# FT-726R

YAESU MUSEN CO., LTD.

C.P.O. BOX 1500 TOKYO, JAPAN

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This manual is intended to serve as a technical supplement to the FT-726R Operating Manual. Detailed information regarding functions, installation, interconnections, operation, and installation of options has been provided in the Operating Manual, and is not reprinted herein. Therefore, this Technical Supplement is not intended to serve as an independent reference, but to be used in conjunction with the information provided in the Operating Manual.

Because there are over seven hundred semiconductor devices in the fully equipped FT-726R, circuit description information is provided in the form of numerous block diagrams and a complete Component Applications list. It is our hope that this manner of providing functional information will prove to be more convenient for the owner and technician than would a lengthy verbal description. Those readers who are not familiar with the basic types of analog and digital circuits that serve as the building blocks of the FT-726R are encouraged to study instructional material, such as that contained in handbooks on amateur radio and digital circuit design, before attempting to understand the design of the FT-726R. Each block in the block diagrams represents one such basic circuit, while the Component Applications list provides additional details for each semiconductor. Specific circuit details are provided in the schematic diagrams.

While we believe this technical information is correct and factual, Yaesu assumes no liability for damage that may result from typographical or other errors that may be present. Your cooperation in pointing out any inconsistencies in the technical information would be appreciated.

Yaesu Musen reserves the right to make changes in the circuitry of this transceiver, in the interest of technological improvement, without notification of the owner.

## ERRATA FOR THE FT-726R OPERATING MANUAL

These corrections apply to early printings of the Operating Manual. Many have been included in later printings, but those manuals with edition numbers up to and including E3830183A (8307-D) should be corrected. The edition number is printed at the bottom of the rear cover of the manual.

#### Pages 2 and 3, Specifications:

The specifications for the 10-15m Module have been added in later printings, as follows:

#### 10-15m Module Specifications

#### Frequency coverage:

21-21.49998 MHz 24.5-24.99998 MHz 28.0-29.99998 MHz

#### Repeater shifts:

±100 kHz for 28 MHz

#### Power input.

10-15m: 30W PEP/DC for 10W out

#### Spurious radiation:

10-15m: Better than -40 dB

#### Frequency stability:

10-15m: Better than  $\pm 10$  ppm

#### Sensitivity:

10-15m SSB/CW
Less than 0.3 μV for 10 dB (S+N)/N
10m FM
Less than 0.7 μV for 12 dB SINAD

#### IF frequencies:

10-15m: 46.255 MHz

10.810 MHz 10.750 MHz 455 kHz

## Channel steps:

SSB, CW: 20/200 Hz FM: 10/20 kHz

#### Page 10, Meter I:

The first printing of the manual stated in this paragraph that Meter I indicates RF power output in watts. This should be corrected to relative forward power, with a deflection of "8" corresponding to 10W RF output into a 50-ohm resistive load.

#### Page 11, BURST

This paragraph describing the switch of the same name on the top panel has been amended to reflect the CW sidetone disable feature that has been added to this switch in later model transceivers: "when this switch is OFF, the CW sidetone is disabled to allow for easy searching for the downlink signal during CW operation through a satellite."

#### Page 20, Step 5.

This paragraph has been amended to incorporate the correction on page 10, and should read,

"5. For simplex operation, simply press the PTT switch on the microphone to transmit on the same frequency. Advance the DRIVE control clockwise until the PO indication on Meter I just ceases to increase, while the ALC indication on Meter II remains in the safe ALC zone. Then advance the MIC GAIN while speaking into the microphone with a normal voice, to the point where the green BUSY LED flickers with speech. When adjusting the DRIVE control, PO deflection depends on the antenna impedance, and will be "8" for a 50-ohm resistive load. If the PO reading is less than "5", the antenna is probably mismatched."

#### Page 23, Step 2.

The fourth sentence, beginning with, "Of course, when the optional tone squelch ..." should be deleted, if present.

## Page 24, Step 5

I

Within the two double quotation marks in the fourth line from the bottom of the page, a backwards "C" should be printed, as it would appear on the digital display.

#### Page 25, second column

The following sentence has been added to the end of the first paragraph, "During CW operation, the BURST/TONE switch on the top cover may be set to the OFF position to disable the sidetone, allowing easy location of the carrier on the downlink."

#### Page 28, Step 5.

The numbers of the lowest set of jacks should be  $J_{3007}$ ,  $J_{3008}$  and  $J_{3009}$ , instead of  $J_{3013}$ ,  $J_{3014}$  and  $J_{3015}$ , as appeared in the first printing of the manual. Also, in later printings, the numbers of all nine jacks have been added to the diagram of the AF Unit below the text, with  $J_{3010}$ ,  $J_{3011}$  and  $J_{3012}$  marked on the middle set of jacks, from left to right, and  $J_{3007}$ ,  $J_{3008}$  and  $J_{3009}$  in the lower Default position.

## Page 34, TX Unit Schematic Diagram:

The three 2SA733Q transistors at the lower left corner should be  $Q_{19}$ ,  $Q_{21}$  and  $Q_{22}$ .  $Q_{19}$  was misprinted to appear as  $Q_{13}$ .

Also on this diagram, near quad AND gate IC  $Q_{35}$  at the lower right, The diode below diode  $D_{43}$  should be labelled  $D_{44}$ . It was misprinted as  $D_{04}$ .

## Page 35, RX Unit Schematic Diagram:

The type 2SC945P transistor near the upper right corner that is labelled as  $Q_{30}$  should be labelled  $Q_{32}$ .  $Q_{30}$  is the type 2SC1815GR transistor between  $Q_{29}$  and  $Q_{31}$  below  $Q_{32}$ .

## Page 37, 6m Module Schematic Diagrams:

In the RF Unit diagram, the collector of  $Q_{09}$  should be shown connected to the junction of  $C_{88}$  and  $R_{52}$ , in addition to the connections shown.

In the PLL Unit diagram, the crystal oscillator transistor near the lower left should be labelled  $Q_{6020}$  (2SC945P). Also in this diagram, at the lower right,  $D_{20}$ ,  $D_{22}$ ,  $D_{24}$  and  $D_{26}$  should be deleted.

## Page 38, 2m Module Schematic Diagrams:

In the PLL Unit diagram, diodes  $D_{21}$  and  $D_{22}$  at the lower right should be removed. Also, it should be indicated that all part location numbers on this Unit are preceded by the number 6.

#### Page 39, 70cm Module Schematic Diagrams:

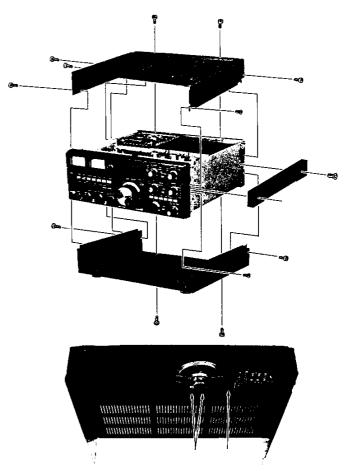
In the 70cm Power Amp Unit diagram at the upper left, diode  $D_{02}$  should be shown with the anode connected to ground.

In the PLL Unit diagram, the test point immediately beneath pins 1 and 2 of  $Q_{23}$  in the lower center of the diagram should be labelled  $TP_{07}$ , and diode  $D_{20}$  should be removed from the right side of the diagram.

#### Block Diagrams:

Numerous corrections have been made to the block diagrams printed at the end of the Operating Manual. These corrections have been incorporated into the block diagrams on pages 74, 75 and 76 of the Technical Supplement.

## TOP AND BOTTOM COVER REMOVAL



#### Note:

When removing the top cover, disconnect the cables to the speaker and SCAN/SQL Unit before pulling the cover away.

Remember to reconnect these cables when replacing the cover.

### SOLDERING AND DESOLDERING TECHNIQUE

## SOLDERING AND DESOLDERING TECHNIQUE ON PRINTED CIRCUIT BOARDS

The FT-726R circuit boards are tough, but mishandling during soldering can cause circuit traces to "lift." While this does not cause permanent damage to the board, much servicing trouble can result, because of the tendency for this lifted trace to break. A few simple precautions will keep your circuit boards in A-1 condition.

- Use only a 12 to 30-watt chisel-tip soldering iron, with the tip grounded or isolated from AC and DC potential. Voltage at the tip can easily destroy CMOS components.
- Use only the minimum amount of heat necessary to remove a component, or to cause the solder to "flow" when installing a new component.
  - 3. USE ONLY 60/40 ROSIN CORE SOLDER.
  - 4. Use solder removing braid and flux to absorb excess solder before installing a new component. A solder sucker can also be used, but most be handled with care to avoid lifting traces.
  - 5. Do not attempt to remove DIP ICs without first cutting all of the pins on the component side of the board, unless you have the correct and all-pin desoldering tip).

If you do lift a trace, don't worry! Read on to find out how to repair traces like a pro.

#### NOTES ON USE OF CMOS COMPONENTS:

As CMOS devices are extremely sensitive to damage from static electricity, special precautions must be observed.

In storage, use only conductive sponge specially designed for CMOS components.

When installing a CMOS part in a socket, or on a circuit board, be certain that the power is off. In addition, the technician should rest his hand on the chassis as the component is inserted, so as to place his hand at the same potential as the chassis (better to discharge small amounts of static electricity through your fingers than through a \$5 IC!).

When soldering a CMOS part onto a circuit board, use a low-wattage iron, and be sure to ground the tip with a clip lead, if the tip is not grounded through a three-wire power cord.

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## INSERTION OF PARTS ON CIRCUIT BOARDS

All of the below are acceptable ways of inserting components into circuit board mounting holes.



(c) Vertical mounting



(a) Bend leads slightly



(d) Preformed disc ceramic capacitor



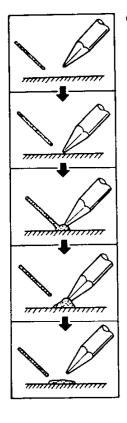
(b) Straight-in mounting



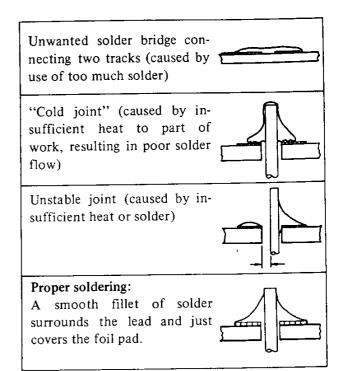
Preformed resistor, diode, etc.

## BASIC SOLDERING PRACTICE

## EXAMPLES OF POOR SOLDERING PRACTICE

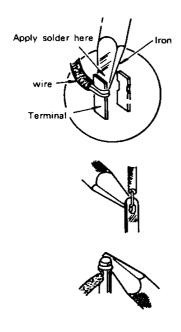


- (1) Prepare soldering iron and solder. The tip of the iron thoroughly be should tinned and wiped clean of excess solder.
- (2) Apply soldering iron to surface to be soldered. Do not press the iron into the surface.
- (3) Apply solder to junction of iron and heated surface.
- (4) When enough solder is applied, remove solder. Continue to apply heat just until solder flows cleanly.
- (5) Remove iron from work. Do not apply more heat than necessary for good solder flow.



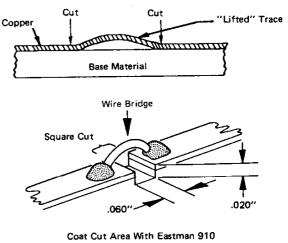
#### Soldering to terminal posts:

(Be certain to apply heat to both post and wire.)



### Repair of a "lifted" trace:

If you have previously lifted a trace, make an etch cut on each side of the lifted trace as shown in the drawing, and install a wire bridge.



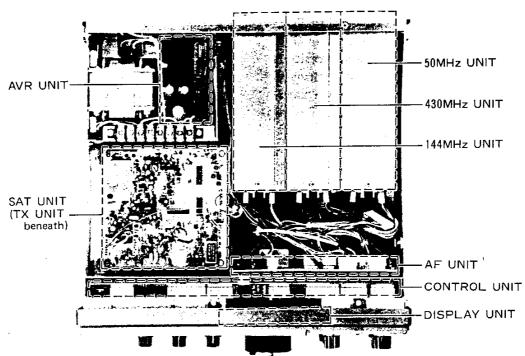
After Soldering Wire Bridge

## TYPICAL PART FAILURES, CAUSES AND SYMPTOMS

| PARTS                                   | CAUSE OF TROUBLE  | SYMPTOMS   |
|---|---|--|
| Semiconductors<br>(IC, FET, TR)         | High supply voltage Open circuit Excessive drive High temperature | Short or open circuit Output decreases to 1/2 at 80°C Internal noise Instability |
| MOS FET<br>MOS IC                       | Static electricity  | Total failure<br>Short or open circuit   |
| Crystal<br>Crystal filter               | Shock High temperature Aging                                      | No oscillation Off frequency Frequency drift Filter bandpass change              |
| Resistor                                | Excessive power High temperature                                  | Component burned Value changed Open circuit                                      |
| Potentiometer                           | Excessive power Shock Dust or oil Wear                            | Component burned Open circuit Noise Unsmooth rotation                            |
| Capacitor                               | Excess voltage High temperature Aging                             | Shorted Leakage Open/decreased capacitance                                       |
| Variable capacitor<br>Trimmer capacitor | Ratings exceeded Dust between plates Shock, forced rotation       | Shorted<br>Leakage<br>Unsmooth rotation  |
| Coils                                   | Ratings exceeded Misadjusted Core or bobbin broken                | Open or short circuit Leakage or shorted turns Detuned                           |
| Switch                                  | Ratings exceeded Aging Dust or oil                                | Poor contact Unsmooth operation Open circuit                                     |
| Relay                                   | Ratings exceeded<br>Humidity<br>Dust or oil on contacts           | Coil open Poor or intermittent contact Noise                                     |

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## **UNIT LOCATIONS**

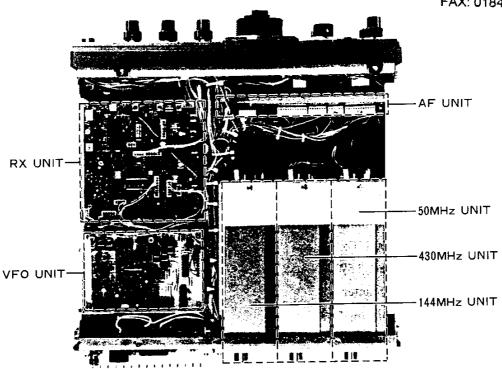


TOP VIEW

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**BOTTOM VIEW** 

## SERVICE AND ALIGNMENT

Under normal operating conditions, the FT-726R may require realignment every few years, because of normal component aging. Such realignment should not require more than a very slight adjustment of the coils and trimmers, and a major shift in an adjustment point will probably result in misalignment. The original alignment performed at the factory is very precise, and coarse realignment will only be required in rare cases of component replacement.

Do not attempt any realignment of any circuit without first becoming fully familiar with the design and function of the entire transceiver. Many adjustments interact, and performance can be impaired by attempts to make random adjustments, or to align the transceiver without the proper test equipment and understanding of its use. If the equipment is not available, or if the circuitry is not clearly understood, please contact your Yaesu dealer for instructions on where to send the transceiver for realignment or servicing.

All alignment steps involving transmission require the connection of a 50-ohm non-reactive dummy load to the ANT jack of the appropriate Band Module, unless otherwise noted. The 144 MHz Module is used for all steps, unless otherwise noted.

## Test Equipment:

Spectrum analyzer with coverage to 500 MHz

RF signal generator with coverage to 500 MHz, calibrated output and modulation

RF voltmeter ranging from 5 mV to 3V, with 5% accuracy to 500 MHz

Frequency counter with 0.1 ppm accuracy to 500 MHz

DC voltmeter with at least 10 Megohms impedance

In-line wattmeter accurate to 500 MHz

50-ohm non-reactive dummy load (15W)

FM Deviation meter and SINAD meter

Sampling coupler "T" (branch attenuator)

AF signal generator with adjustable output from 0.5 to 100 mV

AF voltmeter

Monitor receiver (SSB) covering the amateur bands of interest

Sweep generator covering 20-30 MHz

DC milliammeter

Oscilloscope

#### **Preliminary Procedure**

Alignment must be performed in a temperaturestable environment where the ambient temperature is between 20°C and 30°C. If the transceiver is brought from a different environment, allow at least one hour for the transceiver temperature to stabilize before applying power.

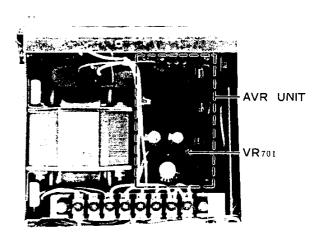
Once power is applied, allow at least five minutes for the oscillators to stabilize. Also, make sure that the test equipment is given the warmup time required for each item.

Alignment of the PLL VCVs (Varactor Control Voltages) require that the shield covers of the PLLs be in place. Signal levels expressed in dB $\mu$  assume a reference of 0 dB $\mu$  = 0.5  $\mu$ V across infinite impedance.

#### POWER SUPPLY

### A. Supply Voltage

Connect the DC voltmeter between the 13.8V terminal on the AVR Unit and chassis ground. Adjust  $VR_{701}$  for 13.8V on the meter.



#### VFO UNIT

#### A. Local Oscillator

- 1. Connect the frequency counter to TP<sub>101</sub>, and check for 4.5056 MHz ± 100 Hz.
- 2. Connect the RF voltmeter to  $TP_{102}$  and adjust  $T_{104}$ ,  $T_{105}$  and  $T_{106}$  for peak RF voltage (min. 500 mVrms).

#### B. VCV

- 1. Tune the transceiver so that the display indicates xxx.x99.9 (x = any digit). Connect the DC voltmeter to  $TP_{103}$  and adjust  $TC_{101}$  for 6.5V on the meter (shield cover in place).
- 2. Retune the transceiver to indicate xxx.x00.0, and check for 3.0 to 4.0V on the meter.

## C. VFO Output Level

Set the transceiver to indicate xxx.x50.0, and connect the RF voltmeter to pin 1 of  $J_{102}$ . Adjust  $T_{101} - T_{103}$  for peak RF voltage (min. 50 mVrms).

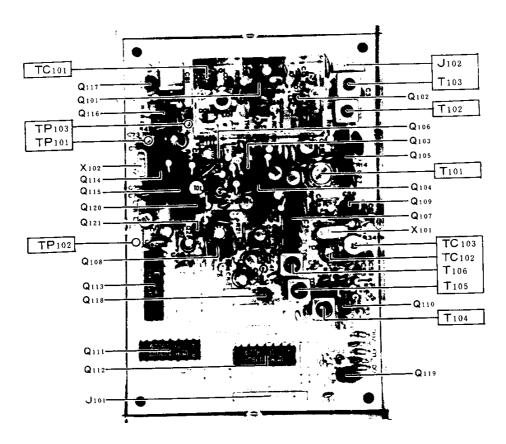
### D. Channel Step Calibration

- 1. Set the transceiver to the FM mode, FM-CH function ON, and the STEP button in the OUT position. Tune for a display frequency of xxx.x50.0.
- Connect the frequency counter through a 0.01 μF capacitor to pin 1 of J<sub>102</sub>, and now select the LSB mode. Adjust TC<sub>103</sub> for 7.835000 MHz on the counter.
- Press the DOWN button to step the frequency 100 Hz lower on the display, and adjust TC<sub>102</sub> for 7.834980 MHz on the counter.
- 4. Press the UP button to return to the original display frequency, and repeat the adjustment in step 2. Repeat step 3, and then steps 2 and 3 again until no further adjustment is required.

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**VFO UNIT** 

#### TX UNIT

#### A. ALC Meter

With the MIC GAIN control fully counterclockwise and in the USB mode, close the PTT line and adjust VR<sub>1006</sub> to the threshold point where ALC indication just begins.

#### B. CW, FM Carrier Point

- Connect the wattmeter with the dummy load to the 144 MHz ANT jack. Select the CW mode, and then close the PTT line and adjust T<sub>1002</sub> and T<sub>1003</sub> for maximum power on the wattmeter, adjusting the DRIVE control, if necessary, so that the ALC meter does not deflect.
- 2. Connect the frequency counter to pin 1 of  $J_{1001}$ . Close the PTT line and adjust  $TC_{1002}$  for 10.809200 MHz  $\pm$  50 Hz on the counter.
- 3. Now select the FM mode, and adjust  $T_{1001}$  for 10.810000 MHz ± 100 Hz on the counter.

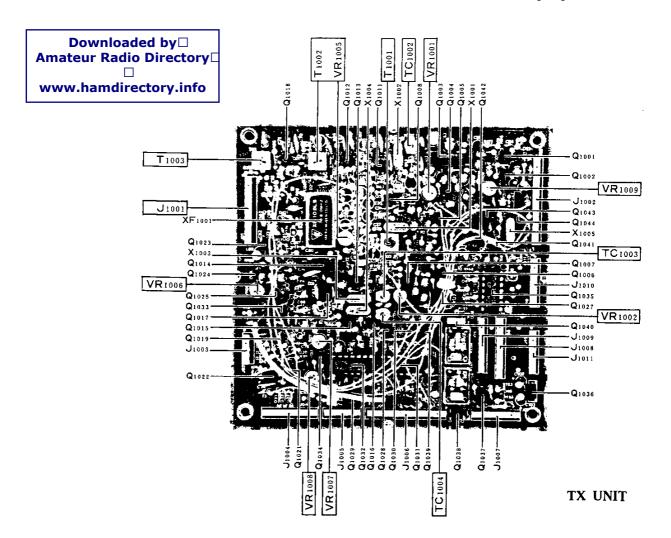
#### C. FM Modulator

- Couple the deviation meter through a sampling coupler or attenuator to the ANT jack.
   Connect the AF generator to pin 8 of the MIC jack, and set for 15 mV output at 1 kHz.
   Select the FM mode, close the PTT line, and adjust VR<sub>1002</sub> for ±4.5 kHz deviation.
- Disconnect the AF generator, and set the MIC GAIN control fully counterclockwise. Press the CALL button and adjust VR<sub>1009</sub> for ±3.0 kHz deviation.

#### D. SSB Carrier Point

(If the ALC meter deflects during this procedure, reduce the setting of the DRIVE control.)

1. Preset VR<sub>1001</sub> to the center of its range. Connect the AF generator to pin 8 of the MIC jack, and set for 0.5 mV output at 2800 Hz. Set the transceiver to USB, close the PTT line, and note the output power on the wattmeter.



- 2. Retune the AF generator to 300 Hz while maintaining the same generator output level, and adjust TC<sub>1004</sub> for the same transceiver output level on the wattmeter.
- 3. Return to receive, select the LSB mode, and repeat the two previous steps, adjusting TC<sub>1003</sub> until the power output is the same at both audio frequencies.

#### E. CW Sidetone Level

Connect the AF voltmeter across the speaker terminals, set  $VR_{1007}$  to the center of its range, and select the CW mode. Close the PTT line and adjust  $VR_{1008}$  for 150 mVrms on the voltmeter.

## F. FM Modulation Indicator Check

Select the FM mode, and set the AF generator for 0.5 mV at 1 kHz to the MIC jack. Set the MIC GAIN control to the 12 o'clock position, close the PTT line, and check to see that the BUSY LED (indicating FM modulation) is lit.

#### G. SSB Carrier Balance

- Set the MIC GAIN control and VR<sub>1001</sub> fully counterclockwise, and set the mode to USB.
   Set the external monitor receiver to the transceiver frequency, close the PTT line, and adjust VR<sub>1005</sub> for minimum signal strength in the external receiver.
- Switch to LSB, key the transmitter, and observe the signal strength at the external receiver. Then switch back to USB and again key the transmitter and observe the signal strength. If the signal strength is different in the different modes, adjust VR<sub>1005</sub> and repeat this step until the strength is about the same in both USB and LSB.
- 3. Switch to FM, close the PTT line, and set the DRIVE control so that the ALC meter deflects just to the right edge of the ALC zone (mid-scale). Set the AF generator for 15 mV output at 1 kHz. Switch to USB, close the PTT line, and adjust VR<sub>1001</sub> so that the ALC meter again deflects to the right edge of the ALC zone.

#### H. Tone Burst Check

Set the mode for FM, and with the external receiver tuned to the same frequency as the transceiver, press the CALL button and listen for a 0.5-second tone.

#### RX UNIT

#### A. IF Bandpass Filters

Connect the signal generator to the ANT jack, and set for  $\pm 3.5$  kHz FM deviation. Tune the generator and transceiver to 146.000000 MHz, and set the generator output level for slight deflection of the S-meter. (If operation is limited to between 144 and 146 MHz, use 145 MHz for alignment.) Adjust  $T_{2001}$  and  $T_{2002}$  for maximum S-meter deflection.

#### B. Second Local Oscillator

- 1. Connect the frequency counter to  $TP_{2002}$ . Set the transceiver to USB and adjust  $T_{2005}$  for 11.2650 MHz on the counter.
- 2. Connect the frequency counter to  $TP_{2001}$  and adjust  $T_{2012}$  for 11.2050 MHz on the counter.

#### C. IF Coils and S-Meter

- 1. With the signal generator and transceiver tuned as in part A, with no modulation and the transceiver set to USB, adjust  $T_{2003}$ ,  $T_{2004}$ ,  $T_{2006}$  and  $T_{2008}-T_{2011}$  all for peak indication on the S-meter.
- 2. Remove the signal generator from the ANT jack, and listen to the receiver noise while switching from USB to LSB and back. Adjust T<sub>2005</sub>, if necessary, until the noise is about the same pitch.
- Connect the signal generator to the ANT jack, and set for an output level of 20 dBμ at 146.000 (or 145.000) MHz. With the transceiver tuned to the same frequency, preset VR<sub>2002</sub> to midrange, and adjust VR<sub>2005</sub> for S9 deflection on the S-meter.
- 4. Increase the generator output to 80 dB $\mu$  and adjust VR<sub>2004</sub> for S9+60dB on the meter.
- 5. Repeat the adjustments of steps 3 and 4 several times.

- Set the transceiver to FM, and set the generator for 60 dBμ output with ±3.5 kHz FM deviation. Adjust VR<sub>2003</sub> for full-scale S-meter deflection.
- 7. Decrease the generator output to  $20 \text{ dB}\mu$  and adjust VR<sub>2001</sub> for S9+30dB on the S-meter.
- 8. Adjust  $VR_{2007}$  for center indication on the DISC meter (Meter I). Then remove the generator from the ANT jack, and note whether the DISC meter indication settles to the center. If not, adjust  $T_{2007}$  so that it does.

#### D. Noise Blanker

Connect the signal generator to the ANT jack, and set the output level for 30 dB $\mu$  at 145.5 MHz. Connect the DC voltmeter to the lead of R<sub>2124</sub> on the RX Unit, and adjust T<sub>2014</sub> – T<sub>2016</sub> for minimum DC voltage on the meter.

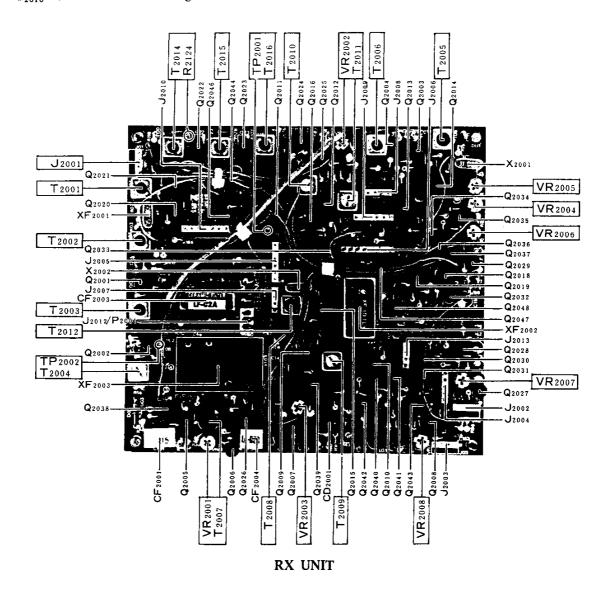
#### E. Squelch Preset

- 1. Remove the generator from the ANT jack, set VR<sub>2008</sub> fully clockwise, and set the SQL control to the threshold point where the noise is just silenced in the FM mode. The SQL control position should be between 8 and 9 o'clock.
- Set the mode to USB, and the SQL control to the 9 o'clock position. Adjust VR<sub>2006</sub> to the threshold point while receiving only noise.

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-12-

## SATELLITE UNIT (Option)

(Set the SATELLITE selector to RX)

## A. Local Oscillator

- Connect the frequency counter to TP<sub>4001</sub>, and check for 4.5056 MHz ± 100 Hz.
- Connect the RF voltmeter to TP<sub>4002</sub> and adjust T<sub>4003</sub>, T<sub>4006</sub>, T<sub>4007</sub> and T<sub>4008</sub> for peak RF voltage (min. 700 mVrms).

#### B. VCV

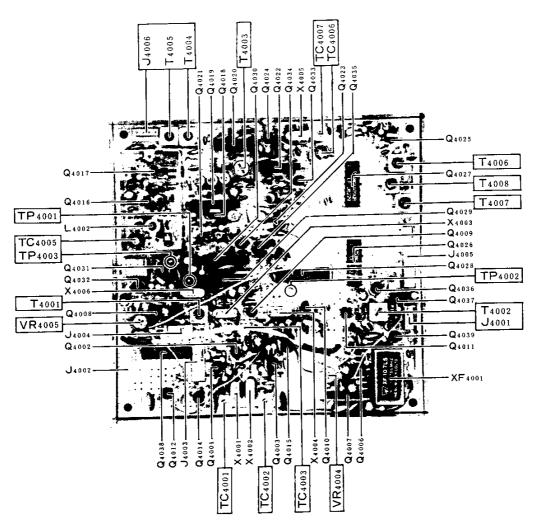
- 1. Tune the transceiver so that the display indicates xxx.x99.9. Connect the DC voltmeter to TP<sub>4003</sub> and adjust TC<sub>4005</sub> for 6.5V on the meter (shield cover in place).
- 2. Retune the transceiver to indicate xxx.x00.0, and check for 2.5-3.5V on the meter.

## C. VFO Output Level

Set the transceiver to indicate xxx.x50.0, and connect the RF voltmeter to pin 1 of  $J_{4006}$ . Adjust  $T_{4003} - T_{4005}$  for peak RF voltage (min. 50 mVrms).

## D. Channel Step Calibration

- 1. Set the transceiver to the FM mode, FM-CH function ON, and the STEP button in the OUT position. Tune for a display frequency of xxx.x50.0.
- 2. Connect the frequency counter through a 0.01  $\mu$ F capacitor to pin 1 of J<sub>4006</sub>, and now select the LSB mode. Adjust TC<sub>4006</sub> for 7.945000 MHz on the counter.
- 3. Press the DOWN button to step the frequency  $100\,$  Hz lower on the display, and adjust  $TC_{4007}$  for 7.944980 MHz on the counter.



SAT UNIT

4. Press the UP button to return to the original display frequency, and repeat the adjustment in step 2. Repeat step 3, and then steps 2 and 3 again until no further adjustment is required.

#### E. CW, FM Carrier Point

(Set the SATELLITE selector to TX)

- 1. Connect the RF voltmeter to pin 2 of  $J_{4001}$ , and select the CW mode. Close the PTT line and adjust  $T_{4002}$  for maximum RF voltage on the meter.
- Connect the frequency counter through a 0.01 μF capacitor to pin 2 of J<sub>4001</sub>. Close the PTT line, and adjust TC<sub>4003</sub> for 10.699200 MHz on the counter.
- 3. Switch to the FM mode, close the PTT line, and adjust  $T_{4001}$  for 10.700000 MHz on the counter.

#### F. FM Modulator

Couple the deviation meter through a sampling coupler or attenuator to the ANT jack. Connect the AF generator to pin 8 of the MIC jack, and set for 15 mV output at 1 kHz. Select the FM mode and set the MIC GAIN control to midrange. Close the PTT line and adjust  $VR_{4005}$  for  $\pm 4.5$  kHz deviation on the meter.

#### G. SSB Carrier Point

(If the ALC meter deflects during this procedure, reduce the setting of the DRIVE control.)

- 1. Set the mode to USB. Connect the RF voltmeter to pin 2 of  $J_{4001}$ , and set the AF generator (at the MIC jack) for 0.5 mV output at 2800 Hz. Close the PTT line and note the RF voltage on the meter.
- Retune the AF generator to 300 Hz while keeping the same output level, and adjust TC<sub>4002</sub> to obtain the same RF level as noted in step 1.
- 3. Return to receive and switch to LSB. Repeat steps 1 and 2, adjusting  $TC_{4001}$ .

#### H. SSB Carrier Balance

- With the dummy load and wattmeter connected to the ANT jack, set the MIC gain control fully counterclockwise and the mode to USB. Tune the external receiver to the transceiver frequency, close the PTT line, and adjust VR<sub>4004</sub> for minimum signal strength at the external receiver.
- 2. Switch to LSB, key the transmitter, and observe the signal strength at the external receiver. Then switch back to USB and again key the transmitter and observe the signal strength. If the signal strength is different in the different sideband modes, adjust VR<sub>4004</sub> and repeat this step until the strength is about the same in both USB and LSB.

#### 50 MHz MODULE (Option)

#### A. PLL

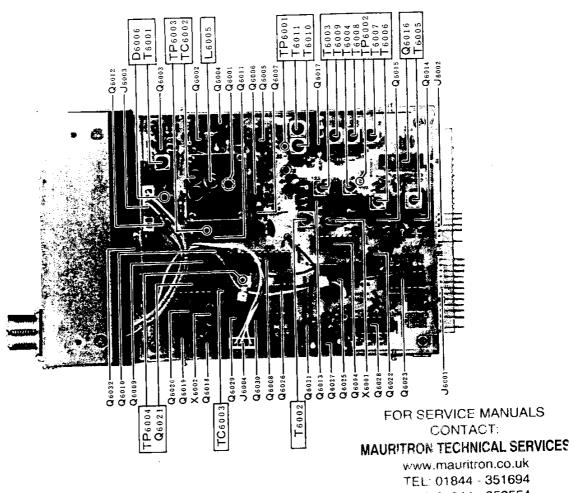
(If the optional SATELLITE Unit is installed, it must be switched OFF for all except step 3, which does not need to be performed if the SATELLITE Unit is not installed.)

- 1. Connect the frequency counter to pin 12 of  $Q_{6021}$ , and adjust  $TC_{6003}$  for 3.200000 MHz on the counter.
- Tune the transceiver for a display of 5x.x50.0, and connect the RF voltmeter to pin 5 of Q<sub>6016</sub>. Adjust T<sub>6006</sub> for maximum RF voltage on the meter.
- Set the SATELLITE selector to TX, and adjust T<sub>6005</sub> for maximum RF voltage on the meter. Then set the SATELLITE selector OFF.
- 4. Tune the transceiver for a display of 53.990.0. Connect the RF voltmeter to TP<sub>6002</sub>, and adjust T<sub>6003</sub> and T<sub>6004</sub> for peak RF voltage. Move the RF voltmeter to TP<sub>6001</sub> and peak T<sub>6007</sub> -T<sub>6011</sub>. Now connect the RF voltmeter to TP<sub>6004</sub> and peak each of the above transformers again, which should result in a final reading of approximately 700 mVrms on the meter.

- 5. Connect the DC voltmeter (10V range) to  $TP_{6003}$  and adjust  $L_{6005}$  for 6.5V on the meter. Now tune the transceiver for a display of 51.990.0 and adjust  $TC_{6002}$ , also for 6.5Von the meter. Repeat the adjustment of  $L_{\rm 6005}$ at 53.990.0 MHz and  $TC_{6002}$  at 51.990.0 MHz several times.
- 6. Now tune the transceiver for displays of 52.000.0 and 50.000.0 and check to see that the meter indicates 1.0-2.0V DC.
- 7. Connect the dummy load to the 50 MHz ANT jack. Connect the RF voltmeter to the cathode of  $D_{6006}$  and tune the transceiver for a display of 52.050.0. Close the PTT line and adjust T6001 for maximum RF voltage on the meter.
- 8. Connect the frequency counter to the cathode of  $D_{6006}$  and tune the transceiver for a display of 52.000.0, FM mode. Adjust  $T_{6002}$  for 41.190000 MHz on the counter.

#### Receiver Section В.

- 1. Connect the RF signal generator to the 50 MHz ANT jack, and set the output to 52.000000 MHz, with  $\pm 3.5$  kHz FM deviation and 1 kHz modulation. Tune the transceiver to the same frequency, FM mode, and set the generator output level for slight Smeter deflection. Adjust T<sub>5001</sub> -T<sub>5009</sub> for peak on the S-meter (reduce the generator level, as required, to keep the S-meter reading below S9).
- 2. Connect the AF voltmeter across the speaker terminals, and set the RF generator level to -10 dB at the ANT jack. Set the AF GAIN control for an indication of -10 dBV on the AF voltmeter, and then remove the generator from the ANT jack. The AF voltmeter should now indicate less than -22 dBV (12 dB S/N).

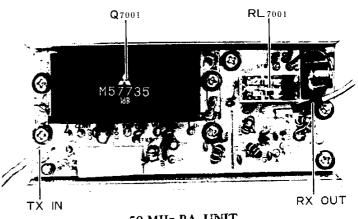


50 MHz PLL UNIT

FAX: 01844 - 352554

### C. Transmitter Section

- Connect the wattmeter, dummy load and spectrum analyzer to the 50 MHz ANT jack. Preset VR<sub>5004</sub> and VR<sub>5006</sub> fully counterclockwise
- 2. Tune the transceiver to 52.050.0 MHz, FM mode. Close the PTT line and adjust  $T_{5010} T_{5015}$ ,  $TC_{5001}$  and  $TC_{5002}$  for maximum power output on the wattmeter.
- 3. Tune the transceiver to 50.000.0 MHz and adjust  $VR_{5004}$  so that the ALC meter deflects to the right edge of the safe ALC zone (corresponding with S9 on the S-meter scale).
- 4. Tune the transceiver to 52.000.0 MHz and adjust  $VR_{5006}$  for 10 watts output on the wattmeter.
- 5. Adjust VR<sub>5005</sub> so that the PO meter indicates "8" on the PO scale of Meter I.
- 6. Repeat steps 4 and 5 several times.
- 7. Adjust VR<sub>5003</sub> for minimum level of the spurious signals 10.81 MHz either side of the transmitter carrier.

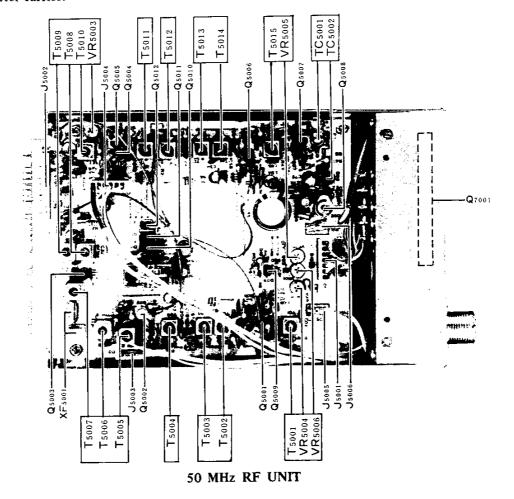


50 MHz PA UNIT

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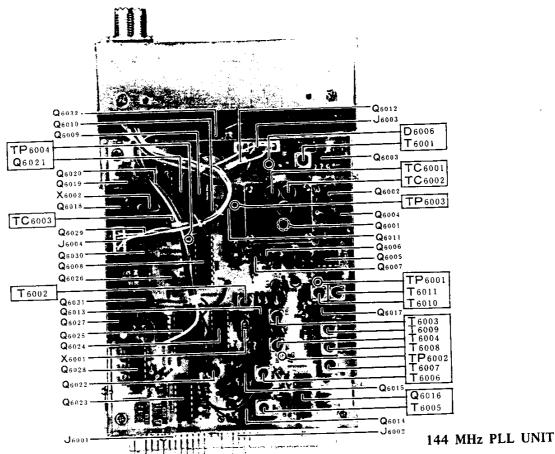
### 144 MHz MODULE

#### A. PLL

(If the optional SATELLITE Unit is installed, it must be switched OFF for all except step 3, which does not need to be performed if the SATELLITE Unit is not installed.)

- 1. Connect the frequency counter to pin 12 of  $Q_{6021}$ , and adjust  $TC_{6003}$  for 3.200000 MHz on the counter.
- 2. Tune the transceiver for a display of 14x.x50.0, and connect the RF voltmeter to pin 5 of  $Q_{6016}$ . Adjust  $T_{6006}$  for maximum RF voltage on the meter.
- 3. Set the SATELLITE selector to TX, and adjust  $T_{6005}$  for maximum RF voltage on the meter. Then set the SATELLITE selector OFF.
- 4. Tune the transceiver for a display of 147.990.0 (or 145.990.0 if 146 MHz is the upper limit of operation). Connect the RF voltmeter to  $TP_{6004}$  and adjust  $T_{6003}$ ,  $T_{6004}$  and  $T_{6007}-T_{6011}$  for maximum RF voltage on the meter (nom. 700 mVrms).

- 5. If transceiver operation is not limited to below 146 MHz, perform this step. Otherwise, skip to step 6. Connect the DC voltmeter (10V range) to TP<sub>6003</sub>. Tune the transceiver for a display of 147.990.0 and adjust TC<sub>6001</sub> for 6.2V on the meter. Retune the transceiver to 146.000.0 MHz and check for 1.5-3.0V on the meter.
- 6. Connect the DC voltmeter (10V range) to TP<sub>6003</sub>, and tune the transceiver for a display of 145.990.0. Adjust TC<sub>6002</sub> for 6.2V on the meter. Retune the transceiver to 144.000.0 MHz and check for 2.5-4.0V on the meter.
- 7. Connect the RF voltmeter to the cathode of  $D_{6006}$  and tune the transceiver for display of 145.500.0. Close the PTT line and adjust  $T_{6001}$  for maximum RF voltage.
- 8. Connect the frequency counter to  $TP_{6002}$ , and tune the transceiver to 145.000.0 MHz, FM mode. Adjust  $T_{6002}$  for 134.190000 MHz on the counter.



#### B. Receiver Section

- Connect the RF signal generator to the 144 MHz ANT jack, and set the output to 146.000000 MHz (or 145.000000 MHz if 146 is the band edge), with ±3.5 kHz FM deviation and 1 kHz modulation. Tune the transceiver to the same frequency, FM mode, and set the generator output level for slight Smeter deflection. Adjust T<sub>5001</sub> -T<sub>5009</sub> for peak on the S-meter (reduce the generator level, as required, to keep the S-meter reading below S9).
- Connect the AF voltmeter across the speaker terminals, and set the RF generator level to -10 dB at the ANT jack. Set the AF GAIN control for an indication of -10 dBV on the AF voltmeter, and then remove the generator from the ANT jack. The AF voltmeter should now indicate less than -22 dBV (12 dB S/N).

#### C. Transmitter Section

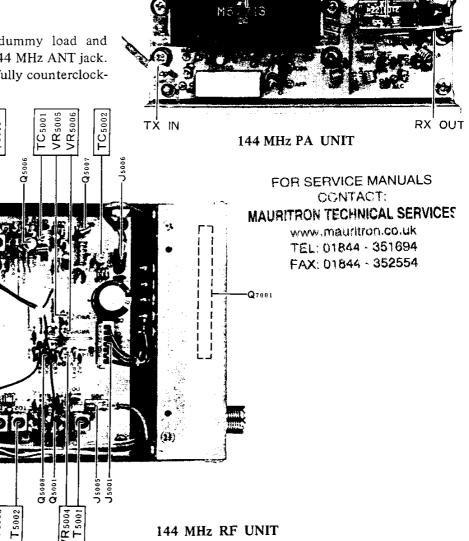
1. Connect the wattmeter, dummy load and spectrum analyzer to the 144 MHz ANT jack. Preset VR<sub>5004</sub> and VR<sub>5006</sub> fully counterclock-

- 2. Tune the transceiver to 146.50 (or 145.50) MHz, FM mode. Close the PTT line and adjust  $T_{5011} T_{5015}$ ,  $TC_{5001}$  and  $TC_{5002}$  for maximum power output on the wattmeter.
- 3. Adjust VR<sub>5004</sub> so that the ALC meter deflects just to the right edge of the safe ALC zone (corresponding with S9 on the S-meter scale).
- 4. Adjust VR<sub>5006</sub> for 10W output on the wattmeter.
- 5. Adjust VR<sub>5005</sub> so that the PO meter indicates "8" on the PO scale of Meter I.
- 6. Repeat steps 4 and 5 several times.

Q7001

 Adjust VR<sub>5003</sub> for minimum level of the spurious signals 10.81 MHz either side of the transmitter carrier.

**RL**7001



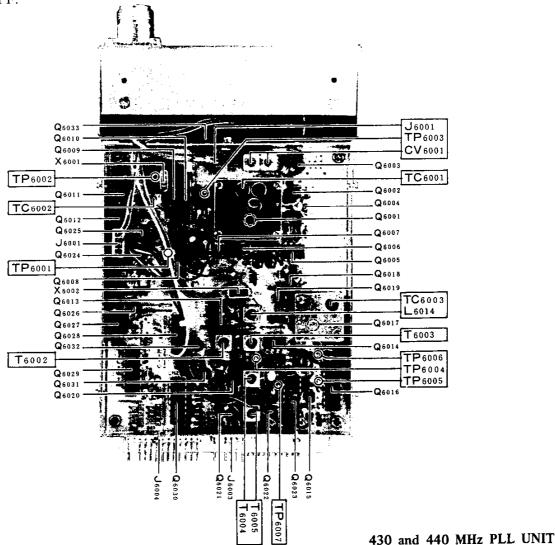
## 430 MHz AND 440 MHz MODULES

#### A. PLL

(If the optional SATELLITE Unit is installed, it must be switched OFF for all except step 3, which does not need to be performed if the SATELLITE Unit is not installed.)

- 1. Connect the frequency counter to  $TP_{6002}$ , and adjust  $TC_{6002}$  for 8.533330 MHz on the counter.
- Tune the transceiver for a display of 4xx.x50.0, and connect the RF voltmeter to TP<sub>6007</sub>. Adjust T<sub>6004</sub> for maximum RF voltage on the meter.
- Set the SATELLITE selector to TX, and adjust T<sub>6005</sub> for maximum RF voltage on the meter. Then set the SATELLITE selector back to OFF.

- 4. Connect the oscilloscope to  $TP_{6005}$ , and adjust  $T_{6002}$  and  $T_{6003}$  for maximum amplitude on the scope waveform (nom. 1 Vrms).
- Connect the DC voltmeter to TP<sub>6006</sub>, and tune the transceiver for a display of 4xx.x99.9. Adjust TC<sub>6003</sub> for 4.0V DC on the meter. Now retune for a display of 4xx.x00.0 and check for about 3.5V DC on the meter.
- 6. Connect the DC voltmeter to  $TP_{6003}$  and tune the transceiver for a display of 4x9.990.0. Adjust  $TC_{6001}$  for 6.5V on the meter. Retune the transceiver for display of 4x0.000.0 and check for 2.0-3.0V on the meter.
- Connect the RF voltmeter and a 50-ohm resistive load to J<sub>6001</sub>, and tune the transceiver to 435 (or 445) MHz. Adjust CV<sub>6001</sub> for maximum RF voltage on the meter.



- 8. Tuning the transceiver back and forth across the band, adjust CV<sub>6001</sub> so that ripple in the passband is less than 2 dB.
- 9. Connect the frequency counter to  $J_{6001}$  and tune the transceiver for display of 435.000.0 (or 445.000.0), FM mode. Adjust  $L_{6014}$  for 367.385000 MHz (or 377.385000 MHz) on the counter.

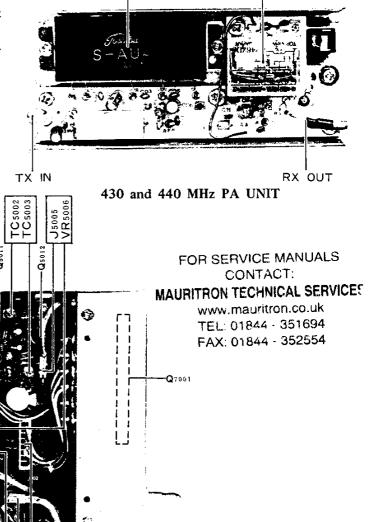
#### B. Receiver Section

- 1. Connect the RF voltmeter to  $TP_{5001}$ , close the PTT line, and adjust  $T_{5015}$  for maximum RF voltage (nom. 220 mVrms).
- 2. Connect the frequency counter to the anode of  $D_{5012}$ , and adjust  $T_{5014}$  for 56.805000 MHz on the counter.
- Connect the RF voltmeter to the junction of R<sub>5033</sub> and C<sub>5039</sub>. Tune the transceiver to the center of the band and adjust CV<sub>5004</sub> for maximum RF voltage on the meter. Check for less than 2 dB ripple across the band.

- 4. With the signal generator connected to the ANT jack, modulate the output with ±3.5 kHz FM deviation and 1 kHz modulation, and tune the generator and transceiver to the center of the band. With the transceiver set for FM, adjust the output level of the generator for slight S-meter deflection. Adjust TC<sub>5001</sub>, CV<sub>5001</sub>, CV<sub>5002</sub> and T<sub>5003</sub> -T<sub>5007</sub> for peak S-meter deflection (adjust the generator level, if necessary, to keep the S-meter below S9).
- 5. Connect the SINADer across the speaker terminals and adjust  $T_{5003}$  and  $TC_{5001}$  for maximum SINAD ratio.

Q7001

**RL** 7001



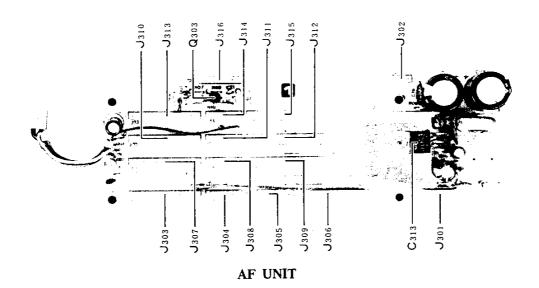
430 and 440 MHz RF UNIT

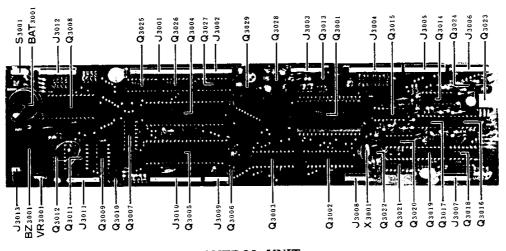
6. Connect the AF voltmeter across the speaker terminals and adjust the RF generator level for -15 dB to the ANT jack. Preset the AF GAIN control for -10 dBV on the AF voltmeter. Now disconnect the RF generator from the ANT jack, and check for less than -17 dBV on the AF voltmeter (7 dB S/N).

#### C. Transmitter Section

 Connect the dummy load and wattmeter through a branch attenuator to the ANT jack, and connect the spectrum analyzer to the branch. Preset VR<sub>5004</sub> and VR<sub>5006</sub> fully counterclockwise.

- 2. With the transceiver tuned to the center of the band, FM mode, adjust T<sub>5008</sub> --T<sub>5011</sub>, TC<sub>5002</sub>, TC<sub>5003</sub> and CV<sub>5003</sub> for maximum output power on the wattmeter.
- 3. Adjust VR<sub>5004</sub> so that the ALC meter deflects just to the right edge of the safe ALC zone (corresponding with the S9 mark).
- 4. Adjust  $VR_{5006}$  for 10 watts output on the wattmeter.
- 5. Adjust VR<sub>5005</sub> so that the PO meter deflects to the "8" mark on the PO scale.
- 6. Repeat steps 4 and 5 several times.
- 7. Adjust VR<sub>5003</sub> for minimum level of the spurious signals 10.81 MHz on either side of the carrier frequency.





CONTROL UNIT

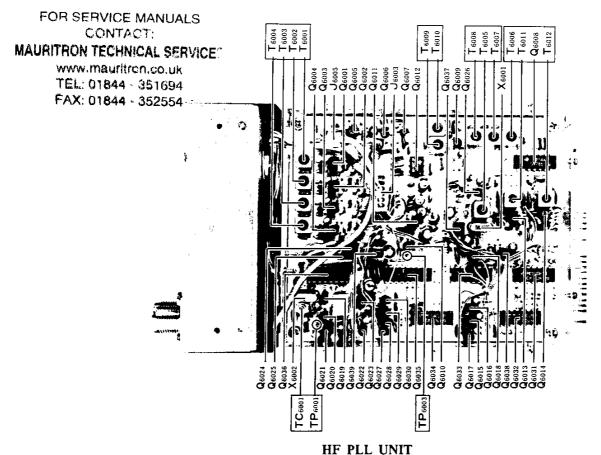
#### HF MODULE (Option)

#### A. PLL

(If the optional SATELLITE Unit is installed, it must be switched OFF for all except step 3, which does not need to be performed if the SATELLITE Unit is not installed.)

- 1. Connect the frequency counter to pin 11 of  $Q_{6008}$ , and adjust  $T_{6005}$  for 58.4685 MHz ( $\pm 50$  Hz) on the counter.
- 2. Tune the transceiver for a display of 2x.x50.0, and connect the RF voltmeter to pin 5 of  $Q_{6008}$ . Adjust  $T_{6011}$  for maximum RF voltage on the meter (approx. 100 mVrms).
- 3. Set the SATELLITE selector to TX and adjust  $T_{6012}$  for maximum RF voltage on the meter (approx. 100 mVrms).
- Tune the transceiver for a display of 21.4999, and connect the oscilloscope to TP<sub>6003</sub>. Adjust T<sub>6006</sub> and T<sub>6011</sub> for maximum deflection on the scope (approx. 2 Vrms).

- Connect the frequency counter to TP<sub>6003</sub> and adjust TC<sub>6001</sub> for 1.4 MHz (±10 Hz) on the counter.
- 6. Connect the DC voltmeter (10V range) to TP<sub>6001</sub> and tune the transceiver for a display of 21.4990. Adjust T<sub>6004</sub> for 6.5V on the meter. Now tune the transceiver for a display of 21.0000 and check that the meter now indicates between 3 and 4V.
- 7. Tune the transceiver for a display of 24.9990, and adjust  $T_{6003}$  for 6.5V on the DC voltmeter. Now tune the transceiver for a display of 24.5000 and again check for 3 to 4V on the meter.
- 8. Tune the transceiver for a display of 29.9990, and adjust  $T_{6002}$  for 6.5V on the DC voltmeter. Now tune the transceiver for a display of 28.0000 and again check for 3 to 4V on the meter.

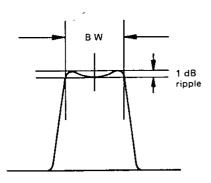


III X E E O I I I

#### B. Receiver Section

1. Connect the sweep generator output to the anode of  $D_{5017}$ , and connect the detector and oscilloscope to  $J_{5006}$ . With the transceiver set to USB, adjust the transformers indicated in the table below for less than 1 dB of ripple in the three bands indicated, as shown in the diagram.

| Band    | Frequency    | Transformer  |
|---------|--------------|--------------|
| 21MHz   | 21.0-21.5MHz | T5005, T5009 |
| 24.5MHz | 24.5-25.0MHz | T5004, T5008 |
| 28MHz   | 28.0-30.0MHz | T5002, T5006 |



- 2. Connect the RF voltmeter to the cathode of  $D_{5002}$  and adjust  $T_{5001}$  for maximum RF voltage on the meter (approx. 180 mVrms).
- 3. Connect the frequency counter to the same point and adjust  $L_{5001}$  for 57.065 MHz ( $\pm 50$  Hz) on the counter.
- 4. Connect the RF signal generator to the HF ANT jack, and tune it and the transceiver to 29.00 MHz. Modulate the signal generator output with 1 kHz audio at ±3.5 kHz deviation, and set the transceiver to the FM mode. Adjust the generator output level for midscale deflection of the S-meter, and then adjust T<sub>5012</sub> through T<sub>5017</sub> for maximum deflection on the S-meter (reduce the generator level if necessary to retain reasonable S-meter deflection).
- 5. Tune the transceiver to 29.999 MHz and set the signal generator level for an S-meter indication of S9. Now tune the transceiver and generator to 28.000 MHz and note the S-meter indication. If it varies by more than 3 dB (about half an S-unit), adjust T<sub>5006</sub> and then recheck both ends of the band, readjusting T<sub>5006</sub> again if necessary.

- 6. With the same signal generator setup as in the previous two steps, tune the transceiver and generator to 29 MHz and set the signal generator output level to 20 dB. Adjust VR<sub>5001</sub> for an S-meter indication of S9+30dB.
- Connect the AF voltmeter across the speaker terminals, and set the RF generator level to -10 dBV at the ANT jack. Set the AF GAIN control for an indication of -10 dBV on the AF voltmeter, and then remove the generator from the ANT jack. The AF voltmeter should now indicate less than -22 dBV (12 dB S/N).

#### C. Transmitter Section

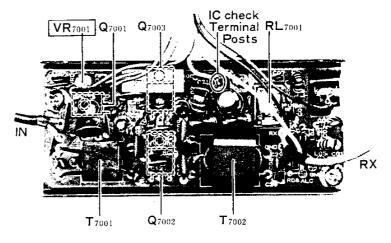
- 1. On the PA Unit, temporarily remove the jumper connecting the IC check terminal posts and connect the DC milliammeter between the posts. Set the milliammeter to the 300 mA range. Temporarily disconnect the center conductor of the TX IN coaxial cable. Key the transmitter and adjust VR<sub>7001</sub> for an indication of 100 mA on the milliammeter. Remove the test equipment and reconnect the coaxial cable and jumper.
- 2. Connect the wattmeter, dummy load and spectrum analyzer to the HF ANT jack. Preset VR<sub>5005</sub> and VR<sub>5006</sub> fully counterclockwise, and the DRIVE control fully clockwise.
- Tune the transceiver to 29.00 MHz, FM mode. Close the PTT line and adjust T<sub>5018</sub> -T<sub>5021</sub> for maximum deflection on the wattmeter (nom. 16W).
- Adjust the DRIVE control on the front panel for 5W output, and then check the power output at 28.000 and 29.999 MHz. If it differs by more than 2W at these frequencies, adjust T<sub>5006</sub> and recheck.
- Repeat step 4 beginning at 21.25 MHz, and checking 21.000 and 21.499 MHz, adjusting T<sub>5009</sub> if necessary.
- 6. Tune the transceiver to 29.000 MHz and set the DRIVE control to the 12 o'clock position. Close the PTT line and adjust VR<sub>5006</sub> so that the ALC meter deflects to the right edge of the safe ALC zone (corresponding with S9 on the S-meter scale).
- Set the DRIVE control fully clockwise and adjust VR<sub>5005</sub> for 10W output on the wattmeter.

- 8. Adjust  $VR_{5004}$  so that the PO meter on the front panel indicates "8" on the PO scale of Meter I, then repeat step 6 and again step 7 several times.
- 9. Adjust  $VR_{5003}$  while transmitting for minimum spurious  $\pm 10.81$  MHz from the carrier frequency.

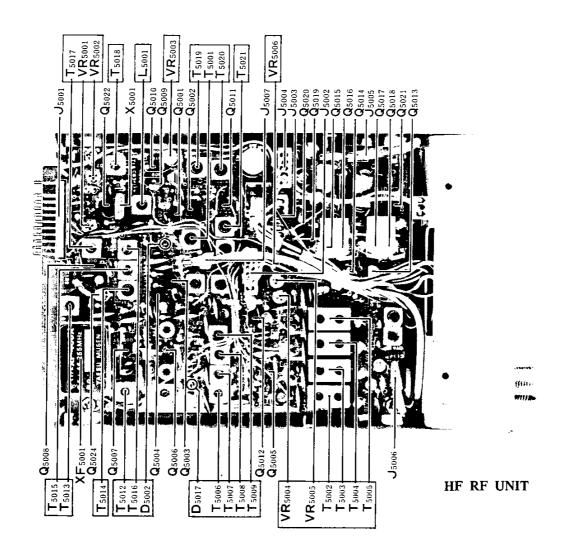
## FOR SERVICE MANUALS CONTACT:

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HF PA UNIT



## COMPONENT APPLICATIONS

| MAIN         | CHASSIS    |              |   | D201         | PY4632K   | LED            | MODE Indicator (NOR<br>LSB)              |
|--------------|------------|--------------|---|--------------|-----------|----------------|--|
|              |            |              |   | D202         | "         | **             | " (NOR USB)                              |
| PART<br>NO.  | DEVICE     | TYPE         | FUNCTION                                    | D203         | "         | **             | " (NOR CW)                               |
| 110.         | DETTEL     | •            |   | D204         | "         | **             | " (NOR FM)                               |
| Q1           | μPC7808H   | IC           | Regulator (+8V Line)                        | D205         | BG4632K   |                | " (SAT LSB)                              |
| QI           | ді Стобон  | 10           |   | D206         | ,,        | •              | " (SAT USB)                              |
| 73.1         | PR4632K    | LED          | FM-CH Indicator                             | D207         | "         | **             | " (SAT CW)                               |
| D1           | PR4032R    | "            | REV Indicator                               | D208         | **        | **             | " (SAT FM)                               |
| D2           |            | Si Diode     | Reverse Voltage Protector                   | D209         | TLR205    | "              | ON AIR Indicator                         |
| D3           | S11B       | 21 Diode     | Reverse voltage i lottettoi                 | D207         | TLG205    | ,,             | BUSY (MOD) Indicator                     |
|              |            |              |   | D210         | 120200    |                | ,  |
| MEO I        | CONTINUE   |              |   |              |           |                |  |
| VFO 1        | UNII       |              |   | AF U         | NITT      |                |  |
|              |            |              |   | AF UI        | AT I      |                |  |
| PART<br>NO.  | DEVICE     | TYPE         | FUNCTION                                    |              |           |                |  |
| NO.          | DEVICE     | 1112         |   | PART<br>NO.  | DEVICE    | TYPE           | FUNCTION                                 |
| 0101         | 2SK192A-GR | JFET         | PLL VCO (for NOR VFO)                       | NO.          | DEVICE    |                |  |
| Q101<br>Q102 | 2SK241Y    | 31 L 1       | PLL Buffer Amplifier                        | Q301         | Not Used  |                |  |
| -            | 2SC535B    | Transistor   | PLL Output Buffer                           | Q301<br>Q302 | μPC2002H  | IC             | RX Audio Amplifier                       |
| Q103         |            |              | 1/44 Divider                                | -            | 2SC945AP  | Transistor     | TX Driver                                |
| Q104         | HD10551P   | ·IC          | •   | Q303         | 25C945AP  | 1 1211515101   | 1 A Dittel                               |
| Q105         | μPC1037H   | ,,           | NOR VFO Premixer                            |              |           | WINT DOLLAR    | TX Power Controller                      |
| Q106         | 2SK241Y    | JFET         | PLL Buffer Amplifier                        | D301         | 1SV80     | PIN Diode      | 1X Power Controller                      |
| Q107         | μPC1037H   | IC           | PLL Mixer                                   |              |           |                |  |
| Q108         | 2SC535B    | Transistor   | PLL IF Amplifier                            |              |           |                |  |
| Q109         | 2SC460B    | **           | PLL Local Oscillator<br>(NOR VFO)           |              | SQL SWITO | CH UNIT        |  |
| Q110         | 2SC535B    | **           | PLL Local Oscillator                        | PART         | DEVICE    | TYPE           | FUNCTION                                 |
|              |            |              | Multiplier (x9)                             | NO.          | DETICE    |                |  |
| Q111         | MC14094B   | IC           | Latch (NOR VFO PLL                          | 0.001        | 2SA733AP  | Transistor     | TONE SQL Switch (FM)                     |
|              |            |              | Divider Data)                               | Q501         | 2SC945AP  | ,,             | RX TONE Amplifier                        |
| Q112         | "          | "            | " ( " )                                     | Q502         | 23C943AF  | ••             | Mr 101021111                             |
| Q113         | TC9122P    | "            | PLL Programmable Divider                    |              |           | C: Diada       | TONE SQL Switch (FM)                     |
| Q114         | TC5082P    | "            | PLL Reference Oscillator,<br>1/1024 Divider | D501         | 1SS53     | Si Diode       | TONE SQL Switch (1 M)                    |
| Q115         | TC5081AP   | ••           | PLL Phase Detector                          | TX U         | NITT      |                |  |
| Q116         | 2SK30AY    | JFET         | PLL Loop Filter Buffer                      | IX U         | IATT      |                |  |
| Q117         | 2SC945AP   | Transistor   | PLL Loop Filter                             |              |           |                |  |
| Q118         | ,,         | **           | Switch (NOR VFO PLL                         | PART         | DEVICE    | TYPE           | FUNCTION                                 |
| -            |            |              | Data)                                       | NO.          | DEVICE    | 1112           | . 01.01.01.                              |
| Q119         | ,,         | **           | Inverter ( " )                              | 01001        | 20C1916CB | Transistor     | TX MIC Amplifier                         |
| Q120         | 2SA733Q    | **           | PLL Unlock Signal                           | Q1001        | 2SC1815GR | ransistor<br>" | " (FM)                                   |
| QIDO         |            |              | Amplifier                                   | Q1002        |           |                | (000)                                    |
| Q121         | 2SC945AP   | ,,           | PLL Unlock Switch                           | Q1003        | μPC1158H2 | IC             |  |
| Q121<br>D101 | 1T25       | Varactor     | PLL VCO (for NOR VFO)                       | Q1004        | 2SC945AP  | Transistor     | TX Audio ALC Amplifier (SSB Audio Speech |
| DIVI         | 1125       | Diode        | •   |              |           |                | Processor)                               |
| D103         | 1SS53      | Si Diode     | PLL Oscillator Frequency                    | Q1005        | **        |                | TX AF Amplifier (for FM)                 |
| D102         | 13333      | 31 Diode     | Control Switch                              | Q1006        | "         | **             | TX Active LPF ( " )                      |
|              |            | ,,           | "   | Q1007        | ,,        | "              | TX AF Amplifier (")                      |
| D103         | "          | ,,           | •   | Q1008        | 2SC460B   | "              | TX FM Carrier Mod. VCXO                  |
| D104         | "          | "            |   | Q1009        | Not Used  |                |  |
|              |            | <b>a</b> . t | PLL Local Oscillator (NOR                   | Q1010        | "         |                |  |
| X101         | 6.38MHz    | Crystal      |   | Q1011        | 2SC460B   | Transistor     | TX CW Carrier Oscillator                 |
|              |            | (HC-18/U     | ) VFO)                                      | Q1012        | 3SK73Y    | MOS FET        | TX 1st IF Buffer Amplifier               |
| X102         | 4.5056MHz  | "( ")        | PLL Reference Oscillator                    | ~            |           |                | (FM, CW)                                 |
| TH101        | 33D28      | Thermistor   | =   | Q1013        | 2SC945AP  | Transistor     | TX AF Buffer Amplifier (SSB)             |
|              |            |              | (for Q101)                                  | Q1014        | μPC1037H  | IC             | TX Balanced Modulator (")                |
|              |            |              |   | Q1015        | 2SA733AQ  | Transistor     | Carrier Oscillator Sideband              |
|              |            |              |   | Ø1013        |           | _ ,            | Selector (USB)                           |
| DISP         | LAY UNIT   |              |   | Q1016        | "         | ,,             | " (LSB)                                  |
|              |            |              |   | -            | 2SC460B   | <br>,,         | Carrier Oscillator                       |
| PART         |            |              |   | Q1017        |           | MOS FET        | TX 1st IF Amplifier                      |
| NO.          | DEVICE     | TYPE         | FUNCTION                                    | Q1018        | 3SK73Y    |                | FM TX 8V Switch                          |
|              |            |              |   | Q1019        | 2SA733AQ  | Transistor     | IN IN 0 7 DWILLOW                        |
| V201         | FIP-12A5A  | FCD          | Frequency Display                           | Q1020        | Not Used  |                |  |
|              |            |              |   |              |           |                |  |

| Q1021   | 2SA733AQ   | Transistor   | CW TX 8V Switch  | D1038  | 1SS53   | Si Diode                                     | TX CW Controller   |
|---|--|--|--|--|---|--|--|
| Q1022   | "  | "  | SSB TX 8V Switch   | D1039  | "   | "  | Threshold Level  |
| Q1023   | 2SC1815BL  | ,,   | TX ALC Amplifier   |  |   |  | Compensator (for Q1033)  |
| Q1024   | 2SK192A-GR   | JFET   | TX ALC Meter Amplifier   | D1040  | ,,  | ,,   | TX CW Controller   |
| Q1025   | 2\$A733AQ  | Transistor   | ,,   | D1041  | ,,  | ,,   | "  |
| Q1025<br>Q1026  | Not Used   | 11411013401  |  | D1041  | **  | ,,   | ,,   |
| ~   |  | m · .  | TV MOD India Girmal  |  |   |  |  |
| Q1027   | 2SC945AP   | Transistor   | TX MOD Indic. Signal   | D1043  | ,,  | "  | Gate Protector (for Q1035)   |
|   |  |  | Amplifier  | D1044  | "   | "  | "  |
| Q1028   | **   | . "  | MOD LED Driver   | D1045  | ,,  | "  | Threshold Level  |
| Q1029   | **   | **   | TX Sidetone Switch   |  |   |  | Compensator (for Q1037)  |
| Q1030   | **   | ,,   | TX MOD Indic. Switch   | D1046  | ,,  | ,,   | Reverse Voltage Protector  |
| Q1031   | MC14011B   | IC   | TX CW Sequencer  |  |   |  | (for Q1038)  |
| Q1032<br>Q1032  | MC14069UB  | ,,   | "  | D1047  | "   | ,,   | " (for RL1001)   |
| -   |  |  | TX CW KEY Switch   |  |   |  |  |
| Q1033   | 2SC945AP   | Transistor   |  | D1048  | "   | "  | " (for Q1039)  |
| Q1034   | "  | "  | TX CW Delayer  | D1049  | "   | "  | " (for RL1002)   |
| Q1035   | MC14081B   | IC   | TX VFO Select Gates  | D1050  | "   | **   | TX Tone Burst Switch   |
| Q1036   | μPC78L05   |  | Regulator (+5V Line)   | D1051  | Not Used  |  |  |
| Q1037   | 2SC945AP   | Transistor   | PTT Switch   | D1052  |   |  |  |
| Q1038   | MPS-A13  | n  | Relay Driver (for RL1001)  | D1053  | ,,  |  |  |
| Q1039   | 2SC945AP   | ,,   | " (for RL1002)   | D1054  | **  |  |  |
| -   |  | ,,   | ,  |  |   | C: Diada                                     | TX MOD Indic, Switch   |
| Q1040   | 2SA496Y  | "  | SAT TX Switch  | D1055  | 1\$\$53   |  |  |
|   |  |  | _  | D1056  | **  | "  | TX MOD Indic. Disable  |
| D1001   | 1\$188FM   | Ge Diode   | TX Audio ALC Detector  |  |   |  | Switch (CW)  |
|   |  |  | (SSB Audio Speech  | D1057  | **  | "  | MODE Switch (for CW)   |
|   |  |  | Processor)   | D1058  | MV12  | Varistor                                     | Temperature Compensator  |
| D1002   | ,,   | "  | ·· (                )  |  |   | Diode  | (for Q1033)  |
| D1003   | 1S1555   | Si Diode   | TX FM IDC  |  |   | 2.02.2                                       | (111 (111)   |
| D1003   | "  | "  | "  | X1001  | 10.81MHz  | Crystal                                      | TX FM Carrier Mod VCXO   |
|   |  |  | TX FM Modulator  | Aloui  | 10.01WINZ   | -  |  |
| D1005   | FC53M-5  | Varactor   | TX FW Modulator  |  |   | (HC-18/T3)                                   |  |
|   |  | Diode  |  | X1002  | 10.8092MHz  |  | TX CW Carrier Oscillator   |
| D1006   | MV103  | Varistor   | Temperature Compensator  | X1003  | 10.8115MHz  | ,  | USB Carrier Oscillator   |
|   |  | Diode  | [for TX FM Modulator   | X1004  | 10.8085MHz  | "( " )                                       | LSB "  |
|   |  |  | (D1005)]   |  |   |  |  |
| D1007   | 1SS53  | Si Diode   | MODE Switch (FM)   | XF1001   | XF-10.8LS   | Crystal                                      | TX SSB Filter  |
|   |  |  | Regulator (for TX FM   |  |   | Filter                                       |  |
| D1008   | WZ050  | Zener Diode  | Regulator (101 LA FW   |  |   |  |  |
|   |  |  | •  |  |   |  |  |
|   |  |  | Modulator VCXO)  | TV11001  | comaca  | The  | Parameters Commonstator  |
| D1009   | 1SS53  | Si Diode   | •  | TH1001   | SDT250  | Thermistor                                   | Temperature Compensator  |
| D1009<br>D1010  | 1SS53<br>Not Used  |  | Modulator VCXO)  | TH1001   | SDT250  | Thermistor                                   | Femperature Compensator (for Q1023)  |
|   |  |  | Modulator VCXO)  | TH1001   | SDT250  | Thermistor                                   | · -  |
| D1010   | Not Used   |  | Modulator VCXO)  | TH1001   | SDT250  | Thermistor                                   | · -  |
| D1010<br>D1011<br>D1012   | Not Used   |  | Modulator VCXO)  |  |   | Thermistor                                   | · -  |
| D1010<br>D1011<br>D1012<br>D1013  | Not Used " " "   |  | Modulator VCXO)  | TH1001   |   | Thermistor                                   | · -  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014   | Not Used " " "   |  | Modulator VCXO)  | RX U   |   | Thermistor                                   | · -  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014<br>D1015  | Not Used " " " "   | Si Diode   | Modulator VCXO) MODE Switch (for FM)   | RX UI  | NIT   |  | (for Q1023)  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014<br>D1015<br>D1016   | Not Used 1SS53   | Si Diode   | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW)   | RX U   |   | Thermistor                                   | · -  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014<br>D1015<br>D1016<br>D1017  | Not Used 1SS53   | Si Diode   | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch  | RX UN  | NIT<br>DEVICE   | TYPE   | (for Q1023)  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014<br>D1015<br>D1016   | Not Used 1SS53   | Si Diode   | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW)   | RX UI  | NIT   |  | (for Q1023)  FUNCTION  RX 1st IF Amplifier (for  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014<br>D1015<br>D1016<br>D1017  | Not Used 1SS53   | Si Diode<br>Si Diode   | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch  | RX UN  | NIT<br>DEVICE   | TYPE   | (for Q1023)  FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014<br>D1015<br>D1016<br>D1017<br>D1018   | Not Used 1SS53 1S1588  | Si Diode Si Diode  | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW)   | RX UN  | NIT<br>DEVICE   | TYPE   | (for Q1023)  FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014<br>D1015<br>D1016<br>D1017<br>D1018<br>D1019<br>D1020   | Not Used 1SS53 1S1588  | Si Diode Si Diode "" ""  | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (")   | RX UN  | NIT<br>DEVICE   | TYPE<br>MOS FET                              | (for Q1023)  FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014<br>D1015<br>D1016<br>D1017<br>D1018<br>D1019<br>D1020<br>D1021  | Not Used 1SS53 1S1588 1SS53                                  | Si Diode Si Diode "" "" ""   | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) ( ) MODE Switch ( ) (SSB)   | RX UN  | NIT<br>DEVICE   | TYPE   | (for Q1023)  FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for  |
| D1010<br>D1011<br>D1012<br>D1013<br>D1014<br>D1015<br>D1016<br>D1017<br>D1018<br>D1019<br>D1020   | Not Used 1SS53 1S1588 1SS53                                  | Si Diode Si Diode "" ""  | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB  | RX UI<br>PART<br>NO.<br>Q2001  | NIT<br>DEVICE<br>3SK73Y   | TYPE<br>MOS FET                              | (for Q1023)  FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022   | Not Used   | Si Diode Si Diode "" "" "" ""  | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) () MODE Switch () (SSB) Carrier Oscillator LSB Selector   | RX UI<br>PART<br>NO.<br>Q2001  | NIT<br>DEVICE<br>3SK73Y   | TYPE<br>MOS FET                              | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz,   |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022   | Not Used   | Si Diode Si Diode "" "" "" "" ""   | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) ( ) MODE Switch ( ) (SSB) Carrier Oscillator LSB Selector USB Selector  | RX UI PART NO.  Q2001  | DEVICE 3SK73Y 2SK125  | TYPE MOS FET JFET                            | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024   | Not Used   | Si Diode Si Diode "" "" "" ""  | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) ( ) MODE Switch ( ) (SSB) Carrier Oscillator LSB Selector USB Selector SSB BFO Switch (RX)  | RX UI PART NO.  Q2001  Q2002   | DEVICE 3SK73Y 2SK125 2SC460B  | TYPE MOS FET  JFET  Transistor               | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025   | Not Used   | Si Diode Si Diode "" "" "" "" ""   | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) ( ) MODE Switch ( ) (SSB) Carrier Oscillator LSB Selector USB Selector  | RX UI PART NO.  Q2001  | DEVICE 3SK73Y 2SK125  | TYPE MOS FET JFET                            | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer   |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024   | Not Used   | Si Diode Si Diode "" "" "" "" "" "" "" "" "" "" "" "" ""                                       | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) ( ) MODE Switch ( ) (SSB) Carrier Oscillator LSB Selector USB Selector SSB BFO Switch (RX)  | RX UI PART NO.  Q2001  Q2002  Q2003 Q2004                            | DEVICE 3SK73Y 2SK125 2SC460B 2SC535B                                  | TYPE MOS FET  JFET  Transistor               | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier   |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026   | Not Used   | Si Diode  Si Diode  """  """  """  """  """  """  """  | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) () MODE Switch () (SSB) Carrier Oscillator LSB Selector USB Selector SSB BFO Switch (RX) (TX)   | RX UI PART NO.  Q2001  Q2002   | DEVICE 3SK73Y 2SK125 2SC460B  | TYPE MOS FET  JFET  Transistor               | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  RX 2nd IF Buffer Amplifier   |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027   | Not Used   | Si Diode  Si Diode  """  """  """  """  """  """  """  | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch   | RX UI PART NO.  Q2001  Q2002  Q2003 Q2004                            | DEVICE 3SK73Y 2SK125 2SC460B 2SC535B                                  | TYPE MOS FET  JFET  Transistor               | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  RX 2nd IF Buffer Amplifier (for 50MHz, 144MHz, FM),  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028   | Not Used "" "" 1SS53 " 1S1588 " 1SS53 " " " " " " " Not Used | Si Diode  Si Diode  """  """  """  """  """  """  """  | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) () MODE Switch () (SSB) Carrier Oscillator LSB Selector USB Selector SSB BFO Switch (RX) (TX) SAT TX Switch MODE Switch (FM)  | RX UI PART NO.  Q2001  Q2002  Q2003 Q2004                            | DEVICE 3SK73Y 2SK125 2SC460B 2SC535B                                  | TYPE MOS FET  JFET  Transistor               | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029                                     | Not Used   | Si Diode  Si Diode  """  """  Si Diode   | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW)                                | RX UI PART NO.  Q2001  Q2002  Q2003 Q2004                            | DEVICE 3SK73Y 2SK125 2SC460B 2SC535B                                  | TYPE MOS FET  JFET  Transistor               | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  RX 2nd IF Buffer Amplifier (for 50MHz, 144MHz, FM),  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029 D1030                               | Not Used   | Si Diode  Si Diode  """  """  Si Diode  """  | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW) " (SSB)                        | RX UI PART NO.  Q2001  Q2002  Q2003 Q2004                            | DEVICE 3SK73Y 2SK125 2SC460B 2SC535B                                  | TYPE MOS FET  JFET  Transistor "             | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029 D1030 D1031                         | Not Used   | Si Diode  Si Diode  """  """  Si Diode  """  Si Diode  """                                     | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW) " (SSB) " (CW)                 | RX UI PART NO. Q2001  Q2002  Q2003 Q2004 Q2005                       | DEVICE 3SK73Y 2SK125 2SC460B 2SC535B                                  | TYPE MOS FET  JFET  Transistor """           | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier (for 430MHz) FM)  " (")  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029 D1030 D1031 D1032                   | Not Used   | Si Diode  Si Diode  """  """  Si Diode  """  """  Si Diode  ""  ""  ""  ""  ""  ""  ""  ""  "" | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW) " (SSB) " (CW) " (LSB)         | RX UI PART NO. Q2001  Q2002  Q2003 Q2004  Q2005                      | DEVICE 3SK73Y 2SK125 2SC460B 2SC535B                                  | TYPE MOS FET  JFET  Transistor " "           | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier  (for 430MHz FM)  "(")  "(")   |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029 D1030 D1031 D1032 D1033             | Not Used   | Si Diode  Si Diode  """  """  Si Diode  """  Si Diode  """                                     | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW) " (SSB) " (CW)                 | RX UI PART NO. Q2001  Q2002  Q2003 Q2004  Q2005                      | DEVICE 3SK73Y 2SK125 2SC460B 2SC535B 2SC945AP µPC577H                 | TYPE MOS FET  JFET  Transistor               | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier  (for 430MHz FM)  " (")  RX FM Limiter Amplifier   |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029 D1030 D1031 D1032                   | Not Used   | Si Diode  Si Diode  """  """  Si Diode  """  """  Si Diode  ""  ""  ""  ""  ""  ""  ""  ""  "" | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW) " (SSB) " (CW) " (LSB)         | RX UI PART NO.  Q2001  Q2002  Q2003 Q2004  Q2005  Q2006  Q2007 Q2008 | DEVICE  3SK73Y  2SK125  2SC460B 2SC535B   2SC945AP  µPC577H 2SC1815GR | TYPE MOS FET  JFET  Transistor IC Transistor | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier  (for 430MHz FM)  " (")  " (")  RX FM Limiter Amplifier  RX FM AF Amplifier  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029 D1030 D1031 D1032 D1033             | Not Used   | Si Diode  Si Diode  """  """  Si Diode  """  """  Si Diode  ""  ""  ""  ""  ""  ""  ""  ""  "" | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW) " (SSB) " (CW) " (LSB)         | RX UI PART NO. Q2001  Q2002  Q2003 Q2004  Q2005                      | DEVICE 3SK73Y 2SK125 2SC460B 2SC535B 2SC945AP µPC577H                 | TYPE MOS FET  JFET  Transistor               | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier  (for 430MHz FM)  " (")  " (")  RX FM Limiter Amplifier  RX 2nd IF Amplifier  RX 2nd IF Amplifier  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029 D1030 D1031 D1032 D1033 D1034       | Not Used   | Si Diode  Si Diode  """  """  Si Diode  """  """  Si Diode  ""  ""  ""  ""  ""  ""  ""  ""  "" | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW) " (SSB) " (CW) " (LSB)         | RX UI PART NO.  Q2001  Q2002  Q2003 Q2004  Q2005  Q2006  Q2007 Q2008 | DEVICE  3SK73Y  2SK125  2SC460B 2SC535B   2SC945AP  µPC577H 2SC1815GR | TYPE MOS FET  JFET  Transistor IC Transistor | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier  (for 430MHz FM)  " (")  RX FM Limiter Amplifier  RX 2nd IF Amplifier  RX FM AF Amplifier  RX 2nd IF Amplifier  RX FM AF Amplifier  RX 2nd IF Amplifier  RX 2nd IF Amplifier  RX 2nd IF Amplifier  RX 2nd IF Amplifier (for 50MHz, 144MHz SSB, CW) |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029 D1030 D1031 D1032 D1033 D1034 D1035 | Not Used   | Si Diode  Si Diode  """  """  Si Diode  """  ""  ""  ""  ""  ""  ""  ""  ""                    | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW) " (SSB) " (CW) " (LSB) " (USB) | RX UI PART NO.  Q2001  Q2002  Q2003 Q2004  Q2005  Q2006  Q2007 Q2008 | DEVICE  3SK73Y  2SK125  2SC460B 2SC535B   2SC945AP  µPC577H 2SC1815GR | TYPE MOS FET  JFET  Transistor IC Transistor | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier  (for 430MHz FM)  " (")  " (")  RX FM Limiter Amplifier  RX 2nd IF Amplifier  RX 2nd IF Amplifier  |
| D1010 D1011 D1012 D1013 D1014 D1015 D1016 D1017 D1018 D1019 D1020 D1021 D1022 D1023 D1024 D1025 D1026 D1027 D1028 D1029 D1030 D1031 D1032 D1033 D1034 D1035 | Not Used   | Si Diode  Si Diode  """  """  Si Diode  """  ""  ""  ""  ""  ""  ""  ""  ""                    | Modulator VCXO) MODE Switch (for FM)  MODE Switch (CW) KEY Switch TX 1st IF Limiter (FM, CW) " (") MODE Switch (") " (SSB) Carrier Oscillator LSB Selector " USB Selector SSB BFO Switch (RX) " (TX) SAT TX Switch MODE Switch (FM)  MODE Switch (CW) " (SSB) " (CW) " (LSB) " (USB) | RX UI PART NO.  Q2001  Q2002  Q2003 Q2004  Q2005  Q2006  Q2007 Q2008 | DEVICE  3SK73Y  2SK125  2SC460B 2SC535B   2SC945AP  µPC577H 2SC1815GR | TYPE MOS FET  JFET  Transistor IC Transistor | FUNCTION  RX 1st IF Amplifier (for 50MHz, 144 MHz), RX 2nd IF Amplifier (for 430MHz)  RX 2nd Mixer (for 50MHz, 144MHz), RX 3rd Mixer (for 430MHz)  RX IF SHIFT VCXO  RX IF SHIFT VCXO  RX IF SHIFT VCXO Buffer Amplifier  (for 50MHz, 144MHz, FM), RX 3nd IF Buffer Amplifier  (for 430MHz FM)  " (")  RX FM Limiter Amplifier  RX 2nd IF Amplifier  RX FM AF Amplifier  RX 2nd IF Amplifier  RX FM AF Amplifier  RX 2nd IF Amplifier  RX 2nd IF Amplifier  RX 2nd IF Amplifier  RX 2nd IF Amplifier (for 50MHz, 144MHz SSB, CW) |

|                |                |             |   | D2016          | No.4 Hond   |                                       |                              |
|----------------|----------------|-------------|---|----------------|-------------|---------------------------------------|------------------------------|
| Q2010          | μPC1037H       | IC          | RX IF WIDTH Mixer                         | D2016<br>D2017 | Not Used    |                                       |                              |
|                |                |             | (SSB, CW)                                 | D2017<br>D2018 | 1SV50       | Varactor                              | RX IF WIDTH VCXO             |
| Q2011          |                | "           | " (")  RX 2nd IF Amplifier (for           | D2010          | 15.50       | Diode                                 |                              |
| Q2012          | 3SK73Y         | MOS FET     | 50MHz, 144MHz, SSB, CW)                   | D2019          | Not Used    |                                       |                              |
|                |                |             | RX 3rd IF Amplifier (for                  | D2020          | ,,          |                                       |                              |
|                |                |             | 430MHz SSB, CW)                           | D2021          | **          |                                       |                              |
| Q2013          | μPC1037H       | IC          | RX Balanced Demodulator                   | D2022          |             |                                       |                              |
| Q2013          | μι C103/11     | 10          | (SSB, CW)                                 | D2023          | 1S188FM     | Ge Diode                              | RX AGC Detector              |
| Q2014          | ,,             | **          | RX BFO Premixer                           | D2024          | "           | "                                     | •                            |
| Q2015          | 2SC460B        | Transistor  | RX IF WIDTH VCXO                          | D2025          | 1SS53       | Si Diode                              | " Database                   |
| Q2016          | 2SC945AP       | **          | RX AGC Buffer Amplifier                   | D2026          | 1S188FM     | Ge Diode                              | RX FM S-Meter Detector       |
| Q2017          | Not Used       |             |   | D2027          | "           | " " " " " " " " " " " " " " " " " " " | " Threshold Level Compensa-  |
| Q2018          | 2SC1815GR      | Transistor  | RX AF Amplifier                           | D2028          | 1S1555      | Si Diode                              | tor [for RX FM Noise         |
| Q2019          | 2SC945AP       | **          | RX AF Active LPF                          |                |             |                                       | Detector (D2029, 2030)]      |
| Q2020          | 2SC535B        | "           | RX NB Buffer Amplifier                    | D2020          | 1S188FM     | Ge Diode                              | RX FM Noise Detector         |
| Q2021          | 2SC1583        | "           | RX NB Amplifier                           | D2029<br>D2030 | 13100FM     | "                                     | "                            |
| Q2022          | "              | "           | ,,  | D2030<br>D2031 |             | ,,                                    | RX AGC Detector              |
| Q2023          |                | "           | " DISNE AGG A WESSEL                      | D2031          | ,,          | ,,                                    | "                            |
| Q2024          | 2SC945AP       | . "         | RX NB AGC Amplifier RX NB Gate Controller | D2032          | 1SS53       | Si Diode                              | RX RF GAIN AGC Gate          |
| Q2025          | 2SC1815GR      | ••          | RX FM S-Meter Amplifier                   | D2034          | "           |                                       | AGC Threshold Level          |
| Q2026          | 2SC945AP       | ,,          | RX FM 3-meter Amplifier                   |                |             |                                       | Compensator (for Q1035)      |
| Q2027          |                | ,,          | " Holse Ampairer                          | D2035          |             |                                       | RX SQL Switch (SSB, CW)      |
| Q2028<br>Q2029 | "<br>2SC1815GR | "           | RX FM SQL Switch                          | D2036          | Not Used    |                                       |                              |
| Q2029<br>Q2030 | 23C1813GR      | ,,          | RX SCAN Switch (FM)                       | D2037          | "           |                                       | _                            |
| Q2030<br>Q2031 | **             | "           | " (SSB, CW)                               | D2038          | 18853       | Si Diode                              | SSB RX 8V Gate               |
| Q2032          | 2SC945AP       | ,,          | RX BUSY Indicator Switch                  | D2039          | "           | **                                    | CW "                         |
| Q2033          | 2SC1815BL      | ,,          | RX AGC DCAmplifier                        | D2040          | "           | "                                     | RX Filter Select Switch (CW) |
| Q2034          | AN6561         | IC          | RX AGC Buffer Amplifier                   | D2041          | Not Used    |                                       |                              |
| Q2035          | 2SA733         | Transistor  | RX S-Meter Amplifier                      | D2042          | 10052       | C: Diada                              | Reverse Voltage Protector    |
|                |                |             | (SSB, CW)                                 | D2043          | 1SS53       | Si Diode                              | (for Q2046)                  |
| Q2036          | 2SC945AP       | **          | RX SQL Switch (")                         | D2044          | ,,          | **                                    | RX AF Amplifier (Q2018)      |
| Q2037          | ,,             | ,,          | " (")                                     | D2044          | "           | ,,                                    | Disable Switch (NOR TX)      |
| Q2038          | 2SA733         | .,          | FM RX 8V Switch                           | D2045          | ,,          | **                                    | RX AGC Buffer Amplifier      |
| Q2039          | AN6561         | IC          | RX FM Center Tune Buffer                  | D2043          |             |                                       | Limiter                      |
|                | 40004547       | T           | Amplifier (dual) RX SCAN Controller (FM)  | D2046          | "           | ••                                    | Threshold Level              |
| Q2040          | 2SC945AP       | Transistor  | " (")                                     |                |             |                                       | Compensator (for Q2034)      |
| Q2041<br>Q2042 | 2SA733         |             | " (" )                                    | D2047          | **          | ••                                    | RX AF Amplifier (Q2048)      |
| Q2042<br>Q2043 | "              | "           | RX FM Center Meter                        |                |             |                                       | Disable Switch (NOR TX)      |
| Q2043          |                |             | Amplifier                                 | D2048          | ••          | **                                    | RX SCAN Controller (FM)      |
| Q2044          | ,,             | "           | SSB CW RX 8V Switch                       |                |             |                                       | DV IF SHIFT VCVO             |
| Q2045          | Not Used       |             |   | X2001          | 11.265MHz   | Crystal                               | RX IF SHIFT VCXO             |
| Q2046          | 2SC945AP       | Transistor  | Relay Driver (for RL2001)                 |                | 11 2051511- | (HC-18/U                              | RX IF WIDTH VCXO             |
| Q2047          | "              | ••          | RX AF Disable Switch (on                  | X2002          | 11.205MHz   | "( ")                                 | RX IF WIDTH VEAC             |
|                |                |             | NOR TX)                                   | VE2001         | 108M15A     | Crystal                               | RX 1st IF Filter (for 50MHz, |
| Q2048          | "              | **          | RX AF Buffer Amplifier                    | XF 2001        | TUOMISA     | Filter                                | 144MHz)                      |
|                |                |             | (for AF OUT)                              |                |             | 1 11(01                               | RX 2nd IF Filter (for        |
| D2001          | FC53M-5        | Varactor    | RX IF SHIFT VCXO                          |                |             |                                       | 430MHz)                      |
|                |                | Diode       |   | XF2002         | XF-10.7LW   | ,,                                    | RX IF WIDTH Filter           |
| D2002          | 1SS53          | Si Diode    | MODE Switch (FM)                          |                | XF-455MC    |                                       | Optional RX 2nd IF Filter    |
| D2003          | "              | "<br>2 Di 1 | " (") RX FM Discriminator                 |                |             |                                       | (for 50MHz, 144MHz           |
| D2004          | 1S188FM        | Ge Diode    |   |                |             |                                       | CW-N)                        |
| D2005          | "              | ,,          | 11  |                |             |                                       | RX3rd IF Filter (for         |
| D2006          | Not Used       |             |   |                |             |                                       | 430MHz CW-N)                 |
| D2007          | "              |             |   | CF2001         | LF-H15S     | Ceramic                               | RX FM IF Filter              |
| D2008          | 1SS53          | Si Diode    | RX Filter Select Switch                   |                |             | Filter                                |                              |
| D2009          | 1000           | J. 2.040    | (SSB, CW-W)                               | CF2002         | Not Used    |                                       |                              |
| D2010          | **             | **          | " ( " )                                   |                | LF-C2A      | Ceramic                               | RX 2nd IF Filter (for 50MHz, |
| D2010<br>D2011 |                |             | " (SSB)                                   |                |             | Filter                                | 144MHz SSB, CW)              |
| D2011<br>D2012 |                | ••          | " (CW-N)                                  |                |             |                                       | RX 3rd IF Filter (for        |
| D2012          |                | **          | " ( " )                                   |                |             |                                       | 430MHz SSB, CW)              |
| D2014          |                |             |   | CF2004         | LF-B20      | "                                     | RX FM IF Filter              |
| D2015          |                |             |   |                |             |                                       |                              |
|                |                |             |   |                |             |                                       |                              |

| CD2001  | SFD455S4     | Ceramic          | RX FM Discriminator          | D3020          | 1SS53        | Si Diode    | SSB Decoder                  |
|---------|--------------|------------------|------------------------------|----------------|--------------|-------------|------------------------------|
|         |              | Filter           |                              | D3021          | "            | "           | Beep Oscillator Control      |
|         |              |                  |                              | D3022          | "            | "           | Decoder (for Display Data)   |
| TH2001  | SDT-250      | Thermistor       | Temperature Compensator      | D3023          | **           | "           | " ( " )                      |
| 1112001 | 52 I 200     | 2110111111111111 | (for Q2029)                  | D3024          | ,,           | ,,          | " ( " )                      |
|         |              |                  | (101 (2025)                  | D3025          | ,,           | ,,          | ,                            |
|         |              |                  |                              |                |              |             | " ( " )                      |
|         |              |                  |                              | D3026          | "            | "           | " ( " )                      |
| CONT.   | ROL UNIT     |                  |                              | D3027          | "            | **          | " ( " )                      |
|         |              |                  |                              | D3028          | "            | ,,          | " ( " )                      |
| PART    |              |                  |                              | D3029          | ,,           | **          | " ( " )                      |
| NO.     | DEVICE       | TYPE             | FUNCTION                     | D3030          | HZ11B1       | Zener Diode | •                            |
|         |              |                  |                              | D3031          | 1SS53        | Si Diode    | Rectifier                    |
| Q3001   | μPD7801G-090 | IC.              | CPU                          |                |              |             |                              |
|         | •            | "                |                              | D3032          | HZ3B2        |             | Clipper (for DC-DC Converter |
| Q3002   | μPD5101LC    |                  | RAM                          | D3033          | 1SS53        | Si Diode    | CLAR/FM-CH Decoder           |
| Q3003   | ••           | **               | "                            | D3034          | "            | "           | "                            |
| Q3004   | μPD8279C-5   | "                | Frequency Display Controller |                |              |             |                              |
| Q3005   | μPD8255AC-5  | ,,               | PIO (for PLL Divider,        | X3001          | CSA4.00MT    | Ceramic     | CPU Clock                    |
|         |              |                  | MODE, REV, FM-CH Data)       |                | 001111001111 | Resonator   | 01 0 010111                  |
| O3006   | 2SD892O      | Transistor       | REV Indicator Driver         |                |              | Resolution  |                              |
| Q3007   | MC14503B     | IC               | PLL Data Buffer              |                |              |             |                              |
| Q3008   | MC14515B     | "                | Frequency Display Decoder    | DØ 113         | r Year       |             |                              |
| -       |              |                  | • • •                        | PS UN          | NTT.         | ì           |                              |
| Q3009   | MC14069UB    | _" .             | MODE Data Decoder            |                |              |             |                              |
| Q3010   | 2SC945AP     | Transistor       | n .                          | PART           |              |             |                              |
| Q3011   | SN7416N      | IC               | "                            | NO.            | DEVICE       | TYPE        | FUNCTION                     |
| Q3012   | MC14001B     |                  | Beep Oscillator              |                |              |             |                              |
| Q3013   | 2SC945AP     | Transistor       | SCAN Stop Switch (PTT)       | Q601           | 2SD717O      | Transistor  | Pass Tran for +13.8V Reg.    |
| Q3014   | MC14011B     | IC               | SCAN Controller              |                |              |             |                              |
| Q3015   | MC14069UB    | "                | CPU Reset Switch (Power      | D601           | S5VB10       | Si Diode    | Rectifier                    |
| Q3013   | MC140030B    |                  |                              | Door           | 22 A D I O   |             | Recuirei                     |
|         |              |                  | Up)                          |                |              | Bridge      |                              |
| Q3016   | "            | "                | VFO Controller               |                |              |             |                              |
| Q3017   | "            | ••               | "                            |                |              |             |                              |
| Q3018   | MC14081B     | "                | **                           | AVR 1          | UNIT         |             |                              |
| Q3019   | MC14072B     | •                | "                            |                |              |             |                              |
| Q3020   | MC14011B     | ,,               | FM-CH Controller             | PART           |              |             |                              |
| Q3021   | MC14013B     | ,,               | UP/DOWN Controller           | NO.            | DEVICE       | TYPE        | FUNCTION                     |
| _       |              |                  | •                            |                |              |             |                              |
| Q3022   | 2SC945AP     | Transistor       | FM-CH Indicator Driver       | Q701           | 2SC496Y      | Transistor  | Regulator                    |
| Q3023   | μPC7805H     | IC               | Regulator (+5V Line)         | -              |              |             | -                            |
| Q3024   | 2SC945AP     | Transistor       | CPU Reset Switch             | Q702           | 2SC945AP     | "           | n                            |
| Q3025   | μPA80C       | IC               | FCD Driver                   |                |              |             |                              |
| Q3026   | . #          | "                | ,,                           | D701           | 10D1         | Si Diode    | Rectifier                    |
| Q3027   | ,,           | ,,               | ,,                           | D702           | HZ6B2        | Zener Diode | Regulator Reference          |
| Q3028   | 2SC1383R     | Transistor       | Regulator (+11V for DC-DC    |                |              |             | -                            |
| Q3020   | 23C1363K     | 11411515101      | - ·                          |                |              |             |                              |
|         |              |                  | Converter)                   | SATE           | LITE UNIT    |             |                              |
| Q3029   | 2SC2002L     | "                | DC-DC Converter Oscillator   | BAILI          | LITE ONL     |             |                              |
|         |              |                  |                              |                |              |             |                              |
| D3001   | 1SS53        | Si Diode         | Decoder (for Memory          | PART           | BRITAR       | ms (D) =    | THE SAME OF SAME             |
|         |              |                  | Channel Data)                | NO.            | DEVICE       | TYPE        | FUNCTION                     |
| D3002   |              | **               | " ( " )                      |                |              |             |                              |
| D3002   | ,,           | ,,               | " ( " )                      | Q4001          | 2SA733AQ     | Transistor  | TX Carrier Oscillator        |
|         |              |                  | ,                            |                |              |             | Sideband Selector (USB)      |
| D3004   | **           | "                | " ( " )                      | Q4002          | ,,           | ,,          | " (LSB)                      |
| D3005   | **           | **               | TONE SQL Decoder             | Q4003          | 2SC460B      | **          | TX Carrier Oscillator        |
| D3006   | "            | **               | Mem Ch Decoder               | Q4004          |              |             | TA Carrier Oscillator        |
| D3007   | **           | ••               | FM-CH Decoder                | -              | Not Used     |             |                              |
| D3008   | **           | **               | DIAL LOCK Decoder            | Q4005          | "            |             |                              |
| D3009   | ,,           | ,,               | VFO Select Decoder           | Q4006          | 2SC945AP     | Transistor  | TX Amplifier (SSB)           |
|         | ,,           | ,,               | "                            | Q4007          | μPC1037H     | IC          | TX Balanced Modulator (")    |
| D3010   |              |                  |                              | Q4008          | 2SC945AP     | Transistor  | TX AF Amplifier (FM)         |
| D3011   | HZ9C1        | Zener Diode      | Threshold Level              | Q4009          | 2SC460B      |             | TX FM Carrier Mod. VCXO      |
|         |              |                  | Compensator (for Q3024)      | Q4010          | **           | ,,          | TX CW Carrier Oscillator     |
| D3012   | 1SS97        | Schottky         | RAM Backup Switch            | Q4010<br>Q4011 | 3SK73Y       |             | TX 1st IF Buffer Amplifier   |
|         |              | Barrier Di.      |                              | QTOII          | JJK / J I    | MOSTEI      |                              |
| D3013   | ,,           | ,,               | Backup Battery Protector     | 0.40:-         | 22.222       |             | (FM, CW)                     |
| D3014   |              | Si Diode         | FM-CH Decoder                | Q4012          | 2SA733AQ     | Transistor  | MODE Switch (FM)             |
|         |              |                  |                              | Q4013          | Not Used     |             |                              |
| D3015   | **           | "                | III/DONAL Davida             | Q4014          | 2SA733AQ     | Transistor  | MODE Switch (CW)             |
| D3016   | **           | ••               | UP/DOWN Decoder              | Q4015          | "            | **          | " (SSB)                      |
| D3017   | ••           | "                | "                            | Q4016          | 2SK192A-GR   |             | PLL VCO (for SAT VFO)        |
| D3018   | Not Used     |                  |                              |                |              |             |                              |
| D3019   | 1SS53        | Si Diode         | SSB Decoder                  | Q4017          | 2SK241Y      |             | PLL Buffer Amplifier         |
|         |              |                  |                              | Q4018          | 2SC535B      | Transistor  | PLL Output Buffer            |
|         |              |                  |                              |                |              |             |                              |

| Q4019          | HD10551         | IC                                      | 1/44 Divider (PLL Out)                      | D4031          | 1T25       | Varactor             | PLL VCO (SAT VFO)                     |
|----------------|-----------------|---|---|----------------|------------|----------------------|---------------------------------------|
| Q4019          | μPC1037H        |   | SAT VFO Premixer                            |                |            | Diode                |                                       |
| Q4021          | 2SK241Y         |   | PLL Buffer Amplifier                        | D4032          | 1SS53      | Si Diode             | PLL Local Oscillator                  |
| 04022          | µPC1037H        |   | PLL Mixer                                   |                |            |                      | Frequency Select Switch               |
| Q4023          | 2SC535B         |   | PLL IF Amplifier                            | D4033          | **         | "                    | "                                     |
| Q4024          | 2SC460B         | ,,                                      | PLL Local Oscillator (SAT                   | D4034          | ,,         | "                    | "                                     |
| Q4025          | 2SC535B         | ,,                                      | VFO) PLL Local Oscillator                   | X4001          | 10.7015MHz | Crystal<br>(HC-18/U) | TX Carrier Oscillator (LSB)           |
|                |                 |   | Multiplier (x9)                             | X4002          | 10,6985MHz | "(")                 | ,, (USB)                              |
| Q4026          | MC14094BCP      | IC                                      | Latch (SAT VFO PLL                          | X4002<br>X4003 | 10.7MHz    | ,,                   | TX FM Carrier Mod VCXO                |
|                |                 |   | Divider Data)                               | A4003          | 10,11.2    | (HC-18/T3)           | P)                                    |
| Q4027          | "               | **                                      | " ( " )<br>" )                              | X4004          | 10.6992MHz | (HC-18/U)            | TX CW Carrier Oscillator              |
| Q4028          | TC9122P         | • | PLL Programmable Divider                    | X4005          | 6.4713MHz  | "(")                 | PLL Local Oscillator (for             |
| Q4029          | TC5082P         | "                                       | PLL Reference Oscillator,<br>1/1024 Divider |                |            |                      | SAT VFO) PLL Reference Oscillator     |
| Q4030          | TC5081AP        | **                                      | PLL Phase Detector                          | X4006          | 4.5056MHz  | "(")                 | FLL Reference Oscillator              |
| Q4031          | 2SK30AY         | JFET                                    | PLL Loop Filter Inverter                    |                |            | C                    | SAT TX SSB Filter                     |
| Q4032          | 2SC945AP        | Transistor                              | PLL Loop Filter                             | XF4001         | XF-10.7LS  | Crystal<br>Filter    | SAT TA SSB THE                        |
| Q4033          | ,,              | ,,                                      | Switch (SAT VFO PLL                         |                |            | Filter               |                                       |
|                |                 |   | Data)                                       |                |            | Thermiston           | Temperature Compensator               |
| Q4034          | 2SA733AQ        | "                                       | PLL Unlock Signal                           | TH4001         | 33D28      | Thermistor           | (for Q4016)                           |
| 04005          | 200045 A.D.     |   | Amplifier PLL Unlock Switch                 |                |            |                      |                                       |
| Q4035          | 2SC945AP        | **                                      | Inverter (SAT VFO PLL                       | 50 MH          | z MODULE   | RF UNI               | Γ                                     |
| Q4036          | **              | "                                       | Data)                                       | 30 1111        |            |                      |                                       |
| O4037          | μPC78L05        | IC                                      | Regulator (+5V Line)                        | PART           |            |                      |                                       |
| Q4037<br>Q4038 | SN7416N         | ,,                                      | Inverter (MODE Data)                        | NO.            | DEVICE     | TYPE                 | FUNCTION                              |
| Q4038<br>Q4039 | 2SC945AP        | Transistor                              | TX 1st IF Buffer Amplifier                  |                |            |                      |                                       |
| Q4037          | 250745711       | 11411010101                             | (SSB)                                       | Q5001          | 3SK74L     | MOS FET              | RX RF Amplifier                       |
|                |                 |   | <b>(</b> ,                                  | Q5002          | 3SK51-03   | "                    | RX 1st Mixer                          |
| D4001          | 1SS53           | Si Diode                                | TX Carrier Oscillator                       | Q5003          | 2SK125     | JFET                 | RX 1st IF Amplifier                   |
| Dioor          | 10000           |   | Sideband Select Decoder                     | Q5004          | 2SK241Y    | "                    | TX 2nd Mixer                          |
|                |                 |   | (USB)                                       | Q5005          | **         | **                   | " " " " " " " " " " " " " " " " " " " |
| D4002          | ,,              | ••                                      | " (LSB)                                     | Q5006          | 3SK73Y     | MOS FET              | TX RF Buffer Amplifier                |
| D4003          | ,,              | ,,                                      | " (USB)                                     | Q5007          | 2SC460B    | Transistor           | TX RF Predriver                       |
| D4004          | ,,              | ,,                                      | ,, (LSB)                                    | Q5008          | 2SC2053    | "                    | TX RF Driver                          |
| D4005          | Not Used        |   |   | Q5009          | 2SA733AQ   | "                    | TX AFP Amplifier                      |
| D4006          | FC53M-5         | Varactor                                | TX FM Modulator                             | Q5010          | 2SD471L    | **                   | Regulator (TX 9V)                     |
|                |                 | Diode                                   |   | Q5011          | 2077.26    | er<br>Transcor       | " (")                                 |
| D4007          | MV103           | Varistor                                | Temperature Compensator                     | Q5012          | 2SK125     | JFET                 | <i>"</i> (" )                         |
|                |                 | Diode                                   | [for TX FM Modulator                        | D5001          | MV13       | Varistor             | Temperature Compensator               |
|                |                 |   | (D4006)]                                    | D3001          | WI V 13    | Diode                | (for Q5001)                           |
| D4008          | WZ050           | Zener Diode                             | Regulator (for TX FM                        | D5002          | 1T25       | Varactor             | RX Auto-Tune Circuit                  |
|                |                 |   | Carrier Mod Oscillator)                     | D3002          | (          | Diode                | (                                     |
| D4009          | Not Used        |   |   | )              | )          | (                    | >                                     |
| D4010          | ••              |   |   | D5005          | 1T25       | Varactor             | RX Auto-Tune Circuit                  |
| D4011          | "               |   |   |                |            | Diode                |                                       |
| D4012          | **              |   |   | D5006          | 1SV50      | ••                   | "                                     |
| D4013          | 10000           | e: pi-d-                                | MODE Switch (SAT CW)                        | D5007          | 1SS53      | Si Diode             | T/R Switch (RX Out)                   |
| D4014          | 1SS53           | Si Diode                                | " ( " )                                     | D5008          | **         | **                   | " (TX In)                             |
| D4015          | "               | "                                       | " (SAT FM)                                  | D5009          | 1T25       | Varactor             | TX Auto-Tune Circuit                  |
| D4016          | **              | "                                       | KEY Switch                                  | (              | (          | Diode                | (                                     |
| D4017          | 101500          | ",                                      | TX 1st IF Limiter (SAT                      | )              | )          | 5                    | )                                     |
| D4018          | 1S1588          | "                                       | FM, SAT CW)                                 | D5013          | 1T25       | Varactor<br>Diode    | TX Auto-Tune Circuit                  |
| D4019          | **              |   | " ( " )                                     | D5014          | 1SS53      | Si Diode             | Temperature Compensator               |
| D4020          | 18853           | ••                                      | MODE Switch ( " )                           | D5014          | 13333      | Di Diodo             | (for Q5006)                           |
| D4021          | **              | ••                                      | " (SAT SSB)                                 | D5015          | 1S1554     |                      | " (for Q5008)                         |
| D4022          | "               | **                                      | " (SAT FM)                                  | D5015          | Not Used   |                      | ,                                     |
| D4023          | Not Used        |   | MODE Suite I (6 SAT CUI)                    | D5010          | 18897      | Schottky             | Switch (for PO Meter)                 |
| D4024          | 1\$\$53         | Si Diode                                | MODE Switch (for SAT CW)                    | 20017          | 1007.      | Barrier Di.          |                                       |
| D4025          | ••              | "                                       | " (SAT LSB)                                 | D5018          | 1SS53      | Si Diode             | AFP → ALC                             |
| D4026          | "               | "                                       | " (SAT USB)                                 | D5019          | ,,         | "                    | Regulator (TX 9V)                     |
| D4027          | er<br>Non-trood | "                                       | " (SAT FM)                                  | D5020          | w2090      | Zener Diode          | <del>-</del>                          |
| D4028          | Not Used        |   |   | D5021          | V06B       | Si Diode             | Reverse Voltage Protector             |
| D4029          |                 |   |   |                |            |                      | (for RL5001)                          |
| D4030          | "               |   |   |                |            |                      |                                       |

| D5022          | 1T25       | Varactor    | TX Auto-Tune Circuit        | D6007          | 1SS53      | Si Diode                               | VFO Selec   | tor (SAT         |
|----------------|------------|-------------|-----------------------------|----------------|------------|--|-------------|------------------|
|                |            | Diode       |                             |                |            |  | VFO)        |                  |
| D5023          | 1SS97      | Schottky    | Switch (ALC)                | D6008          | ••         | "                                      | "           | (NOR VFO)        |
|                |            | Barrier Di. |                             | D6009          | "          | ,,                                     | "           | (SAT VFO)        |
|                |            |             |                             | D6010          | ,,         | ••                                     | "           | (NOR VFO)        |
| XF5001         | 10.8M30B   | Crystal     | RX 1st IF Filter            | D6011          | V06B       | "                                      | Reverse Vo  | oltage Protector |
|                |            | Filter      |                             |                |            |  | (for Q60    | 22)              |
|                |            |             |                             | D6012          | 1SS53      | "                                      | NOR TX S    | TBY Decoder      |
| TH5001         | 31D26      | Thermistor  | Temperature Compensator     | D6013          |            | ,,                                     | SAT TX S    | TBY Decoder      |
|                |            |             | (RX Output Level)           | D6014          | ,,         | ,,                                     | NOR Strot   | oe Decoder       |
| TH5002         | 25D29      | ,,          | " (TX Input Level)          | D6015          | ,,         | ,,                                     | SAT Strob   | e Decoder        |
| 1115002        | 2302)      |             | (17t Input Botol)           | D6016          | V06B       | ,,                                     | Reverse Vo  | oltage Protector |
|                |            |             |                             | 20010          |            |  | (for Q60    | •                |
| 50 MH          | z MODULE   | · PII V     | O UNITS                     | D6017          | 1SS53      | "                                      |             | Data Decoder     |
| JU 1411        | iz MODULL  | I, V C      | CO CIVIIS                   | D6018          | "          | "                                      |             | TX Decoder       |
| DADT           |            |             |                             | D6019          | ,,         | **                                     |             | Data Decoder     |
| PART<br>NO.    | DEVICE     | TYPE        | FUNCTION                    | D6020          | Not Used   |  | I LL OILI   | 5444 D 400401    |
|                | 221102     |             |                             | D6020          | 1SS53      | Si Diode                               | DII SATI    | Data Decoder     |
| Q6001          | 2SK192A-GR | JFET        | PLL VCO (RX 1st, TX         | D6021<br>D6022 | Not Used   | 31 Diode                               | ILL SAI I   | Data Decoder     |
| Q0001          | ZJKI/ZA-GK | J1 L1       | 2nd Local Oscillator)       |                |            | C: D:- 4-                              | DI L NOD    | Data Danadas     |
| 06002          | 201/241V   |             | VCO Buffer Amplifier        | D6023          | 1SS53      | Si Diode                               |             | Data Decoder     |
| Q6002          | 2SK241Y    | "           | •                           | D6024          | Not Used   |  | i.          |                  |
| Q6003          | 3SK73Y     | MOS FET     | PLL Output Buffer Amplifier | D6025          | 1SS53      | Si Diode                               | PLL NOR     | Data Decoder     |
|                |            |             | (RX 1st, TX 2nd Local)      |                |            |  |             |                  |
| Q6004          | 2SK241Y    | JFET        | PLL Buffer Amplifier        | X6001          | 27.4035MHz | Crystal                                | PLL Local   | Oscillator       |
| Q6005          | SN16913P   | IC          | PLL Mixer                   |                |            | (HC-18/U3                              | 3P)         |                  |
| Q6006          | 2SC945AP   | Transistor  | PLL IF Buffer Amplifier     | X6002          | 6.4MHz     | " (HC-18/U)                            | PLL Refere  | ence Oscillator  |
| Q6007          | **         | "           | **                          |                |            |  |             |                  |
| Q6008          | TC9122P    | IC          | PLL Programmable Divider    | TH6001         | 31D26      | Thermistor                             | Temperatu   | re Compensator   |
| Q6009          | TC5081AP   | "           | PLL Phase Detector          |                |            |  | (for Q60    | 01)              |
| Q6010          | 2SC945AP   | Transistor  | PLL Active LPF              |                |            |  |             |                  |
| Q6011          | "          | "           | "                           |                |            |  |             |                  |
| Q6012          | ,,         | ,,          | PLL VCO (Q6001) Band        | 50 ME          | Iz MODULE  | : PA UNI                               | Т           |                  |
| •              |            |             | Switch                      |                |            |  | _           |                  |
| Q6013          | 2SC460B    | ,,          | PLL Local Oscillator        | PART           |            |  |             |                  |
| Q6014          | 2SC945AP   | ,,          | SAT VFO Buffer Amplifier    | NO.            | DEVICE     | TYPE                                   | FUNCTIO     | N                |
| Q6015          | "          | ,,          | NOR VFO Buffer Amplifier    |                |            |  |             |                  |
| Q6016          | SN76514N   | IC          | PLL Local Premixer          | Q7001          | M57735     | IC                                     | TX RF Pov   | wer Amplifier    |
| Q6017          | 2SC535B    | Transistor  | PLL Local Buffer            | •              |            |  |             | •                |
| Q6017          | 2SC945AP   |             | PLL Unlock Switch           | D7001          | V06B       | Si Diode                               | Reverse Vo  | ltage Protector  |
| Q6018<br>Q6019 |            | "           | PLL Unlock Signal Amplifier |                |            |  | (for RL7    |                  |
| -              | 2SA564A    | "           | PLL Reference Oscillator    | D7002          | 1S1588     | ,,                                     | TX ALC D    | *                |
| Q6020          | 2SC945AP   |             |                             | 27002          | 101000     |  | 111 .1120 2 |                  |
| Q6021          | MB84024B   | IC          | PLL Reference 1/64 Divider  |                |            |  |             |                  |
| Q6022          | 2SD892Q    | Transistor  | STBY Switch                 |                |            |  |             |                  |
| Q6023          | MC14081B   | IC          | NOR/SAT TX Select Data      |                |            |  |             |                  |
|                |            |             | and STROBE Decoder          |                |            |  |             |                  |
| Q6024          | MC14560B   | "           | VCO Band Decoder            |                |            |  |             |                  |
| Q6025          | MC14094B   | "           | Latch (PLL Divider Data)    |                |            |  |             |                  |
| Q6026          | 2SC945AP   | Transistor  | Switch ( " )                |                | F00 05     | יייייייייייייייייייייייייייייייייייייי | SILIAL O    |                  |
| Q6027          | μPC78L05   | IC          | Regulator (+5V Line)        |                |            | RVICE MA                               |             |                  |
| Q6028          | MC14504B   | ,,          | PLL Divider Data Decoder    |                | (          | CONTACT:                               |             |                  |
| Q6029          | 2SC945AP   | Transistor  | VFO Selector (SAT VFO)      |                | MAURITRON  | TECHNICA                               | LSERVIC     | Ec               |
| Q6030          | ,,         | ••          | " (NOR VFO)                 |                |            |  |             | <b>/</b> L0      |
| Q6031          | 2SD892Q    | ••          | Relay Driver (for RL6001)   |                |            | .mauritron.e                           |             |                  |
| Q6032          | μPC7808H   | IC          | Regulator (+8V Line)        |                | TEL        | 01844 - 35                             | 1694        |                  |
| ~              |            |             | ÷ ,                         |                | FAX:       | 01844 - 35                             | 2554        |                  |
| D6001          | 1SV50      | Varactor    | PLL VCO Control             |                |            |  |             |                  |
| 20001          | 13.00      | Diode       |                             |                |            |  |             |                  |
| D6002          | ,,         | "           | ,,                          |                |            |  |             |                  |
| D6002          | 1SS53      | Si Diode    | PLL VCO (Q6001) Band        |                |            |  |             |                  |
| בטטטט          | 19999      | or prode    | Switch                      |                |            |  |             |                  |
| D6004          | 18V50      | Varante-    | PLL Auto-Tune Circuit       |                |            |  |             |                  |
| D6004          | 1SV50      | Varactor    | FLL Auto-Tune Circuit       |                |            |  |             |                  |
| Deces          | 10053      | Diode       | T/D Sudant (DV I            |                |            |  |             |                  |
| D6005          | 1SS53      | Si Diode    | T/R Switch (RX Local)       |                |            |  |             |                  |
| D6006          | **         | "           | " (TX Local)                |                |            |  |             |                  |
|                |            |             |                             |                |            |  |             |                  |

| 144 MHz MODULE: RF UNIT |                 |             | Q6006<br>Q6007              | 2SC945AP | Transistor               | PLL IF Buffer Amplifier |                            |
|-------------------------|-----------------|-------------|-----------------------------|----------|--------------------------|-------------------------|----------------------------|
| D + D.T.                |                 |             |                             | Q6008    | TC9122P                  | IC                      | PLL Programmable Divider   |
| PART<br>NO.             | DEVICE          | TYPE        | FUNCTION                    | Q6009    | TC5081AP                 | "                       | PLL Phase Detector         |
| NO.                     | DEVICE          | 1112        |                             | Q6010    | 2SC945AP                 | Transistor              | PLL Active LPF             |
| 05001                   | 2011741         | MOS FET     | RX RF Amplifier             | Q6011    | ,,                       | .,                      | **                         |
|                         | 3SK74L          |             | RX 1st Mixer                | Q6011    | ,,                       | ,,                      | PLL VCO (Q6001) Band       |
| Q5002                   | 3SK51-03        |             |                             | Q0012    | ••                       |                         | Switch                     |
| Q5003                   | 2SK125          | JFET        | RX 1st IF Amplifier         | 0.010    | 2004600                  |                         | PLL Local Oscillator       |
|                         |                 |             |                             | Q6013    | 2SC460B                  | "                       | SAT VFO Buffer Amplifier   |
| Q5004                   | 2SK241Y         | **          | TX 2nd Mixer                | Q6014    | 2SC945AP                 | "                       | -· ·                       |
| Q5005                   | "               |             | "                           | Q6015    | **                       | ••                      | NOR VFO Buffer Amplifier   |
| Q5006                   | 3SK70           | MOS FET     | TX RF Buffer Amplifier      | Q6016    | SN76514N                 | IC                      | PLL Local Premixer         |
| Q5007                   | 2SC2538         | Transistor  | TX RF Driver                | Q6017    | 2SC535B                  | Transistor              | PLL Local Buffer Amplifier |
| Q5008                   | 2SA733AQ        | "           | TX AFP Amplifier            | Q6018    | 2SC945AP                 | **                      | PLL Unlock Switch          |
| Q5009                   | 2SD471L         |             | Regulator (TX 9V)           | Q6019    | 2SA564A                  | ••                      | PLL Unlock Signal          |
| -                       |                 |             | " (")                       | Q0017    | 20                       |                         | Amplifier                  |
| Q5010                   | 201125          | ,,<br>JEET  | " (" )                      | Q6020    | 2SC945AP                 | **                      | PLL Reference Oscillator   |
| Q5011                   | 2SK125          | 1LE1        | " (" )                      | -        | MB84024B                 | IC                      | PLL Reference 1/64 Divider |
|                         |                 |             | T C                         | Q6021    |                          | Transistor              | STBY Switch                |
| D5001                   | MV13            | Varistor    | Temperature Compensator     | Q6022    | 2SD892O                  |                         | NOR/SAT TX Select Data     |
|                         |                 | Diode       | (for Q5001)                 | Q6023    | MC14081B                 | IC                      | and Strobe Decoder         |
| D5002                   | 1T25            | Varactor    | RX Auto-Tune Circuit        |          |                          |                         | VCO Band Decoder           |
| (                       | (               | Diode       | (                           | Q6024    | MC14560B                 | "                       |                            |
| )                       | )               | <b>`</b>    | )                           | Q6025    | MC14094B                 | "                       | Latch (PLL Divider Data)   |
| D5006                   | 1T25            | Varactor    | RX Auto-Tune Circuit        | Q6026    | 2SC945AP                 | Transistor              | Switch ( " )               |
|                         |                 | Diode       |                             | Q6027    | μPC78L05                 | IC                      | Regulator (+5V Line)       |
| D5007                   | 1SS53           | Si Diode    | T/R Switch (RX Out)         | Q6028    | MC14504B                 | ••                      | PLL Divider Data Decoder   |
| D5007                   | "               | .,          | ,, (TX In)                  | Q6029    | 2SC945AP                 | Transistor              | VFO Selector (SAT VFO)     |
| D5009                   | 1T25            | Varactor    | TX Auto-Tune Circuit        | Q6030    | **                       | "                       | " (NOR VFO)                |
| D3003                   | (               | Diode       | [                           | Q6031    | 2SD892Q                  | ,,                      | Relay Driver (for RL6001)  |
| \                       | }               | (           | )                           | Q6032    | μPC7808H                 | IC                      | Regulator (+8V Line)       |
|                         |                 | )           | TX Auto-Tune Circuit        | 20052    | <b>µ</b> 1 0 / 0 0 0 1 1 |                         |                            |
| D5012                   | 1T25            | Varactor    | 1X Auto-Tune Chemi          | D6001    | 1T25                     | Varactor                | PLL VCO Control            |
|                         |                 | Diode       | T                           | D6001    | 1123                     | Diode                   |                            |
| D5013                   | 1S1555          | Si Diode    | Temperature Compensator     |          |                          | Diode.                  | a                          |
|                         |                 |             | (for Q5007)                 | D6002    | ,,                       | Si Diode                | PLL VCO (Q6001) Band       |
| D5014                   | 1SS53           | **          | Temperature Compensator     | D6003    | 1SS53                    | 21 Dioge                | Switch                     |
|                         |                 |             | (for Q5008)                 |          |                          |                         |                            |
| D5015                   | "               | **          | AFP-→ALC                    | D6004    | 1T25                     | Varactor                | PLL Auto-Tune Circuit      |
| D5016                   | 1SS97           | Schottky    | Switch (for PO Meter)       |          |                          | Diode                   |                            |
|                         |                 | Barrier Di. |                             | D6005    | 1SS53                    | Si Diode                | T/R Switch (RX Local)      |
| D5017                   | WZ090           | Zener Diode | Regulator (TX 8V)           | D6006    | "                        | **                      | " (TX Local)               |
| D5018                   | 18853           | Si Diode    | ,, ( ,, )                   | D6007    | "                        | **                      | VFO Selector (SAT          |
| D5019                   | V06B            | ,,          | Reverse Voltage Protector   |          |                          |                         | VFO)                       |
| Door                    | .002            |             | (for RL5001)                | D6008    | "                        | **                      | " (NOR VFO)                |
| D5020                   | 1SS97           | Schottky    | Switch (ALC)                | D6009    | **                       | ,,                      | " (SAT VFO)                |
| D3020                   | 13377           | Barrier Di. |                             | D6010    | ,,                       | **                      | " (NOR VFO)                |
|                         |                 | Darrier Di. |                             | D6011    | V06B                     | "                       | Reverse Voltage Protector  |
| *******                 | 10.01/200       | Countral    | RX 1st IF Filter            | DOULI    | ¥00B                     |                         | (for Q6022)                |
| XF3001                  | 10.8M30B        | Crystal     | RA 13t II THE               | D(013    | 1SS53                    | **                      | NOR TX STBY Decoder        |
|                         |                 | Filter      |                             | D6012    |                          |                         | SAT TX Decoder             |
|                         |                 |             |                             | D6013    | **                       | ",                      | NOR Strobe Decoder         |
| TH5001                  | 25D29           | Thermistor  | Temperature Compensator     | D6014    | "                        |                         | SAT Strobe Decoder         |
|                         |                 |             | (RX Output Level)           | D6015    | "                        | "                       | Reverse Voltage Protector  |
| TH5002                  | 31D26           | **          | (for TX Input Level)        | D6016    | V06B                     | ••                      | -                          |
| TH5003                  | D22A            | •           | (for Q5006)                 |          |                          |                         | (for Q6031)                |
|                         |                 |             |                             | D6017    | 1SS53                    | **                      | PLL NOR Data Decoder       |
|                         |                 |             |                             | D6018    | "                        | "                       | PLL SAT TX Decoder         |
| 144 M                   | Hz MODUL        | E: PLL.     | VCO UNITS                   | D6019    | ••                       | "                       | PLL SAT Data Decoder       |
| 2                       |                 | •           |                             | D6020    | **                       | "                       | "                          |
| PART                    |                 |             |                             | D6021    | Not Used                 |                         |                            |
| NO.                     | DEVICE          | TYPE        | FUNCTION                    | D6022    | ,,                       |                         |                            |
|                         |                 |             |                             | D6023    | 1SS53                    | Si Diode                | PLL NOR Data Decoder       |
| Q6001                   | 2SK192A-GR      | JFET        | PLL VCO (RX 1st, TX 2nd     | D6023    | 13555                    | "                       |                            |
| <b>40001</b>            | DOI: 17 DIT-OIL |             | Local Oscillator)           | D6025    | **                       |                         | •                          |
| 00003                   | 20V241V         | ,,          | VCO Buffer Amplifier        |          |                          |                         | ,,                         |
| Q6002                   | 2SK241Y         | MOS FET     | PLL Output Buffer Amplifier | D6026    |                          |                         |                            |
| Q6003                   | 3SK73Y          | MOSPEI      | (RX 1st, TX 2nd Local)      |          | CO 7010MIT-              | Crystal                 | PLL Local Oscillator       |
| 0                       | 001104431       | IEET        | PLL Buffer Amplifier        | X6001    | 60.7018MHz               | (HC-18/                 |                            |
| Q6004                   | 25K241Y         | JFET<br>IC  | PLL Mixer                   |          |                          | (110-10)                |                            |
| Q6005                   | SN16913P        | IC.         | I DL MINOI                  |          |                          |                         |                            |
|                         |                 |             |                             |          |                          |                         |                            |

| X6002          | 6.4MHz        | Crystal (HC-            | 18/U) PLL       | Reference Oscillator           | TH5001         | 25D29              | Thermistor        | Temperature Compensator   |
|----------------|---------------|-------------------------|-----------------|--------------------------------|----------------|--------------------|-------------------|---|
| TH6001         | 31D26         | Thermistor              | Temperat        | ure Compensator<br>001)        | TH5002         | 31D26              | "                 | (RX Output Level) " (for TX Input Level)                                  |
| 144 M          | Hz MODUL      | E. DA IIN               | IIT             |                                | 430/44         | 10 MHz MO          | DULES: F          | LL, VCO UNITS   |
| 177 14         | IIIZ MODUL    | L. IA OI                | 1               |                                | PART           |                    |                   |   |
| PART<br>NO.    | DEVICE        | TYPE                    | FUNCTIO         | )N                             | NO.            | DEVICE             | TYPE              | FUNCTION  |
| Q7001          | M57713        | IC                      | TX RF Po        | wer Amplifier                  | Q6001          | 2SK192A-GR         | JFET              | PLL-1 VCO (RX 1st/TX<br>3rd Local Oscillator)                             |
| D7001          | V06B          | Si Diode                | Reverse V       | oltage Protector               | Q6002<br>Q6003 | 2SK241Y<br>2SC2026 | "<br>Transistor   | PLL-1 VCO Buffer Amplifier PLL-1 Output Tripler (for RX 1st/TX 3rd Local) |
| D7002          | 1SS97         | Schottky<br>Barrier Di. | TX ALC I        |                                | Q6004          | 2SK241Y            | JFET              | PLL-1 VCO Buffer<br>Amplifier   |
|                |               |                         |                 |                                | Q6005          | SN16913P           | IC                | PLL-1 Mixer   |
| 420/44         | 0 MHz MO      | DULES, D                | דוואוז ס        | •                              | Q6006          | 2SC945AP           | Transistor        | PLL-1 IF Buffer Amplifier   |
| 430/44         | MHZ MO        | DULES: N                | T OINT          |                                | Q6007          | **                 | "                 | 11  |
| PART           |               |                         |                 |                                | Q6008          | TC9122P            | IC                | PLL-1 Programmable Divider  |
| NO.            | DEVICE        | TYPE                    | FUNCTIO         | N                              | Q6009          | TC5082P            | ,,                | PLL-1 Reference Oscillator,<br>1/256 Divider                              |
| Q5001          | 3SK121        | GaAs FET                | RX RF A         | nplifier                       | Q6010          | TC5081AP           | _" .              | PLL-1 Phase Detector  |
| Q5002          | 2SK125        | JFET                    | **              |                                | Q6011          | 2SA733AQ           | Transistor        | PLL Unlock Signal   |
| Q5003          | ND487C1-3R    | IC (Ring<br>Module)     | RX 1st Mi       |                                | Q6012          | 2SC945AP           | ,,                | Amplifier<br>PLL Unlock Switch  |
| Q5004          | 3SK73Y        | MOS FET                 | RX 1st IF       | -                              | Q6013          | 2SC460B            | ,,                | PLL-2 Local Oscillator, x2  |
| Q5005          | 3SK51-03      |                         | RX 2nd M        |                                |                |                    |                   | Multiplier  |
| Q5006          | 2SK 241Y      | JFET                    | TX 2nd M        | ixer                           | Q6014          | SN16913P           | IC                | PLL-2 Mixer   |
| Q5007          | "             | "                       | "               |                                | Q6015          | 2SC945AP           | Transistor        | PLL-2 IF Buffer Amplifier   |
| Q5008          | 3SK73Y        | MOS FET                 |                 | Buffer Amplifier               | Q6016          | MC145143P          | IC                | PLL-2 Phase Detector,   |
| Q5009          | ND487C2-3R    | IC (Ring                | TX 3rd M        | xer                            |                |                    |                   | Programmable Divider  |
|                |               | Module)                 |                 | co + 110°                      | Q6017          | 2SK192A-GR         | JFET              | PLL-2 VCO   |
| Q5010          | 2SK125        | JFET                    |                 | ffer Amplifier                 | Q6018          | 2SK241Y            | **                | PLL-2 VCO Buffer Amplifier  |
| Q5011          | 2SC2407       | Transistor              | TX RF Pr        |                                | Q6019          | "                  | "                 | "   |
| Q5012          | 2SC1426       | "                       | TX RF Dr        |                                | Q6020          | 2SC945AP           | Transistor        | PLL-2 Reference (NOR  |
| Q5013          | 2SA733AQ      | "                       | TX AFP A        | -                              |                |                    |                   | VFO) Buffer Amplifier   |
| Q5014          | 2SC2026       | ,,                      | Amplific        |                                | Q6021          | "                  | ••                | PLL-2 Reference (SAT<br>VFO) Buffer Amplifier                             |
| Q5015          | 2SC460B       | ••                      |                 | Oscillator<br>Buffer Amplifier | Q6022          | **                 | ,,                | PLL-2 Reference (NOR  |
| Q5016<br>D5001 | "<br>1SS53    | "<br>Si Diode           |                 | h (RX Out)                     |                |                    |                   | VFO or SAT VFO) Buffer<br>Amplifier                                       |
| D5001          | 13333         | "                       | "               | (TX In)                        | Q6023          | TC9122P            | IC                | PLL-2 Reference (NOR  |
| D5002          | "             |                         | Temperati       | ire Compensator                |                |                    |                   | VFO or SAT VFO) 1/96<br>Divider   |
|                |               |                         | (for Q50        |                                | Q6024          | 2SC945AP           | Transistor        | PLL-2 Reference Selector  |
| D5004          | 1S1555        | "                       | "               | (for Q5011)                    |                |                    |                   | (NOR VFO)   |
| D5005          | "             |                         | "               | (for Q5012)                    | Q6025          | ,,                 | **                | " (SAT VFO)   |
| D5006          | 1SS53         | ,,                      | "<br>Ci+-1- (C- | (for Q5013)                    | Q6026          | 2SD892Q            | ••                | Relay Driver (for RL6001)   |
| D5007          | 1SS97         | Schottky                |                 | r PO Meter)                    | Q6027          | μPC78L05           | IC                | Regulator (+5V Line)  |
| DEADO          | 10052         | Barrier Di.<br>Si Diode | AFP → AI        | C                              | Q6028          | MC14094B           | "                 | Latch (PLL-1 Divider Data)  |
| D5008<br>D5009 | 1SS53<br>V06B | ",                      |                 | oltage Protector               | Q6029          | MC14504B           | "                 | PLL-1 Divider Data Decoder  |
| D5010          | MI301         | PIN Diode               | (for RL         | •                              | Q6030          | MC14081B           | **                | NOR/SAT TX Select Data and Strobe Decoder                                 |
| D5010<br>D5011 | WI13U1        | " Diode                 | "               | (TX 3rd Local)                 | Q6031          | 2SD892Q            | Transistor        | STBY Switch   |
| D5011          | 1SS53         | Si Diode                | "               | (RX 2nd Local)                 | Q6032          | 2SC945AP           | "                 | Switch (PLL-1 Divider Data)   |
| D5012          | "             | "                       | ,,              | (TX 2nd Local)                 | Q6033          | μPC7808H           | IC                | Regulator (+8V Line)  |
| D5014          | 1\$\$97       | Schottky<br>Barrier Di. | Switch (A       | •                              | D6001          | 1T25               | Varactor<br>Diode | PLL-1 (RX 1st/TX 3rd<br>Local Oscillator)                                 |
|                |               |                         |                 |                                | D6002          | ,,                 | "                 | " ( " )   |
| X5001          | 56.805MHz     | Crystal                 | 2nd Local       | Oscillator                     | D6002          | 1SS53              | Si Diode          | PLL-1 Unlock Switch   |
|                |               | (HC-18/U3               | г)              |                                | D6004          |                    | "                 | PLL-2 Unlock Switch   |
| VESOO1         | VE 471V       | Crystal                 | RX 1st IF       | Filtar                         | D6005          | 1T25               | Varactor          | PLL-2 VCO   |
| VLOOM          | XF-67JX       | Filter                  | AA 131 IF       | i mtei                         |                |                    | Diode             |   |

| D6006  | 1SS53      | Si Diode   | PLL-2 Reference Selector<br>(NOR VFO) |
|--------|------------|------------|---------------------------------------|
| D6007  | ,,         | ,,         | " ( " )                               |
| D6008  | .,         | ,,         | " (SAT VFO)                           |
| D6009  | ,,         | "          | " ( " )                               |
| D6010  | V06B       | "          | Reverse Voltage Protector             |
|        |            |            | (for Q3026)                           |
| D6011  | 1SS53      | ,,         | PLL NOR Data Decoder                  |
| D6012  | "          |            | PLL SAT TX Decoder                    |
| D6013  | **         | **         | NOR Strobe Decoder                    |
| D6014  | **         | ,,         | SAT Strobe Decoder                    |
| D6015  | ,,         | **         | SAT TX Decoder                        |
| D6016  | **         | **         | NOR TX STBY Decoder                   |
| D6017  | V06B       | "          | Reverse Voltage Protector             |
|        |            |            | (for Q6031)                           |
| D6018  | 1SS53      | .,         | PLL NOR Data Decoder                  |
| D6019  | "          | "          | ***                                   |
| D6020  | Not Used   |            |                                       |
| D6021  | 1SS53      | Si Diode   | PLL NOR Data Decoder                  |
| D6022  | "          | "          | PLL SAT Data Decoder                  |
| D6023  | ••         | ."         | "                                     |
| D6024  | ,,         |            | "                                     |
| D6025  | ,,         | **         | **                                    |
|        |            |            |                                       |
| X6001  | 8.5333MHz  | Crystal    | PLL-2 Local Oscillator                |
|        |            | (HC-18/U)  |                                       |
| X6002  | 57.4333MHz |            | PLL-1 Reference Oscillator            |
|        |            | (HC-18/U   | 3P)                                   |
| TH6001 | 31D26      | Thermistor | Temperature Compensator               |
|        |            |            | (for Q6001)                           |
| TH6002 | ,,         | **         | " (for Q6017)                         |
|        |            |            | _                                     |
| PTH    | PTH-2928   | Posistor   | Temperature Compensator               |
| 6001   |            |            | (for X6002)                           |

## 430/440 MHz MODULES: PA UNIT

| PART<br>NO. | DEVICE | TYPE                    | FUNCTION                                  |
|-------------|--------|-------------------------|---|
| Q7001       | S-AU4  | IC                      | TX RF Power Amplifier                     |
| D7001       | V06B   | Si Diode                | Reverse Voltage Protector<br>(for RL7001) |
| D7002       | 15597  | Schottky<br>Barrier Di. | TX ALC Detector                           |

FOR SERVICE MANUALS

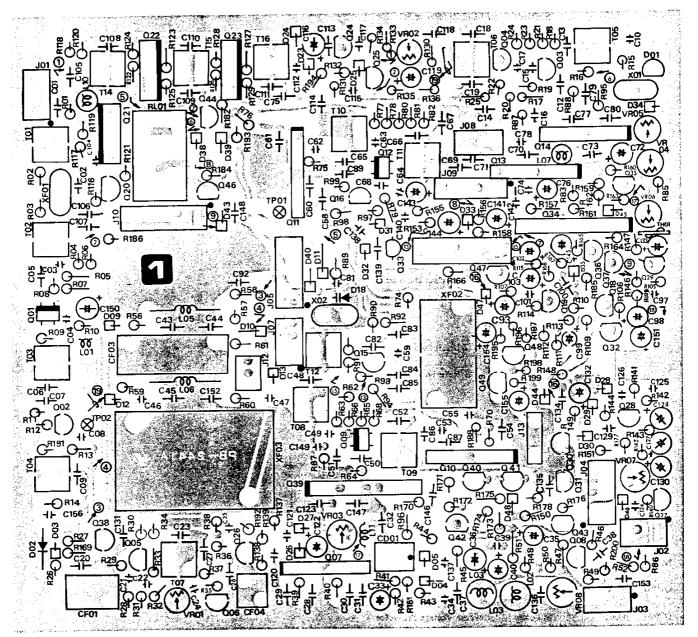
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SUBJECT OF TECHNICAL SERVICE

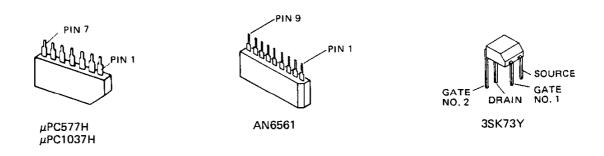
MAURITRON TECHNICAL SERVICES
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TEL: 01844 - 351694 FAX: 01844 - 352554

## RX UNIT PARTS LAYOUT

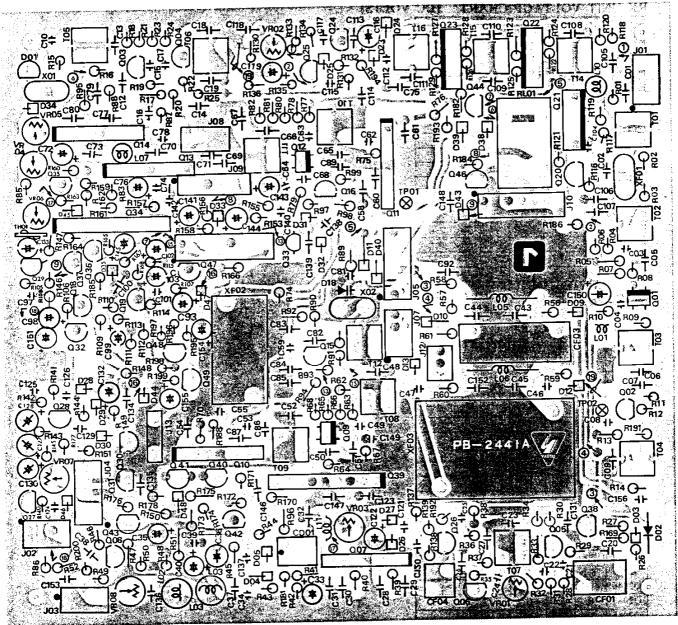


Viewed from component side



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## RX UNIT PARTS LAYOUT

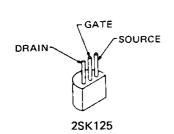


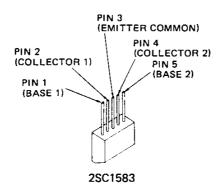
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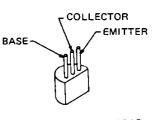
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2SA733 2SC460B 2SC535B 2SC945AP 2SC1815BL 2SC1815GR

### RX UNIT VOLTAGE CHART (DC VOLTS)

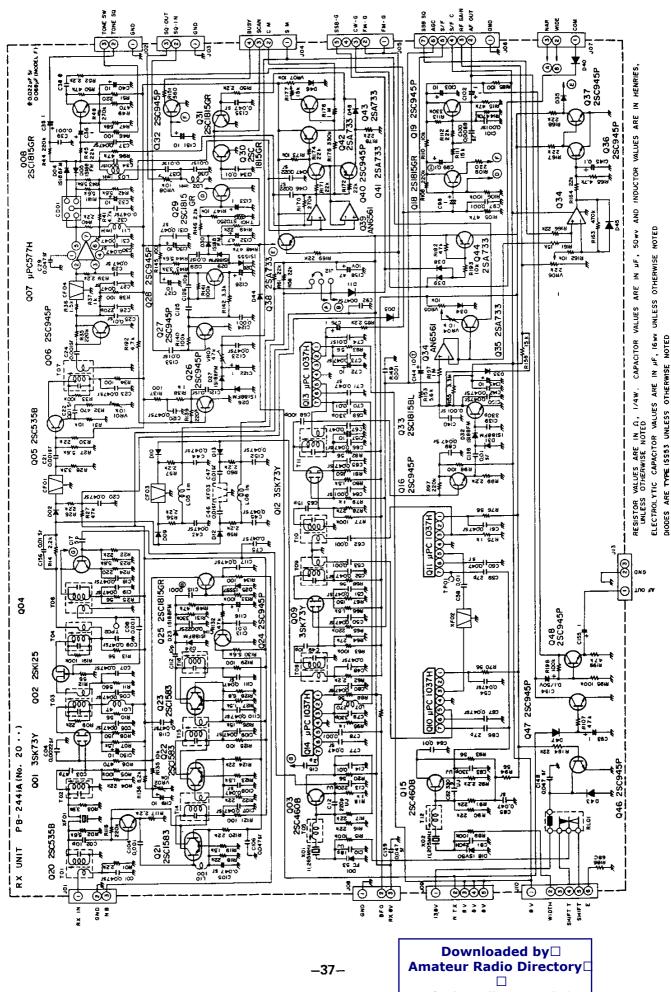
| J | KX. | UN  | III Y | VOLI | AGE   | CHA      | KI (DC  |
|---|-----|-----|-------|------|-------|----------|---------|
|   |     |     | E(S)  | C(D) | B(G1) | (G2)     | REMARKS |
|   | Q20 | 001 | 1.4   | 8.1  | 1.5   | 2.4      |         |
|   | Q20 | 002 | 2.9   | 7.7  | 0     |          |         |
|   | Q20 | 003 | 3.6   | 7.8  | 3.6   |          |         |
|   | Q20 | 004 | 0.8   | 7.8  | 1.5   |          |         |
|   | Q20 | 005 | 0.9   | 7.9  | 1.6   |          |         |
|   | Q20 | 006 | 0     | 3.3  | 0.7   |          |         |
|   | Q20 | 800 | 0.6   | 1.6  | 1.2   |          |         |
| ĺ | Q20 | 009 | 1.5   | 7.2  | 1.6   | 3.0      |         |
| ĺ | Q20 | 012 | 1.5   | 7.2  | 1.6   | 3.0      |         |
|   | Q20 | 015 | 3.0   | 7.4  | 3.6   |          |         |
|   | Q20 | 016 | 5.5   | 7.8  | 6.0   |          |         |
|   | Q20 | 018 | 0.8   | 4.7  | 1.4   |          |         |
| ĺ | Q20 | )19 | 3.6   | 7.9  | 4.1   |          |         |
|   | Q20 | 20  | 3.7   | 7.7  | 4.4   |          |         |
|   | Q20 | )21 | 2.1   | 7.7  | 3.2   |          |         |
|   | Q20 | )22 | 2.6   | -7.9 | 3.2   |          |         |
|   | Q20 | )23 | 1.9   | 7.9  | 2.5   |          |         |
| ĺ | Q20 | )24 | 0     | 6.4  | 0.4   |          |         |
|   | Q20 | 025 | 0     | 2.4  | 0     |          |         |
|   | Q20 | 026 | 0     | 0    | 0     |          |         |
|   | Q20 | 027 | 0     | 0.2  | 0.2   |          |         |
|   | Q20 | 028 | 0.2   | 0    | 0     |          |         |
|   | Q20 | )29 | 0     | 1.4  | 0.8   |          |         |
|   | Q20 | 030 | 0     | 0.1  | 0.6   |          |         |
|   | Q20 | 031 | 0     | 0.1  | 0.1   |          |         |
|   | Q20 | )32 | 0     | 12.1 | 0.4   |          |         |
|   | Q20 | 033 | 0     | 3.2  | 0     |          |         |
|   | Q20 | 035 | 3.2   | 0    | 3.3   |          |         |
|   | Q20 | 036 | 0     | 0    | 0.6   |          |         |
| ١ | Q20 | )37 | 0     | 5.6  | 0     |          |         |
| ĺ | Q20 | )38 | 8.1   | 7.9  | 8.0   |          |         |
|   | Q20 | 040 | 4.2   | 7.9  | 4.0   |          |         |
|   | Q20 | )41 | 4.2   | 0    | 4.0   |          |         |
| ١ | Q20 |     | 7.9   | 0    | 7.9   |          |         |
|   | Q20 |     | 3.8   | 0.1  | 3.1   | <u> </u> |         |
|   | Q20 |     | 8.1   | 7.5  | 7.3   |          |         |
| ļ | Q20 |     | 0     | 13.7 | 0     |          |         |
| l | Q20 |     | 0     | 0    | 0     |          |         |
|   | Q20 | )48 | 3.2   | 7.9  | 3.8   |          |         |

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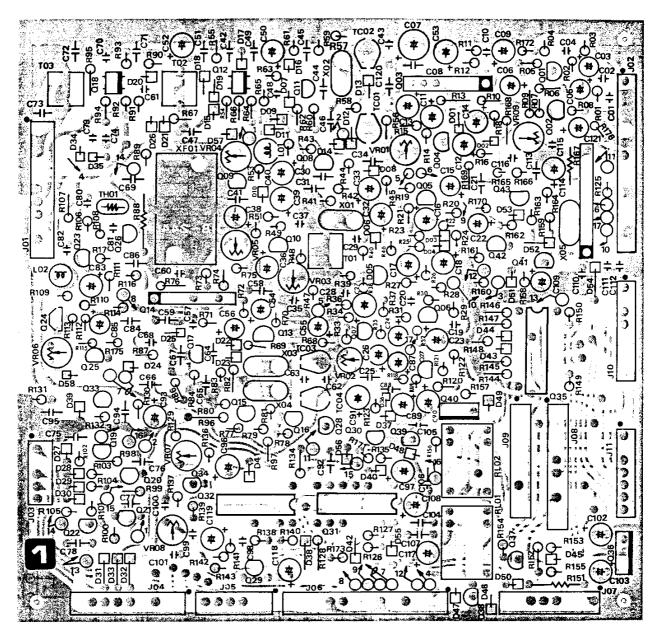
|       | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | REMARKS |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|
| Q2007 | 5.2 | 1.6 | 1.6 | 0   | 4.1 | 2.6 | 7.7 |     |     |         |
| Q2010 | 6.7 | 5.9 | 5.5 | 0   | 2.9 | 2.9 | 2.9 |     |     |         |
| Q2011 | 6.5 | 5.6 | 4.8 | 0   | 3.0 | 3.0 | 3.0 |     |     |         |
| Q2013 | 7.2 | 6.3 | 5.9 | 0   | 3.2 | 3.2 | 3.2 |     |     |         |
| Q2014 | 6.9 | 6.0 | 5.3 | 0   | 3.1 | 3.1 | 3.1 |     |     |         |
| Q2034 | 8.1 | 6.8 | 2.3 | 2.7 | 0   | 2.9 | 3.2 | 3.2 | 8.1 |         |
| Q2039 | 7.9 | 4.2 | 4.2 | 4.2 | 0   | 4.2 | 4.2 | 4.1 | 7.9 |         |

## **RX UNIT SCHEMATIC DIAGRAM**



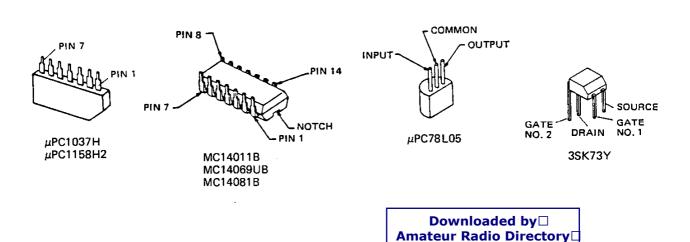
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#### TX UNIT PARTS LAYOUT

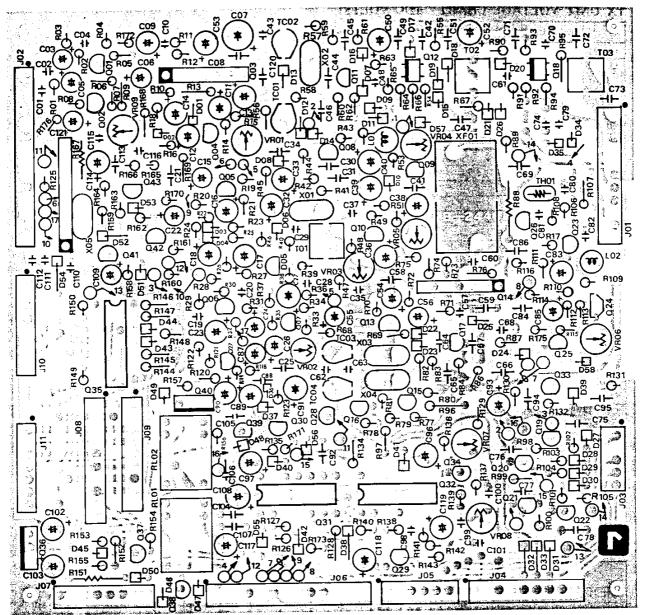


Viewed from component side

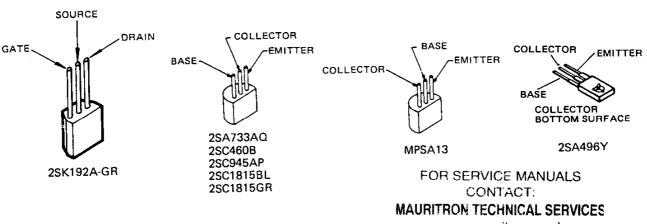
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## TX UNIT PARTS LAYOUT



Viewed from solder side



TX UNIT VOLTAGE CHART (DC VOLTS)

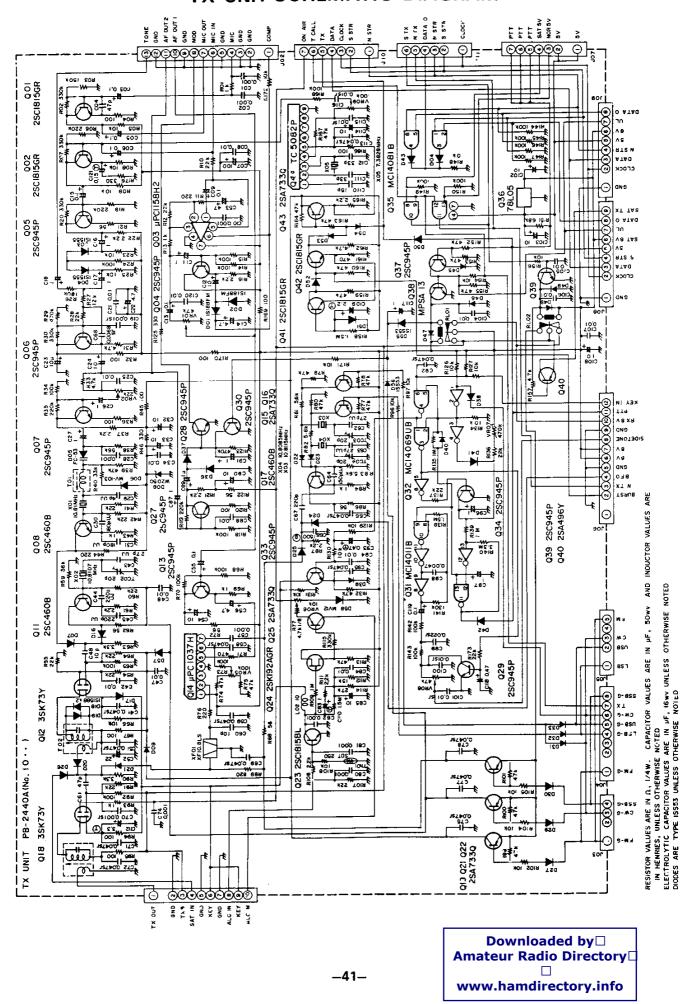
|     | O1  | 'A T Y | OL.  | AUL   | CHI  | iki (DC   |   |
|-----|-----|--------|------|-------|------|-----------|---|
|     |     | E(S)   | C(D) | B(G1) | (G2) | REMARKS   |   |
| Q1  | 001 | 0      | 2.8  | 0.7   |      |           |   |
|     | 002 | 1.7    | 5.9  | 2.2   |      |           |   |
| Q1  | 004 | 3.0    | 7.7  | 3.6   |      |           |   |
| QI  | 005 | 0.1    | 3.7  | 0.7   |      |           |   |
| Q10 | 006 | 3.5    | 7.8  | 4.0   |      |           |   |
| Q10 | 007 | 0.2    | 3.7  | 0.8   |      |           |   |
| Q1( | 308 | 1.6    | 4.2  | 2.2   |      |           |   |
| Q1( | 011 | 5.2    | 7.8  | 5.2   |      |           |   |
| Q10 | 012 | 3.9    | 7.0  | 1.3   | 3.7  |           |   |
| Q1( | )13 | 2.9    | 7.9  | 3.5   |      |           |   |
| Q10 | 015 | 8.1    | 0    | 8.1   |      |           |   |
| Q10 | )16 | 8.1    | 0    | 8.1   |      |           |   |
| Q1( | 017 | 3.2    | 7.9  | 3.6   |      |           |   |
| Q10 | 018 | 1.4    | 7.6  | 1.4   | 2.5  |           |   |
| QI  | )19 | 8.1    | 8.0  | 7.4   |      |           |   |
| Q1( | )21 | 8.1    | 8.0  | 7.4   |      |           |   |
| Q10 | )22 | 8.1    | 8.0  | 7.4   |      |           |   |
| Q10 | )23 | 0      | 2.5  | 0     |      | DRIVE MIN | ١ |
| Q10 | )24 | 5.0    | 8.1  | 2.3   |      | DRIVE MIN | ١ |
| Q16 | )25 | 5.5    | 0    | 4.8   |      | DRIVE MIN |   |
| Q10 | 27  | 0.2    | 3.9  | 0.8   |      |           |   |
| Q10 | 28  | 0      | 12.2 | 0     |      |           |   |
| Q10 | 29  | 0      | 0    | 0.7   |      |           |   |
| Q10 | 30  | 0      | 0    | 0.3   |      |           |   |
| Q10 | 33  | 0.7    | 3.3  | 0     |      |           | ĺ |
| Q10 | 34  | 0      | 7.9  | 0     |      |           |   |
| Q10 | 37  | 0      | 1.3  | 0     |      |           |   |
| Q10 | 38  | 0      | 0.7  | 1.3   |      |           |   |
| Q10 | 39  | 0      | 8.1  | 0     |      |           |   |
| Q10 | 40  | 8.1    | 8.1  | 7.3   |      |           |   |
| Q10 | 41  | 0.1    | 0.2  | 0.6   |      |           |   |
| Q10 | 42  | 0.1    | 7.9  | 0     |      |           |   |
| Q10 | 43  | 7.9    | 7.8  | 7.2   | Ţ    |           |   |

|       | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | REMARKS |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|
| Q1003 | 1.3 | 0.8 | 3.5 | 0   | 0   | 0   | 7.7 |     |     |     | - " |     |     |     |         |
| Q1014 | 8.0 | 7.0 | 6.6 | 0   | 3.6 | 3.0 | 3.5 |     |     |     |     |     |     |     |         |
| Q1031 | 0   | 7.9 | 8.0 | 0   | 7.8 | 8.1 | 0   | 3.7 | 7,2 | 3.9 | 8.1 | 0   | 7.2 | 8.1 |         |
| Q1032 | 0.8 | 7.9 | 7.9 | 0   | 8.0 | 0   | 0   | 3.9 | 4.2 | 4.2 | 3.9 | 0   | 7.4 | 8.1 |         |
| Q1035 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 4.8 | 0   | 4.8 | 4.8 | 4.9 | 4.9 |         |
| Q1036 | 4.9 | 0   | 8.1 |     |     |     |     |     |     |     |     |     |     |     |         |
| Q1044 | 2.2 | 3.0 | 3.2 | 3.7 | 7.5 | 3.7 | 3.7 | 3.7 | 0   |     |     |     |     |     |         |

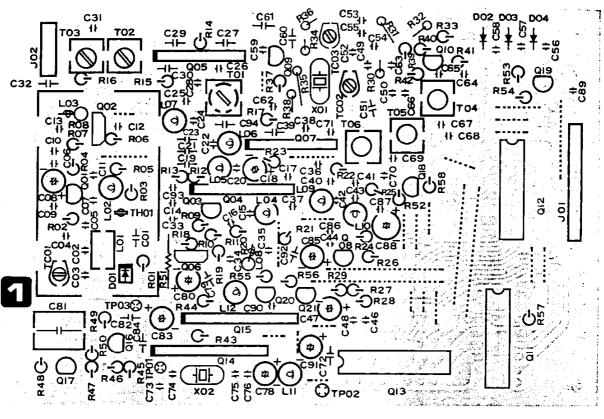
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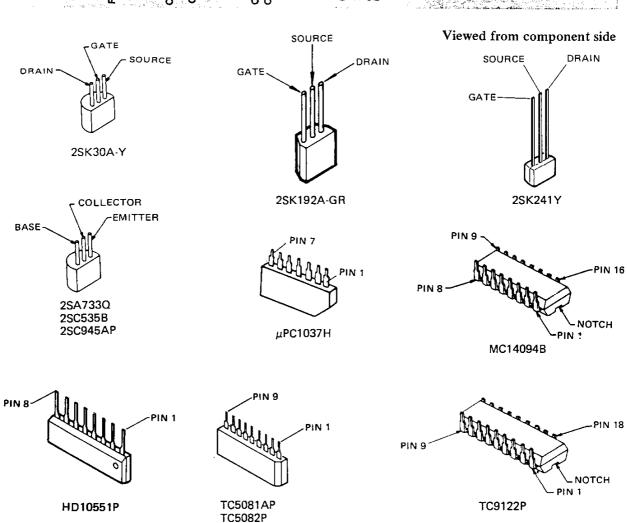
**MAURITRON TECHNICAL SERVICES** 

#### TX UNIT SCHEMATIC DIAGRAM

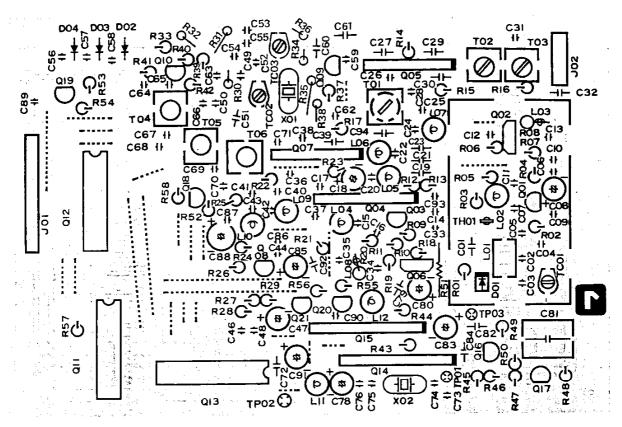


#### VFO UNIT PARTS LAYOUT





#### **VFO UNIT PARTS LAYOUT**



Viewed from solder side

#### VFO UNIT VOLTAGE CHART (DC VOLTS)

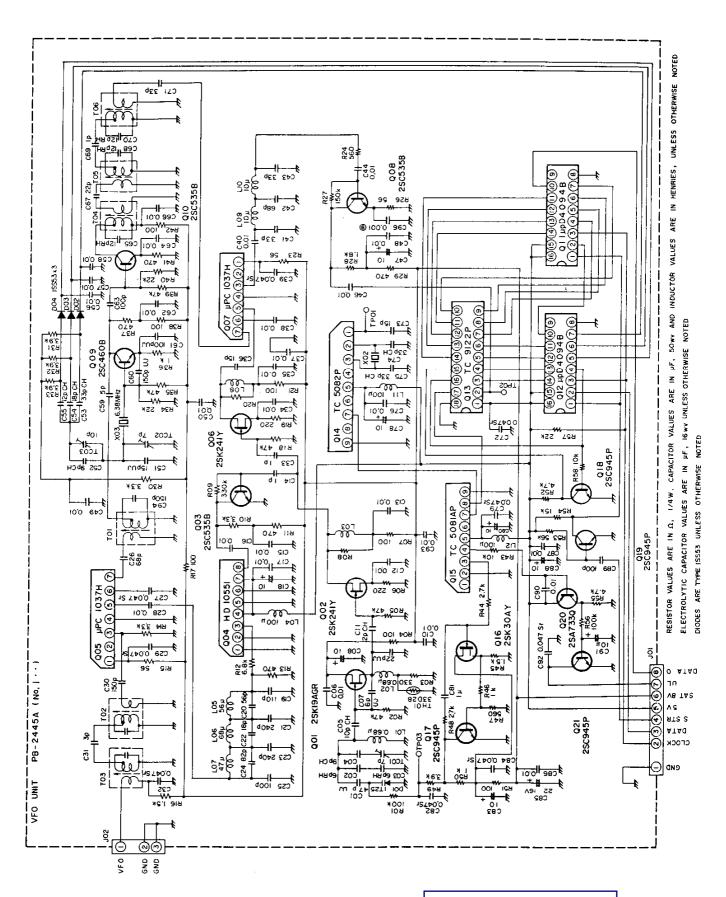
| -    | E(S) | C(D) | B(G1) | REMARKS |
|------|------|------|-------|---------|
| Q101 | 1.0  | 7.7  | 0     |         |
| Q102 | 0.5  | 7.8  | 0     |         |
| Q103 | 0    | 4.8  | 0.7   |         |
| Q106 | 0.5  | 7.9  | 0     |         |
| Q108 | 0.1  | 3.9  | 0.8   |         |
| Q109 | 2.0  | 6.2  | 1.9   |         |
| Q110 | 1.7  | 7.0  | 1.7   |         |
| Q116 | 1.8  | 7.5  | 1.7   |         |
| Q117 | 0    | 3.8  | 0.6   |         |
| Q118 | 0    | 4.3  | 0     |         |
| Q119 | 0    | 0    | 0.6   |         |
| Q120 | 4.9  | 0    | 4.9   |         |
| Q121 | 0    | 0.3  | 0     |         |

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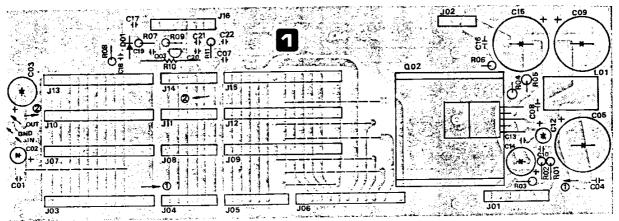
| <del></del> - | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9 | 10  | 11 | 12  | 13 | 14  | 15  | 16  | REMARKS |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|----|-----|----|-----|-----|-----|---------|
| Q104          | 0   | 0   | 2.6 | 4.9 | 0   | 0   | 4.9 | 2.7 |   |     |    |     |    |     |     |     |         |
| Q105          | 7.0 | 6.2 | 5.5 | 0   | 3.1 | 3.1 | 3.1 |     |   |     |    |     |    |     |     |     |         |
| Q107          | 7.2 | 6.3 | 5.8 | 0   | 3.2 | 3.2 | 3.2 |     |   |     |    |     |    |     |     |     |         |
| Q111          | 0   | 4.9 | 4.9 | 4.9 | 0   | 0   | 0   | 0   | 0 | 0   | 0  | 0   | 0  | 0   | 4.9 | 4.9 |         |
| Q112          | 0   | 0   | 4.9 | 0   | 0.2 | 0   | 0.2 | 0   | 0 | 4.9 | 0  | 4.9 | 0  | 4.9 | 4.9 | 4.9 |         |

#### VFO UNIT SCHEMATIC DIAGRAM

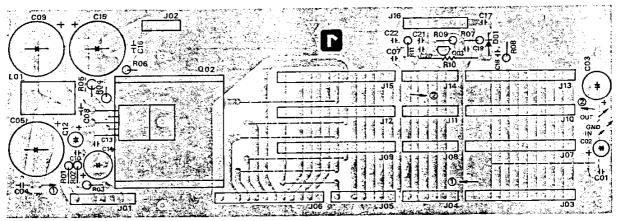


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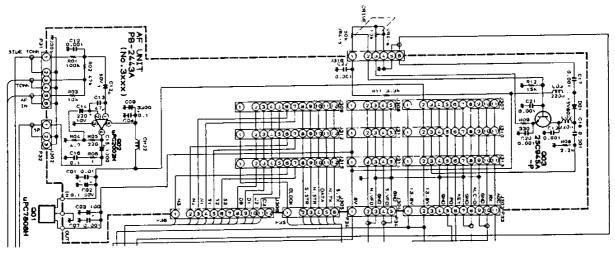
#### AF UNIT



Viewed from component side



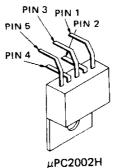
Viewed from solder side

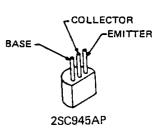


AF UNIT VOLTAGE CHART (DC VOLTS)

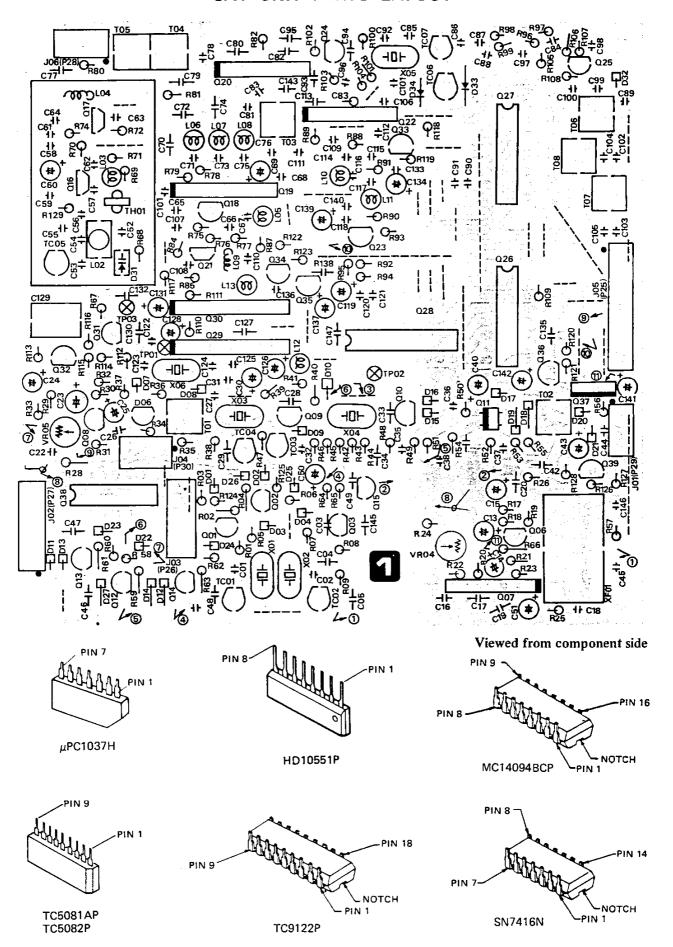
|      | E(S) | C(D) | B(G1) | REMARKS |
|------|------|------|-------|---------|
| Q303 | 0    | 7.8  | 0     |         |

|      | 1   | 2 | 3  | 4 | 5    |
|------|-----|---|----|---|------|
| Q302 | 0.7 | 0 | 0_ | 0 | 13.7 |

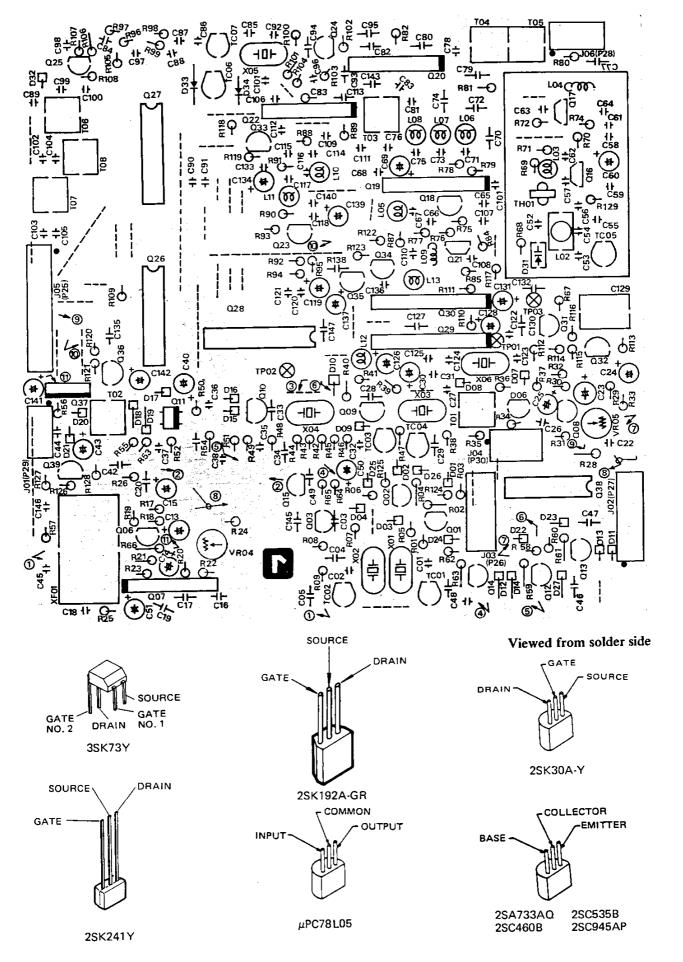




#### SAT UNIT PARTS LAYOUT



#### SAT UNIT PARTS LAYOUT



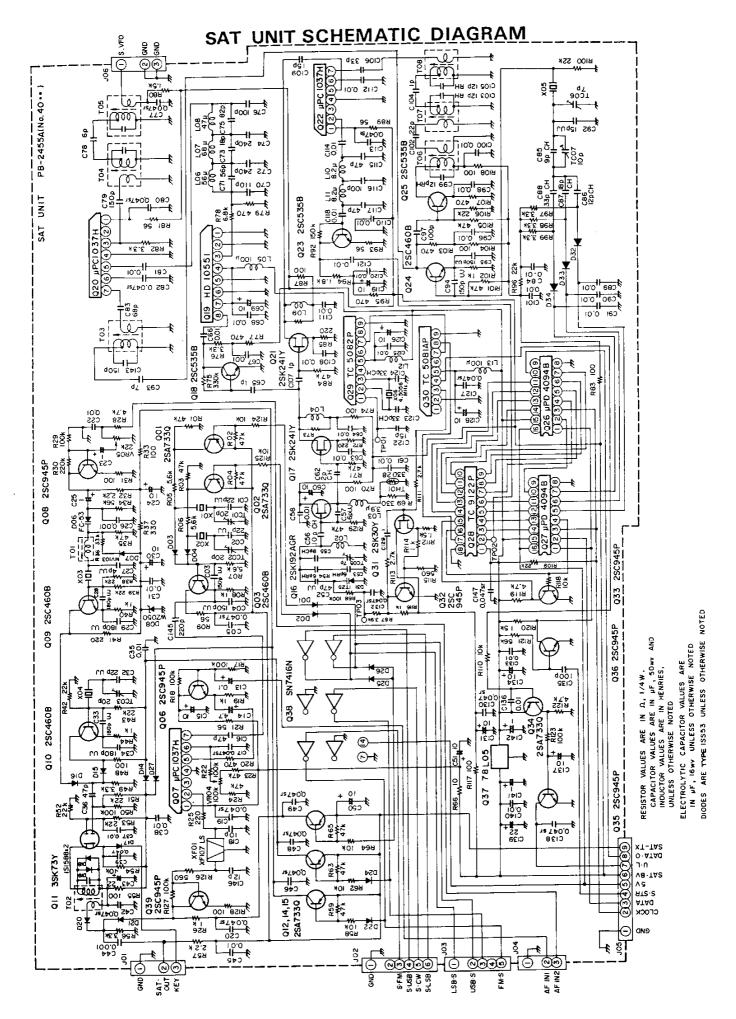
#### SAT UNIT VOLTAGE CHART (DC VOLTS)

|       |      |      | _     |      | ·       |
|-------|------|------|-------|------|---------|
|       | E(S) | C(D) | B(G1) | (G2) | REMARKS |
| Q4001 | 8.0  | 0    | 7.5   |      |         |
| Q4002 | 8.0  | 7.9  | 7.3   |      | ļ       |
| Q4003 | 3.7  | 7.8  | 3.5   |      |         |
| Q4006 | 2.7  | 7.6  | 3.1   |      |         |
| Q4008 | 0.2  | 3.5  | 0.8   |      |         |
| Q4009 | 1.6  | 4.1  | 2.2   |      |         |
| Q4010 | 3.7  | 7.3  | 3.5   |      |         |
| Q4011 | 1.6  | 6.7  | 1.2   | 3.5V |         |
| Q4012 | 7.9  | 7.8  | 7.3   |      |         |
| Q4014 | 8.0  | 7.9  | 7.3   |      |         |
| Q4015 | 8.0  | 7.9  | 7.3   |      |         |
| Q4016 | 0.8  | 7.6  | 0     |      |         |
| Q4017 | 0.4  | 7.8  | 0     |      |         |
| Q4018 | 0    | 4.2  | 0.7   |      |         |
| Q4021 | 0.5  | 7.7  | 0     |      |         |
| Q4023 | 0.1  | 3.9  | 0.8   |      |         |
| Q4024 | 1.8  | 6.2  | 2.1   |      |         |
| Q4025 | 1.6  | 7.0  | 1.8   |      |         |
| Q4031 | 1.8  | 7.4  | 1.8   |      |         |
| Q4032 | 0    | 3.7  | 0.6   |      |         |
| Q4033 | 0.6  | 5.0  | 0     |      |         |
| Q4034 | 5.0  | 0    | 4.9   |      |         |
| Q4035 | 0    | 1.3  | 0.1   |      |         |
| Q4036 | 0    | 0.1  | 0.7   |      |         |
| Q4039 | 0    | 0.2  | 0.2   |      |         |

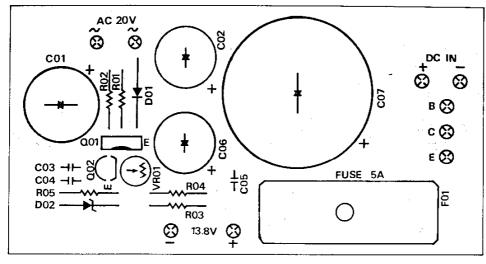
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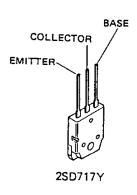
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|       | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8    | 9   | 10   | 11  | 12  | 13 | 14  | 15  | 16  | 17 | 18 | REMARKS |
|-------|-----|-----|-----|-----|-----|-----|-----|------|-----|------|-----|-----|----|-----|-----|-----|----|----|---------|
| Q4007 | 7.8 | 0.7 | 6.4 | 0   | 3.5 | 3.4 | 3.4 |      |     |      |     |     |    |     |     |     |    |    |         |
| Q4019 | 0   | 0   | 2.2 | 4.9 | 0   | 0   | 4.9 | 2.8  |     |      |     |     |    |     |     |     |    |    |         |
| Q4020 | 7.0 | 6.1 | 5.4 | 0   | 3.1 | 3.1 | 3.1 |      |     |      |     |     |    |     |     |     |    |    |         |
| Q4022 | 7.0 | 6.2 | 5.7 | 0   | 3.2 | 3.2 | 3.2 |      |     |      |     |     |    |     |     |     |    |    |         |
| Q4026 | 0.1 | 4.9 | 4.9 | 4.9 | 4.9 | 0   | 0   | 0    | 0   | 0    | 0   | 0   | 0  | 0   | 5.0 | 4.9 |    |    |         |
| Q4027 | 0.1 | 0   | 4.9 | 0   | 0   | 4.9 | 0   | 0    | 0   | 4.9  | 0   | 0   | 0  | 0   | 5.0 | 4.9 |    |    |         |
| Q4028 | 5.0 | 2.0 | 0   | 0   | 0   | 0   | 4.9 | 4.9  | 0   | 0    | 0   | 0   | 0  | 0   | 4.4 | 0   | 0  | 0  |         |
| Q4029 | 1.3 | 2.3 | 2.4 | 2.5 | 5.0 | 2.5 | 2.5 | 2.4  | 0   |      |     |     |    |     |     |     |    |    |         |
| Q4030 | 5.0 | 0   | 1.8 | 5.0 | 5.0 | -   | 2.5 | 0    | 0   |      |     |     |    |     |     |     |    |    |         |
| Q4037 | 5.0 | 0   | 7.9 |     |     |     |     |      |     |      |     |     |    |     |     |     |    |    |         |
| Q4038 | 3.9 | 0.1 | 1.8 | 0.1 | 0.1 | 7.5 | 0   | 12.7 | 0.1 | 12.6 | 0.1 | 1.2 | 0  | 4.9 |     |     |    |    |         |

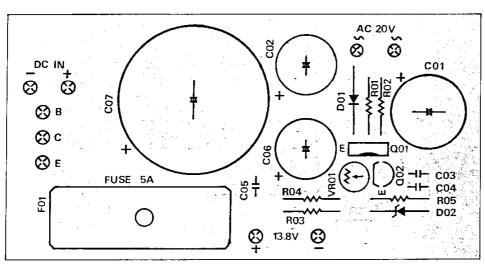


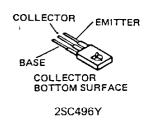
#### **AVR UNIT**

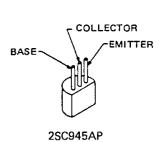




Viewed from component side



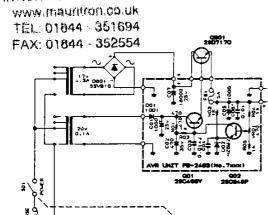




FOR SERVICE MANUALS CONTACT:

Viewed from solder side

## MAURITRON TECHNICAL SERVICES



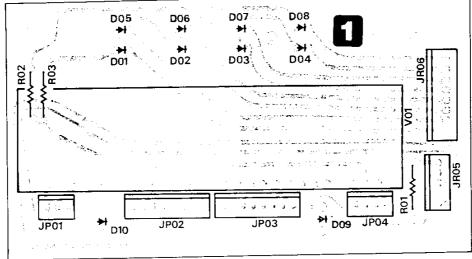
#### 10W PS UNIT VOLTAGE CHART (DC VOLTS)

|      | E(S) | C(D) | B(G1) | REMARKS |
|------|------|------|-------|---------|
| Q601 | 13.7 | 20.5 | 14.4  |         |

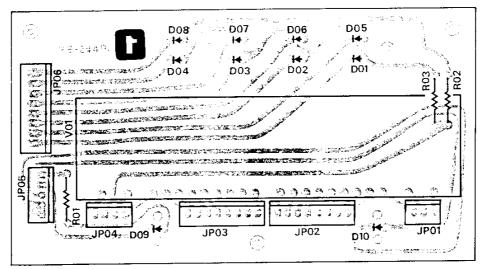
#### AVR UNIT VOLTAGE CHART (DC VOLTS)

|      | E(S) | C(D) | B(G1) | REMARKS |
|------|------|------|-------|---------|
| Q701 | 14.4 | 24.0 | 15.0  |         |
| Q702 | 5.8  | 15.0 | 6.5   |         |

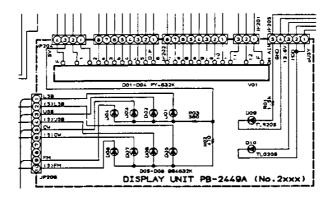
### **DISPLAY UNIT**



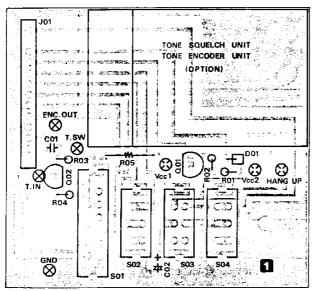
Viewed from component side

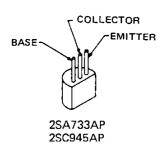


Viewed from solder side

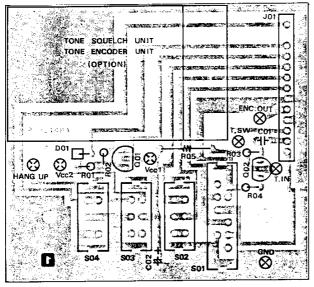


## SCAN/SQL SW UNIT

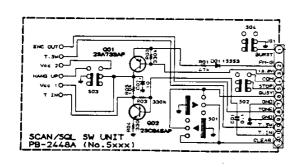




Viewed from component side



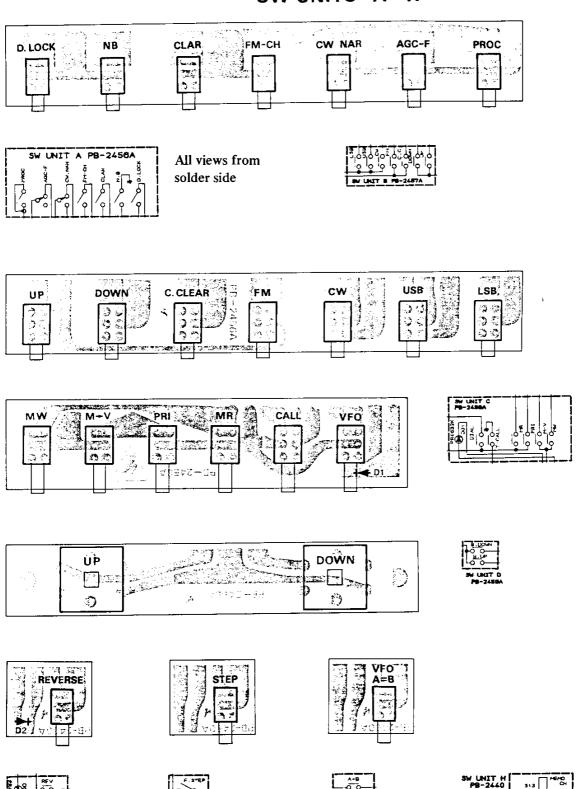
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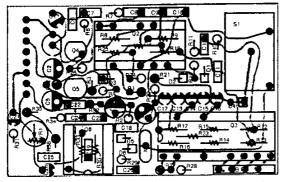
### SW UNITS A-H



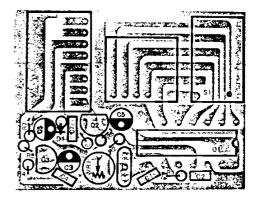
## FTS-32R AND FTE-36 TONE SQL UNITS

FTS-32R

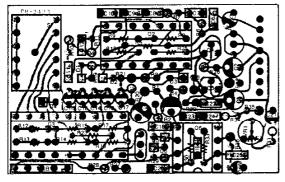




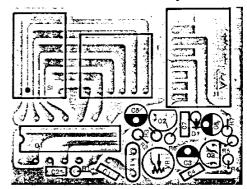
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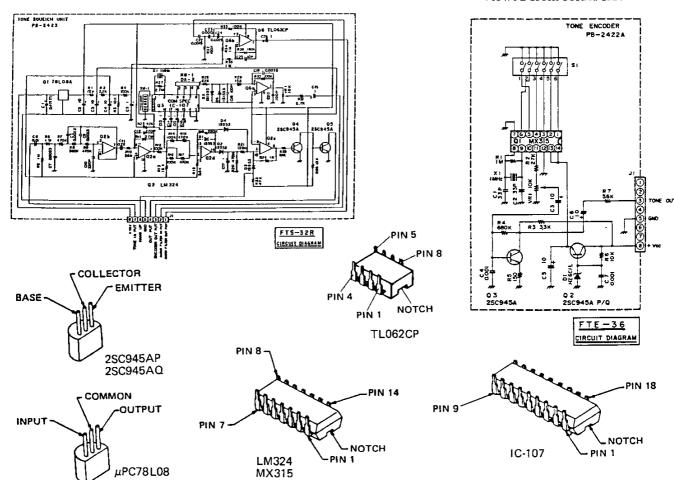
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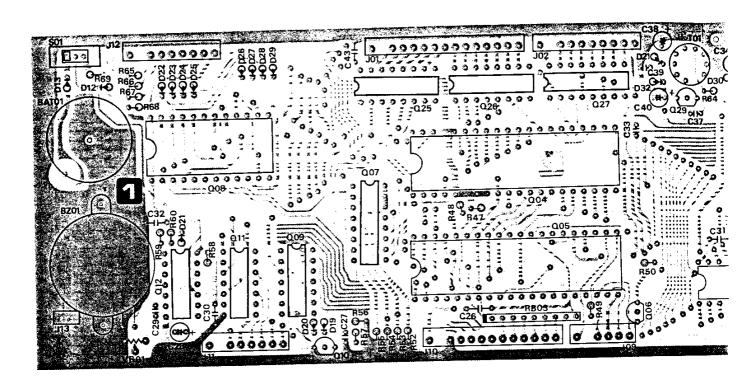
Viewed from solder side

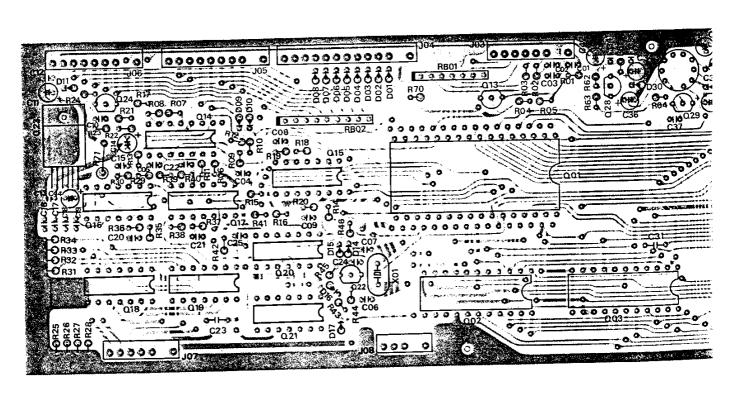


Viewed from solder side



#### **CONTROL UNIT F**

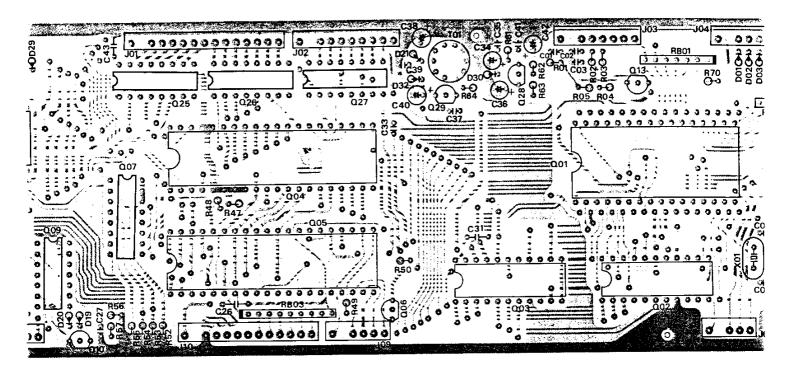


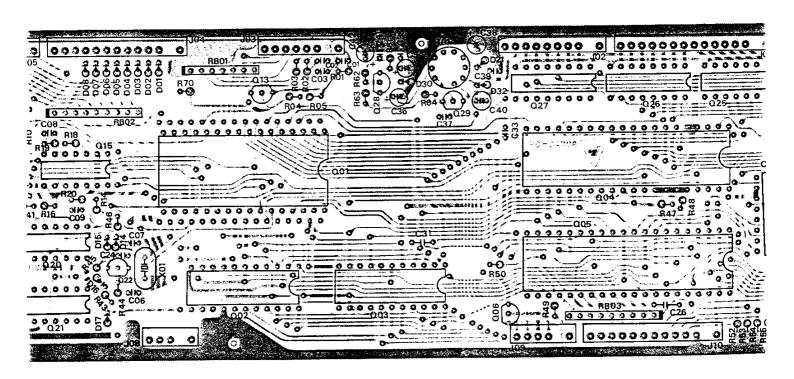


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CONTACT:

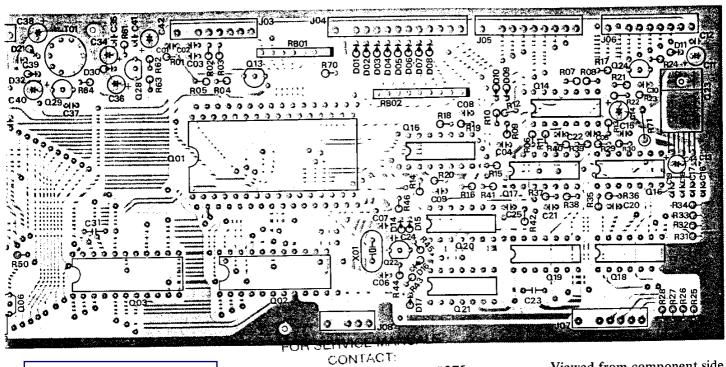
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#### **CONTROL UNIT PARTS LAYOUT**





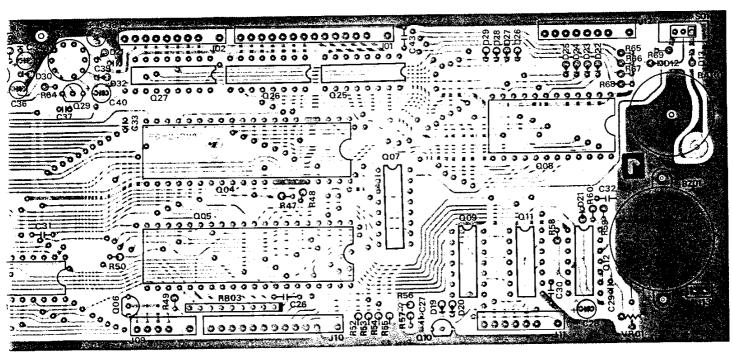
## **IOL UNIT PARTS LAYOUT**



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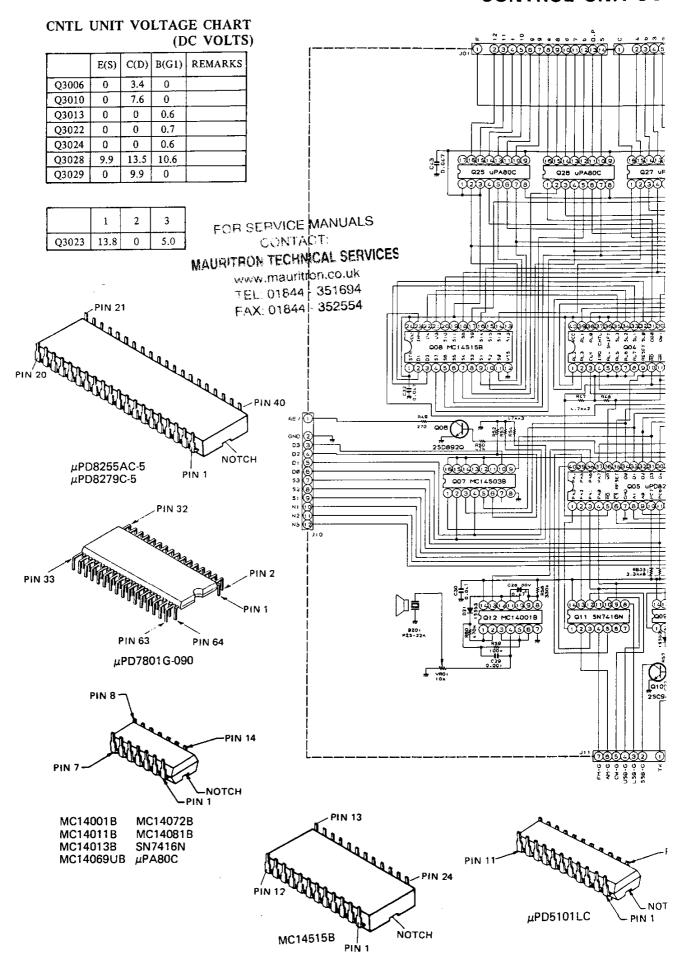
MAURITRON TECHNICAL SERVICES

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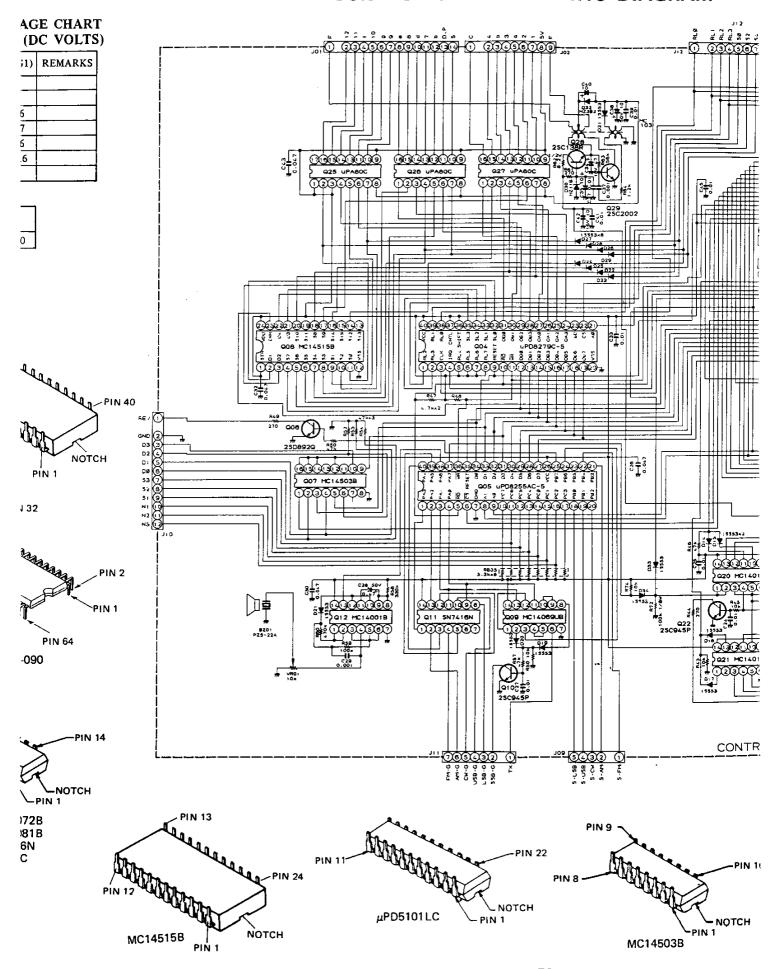


Viewed from solder side

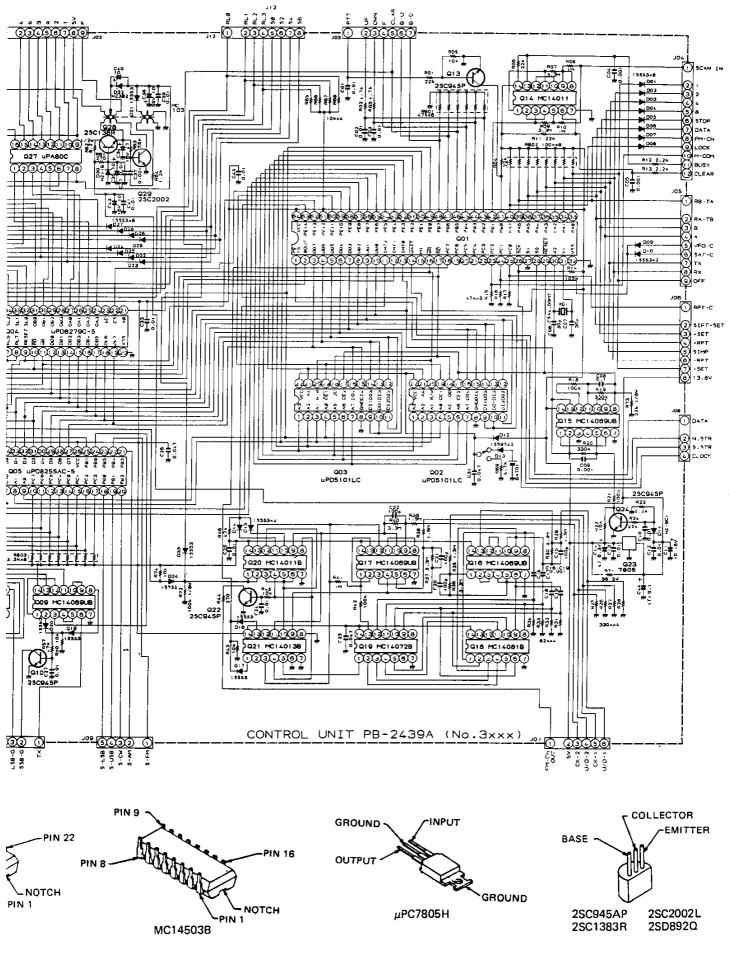
#### **CONTROL UNIT SC**

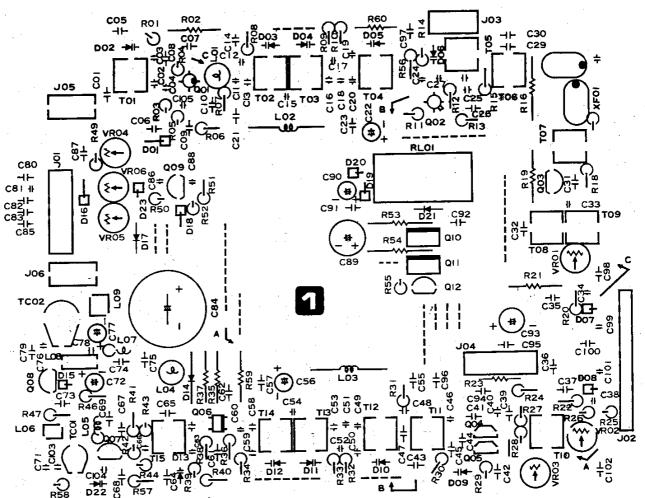


#### CONTROL UNIT SCHEMATIC DIAGRAM

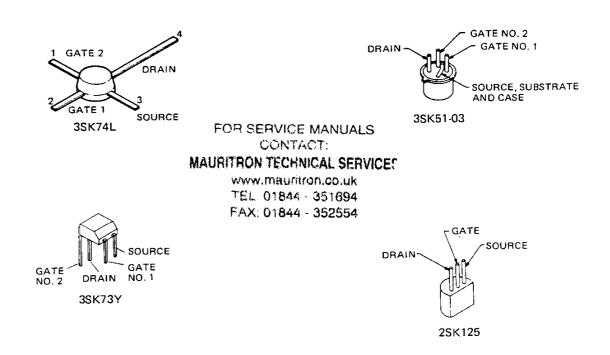


#### **I SCHEMATIC DIAGRAM**

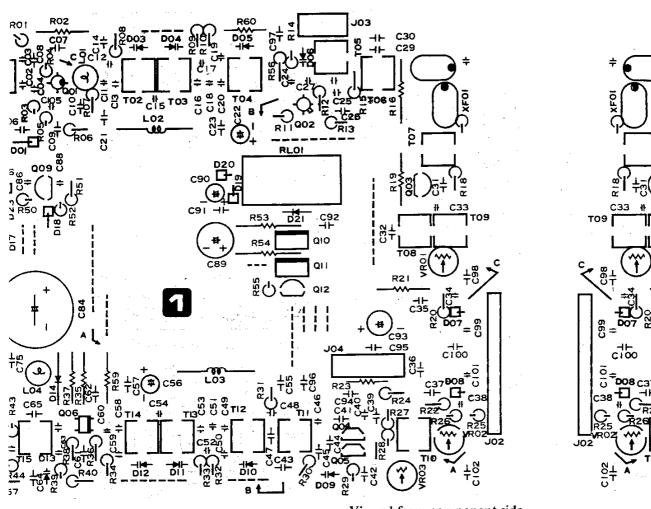


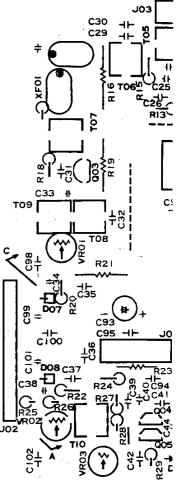


Viewed from component side

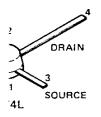


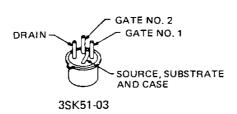
### 50 MHz MODULE: RF UNIT PARTS L





Viewed from component side

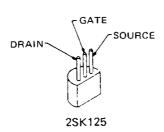




sol

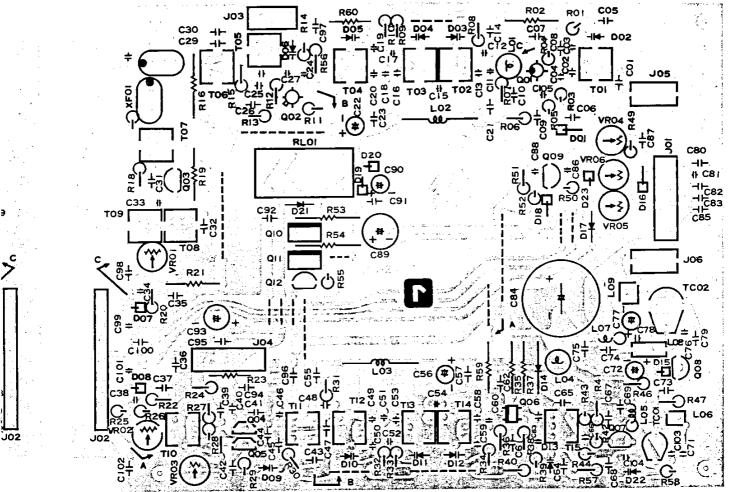
GATE



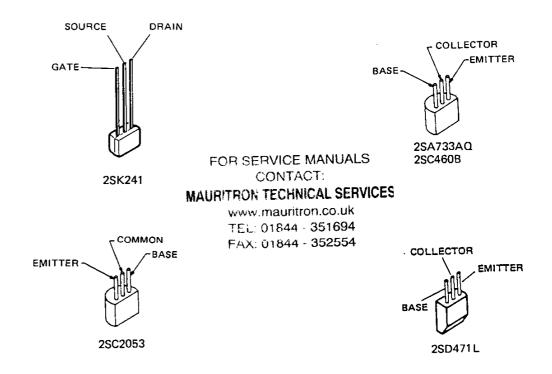


EMITTER

## MODULE: RF UNIT PARTS LAYOUT

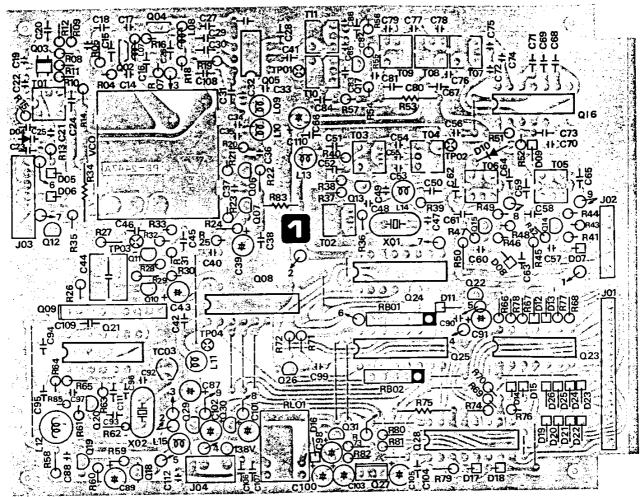


nt side Viewed from solder side

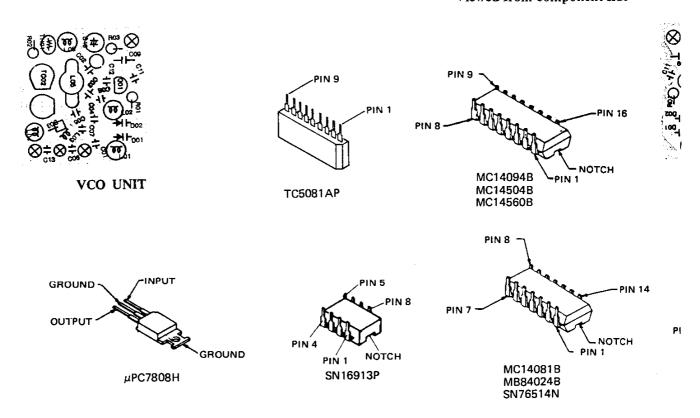


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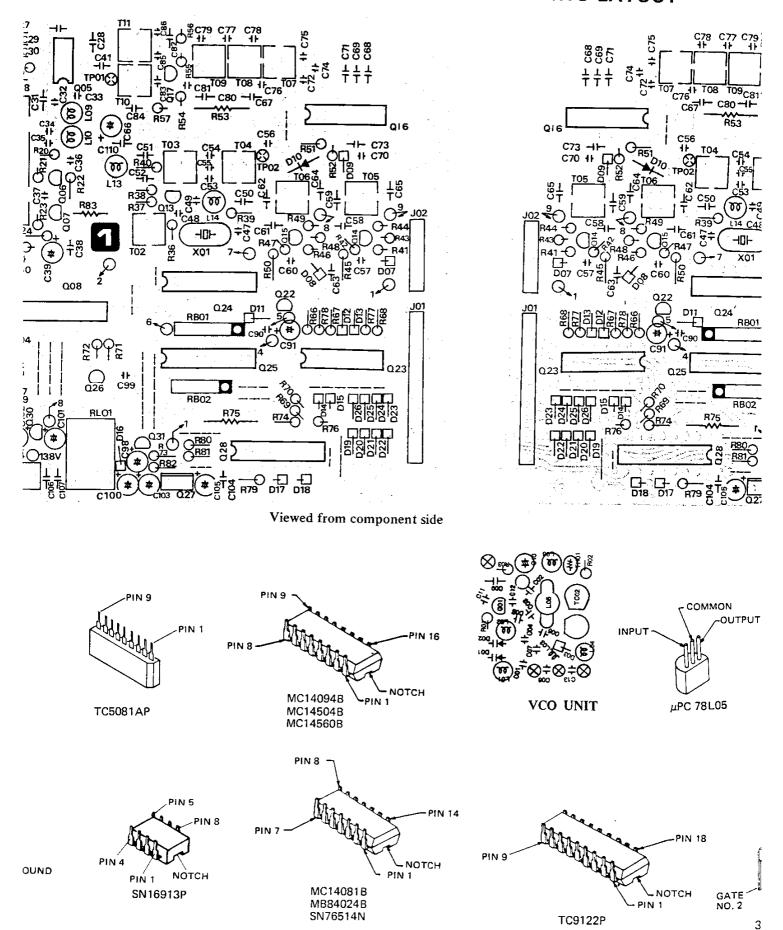
#### 50 MHz MODULE: PLL UNIT



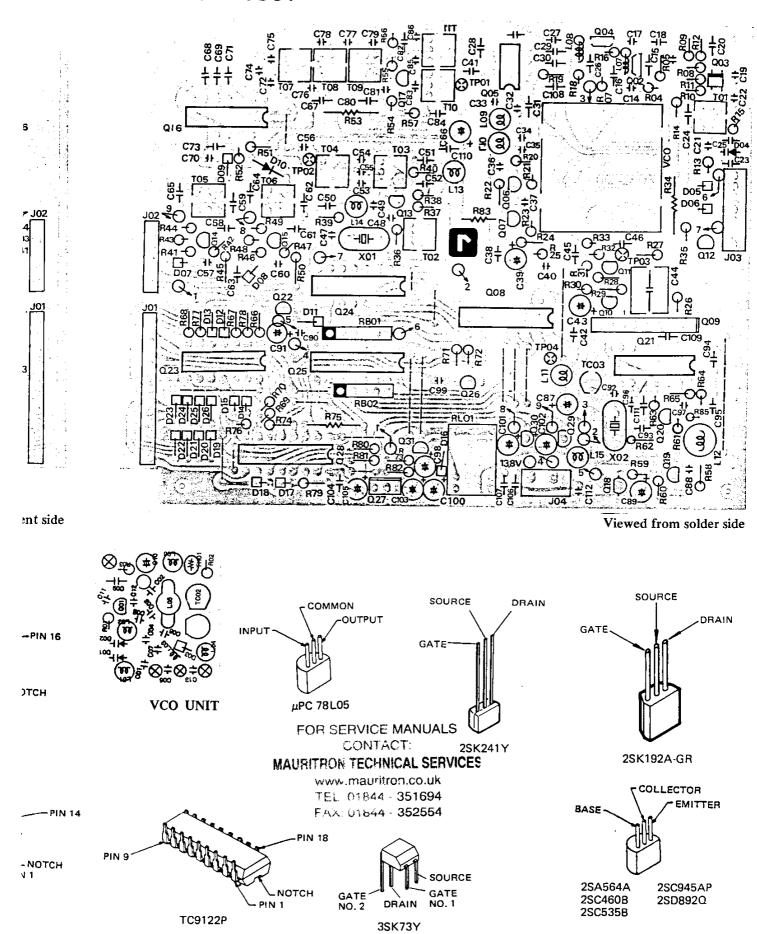
Viewed from component side



## 50 MHz MODULE: PLL UNIT PARTS LAYOUT

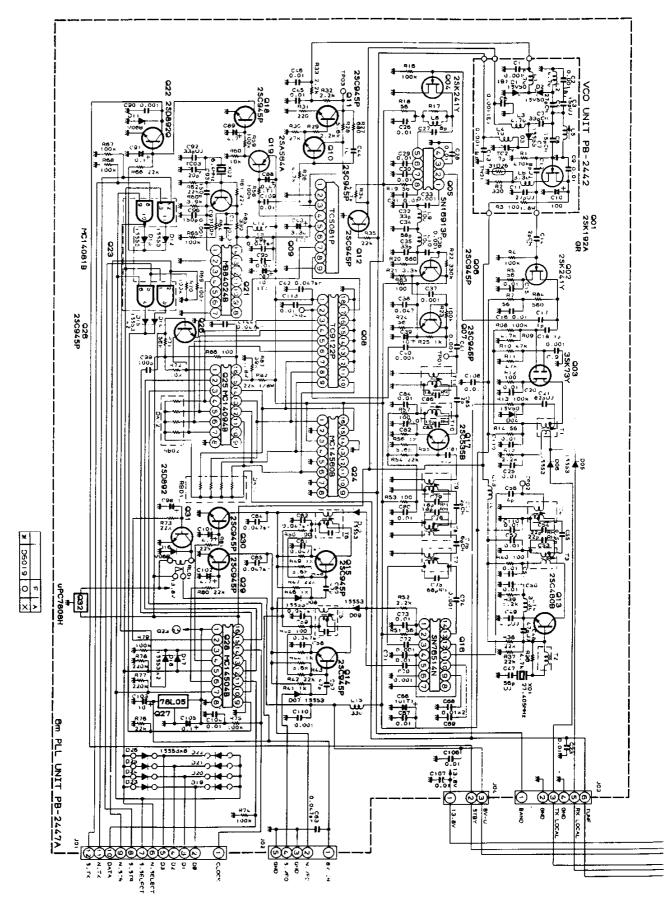


## **E:PLL UNIT PARTS LAYOUT**

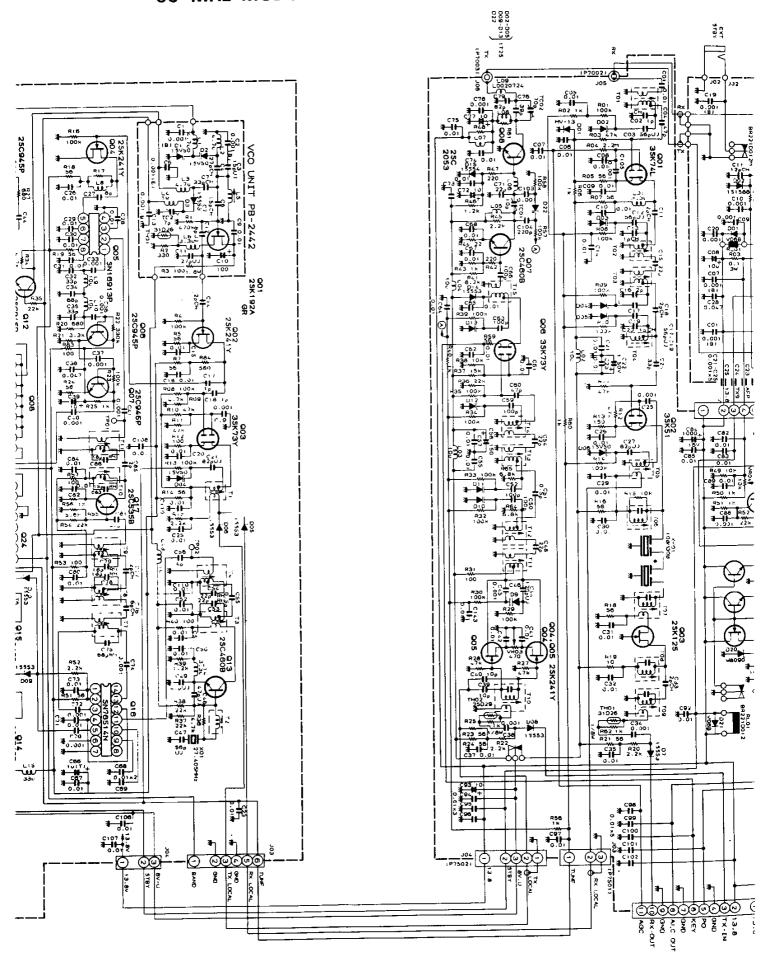


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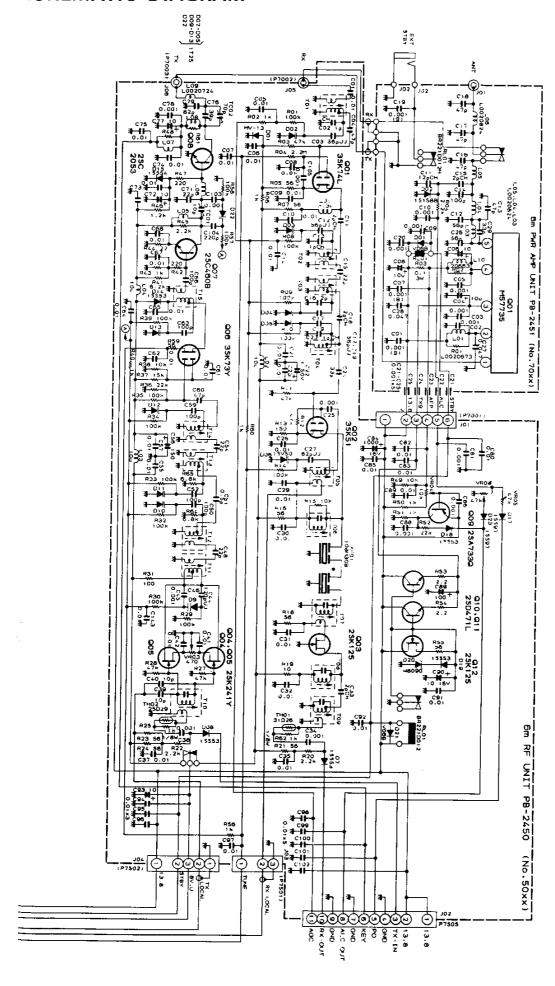
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## 50 MHz MODULE SCHEMATIC DIAGRAM



#### CHEMATIC DIAGRAM



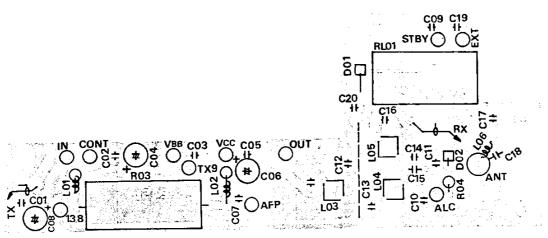
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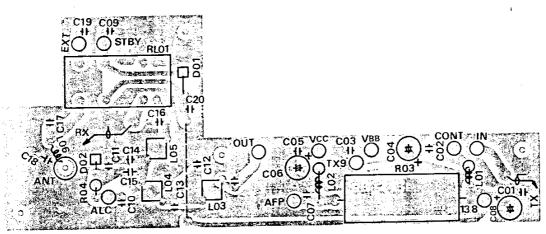
FAX: 01844 - 352554

FOR SERVICE MANUALS

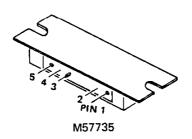
## 50 MHz MODULE: PA UNIT P



Viewed from component side



Viewed from solder side



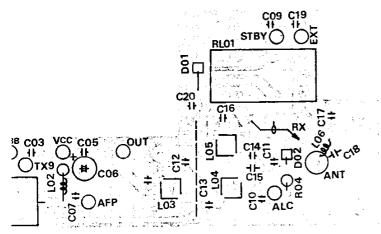
FOR SERVICE MANUALS CONTACT:

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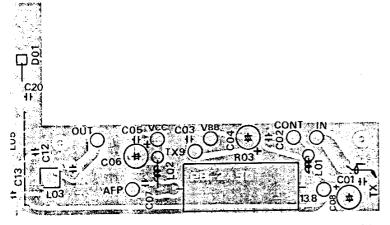
| 5 | 0             | M        | Hz       | Z |
|---|---------------|----------|----------|---|
|   |               |          |          |   |
|   |               |          |          | Ī |
| _ | 05            | 00       | 1        | r |
|   |               | 00       | _        | ŀ |
| r | QS            | 00       | 4        | ľ |
|   | Q5            | 00       | 3        |   |
|   |               | 00       |          |   |
| Ĺ |               | 00       |          | L |
| L |               | 00       |          | ŀ |
| Ļ |               | 00       |          | ŀ |
| L | Q:            | 00       | 9        | L |
| L |               | 01<br>01 |          |   |
| ļ |               | 501      | _        | ŀ |
| r | <u> </u>      |          | _        | ł |
| ŀ | O é           | 500      | 1        | 1 |
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| ľ | Q             | 600      | )7       |   |
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| - | Q             | 60!      | 15       | Į |
| ŀ |               | 60.      |          | 4 |
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| ŀ | 7             | 60       | 20<br>22 | _ |
| ł |               | 60       |          | 1 |
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| I |               | 60       |          |   |
| 1 |               | 60       |          | 1 |
| , |               |          |          | - |
| I | _             |          |          | ľ |
|   | -             | 260      | 05       | Ì |

| Q6005 |   |
|-------|---|
| Q6008 |   |
| Q6009 | _ |
| Q6016 |   |
| Q6021 |   |
| Q6023 | L |
| Q6024 | L |
| Q6025 | L |
| Q6027 | L |
| Q6028 | L |
| Q6032 | L |
| Q7001 | 1 |

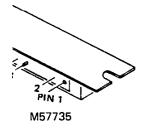
# 50 MHz MODULE: PA UNIT PARTS LAYOUT AND VOLTA



Viewed from component side



Viewed from solder side



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#### 50 MHz MODULE VOLTAGE CHART (DC VOI

|       | E(  | (S)  | C(   | D)   | B(0 | G1)     | (C  | (2)      | REM      |
|-------|-----|------|------|------|-----|---------|-----|----------|----------|
|       | R   | Т    | R    | Т    | R   | Т       | R   | T        | KEN      |
| Q5001 | 1.3 |      | 7.9  |      | 1.4 |         | 1.9 |          |          |
| Q5002 | 0.3 |      | 7.8  |      | 0   |         | 0.3 |          |          |
| Q5004 |     | 0.5  |      | 7.7  |     | 0       |     |          |          |
| Q5003 | 1.3 |      | 7.9  |      | _   | 0       |     | ļ        | Ì        |
| Q5005 |     | 0.5  |      | 7.7  |     | 0       |     |          |          |
| Q5006 |     | 1.3  |      | 7.3  |     | 1.5     |     | 4.0      |          |
| Q5007 |     | 0.1  |      | 8.1  |     | 0.8     |     |          |          |
| Q5008 |     | 0    |      | 13.7 |     | 0.7     |     |          |          |
| Q5009 |     | 13.7 |      | 0    |     | 13.2    |     |          |          |
| Q5010 |     | 9.4  |      | 13.7 |     | 10.0    |     |          |          |
| Q5011 |     | 9.4  |      | 13.7 |     | 10.0    |     | <u></u>  |          |
| Q5012 |     | 12.0 |      | 13.7 |     | 10.0    |     |          |          |
|       |     |      |      |      |     |         |     |          |          |
| Q6001 | 0.7 |      | 7.8  |      | 0   |         |     |          |          |
| Q6002 | 0.2 |      | 5.8  |      | Q   |         |     |          |          |
| Q6003 | 0.5 |      | 7.8  |      | 0.4 | L       | 3.9 |          |          |
| Q6004 | 0   |      | 7.8  |      | 0   |         |     |          | <u> </u> |
| Q6006 | 4.9 |      | 7.5  |      | 5.5 |         |     | <u></u>  |          |
| Q6007 | 0.3 |      | 2.8  |      | 0.9 |         |     | ļ        | <u> </u> |
| Q6010 | 0.9 |      | 8.0  |      | 1.4 |         |     |          | ļ        |
| Q6011 | 0.3 |      | 1.6  |      | 0_  |         |     |          | <u> </u> |
| Q6012 | 0   |      | 1.0  |      | 0.3 | <u></u> |     |          |          |
| Q6013 | 3.5 |      | 7.8  |      | 3.7 | L       |     |          | <u> </u> |
| Q6014 | 8.1 |      | 8.1  |      | 8.1 |         |     | L        |          |
| Q6015 | 1.0 |      | 8.0  |      | 1.7 |         |     |          | ļ        |
| Q6017 | 0.9 |      | 7.9  |      | 1.6 |         |     |          | ļ        |
| Q6018 | 0   |      | 0    |      | 0.6 |         |     | <u> </u> | <u></u>  |
| Q6019 | 8.1 |      | 7.3  | -    | 8.0 |         |     |          |          |
| Q6020 | 4.9 |      | 7.6  |      | 3.7 |         |     | ļ        |          |
| Q6022 | 0   |      | 13.7 |      | 0   |         |     |          |          |
| Q6026 | 0   |      | 0    |      | 0.6 |         |     |          | <u> </u> |
| Q6029 | 0   |      | 8.1  |      | 0   |         |     | <u> </u> | <u> </u> |
| Q6030 | 0   |      | 0    |      | 0.7 |         |     | <u> </u> |          |
| Q6031 | 0   |      | 0.8  |      | 1.4 |         |     |          | <u> </u> |

|       | 1    | 2    | 3   | 4    | 5   | 6   | 7             | 8   | 9   |
|-------|------|------|-----|------|-----|-----|---------------|-----|-----|
| Q6005 | 6.3  | 3.8  | 2.7 | 0    | 2.7 | 3.8 | 3.8           | 7.6 |     |
| Q6008 | 8.1  | 3.1  | 0   | 0    | 0   | 0   | 0             | 0   | 7.8 |
| Q6009 | 8.0  | 0    | 1.4 | 8.0  | 8.0 | 0   | 4.0           | 1.0 | 0   |
| Q6016 | 0    | 7.7  | 6.9 | 3.9  | 2.6 | 0   | 0             |     | 2.6 |
| O6021 | 3.8  | 0    | 4.0 | 4.0  | 4.0 | 4.0 | 0             | 0   | 3.9 |
| O6023 | 0    | 0    | 0   | 0    | 0   | 0.2 | 0             | 0   | 0.2 |
| O6024 | 0    | 0    | 8.1 | Ø    | 0   | 0   | 0             | 0   | 0.3 |
| Q6025 | 0    | 0    | 8.1 | 0    | 0   | 0   | 0             | 0   | 0   |
| Q6027 | 5.0  | 0    | 8.1 |      |     |     |               |     |     |
| O6028 | 4.9  | 8.0  | 3.6 | 8.0  | 4.2 | 0   | 0.1           | 0   | 0   |
| Q6032 | 13.7 | 0    | 8.1 |      |     |     | $\overline{}$ |     | L   |
| Q7001 | 0    | 13.7 | Ö   | 13.7 | 0   |     |               |     |     |
|       |      |      |     |      |     |     |               |     |     |

# JNIT PARTS LAYOUT AND VOLTAGE CHARTS

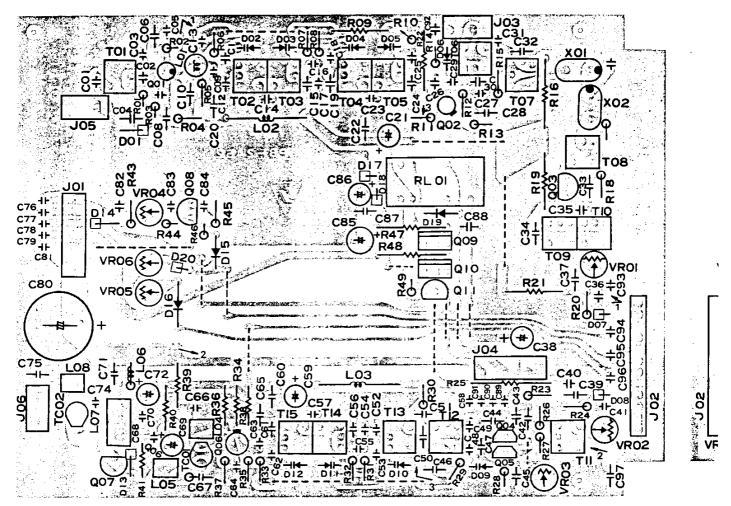
50 MHz MODULE VOLTAGE CHART (DC VOLTS)

| ZWIL | עטענ  | EV  | <i>J</i> L1 <i>F</i>  | OL.   | CIIA  |   | (20  | TOLIB)   |
|------|---|---|---|---|---|---|--|--|
| E(   | (S)   | C(  | D)  | B(0   | G1)   | (0  | (2)  | REMARKS  |
| R    | Т   | R   | Т   | R   | Т   | R   | Т  | REMARKS  |
| 1.3  | _   | 7.9   |   | 1.4   |   | 1.9   |  |  |
| 0.3  |   | 7.8   |   | 0   |   | 0.3   |  |  |
|      | 0.5   |   | 7.7   |   | 0   |   |  |  |
| 1.3  |   | 7.9   |   |   | 0   |   |  |  |
|      | 0.5   |   | 7.7   |   | 0   |   |  |  |
|      | 1.3   |   | 7.3   |   | 1.5   |   | 4.0  |  |
|      | 0.1   |   | 8.1   |   | 0.8   |   |  |  |
|      | 0   |   | 13.7  |   | 0.7   |   |  |  |
|      | 13.7  |   | 0   |   | 13.2  |   |  |  |
|      | 9.4   |   | 13.7  |   | 10.0  |   |  |  |
|      | 9.4   |   | 13.7  |   | 10.0  |   |  |  |
|      | 12.0  |   | 13.7  |   | 10.0  |   |  |  |
|      |   |   |   |   |   |   |  |  |
| 0.7  |   | 7.8   |   | 0   |   |   |  |  |
| 0.2  |   | 5.8   |   | , 0   |   |   |  |  |
| 0.5  |   | 7.8   |   | 0.4   |   | 3.9   |  |  |
| 0    |   | 7.8   |   | 0   |   |   |  |  |
| 4.9  |   | 7.5   |   | 5.5   |   |   |  |  |
| 0.3  |   | 2.8   |   | 0.9   |   |   |  |  |
| 0.9  |   | 8.0   |   | 1.4   |   |   |  |  |
| 0.3  |   | 1.6   |   | 0   |   |   | l  |  |
| 0    |   | 1.0   |   | 0.3   |   |   |  |  |
| 3.5  |   | 7.8   |   | 3.7   | [ <u>.</u>  |   |  |  |
| 8.1  |   | 8.1   |   | 8.1   |   |   |  |  |
| 1.0  |   | 8.0   |   | 1.7   |   |   |  |  |
| 0.9  |   | 7.9   |   | 1.6   |   |   |  |  |
| 0    |   | 0   |   | 0.6   |   |   |  |  |
| 8.1  |   | 7.3   |   | 8.0   | Ι   |   |  |  |
| 4.9  |   | 7.6   |   | 3.7   |   |   | L  |  |
| 0    | · ·   | 13.7  |   | 0   |   |   |  |  |
| 0    |   | 0   |   | 0.6   |   |   |  |  |
| 0    | 1   | 8.1   |   | 0   |   |   |  |  |
| 0    |   | 0   |   | 0.7   |   |   |  |  |
| 0    |   | 0.8   |   | 1.4   |   |   |  |  |
|      | 0.7<br>0.2<br>0.3<br>0.3<br>0.3<br>0.7<br>0.2<br>0.5<br>0<br>0.3<br>0.9<br>0.3<br>0.9<br>0.3<br>1.0<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0.9<br>0 | E(S)  R T  1.3  0.3  0.5  1.3  0.1  0  13.7  9.4  9.4  12.0  0.5  0  4.9  0.3  0.9  0.3  0  3.5  8.1  1.0  0.9  0  8.1  4.9  0  0  0  0  0  0 | E(S)         C(           R         T         R           1.3         7.9           0.3         7.8           0.5         1.3         7.9           0.5         1.3         0.1           0         13.7         9.4           9.4         9.4         12.0           0.7         7.8         0.2           0.5         7.8         0           0.2         5.8         0           0.3         2.8         0.9           0.3         1.6         0           0.3         1.6         0           0.3         1.6         0           0.3         7.8         8.1           1.0         8.0         0.9           0.9         7.9         0           0         0         8.1           1.0         0         0           8.1         7.3         0           0         0         8.1           0         0         8.1           0         0         8.1           0         0         8.1           0         0         0 | E(S)         C(D)           R         T         R         T           1.3         7.9            0.5         7.7           1.3         7.3           0.1         8.1           0         13.7           13.7         0           9.4         13.7           0.7         7.8           0.2         5.8           0.5         7.8           0         7.8           4.9         7.5           0.3         2.8           0.9         8.0           0.3         1.6           0         1.0           3.5         7.8           8.1         8.1           1.0         8.0           0.9         7.9           0         0           8.1         7.3           4.9         7.6           0         13.7           0         0           8.1         7.3           4.9         7.6           0         13.7           0         0 | E(S)         C(D)         B(C)           R         T         R         T         R           1.3         7.9         1.4           0.3         7.8         0           0.5         7.7         1.3           1.3         7.3         1.3           0.1         8.1         1.3           0.1         8.1         1.3           0.1         13.7         0           9.4         13.7         13.7           0.7         7.8         0           0.2         5.8         0           0.5         7.8         0.4           0         7.8         0           0.4         7.5         5.5           0.3         2.8         0.9           0.9         8.0         1.4           0.3         1.6         0           0         1.0         0.3           3.5         7.8         3.7           8.1         8.1         8.1           1.0         8.0         1.7           0.9         7.9         1.6           0         0         0.6           8.1         7.3 | E(S)         C(D)         B(G1)           R         T         R         T         R         T           1.3         7.9         1.4         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         -         0         -         1         -         0         -         -         0         -         -         0         -         -         0         -         -         -         0         -         -         -         0         -         -         -         0         - | R         T         R         T         R         T         R           1.3         7.9         1.4         1.9         0.3           0.5         7.7         0         0         0.3           0.5         7.7         0         0         0         0           1.3         7.9         0 <td>E(S)         C(D)         B(G1)         (G≥)           R         T         R         T         R         T           1.3         7.9         1.4         1.9         1.9           0.3         7.8         0         0         0.3           0.5         7.7         0         0         1.2           1.3         7.3         1.5         4.0           0.1         8.1         0.8         1.5         4.0           0.1         8.1         0.8         1.5         4.0           0.1         8.1         0.8         1.2         1.2         1.2           0.1         13.7         0         13.2         1.2         &lt;</td> | E(S)         C(D)         B(G1)         (G≥)           R         T         R         T         R         T           1.3         7.9         1.4         1.9         1.9           0.3         7.8         0         0         0.3           0.5         7.7         0         0         1.2           1.3         7.3         1.5         4.0           0.1         8.1         0.8         1.5         4.0           0.1         8.1         0.8         1.5         4.0           0.1         8.1         0.8         1.2         1.2         1.2           0.1         13.7         0         13.2         1.2         < |

|       | 1    | 2    | 3   | 4    | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15       | 16       | 17  | 18 | REMARKS |
|-------|------|------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|----------|-----|----|---------|
| 06005 | 6.3  | 3.8  | 2.7 | 0    | 2.7 | 3.8 | 3.8 | 7.6 |     |     |     |     |     |     |          |          |     |    |         |
| Q6008 | 8.1  | 3.1  | 0   | 0    | 0   | 0   | 0   | 0   | 7.8 | 0   | 0   | 0   | 0   | 0   | 0        | 0_       | 1.0 | 0  |         |
| Q6009 | 8.0  | 0    | 1.4 | 8.0  | 8.0 | 0   | 4.0 | 1.0 | 0   |     |     |     |     |     |          |          |     |    |         |
| Q6016 | 0    | 7.7  | 6.9 | 3.9  | 2.6 | 0   | 0   | _   | 2.6 | 3.9 |     | 3.9 | 6.9 | 0   |          |          |     |    |         |
| Q6021 | 3.8  | 0    | 4.0 | 4.0  | 4.0 | 4.0 | 0   | 0   | 3.9 | _   | 3.9 | 4.2 | 0   | 8.0 |          |          |     |    |         |
| Q6023 | 0    | 0    | 0   | 0    | 0   | 0.2 | 0   | 0   | 0.2 | 0   | 0   | 0   | 4.2 | 5.0 |          |          |     |    |         |
| Q6024 | 0    | 0    | 8.1 | Ø    | 0   | 0   | 0   | 0   | 0.3 | 0   | 8.1 | 0   | 0   | 0   | 0        | 8.1      |     |    |         |
| Q6025 |      | 0    | 8.1 | 0    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 5.1      | 7.9      |     |    |         |
| Q6027 | 5.0  | 0    | 8.1 |      |     |     |     |     | -   |     |     |     |     |     | <u>.</u> | L        |     |    |         |
| Q6028 | 4.9  | 8.0  | 3.6 | 8.0  | 4.2 | 0   | 0.1 | 0   | 0   | 0   | 0   | 0   | 0   | 4.9 | 8.1      | 8.1      |     |    |         |
| Q6032 | 13.7 | 0    | 8.1 |      |     |     |     |     |     |     |     |     |     |     |          | <u> </u> |     |    |         |
| Q7001 | 0    | 13.7 | 0   | 13.7 | 0   |     |     |     |     |     |     |     |     |     |          |          | l   |    | RX      |

FOR SERVICE MANUALS
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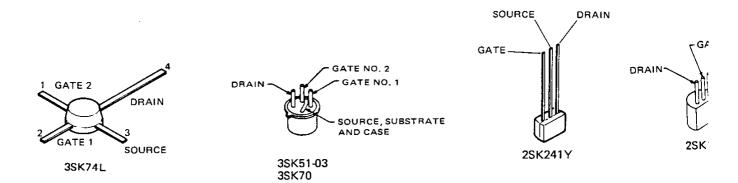
#### 144MHz MODULE: RF L



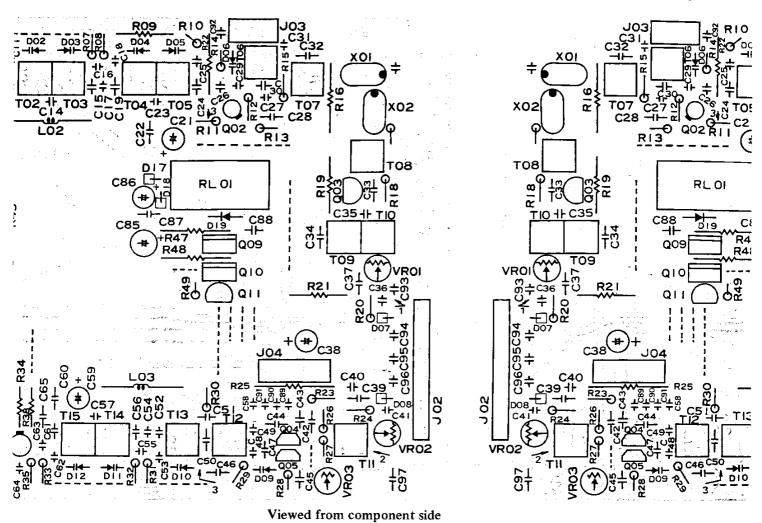
Viewed from component side

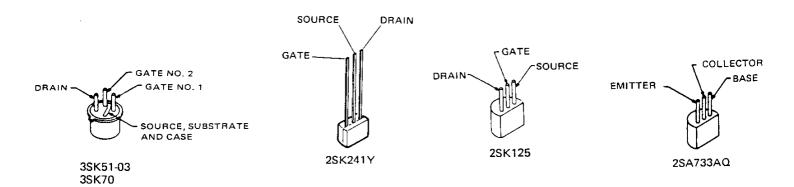
# FOR SERVICE MANUALS CONTACT:

#### MAURITRON TECHNICAL SERVICES

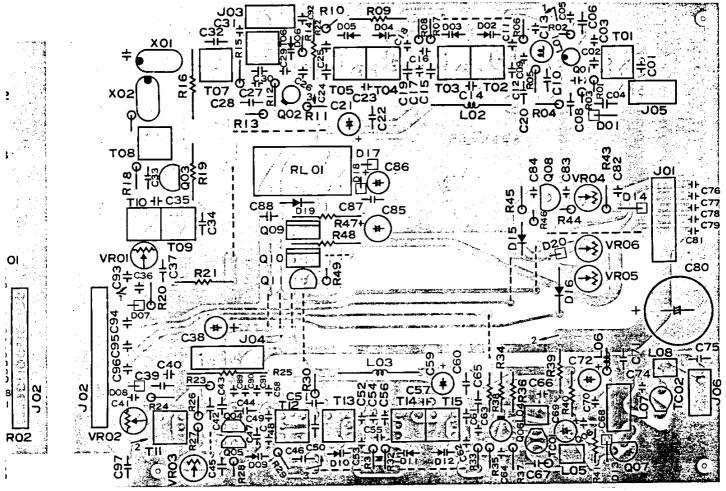


#### 144MHz MODULE: RF UNIT PARTS LAYOUT





## **DULE: RF UNIT PARTS LAYOUT**

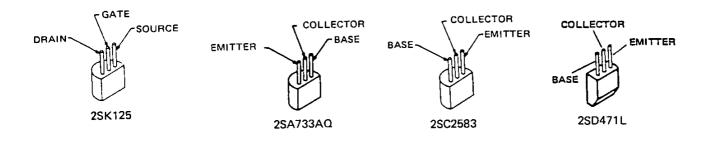


Viewed from solder side

# FOR SERVICE MANUALS CONTACT:

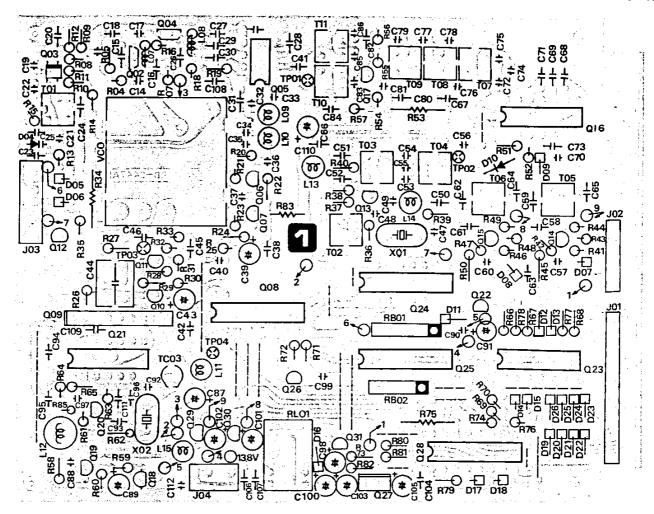
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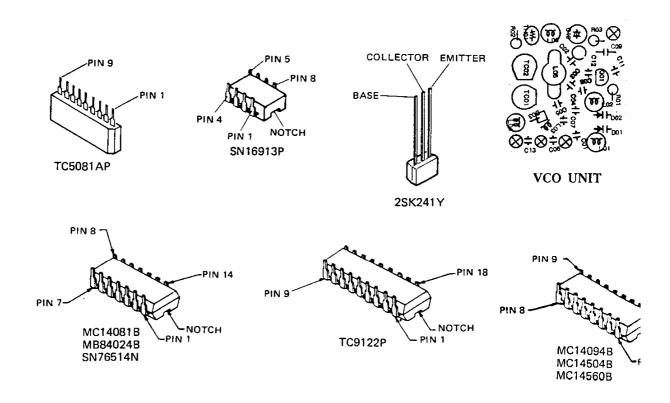


ıt side

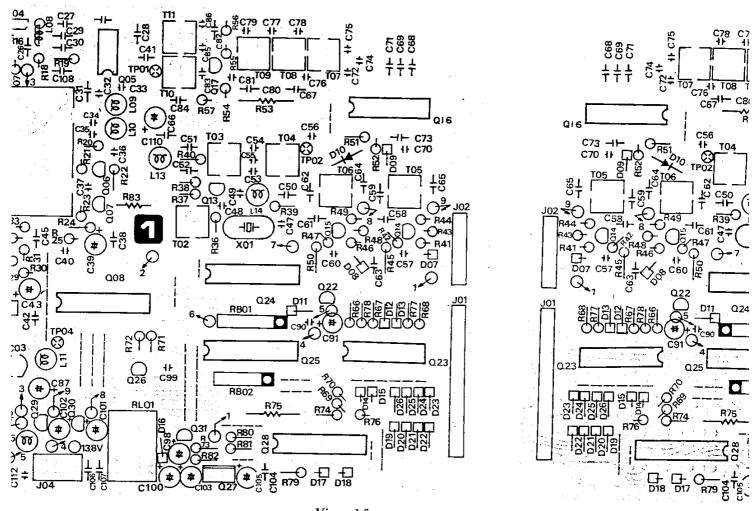
## 144MHz MODULE: PLL UNI



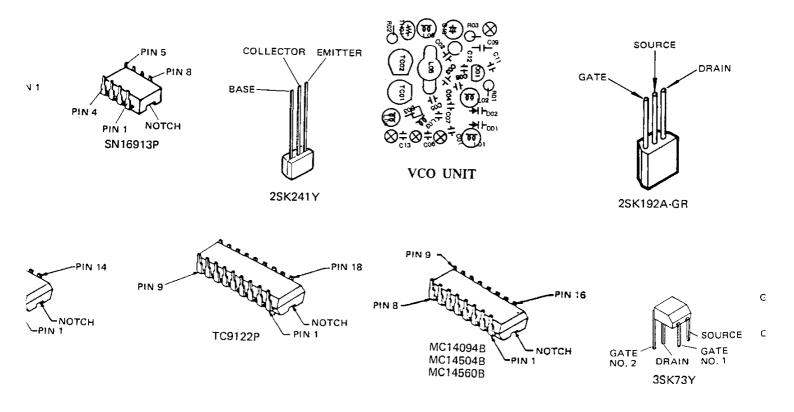
Viewed from component side



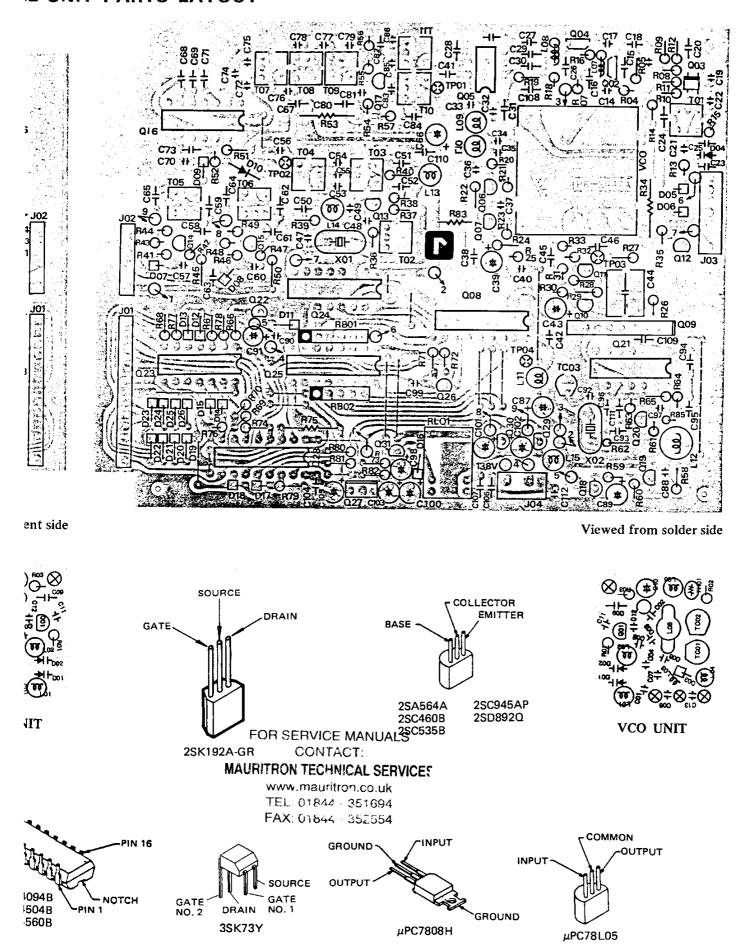
# 144MHz MODULE: PLL UNIT PARTS LAYOUT



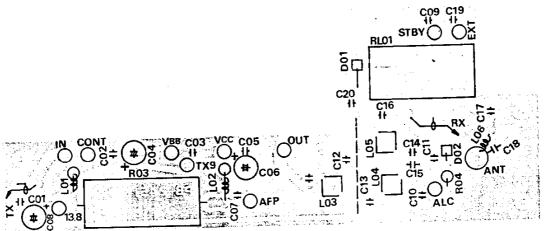
Viewed from component side



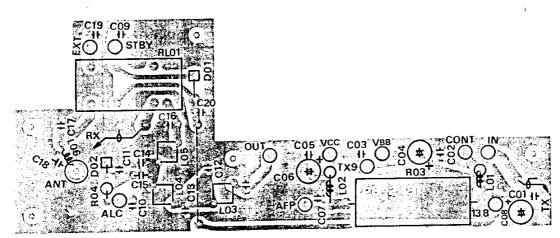
#### L UNIT PARTS LAYOUT



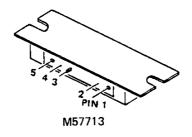
## 144MHz MODULE: PA UNIT PARTS I



Viewed from component side



Viewed from solder side



FOR SERVICE MANUALS CONTACT:

#### MAURITRON TECHNICAL SERVICES

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Q5001 Q5002 Q5003 Q5004

Q5005 Q5006 Q5007 Q5008

Q5009 Q5010 Q5011

> Q6001 Q6002 Q6003 Q6004 Q6006

Q6007 Q6010 Q6011 Q6011 Q6011

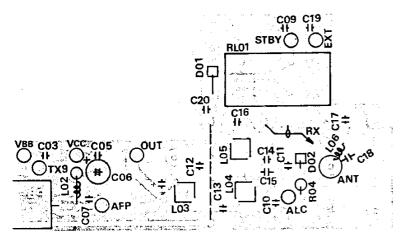
Q6014 Q6013 Q6013 Q6014 Q6020

Q602 Q602 Q602 Q603 Q603

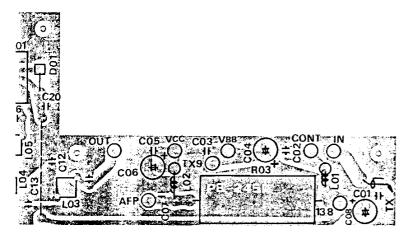
Q600 Q600 Q601 Q602 Q602 Q603 Q603 Q603

> Q60: Q70

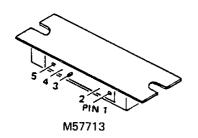
## 144MHz MODULE: PA UNIT PARTS LAYOUT AND VOLTAGE C



Viewed from component side



Viewed from solder side



144 MHz MODULE VOLTAGE CHART (D

|       | E(  | (S)  | C   | (D)  | В(  | G1)  | (C  | G2) |
|-------|-----|------|-----|------|-----|------|-----|-----|
|       | R   | Т    | R   | Т    | R   | Т    | R   | Т   |
| Q5001 | 1.7 |      | 7.9 |      | 1.4 |      | 2.5 |     |
| Q5002 | 0.2 |      | 7.8 |      | 0   |      | 0.2 |     |
| Q5003 | 1.4 |      | 7.9 |      | 0   |      |     |     |
| Q5004 |     | 0.7  |     | 7.9  |     | 0    |     |     |
| Q5005 |     | 0.7  |     | 7.9  |     | 0    |     |     |
| Q5006 |     | 1.5  |     | 13.4 | Ţ,  | 1.5  |     | 4.1 |
| Q5007 |     | 0    |     | 13.7 |     | 0.7  |     |     |
| Q5008 |     | 13.7 |     | 0    |     | 13.2 |     |     |
| Q5009 |     | 9.4  |     | 13.6 |     | 10.0 |     |     |
| Q5010 |     | 9.4  |     | 13.6 |     | 10.0 |     |     |
| Q5011 |     | 11.9 |     | 13.6 |     | 10.0 |     |     |
|       |     |      |     |      |     |      |     |     |
| Q6001 | 0.7 |      | 7.8 |      | 0   |      |     |     |
| Q6002 | 0.2 |      | 7.9 |      | 0   |      |     |     |
| Q6003 | 0.5 |      | 7.8 | 1    | 0.4 |      | 3.9 |     |
| Q6004 | 0   |      | 7.7 | -    | 0   |      |     |     |
| Q6006 | 5.2 |      | 7.5 |      | 5.7 |      |     |     |
| Q6007 | 0.3 |      | 2.5 |      | 0.9 |      |     |     |
| Q6010 | 0.7 |      | 8.1 |      | 1.2 |      |     |     |
| Q6011 | 0.1 |      | 5.3 |      | 0.7 |      |     |     |
| Q6012 | 0   |      | 1.0 |      | 0.3 |      |     |     |
| Q6013 | 3.2 |      | 8.1 |      | 3.9 |      |     |     |
| Q6014 | 8.1 |      | 8.1 |      | 8.0 |      |     | _   |
| Q6015 | 1.0 |      | 8.0 |      | 1.7 |      |     |     |
| Q6017 | 0.9 |      | 7.9 |      | 1.6 |      |     |     |
| Q6018 | 0   |      | 1.5 |      | 0   |      |     |     |
| Q6019 | 8.2 |      | 0   |      | 8.0 |      |     |     |
| Q6020 | 4.6 |      | 7.7 |      | 3.8 |      |     |     |
| Q6022 | 0   |      | 0.9 |      | 1.5 |      |     |     |
| Q6026 | 0   |      | 0   |      | 0.6 |      |     |     |
| Q6029 | 0   |      | 8.1 |      | 0   |      |     |     |
| Q6030 | 0   |      | 0   |      | 0.7 |      |     |     |
| Q6031 | 0   |      | 1.4 |      | 0.8 |      |     |     |

|       | 1    | 2    | 3   | 4    | 5   | 6   | 7   | 8   |
|-------|------|------|-----|------|-----|-----|-----|-----|
| Q6005 | 6.3  | 3.8  | 2.7 | 0    | 2.7 | 3.8 | 3.8 | 7.6 |
| Q6008 | 8.2  | 3.3  | 0   | 0    | 0   | 0   | 7.4 | 0   |
| Q6009 | 8.2  | 0    | 1.2 | 8.1  | 8.2 |     | 4.1 | 0.8 |
| Q6016 | 0    | 7.8  | 6.9 | 3.9  | 2.6 | 0   | 0   |     |
| Q6021 | 3.8  | 0    | 4.1 | 4.1  | 4.1 | 4.0 | 0   | _   |
| Q6023 | 4.2  | 0    | 0   | 0    | 0   | 0.1 | 0   | 0   |
| Q6024 | 0    | 0    | 8.2 | 7.4  | 0   | Ö   | 0   | 0   |
| Q6025 | 0    | 0    | 8.1 | U    | 0   | 0   | 0   | 0   |
| Q6027 | 5.0  | 0    | 8.2 |      |     |     |     |     |
| Q6028 | 5.0  | 8.1  | 3.6 | 8.1  | 4.2 | 0   | 0.1 | 0   |
| Q6032 | 13.7 | 0    | 8.2 |      |     |     |     |     |
| Q7001 | 0    | 13.7 | 9.2 | 13.6 | 0   |     |     |     |

# PARTS LAYOUT AND VOLTAGE CHARTS

144 MHz MODULE VOLTAGE CHART (DC VOLTS)

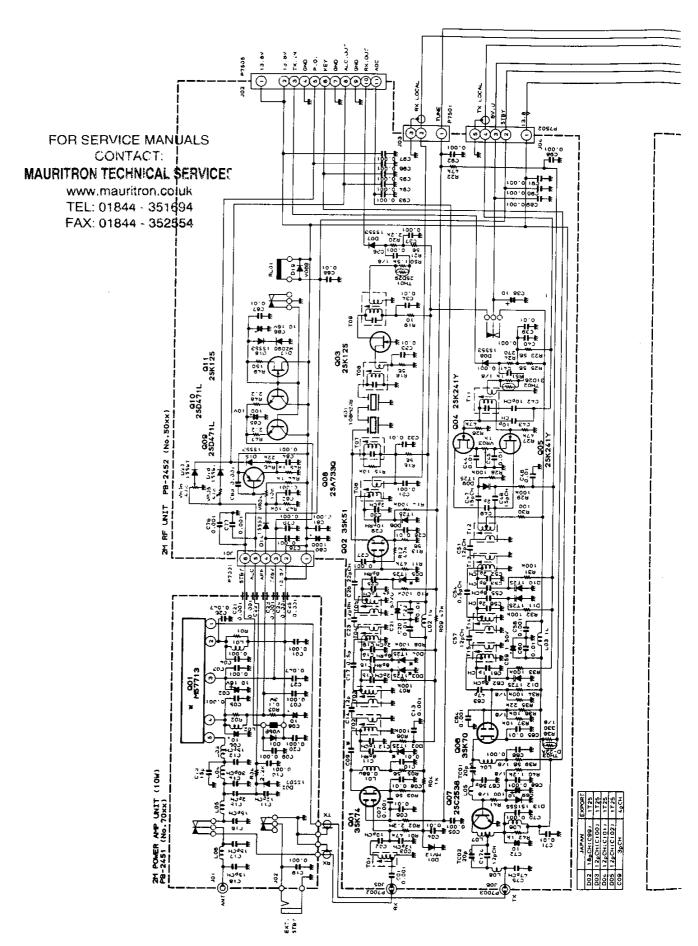
|       | E(  | S)   | C(  | D)   | B(0 | Gl)  | (G  | 2)  | REMARKS  |
|-------|-----|------|-----|------|-----|------|-----|-----|----------|
|       | R   | Т    | R   | T    | R   | Т    | R   | T   | REMARKS  |
| Q5001 | 1.7 |      | 7.9 |      | 1.4 |      | 2.5 |     |          |
| Q5002 | 0.2 |      | 7.8 |      | 0   |      | 0.2 |     |          |
| Q5003 | 1.4 |      | 7.9 |      | 0   |      |     |     |          |
| Q5004 |     | 0.7  |     | 7.9  |     | 0    |     |     |          |
| Q5005 |     | 0.7  |     | 7.9  |     | 0    |     |     |          |
| Q5006 |     | 1.5  |     | 13.4 |     | 1.5  |     | 4.1 |          |
| Q5007 |     | 0    |     | 13.7 |     | 0.7  |     |     |          |
| Q5008 |     | 13.7 |     | 0    |     | 13.2 |     |     |          |
| Q5009 |     | 9.4  |     | 13.6 |     | 10.0 |     |     |          |
| Q5010 |     | 9.4  |     | 13.6 |     | 10.0 |     |     |          |
| Q5011 |     | 11.9 |     | 13.6 |     | 10.0 |     |     |          |
|       |     |      |     |      |     |      |     |     |          |
| Q6001 | 0.7 |      | 7.8 |      | 0   |      |     |     |          |
| Q6002 | 0.2 |      | 7.9 |      | 0   |      |     |     |          |
| Q6003 | 0.5 |      | 7.8 |      | 0.4 |      | 3.9 |     |          |
| Q6004 | 0   |      | 7.7 |      | 0   |      |     |     |          |
| Q6006 | 5.2 |      | 7.5 |      | 5.7 |      |     |     |          |
| Q6007 | 0.3 |      | 2.5 |      | 0.9 |      |     |     | <u> </u> |
| Q6010 | 0.7 |      | 8.1 |      | 1.2 |      |     | _   |          |
| Q6011 | 0.1 |      | 5.3 |      | 0.7 |      |     |     |          |
| Q6012 | 0   |      | 1.0 |      | 0.3 |      |     |     |          |
| Q6013 | 3.2 |      | 8.1 |      | 3.9 |      |     | _   |          |
| Q6014 | 8.1 |      | 8.1 |      | 8.0 |      |     |     | NOR VFO  |
| Q6015 | 1.0 |      | 8.0 |      | 1.7 |      |     |     | NOR VFO  |
| Q6017 | 0.9 |      | 7.9 |      | 1.6 |      |     |     |          |
| Q6018 | 0   |      | 1.5 |      | 0_  |      |     |     |          |
| Q6019 | 8.2 |      | 0   |      | 8.0 |      |     |     |          |
| Q6020 | 4.6 |      | 7.7 |      | 3.8 |      |     |     |          |
| Q6022 | 0   |      | 0.9 |      | 1.5 |      |     |     |          |
| Q6026 | 0   |      | 0   |      | 0.6 |      |     |     |          |
| Q6029 | 0   |      | 8.1 |      | 0   |      |     |     | NOR VFO  |
| Q6030 | 0   |      | 0   |      | 0.7 |      |     |     | NOR VFO  |
| Q6031 | 0   |      | 1.4 |      | 0.8 |      |     |     |          |

|       | 1    | 2    | 3   | 4    | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13       | 14       | 15       | 16       | 17   | 18 | REMARKS  |
|-------|------|------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|----------|----------|----------|--|----|----------|
| Q6005 | 6.3  | 3.8  | 2.7 | 0    | 2.7 | 3.8 | 3.8 | 7.6 |     |     |     |     |          | <u>.</u> |          |          |  |    |          |
| Q6008 | 8.2  | 3.3  | 0   | 0    | 0   | 0   | 7.4 | 0   | 7.4 | 0   | 0   | 0   | 0        | 0        | 0        | 0        | 0.8  | 0  |          |
| Q6009 | 8.2  | 0    | 1.2 | 8.1  | 8.2 |     | 4.1 | 0.8 | 0   |     |     |     |          |          |          | L        |  |    |          |
| Q6016 | 0    | 7.8  | 6.9 | 3.9  | 2.6 | 0   | 0   | _   | 2.6 | 3.9 | 3.9 | 3.9 | 6.9      |          |          |          |  |    | <u> </u> |
| Q6021 | 3.8  | 0    | 4.1 | 4.1  | 4.1 | 4.0 | 0   |     | 4.0 |     | 3.9 | 4.2 |          | 8.2      | ļ        |          |  |    |          |
| Q6023 | 4,2  | 0    | 0   | 0    | 0   | 0.1 | 0   | 0   | 0.1 | 0   | 4.9 | 4.8 | 4.2      | 5.0      |          |          | _  |    |          |
| Q6024 | 0    | 0    | 8.2 | 7.4  | 0   | 0   | 0   | 0   | 0.3 | 8.2 | 0   | 0   | 8.2      | 0        | 7.4      | 8.2      |  | _  |          |
| Q6025 | 0    | 0    | 8.1 | υ    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 7.4 | 0        | 7.4      | 5.2      | 7.4      |  |    |          |
| Q6027 | 5.0  | 0    | 8.2 |      |     |     |     | •   |     |     |     |     |          |          |          | <u> </u> |  |    |          |
| Q6028 | 5.0  | 8.1  | 3.6 | 8.1  | 4.2 | 0   | 0.1 | 0   | 0   | 0   | 0   | 0   | 0        | 4.9      | 8.1      | 8.2      |  |    |          |
| Q6032 | 13.7 | 0    | 8.2 |      |     |     |     |     |     |     |     |     | <u> </u> |          | <u> </u> |          |  |    |          |
| Q7001 | 0    | 13.7 | 9.2 | 13.6 | 0   |     |     |     |     |     |     | 1   | <u> </u> |          |          |          | <u>.                                    </u> |    | TX       |

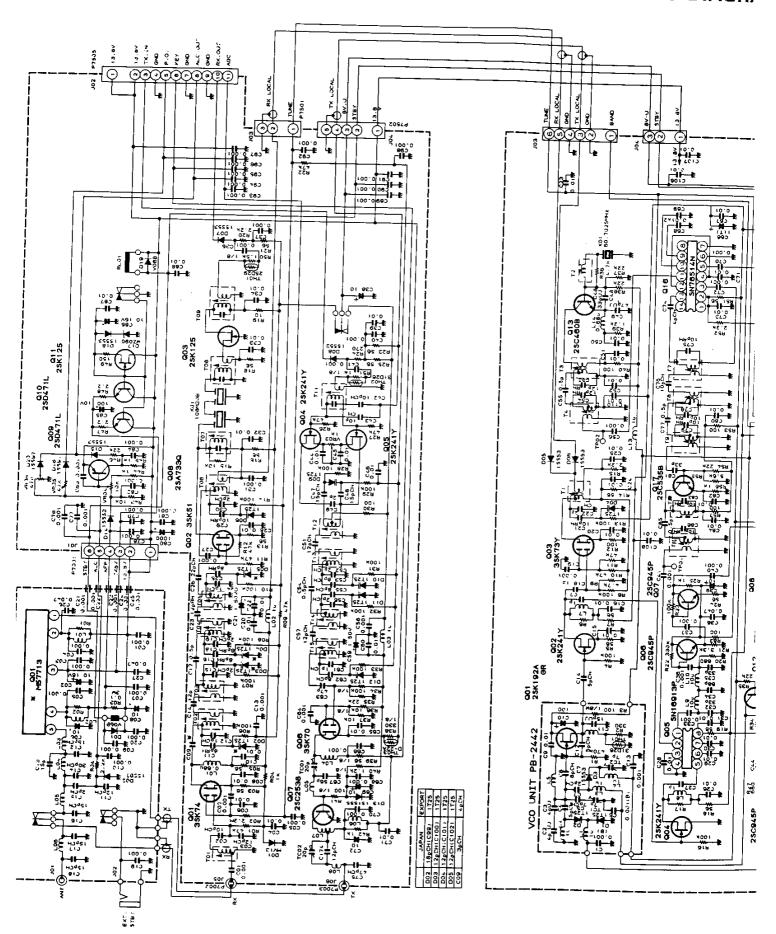
FOR SERVICE MANUALS
CONTACT:

#### **MAURITRON TECHNICAL SERVICES**

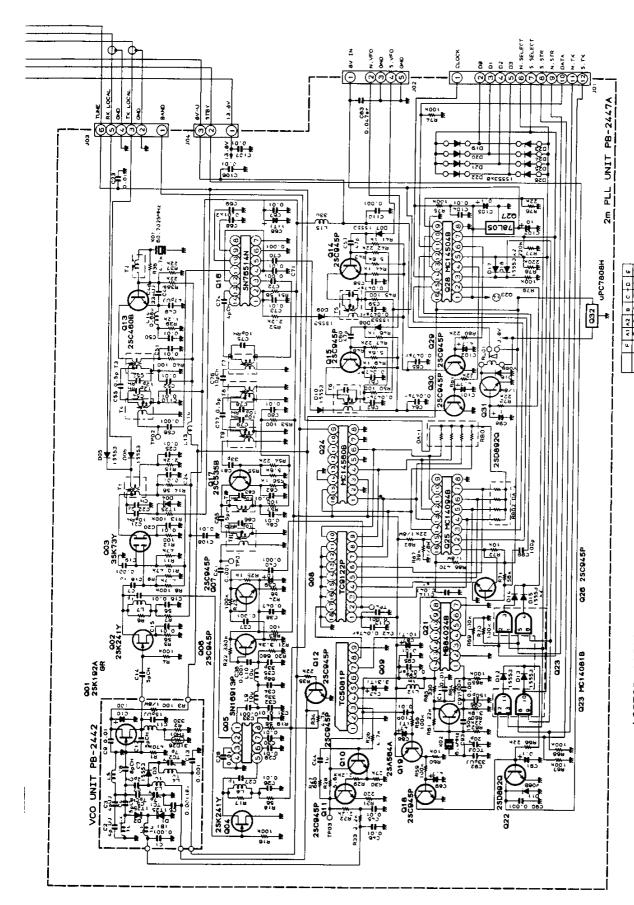
#### 144MHz MODU



# 144MHz MODULE SCHEMATIC DIAGRA



## MODULE SCHEMATIC DIAGRAM

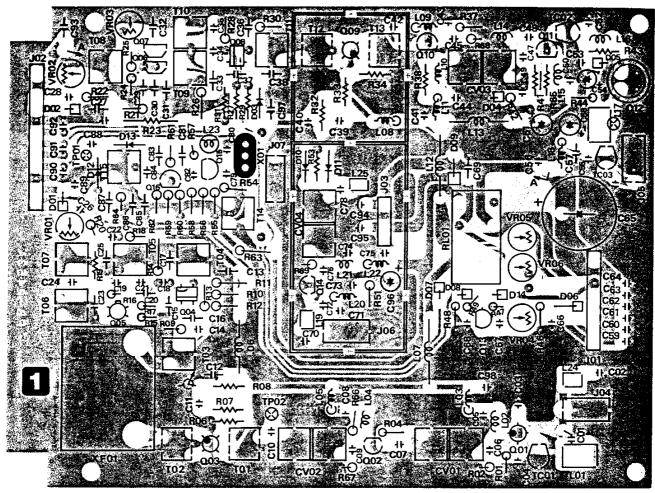


www.mauritron.co.uk TEL: 01844 - 351694 FAX: 01844 - 352554

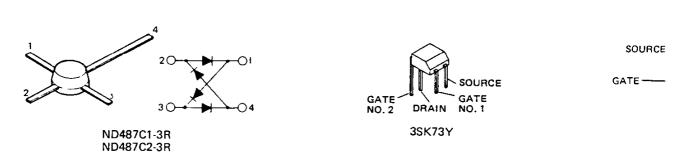
MAURITRON TECHNICAL SERVICES

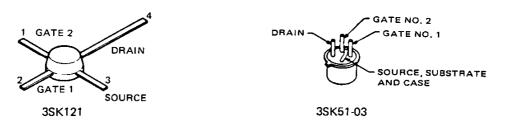
FOR SERVICE MANUALS

-64-



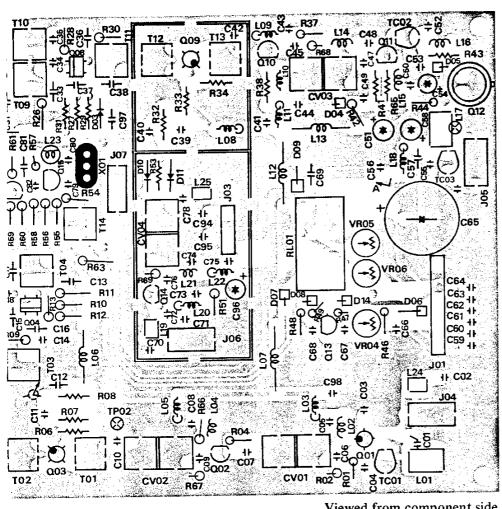
Viewed from component side

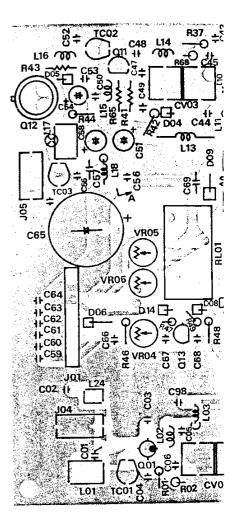




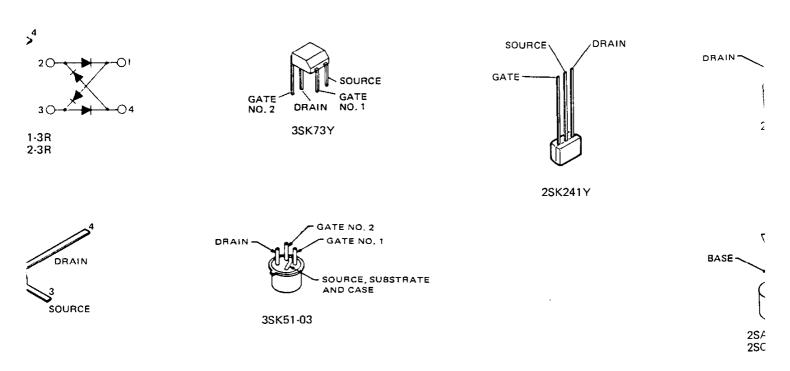
2

#### 430 AND 440 MHz MODULES: RF UNIT PAR'

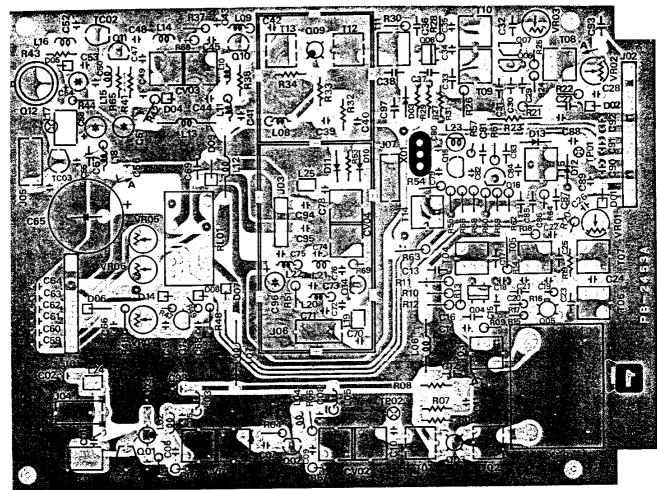




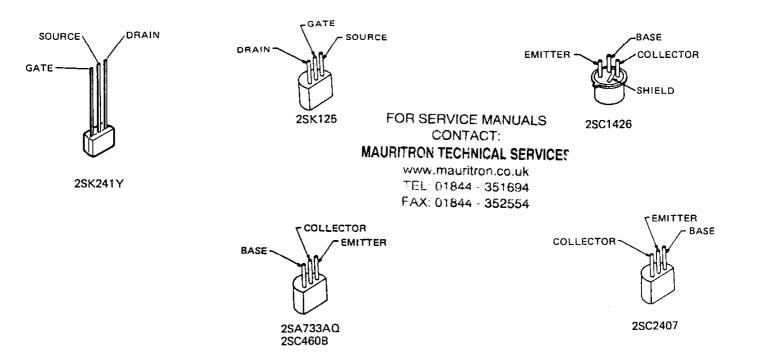
Viewed from component side



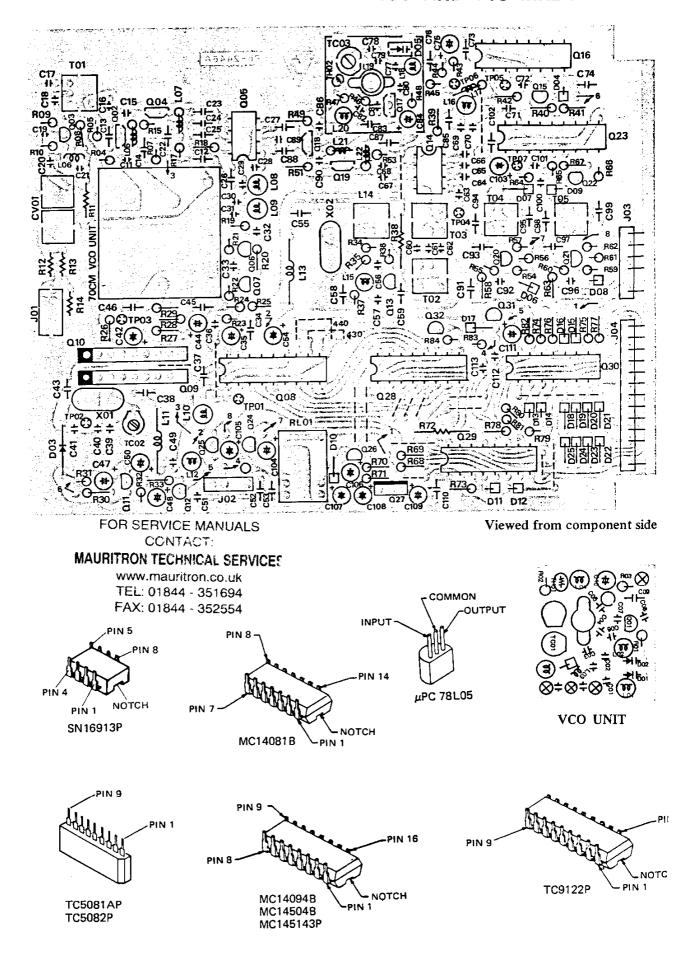
# MHz MODULES: RF UNIT PARTS LAYOUT



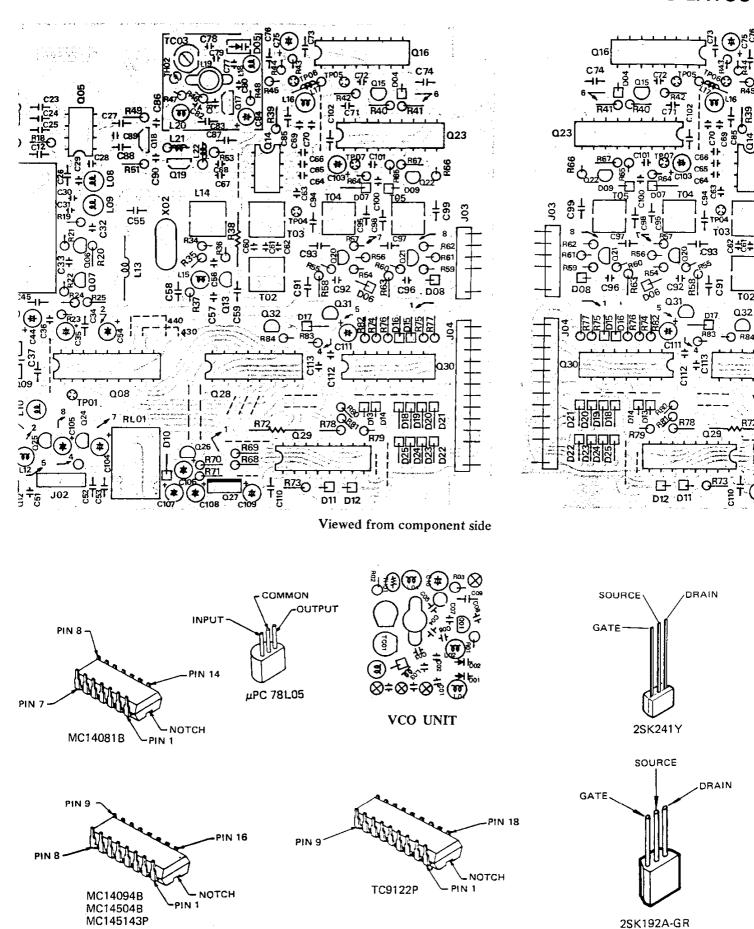
nt side Viewed from solder side



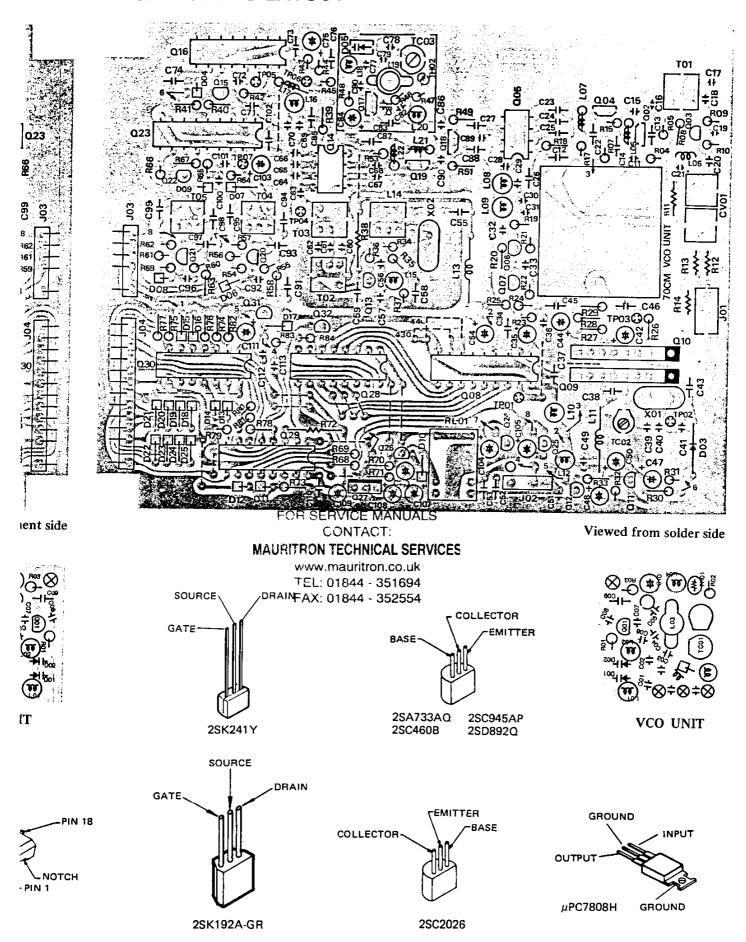
#### 430 AND 440 MHz MODULES:

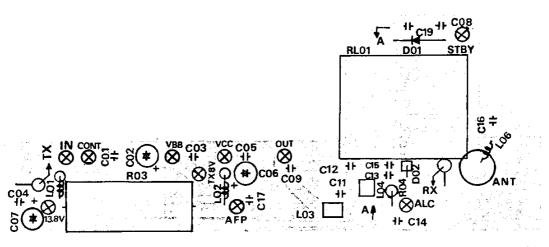


## 430 AND 440 MHz MODULES: PLL UNIT PARTS LAYOUT

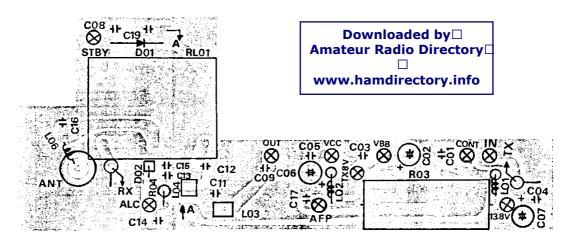


#### **DULES: PLL UNIT PARTS LAYOUT**

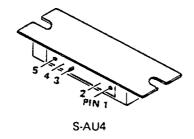




Viewed from component side



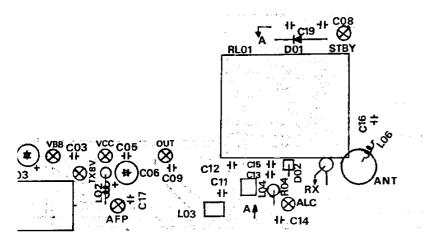
Viewed from solder side



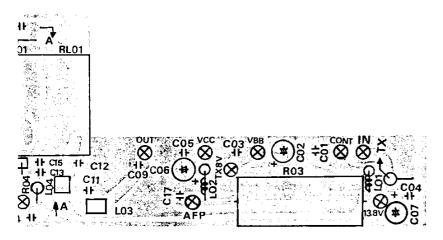
FOR SERVICE MANUALS CONTACT:

#### MAURITRON TECHNICAL SERVICES

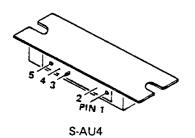
# 430 AND 440 MHz MODULES: PA UNIT PARTS LAYOUT



Viewed from component side



Viewed from solder side



430 MHz MODULE VOLTAGE CHART

|       | E(   | S)  | C(I  | ))   | B(C  | G1) | (        |
|-------|------|-----|------|------|------|-----|----------|
|       | R    | T   | R    | Т    | R    | Т   | R        |
| Q5001 | 1.6  |     | 8.1  |      | 0    |     | 1.6      |
| Q5002 | 1.4  |     | 8.1  |      | 0    |     |          |
| Q5004 | 1.3  |     | 7.8  |      | 1.5  |     | 0        |
| Q5005 | 0.4  |     | 7.9  |      | 0    |     | 0.4      |
| Q5006 |      | 0.6 |      | 7.9  |      | 0   |          |
| Q5007 |      | 0.6 |      | 7.9  |      | 0   |          |
| Q5008 |      | 1.4 |      | 7.3  |      | 1.4 | Ì        |
| Q5010 |      | 1.4 |      | 8.0  |      | 0   |          |
| Q5011 |      | 0   |      | 8.0  |      | 0.7 |          |
| Q5012 |      | 0   |      | 13.7 |      | 0.7 |          |
| Q5013 | 13.7 |     | 0    |      | 13.2 |     |          |
| Q5014 | 0    |     | 7.3  |      | 0.7  |     |          |
| Q5015 | 7.8  |     | 3.0  |      | 3.7  |     |          |
| Q5016 | 7.8  |     | 0.9  |      | 1.6  |     | ·        |
|       |      |     |      |      |      |     |          |
| Q6001 | 0.7  |     | 7.8  |      | 0    |     |          |
| Q6002 | 0.2  |     | 7.9  |      | 0    |     |          |
| Q6003 | 1.3  |     | 8.0  |      | 1.8  |     |          |
| Q6004 | 0    |     | 7.6  |      | 0    |     |          |
| Q6006 | 5.4  |     | 7.5  |      | 5.8  |     |          |
| Q6007 | 0.4  |     | 3.6  |      | 1.0  |     |          |
| Q6011 | 8.1  |     | 0    |      | 7.9  |     |          |
| Q6012 | 0    |     | 1.5  |      | 0    |     |          |
| Q6013 | 3.1  |     | 7.9  |      | 3.7  |     |          |
| Q6015 | 0.2  |     | 3.7  |      | 0.9  |     |          |
| Q6017 | 0.7  |     | 7.8  |      | 0    |     |          |
| Q6018 | 0    |     | 7.4  |      | 0    |     | <u> </u> |
| Q6019 | 0    |     | 7.3  |      | 0    |     |          |
| Q6020 | 1.1  |     | 8.0  |      | 1.7  |     | <u> </u> |
| Q6021 | 8.1  |     | 8.1  |      | 8.1  |     |          |
| Q6022 | 0.4  |     | 3.8  |      | 1.0  |     |          |
| Q6024 | 0    | T   | 0    |      | 0.7  |     | 1_       |
| Q6025 | 0    |     | 8.1  |      | 0    |     | <u> </u> |
| Q6026 | 0    |     | 8.0  |      | 1.4  |     |          |
| Q6031 | 0    |     | 13.7 |      | 0.1  |     | $\bot$   |
| Q6032 | 0    |     | 0    |      | 0.6  |     |          |

|       | 1    | 2    | 3   | 4    | 5   | 6   | 7   |
|-------|------|------|-----|------|-----|-----|-----|
| Q6005 | 6.2  | 3.7  | 2.6 | 0    | 2.6 | 3.7 | 3.  |
| Q6008 | 8.1  | 3.3  | 0   | 0    | 0   | 0   | 0   |
| Q6009 | 2.3  | 3.3  | 3.5 | 4.0  | 8.0 | 4.0 | 4.( |
| Q6010 | 0    | 2.2  | 8.0 | 8.0  | 8.0 | 0.4 | 4.1 |
| Q6014 | 6.0  | 3.6  | 2.6 | 0    | 2,6 | 3.7 | 3.  |
| Q6016 | 7.8  | 0.4  | 4.1 | 4.1  | 4.4 | 7.8 | 0   |
| Q6023 | 7.8  | 3.2  | 0   | 7.8  | 7.8 | 0   | 7.8 |
| Q6027 | 4.9  | 0    | 8.1 |      |     |     |     |
| Q6028 | 0    | 0    | 8.1 | 0    | 0   | 0   | 0   |
| Q6029 | 4.9  | 8.1  | 3.7 | 8.0  | 4.2 | 0   | 0.  |
| Q6030 | 4.2  | 0    | 0   | 0    | 0   | 0.1 | 0   |
| Q6033 | 13.7 | 0    | 8.1 |      |     |     |     |
| Q7001 | 0    | 13.7 | 8.1 | 13.6 | 0   |     |     |
|       |      |      |     |      |     |     |     |

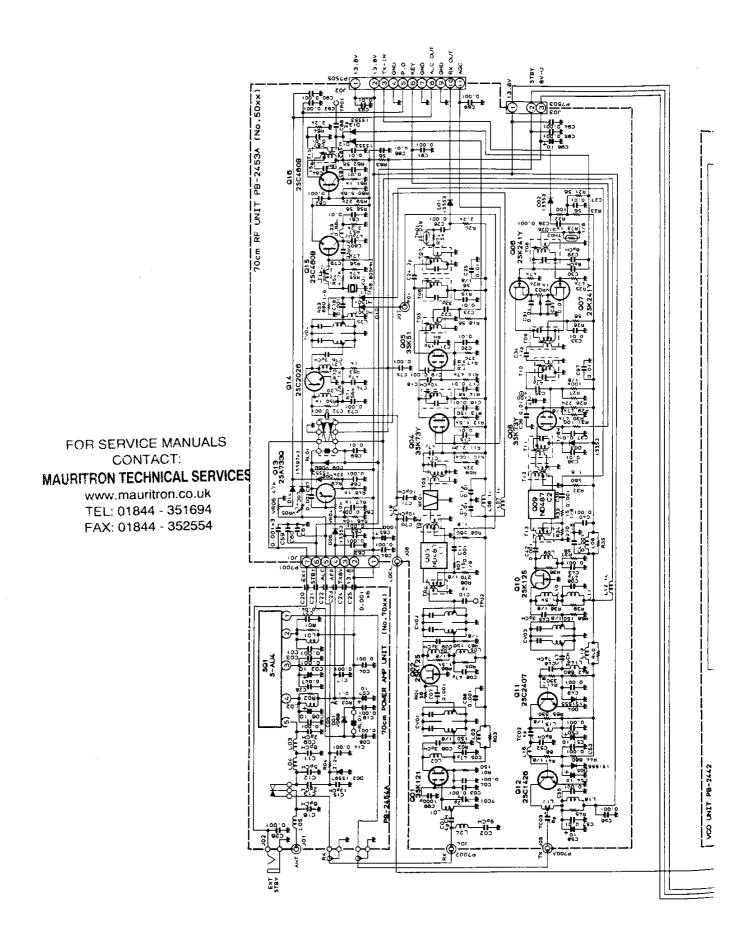
# ULES: PA UNIT PARTS LAYOUT AND VOLTAGE CHARTS

430 MHz MODULE VOLTAGE CHART (DC VOLTS)

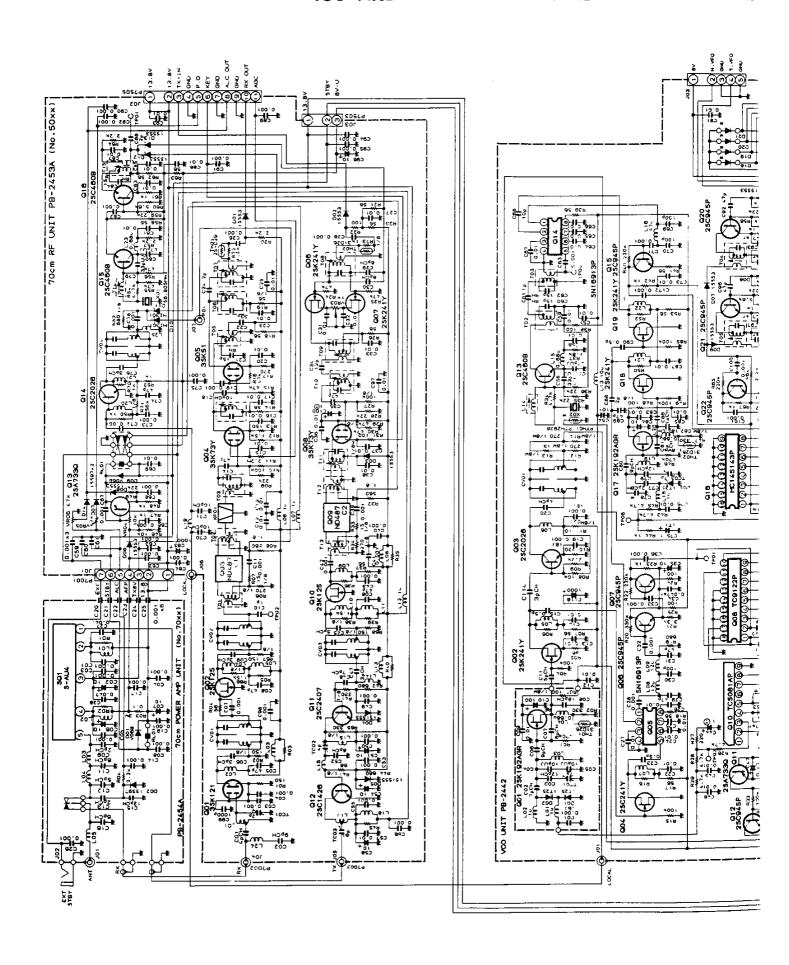
|       | E(   | S)  | C(1  | D)       | B(C  | G1) | (G       | 2)         | REMARKS      |
|-------|------|-----|------|----------|------|-----|----------|------------|--------------|
|       | R    | Τ   | R    | Υ        | R    | Т   | R        | Т          |              |
| Q5001 | 1.6  |     | 8.1  |          | 0    |     | 1.6      |            |              |
| Q5002 | 1.4  |     | 8.1  |          | 0    |     |          | :          | <del>_</del> |
| Q5004 | 1.3  |     | 7.8  |          | 1.5  |     | 0        |            |              |
| Q5005 | 0.4  |     | 7.9  |          | 0    |     | 0.4      | <u></u>    |              |
| Q5006 |      | 0.6 |      | 7.9      |      | 0   |          |            |              |
| Q5007 |      | 0.6 |      | 7.9      |      | 0   |          |            |              |
| Q5008 |      | 1.4 |      | 7.3      |      | 1.4 |          | 3.9        |              |
| Q5010 |      | 1.4 |      | 8.0      |      | 0   |          |            |              |
| Q5011 |      | 0   |      | 8.0      |      | 0.7 |          |            |              |
| Q5012 |      | 0   |      | 13.7     |      | 0.7 |          |            |              |
| Q5013 | 13.7 |     | 0    |          | 13.2 |     |          |            |              |
| Q5014 | 0    |     | 7.3  |          | 0.7  |     |          |            |              |
| Q5015 | 7.8  |     | 3.0  |          | 3.7  |     |          |            |              |
| Q5016 | 7.8  |     | 0.9  |          | 1.6  |     |          |            |              |
|       |      |     |      |          |      |     |          |            |              |
| Q6001 | 0.7  |     | 7.8  |          | 0    |     |          |            |              |
| Q6002 | 0.2  |     | 7.9  |          | 0    |     |          |            |              |
| Q6003 | 1.3  |     | 8.0  |          | 1.8  |     |          | <u></u>    |              |
| Q6004 | 0    |     | 7.6  |          | 0    |     |          |            |              |
| Q6006 | 5.4  |     | 7.5  |          | 5.8  |     |          |            |              |
| Q6007 | 0.4  |     | 3.6  |          | 1.0  |     |          | <u> </u>   |              |
| Q6011 | 8.1  |     | 0    |          | 7.9  |     |          |            |              |
| Q6012 | 0    |     | 1.5  |          | 0    |     |          |            |              |
| Q6013 | 3.1  |     | 7.9  |          | 3.7  |     |          |            |              |
| Q6015 | 0.2  |     | 3.7  |          | 0.9  |     |          |            |              |
| Q6017 | 0.7  |     | 7.8  |          | 0    |     |          |            |              |
| Q6018 | 0    |     | 7.4  |          | 0    |     |          |            |              |
| Q6019 | 0    |     | 7.3  |          | 0    |     |          |            |              |
| Q6020 | 1.1  |     | 8.0  |          | 1.7  |     |          |            |              |
| Q6021 | 8.1  |     | 8.1  |          | 8.1  |     |          | <u>L</u> _ |              |
| Q6022 | 0.4  |     | 3.8  | <u> </u> | 1.0  |     |          |            |              |
| Q6024 | 0    |     | 0    |          | 0.7  |     |          |            |              |
| Q6025 | 0    |     | 8.1  |          | 0    |     |          |            |              |
| Q6026 | 0    |     | 8.0  |          | 1.4  |     | <u> </u> |            |              |
| Q6031 | 0    |     | 13.7 |          | 0.1  |     | <u> </u> | ļ          |              |
| Q6032 | 0    |     | 0    |          | 0.6  |     | 1        |            |              |

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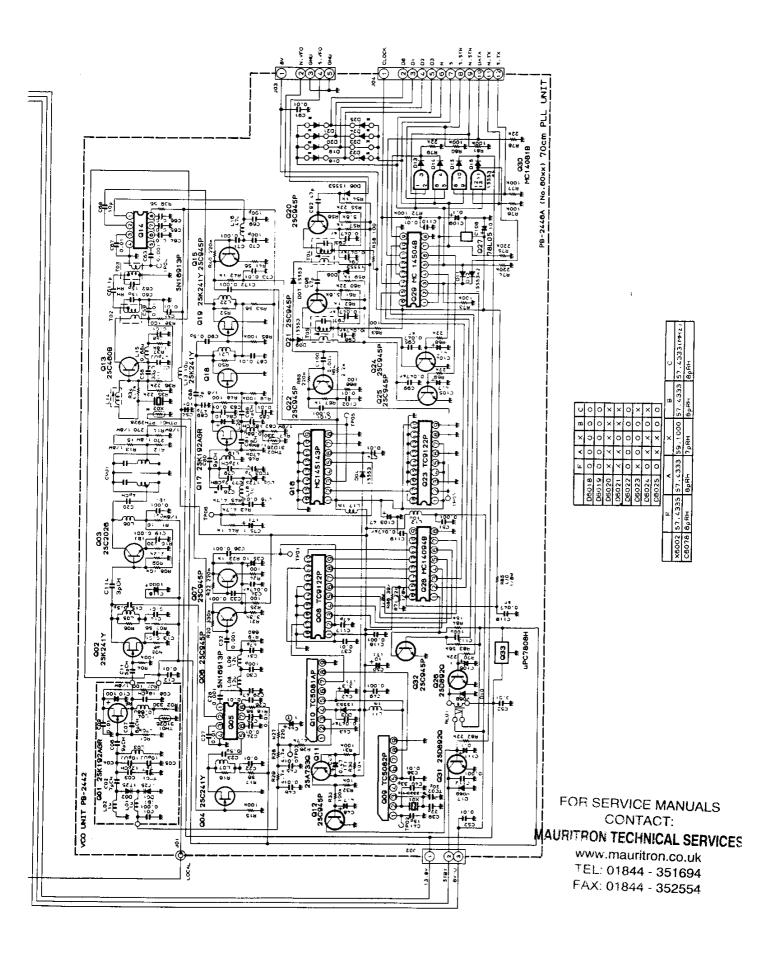
|       | 1    | 2    | 3   | 4    | 5   | 6   | 7   | 8   | 9   | 10  | 11       | 12 | 13       | 14  | 15  | 16  | 17      | 18           | REMARKS  |
|-------|------|------|-----|------|-----|-----|-----|-----|-----|-----|----------|----|----------|-----|-----|-----|---------|--------------|----------|
| Q6005 | 6.2  | 3.7  | 2.6 | 0    | 2.6 | 3.7 | 3.7 | 7.5 |     |     |          |    |          |     |     |     |         |              |          |
| Q6008 | 8.1  | 3.3  | 0   | 0    | 0   | 0   | 0   | 0   | 0   | 0   | 8.0      | 0  | 0        | 0   | 0   | 0   | 0.4     | 0            |          |
| Q6009 | 2.3  | 3.3  | 3.5 | 4.0  | 8.0 | 4.0 | 4.0 | 4.0 | 0   |     |          |    |          |     |     |     |         |              |          |
| Q6010 | 0    | 2.2  | 8.0 | 8.0  | 8.0 | 0.4 | 4.0 | 4.0 | 0   |     |          |    | <u> </u> |     |     |     |         |              |          |
| Q6014 | 6.0  | 3.6  | 2.6 | 0    | 2.6 | 3.7 | 3.7 | 7.4 |     |     | <u>.</u> |    |          |     |     |     |         |              |          |
| Q6016 | 7.8  | 0.4  | 4.1 | 4.1  | 4.4 | 7.8 | 0   | 0   | 0   | 0   | 0        | 0  | 0        | 0   | 0   | 0   |         | _ <u>-</u> - |          |
| Q6023 | 7.8  | 3.2  | 0   | 7.8  | 7.8 | 0   | 7.8 | 0   | 0   | 7.8 | 0        | 0  | 0        | 0   | 0   | 0   | 0.4     | 0            |          |
| Q6027 | 4.9  | 0    | 8.1 |      |     |     |     |     |     |     |          |    |          |     |     |     | L       |              |          |
| Q6028 | 0    | 0    | 8.1 | 0    | 0   | 0   | 0   | 0   | 0   | 0   | 0        | 0  | 0        | 0   | 5.1 | 7.6 |         |              |          |
| Q6029 | 4.9  | 8.1  | 3.7 | 8.0  | 4.2 | 0   | 0.1 | 0   | 0   | 0   | 0        | 0  | 0        | 4.9 | 8.1 | 8.1 |         | <u> </u>     | <u> </u> |
| Q6030 | 4.2  | 0    | 0   | 0    | 0   | 0.1 | 0   | 0   | 0.1 | 0   | 0        | 0  | 4.2      | 4.9 |     | ļ   | L       |              |          |
| Q6033 | 13.7 | 0    | 8.1 |      |     |     |     |     |     |     |          |    |          |     |     |     |         | L.—          |          |
| Q7001 | 0    | 13.7 | 8.1 | 13.6 | 0   |     |     |     |     |     |          |    |          |     |     |     | <u></u> |              | TX       |



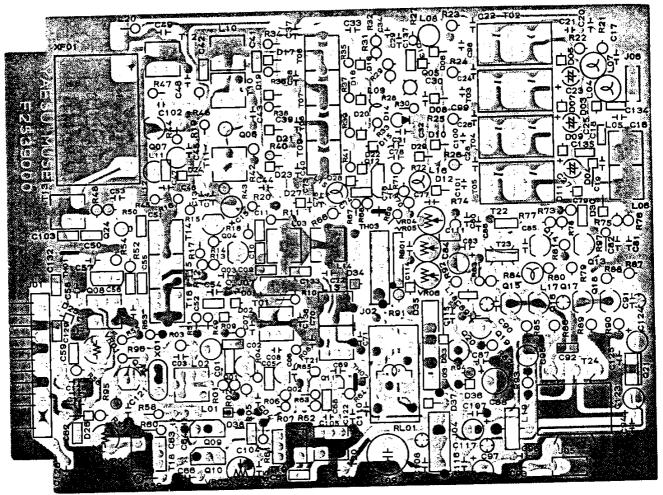
## 430 AND 440 MHz MODULES SCHEMATIC DIA



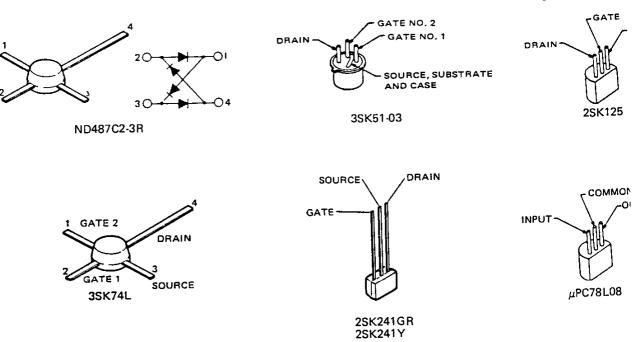
#### MHz MODULES SCHEMATIC DIAGRAM



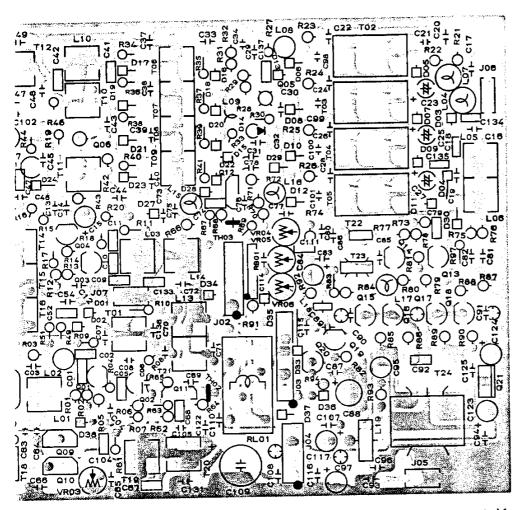
#### 10-15m MODULE:

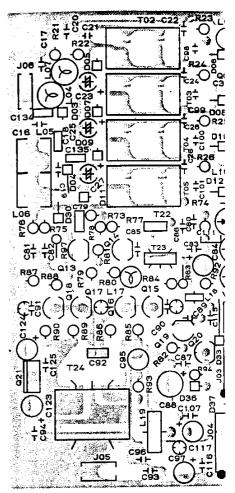


#### Viewed from component side

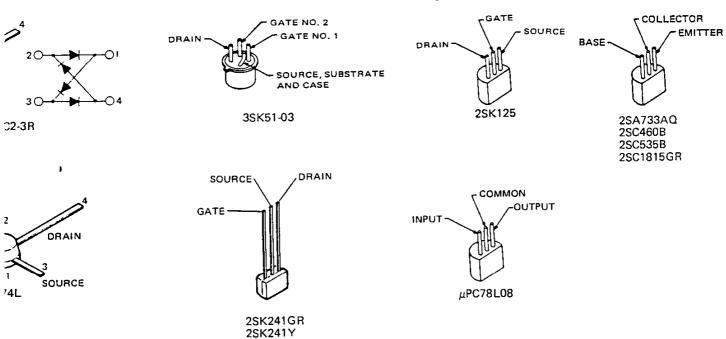


## 10-15m MODULE: RF UNIT PARTS LAYOU

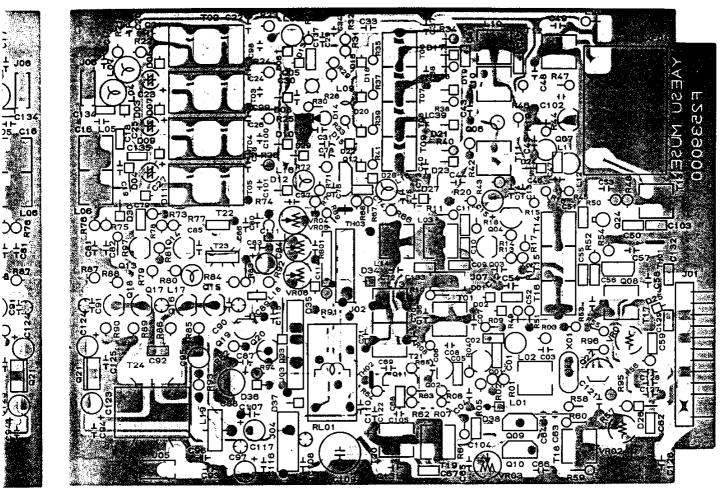




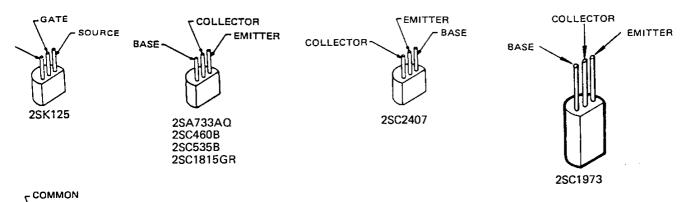
#### Viewed from component side



## **ODULE: RF UNIT PARTS LAYOUT**



ent side Viewed from solder side

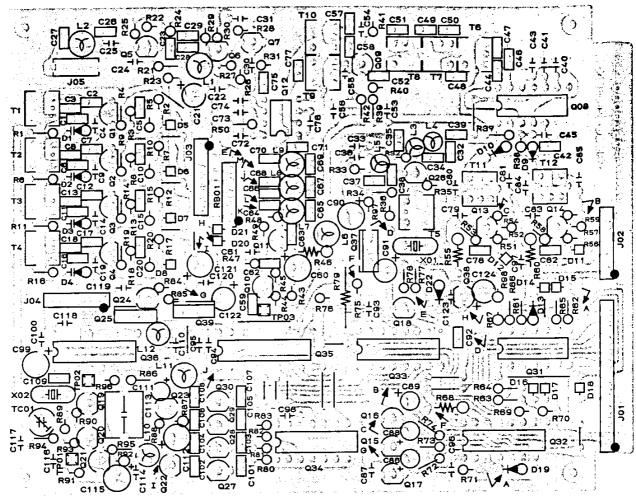


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PC78L08

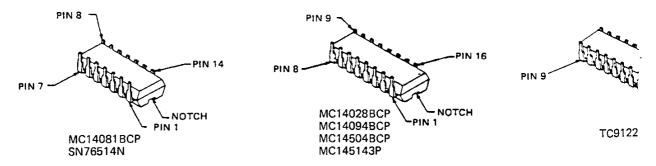
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-OUTPUT



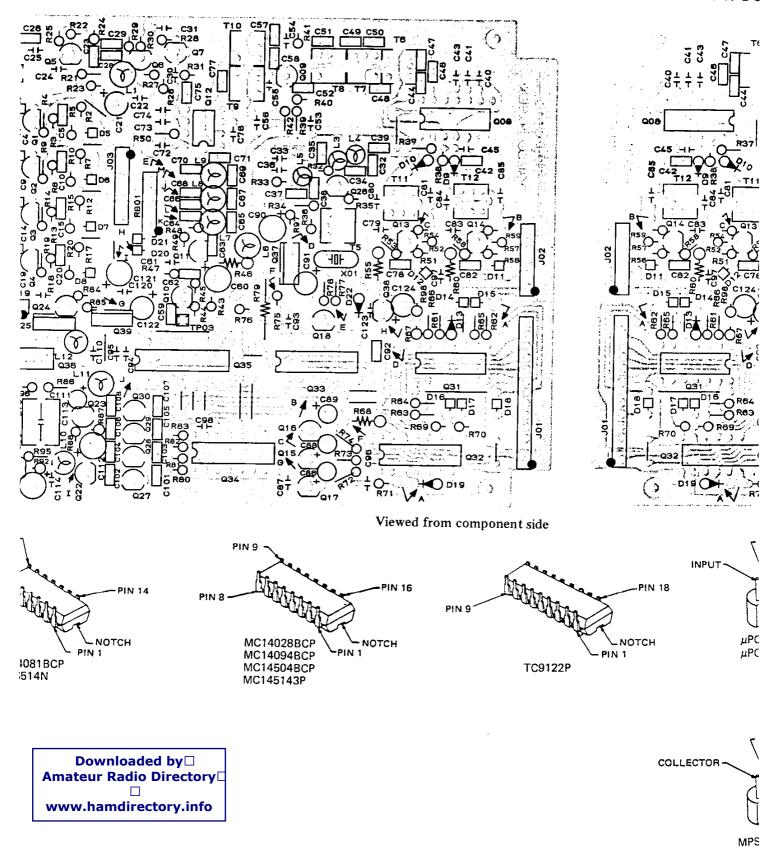
Viewed from component side



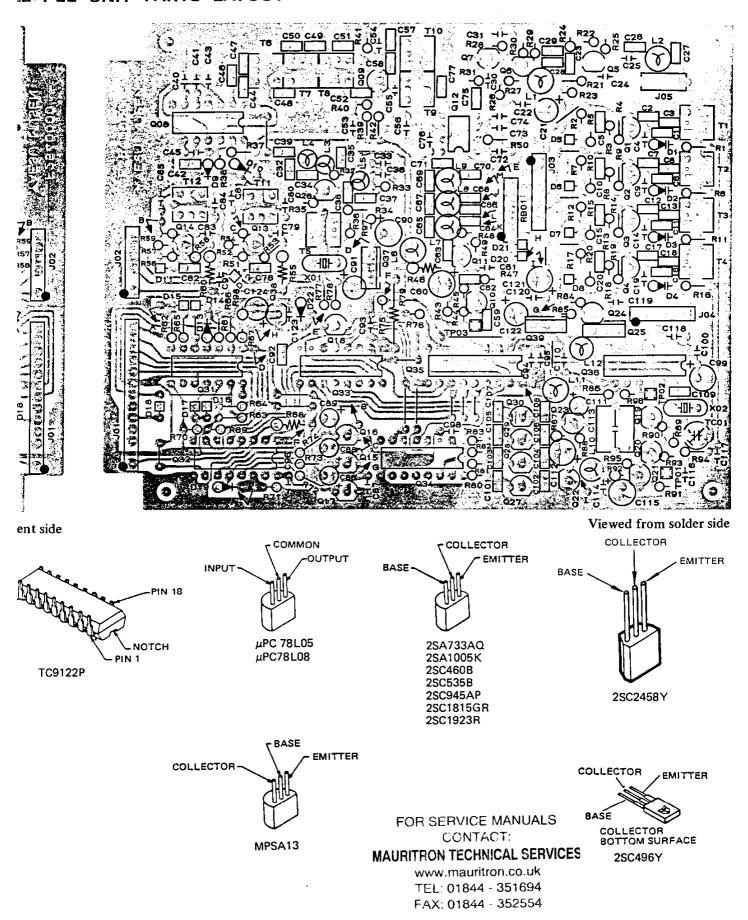
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# 10-15m MODULE: PLL UNIT PARTS LAYOU



#### E: PLL UNIT PARTS LAYOUT



#### 10-15m MODULE: PA UNIT

10-15m ?

Q5001

Q5002

Q5003

Q5004

Q5005

Q5007

Q0008

Q5009

Q5010

Q5011

Q5012

Q5013 Q5014 Q5015 Q5016

Q5017

Q5018 Q5019

Q5020

Q5022

I R

3.2

3.0

1.8

6.8

1.8

1.5

0

0

0

0

0

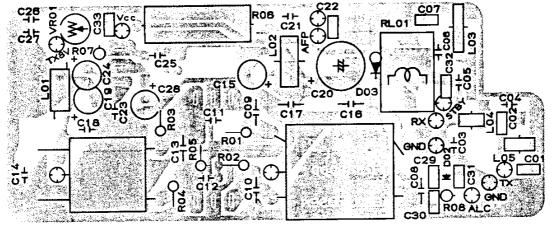
0

0

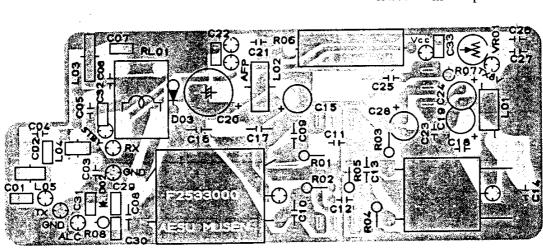
0

13.

8.1



Viewed from component side



Viewed from solder side

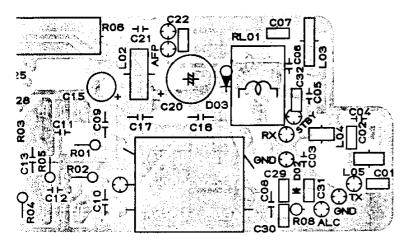


|       | Г   |
|-------|-----|
| IC    | 1   |
| Q5021 | 13. |
| Q5023 | 12. |
| Q6008 | 0   |
| Q6012 | 6   |
| Q6037 | 8.  |
| Q6039 | 13. |

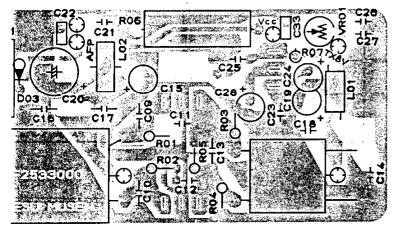
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CONTACT:

#### **MAURITRON TECHNICAL SERVICES**

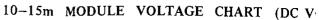
# 10-15m MODULE: PA UNIT PARTS LAYOUT AND VOL



Viewed from component side



Viewed from solder side



|       | E(   | S)   | C(   | D)   | B(   | Gl)  | ((  | (G2) |     |
|-------|------|------|------|------|------|------|-----|------|-----|
|       | R    | T    | R    | T    | R    | T    | R   | Т    | REN |
| Q5001 | 3.3  | 3.3  | 8.0  | 8.0  | 3.9  | 3.9  |     |      |     |
| Q5002 | 0.8  | 0.8  | 7.9  | 7.9  | 1.5  | 1.5  |     |      |     |
| Q5003 | 1.8  | 1.8  | 6.9  | 6.9  | 1.1  | 1.1  |     |      |     |
| Q5004 | 6.8  | 6.8  | 10.4 | 10.4 | 6.1  | 6.1  |     |      |     |
| Q5005 | 1.8  | 0    | 12.3 | 0    | 1.4  | _0   | 2.3 | 2.3  |     |
| Q5007 | 1.5  | 0    | 11.6 | 0    | 0    | 0    |     |      |     |
| Q0008 | 0    | 0    | 7.4  | 0    | 0    | 0    |     |      |     |
| Q5009 | 0    | 0.6  | 0    | 7.8  | 0    | 0    |     |      |     |
| Q5010 | 0    | 0.6  | 0    | 7.8  | 0    | 0    |     |      |     |
| Q5011 | 0    | 1.4  | 0    | 4.4  | 0    | 1.4  | ļ   |      |     |
| Q5012 | 0    | 0    | 0    | 12.4 | 0    | 0.6  |     |      |     |
| Q5013 | 0    | 2.1  | 0    | 8.3  | 0    | 2.8  |     |      |     |
| Q5014 | 0    | 1.2  | 0    | 12.9 | 0    | 8.2  |     |      |     |
| Q5015 | 0    | 0    | 0    | 12.9 | 0    | 0.7  |     |      |     |
| Q5016 | 0    | 0    | 0    | 12.9 | 0    | 0.7  |     |      |     |
| Q5017 | 0    | 0    | 0    | 12.9 | 0    | 0.7  |     |      |     |
| Q5018 | 0    | 0    | 0    | 12.9 | 0    | 0.7  |     |      |     |
| Q5019 | 0    | 0.7  | 0    | 8.1  | 0    | 1.4  |     |      |     |
| Q5020 | 13.8 | 13.8 | 0    | 0    | 13.8 | 13.8 |     |      |     |
| Q5022 | 8.1  | 8.1  | 8.0  | 0    | 7.4  | 8.1  |     |      |     |



| IC    | 1    | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| Q5021 | 13.0 | 0   | 8.1 |     |     |     |     |     |     |
| Q5023 | 12.9 | 0   | 8.0 |     |     |     |     |     |     |
| Q6008 | 0    | 7.8 | 7.0 | 4.1 | 2.3 | 0   | 0   | 0   | 2.3 |
| Q6012 | 6.3  | 3.8 | 2.7 | 0   | 2.7 | 3.8 | 3.8 | 7.6 |     |
| Q6037 | 8.1  | 0   | 5.0 |     |     |     |     |     |     |
| Q6039 | 13.1 | 0   | 8.2 |     |     |     |     |     |     |

# A UNIT PARTS LAYOUT AND VOLTAGE CHARTS

10-15m MODULE VOLTAGE CHART (DC VOLTS)

|       | E(S  | 5)   | C(I  | ))   | B(0  | G1)  | (C  | (2) | REMARKS |
|-------|------|------|------|------|------|------|-----|-----|---------|
|       | R    | T    | R    | Т    | R    | Т    | R   | T   | KEMAKKS |
| Q5001 | 3.3  | 3.3  | 8.0  | 8.0  | 3.9  | 3.9  |     |     |         |
| Q5002 | 0.8  | 0.8  | 7.9  | 7.9  | 1.5  | 1.5  |     |     |         |
| Q5003 | 1.8  | 1.8  | 6.9  | 6.9  | 1.1  | 1.1  |     |     |         |
| Q5004 | 6.8  | 6.8  | 10.4 | 10.4 | 6.1  | 6.1  |     |     |         |
| Q5005 | 1.8  | 0    | 12.3 | 0    | 1.4  | 0    | 2.3 | 2.3 |         |
| Q5007 | 1.5  | 0    | 11.6 | 0    | 0    | 0    |     |     |         |
| Q0008 | 0    | 0    | 7.4  | 0    | 0    | 0    |     |     |         |
| Q5009 | 0    | 0.6  | 0    | 7.8  | 0    | 0    |     |     |         |
| Q5010 | 0    | 0.6  | 0    | 7.8  | 0    | 0    |     |     |         |
| Q5011 | 0    | 1.4  | 0    | 4.4  | 0    | 1.4  |     |     |         |
| Q5012 | 0    | 0    | 0    | 12.4 | 0    | 0.6  |     |     |         |
| Q5013 | 0    | 2.1  | 0    | 8.3  | 0    | 2.8  |     |     |         |
| Q5014 | 0    | 1.2  | 0    | 12.9 | 0    | 8.2  |     |     |         |
| Q5015 | 0    | 0    | 0    | 12.9 | 0    | 0.7  |     |     |         |
| Q5016 | 0    | 0    | 0    | 12.9 | 0    | 0.7  |     |     |         |
| Q5017 | 0    | 0    | 0    | 12.9 | 0    | 0.7  |     |     |         |
| Q5018 | 0    | 0    | 0    | 12.9 | 0    | 0.7  |     |     |         |
| Q5019 | 0    | 0.7  | 0    | 8.1  | 0    | 1.4  |     |     |         |
| Q5020 | 13.8 | 13.8 | 0    | 0    | 13.8 | 13.8 |     |     |         |
| Q5022 | 8.1  | 8.1  | 8.0  | 0    | 7.4  | 8.1  |     | ļ   |         |

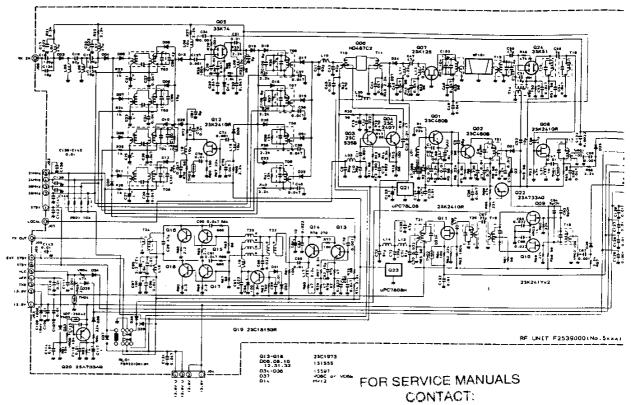
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| Q6001 | 4.3  | 4.3  | 0.7  | 0.7  | 3.4  | 3.4  |   |   | 28.0 MHz |
|-------|------|------|------|------|------|------|---|---|----------|
| Q6002 | 4.3  | 4.3  | 0.7  | 0.7  | 3.7  | 3.7  |   |   | 26.0 MHz |
| Q6003 | 4.4  | 4.4  | 0.6  | 0.6  | 3.7  | 3.7  |   |   | 24.5 MHz |
| Q6004 | 4.3  | 4.3  | 0.7  | 0.7  | 3.8  | 3.8  |   | : | 21.0 MHz |
| Q6005 | 4.4  | 4.4  | 7.2  | 7.2  | 5.2  | 5.2  |   | l |          |
| Q6006 | 1.0  | 1.0  | 3.6  | 3.6  | 1.0  | 1.0  |   |   |          |
| Q6007 | 3.0  | 3.0  | 6.6  | 6.6  | 3.6  | 3.6  |   |   |          |
| Q6009 | 0.9  | 0.9  | 8.0  | 8.0  | 1.7  | 1.7  |   |   |          |
| Q6010 | 0.2  | 0.2  | 4.5  | 4.5  | 0.9  | 0.9  |   |   |          |
| Q6011 | 3.2  | 3.2  | 7.8  | 7.8  | 3.0  | 3.0  |   |   |          |
| Q6013 | 1.1  | 1.1  | 8.0  | 8.0  | 1.7  | 1.7  |   |   |          |
| Q6014 | 1.1  | 1.1  | 8.0  | 8.0  | 1.7  | 1.7  |   |   | SAT      |
| Q6015 | 0    | 0    | 0    | 0    | 0.7  | 0.7  |   |   |          |
| Q6016 | 0    | 0    | 0    | 0    | 0.7  | 0.7  |   |   | SAT      |
| Q6017 | 0    | 0    | 0    | 0    | 0.7  | 0.7  |   |   |          |
| Q6018 | 0    | 0    | 0    | 0    | 0.6  | 0.6  |   |   | ·        |
| Q6019 | 1.4  | 1.4  | 8.0  | 8.0  | 1.8  | 1.8  | 1 |   | 21.0 MHz |
| Q6020 | 0.9  | 0.9  | 3.6  | 3.6  | 1.3  | 1.3  |   |   | 21.0 MHz |
| Q6021 | 0.2  | 0.2  | 3.6  | 3.6  | 0.9  | 0.9  |   |   | 21.0 MHz |
| Q6022 | 0    | 0    | 0    | 1.3  | 0    | 0    |   |   |          |
| Q6023 | 8.2  | 8.2  | 0    | 0    | 8.0  | 8.0  |   |   | 21.0 MHz |
| Q6024 | 13.7 | 13.7 | 13.7 | 13.7 | 13.1 | 13.1 |   |   |          |
| Q6025 | 13.1 | 13.1 | 13.7 | 13.7 | 13.7 | 13.7 |   |   |          |
| Q6026 | 1.7  | 1.7  | 4.9  | 4.9  | 2.4  | 2.4  |   |   |          |
| Q6027 | 0    | 0    | 0    | 0    | 0.8  | 0.8  |   |   | 28.0 MHz |
| Q6028 | 0    | 0    | 0    | 0    | 0.8  | 0.8  |   |   | 24.5 MHz |
| Q6029 | 0    | 0    | 0    | 0    | 0.8  | 0.8  |   |   | 21.0 MHz |
| Q6030 | 0    | 0    | 0    | 0    | 0.8  | 0.8  |   |   | 26.0 MHz |
| Q6038 | 0    | 0    | 13.4 | 0.8  | 0    | 1.4  |   |   |          |
|       |      |      |      |      |      |      |   |   |          |
| Q7001 | 0    | 0.1  | 0    | 8.0  | 0    | 0.6  |   |   | SSB      |
| Q7002 | 0    | 0    | 13.8 | 13.8 | 0    | 0.1  |   |   |          |
| Q7003 | 0    | 0    | 13.8 | 13.8 | 0    | 0.1  |   |   |          |

| IC    | 1    | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10       | 11  | 12       | 13       | 14       | REMARKS |
|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|----------|----------|----------|---------|
| Q5021 | 13.0 | 0   | 8.1 |     |     |     |     |     |     |          |     |          |          |          |         |
| Q5023 | 12.9 | 0   | 8.0 |     |     |     |     |     |     |          |     |          |          |          | TX      |
| Q6008 | 0    | 7.8 | 7.0 | 4.1 | 2.3 | 0   | 0   | 0   | 2.3 | 4.0      | 4.0 | 4.0      | 6.9      | 0        |         |
| Q6012 | 6.3  | 3.8 | 2.7 | 0   | 2.7 | 3.8 | 3.8 | 7.6 |     | <u> </u> |     |          |          | <u> </u> |         |
| Q6037 | 8.1  | 0   | 5.0 |     |     |     |     |     |     |          |     |          |          |          |         |
| Q6039 | 13.1 | 0   | 8.2 |     |     |     |     |     |     |          |     | <u> </u> | <u> </u> |          |         |

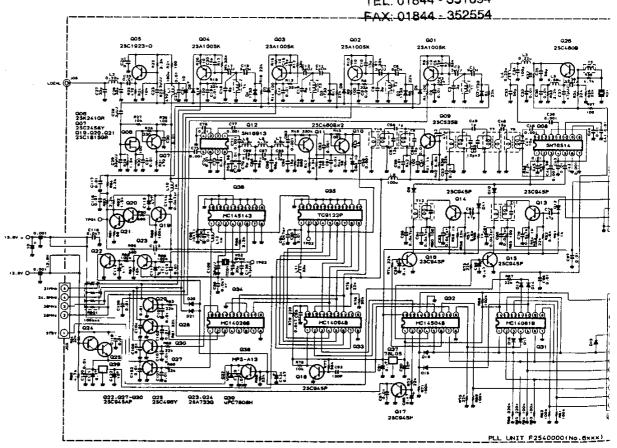
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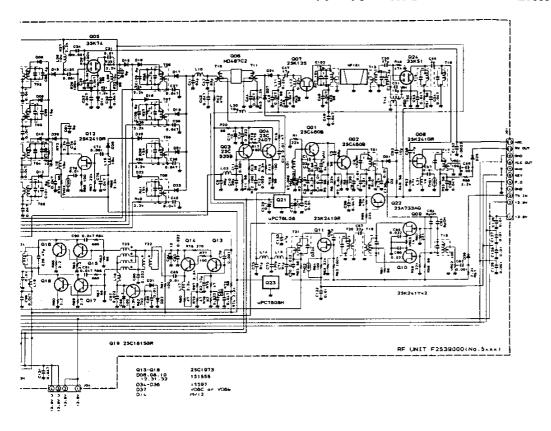


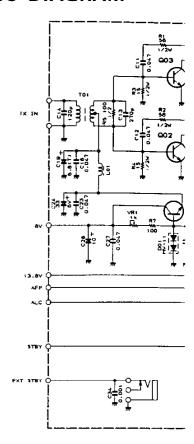
## MAURITRON TECHNICAL SERVICES

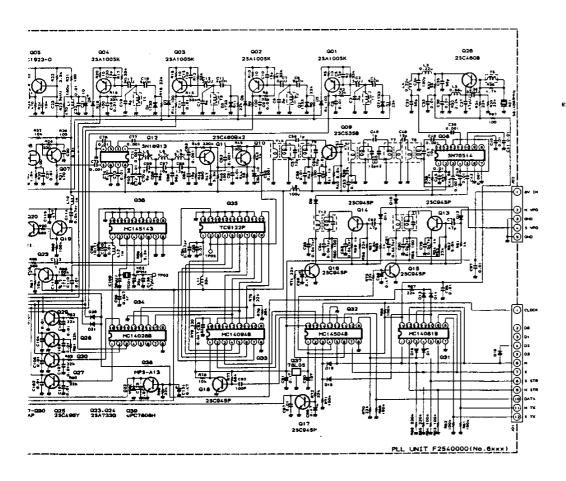
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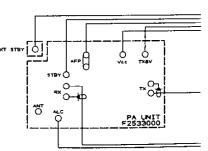


## 10-15m MODULE SCHEMATIC DIAGRAM

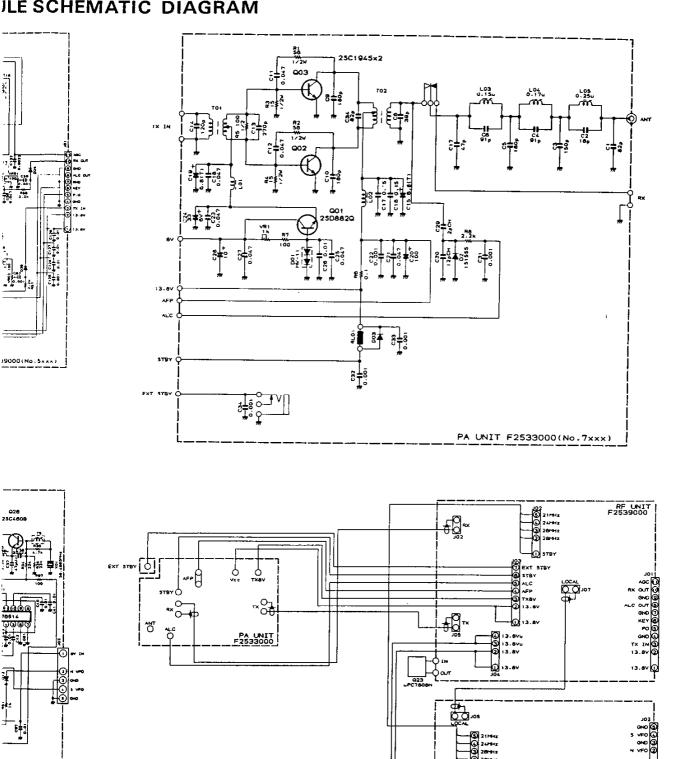








#### JLE SCHEMATIC DIAGRAM

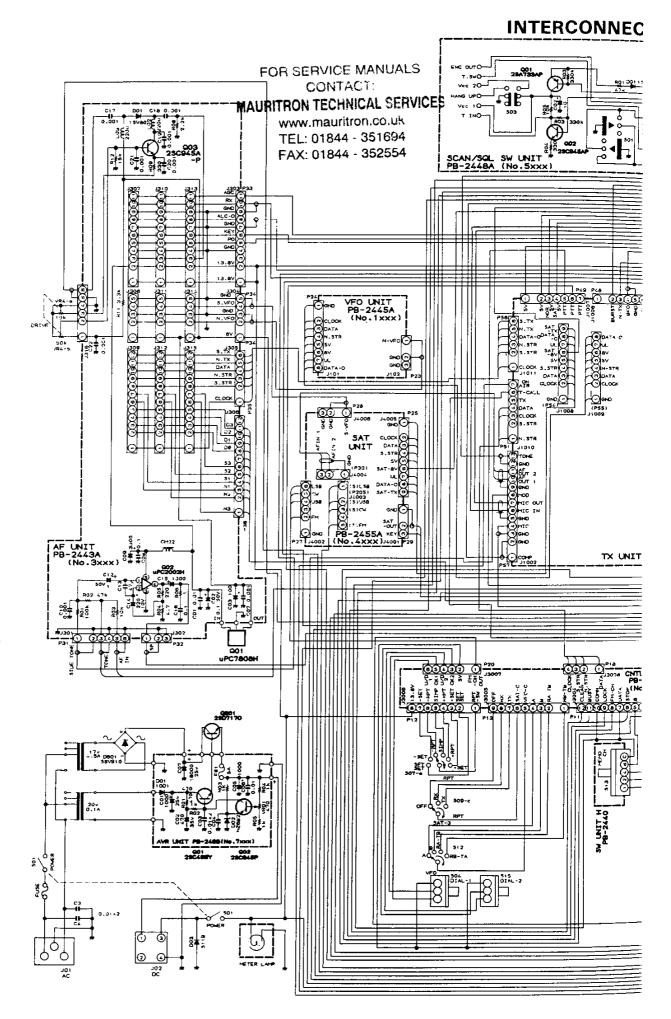


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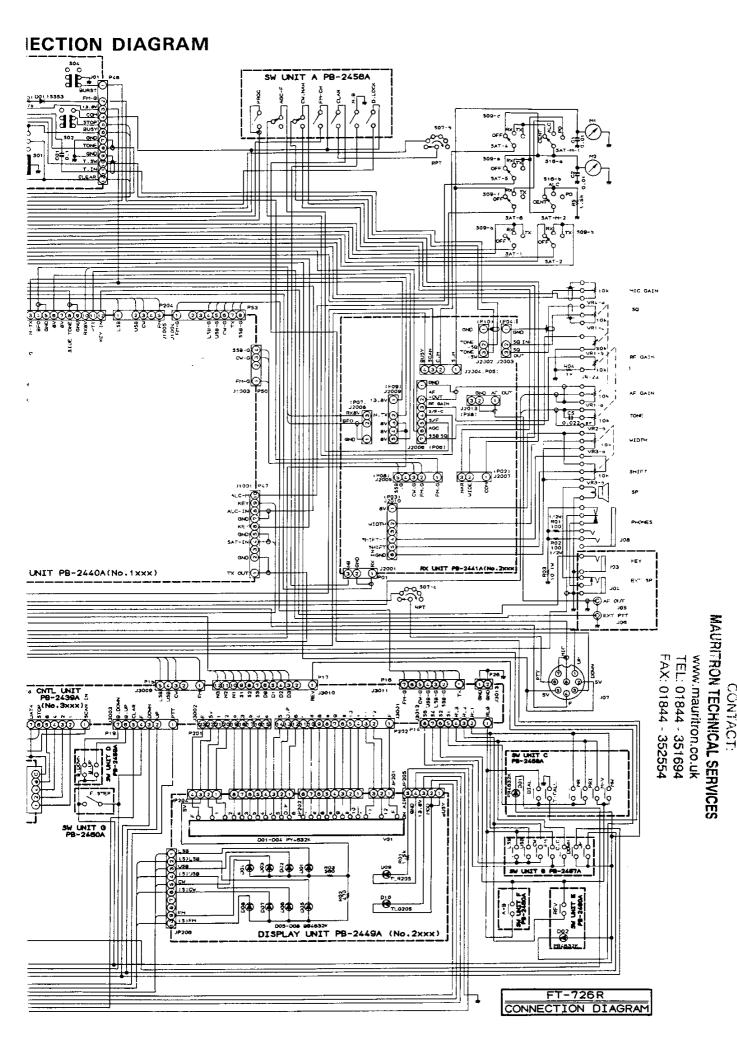
FT726 10-15m UNIT CONNECTION DIAGRAM

PLL UNIT F2540000

00(Na.5xxx)

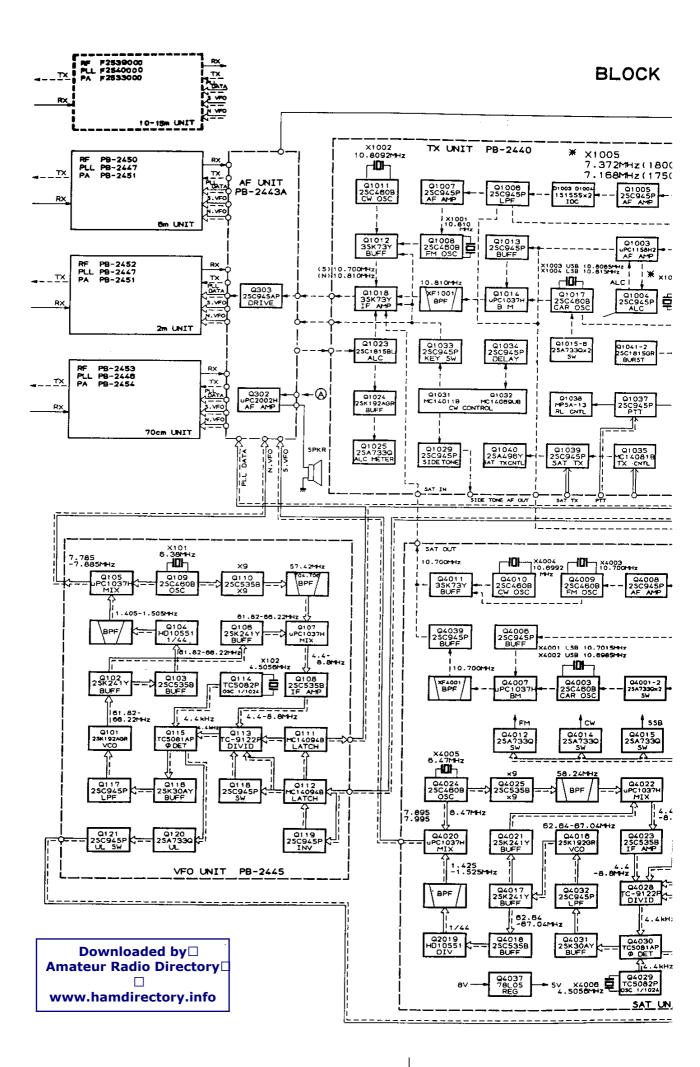


# INTERCONNECTION DIAGRAM T. 3WO- $\Box$ -ãE Vec 10-SCAN/SQL SW UNIT PB-2448A (No.5xxx) Ŷ J: 303 N. STR PS1 J1010 A Frome A GAO A GA TX UNIT PB-2440A(No.1xxx) Q01 uPC7808H D01-004 PY-632K ₹Ф DISPLAY UNIT P

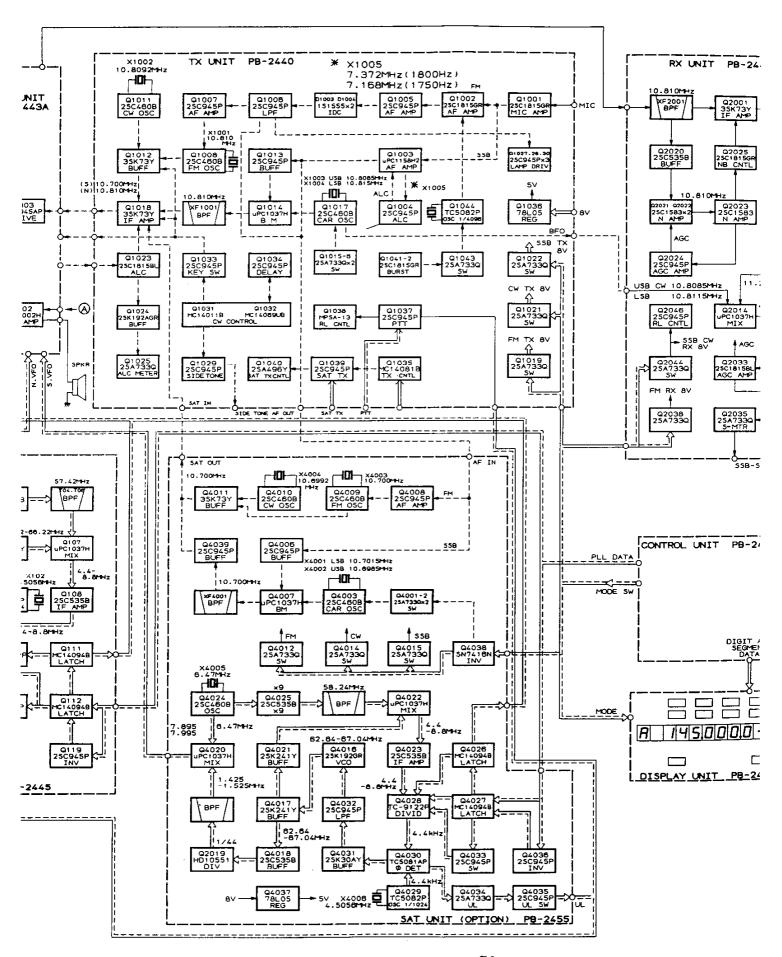


FOR SERVICE MANUALS

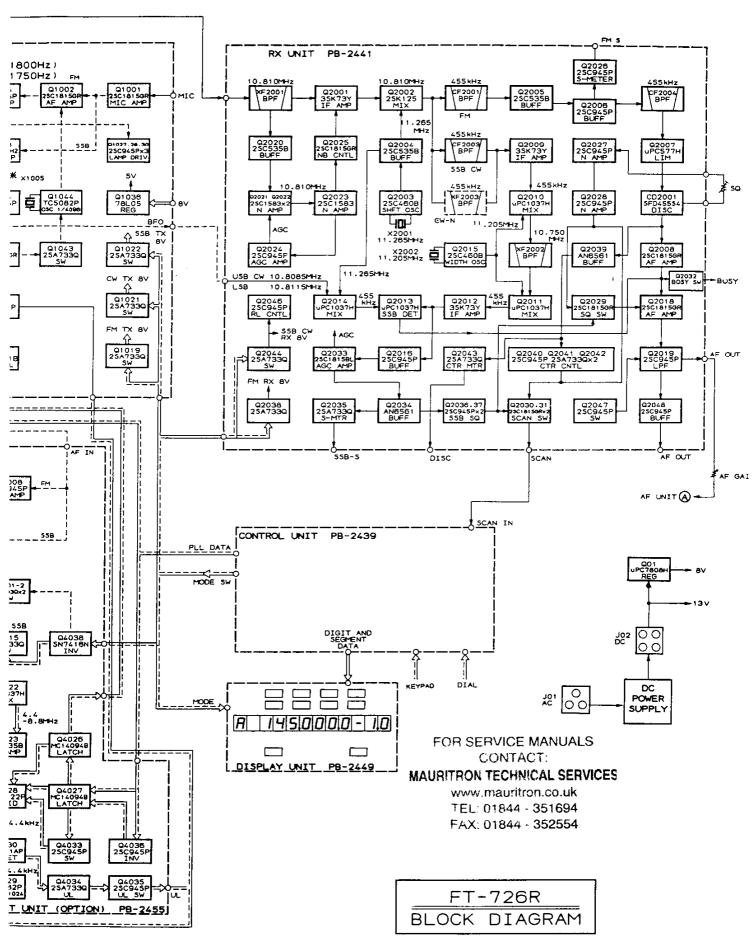
--73-

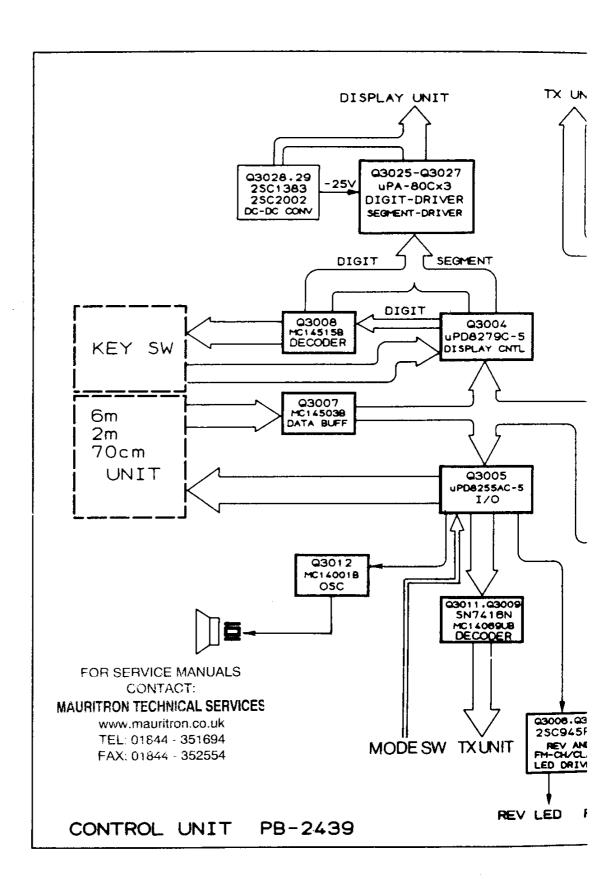


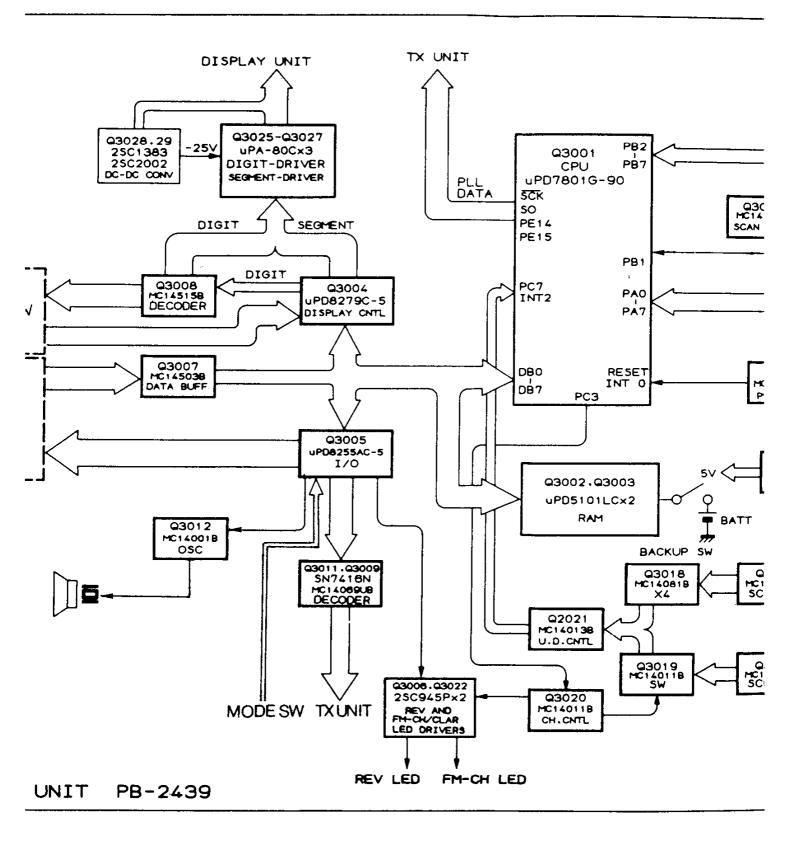
#### **BLOCK DIAGRAM**

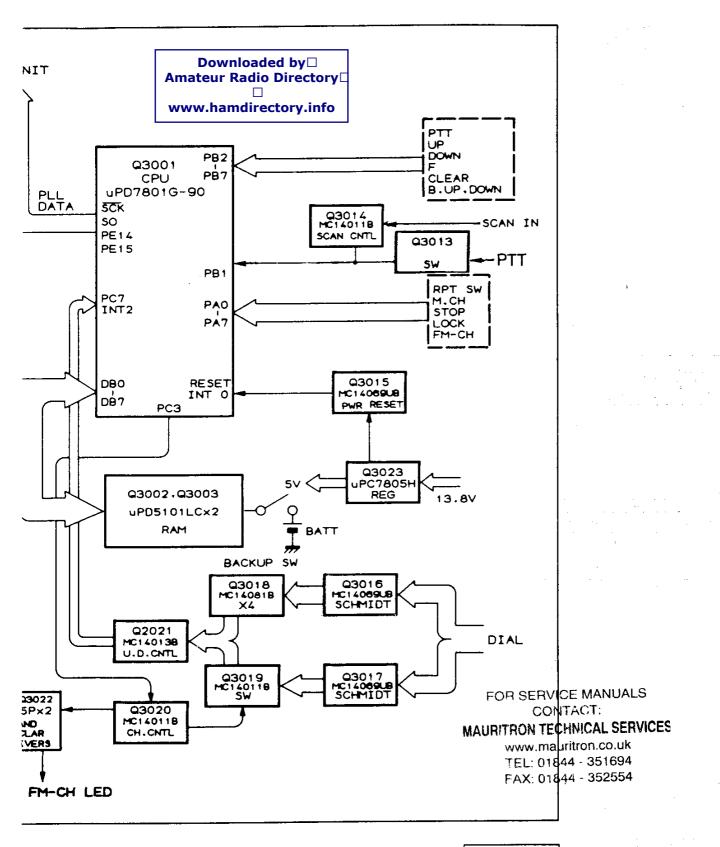


#### K DIAGRAM





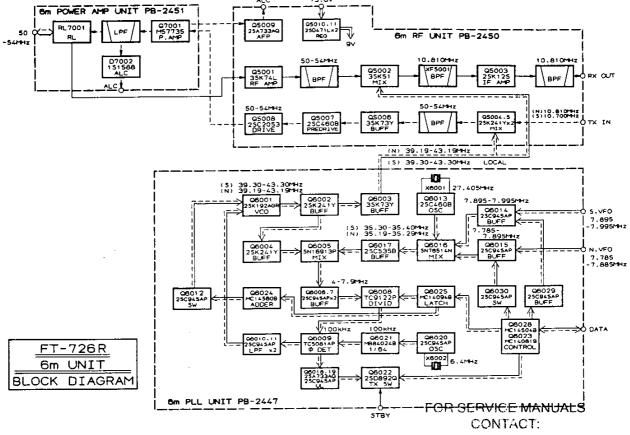




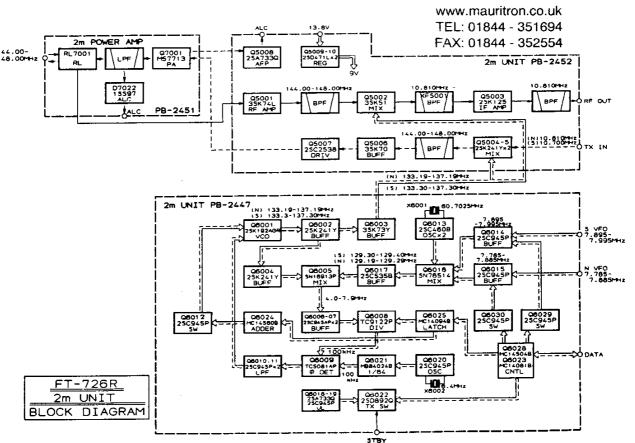
FT-726 CONTROL UNIT BLOCK DIAGRAM

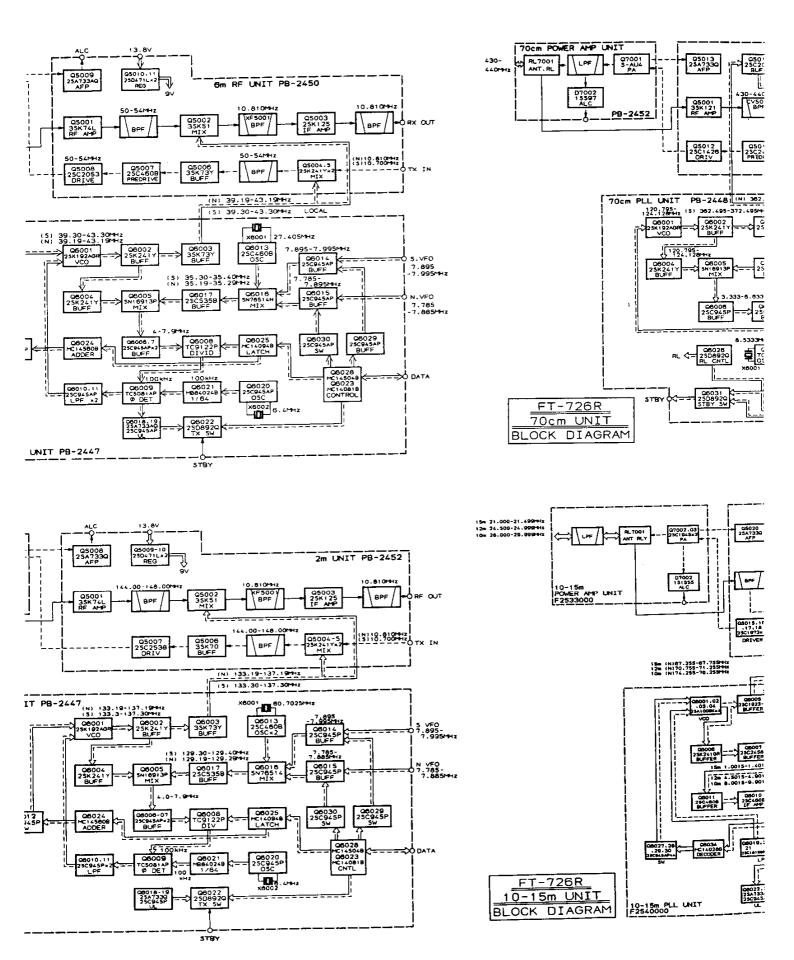


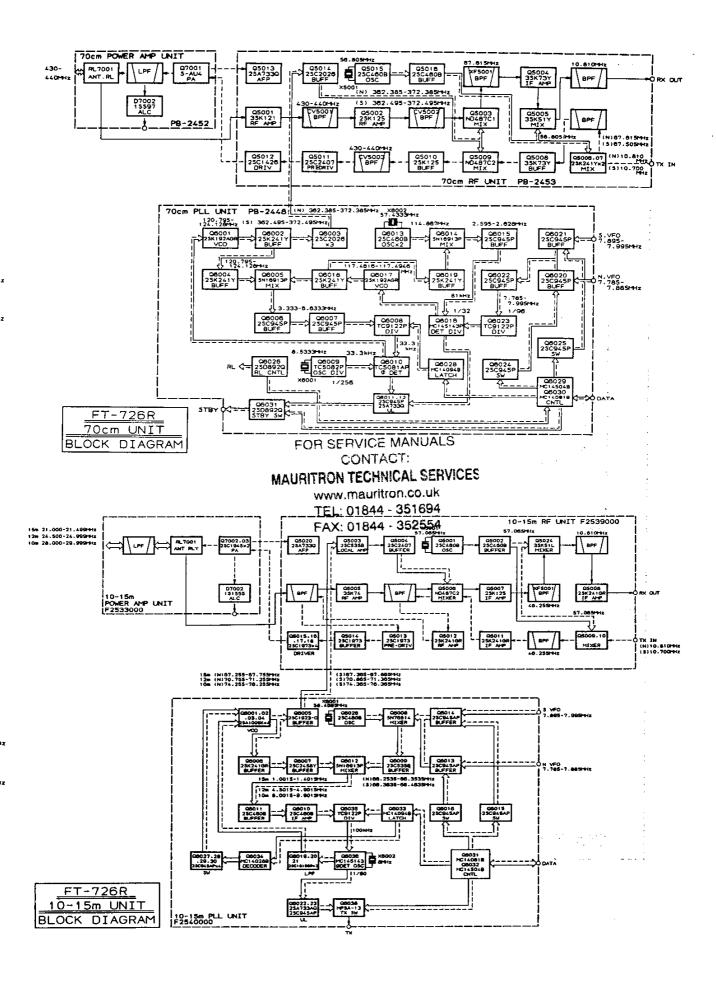
15m 21.0 12m 24.2 10m 28.0



#### **MAURITRON TECHNICAL SERVICES**







-76-

- |

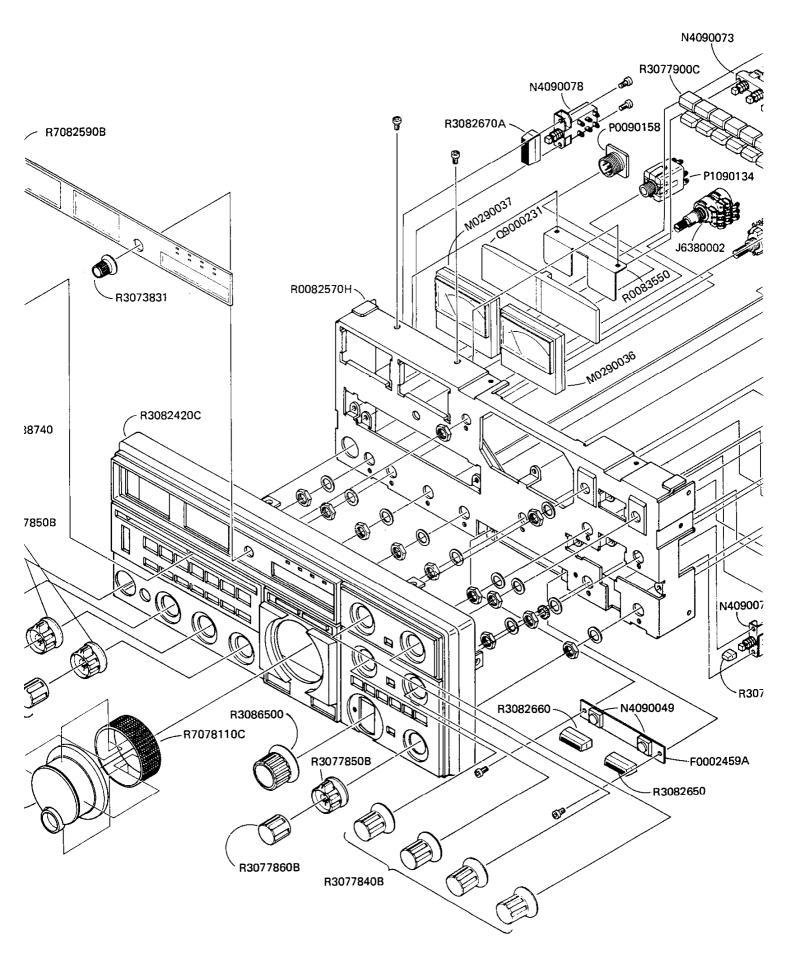
## FRONT PANEL EX

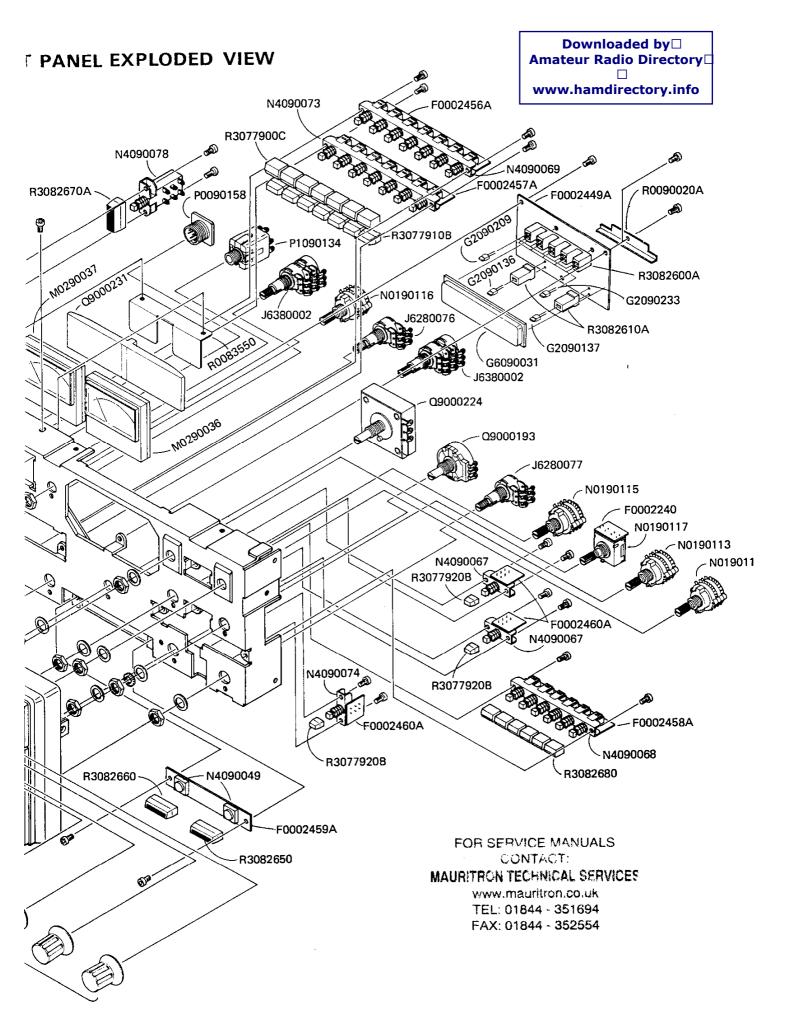
#### FOR SERVICE MANUALS CONTACT:

#### **MAURITRON TECHNICAL SERVICES**

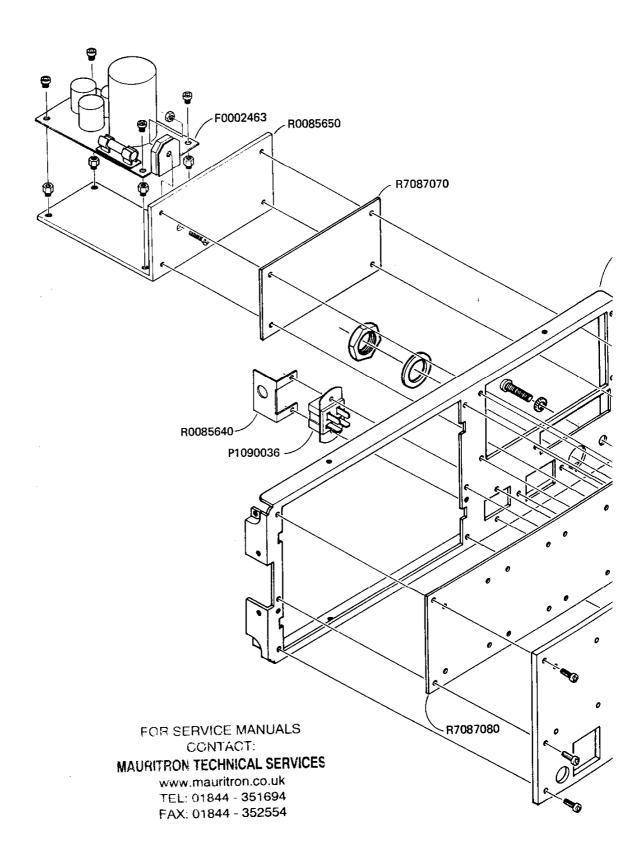
www.mauritron.co.uk Ŋ۷ TEL: 01844 - 351694 FAX: 01844 - 352554 P R3082670A -R7082590B M0290037 O200023 R0082570H R3073831 R3082420C JA R8088730 USA, EU, VK R8088740 SOKA R8032960A R3077850B R3077860B R3082 R3086500 R7078110C R3077850B R3084110A R3077860B R3077840B

## FRONT PANEL EXPLODED VIEW

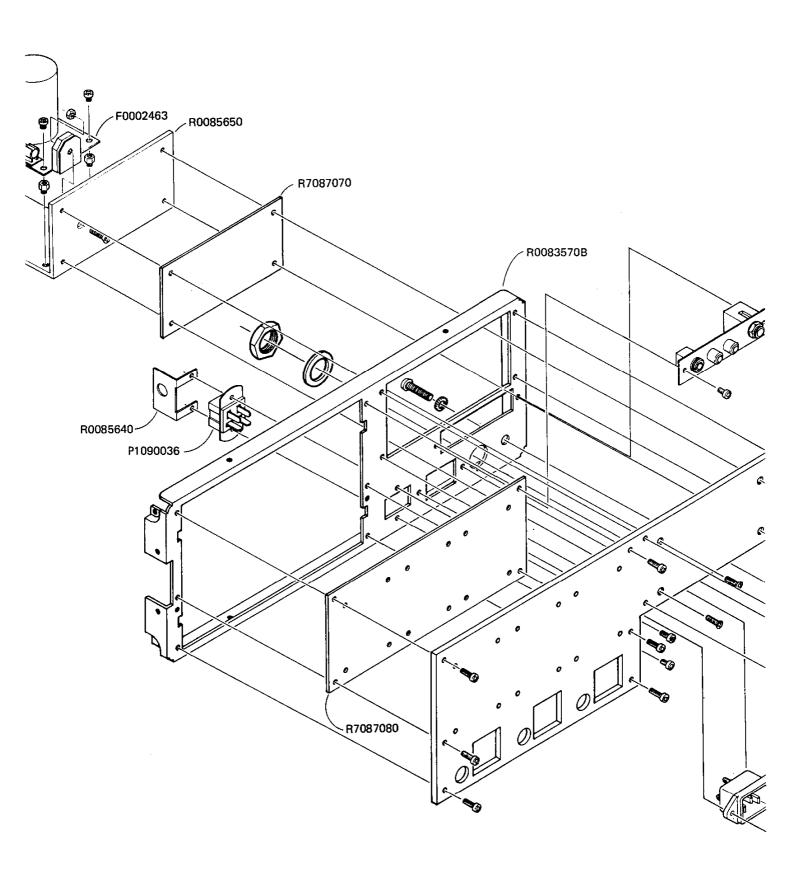




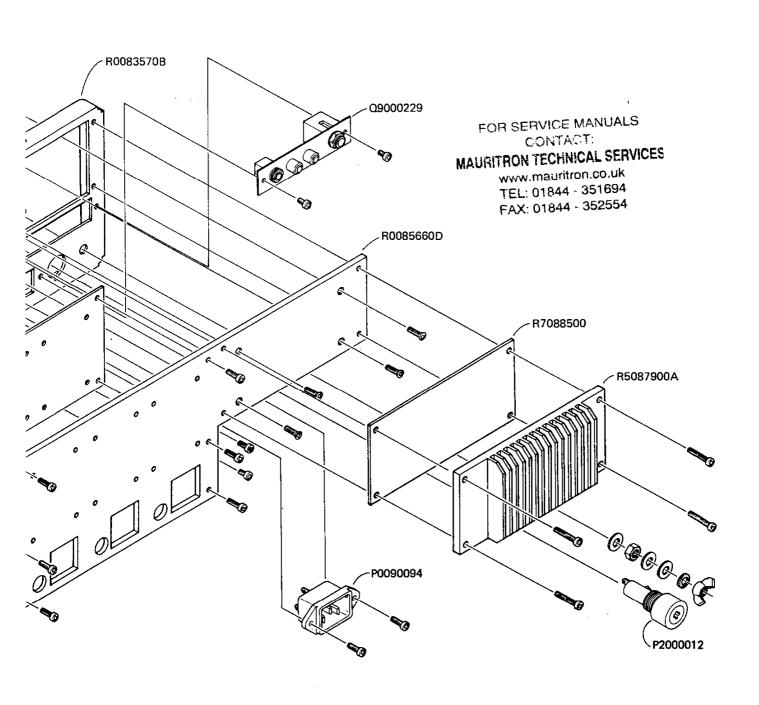
# REAR PANEL EXP



# **REAR PANEL EXPLODED VIEW**



## **IEL EXPLODED VIEW**



# **PARTS LIST**

|              | MAIN C                | ASSIS                               | VR3      | J62800076            | K16BA0A07-10KBx2                         |
|--------------|-----------------------|-------------------------------------|----------|----------------------|--|
| Symbol No.   | Part No.              | Description                         |          |                      | 10ΚΩΒ-10ΚΩΒ                              |
|              |                       | SWITCH UNIT A                       |          |                      |  |
| PB-2456A     | F0002456A             | Printed Circuit Board               |          |                      | L-3-22-11                                |
| <u>.</u> ,   | C024560A              | PCB with S2                         |          |                      | CAPACITOR                                |
|              |                       | <u> </u>                            | C1,2     | K13179008            | Ceramic 50WV F 0.01μF<br>(DD106F103Z50V) |
|              | E00024574             | SWITCH UNIT B Printed Circuit Board | C3,4     | K12329001            | " 1.2KVAC 0.01μF<br>(ECKDAL103PE)        |
| PB-2457A     | F0002457A<br>C024570A | PCB with S3                         | C5       | K19149017            | Semiconductor Ceramic                    |
|              | C024370A              | 1 CB with 35                        |          |                      | 25WV 0.022μF                             |
|              | <del></del>           |                                     | •        |                      | (UAT06X223K-L45AE)                       |
|              |                       | SWITCH UNIT C                       | C6-10    | K12171102            | Ceramic 50WV E 0.001µF                   |
| PB-2458A     | F0002458A             | Printed Circuit Board               |          |                      | (DD104E102P50V)                          |
| 10 210011    | C024580A              | PCB with S10, D1                    |          |                      | METER                                    |
|              |                       |                                     | M1       | M0290036             | S/ALC                                    |
|              |                       |                                     | M2       | M0290037             | PO/DISC                                  |
|              |                       | SWITCH UNIT D                       |          |                      |  |
| PB-2459A     | F0002459A             | Printed Circuit Board               |          |                      |  |
|              | C024590A              | PCB with S5, S6                     |          |                      | SPEAKER SS-77KYH 8Ω 2W                   |
|              |                       |                                     | SP1      | M4090047             | <u> </u>                                 |
|              |                       |                                     |          | T9100301             | Speaker Lead                             |
|              |                       | SWITCH UNIT E                       |          |                      |  |
| PB-2460A     | F0002460A             | Printed Circuit Board               |          |                      | SWITCH                                   |
|              | C024600A              | PCB with S8, D2                     | 61       | N4090078             | NE15J 1P-0022AC2020                      |
|              |                       |                                     | S1<br>S2 | N4090069             | SUJ-72A/E3891805M                        |
|              |                       | OWNERS AND F                        | S3       | N4090073             | SUJ-72A/E6057717M                        |
|              | E00034604             | SWITCH UNIT F Printed Circuit Board | S4       | Q9000224             | LA24034                                  |
| PB-2460A     | F0002460A<br>C024601A | PCB with S11                        | S5,6     | N4090049             | KHC10901                                 |
|              | C024601A              | TEB WIth 311                        | S7       | N0190113             | SRN-2046/E3891856M                       |
|              |                       |                                     | S8,11    | N4090067             | SUJ-12A/E42129790                        |
| m            |                       | SWITCH UNIT G                       | S9       | N0190114             | SRN-2083N/E3891848M                      |
| PB-2460A     | F0002460A             | Printed Circuit Board               | S10      | N4090068             | SUJ-61A/E3891813M                        |
| 1B-2400A     | C024602A              | PCB with S14                        | S12      | N0190115             | SRN-1034N/E6058322M                      |
|              | 002100210             |                                     | S13      | N0190117             | SRS-101C                                 |
|              |                       |                                     | S14      | N4090074             | SUJ-12A/E6058306M                        |
|              |                       | SWITCH UNIT H                       | S15      | Q9000193             | EWT-XDDS2050B                            |
| PB-2240      | F0002240              | Printed Circuit Board               | S16      | N0190116             | SRN-1043N/204657690                      |
|              | C022400               | PCB with S13                        |          |                      |  |
|              |                       |                                     |          |                      | CONVECTOR                                |
|              |                       |                                     |          | P000004              | PA-125                                   |
|              |                       | IC                                  | J1       | P0090094<br>P1090036 | QS-AB4M                                  |
| Q1           | G1090294              | μРС7808Н                            | J2<br>J7 | P0090158             | FM214-8SS                                |
|              |                       |                                     | 18       | P1090134             | SG7627                                   |
|              |                       |                                     | J3,4,5,6 | Q9000229             | PIN JACK BOARD (KEY, EXT                 |
| <del> </del> |                       | Si S11B                             | 13,4,5,0 | 2,000225             | SPKR, ALC, PTT)                          |
| D3           | G2090232              | Si S11B<br>LED PR4632K              |          | <del>-</del>         |  |
| D1,2         | G2090208              | LED 1K4052K                         |          |                      |  |
|              | <del></del>           |                                     |          |                      | POWER TRANSFORMER                        |
|              |                       | RESISTOR                            | PTI      | L3030104A            |  |
| R3           | J20306100             | Metallic film 1W 10Ω                | T        |                      |  |
| R1,2         | J10276101             | Carbon Composition                  |          |                      |  |
| 171,0        | 132,0131              | 1/2W GK 100Ω                        |          |                      | TERMINAL                                 |
| R4           | J01245102             | " film 1/4W TJ 1kΩ                  |          | Q6000003             | 1L2P (1-0-1)                             |
| R5           | J01245152             | ., ., ., ., 1.5kΩ                   |          | Q6000077             | ML-3161C-8P                              |
|              | <u> </u>              |                                     |          |                      |  |
|              |                       | POTENTIOMETER                       | I        |                      | FUSE HOLDER                              |
| VR1,4        | J63800002             | K16C5000C-10KB-50KB-10KA            | FH1      | P2000012             | SN2059                                   |
| ,.           |                       | 10ΚΩΒ/50ΚΩΒ, 10ΚΩΑ                  |          |                      |  |
| VR2          | J62800077             | K16B1000L-10KBx2                    |          |                      | TROUGHT OF A TOP (                       |
| İ            |                       | 10KΩB·10kΩB                         |          | Q9000231             | LIGHT PLATE (with lamp)                  |
|              |                       |                                     | <u>L</u> |                      |  |

| <u> </u>                              | <del></del>           | PLUG   |   | -  |                         |
|---------------------------------------|-----------------------|--|---|--|-------------------------|
| P1 (with wire)                        | T9204636A             |  | 0130                                    | -  | TRANSISTOR              |
| P2 ( " )                              | T9204634F             |  | Q120<br>Q109                            | G3107331Q  | 2SA733AQ                |
| P3 ( " )                              | T9204634F             | +  |   | G3304600B  | 2SC460B                 |
| P12 ( " )                             | T9204533              | 7  | Q103,108,110                            | G3305350B  | 2SC535B                 |
| P13 ( " )                             | T9204501A             | <u> </u>   | Q117-119,121                            | G3309451P  | 2SC945AP                |
| P14 ( " )                             | <del></del>           | <del></del>                                      |   | <del> </del>                                     |                         |
| ` <del></del>                         | T9204503A<br>T9204637 |  |   | <del>                                     </del> |                         |
|                                       |                       |  |   | <del> </del>                                     | DIODE                   |
| P20 ( " )                             | T9204508B             |  | D102-104                                | G2090027   | Si 1SS53                |
| P26 ( " )                             | T9204513A             |  | D101                                    | G2090107   | Varactor 1T25           |
|                                       | -                     | <del>                                     </del> | <del></del>                             | -  |                         |
|                                       |                       |  | <del></del>                             | ~  |                         |
| <del>-</del>                          | 0000000               | FUSE   |   | <u> </u>   | CRYSTAL                 |
|                                       | Q0000003              | 2A 100V-117VAC                                   | X101                                    | H0102504   | HC-18/U 6.38MHz         |
|                                       | Q0000002              | 1A 200V-234VAC                                   | X102                                    | H0102503   | HC-18/U 4.505MHz        |
|                                       | <u> </u>              |  | <u> </u>                                |  |                         |
|                                       |                       |  |   | ļ  |                         |
|                                       | **1                   | * * *  |   |  | THERMISTOR              |
| <del></del>                           | D20041101             | KNOB   | TH101                                   | G9090016   | 33D28                   |
| <u> </u>                              | R3084110A             | FT-50T TUNING                                    |   |  |                         |
|                                       | R7078110B             | Rubber Ring                                      | B146 406 105                            |  | RESISTOR                |
| · · · · · · · · · · · · · · · · · · · | R3086500              | FT-29T FM-CH/CLAR                                | R115,123,126                            | J02245560  | Carbon film 1/4W SJ 56Ω |
|                                       | R3077840B             | FT-22WK RPT SELECT,<br>SATELLITE,                | R104,107,117,121,<br>138,142            | J02245101  | " " " 100Ω              |
| 484                                   |                       | VFO, MEMORY                                      | R151                                    | J01245101  | ΤJ 100Ω                 |
|                                       | R3077850B             | FT-22WDNS DRIVE, WIDTH,                          | R106,109                                | J02245221  | " " SJ 220Ω             |
| <del>-</del>                          |                       | SQL, TONE  | R103                                    | J02245331  | " " " 330Ω              |
|                                       | R3077860B             | FT-15WK MIC GAIN, AF<br>GAIN, RF GAIN,           | R111,113,129,137,<br>141                | J02245471  | 470Ω                    |
|                                       |                       | SHIFT  | `R147                                   | J02245561  | 560Ω                    |
|                                       | R3073831              | FT-13UTK SAT METER                               | R136,146,150                            | J02245102  | " " " !kΩ               |
|                                       | R3077900B             | PUSH KNOB A                                      | R116                                    | J01215152  | " " 1/8W TJ 1.5kΩ       |
|                                       |                       | PROCD.LOCK                                       | R145                                    | J02245152  | " " 1/4W SJ 1.5kΩ       |
|                                       | R3077910              | " " G LSBUP                                      | R128                                    | J02245182  | " " " 1.8kΩ             |
|                                       | R3077920              | " " H REVERSE,                                   | R144,148                                | J02245272  | " " 2.7kΩ               |
|                                       |                       | VFO A=B,STEP                                     | R110,114,130                            | J02245332  | " " " 3.3kΩ             |
|                                       | R3082670              | " " I POWER                                      | R131-133,149                            | J02245392  | " " 3.9kΩ               |
|                                       | R3082680              | " " J VFOMW                                      | R152,155                                | J02245472  | 4.7kΩ                   |
|                                       | R3082650              | KEY TOP A BAND UP                                | R112                                    | J02245682  | " " " 6.8kΩ             |
|                                       | R3082660              | " " B BAND DOWN                                  | R143,158                                | J02245103  | " " " 10kΩ              |
|                                       |                       |  | R154                                    | J02245153  | " " " 15kΩ              |
|                                       |                       |  | R134,140,157                            | J02245223  | " " " 22kΩ              |
|                                       |                       |  | * · · · · · · · · · · · · · · · · · · · | J02245333  | " " " " 33kΩ            |
|                                       |                       |  | R102,105,108,135,<br>139                | J02245473  | 47kΩ                    |
|                                       | VFO (                 | JNIT   | R153                                    | J02245563  | 56kΩ                    |
| Symbol No.                            | Part No.              | Description                                      | R101,156                                | J02245104  | " " 100kΩ               |
| PB-2445A                              | C024450A              | Printed Circuit Board                            | R127                                    | J02245154  | " " 150kΩ               |
|                                       | C024450A              | PCB with Components                              | R109                                    | J02245134  | " " " 330kΩ             |
|                                       | 1                     |  |   |  | JJorge                  |
|                                       | 1                     |  | ·                                       |  |                         |
|                                       |                       | IC   |   |  | CAPACITOR               |
| Q104                                  | G1090296              | HD10551P   | C114,133,169                            | K00172010  | Ceramic 50WV SL 1pF     |
| Q111,112                              | G1090343              | MC14094B   | ,,                                      |  | (DD104SL010C50V)        |
| Q115                                  | G1090473              | TC5081AP   | C111                                    | K02179003  | " CK 2pF                |
| Q114                                  | G1090239              | TC5082P  |   |  | (DD104CK020C50V)        |
| Q113                                  | G1090247              | TC9122P  | C131                                    | K00172030  | " " SL 3pF              |
| Q105,107                              | G1090101              | μPC1037H   |   |  | (DD104SL030C50V)        |
|                                       |                       |  | C102,103                                | K05173060  | " " RH 6pF              |
|                                       |                       |  | ,                                       |  | (DD104RH060D50V)        |
|                                       |                       | FET  | C107                                    | K06173060  | " " UJ 6pF              |
| Q116                                  | G3800301Y             | 2SK30AY  | - : -                                   |  | (DD104UJ060D50V)        |
| Q101                                  | G3801921G             | 2SK192AGR  | ***                                     | K02173060  | " " CH 6pF              |
| Q102,106                              | G3802410Y             | 2SK241Y  |   |  | (DD104CH060D50V)        |
|                                       |                       |  |   |  | (                       |
|                                       | <u> </u>              |  | <u></u>                                 |  |                         |

| C159  | K00172050                                  | Ceramic 50WV SL 5pF<br>(DD104SL050C50V)   | C108,118,147,178,<br>180,183,188,191   |  | Electrolytic 16WV 10μ<br>(ECE-A1CK100)   |
|---|--|---|--|--|--|
| C104,152  | K02173090                                  | " " CH 9pF<br>(DD104CH090D50V)  | C185                                   | K40129013  | 22µ<br>(ECE-A1CK220)   |
| C105  | K02173100                                  | " " 10pF<br>(DD104CH100D50V)  |  |  |  |
| C155  | K02175120                                  | " " 12pF  |  |  | TRIMMER CAPACITOR  |
|   |  | (DD104CH120J50V)  | TC101,102                              | K91000055  | ECV1ZW 06x53N 6pF  |
| C165,168,170  | K05175120                                  | " RH12pF<br>(DD104RH120J50V)  | TC103                                  | K91000028  | ECV1ZW 10x53 10p   |
| C136,173  | K00175150                                  | SL 15pF<br>(DD104SL150J50V)   |  |  | INDUCTOR   |
| C151  | K06175150                                  | " " UJ 15pF   | L102                                   | L1190004   | FL4H-R68M 0.68µH   |
| 0.01  | 12001.010                                  | (DD104UJ150J50V)  | L109,110                               | L1190070   | FL4H-8R2M 8.2µH  |
| C154  | K02175180                                  | " CH 18pF   | L107                                   | L1190029   | FL5H-470K 47µH   |
|   |  | (DD104CH180J50V)  | L105                                   | L1190030   | FL5H-560K 56µH   |
| C122  | K00175180                                  | " " SL 18pF   | L106                                   | L1190031   | FL5H-680K 68µH   |
|   |  | (DD104SL180J50V)  | L101,111,112                           | L1190016   | FL5H-101K 100µH  |
| C109  | K06175220                                  | ., ., UJ 22pF<br>(DD104UJ220J50V)   | L103,108                               | L1020680   |  |
| C167  | K00175220                                  | " " SL 22pF   |  |  | 3  |
| 0107  | 1.001,0220                                 | (DD104SL220J50V)  |  | 1  | TRANSFORMER  |
| C153,174,175  | K02175330                                  | " " CH 33pF   | T101                                   | L0020612   |  |
| 0100,177,172  |  | (DD104CH330J50V)  | T102,103                               | L0020782   |  |
| C171  | K00175330                                  | " " SL 33pF   | T104-106                               | L0020825   |  |
|   |  | (DD104SL330J50V)  |  |  |  |
| C101  | K06175470                                  | " UJ 47pF   |  |  |  |
|   |  | (DD104UJ470J50V)  |  |  | CONNECTOR  |
| C141,143  | K00175470                                  | " SL 47pF   | J102                                   | P0090041   | 5048-03A   |
|   |  | (DD104SL470J50V)  | J101                                   | P0090037   | 5048-08A   |
| C120  | K00175560                                  | " " 56pF<br>(DD104SL560J50V)  |  |  |  |
| C126  | K00175680                                  | " " 68pF  |  |  | TP TERMINAL  |
|   |  | (DD104UJ470J50V)  |  | Q5000036   | TP-G   |
| C124  | K00175820                                  | " " 82pF  |  |  |  |
|   |  | (DD104SL820J50V)  |  |  |  |
| C125,142,163,189  | K00175101                                  | " " 100pF   |  |  | FERRITE BEADS  |
|   |  | (DD105SL101J50V)  | FB101                                  | L9190001   | Ri 3x3x1   |
| C161  | K06175101                                  | " " UJ 100pF<br>(DD106UJ101J50V)  |  |  |  |
| C119  | K00179015                                  | " " SL 110pF  |  |  |  |
|   |  | (DD105SL111J50V)  |  |  | Y UNIT   |
| C130,194  | K00175151                                  | " " 150pF   | Symbol No.                             | Part No.   |  |
|   |  | (DD106SL151J50V)  | PB-2449A                               | F0002449A  | Printed Circuit Board  |
| C160  | K06175151                                  | " " UJ 150pF<br>(DD107UJ151J50V)  |  | C024490A   | PCB with Components  |
| C121 122  |  |   |  |  |  |
| C141.143  | K00179020                                  | " SL 240pF  |  |  |  |
| C121,123  | K00179020                                  | " SL 240pF<br>(DD107SL241J50V)  |  |  | FCD  |
| C121,123  | K00179020<br>K10176102                     | (DD107SL241J50V) " Β 0.001μF  | V201                                   | G6090031   | FCD<br>FIP12A5A  |
| C196  | K10176102                                  | (DD107SL241J50V) " Β 0.001μF (DD104B102K50V)  | V201                                   | G6090031   |  |
| C196<br>C106,110,112,113,   |  | (DD107SL241J50V)  "   | V201                                   | G6090031   | FIP12A5A   |
| C196  | K10176102                                  | (DD107SL241J50V) " Β 0.001μF (DD104B102K50V)  |  |  | FIP12A5A DIODE   |
| C196<br>C106,110,112,113,<br>115-117,128,<br>134,135,137,138,<br>140,144,   | K10176102                                  | (DD107SL241J50V)  "   | D205-208                               | G2090209   | FIP12A5A  DIODE  LED BG4632K   |
| C196 C106,110,112,113, 115-117,128, 134,135,137,138, 140,144, 148-150.  | K10176102                                  | (DD107SL241J50V)  "   | D205-208<br>D201-204                   | G2090209<br>G2090233   | DIODE LED BG4632K " PY4632K  |
| C196<br>C106,110,112,113,<br>115-117,128,<br>134,135,137,138,<br>140,144,   | K10176102                                  | (DD107SL241J50V)  "   | D205-208                               | G2090209   | FIP12A5A  DIODE  LED BG4632K   |
| C196  C106,110,112,113, 115-117,128, 134,135,137,138, 140,144, 148-150, 156-158,162, 164,166,176,187, 190,193   | K10176102<br>K14180103                     | (DD107SL241J50V)  " B 0.001µF (DD104B102K50V)  " FZ 0.01µF (RD871-1FZ-103Z63V)  | D205-208<br>D201-204<br>D210           | G2090209<br>G2090233<br>G2090136                                       | DIODE  LED BG4632K  " PY4632K  " TLG205  |
| C196  C106,110,112,113, 115-117,128, 134,135,137,138, 140,144, 148-150, 156-158,162, 164,166,176,187, 190,193  C127,129,132,139,                          | K10176102                                  | (DD107SL241J50V)  " " B 0.001µF (DD104B102K50V)  " FZ 0.01µF (RD871-1FZ-103Z63V)  Semiconductor Ceramic   | D205-208<br>D201-204<br>D210           | G2090209<br>G2090233<br>G2090136                                       | DIODE  LED BG4632K  " PY4632K  " TLG205  " TLR205                                    |
| C196  C106,110,112,113, 115-117,128, 134,135,137,138, 140,144, 148-150, 156-158,162, 164,166,176,187, 190,193  C127,129,132,139, 172,179,182,184,         | K10176102<br>K14180103                     | (DD107SL241J50V)  " " B 0.001µF (DD104B102K50V)  " FZ 0.01µF (RD871-1FZ-103Z63V)  Semiconductor Ceramic 25WV 0.047µF  | D205-208 D201-204 D210 D209            | G2090209<br>G2090233<br>G2090136<br>G2090137                           | DIODE  LED BG4632K  " PY4632K  " TLG205  " TLR205                                    |
| C196  C106,110,112,113, 115-117,128, 134,135,137,138, 140,144, 148-150, 156-158,162, 164,166,176,187, 190,193  C127,129,132,139, 172,179,182,184, 186,192 | K10176102<br>K14180103<br>K19149021        | (DD107SL241J50V)  " " B 0.001μF (DD104B102K50V)  " " FZ 0.01μF (RD871-1FZ-103Z63V)  Semiconductor Ceramic 25WV 0.047μF (UAT08X473K-L45AE)   | D205-208 D201-204 D210 D209 R202       | G2090209<br>G2090233<br>G2090136<br>G2090137                           | DIODE  LED BG4632K  " PY4632K  " TLG205  " TLR205  RESISTOR  Carbon film 1/4W TJ 470 |
| C196  C106,110,112,113, 115-117,128, 134,135,137,138, 140,144, 148-150, 156-158,162, 164,166,176,187, 190,193  C127,129,132,139, 172,179,182,184,         | K10176102<br>K14180103                     | (DD107SL241J50V)  " " B 0.001µF (DD104B102K50V)  " " FZ 0.01µF (RD871-1FZ-103Z63V)  Semiconductor Ceramic 25WV 0.047µF (UAT08X473K-L45AE) Polycarbonate 100WV 1µF                 | D205-208 D201-204 D210 D209  R202 R203 | G2090209<br>G2090233<br>G2090136<br>G2090137<br>J01245471<br>J01245561 | DIODE  LED BG4632K  " PY4632K  " TLG205  " TLR205  RESISTOR  Carbon film 1/4W TJ 470 |
| C196  C106,110,112,113, 115-117,128, 134,135,137,138, 140,144, 148-150, 156-158,162, 164,166,176,187, 190,193  C127,129,132,139, 172,179,182,184, 186,192 | K10176102  K14180103  K19149021  K54200001 | (DD107SL241J50V)  " " B 0.001µF (DD104B102K50V)  " " FZ 0.01µF (RD871-1FZ-103Z63V)  Semiconductor Ceramic 25WV 0.047µF (UAT08X473K-L45AE)  Polycarbonate 100WV 1µF (B32561A1105J) | D205-208 D201-204 D210 D209 R202       | G2090209<br>G2090233<br>G2090136<br>G2090137                           | DIODE  LED BG4632K  " PY4632K  " TLG205  " TLR205  RESISTOR  Carbon film 1/4W TJ 470 |
| C196  C106,110,112,113, 115-117,128, 134,135,137,138, 140,144, 148-150, 156-158,162, 164,166,176,187, 190,193  C127,129,132,139, 172,179,182,184, 186,192 | K10176102<br>K14180103<br>K19149021        | (DD107SL241J50V)  " " B 0.001µF (DD104B102K50V)  " " FZ 0.01µF (RD871-1FZ-103Z63V)  Semiconductor Ceramic 25WV 0.047µF (UAT08X473K-L45AE) Polycarbonate 100WV 1µF                 | D205-208 D201-204 D210 D209  R202 R203 | G2090209<br>G2090233<br>G2090136<br>G2090137<br>J01245471<br>J01245561 | DIODE  LED BG4632K  " PY4632K  " TLG205  " TLR205  RESISTOR  Carbon film 1/4W TJ 470 |

| F                                     | <del></del>                                      | I NI LIC                         | · · · · · · · · · · · · · · · · · · · |  | 1                                      |
|---------------------------------------|--|----------------------------------|---------------------------------------|--|--|
| P202 (with wire)                      | T9204521A  | PLUG                             | L301                                  | I 2020067  | INDUCTOR                               |
| r 202 (with wire)                     | 13204321A  |                                  | L301<br>L302,303                      | L2030067<br>L1190132                             | LAL04NA221K 220µH                      |
|                                       | <del> </del>                                     |                                  | 1502,303                              | L1190132   | LAL04NA221K 220µH                      |
|                                       | <u> </u>   | <del> </del>                     | <del> </del> -                        | ·  |  |
|                                       | <del>                                     </del> |                                  | <del> </del>                          | <del>                                     </del> | CONNECTOR                              |
|                                       |  | 7                                | J302                                  | P0090041   | 5048-03A                               |
|                                       | AF L   | INIT                             | J304,308,311,314                      | P0090042   | 5048-05A                               |
| Symbol No.                            | Part No.   | Description                      | J301,305,316                          | P0090051   | 5048-06A                               |
| PB-2443A                              | F0002443A  | Printed Circuit Board            | J303,306,307,310,                     | P0090053   | 5048-11A                               |
| · · · · · · · · · · · · · · · · · · · | C024430A   | PCB with Components              | 313                                   |  | 1                                      |
|                                       |  |                                  | J309,312,315                          | P0090038   | 5048-12A                               |
|                                       |  |                                  |                                       | FC   | R SERVICE MANUALS                      |
|                                       |  | IC                               |                                       |  | CONTACT:                               |
| Q302                                  | G1090164   | μРС2002Н                         | P301 (with wire)                      | Т920466 ВЛЕМ                                     | RON TECHNICAL SERVICE                  |
|                                       |  |                                  |                                       | 10.22  | 1                                      |
|                                       |  |                                  |                                       |  | www.mauritron.co.uk                    |
|                                       |  | TRANSISTOR                       |                                       |  | TEL: 01844 - 351694                    |
| Q303                                  | G3309451P  | 2SC945AP                         | ļ                                     |  | AX: 01844 - 352554                     |
|                                       | ļ  |                                  |                                       |  |  |
|                                       |  |                                  |                                       | SCAN/SQL   | · · · · · · · · · · · · · · · · · · ·  |
| <b>D</b> 201                          |  | DIODE                            | Symbol No.                            | Part No.   | Description                            |
| D301                                  | G2090200   | PIN 1SV80                        | PB-2448A                              | F0002448A  | Printed Circuit Board                  |
|                                       | <b>1</b>   |                                  |                                       | C024480A   | PCB with Components Model F            |
|                                       |  | 0.500.70.5                       |                                       | C024480B   | " Model A,X " Model B,C,D,E            |
| R306                                  | J02245010  | RESISTOR  Carbon film 1/4W SJ 1Ω |                                       | C024480C   | · · · · · · · · · · · · · · · · · · ·  |
| R304                                  | J02245479  | 4.7Ω                             | Q501                                  | G3107331P  | TRANSISTOR 2SA733AP or Q               |
| RSOT                                  | J02245101  | " " 100Ω                         | 2501                                  | /Q   | 23A733AF 01 Q                          |
| R305                                  | J10276221  | " Composition                    | Q502                                  | G3309451P  | 2SC945AP                               |
| 11200                                 | 3102.0221  | 1/2W GK 220Ω                     | Q302                                  | 033074311  | 25074374                               |
| R309                                  | J02245331  | " film 1/4W SJ 330Ω              |                                       |  |  |
| •                                     | J01245331  | " " TJ 330Ω                      |                                       |  | DIODE                                  |
| R308                                  | J02245222  | " " SJ 2.2kΩ                     | D501                                  | G2090027   | Si 1SS53                               |
| R311                                  | J02245332  | " " " 3.3kΩ                      |                                       |  |  |
| R303                                  | J02245103  | " " " 10kΩ                       |                                       |  |  |
| R312                                  | J01245153  | " " TJ 15kΩ                      |                                       |  | RESISTOR                               |
| R302                                  | J02245473  | " " " SJ 47kΩ                    | R504                                  | J02245331  | Carbon film 1/4W SJ 330Ω               |
| R301                                  | J02245104  | 100kΩ                            | R505                                  | J01245103  | " " " TJ 10kΩ                          |
|                                       |  |                                  | R501,502                              | J02245473  | " " SJ 47kΩ                            |
| ····                                  |  |                                  | R503                                  | J02245334  | " " " 330kΩ                            |
|                                       |  | CAPACITOR                        |                                       |  |  |
| C313                                  | K00175470  | Ceramic 50WV SL 47pF             |                                       |  |  |
| 0001 207 210                          | 77121717   | (DD104SL470J50V)                 |                                       |  | CAPACITOR                              |
| C301,307,310,<br>317-322              | K12171102  | " E 0.001μF                      | C501                                  | K23170008  | Monolithic Ceramic                     |
|                                       | K13179008  | (DD104E102P50V)<br>" " F 0.01µF  |                                       |  | 50WV 0.1μF                             |
|                                       | K131/9008  | " F 0.01μF<br>(DD106F103Z50V)    | C502                                  | K40129012  | (RPE110F104Z50) Electrolytic 16WV 10μF |
| C308,316                              | K19149025  | Semiconductor Ceramic            | C302                                  | K40129012  | (ECE-A1CK100)                          |
| 0300,510                              | 17147025   | 25WV 0.1μF                       |                                       |  | (ECE-ATCR100)                          |
| i                                     |  | (UAT13X104K-L46AE)               |                                       |  |  |
| C302                                  | K40179002  | Electrolytic 50WV 0.1µF          |                                       |  | SWITCH                                 |
|                                       |  | (ECE-A1HK0R1)                    | S501                                  | N6090028   | SSHP23-05                              |
| C312                                  | K40179001  | " " 1μF                          | S502-504                              | N6090029   | SSFYP22-07                             |
|                                       |  | (ECE-A1HK010)                    |                                       |  |  |
| C303                                  | K40109001  | " 10WV 100µF                     |                                       |  |  |
|                                       | l  | (10RE100)                        |                                       | -  | CONNECTOR                              |
| C314                                  | K40109007  | 220μF                            | J501                                  | P0090100   | 5049-12A                               |
|                                       |  | (10RE220)                        | P501 (with wire)                      | T9204531A  |  |
| C315                                  | K40129019  | " 16WV 1000μF                    | P501 ( " )                            | T9204532B  | EU Model                               |
|                                       |  | (16RC1000)                       |                                       |  |  |
|                                       |  | " 3300μF                         |                                       |  |  |
| C309                                  | K40120338  | · .                              |                                       |  |  |
| C309                                  | K40120338  | " " 3300μr (16RL3300)            |                                       |  | TP TERMINAL                            |
| C309                                  | K40120338  | · .                              |                                       | Q5000036   | TP TERMINAL<br>TP-G                    |

|                                 | TX U   | NIT             |                 |                                   |           | CRYST        |        |       |     |              |
|---------------------------------|--|-----------------|-----------------|-----------------------------------|-----------|--------------|--------|-------|-----|--------------|
| Symbol No.                      | Part No.   |                 | ription         | XF1001                            | H1102074  | XF-10        | .8LS   | 10.81 | 0MI | Iz           |
| PB-2440A                        | F0002440A  | Printed Circuit |                 |                                   |           |              |        |       |     |              |
|                                 | C024400A   | PCB with Com    | ponents Model F |                                   |           | RESIST       |        |       |     |              |
|                                 | C024400B   | "               | Model A,X       | R1021,1062,1072,                  | J02245560 | Carbo        | n film | 1/4W  | SJ  | 56Ω          |
|                                 | C024400C   | ,,              | Model B,C,D,E   | 1086,1122                         |           |              |        |       |     |              |
|                                 |  | IC              |                 | R1088                             | J01245560 | "            | **     |       |     | 56Ω          |
| Q1031                           | G1090068   | MC14011B        |                 | R1004,1032,1036,                  | J02245101 | "            | "      | **    | SJ  | $100\Omega$  |
| Q1032                           | G1090126   | MC14069UB       | -               | 1045,1067,1094,                   |           |              |        |       |     |              |
| Q1035                           | G1090053   | MC14081B        |                 | 1095,1120,1128,<br>1166,1169,1170 |           |              |        |       |     |              |
| Q1033<br>Q1044                  | G1090239   | TC5082P         |                 | 1,00,1107,1110                    |           |              |        |       |     |              |
| Q1036                           | G1090084   | μPC78L05        |                 | R1011,1044,1076                   | J02245221 | "            | .,,    |       | "   | 220Ω         |
| Q1014                           | G1090101   | μPC1037H        |                 | R1046,1176                        | J02245331 | "            | "      | "     | "   | 330Ω         |
| Q1014<br>Q1003                  | G1090493   | μPC1158H2       |                 | R1071                             | J02245471 | ,,           |        | ,,    | ••  | 470Ω         |
| Q1003                           | 01090493   | ді стізопі      |                 | R1125                             | J02245681 | "            | ,,     | "     | ••  | 0.089        |
|                                 |  |                 |                 | R1089                             | J02245821 | ",           | ,,     | .,    | "   | $820\Omega$  |
|                                 | <del>                                     </del> | TRANSISTOR      |                 | R1001,1013,1043,                  | J02245102 | ,,           | ,,     | .,    | "   | 1kΩ          |
| 01040                           | G3104960Y  | 2SA496Y         |                 | 1069,1084,1093                    |           |              |        |       |     |              |
| Q1040                           | G31043601  | 2SA733AQ        |                 | 1                                 | J02245122 | ,,           |        |       | **  | $1.2k\Omega$ |
| Q1015,1016,1021, 1022,1025,1043 | G310/331Q  | 23A / 33AQ      |                 | R1016.1022.1037.                  | J02245222 | "            | **     |       | ••  | $2.2k\Omega$ |
| 10,20,10,20,10,10               | ,  |                 |                 | 1061,1087,1106,                   |           |              | ı      |       |     |              |
| 01000 1011 1015                 | C2204600P  | 2SC460B         |                 | 1111,1121,1165                    |           |              | ,      |       |     |              |
| Q1008,1011,1017,                | G3304600B  |                 |                 | R1063,1090                        | J02245332 | "            |        |       | ,,  | 3.3kΩ        |
| Q1004-1007,                     | G3309451P  | 2SC945AP        |                 | R1083,1030                        | J02245472 | - "          | .,     | .,    | .,  |              |
| 1013,<br>1027-1030,             | 1  |                 |                 | 1157,1162,1177                    | 302273772 | "            |        |       |     |              |
| 1033,1034,1037,                 |  |                 |                 | R1178                             | J01245472 |              | .,     | "     | ŢJ  | 4.7kΩ        |
| 1039                            |  | 0.7610157       |                 | R1081-1083                        | J02245562 |              | -,,    | 1/4W  |     | 5.6kΩ        |
| Q1023                           | G3318150B  | 2SC1815BL       |                 | R1151                             | J01245682 |              |        | .,    |     | 6.8kΩ        |
| Q1001,1002,1041,<br>1042        | G3318150G  | 2SC1815GR       |                 | R1005.1008,1009,                  | J02245103 | ,,           |        | .,    |     | 10kΩ         |
| 1042                            |  |                 |                 | 1023,1025,1066,                   | 102243103 |              |        |       | -   | 20           |
| Q1038                           | G3090005   | MPS-A13         |                 | 1096,1097,1102,                   |           |              |        |       |     |              |
|                                 |  |                 |                 | 1104,1105,1108,                   | Ì         |              |        |       |     |              |
|                                 |  |                 |                 | 1126,1127,<br>1129-1131,          |           | İ            |        |       |     |              |
|                                 |  | FET             |                 | 1148,1154,                        |           |              |        |       |     |              |
| Q1012,1018                      | G4800730Y  | 3SK73Y          |                 | 1156,1171,1172                    |           |              |        |       |     |              |
|                                 |  | ,,,,            |                 |                                   | 700016100 |              |        |       |     | 12kΩ         |
|                                 |  |                 |                 | R1027                             | J02245123 | "            | - "    |       |     | 15kΩ         |
| <u></u>                         |  | DIODE           |                 | R1112                             | J02245153 |              |        |       |     |              |
| D1001,1002                      | G2001880F  | Ge              | 1S188FM         | R1010,1012,1028,                  | J02245223 | "            | "      | "     | "   | 22K34        |
| D1003,1004                      | G2015550   | Si              | 1S1555          | 1055,1060,1064,                   |           |              |        |       |     |              |
| D1018,1019                      | G2015880   | "               | 1S1588          | 1091,1107,1136,                   |           |              |        |       |     |              |
| D1007,1009,                     | G2090027   | "               | 1SS53           | 1137,1173                         | ļ         | <del> </del> |        |       |     | 271-0        |
| 1016-1017,                      |  |                 |                 | R1114                             | J02245273 |              |        | .,,   | "   |              |
| 1020-1027,<br>1029-1033,        |  |                 |                 | R1040                             | J02245333 | "            | .,     |       |     |              |
| 1036-1057,1059                  | 1  |                 |                 | R1039,1074,1075,                  | J02245473 | "            | "      | "     | "   | 47kΩ         |
| D1005                           | G2090180   | Varactor        | FC53-M5         | 1077-1080,<br>1098,1100,1101,     |           |              |        |       |     |              |
| D1058                           | G9090007   | Varistor        | MV12            | 1113,1152,1153,                   | ŀ         |              |        |       |     |              |
| D1006                           | G9090005   | "               | MV103           | 1155,1159,1160,                   |           |              |        |       |     |              |
| D1008                           | G2090188   | Zener           | HZ5C1           | 1163,1164,1167                    |           | ļ            |        |       |     |              |
|                                 | †  |                 |                 | R1038,1059                        | J02245563 | "            | "      |       |     | 56kΩ         |
|                                 |  | CRYSTAL         |                 | R1014,1015,1024,                  | J02245104 | "            | "      | "     | "   | 100kΩ        |
| X1001                           | H0102448   | HC-18/T3P       | 10.810MHz       | 1034,1065,1068, 1070,1073,1092,   |           |              |        |       |     |              |
| X1002                           | H0102511   | HC-18/U         | 10.8092MHz      | 1118,                             |           |              |        |       |     |              |
| X1003                           | H0100992   | HC-18/U         | 10.8115MHz      | 1142-1047,                        |           |              |        |       |     |              |
| X1004                           | H0100991   | HC-18/U         | 10.8085MHz      | 1149,1150,<br>1168                |           |              |        |       |     |              |
| X1005                           | H0101982   | HC-18/T         | 7.168MHz        |                                   |           |              |        |       |     |              |
| (1750Hz Tone)                   |  |                 |                 | R1140                             | J20249029 | Meta         | llic " |       |     | 130kΩ        |
| X1005                           | H0101983   | HC-18/T         | 7.372MHz        | R1003                             | J02245154 | Carb         | on "   | "     | SJ  |              |
| (1800Hz Tone)                   | 1.0101703  |                 |                 | R1026                             | J02245184 | ,,           | .,     |       | "   | 180kΩ        |
| (1000Hz Tolle)                  | <del>-</del>                                     |                 |                 | R1006,1019,1035,                  | J02245224 | "            | ••     | .,    | "   | 220kΩ        |
|                                 |  | -               |                 | 1119                              |           |              |        |       |     |              |
|                                 | <del></del>                                      | THERMISTOR      |                 | R1002,1007,1020,                  | J02245334 |              | ,,     | .,    | .,  | 330kΩ        |
| T111001                         | C0000001   | SDT250          | <u> </u>        | 1030,1115                         |           |              |        |       |     |              |
| TH1001                          | G9090001   | 3D1 23U         | <del> </del>    | R1029,1123                        | J02245474 | - "          | "      | .,    | .,  | 470kΩ        |
|                                 | +  | +               | _ <del>-</del>  | R1109,1135,1139                   | J02245105 | -,,          | ,,     |       |     | 1ΜΩ          |
|                                 |  | +               |                 | R1110,1138,1158                   | J02245155 | <del> </del> | .,     |       | ,,  | 1.5ΜΩ        |
| i                               | 1  |                 |                 | K1110,1136,1136                   | 302243133 |              |        |       |     |              |

|                                     | T          | POTENTIOMETER                 | C1122  | K70120006                        | " " 3.3"                     |
|-------------------------------------|------------|-------------------------------|--|----------------------------------|------------------------------|
| VR1006                              | J51745103  | H0651A013-10KB 10kΩ           | 1 ***  | 1.0120000                        | " " 3,3μ<br>(489D335X0016B1) |
| VR1002                              | J51745223  | H0651A015-22KB 22kΩ           | C1003,1005,1006,                                 | K40179002                        | Electrolytic 50WV 0.1µ       |
| VR1001,1008                         | J51745473  | H0651A017-47KB 47kΩ           | 1009,1013,1015,                                  |                                  | (ECE-A1HK0R1)                |
| VR1005,1009                         | J51745104  | H0651A019-100KB 100kΩ         | 1055,1119  |                                  |                              |
| VR1007                              | J51745474  | H0651A023-470KB 470kΩ         | C1011,   | K40179001                        | Electrolytic 50WV 1µF        |
|                                     |            |                               | 1016-1018,<br>1026,1027,                         |                                  | (ECE-A1HK010)                |
|                                     |            |                               | 1087,1089,1091,                                  |                                  |                              |
|                                     |            | CAPACITOR                     | 1096,1097,1117                                   |                                  |                              |
| C1029                               | K06172040  | Ceramic 50WV UJ 4pF           | C1014,1056                                       | K40149011                        | " 25WV 4.7μ                  |
| 01010 1000                          |            | (DD104UJ040J50V)              |  |                                  | (ECE-A1EK4R7)                |
| C1048,1060                          | K00173100  | " " SL 10pF                   | C1022  | K40129015                        | " 16WV 4.7μ                  |
| C1110                               | K00175150  | (DD104SL100D50V) " " 15pF     | 6101210221024                                    | V 40100010                       | (ECE-A1CK4R7)                |
| CITIO                               | K001/3130  | (DD104SL150J50V)              | C1012,1023,1024, 1032,1033,1054,                 | K40129012                        | " " 10μ1                     |
| C1043,1062,1063                     | K06175270  | " " UJ 27pF                   | 1085,1090,1102,                                  |                                  | (ECE-A1CK100)                |
| -10,1002,1003                       | 1001/32/0  | (DD104UJ270J50V)              | 1103,1108,1114                                   |                                  |                              |
| C1111                               | K00175330  | " " SL 33pF                   | C1052  | K40129013                        | ., 22µІ                      |
|                                     |            | (DD104SL330J50V)              |  | 12.02.25025                      | (ECE-A1CK220)                |
| C1004,1061                          | K00175470  | " " 47pF                      | C1053  | K40109010                        | " 10WV 47µI                  |
|                                     |            | (DD104SL470J50V)              | 1  |                                  | (ECE-A1AK470)                |
|                                     | K00175820  | " " 82pF                      | C1007  | K40109001                        | ·· · · 100µ                  |
|                                     |            | (DD104SL820J50V)              |  |                                  | (10RE100)                    |
| C1064                               | K06175151  | " " UJ 150pF                  |  |                                  |                              |
|                                     |            | (DD107UJ151J50V)              |  |                                  | TRIMMER CAPACITOR            |
| C1030,1031                          | K06175181  | " " 180pF                     | TC1002-1004                                      | K91000029                        | ECV-1ZW 20x53 20pF           |
| C1044,1045                          | K06175221  | (DD104UJ181J50V)              |  |                                  |                              |
| C1044,1043                          | KU01/3221  | " " 220pF<br>(DD109UJ221J50V) | 7.1002   | T 1 1 0 0 0 1 4                  | INDUCTOR                     |
| C1067                               | K00175221  | " " SL 220pF                  | L1002  | L1190014                         | FL4H-100K                    |
| 01007                               | ROOT/SEET  | (DD107SL221J50V)              | <del></del>                                      | -                                | TOANGEODMED                  |
| C1001,1002,1010,                    | K12171102  | " E 0.001µF                   | T1001  | L0021354                         | TRANSFORMER                  |
| 1028,1057,1074,                     |            | (DD104E102P50V)               | T1002,1003                                       | L0021354                         |                              |
| 1080-1082                           |            | ,                             |  | 20021103                         |                              |
| C1068                               | K10176152  | " 50WV B 0.0015μF             |  |                                  | RELAY                        |
|                                     |            | (DD104B152K50V)               | RL1001,1002                                      | M1190001                         | FBR211A009M                  |
| C1019,1070                          | K19149001  | Semiconductor Ceramic         |  |                                  |                              |
|                                     |            | 25WV 0.001μF                  |  |                                  | CONNECTOR                    |
|                                     |            | (UAT04X102K-L05AE)            | J1003  | P0090050                         | 5048-04A                     |
| C1020                               | K19149011  | " " 0.0068μF                  | J1005  | P0090042                         | 5048-05A                     |
| C1009 1031 1035                     | 1512170000 | (UAT05X682K-L05AE)            | J1011  | P0090051                         | 5048-06A                     |
| C1008,1021,1025,<br>1034,1042,1046. | K13179008  | Ceramic 50WV F 0.01µF         | J1007,1010                                       | P0090054                         | 5048-07A                     |
| 1047,1084,1088,                     |            | (DD106F103Z50V)               | J1004,1009                                       | P0090037                         | 5048-08A                     |
| 1094,<br>1104-1107,1120             |            |                               | J1008<br>J1001                                   | P0090072<br>P0090052             | 5048-09A<br>5048-10A         |
| C1100,1101,1115,                    | K19149013  | Semiconductor Ceramic         | J1001<br>J1006                                   | P0090032                         | 5048-12A                     |
| 1116                                | 111717013  | 25WV 0.01μF                   | J1002  | P0090039                         | 5048-13A                     |
|                                     |            | (UAT05X103K-L05AE)            |  | 20070039                         |                              |
| C1099                               | K19149017  | " " " 0.022μF                 | <del>                                     </del> | <del></del>                      |                              |
|                                     |            | (UAT06X223K-45AE)             |  | 1                                | FERRITE BEADS                |
| 21049,1051,1058,                    | K19149021  | " " 0.047μF                   | FB1001-1003                                      | L9190001                         | Ri 3x3x1                     |
| 1059,1066,1069,<br>1071,1072,1075,  |            | (UAT08X473K-L45AE)            |  |                                  |                              |
| 1077,1078,1092,                     |            |                               |  |                                  |                              |
| 1095,1113                           |            |                               |  |                                  |                              |
| C1098                               | K55209003  | Polypropylene 0.0047µF        |  | RX U                             |                              |
| 1121                                | V70167164  | (PRA4701F4700PF)              | Symbol No.                                       | Part No.                         | Description                  |
| 21121                               | K70167154  | Tantalum 35WV 0.15μF          | PB-2441A   | F0002441A                        | Printed Circuit Board        |
|                                     | K70140005  | (CS15E1VR15M) " 25WV 0.47µF   |  | C024410A                         | PCB with Components Model F  |
| 1093                                | ********** | 25 11 1 0.17 121              |  | C024410B                         | " Model A,B,C,D,             |
| 21093                               |            |                               |  | i                                |                              |
|                                     | K70140007  | (489D474X0025A1)              | <del></del>                                      |                                  | ıc                           |
| 21093                               | K70140007  | " " 1μF                       | O2034,2039                                       | G1090500                         | IC<br>AN6561                 |
|                                     | K70140007  |                               | Q2034,2039<br>Q2007                              | G1090500<br>G1090072             | AN6561                       |
| 21083                               |            | 1μF<br>(489D105X0025A1)       | Q2034,2039<br>Q2007<br>Q2010,2011,2013,          | G1090500<br>G1090072<br>G1090101 |                              |

| Q2035,2038,  |  | TO A MOIOTO D  |                     | D 2145 2106  | 102245101  | Control                                 | - 61                                   | 1 / 4311 6                 | 7 .   | 00-   |
|--|--|--|---------------------|--|--|---|--|----------------------------|---|---|
|  | G010G001P  | TRANSISTOR   |                     | R2145,2185   | J02245101  |   | n film                                 | 1/4W S                     |   |   |
| 2041-2044  | G3107331P  | 2SA733AP   |                     | R2008,2067,2081  | J02245151  | "                                       |  |                            |   | 50Ω   |
|  |  |  |                     | R2024,2051,2109  | J02245221  |   | . "                                    |                            |   | 220Ω  |
| Q2003,2015   | G3304600B  | 2SC460B  |                     | R2032,2049   | J02245471  | ,,                                      | "                                      |                            |   | 70Ω   |
| Q2004,2005,2020  | G3305350B  | 2SC535B  |                     | R2202  | J01245471  | "                                       | **                                     | 1/8W 1                     |   | 70Ω   |
| Q2006,2016,2019,   | G3309451P  | 2SC945AP   |                     | R2151,2186   | J02245681  | ,,                                      |  | 1/4W S                     | _   | 80Ω   |
| 2024,<br>2026-2028,<br>2032,2036,2037,<br>2040,2046-2048   |  |  |                     | R2011,2018,2037,<br>2075,2179,2138,<br>2095  | J02245102  | "                                       | ,,                                     | **                         | •• ]  | lkΩ   |
| Q2021-2023   | G3315830B  | 2SC1583B   |                     | R2123,2127   | J00215152  | "                                       | ,,                                     | 1/8W V                     | / <b>J</b> ]                                  | .5kΩ  |
| Q2033  | G3318150B  | 2SC1815BL  |                     | R2007,2036,2066,   | J02245152  | **                                      | **                                     | 1/8W S                     | 3J 1  | .5kΩ  |
| Q2008,2018,2025,<br>2029-2031  | G3318150G  | 2SC1815GR  |                     | 2080,2119  |  |   |  |                            |   | 21  |
| 2029-2031  |  |  |                     | R2001,2014,2026,<br>2039,2040,2052,<br>2056,2057,2059,<br>2060,2062,2085,  | J02245222  | "                                       | **                                     | "                          | "   | 2.2kΩ   |
|  |  | FET  |                     | 2092,2099,2117,<br>2146,2150   |  |   |  |                            |   |   |
| Q2002  | G3801680D  | 2SK168D  |                     |  |  |   |  |                            |   |   |
| Q2001,2009,2019  | G4800730Y  | 3SK73Y   |                     | R2028,2142, 2143   | J02245332  | "                                       | "                                      |                            |   | 3.3kΩ   |
|  |  |  |                     | R2003  | J02245392  | "                                       |  |                            |   | 3.9kΩ   |
| D2004,2005,2023,   | G2001880F  | DIODE<br>Ge  | 1S188FM             | R2041,2050,2115,<br>2165,2192,2199   | J02245472  | "                                       | ,,                                     | "                          | ., 4  | i.7kΩ   |
| 2024,2026,2027,<br>2029–2032   | G2001860F  | :  | 101001 111          | R2002,2023,2029,<br>2042,2043,2130,  | J02245562  | "                                       | ,,                                     | ,,                         | ,, 5  | 5.6kΩ   |
| D2025  | G2090118   | Schottky Barri   | ier 1SS97           | 2144,2153,2181   |  |   |  |                            |   |   |
| D2028  | G2015550   | Si   | 1S1555              | R2128  | J00215682  | "                                       | "                                      | 1/8W V                     | /J 6  | .8kΩ  |
| D2002,2003,  | G2090027   | **   | 1SS53               | R2136  | J02245822  | , ,,                                    | **                                     | 1/4W S                     | 3J 8  | 3.2kΩ   |
| 2009_2013,   |  | ı  |                     | R2031,2110,2135,   | J02245103  | "                                       | **                                     | ••                         | · ]   | 0kΩ   |
| 2033-2035,<br>2038-2040,   |  | ı  |                     | 2147,2162,2173,<br>2193  |  |   |  |                            |   |   |
| 2043-2049  |  |  |                     | R2111,2158,2161,<br>2177   | J02245153  | **                                      | "                                      | "                          | , ]   | 5kΩ   |
| D2001  | G2090180   | Varactor   | FC53M-5             |  | T00015150  |   |  | 1 /010/1                   | rr 1  | 151.0   |
|  |  |  |                     | R2126  | J00215153  |   | "                                      | 1/8W V                     |   |   |
|  |  |  |                     | R2004,2017,2022,   | J02245223  | "                                       | ,,                                     | 1/4W S                     | ∠ اد  | 22K12   |
|  |  | CRYSTAL  |                     | 2030,2045,2058,<br>2061,2090,2091,   |  |   |  |                            |   |   |
|  | H0102514   | HC-18/U3P  | 11.205MHz           | 2112,2118,2120,  |  |   |  |                            |   |   |
| X2001  | H0102513   | HC-18/U3P  | 11.265MHz           | 2149,2164,2166,<br>2167-2169,  |  |   |  |                            |   |   |
|  |  |  |                     | 2171,2172,2174,<br>2178,2184   |  |   |  |                            |   |   |
|  |  | THERMISTOR   | -                   |  | J00215223  | ,                                       | .,,                                    | 1/8W V                     | /T /  | 22kO  |
| TH2001   | G9090001   | SDT250   |                     | R2009,2016,2122,<br>2124   | 100213223  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |  | 1/011                      |   | LLRas   |
| 1112001  | 0,0,0001   |  |                     | R2064,2078   | J02245273  | "                                       | ,,                                     | 1/4W S                     | 3J 2  | 7kΩ   |
|  |  |  |                     |  |  |   |  |                            |   |   |
| • •  | - +  |  |                     | I KZUZ7.ZU90.ZIUS. I   | J02245473  | "                                       |  | <del>-</del>               | . 4   | 7kΩ   |
|  |  | CRYSTAL FILT   | rer                 | R2027,2096,2105,<br>2107,2132,2148,  | J02245473  | "                                       | "                                      | <del>-</del>               | . 4   | 17kΩ  |
| XF2001   | H1101980   | 108M15A  | rer                 | 2107,2132,2148,<br>2182,2194   |  |   |  | "                          |   |   |
|  | H1101980<br>H1102075   |  | TER                 | 2107,2132,2148,<br>2182,2194<br>R2201  | J01215823  |   | **                                     | <br>1/8W T                 | J 8   | 2kΩ   |
|  |  | 108M15A  | TER                 | 2107,2132,2148,<br>2182,2194<br>R2201<br>R2191   | J01215823<br>J00215104   | **                                      | "                                      | 1/8W T                     | J 8   | 2kΩ<br>.00kΩ  |
|  |  | 108M15A  | TER                 | 2107,2132,2148,<br>2182,2194<br>R2201<br>R2191<br>R2005,2015,2033,   | J01215823  |   | **                                     | <br>1/8W T                 | J 8   | 2kΩ<br>.00kΩ  |
|  |  | 108M15A  |                     | 2107,2132,2148,<br>2182,2194<br>R2201<br>R2191<br>R2005,2015,2033,<br>2063,2077,2089,<br>2106,2133,2140,   | J01215823<br>J00215104   | **                                      | "                                      | 1/8W T                     | J 8   | 2kΩ<br>.00kΩ  |
| XF2002   |  | 108M15A<br>XF-10.7LW   |                     | 2107,2132,2148,<br>2182,2194  R2201  R2191  R2005,2015,2033,<br>2063,2077,2089,<br>2106,2133,2140,<br>2141,2195,   | J01215823<br>J00215104   | **                                      | "                                      | 1/8W T                     | J 8   | 2kΩ<br>.00kΩ  |
| XF2002<br>CF2004   | H1102075   | 108M15A<br>XF-10.7LW   |                     | 2107,2132,2148,<br>2182,2194  R2201  R2191  R2005,2015,2033,<br>2063,2077,2089,<br>2106,2133,2140,<br>2141,2195,<br>2198   | J01215823<br>J00215104<br>J02245104  | " "                                     |  | 1/8W T<br>1/8W V<br>1/4W S | TJ 8  | 32kΩ<br>.00kΩ<br>.00kΩ  |
| XF2002  CF2004  CF2003   | H1102075   | 108M15A<br>XF-10.7LW<br>CERAMIC FILT<br>LF-B20   |                     | R2201 R2191 R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198 R2035,2044,2065,  | J01215823<br>J00215104   | **                                      | "                                      | 1/8W T<br>1/8W V<br>1/4W S | TJ 8  | 2kΩ<br>.00kΩ  |
| XF2002  CF2004  CF2003   | H1102075<br>H3900071<br>H3900040                             | 108M15A<br>XF-10.7LW<br>CERAMIC FILT<br>LF-B20<br>LF-C2A   |                     | 2107,2132,2148,<br>2182,2194  R2201  R2191  R2005,2015,2033,<br>2063,2077,2089,<br>2106,2133,2140,<br>2141,2195,<br>2198   | J01215823<br>J00215104<br>J02245104  | " "                                     |  | 1/8W T<br>1/8W V<br>1/4W S | "J 8  | 32kΩ<br>.00kΩ<br>.00kΩ<br>.00kΩ   |
| XF2002  CF2004  CF2003   | H1102075<br>H3900071<br>H3900040                             | 108M15A<br>XF-10.7LW<br>CERAMIC FILT<br>LF-B20<br>LF-C2A   |                     | R2201 R2191 R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198 R2035,2044,2065, 2097,2108,2116,  | J01215823<br>J00215104<br>J02245104  | " "                                     |  | 1/8W T<br>1/8W V<br>1/4W S | " 2<br>" 2                                    | 32kΩ<br>.00kΩ<br>.00kΩ<br>.00kΩ<br>.220kΩ                                     |
| XF2002  CF2004  CF2003   | H1102075<br>H3900071<br>H3900040                             | 108M15A<br>XF-10.7LW<br>CERAMIC FILT<br>LF-B20<br>LF-C2A<br>LF-H15S                                    | CRIMINATOR          | R2201 R2191 R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198 R2035,2044,2065, 2097,2108,2116, 2139   | J01215823<br>J00215104<br>J02245104<br>J02245224   | " "                                     | " " " " " " " " " " " " " " " " " " "  | 1/8W T<br>1/8W V<br>1/4W S | " 2<br>" 2                                    | 32kΩ<br>.00kΩ<br>.00kΩ<br>.00kΩ   |
| XF2002  CF2004  CF2003  CF2001   | H1102075<br>H3900071<br>H3900040                             | 108M15A<br>XF-10.7LW<br>CERAMIC FILT<br>LF-B20<br>LF-C2A<br>LF-H15S                                    | CRIMINATOR          | 2107,2132,2148, 2182,2194  R2201  R2191  R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198  R2035,2044,2065, 2097,2108,2116, 2139  R2048,2170   | J01215823<br>J00215104<br>J02245104<br>J02245224<br>J02245224  | "                                       | ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, | 1/8W T<br>1/8W V<br>1/4W S | " 2<br>" 2                                    | 32kΩ<br>.00kΩ<br>.00kΩ<br>.00kΩ<br>.220kΩ                                     |
| CF2004<br>CF2003<br>CF2001   | H1102075 H3900071 H3900040 H3900204                          | 108M15A<br>XF-10.7LW<br>CERAMIC FILT<br>LF-B20<br>LF-C2A<br>LF-H15S                                    | CRIMINATOR          | R2201 R2191 R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198 R2035,2044,2065, 2097,2108,2116, 2139 R2048,2170 R2113,2131,2175,   | J01215823<br>J00215104<br>J02245104<br>J02245224<br>J02245224  | "                                       | ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, | 1/8W T<br>1/8W V<br>1/4W S | 7J 8<br>7J 1<br>BJ 1                          | 32kΩ<br>.00kΩ<br>.00kΩ<br>.00kΩ<br>.220kΩ                                     |
| CF2004<br>CF2003<br>CF2001   | H1102075 H3900071 H3900040 H3900204                          | 108M15A<br>XF-10.7LW<br>CERAMIC FILT<br>LF-B20<br>LF-C2A<br>LF-H15S                                    | CRIMINATOR          | R2201 R2191 R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198 R2035,2044,2065, 2097,2108,2116, 2139 R2048,2170 R2113,2131,2175, 2176  | J01215823<br>J00215104<br>J02245104<br>J02245224<br>J02245224<br>J02245274<br>J02245334              | "                                       | ,,<br>,,                               | 1/8W T<br>1/8W V<br>1/4W S | 7J 8<br>7J 1<br>8J 1                          | 32kΩ<br>00kΩ<br>00kΩ<br>220kΩ<br>270kΩ<br>330kΩ                               |
| CF2004<br>CF2003<br>CF2001<br>CD2001   | H1102075 H3900071 H3900040 H3900204                          | 108M15A XF-10.7LW  CERAMIC FILT LF-B20 LF-C2A LF-H15S  CERAMIC DISC SFD455S4/45                        | CRIMINATOR          | R2201 R2191 R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198 R2035,2044,2065, 2097,2108,2116, 2139 R2048,2170 R2113,2131,2175, 2176 R2114,2163   | J01215823<br>J00215104<br>J02245104<br>J02245224<br>J02245224<br>J02245274<br>J02245334              | "                                       | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 1/8W T<br>1/8W V<br>1/4W S | 7J 8<br>7J 1<br>8J 1                          | 32kΩ<br>00kΩ<br>00kΩ<br>220kΩ<br>270kΩ<br>330kΩ                               |
| CF2004<br>CF2003<br>CF2001<br>CD2001 F   | H3900071<br>H3900040<br>H3900204<br>H7900040/60              | 108M15A XF-10.7LW  CERAMIC FILT LF-B20 LF-C2A LF-H15S  CERAMIC DISC SFD455S4/45                        | CRIMINATOR<br>5DW-8 | R2201 R2191 R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198 R2035,2044,2065, 2097,2108,2116, 2139 R2048,2170 R2113,2131,2175, 2176 R2114,2163   | J01215823<br>J00215104<br>J02245104<br>J02245224<br>J02245224<br>J02245274<br>J02245334              | "                                       | " " " " " " " " " " " " " " " " " " "  | 1/8W T<br>1/8W V<br>1/4W S | 7J 8<br>7J 1<br>8J 1                          | 32kΩ<br>00kΩ<br>00kΩ<br>220kΩ<br>270kΩ<br>330kΩ                               |
| CF2004 CF2003 CF2001  CD2001  R2010,2012,2013, 2020,2025,2068, 2070,2076,2082,   | H3900071<br>H3900040<br>H3900204<br>H7900040/60              | 108M15A XF-10.7LW  CERAMIC FILT LF-B20 LF-C2A LF-H15S  CERAMIC DISC SFD455S4/45                        | CRIMINATOR<br>5DW-8 | R2201 R2191 R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198 R2035,2044,2065, 2097,2108,2116, 2139 R2048,2170 R2113,2131,2175, 2176 R2114,2163   | J01215823<br>J00215104<br>J02245104<br>J02245224<br>J02245274<br>J02245334<br>J02245474<br>J02245105 | " " " " POTEN                           | " " " " " " " " " " " " " " " " " " "  | 1/8W T<br>1/8W V<br>1/4W S | 7J 8 7J 1 6J 1 6J 1 73 1 74 7 7 1             | 22kΩ<br>.00kΩ<br>.00kΩ<br>.00kΩ<br>.220kΩ<br>.270kΩ<br>.330kΩ<br>.70kΩ<br>.MΩ |
| CF2004<br>CF2003<br>CF2001<br>CD2001 F   | H3900071<br>H3900040<br>H3900204<br>H7900040/60              | 108M15A XF-10.7LW  CERAMIC FILT LF-B20 LF-C2A LF-H15S  CERAMIC DISC SFD455S4/45                        | CRIMINATOR<br>5DW-8 | 2107,2132,2148, 2182,2194  R2201  R2191  R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198  R2035,2044,2065, 2097,2108,2116, 2139  R2048,2170  R2113,2131,2175, 2176  R2114,2163  R2157                               | J01215823<br>J00215104<br>J02245104<br>J02245224<br>J02245224<br>J02245274<br>J02245334              | " " " " POTEN H065                      | " " " " " " TIOME                      | 1/8W T<br>1/8W V<br>1/4W S | 7J 8 7/J 1 8J 1 8J 1 83 1 83 1 84 1 84 1 84 1 | 32kΩ<br>00kΩ<br>00kΩ<br>220kΩ<br>270kΩ<br>330kΩ                               |
| CF2004<br>CF2003<br>CF2001<br>CF2001<br>CD2001 F<br>R2010,2012,2013,<br>2020,2025,2068,<br>2070,2076,2082,<br>2083,2087,2088,<br>2093,2094<br>R2038,2046,2098, | H3900071<br>H3900040<br>H3900204<br>H7900040/60              | 108M15A XF-10.7LW  CERAMIC FILT LF-B20 LF-C2A LF-H15S  CERAMIC DISC SFD455S4/45                        | CRIMINATOR<br>5DW-8 | R2201 R2191 R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198 R2035,2044,2065, 2097,2108,2116, 2139 R2048,2170 R2113,2131,2175, 2176 R2114,2163   | J01215823<br>J00215104<br>J02245104<br>J02245224<br>J02245224<br>J02245334<br>J02245474<br>J02245105 | " " " " POTEN H065                      | " " " " " TIOME                        | 1/8W T<br>1/8W V<br>1/4W S | 7J 8 7/J 1 8J 1 8J 1 83 1 83 1 84 1 84 1 84 1 | 22kΩ<br>.00kΩ<br>.00kΩ<br>.220kΩ<br>.270kΩ<br>.330kΩ<br>.70kΩ<br>7kΩB         |
| CF2004 CF2003 CF2001  CD2001  R2010,2012,2013, 2020,2025,2068, 2070,2076,2082, 2083,2087,2088, 2093,2094   | H3900071<br>H3900040<br>H3900204<br>H7900040/60<br>J02245560 | 108M15A XF-10.7LW  CERAMIC FILT LF-B20 LF-C2A LF-H15S  CERAMIC DISC SFD455S4/45:  RESISTOR Carbon film | ERIMINATOR<br>SDW-8 | 2107,2132,2148, 2182,2194  R2201  R2191  R2005,2015,2033, 2063,2077,2089, 2106,2133,2140, 2141,2195, 2198  R2035,2044,2065, 2097,2108,2116, 2139  R2048,2170  R2113,2131,2175, 2176  R2114,2163  R2157  VR2001,2002, 2004,2005,2007, | J01215823<br>J00215104<br>J02245104<br>J02245224<br>J02245224<br>J02245334<br>J02245474<br>J02245105 | " " " " " " " " " H065                  | " " " " " TIOME                        | 1/8W T<br>1/8W V<br>1/4W S | 7J 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1      | 22kΩ<br>.00kΩ<br>.00kΩ<br>.220kΩ<br>.270kΩ<br>.330kΩ<br>.70kΩ<br>7kΩB         |

| 62016                              | E00122020  | CAPACITOR 50WW SL 2-E                   | C2099,2141                            | K70167104            | Tantalum 35WV                   | 0.1µF        |
|------------------------------------|------------|---|---------------------------------------|----------------------|---------------------------------|--------------|
| C2016                              | K00172020  | Ceramic 50WV SL 2pF<br>(DD104SL020C50V) | C2144                                 | K70120002            | (CS15E1V0R1M) " 16WV            | 10μF         |
| C2081                              | K02179003  | " " СН 2pF                              | 60145 0154                            | ***********          | (489D106X0016C1)                |              |
| C2017                              | K00172050  | (DD104CK020C50V) " " SL 5pF             | C2145,2154                            | K40179002            | Electrolytic 50WV (ECE-A1HK0R1) | 0.1µF        |
|                                    |            | (DD104\$L050C50V)                       | C2035,2036,2076,<br>2093,2098,2102,   | K40179001            | " " "                           | 1 <b>μ</b> F |
| C2002,2049,2112,<br>2126           | K00173100  | " " 10pF<br>(DD104SL100D50V)            | 2116,2122,2128,<br>2133,2155          |                      | (ECE-A1HK010)                   |              |
| C2063                              | K00175150  | " " 15pF                                |                                       |                      |                                 |              |
| C2010                              | K06175180  | (DD104SL150J50V) " " UJ 18pF            | C2132,2144                            | K40129015            | " 16WV<br>(ECE-A1CK4R7)         | 4.7μF        |
|                                    |            | (DD104UJ180J50V)                        | C2033,2040,2072,<br>2103,2119,2127,   | K40129012            | " "                             | 10μF         |
| C2059,2086                         | K00175270  | " " SL 27pF<br>(DD104SL270J50V)         | 2130,2143,2150,<br>2151,2157          |                      | (ECE-A1CK100)                   |              |
| C2003                              | K00175470  | " " 47pF                                |                                       |                      |                                 |              |
| C2068                              | K00175101  | (DD104SL470J50V) " " 100pF              | C2158                                 | K40109002            | " 10WV (10RE47)                 | 47μF         |
| C2008                              | K001/3101  | (DD105SL101J50V)                        |                                       |                      | (TORE47)                        |              |
| C2012,2013                         | K06175221  | " " UJ 220pF                            |                                       |                      |                                 |              |
|                                    |            | (DD109UJ221J50V)                        |                                       |                      | INDUCTOR                        |              |
| C2026                              | K00175221  | " " SL 220pF                            | L2001                                 | L1190029             | FL5H-470K                       | 47µH         |
|                                    |            | (DD107SL221J50V)                        | L2010                                 | L1190016             | FL5H-101K                       | 100µH        |
| C2069,2079,<br>2139                | K00175331  | " " 330pF                               | L2007<br>L2002.2003                   | L1190038             | FL5H-271K                       | 270µH        |
|                                    | 200170019  | (DD107SL331J50V)                        |                                       | L1190040             | S4-1MH                          | 1mH<br>1mH   |
| C2082,2083                         | K06179018  | " " UJ 330pF<br>(DD110UJ331J50V)        | L2005,2006,2011                       | L1190090             | LAL04NA102K                     | Imn          |
| C2115                              | K10176471  | " " 470pF                               |                                       |                      |                                 | al a         |
|                                    |            | (DD104B471K50V)                         |                                       |                      | TRANSFORMER                     |              |
| C2008,2039,2053,                   | K12171102  | " Ε 0.001μF                             | T2001-2003                            | L0021161             |                                 |              |
| 2062,2078,2097,<br>2104,2124,2149  |            | (DD104E102P50V)                         | T2004,2009-2011                       | L0190094             |                                 |              |
| C2014,2058,2070,                   | K13179008  | " Γ 0.01μF                              | T2005                                 | L0021258             |                                 |              |
| 2084,2113,2121,                    |            | (DD106F103Z50V)                         | T2006,2014-2016                       | L0021162             | •                               |              |
| 2134<br>C2021,2024,2034,           | K19149001  | Semiconductor Ceramic                   | T2007,2008<br>T2012                   | L0020188<br>L0021257 |                                 |              |
| 2064,2101,2140                     | 113173001  | 25WV 0.001μF                            | 12012                                 | L0021237             |                                 |              |
|                                    |            | (UAT04X102K-L05AE)                      |                                       |                      | <u> </u>                        |              |
| C2004,2114                         | K19149005  | " 0.0022μF                              |                                       |                      | RELAY                           |              |
| 241.40                             | 7710140000 | (UAT04X222K-L05AE)                      | RL2001                                | M1190002             | FBR211AD012M                    |              |
| Č2140                              | K19149009  | " 0.0047μF<br>(UAT05X472K-L05AE)        |                                       |                      |                                 |              |
| C2100                              | K19149011  | " " 0.0068µF                            |                                       |                      | CONNECTOR                       |              |
|                                    |            | ·                                       | J2001-2003.                           | P0090041             | 5048-03A                        |              |
| C2022,2025,2046,                   | K19149013  | " 25WV 0.01μF                           | 2007,2008,2013                        | 10020041             | 30 10 0371                      |              |
| 2047,2074,2129,<br>2136-2138.      |            | (UATO5X103K-L05AE)                      | J2004                                 | P0090050             | 5048-04A                        |              |
| 2153,2156                          |            | . <u></u>                               | J2005,2009                            | P0090042             | 5048-05A                        |              |
| C2146,2147                         | K19149017  | 0.022μF                                 | J2010                                 | P0090051             | 5048-06A                        |              |
|                                    |            | (UAT06X223K-L45AE)                      | J2006                                 | P0090054             | 5048-07A                        |              |
| C2038                              | K19149019  | " 0.033μF                               | J2012                                 | P0090352             | 3022-03A                        |              |
| 22001,                             | V101/0021  | (UAT06X333K-L45AE)<br>" " 0.047μF       |                                       |                      |                                 | •            |
| 2001,<br>2005–2007,                | K19149021  | " 0.047μF<br>(UAT08X473K-L45AE)         | · · · · · · · · · · · · · · · · · · · |                      | PLUG                            |              |
| 2009,<br>2018–2020,                |            | (CN100N+13N L+3NL)                      | P2001 (with wire)                     | T9204522             | 1 604                           |              |
| 2023,                              |            |   |                                       | 1,720,1022           |                                 |              |
| 2027-2032,                         | E0D        | SERVICE MANULALS                        |                                       |                      |                                 |              |
| 2037,<br>2043–2045,                | FUH        | SERVICE MANUALS                         |                                       |                      | TP TERMINAL                     |              |
| 2048,<br>2050–2052,                |            | CONTACT:                                |                                       | Q5000036             | TP-G                            |              |
| 2054,2060,2061,                    |            | N TECHNICAL SERVICES                    |                                       | <u> </u>             |                                 |              |
| 2065-2067,<br>2071,2073,2075,      |            | w.mauritron.co.uk                       |                                       |                      | ECODITE DEADS                   |              |
| 2077,2080,2085,                    | TE         | _: 01844 - 351 <b>69</b> 4              | FB2001                                | L9190001             | FERRITE BEADS Ri 3x3x1          |              |
| 2087,2089,2092,<br>2105-2111,      | FA         | K: 01844 - <b>352554</b>                | 1 B2001                               | E3130001             | KI JAJAI                        |              |
| 2117,2118,2120,                    |            |   |                                       |                      |                                 |              |
| A . A . A . A . A . A . A . A      |            |   |                                       |                      | i                               |              |
| 2123,2131,2135,<br>2142,2148,2152, |            | ,                                       |                                       |                      |                                 |              |

| Symbol No.   Par No.   Description   3065-1498,3174   102245153     15kg     |                                       | CONTRO                                | LUNIT                                  | R3045,3056,                | J02245103   | Carbon film 1/4W SJ 10kΩ              |
|---|---------------------------------------|---------------------------------------|--|----------------------------|-------------|---------------------------------------|
| PB-2439B  | Symbol No                             |                                       |  | 3065-3068,3074             |             | ,                                     |
| C024390A   FCB with Components  |                                       |                                       | Printed Circuit Board                  | R3070                      | J02245153   | " " " 15kΩ                            |
|   | FD-2437D                              |                                       |  | R3001,3004,3006,           | J02245223   | " " 22kΩ                              |
| Color   |                                       | C02+3707                              |  | 3011,3024                  |             |                                       |
| Q3012   | <del> </del>                          |                                       |  | R3073                      | J01215223   | " " 1/8W TJ 22kΩ                      |
|   |                                       |                                       | ıc                                     | R3015-3017,                | J02245473   | 1/4W SJ 47kΩ                          |
| C3914   A3020   | 02012                                 | G1090027                              |  | 3046,3050,                 |             |                                       |
| G109031   |                                       |                                       |  |                            |             |                                       |
| Common  |                                       |                                       |  | 2002                       | J02245563   | 56kΩ                                  |
| Company   |                                       |                                       |  | R 3031 3034                |             | " " 82kΩ                              |
|   |                                       |                                       |  |                            |             | 1001.0                                |
| Compage   |                                       |                                       |  | 3042,3059                  |             |                                       |
| Common  |                                       |                                       |  | R3072                      | J01215104   | 1/8W TJ 100kΩ                         |
| Commons   |                                       |                                       |  |                            |             | 1/4W SJ 330kΩ                         |
| Q301   G1090318   |                                       |                                       |  | 3025-3028,3058             | 302210221   |                                       |
| \$\frac{1}{2}\frac{3}{2}\frac{3}{2}\frac{1}{2}       |                                       |                                       | L                                      |                            | 102245474   | ,, ,, ,, 470kΩ                        |
| Company   Com |                                       | L                                     | l '                                    |                            | l           |                                       |
|   |                                       |                                       |  |                            |             |                                       |
| Q3001   |                                       |                                       |  | R3029,3033,3038,<br>  3039 | 102243133   | 1.0/132                               |
| Compose   Composition   Com |                                       | +                                     |  |                            | 102245225   |                                       |
| Composition   |                                       | · · · · · · · · · · · · · · · · · · · | ,                                      |                            | 102245555   | 5.5.1142                              |
| Canal   | Q3004                                 | G1090405                              | μPD8279C-5                             | 3030,3037,3010             |             |                                       |
| Canal   |                                       |                                       |  |                            |             |                                       |
| Canal   |                                       |                                       |  |                            |             | THE OFFICE OF THE OFFI                |
|   |                                       |                                       |  |                            | 740000001   |                                       |
| Q3028   G3313830R   2SC1383R   RB3002   149900032   EXB-P88-104K   100Kx8     Q3029   G3320020L   2SC2002L       Q3006   G3408920Q   2SD892Q       D10DE  |                                       | G3309451P                             | 2SC945AP                               |                            | <del></del> |                                       |
| Q3028   Q33120020L   ZSC2002L   ZSC202L    | 3024                                  |                                       |  |                            |             |                                       |
| Q3006   G3408920Q   SD892Q  | Q3028                                 | G3313830R                             |  | RB3002                     | J40900032   | EXB-P88-104K 100KX8                   |
| DIODE   | Q3029                                 | G3320020L                             |  |                            |             |                                       |
| DIODE   | Q3006                                 | G3408920Q                             | 2SD892Q                                |                            |             |                                       |
| DIODE   Si   ISS53   CAPACITOR   CAPACITOR   Capacitor   Company   Compan |                                       |                                       |  |                            |             |                                       |
| D3001-3010, 3014-3017, 3019-3029, 3031,3033,3034   Si   |                                       |                                       |  | VR3001                     | J50714103   | V8K-1-1B 10kΩ                         |
| 3014-3017, 3019-3029, 3013-3033,3034   Schottky Barrier 1SS97   C3006,3007   K00179007   Ceramic   50WV SL 30pf (DD104SL300150V)  |                                       |                                       | DIODE                                  |                            |             |                                       |
| CAPACITOR   CAP | D3001-3010,                           | G2090027                              | Si 1SS53                               |                            |             |                                       |
| D3012,3013   G2090118   Schottky Barrier 1SS97   C3019,3020—3022   K00175101   (DD104SL300J50V)   | 3014-3017,                            |                                       |  |                            |             |                                       |
| D3012,3013   G2090118   Schottky Barrier   ISS97   C3019,3020-3022   K00175101   " " " 1005   D3032   G2090177   Zener   HZ3B2   C3004,3005,3009,   K12171102   " " E 0.001   (DD104SL30JSV)   D3030   G2090143   " HZ11B1   3029   CERAMIC RESONATOR   3010,3012,3013, 3010,3012,3013, 3010,3012,3013, 3010,3012,3013, 3024,3025,3027, 3033,0305,3039,   S14180103   " G3WV FZ 0.01   (RD871-1FZ-103Z63V)   (RD871-1FZ-103Z63V)   C3001   H7900110   CSA 4.00MT   C3045   K13179008   " S0WV F 0.01   (DD106F103Z50V)   C3045   K13179008   " S0WV F 0.01   (DD106F103Z50V)   C3045   K19149025   C3046   K19149025   C3046   K19149025   C3047   C3047   C3048   K19149025   C3047   C304 |                                       |                                       |  | C3006,3007                 | K00179007   | _ ·                                   |
| D3012,3013   G2090178   Senicity Barrier 1537   D3032   G2090173   Zener   HZ3B2   C3004,3005,3009, M   | 5051,5000,000                         |                                       |  |                            |             |                                       |
| D3032   G2090177   Zener   HZ3B2   C3004,3005,3009, B   C3009, B   C3090143   C3090218   C3090143   C3090143   C3090143   C3090143   C3090143   C3090143   C3090143   C3001 - 3003, B   C3001 - 3003, B   C3010,3012,3013, B   C3011,3014,3042   C3011,3014, | D3012,3013                            | G2090118                              | Schottky Barrier 1SS97                 | C3019,3020-3022            | K00175101   | " " 100pF                             |
| D3011   G2090218  |                                       | G2090177                              | Zener HZ3B2                            |                            |             | `                                     |
| D3030   G2090143   "   HZ11B1   3029   (DD104E102P50V)  |                                       | G2090218                              | " HZ9C1                                | C3004,3005,3009,           | K12171102   | 2                                     |
| Caramic resonator   Car |                                       | G2090143                              | " HZ11B1                               | 3029                       |             |                                       |
| X3001   |                                       |                                       |  |                            | K14180103   | 63WV FZ 0.01μF                        |
| X3001   H7900110   CSA 4.00MT   3033,3035,3039, 3041   C3045   K13179008   S0WV F 0.01  |                                       |                                       |  |                            |             | (RD871-1FZ-103Z63V)                   |
| X3001   |                                       |                                       | CERAMIC RESONATOR                      |                            |             |                                       |
| C3045   K13179008   " S0WV F 0.01 (DD106F103Z50V)   | X3001                                 | H7900110                              |  |                            |             |                                       |
| BUZZER   C3023,3026, 3030-3032,3043   CD111FZ473Z50V  | X3001                                 | 111700110                             |  | C3045                      | K13179008   | " 50WV F 0.01μF                       |
| BZ3001   M4290003   PZS-22A   C3030-3032,3043   CD111FZ473Z50V)   |                                       |                                       |  | 1                          |             | \                                     |
| BZ3001   M4290003   PZS-22A   3030-3032,3043   (DD111FZ473Z50V)   |                                       | <u> </u>                              | RUZZER                                 |                            | K14170473   | " FZ 0.047μF                          |
| C3008   K19149025   Semiconductor Ceramic   25WV   0.1μ   | P73001                                | M4290003                              |  | 3030-3032,3043             |             | (DD111FZ473Z50V)                      |
| BAT3001   Q9000106   CR2025   C3037   K50177102   Mylar   50WV   0.001 μ   (50F2U102M)  | D23001                                | 1114270003                            |  | C3008                      | K19149025   | Semiconductor Ceramic                 |
| BAT3001   Q9000106   CR2025   C3037   K50177102   Mylar   50WV   0.001μ   (50F2U102M)   C3044   K70167104   Tantalum   35WV   0.1μ   (CS15E1V0R1M)   CS15E1V0R1M)   C3044   K40179010   Electrolytic   50WV   0.47   (CS15E1V0R1M)   C3028   C3040   C3044   C3044,3049,3061   J20336560   Metallic film   ZW   56Ω   C3040   |                                       |  | 1                          |             | 25WV 0.1μF                            |
| Resistor   C3037   K50177102   Mylar   S0WV   0.001μ   (S0F2U102M)   C3044   K70167104   Tantalum   35WV   0.1μ   (CS15E1V0R1M)   C3044   K40179010   Electrolytic   S0WV   0.47   (S0RER47)   C3044   K40149008   C3044    |                                       | ļ                                     | LITHIUM BATTERY                        | 1                          |             | (UAT13X104K-L46AE)                    |
| C3044   K70167104   Tantalum   35WV   0.1µ  | PAT2001                               | 09000106                              |  | C3037                      | K50177102   | Mylar 50WV 0.001µF                    |
| RESISTOR   Carbon Composition   C3028   K40179010   Electrolytic   50WV   0.47  | BA13001                               | Q7000100                              |  | 1                          |             | (50F2U102M)                           |
| RESISTOR         (CS15E1V0R1M)           R3062         J10276829         Carbon Composition 1/2W GK 8.2Ω         C3028         K40179010         Electrolytic 50WV 0.47         0.47           R3071         J20336560         Metallic film 2W 56Ω         C3040         K40149008         " 25WV 10μ           R3044,3049,3061         J02245271         Carbon " 1/4W SJ 270Ω         (25RE10)         (25RE10)           R3064         J02245122         " " " " 1.2kΩ         C3011,3034,3042         K40129004         " 16WV 10μ           R3012,3013,3023         J02245222         " " " 2.2kΩ         (16RE10)           R3002,3003,3047         J02245472         " " 4.7kΩ         C3038         K40179014         " 50WV 10μ   |                                       |                                       |  | C3044                      | K70167104   | Tantalum 35WV 0.1μF                   |
| R3062   J10276829   Carbon Composition   1/2W GK 8.2Ω   C3028   K40179010   Electrolytic   50WV   0.47  |                                       |                                       | PECISTOR                               | 1                          |             | (CS15E1V0R1M)                         |
| R3062   10276829   1/2W GK 8.2Ω   (50RER47)     R3071   | P2062                                 | 110276820                             |  | C3028                      | K40179010   | Electrolytic 50WV 0.47µF              |
| R3071   J20336560   Metallic film   2W   56Ω   C3040   K40149008   "   25WV   10μ   | K3002                                 | 3102/0029                             |  |                            |             | · •                                   |
| R3071   J20336560   Metalle Hill 2W   S042   C3000   (25RE10)   R3044,3049,3061   J02245271   Carbon "   1/4W SJ   270Ω   (25RE10)   R3064   J02245122   " " " " " 1.2kΩ   C3011,3034,3042   K40129004   " 16WV   10μ   R3012,3013,3023   J02245222   " " " " " 2.2kΩ   (16RE10)   R3002,3003,3047,   J02245472   " " " 4.7kΩ   C3038   K40179014   " 50WV   10μ   C30WV   10μ   C30WV   10μ   C30WV   10μ   C30WV   10μ   C30WV    | D2021                                 | 120226560                             |  | C3040                      | K40149008   | 1                                     |
| R3064 $J02245122$   |                                       |                                       |  | 1                          |             | · · · · · · · · · · · · · · · · · · · |
| R3064   J02245122   "   "   "   2.2kΩ   (16RE10)   R3012,3013,3023   J02245222   "   "   "   4.7kΩ   C3038   K40179014   "   50WV   10μ   |                                       |                                       |  | C3011 3034 3042            | K40129004   |                                       |
| R3012,3013,3025 J02245222 " " 4.7kΩ C3038 K40179014 " 50WV 10μ  |                                       | <del></del>                           |  | 03011,3037,3072            | 12.012.004  | '                                     |
| R3002,3003,3047, 302243472   " " " 477422   C5050   |                                       |                                       | 4.21-0                                 | C3038                      | K40179014   |                                       |
|   |                                       | 302245472                             | ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, | 23030                      | 18.017,7014 | 1                                     |
| R3005,3022,3043 J02245103 " " " 10kΩ  | · · · · · · · · · · · · · · · · · · · | 102245102                             | " " 10k0                               | <del> </del>               |             |                                       |

| C3014  | K40089003  | Electrolytic 6.3WV 47µF                       | D4032-4034   | G2090027                              | Si           | 1SS53                                 |
|--|--|---|--|---------------------------------------|--------------|---------------------------------------|
| 0001   | 1210005005                                       | (ECE-A0JK470)                                 | D4031  | G2090107                              | Varactor     | 15353<br>1T25                         |
|  | <del>                                     </del> | (202.1011.10)                                 | D4006  | G2090180                              | "            | FC53M-5                               |
|  |  |   | D4007  | G2090041                              | Varistor     | MV103                                 |
|  |  | TRANSFORMER                                   | D4008  | G2090188                              | Zener        | HZ5C1                                 |
| T3001  | L3030101   | Thanks onlines                                | D4000  | G2090188                              | Zener        | HZ3CI                                 |
|  | 22000101   |   |  |                                       |              |                                       |
|  |  |   | - <del> </del>   | · · · · · · · · · · · · · · · · · · · | CRYSTAL      | <u></u>                               |
|  |  | CONNECTOR                                     | X4001  | H0100511                              | HC-18/U      | 10.70163411-                          |
| J3013  | P0090351   | 3094-02A                                      | X4001<br>X4002   | +                                     | HC-18/U      | 10.7015MHz                            |
| J3008  | P0090050   | 5048-04A                                      | X4002<br>X4003   | H0100512                              | HC-18/U      | 10.6985MHz<br>10.700MHz               |
| J3009  | P0090042   | 5048-05A                                      | X4003  | H0102510                              | HC-18/U      | 10.6992MHz                            |
| J3007  | P0090051   | 5048-06A                                      | X4004<br>X4005   | <del></del>                           | HC-18/U      | · · · · · · · · · · · · · · · · · · · |
| J3003,3011   | P0090054   | 5048-07A                                      | X4006  | H0102515                              | · · · · · ·  | 6.4713MHz                             |
| J3006,3012   | P0090037   | 5048-08A                                      | A4000  | H0102503                              | HC-18/U      | 4.5056MHz                             |
| J3002,3005   | P0090037   | 5048-09A                                      | <u> </u>   | +                                     | -            |                                       |
| J3004,3010   | P0090072   | 5048-12A                                      | <del> </del>   | <del> </del>                          |              | <u> </u>                              |
| J3004,5010   | P0090036   | <del>-</del>                                  | TUADOI   | G0000016                              | THERMISTOR   |                                       |
| 33001  | P0090036   | 5048-14A                                      | TH4001   | G9090016                              | 33D28        |                                       |
|  | 1  |   | <del> </del>   | <del> </del>                          | <del> </del> |                                       |
| <del></del>  | <del>                                     </del> | SMITCH  |  | <del> </del>                          | onvete: 5::  | TED                                   |
| S3001  | N6090037   | SWITCH  | VE4001   | 111102001                             | CRYSTAL FIL  | LIEK                                  |
| 22001  | 110030037  | SSS312  | XF4001   | H1102064                              | XF-10.7LS    |                                       |
| <del></del>  | <del>                                     </del> | TERMINAL POARD                                | <del> </del>   | +                                     |              |                                       |
| <del></del>  | O6000003   | TERMINAL BOARD 1L2PS (1-0-1)                  | <del>                                      </del>  | +                                     |              |                                       |
|  | Q6000003   | 11,275 (1-0-1)                                | D4066  | 700015100                             | RESISTOR     |                                       |
|  | -  |   | R4066  | J02245100                             | Carbon film  | 1/4W SJ 10Ω                           |
|  | ATELLITE M                                       | NUT (CRITICAL)                                | R4009,4021,4081,<br>4089,4093  | J02245560                             | " "          | " " 56Ω                               |
|  |  | NIT (OPTION)                                  |  |                                       | <del> </del> |                                       |
| Symbol No.   | Part No.   | Description                                   | R4031,4033,4048,<br>4055,4070,4074,  | J02245101                             | " "          | " " 100Ω                              |
| PB-2455A   | F0002455A  | Printed Circuit Board                         | 4083,4087,4104,  |                                       |              |                                       |
| ·  | C024550A   | PCB with Components                           | 4108,4117,4128   |                                       |              |                                       |
|  | -  |   |  |                                       |              |                                       |
|  |  |   | R4025,4041,4072,<br>4085   | J02245221                             | " "          | " " 220Ω                              |
| 0.010  | ļ  | IC  | -  |                                       |              |                                       |
| Q4019  | G1090296   | HD10551                                       | R4037,4069   | J02245331                             | 11 21        | 330Ω                                  |
| Q4026,4027   | G1090343   | MC14094BCP                                    | R4020,4077,4079,   | J02245471                             | " "          | " " 470Ω                              |
| Q4038  | G1090501   | SN7416N                                       | 4095,4103,4107   |                                       |              |                                       |
| Q4030  | G1090473   | TC5081AP                                      | R4115,4126   | J02245561                             | " "          | " " 560Ω                              |
| Q4029  | G1090239   | TC5082P                                       | R4008,4019,4026,   | J02245102                             | " "          | " " lkΩ                               |
| Q4028  | G1090247   | TC9122P                                       | 4040,4044,4102,<br>4114,4116   |                                       |              |                                       |
| Q4037  | G1090084   | μPC78L05                                      | 1111,7110  |                                       |              |                                       |
| Q4007,4020,4022  | G1090101   | μPC1037H                                      | <u> </u>   | J02245122                             | " "          | " " 1.2kΩ                             |
|  |  |   | R4080,4112,4120  | J02245152                             | " "          | " " 1.5kΩ                             |
|  |  |   |  |                                       |              |                                       |
|  |  | TRANSISTOR                                    | R4094  | J02245182                             | " "          | " " 1.8kΩ                             |
| Q4001,4002,4012,   | G3107331Q  | 2SA733AQ                                      | R4032,4057   | J02245222                             |              | " " 2.2kΩ                             |
| 4014,4015,4034   |  |   | R4111,4113   | J02245272                             | ., ,,        | " " 2.7kΩ                             |
| Q4003,4009,4010,   | G3304600B  | 2SC460B                                       | R4049,4056,4076,   | J02245332                             | ,, ,,        | " " 3.3kΩ                             |
| 4024   |  |   | 4082,4097-4099   |                                       |              |                                       |
| Q4018,4023,4025  | G3305350B  | 2SC535B                                       | R4067  | J02245392                             |              | " " 3.9kΩ                             |
| Q4006,4008,4032,   | G3309451P  | 2SC945AP                                      | R4028,4119,4122  | J02245472                             | " "          | " " 4.7kΩ                             |
| 4033,4035,4036,<br>4039  | [  |   | R4005-4007   | J02245562                             |              | " " 5.6kΩ                             |
| .007   | <u> </u>   |   | R4078  | J02245682                             | ,            | " " 6.8kΩ                             |
|  |  | ·   | R4054,4058,4062,   | J02245103                             |              | " " 10kΩ                              |
|  | T  | FET   | 4064,4110,4118,  |                                       |              |                                       |
|  |  |   | 4124,4125  |                                       |              |                                       |
| Q4031  | G3800301Y  | 2SK30AY                                       |  |                                       |              |                                       |
| <del></del>  | G3800301Y<br>G3801921G                           | 2SK30AY<br>2SK192AGR                          | R4038,4039,4042,   | J02245223                             | " "          | " " 22kΩ                              |
| Q4016  |  |   | 4043,4050,4052,  | J02245223                             | " "          | " " 22kΩ                              |
| Q4016  | G3801921G  | 2SK 192AGR                                    | 4043,4050,4052,<br>4053,4096,4100,   | J02245223                             | " "          | " " 22kΩ                              |
| Q4016  | G3801921G  | 2SK 192AGR                                    | 4043,4050,4052,  | J02245223                             | " "          | " " 22kΩ                              |
| Q4016<br>Q4017,4021  | G3801921G  | 2SK 192AGR<br>2SK 241 Y                       | 4043,4050,4052,<br>4053,4096,4100,   |                                       | " "          |                                       |
| Q4031<br>Q4016<br>Q4017,4021<br>D4018,4019<br>D4001-4004,      | G3801921G<br>G3802410Y                           | 2SK 192AGR<br>2SK 241 Y                       | 4043,4050,4052,<br>4053,4096,4100,<br>4106,4109  | J02245333                             |              | " " 33kΩ                              |
| Q4016<br>Q4017,4021<br>D4018,4019<br>D4001-4004,<br>4004-4017, | G3801921G<br>G3802410Y<br>G201588                | 2SK 192AGR<br>2SK 241 Y<br>DIODE<br>Si 1S1588 | 4043,4050,4052,<br>4053,4096,4100,<br>4106,4109<br>R4036<br>R4001-4004,<br>4023,4024,4035, |                                       | 11 11        | " " 33kΩ                              |
| Q4016<br>Q4017,4021<br>D4018,4019<br>D4001-4004,               | G3801921G<br>G3802410Y<br>G201588                | 2SK 192AGR<br>2SK 241 Y<br>DIODE<br>Si 1S1588 | 4043,4050,4052,<br>4053,4096,4100,<br>4106,4109<br>R4036<br>R4001-4004,                    | J02245333                             | 11 11        | " " 33kΩ                              |

|  |              |                                   | 04003                                 | 100175600            | Committee Committee Committee         |
|--|--------------|-----------------------------------|---------------------------------------|----------------------|---------------------------------------|
| R4034,4121                                       | J02245563    | Carbon film $1/4W$ SJ $56k\Omega$ | C4083                                 | K00175680            | Ceramic 50WV SL 68pF (DD104SL680J50V) |
| R4017,4018,4022,<br>4029,4051,4068,<br>4123,4127 | J02245104    | ,, ,, ,, 100kΩ                    | C4075                                 | K00175820            | " " 82pF                              |
|  | <u> </u>     | 1601-0                            | 04005                                 | V0C175101            | (DD104SL820J50V) " " UJ 100pF         |
| R4092  | J02245154    | 150kΩ                             | C4095                                 | K06175101            | (DD106UJ101J50V)                      |
| R4030  | J02245224    | 220kΩ                             | 04076 4007 4116                       | K00175101            | " " SL 100pF                          |
| R4075  | J02245334    | " " " 330kΩ                       | C4076,4097,4116,<br>4135              | K00173101            | (DD105SL101J50V)                      |
|  |              |                                   | C4070                                 | K00179015            | " " 110pF                             |
|  |              | POTENTIOMETER                     | C4010                                 | 1200117010           | (DD105SL111J50V)                      |
| VR4005   | J51745223    | H0651A015-22KB 22kΩB              | C4003,4004,4094                       | K06175151            | " " UJ 150pF                          |
| VR4004   | J51745104    | H0651A019-100KB 100kΩB            | , ,                                   |                      | (DD107UJ151J50V)                      |
|  |              |                                   | C4079,4143                            | K00175151            | " SL 150pF                            |
|  | _            |                                   |                                       |                      | (DD106SL151J50V)                      |
|  |              | CAPACITOR                         | C4028,4029,4033,                      | K06175181            | " " UJ 180pF                          |
| C4065,4104,4107                                  | K00172010    | Ceramic 50WV SL 1pF               | 4034                                  |                      | (DD107UJ181J50V)<br>" " SL 220pF      |
|  |              | (DD104SL010C50V)                  | C4145                                 | K00175221            | (DD107SL221J50V)                      |
| C4062  | K02172020    | " CH 2pF                          | C4072,4074                            | K00179020            | " " 240pF                             |
| C4027  | K06172040    | (DD104CH020C50V)                  | C4072,4074                            | K001/3020            | (DD107SL241J50V)                      |
| C4027  | K00 1/2040   | (DD104UJ040J50V)                  | C4026,4044                            | K12171102            | " E 0.001μF                           |
| C4053,4054                                       | K05173060    | " RH 6pF                          | 1                                     |                      | (DD104E102P50V)                       |
| 27000,700  |              | (DD104RH060D50V)                  | C4022,4031,4035,                      | K14180103            | " FZ 0.01μF                           |
| C4057  | K06173060    | " " UJ 6pF                        | 4037,4038,4045,<br>4058,4061,4063,    |                      | (RD871-1FZ-103Z63V)                   |
|  |              | (DD104UJ060J50V)                  | 4064,                                 | FOR SEE              | RVICE MANUALS                         |
| C4078  | K00173060    | " SL 6pF                          | 4066-4068,<br>4081,4084,              | !                    | ONTACT:                               |
|  | 77.02.700.60 | (DD104SL060D50V)                  | 4080 <u>~</u> 4001                    |                      | ECHNICAL SERVICES                     |
|  | K02173060    | " " CH 6pF<br>(DD104CH060D50V)    | 4096,4098,4100 <b>M</b><br>4101,4108, |                      |                                       |
| C4093  | K00173070    | " " SL 7pF                        | 4110-4112,                            |                      | nauritron.co.uk                       |
| C4093  | K00173070    | (DD104SL070D50V)                  | 4114,4118,4120,<br>4121,4125,4133,    |                      | 1844 - 351694                         |
| C4055,4085                                       | K02173090    | " CH 9pF                          | 4136,4140                             | FAX: (               | 1844 - 352554                         |
| ŕ  |              | (DD104CH090D50V)                  | C4005,4017,4019,                      | K19149021            | Semiconductor Ceramic                 |
| C4056  | K02173100    | " " 10pF                          | 4020,4039,4042,<br>4046,4048,4049,    |                      | 50WV 0.047μF                          |
|  |              | (DD104CH100D50V)                  | 4077,4080,4082,                       |                      | (UAT08X473K-L45AE)                    |
| C4018  | K00173100    | " " SL 10pF                       | 4113,4127,4130,<br>4132,4138,4147     |                      |                                       |
| 04006  | K02175120    | (DD104SL100D50V) " CH 12pF        | C4129                                 | K54200001            | Polycarbonate 100WV 1µF               |
| C4086  | K021/3120    | (DD104CH120J50V)                  | (412)                                 | K5 1200001           | (B32561A1105J)                        |
| C4099,4103,4105                                  | K05175120    | " RH 12pF                         | C4013                                 | K40179002            | Electrolytic 50WV 0.1μF               |
| C1055,1105,1105                                  | 110011101    | (DD104RH120J50V)                  |                                       |                      | (ECE-A1HK0R1)                         |
| C4146  | K00175120    | " " SL 12pF                       | [                                     | K40179005            | " 0.47μF                              |
|  |              | (DD104SL120J50V)                  |                                       |                      | (ECE-A1HKR47)                         |
| C4109,4122                                       | K00175150    | " " " 15pF                        | C4015,4023,4025,<br>4141,4142         | K40179001            | " " 1μF<br>(ECE-A1HK010)              |
|  | 7706155      | (DD104SL150J50V) " " UJ 15pF      | C4014                                 | K40129015            | " 16WV 4.7μF                          |
| C4092  | K06175150    | (D104UJ150J50V)                   | C4014                                 | K40123013            | (ECE-A1CK4R7)                         |
| C4073  | K00175180    | " " 18pF                          | C4024,4030,4050,                      | K40129012            | " " 10μF                              |
|  |              | (DD104SL180J50V)                  | 4051,4060,4069,                       | -                    | (ECE-A1CK100)                         |
| C4087  | K02175180    | " CH 18pF                         | 4119,4126,4128,<br>4131,4134,4137     |                      |                                       |
|  |              | (DD104CH180J50V)                  |                                       |                      | 20.5                                  |
| C4001,4002,4032,                                 | K06175220    | " " 22pF                          | C4043,4139                            | K40129013            | " 22μF                                |
| 4059   |              | (DD104UJ220J50V)                  | 04140                                 | 77.401.00002         | (ECE-A1CK220)<br>" 10WV 330µF         |
| C4102  | K00175220    | " " SL 22pF<br>(DD104SL220J50V)   | C4148                                 | K40109003            | (10RE330)                             |
| C4106  | K00175330    | (DD104SE220130V)                  |                                       |                      | TRIMMER CAPACITOR                     |
| C4106  | K00113330    | (DD104SL330J50V)                  | TC4005,4006                           | K91000055            | ECV-1ZW 06x53N 6pF                    |
| C4088,4123,4124                                  | K02179013    | " " CH 33pF                       | TC4007                                | K91000028            | ECV-1ZW 10x53 10pF                    |
| , ·, ·, ·  |              | (DD104CH330J50V)                  | TC4001-4003                           | K91000029            | ECV-1ZW 20x53 20pF                    |
| C4016,4036,4115,                                 | K00175470    | SL 47pF                           |                                       |                      |                                       |
| 4117   |              | (DD104SL470J50V)                  |                                       |                      |                                       |
| C4052  | K06175470    | " " UJ 47pF                       | 1.4000                                | T 0100017            | E521GN-110053                         |
|  |              | (DD104UJ470J50V)                  | L4002                                 | L0190017             | E321GN-110033                         |
| C4071  | K00175560    | " " SL 56pF                       | L4004,4009                            | L1020680<br>L1190010 |                                       |
|  | <u> </u>     | (DD104SL560J50V)                  | L4003                                 | L1170010             | <u></u>                               |

| T 4010 4011              | T 1100070            |                          | Т              |               | CAPACITOR                             |
|--------------------------|----------------------|--------------------------|----------------|---------------|---------------------------------------|
| L4010,4011<br>L4008      | L1190070<br>L1190029 |                          | C703,704,706   | K13179008     | Ceramic 50WV F 0.01µF                 |
| L4008<br>L4006           | L1190029             |                          | 1 0,03,704,700 | K13179000     | (DD106F103Z50V)                       |
| L4006<br>L4007           | <del></del>          |                          | C702           | K40169002     | Electrolytic 35WV 470µF               |
| L4007<br>L4005,4012,4013 | L1190031<br>L1190016 |                          | - 102          | R40103002     | (35RE470)                             |
| L4003,4012,4013          | L1190016             |                          | C701           | K40169011     | " " 1000µF                            |
|                          | <del> </del>         | TT ALICEOPHED            | C707           | K42140004     | (35RE1000)<br>" 25WV 18000µF          |
| T4001                    | 10001064             | TRANSFORMER              | 1 6/07         | K42140004     | (25LP18000)                           |
| T4001                    | L0021354             |                          | 1              |               | (23LF18000)                           |
| T4002<br>T4003           | L0021164<br>L0020612 |                          | <del> </del>   |               |                                       |
| T4003                    | L0020782             | tms                      |                |               | FUSE HOLDER                           |
| T4004,4003               | L0020782             |                          | FH701          | P2000003      | F3265                                 |
| 14000-4000               | L0020623             |                          | 111701         | 12000003      | 1 3203                                |
|                          |                      |                          |                |               |                                       |
|                          |                      | CONNECTOR                |                |               | FUSE                                  |
| J4001,4004,4006          | P0090041             | 5048-03A                 | F701           | Q0000005      | 5A                                    |
| J4003                    | P0090042             | 5048-05A                 |                |               |                                       |
| J4002                    | P0090051             | 5048-06A                 |                |               |                                       |
| J4005                    | P0090072             | 5048-09A                 |                |               | TP TERMINAL                           |
|                          |                      |                          |                | Q5000036      | TP-G                                  |
|                          |                      |                          | -              |               |                                       |
|                          |                      | TP TERMINAL              |                |               |                                       |
| TP4001-4003              | Q5000036             | TP-G                     |                |               |                                       |
|                          |                      |                          |                |               |                                       |
| <del></del>              | <u> </u>             |                          |                | ACCES         | SORIES                                |
|                          | <u> </u>             |                          | Symbol No.     | Part No.      | Description                           |
|                          |                      |                          |                |               | AC CORD                               |
| Symbol No.               | PS UNI<br>Part No.   | T<br>Description         |                | T9013280      | DC-546-007 2 wire, 2 prong plug       |
| Symbol No.               | Fait No.             | TRANSISTOR               |                | T9013282      | UD-904-016 3 wire, 3 prong            |
| Q601                     | G3407170O            | 2SD717O                  | _              |               | UL plug                               |
|                          |                      |                          | _              | T9013284      | EC-407-007 3 wire, 2 prong<br>EU plug |
|                          | <del>  </del>        | DIODE                    |                | T9013283      | SC-411-001 3 wire, 3 prong            |
| D601                     | G2090022             | Si S5VB10                |                | 17020-00      | Australian plug                       |
| 2001                     | 020,0022             | 50,010                   |                | ****          |                                       |
|                          |                      |                          |                |               |                                       |
|                          |                      |                          |                |               | FUSE                                  |
|                          |                      |                          |                | Q0000003      | 2A 100V-117VAC                        |
|                          |                      |                          | •              | Q0000002      | 1A 200V-234VAC                        |
|                          | AVR                  |                          |                |               |                                       |
| Symbol No.               | Part No.             | Description              |                |               | PLUG                                  |
| PB-2463                  | F0002463             | Printed Circuit Board    |                | P0090034      | C-107                                 |
|                          | C024630A             | PCB with Components      | -              | P1090042      | QS-P4-FK                              |
|                          | +                    |                          | +              | 11070042      | 201111                                |
|                          |                      | TRANSISTOR               |                |               |                                       |
| Q701                     | G3304960Y            | 2SC496Y                  | 1              |               |                                       |
| Q702                     | G3309451P            | 2SC945AP                 |                |               |                                       |
|                          | 1                    |                          | 5              | OMHz MODU     | _E (OPTION)                           |
|                          |                      |                          |                | * * * 50MHz F | RF UNIT * * *                         |
|                          |                      | DIODE                    | Symbol No.     | Part No.      | Description                           |
| D701                     | G2090001             | Si 10D1                  | PB-2450        | F0002450      | Printed Circuit Board                 |
| D702                     | G2090113             | Zener HZ6B2              |                | C002450A      | PCB with Components                   |
| <del></del> .            |                      |                          |                |               |                                       |
|                          |                      | RESISTOR                 |                |               | FET                                   |
| R701                     | J01245471            | Carbon film 1/4W TJ 470Ω | Q5003,5012     | G3801250      | 2SK125                                |
| R702-705                 | J01245102            | " " " 1kΩ                | Q5004,5005     | G3802410Y     | 2SK 24 1 Y                            |
|                          |                      |                          | Q5002          | G4800510C     | 3SK51-03                              |
|                          |                      |                          | Q5006          | G4800730Y     | 3SK73Y                                |
|                          |                      | POTENTIOMETER            | Q5001          | G4800740L     | 3SK74L                                |
| VR701                    | J51745471            | H0651A005-470B 470ΩE     |                |               |                                       |

|                                     |                      | TRANSICTOR                       |  |  | CAPACITOR                          |
|-------------------------------------|----------------------|----------------------------------|--|--|------------------------------------|
| 05000                               | G3107331Q            | TRANSISTOR<br>2SA733AQ           | C5051                                      | K02182059  | Ceramic 50WV CH 0.5pF              |
| Q5009                               |                      |                                  | C3031                                      | KU2182039  | (RD870-1NPO-0R5C63V)               |
| Q5007                               | G3304600B            |                                  |  | Ceramic 50WV CH 1pF                              |                                    |
| Q5008                               | G3320530             | 2SC2053<br>2SD471L               | 5051                                       | K02177001  | (DD104CK010C50V)                   |
| Q5010,5011                          | G3404710L            | 25D4/1L                          | C5011,5016,5018,                           | K02179003  | " " 2pF                            |
|                                     |                      | _:::-                            | 5033                                       | ROZITIOOS  | (DD104CK020C50V)                   |
|                                     | G2000027             | Si 1SS53                         | C5039,5040                                 | K00173100  | " " SL 10pF                        |
| D5007,5008,5014,<br>5016,5018,5019, | G2090027             | Si 1SS53                         | C3037,3040                                 | ROOT/SIGO  | (DD104SL100D50V)                   |
| 5023                                |                      |                                  | C5015,5048,5054,                           | K00175220  | " " 22pF                           |
|                                     | 62000110             | 0.1-41-7-1-15507                 | 5071                                       | R00173220  | (DD104SL220J50V)                   |
| D5017                               | G2090118             | Schottky Barrier 1SS97 Si 1S1554 | C5024                                      | K00175330  |                                    |
| D5015                               | G2015540             | Si 1S1554<br>Varactor 1SV50      | C3024                                      | K00173330  | (DD104SL330J50V)                   |
| D5006                               | G2090023<br>G2090107 | " 1T25                           | C5076                                      | K00175390  | " " 39pF                           |
| D5002-5005,<br>5009-5003,5022       | G2090107             | " 1123                           | C3070                                      | ROUTIOSSO  | (DD104SL390J50V)                   |
| ,                                   | G9090006             | Varistor MV13                    | C5004,5060                                 | K00175470  | " " SL 47pF                        |
| D5001                               | G2090008             | Si V06B                          |  | 100170170  | (DD104SL470J50V)                   |
| D5021<br>D5020                      | G2090003<br>G2090218 | Zener HZ9C1                      | C5003,5012,5017,                           | K06179009  | " " UJ 56pF                        |
| D3020                               | G2090218             | Zeller HZ9C1                     | 5019                                       | 100117007  | (DD104UJ560J50V)                   |
|                                     |                      |                                  |  |  | (                                  |
|                                     |                      | THERMISTOR                       | C5027                                      | K06185820  | " " UJ 82pF                        |
| TH5001                              | G9090008             | 31D26                            |  |  | (RD871-1N750-820J63V)              |
| TH5001                              | G9090008             | 25D29                            | C5079                                      | K00175820  | " " SL 82pF                        |
| TH5002                              | G9090001             | SDT250                           |  |  | (DD104SL820J50V)                   |
| 1115005                             | 47070001             |                                  | C5050,5052,5059,                           | K00175101  | " " SL 100pF                       |
|                                     |                      | CRYSTAL FILTER                   | 5063,5066                                  |  | (DD105SL101J50V)                   |
| XF5001                              | H1102021             | 108M30B                          | C5044                                      | K06175121  | " UJ 120pF                         |
|                                     |                      |                                  |  |  | (DD107UJ121J50V)                   |
|                                     |                      | RESISTOR                         | C5104                                      | K10186221  | " 63WV" 220pF                      |
| R5053,5054                          | J01245229            | Carbon film 1/4W TJ 2.2Ω         |  | <u> </u>   | (RD870-1B221K63V)                  |
| R5019                               | J01245100            | 10Ω                              | C5045,5103                                 | K10176102  | " B 0.001μF                        |
| R5044                               | J02245220            | SJ 22Ω                           |  |  | (DD104B102K50V)                    |
| R5007,5018,5024,                    | J02245560            | 56Ω                              | C5025,5034,5038,                           | K12171102  | " 50WV E 0.001μF                   |
| R5016,5021,5023<br>5059             | J01245560            | TJ 56Ω                           | 5078,5081,5086,<br>5088,5099,5101,<br>5105 | :  | (DD104E102P50V)                    |
| R5005,5031,5022                     | J02245101            | SJ 100Ω                          | C5001,                                     | K13179008  | " F 0.01μF                         |
| R5013,5055                          | J02245151            | " " 150Ω                         | 5005-5010,                                 |  | (DD106F103Z50V)                    |
| R5042,5047                          | J02245221            | " " " 220Ω                       | 5014,5021,5023,<br>5026,                   |  |                                    |
| R5002,5060                          | J01215102            | 1/8W TJ 1kΩ                      | 5029~5032,                                 |  |                                    |
| R5006,5025,5040,                    | J02245102            | " " 1/4W SJ 1kΩ                  | 5035,5037,                                 | FOR SE   | RVICE MANUALS                      |
| 5043,5050,5051,                     |                      | ·                                | 5041-5043,<br>5055,5057,                   |  | ONTACT:                            |
| 5056,5062                           |                      |                                  | 5061,5062,5064,                            | MAGTICILA  | TECHNICAL SERVICES                 |
| R5046                               | J02245122            | " " " 1.2kΩ                      | 5065, N<br>5067-5069,                      | POTICION   | mauritran co uk                    |
|                                     | J01215152            | " " 1/8W TJ 1.5kΩ                | 5073-5075,                                 |  | mauritron.co.uk                    |
| R5020,5022                          | J02245222            | " " 1/4W SJ 2.2kΩ                | 5080,5082,5083,<br>5085,5087,5091,         |  | 01844 - 351694                     |
| R5064,5065                          | J02245682            | " " 6.8kΩ                        | 5092,                                      | FAX:   | 01844 - 352554                     |
|                                     |                      | (50MHz UNIT)                     | 5094-5098,                                 |  |                                    |
| R5041                               | J02245822            | " " 8.2kΩ                        | 5100,5102,5106                             | V40170013  | Electrolytic " 1µF                 |
| R5015,5038,5049                     | J02245103            | 10kΩ                             | C5022,5056                                 | K40179013  | Electrolytic " lμF (50RE1)         |
| R5037                               | J01245103            | " " TJ 10kΩ                      | C5072 5077 5000                            | K40129004  | " 16WV 10µF                        |
| R5036                               | J02245223            | " " SJ 22kΩ                      | C5072,5077,5090,<br>5093                   | A70127004  | (16RE10)                           |
| R5003,5011,5012,<br>5027,5028       | J02245473            | 47kΩ                             | C5089                                      | K40109001  | " 10WV 100µF                       |
| R5001,                              | J02245104            | 100kΩ                            |  |  | (10RE100)                          |
| 5008-5010,                          | 1                    |                                  | C5084                                      | K40129019  | " 16WV 1000µF                      |
| 5014,5029,5030,<br>5032-5034,       |                      |                                  |  |  | (16RC1000)                         |
| 5039,5057,5058                      |                      |                                  |  | <u> </u>   | TRIMMER CAPACITOR                  |
| R5035                               | J01245104            | ΤJ 100kΩ                         | TC5001                                     | K91000028  | ECV-1ZW 10x53 10pF                 |
| R5004                               | J02245225            | SJ 2.2MΩ                         | TC5002                                     | K91000017  | ECV-1ZW 70x32 70pF                 |
|                                     |                      |                                  |  | <del>                                     </del> | INDUCTOR 2 2.14                    |
|                                     |                      | POTENTIOMETER                    | L5001                                      | L1190009   | FL4H-3R3M 3.3µH                    |
| VR5003                              | J51745471            | H0651A005-470B 470Ω(B)           | L5002,5003                                 | L1190138   | LAL04NA100K 10μH<br>FL4H-100K 10μH |
| VR5004                              | J51745103            | H0651A013-10KB 10kΩ(B)           | L5004                                      | L1190014   | FL4H-100K 10μH                     |
| VR5006                              | J51745223            | H0651A015-22KB 22kΩ(B)           | L5005                                      | L1020680   |                                    |
| VR5005                              | J51745473            | H0651A017-47KB 47kΩ(B)           | L5006                                      | L0020340   |                                    |

| L5007                                 | L1020673     | T                          | Q6013                              | C2204C000              | 200455              |                       |
|---------------------------------------|--------------|----------------------------|------------------------------------|------------------------|---------------------|-----------------------|
| L5007                                 | L1020673     |                            | Q6013<br>Q6017                     | G3304600B<br>G3305350B | 2SC460B             |                       |
| L5009                                 | L0020724     |                            | Q6006,6007,                        | G3305350B<br>G3309451P | 2SC535B<br>2SC945AP |                       |
|                                       | 20020121     |                            | 6010-6012,                         | 033034311              | 23C943AP            |                       |
| <del></del>                           | <del> </del> |                            | 6014,6015,6018,                    |                        |                     |                       |
|                                       |              | TRANSFORMER                | 6020,6026,6029,                    |                        | 1                   |                       |
| T5001-5005,                           | L0020825     |                            | Q6022,6031                         | G3408920O              | 2SD892Q             | <del></del>           |
| 5011,5012-5015                        | }            |                            | (0.000,000)                        | 031003200              | 2520720             |                       |
| T5006,5007                            | L0021162     |                            |                                    |                        |                     |                       |
| T5008-5010                            | L0021161     |                            |                                    |                        | DIODE               |                       |
|                                       |              |                            | D6003.                             | G2090027               | Si                  | 1SS53                 |
|                                       |              |                            | 6005-6010,                         |                        |                     |                       |
|                                       |              | RELAY                      | 6012-6015,<br>6017,6018,6021,      |                        |                     |                       |
| RL5001                                | M1190006     | FBR221D012M                | 6023,6025                          |                        |                     |                       |
|                                       |              |                            | D6001,6002,6004                    | G2090023               | Varactor            | 1SV50                 |
|                                       |              |                            | D6011,6016                         | G2090003               | Si                  | V06B                  |
|                                       |              | CONNECTOR                  |                                    |                        |                     |                       |
| J5003                                 | P0090041     | 5048-03A                   |                                    |                        | THERMISTOR          |                       |
| J5004                                 | P0090042     | 5048-05A                   | TH6001                             | G9090008               | 31D26               |                       |
| J5001                                 | P0090051     | 5048-06A                   |                                    |                        |                     |                       |
| J5002                                 | P0090189     | 5049-11A                   |                                    |                        | CRYSTAL             |                       |
| J5005,5006                            | P1090255     | TMP-JA                     | X6001                              | H0102509               | HC-18/U-3P          | 27.4035MHz            |
| <u> </u>                              |              |                            | X6002                              | H0102338               | HC-18/U             | 6.4MHz                |
| · · · · · · · · · · · · · · · · · · · |              |                            |                                    |                        |                     |                       |
| <del></del>                           |              |                            |                                    |                        | RESISTOR            |                       |
| -                                     |              |                            | R6005,6007,6014,                   | J02245560              | Carbon film         | 1/4W SJ 56Ω           |
| <del></del>                           | 1            | DIA HEUT I A A             | 6018,6019,6024,<br>6051            |                        |                     |                       |
|                                       | γ            | PLL UNIT * * *             |                                    |                        |                     |                       |
| Symbol No.                            | Part No.     | Description                | R6003                              | J00245101              | " "                 | 1/8W VJ 100Ω          |
| DD 24424                              | F0000445     | PLL BOARD                  | R6012,6040,6045,                   | J02245101              | " "                 | 1/4W SJ 100Ω          |
| PB-2447A                              | F0002447A    | Printed Circuit Board      | 6050,6057                          | 1000                   |                     |                       |
|                                       | C024470A     | PCB with Components        | R6053,6086                         | J01245101              | <u>""</u>           | " TJ 100Ω             |
| <del>,</del>                          | C024470D     | (w/VCO Board) Model F      | R6083                              | J01215101              | " "                 | 1/8W " 100Ω           |
|                                       | C024470B     | " Model A                  | R6031                              | J02245221              | " "                 | 1/4W SJ 220Ω          |
|                                       |              | VCO BOARD                  | R6002,6085                         | J02245331              |                     | " " 330Ω<br>" TI 470Ω |
| PB-2442                               | F0002442     | Printed Circuit Board      | R6084                              | J01245471<br>J02245561 | "                   | " TJ 470Ω             |
| -20115                                | C024420A     | PCB with Q6001,D6001-6003, | R6020,6027                         | J02245561<br>J02245681 | " "                 | " SJ 560Ω             |
| i                                     | C02+720A     | R6001-6003,TH6001,C6001-   | R6025,6041,6044.                   | J02245681<br>J02245102 |                     | " " 680Ω<br>" " IkΩ   |
|                                       |              | 6004,6006–6013,TC6002,     | 6046,6049,6056                     | 302273102              | ., ,,               | 1K75                  |
|                                       |              | L6001-6006                 | R6039                              | J02245122              |                     | " " 1.2kΩ             |
| -                                     |              |                            | R6015,6029,6032,                   | J02245122<br>J02245222 | ., .,               | " " 1.2kΩ             |
|                                       |              | ·                          | 6033,6052                          | - 022   0222           |                     | 2.2832                |
|                                       |              | IC                         | R6021                              | J02245332              |                     | " " 3.3kΩ             |
| Q6021                                 | G1090342     | MB84024B                   | R6063                              | J02245392              | " "                 | " " 3.9kΩ             |
| Q6023                                 | G1090053     | MC14081B                   | R6009,6026,6036                    | J02245472              | " "                 | " " 4.7kΩ             |
| Q6025                                 | G1090343     | MC14094B                   | R6034                              | J01245472              | ,, ,,               | " TJ 4.7kΩ            |
| Q6028                                 | G1090312     | MC14504B                   | R6028,6043,6048,                   | J02245562              | " "                 | " SJ 5.6kΩ            |
| Q6024                                 | G1090298     | MC14560B                   | 6055                               |                        |                     | 21 210mg2             |
| Q6005                                 | G1090012     | SN16913P                   | R6060,6072                         | J02245103              |                     | " " 10kΩ              |
| Q6016                                 | G1090062     | SN76514N                   | R6035,6037,6038,                   | J02245223              | ,, ,,               | " " 22kΩ              |
| Q6009                                 | G1090473     | TC5081AP                   | 6042,6047,6054,                    |                        |                     |                       |
| Q6008                                 | G1090247     | TC9122P                    | 6061,6062,6066,<br>6073,6076,6080, |                        |                     |                       |
| Q6027                                 | G1090084     | μPC78L05                   | 6081                               |                        |                     |                       |
| Q6032                                 | G1090294     | μPC7808H                   | R6082                              | J01215223              | " "                 | 1/8W TJ 22kΩ          |
|                                       |              |                            | R6030                              | J02245273              | " "                 | 1/4W SJ 27kΩ          |
|                                       |              |                            | R6087                              | J01215393              | " "                 | 1/8W TJ 39kΩ          |
|                                       |              | FET                        | R6010,6011                         | J02245473              | " "                 | " " 47kΩ              |
| Q6002,6004                            | G3802410Y    | 2SK241Y                    | R6071                              | J02245563              | , ,                 | " " 56kΩ              |
| Q6001                                 | G3801921G    | 2SK192AGR                  | R6004,6008,6013,                   | J02245104              | " "                 | " " 100kΩ             |
| Q6003                                 | G4800730Y    | 3SK73Y                     | 6016,6023,6058,<br>6059,6064,6065, |                        |                     |                       |
|                                       |              |                            | 6067-6070,                         |                        |                     |                       |
|                                       |              |                            | 6074,6079                          |                        |                     |                       |
|                                       |              | TRANSISTOR                 | R6075                              | J01245104              |                     | " TJ 100kΩ            |
| Q6019                                 | G3105641     | 2SA564A                    | R6077,6078                         | J02245224              | ,, ,,               | " SJ 220kΩ            |

| R6022                              | J02245334  | Carbon film 1/4W SJ 330kΩ     | C6028-6031,              | K13179008            | Ceramic 50WV F             | 0.01µF         |
|------------------------------------|--|-------------------------------|--------------------------|----------------------|----------------------------|----------------|
| R6022<br>R6001                     | J02245334<br>J02245474                           | " " 470kΩ                     | 6045,6046,               | K13173000            | (DD106F103Z50V)            | 0.01μΓ         |
| KOUUI                              | 302243474  | Trokes                        | 6050-6052,<br>6067-6069, | }                    | (DD10011032301)            |                |
|                                    | <del>                                     </del> | BLOCK RESISTOR                | 6071,6073,6080,          |                      |                            |                |
| RB6001                             | J40900022  | DA-1                          | 6082,6084,6095,          |                      |                            |                |
| RB6002                             | J40900023  | DA-2                          | 6104,6106-6113           |                      |                            |                |
|                                    |  |                               | C6038,6042,6058,         | K19149021            | Semiconductor Ceramic      | ;              |
|                                    |  | CAPACITOR                     | 6059,<br>6061–6065,6094, |                      | 25WV                       | $0.047 \mu F$  |
| C6055                              | K00179001  | Ceramic 50WV SL 0.5pF         | 6114                     |                      | (UAT-08X473K-L45AE         | 5)             |
|                                    |  | (DD104SL0R5C50V)              | C6044                    | K54200001            | Polycarbonate 100WV        | 1μF            |
| C6017,6018                         | K00172010  | " " 1pF                       |                          |                      | (B32561A1105J)             |                |
|                                    |  | (DD104SL010C50V)              | C6088                    | K70167474            | Tantalum 35WV              | 0.47μF         |
| C6014,6077                         | K02179003  | " " CH 2pF                    |                          |                      | (CS15E1VR47M)<br>" 25WV    | 1 5            |
|                                    |  | (DD104CK020C50V)              | C6066                    | K70140007            | 2517 1                     | 1μF            |
| C6085                              | K00172020  | " " SL 2pF                    | 00043                    | K70120006            | (489D105X0025A1)<br>" 16WV | 3.3µF          |
| 040.04                             | **********                                       | (DD104SL020C50V)              | C6043                    | K/0120006            | (489D335X0016B1)           | J.J <u>.</u> I |
| C6056                              | K00172040  | " " 4pF                       | C6087                    | K70120002            | (467D333X0010B1)           | 10µF           |
| C6076                              | K02173060  | (DD104SL040C50V) " " CH 6pF   | C0001                    | K70120002            | (489D106X0016C1)           | 10μ1           |
| C6076                              | K021/3060  | (DD104CH060D50V)              | C6091.6105               | K40179002            | Electrolytic 50WV          | 0.1µF          |
| C6027                              | K00173080  | " " SL 8pF                    | 00071,0103               | 110173002            | (ECE-A1HK-0R1)             |                |
| C0027                              | K001/3080  | (DD104SL080J50V)              | C6098                    | K40179001            | " "                        | 1µF            |
| C6012                              | K06173080  | UJ 8pF                        | 00070                    | 12:02:7002           | (ECE-A1HK-010)             |                |
| C0012                              | Rootisooo  | (DD104UJ080D50V)              | C6089.6101.6102          | K40149011            | " 25WV                     | 4.7μF          |
| C6003                              | K06175150  | " " 15pF                      | , ,                      |                      | (ECE-A1EK4R7)              |                |
| 00000                              |  | (DD104UJ150J50V)              | C6039,6103               | K40129012            | " 16WV                     | 10μF           |
| C6008                              | K02175150  | CH 15pF                       |                          |                      | (ECE-A1CK100)              |                |
|                                    |  | (DD104CH150J50V)              | C6010                    | K40109001            | " 10WV                     | 100µF          |
| C6083                              | K05175150  | " " RH 15pF                   |                          |                      | (10RE100)                  |                |
|                                    |  | (DD104RH150J50V)              |                          |                      | TRIMMER CAPACITOR          |                |
| C6078,6079,6086                    | K05175180  | " " 18pF                      | TC6002                   | K91000055            | ECV1ZW 06x53N              | 6pF            |
|                                    |  | (DD104RH180J50V)              | TC6003                   | K91000029            | ECV1ZW 20x53               | 20pF           |
| C6053,6054                         | K05175220  | " " 22pF                      |                          | -                    |                            |                |
| G(004                              | 1500105070                                       | (DD104RH220J50V)              |                          |                      | INDUCTOR                   |                |
| C6004                              | K02175270  | " CH 27pF<br>(DD104CH270J50V) | L6008                    | L1020680             | INDUCTOR                   |                |
| C6011                              | K06175270  | " " UJ 27pF                   | L6013                    | L1190089             | LAL04NA1R0M                | 1μΗ            |
| Court                              | K001/32/0  | (DD104UJ270J50V)              | L6006                    | L1190143             | FL3H-3R3M                  | 3.3µH          |
| C6007                              | K02175330  | " " CH 33pF                   | 20000                    | 211701.5             | 12011011011                | •              |
| 0000,                              | 1021,000   | (DD104CH330J50V)              | L6014                    | L1190009             | FL4H-3R3M                  | 3.3µH          |
| C6032,6035                         | K00175330  | " " SL 33pF                   | L6001-6004               | L1190110             | FL3H-4R7K                  | 4.7µH          |
| ,                                  |  | (DD104SL330J50V)              | L6009,6010               | L1190014             | FL4H-100K                  | 10µH           |
| C6092                              | K06175330  | " " UJ 33pF                   | L6015                    | L1190025             | FL5H-330K                  | 33µH           |
|                                    |  | (DD104UJ330J50V)              | L6012                    | L1190017             | FL5H-102K                  | 1mH            |
| C6048,6049                         | K06175470  | " " 47pF                      |                          |                      |                            |                |
|                                    |  | (DD104UJ470J50V)              |                          |                      |                            |                |
| C6057,6060,6081                    | K00175470  | " " SL 47pF                   | <b>m</b>                 | V 0000000            | TRANSFORMER                |                |
|                                    | <u> </u>   | (DD104SL470J50V)              | T6001                    | L0020825             |                            |                |
| C6047                              | K06179009  | " " UJ 56pF                   | T6002                    | L0021352             |                            |                |
| 06004 5055                         | W00155505  | (DD105UJ560J50V)              | T6003,6004               | L0020919             |                            |                |
| C6034,6075                         | K00175680  | " " SL 68pF                   | T6005,6006<br>T6007      | L0020782<br>L0190013 |                            |                |
| C(021                              | K06185820  | (DD104SL680J50V) " " UJ 82pF  | T6007                    | L0190013             |                            |                |
| C6021                              | N00103020  | (RD871-1N750-820J63V)         | 10000-0011               | 20170011             |                            |                |
| C6099                              | K00175101  | " " 100pF                     |                          |                      |                            |                |
| <del></del>                        | RUUTISTUT  | (DD105SL101J50V)              |                          |                      | RELAY                      |                |
| C6093,6096                         | K00175151  | " " 150pF                     | RL6001                   | M1190002             | FBR211AD012M               |                |
| 20030,0030                         | 1.001,0101                                       | (DD106SL151J50V)              |                          |                      |                            |                |
| C6001,6002,6006,                   | K10176102  | " B 0.001μF                   |                          |                      |                            |                |
| 6013,6019,6033,                    |  | (DD104B102K50)                |                          |                      | CONNECTOR                  |                |
| 6036,6037,6040,<br>6041,6070,6072, | 1  |                               | J6004                    | P0090041             | 5048-3A                    |                |
| 6074,6090,6097                     | 1  |                               | J6002                    | P0090097             | 5049-5A                    |                |
| C6009,6015,6016,                   | K13179008  | " F 0.01μF                    | J6003                    | P0090051             | 5048-6A                    |                |
| 6020,<br>6023-6026                 |  | (DD106F103Z50V)               | J6001                    | P0090100             | 5049-12A                   |                |
|                                    |  |                               |                          |                      |                            |                |

|                                   |                      | TP TERMINAL                          | P7003(with wire) | T9307002                 |                          |
|-----------------------------------|----------------------|--------------------------------------|------------------|--------------------------|--------------------------|
| Bit 4                             | Q5000036             | TP-G                                 |                  |                          |                          |
|                                   | Q5000020             | MS-60121                             |                  |                          |                          |
|                                   | <u> </u>             |                                      |                  |                          | TP TERMINAL              |
|                                   | ļ                    |                                      |                  | Q5000036                 | TP-G                     |
|                                   |                      | 1 1011 1011 1011 1011                |                  |                          |                          |
|                                   |                      |                                      |                  |                          |                          |
|                                   | r                    | PA UNIT * * *                        |                  |                          |                          |
| Symbol No.                        | Part No.             | Description                          |                  |                          |                          |
| PB-2451                           | F0002451             | Printed Circuit Board                |                  | 144MHz [<br>* * 144MHz R |                          |
|                                   | C024510A             | PCB with Components                  | Symbol No.       | Part No.                 | Description              |
| <del></del> .                     |                      |                                      | PB-2452          | F0002452                 | Printed Circuit Board    |
|                                   |                      | POWER MODULE                         | 15 2102          | C024520A                 | PCB with Components      |
| Q7001                             | G1090475             | M57735                               |                  |                          |                          |
|                                   |                      |                                      |                  |                          |                          |
|                                   |                      |                                      |                  |                          | FET                      |
|                                   |                      | DIODE                                | Q5003,5011       | G3801250                 | 2SK125                   |
| D7002                             | G2015880             | Si 1S1588                            | Q5004,5005       | G3802410Y                | 2SK241Y                  |
| D7001                             | G2090003             | " V06B                               | Q5002            | G4800510C                | 3SK51-03                 |
|                                   |                      |                                      | Q5006            | G4800700                 | 3SK 70                   |
|                                   |                      | RESISTOR                             | Q5001            | G4800740L                | 3SK74L                   |
| R7003                             | J30356019            | Cement 3W 0.1Ω                       |                  |                          |                          |
| R7004                             | J02245222            | Carbon film 1/4W 2.2kΩ               |                  |                          |                          |
|                                   |                      | 048401705                            | 05000            | Garage                   | TRANSISTOR               |
| C7015                             | K02170002            | CAPACITOR                            | Q5008            | G3107331Q                | 2SA733AQ                 |
| C/013                             | K02179003            | Ceramic 50WV CH 2pF (DD104CK020C50V) | Q5007            | G3325380<br>G3404710L    | 2SC2538<br>2SD471L       |
| C7011                             | K02175120            | " " 12pF                             | Q5009,5010       | G3404/10L                | 25D4/1L                  |
| C/011                             | R02173120            | (DD104CH120J50V)                     |                  | <u> </u>                 | DIODE                    |
| C7029                             | K00175330            | " " SL 33pF                          | D5013            | G2015550                 | Si 1S1555                |
| C1029                             | K00173330            | (DD104SL330J50V)                     | D5007,5008,      | G2090027                 | " 1SS53                  |
| C7013,7016-7018                   | K00175470            | " SL 47pF                            | 5014-5015,5018,  |                          |                          |
| C/013,/010/018                    | 11002.07.0           | (DD104SL470J50V)                     | 5020             |                          |                          |
| C7012,7026                        | K00175560            | " " 56pF                             | D5016            | G2090118                 | Schottky Barrier 1SS97   |
| , . ,                             |                      | (DD104SL560J50V)                     | D5002-5006,      | G2090107                 | Varactor 1T25            |
| C7014                             | K00175101            | " " 100pF                            | 5009-5012        |                          |                          |
|                                   |                      | (DD105SL101J50V)                     | D5001            | G9090006                 | Varistor MV13            |
| C7001-7003,                       | K10176102            | " B 0.001μF                          | D5019            | G2090003                 | Si V06B                  |
| 7005,7007,7009,<br>7010,7019,7020 |                      | (DD104B102K50)                       | D5017            | G2090218                 | Zener HZ9C1              |
|                                   |                      |                                      |                  |                          |                          |
| C7021-7025                        | K21170002            | Feed through 0.001µF                 |                  |                          |                          |
|                                   |                      | (ECKY1H-102WE)                       |                  |                          | THERMISTOR               |
| C7004,7006,7008                   | K40129012            | Electrolytic 16WV 10μF               | TH5001           | G9090013                 | 25D29                    |
|                                   |                      | (16RC2-10)                           | TH5002           | G9090008                 | 31D26                    |
|                                   |                      |                                      | TH5003           | G9090002                 | D22A                     |
|                                   |                      | INDUCTOS                             | TH5004           | G9090001                 | SDT250                   |
| T 7001                            | L1020673             | INDUCTOR                             |                  |                          | CRYSTAL FILTER           |
| L7001<br>L7002                    | L1020673<br>L1020663 |                                      | XF5001           | H1102021                 | 108M30B                  |
| L7004-7006                        | L0020824             |                                      | A1 3001          | 111102021                | 10011300                 |
| L7004 - 7006                      | L0020824             |                                      |                  |                          |                          |
| <u> </u>                          | 20020019             |                                      | · · ·            |                          | RESISTOR                 |
|                                   |                      | RELAY                                | R5047,5048       | J01245229                | Carbon film 1/4W TJ 2.2Ω |
| RL7001                            | M1190006             | FBR221D012M                          | R5019            | J01245100                | " " " 10Ω                |
|                                   |                      |                                      | R5003,5005,5013, | J02245560                | " " SJ 56Ω               |
|                                   |                      |                                      | 5018,5023        |                          |                          |
|                                   |                      | CONNECTOR                            | R5016,5021,5025  | J01245560                | " " " TJ 56Ω             |
| J7001                             | P1090192             | FM-MR                                | R5039            | J01215560                | " " 1/8W " 56Ω           |
| J7002                             | P1090005             | SG-8050                              | R5030            | J02245101                | " " 1/4W SJ 100Ω         |
|                                   |                      |                                      | R5041            | J01215101                | " " 1/8W TJ 100Ω         |
|                                   |                      |                                      | R5049            | J02245151                | " " 1/4W SJ 150Ω         |
|                                   |                      | PLUG                                 | R5024            | J02245271                | " " " 270Ω               |
| P7001(with wire)                  | T9204523             |                                      | R5038            | J01215331                | " " 1/8W TJ 330Ω         |
| P7002( " )                        | T9307001             |                                      | R5051            | J01215102                | " " 1kΩ                  |

(144MHz MODULE)

|  |           |                                 | 04044 6001 6002                                  | V.12170000                                       | C : SOUNT E O OL E                 |
|--|-----------|---------------------------------|--|--|------------------------------------|
| R5004,5044,5045                                  | J02245102 | Carbon film 1/4W SJ 1kΩ         | C5065,5071,5087,<br>5088,5097                    | K13179008  | Ceramic 50WV F 0.01μF              |
| R5040  | J01215122 | " " 1/8W TJ 1.2kΩ               | _ <del></del>                                    | 1/40170013                                       | (DD106F103Z50V) Electrolytic " 1µF |
| R5050  | J01215152 | " " " 1.5kΩ                     | C5021,5059                                       | K40179013  | •                                  |
| R5020,5046                                       | J02245222 | " " 1/4W SJ 2.2kΩ               |  | ***********                                      | (50RE1)                            |
| R5015,5037,5043                                  | J02245103 | " " " 10kΩ                      | C5038  | K40129004  | " 16WV 10μF                        |
| R5036  | J01215103 | 1/8W TJ 10kΩ                    |  |  | (16RE10)                           |
| R5035  | J02245223 | " " 1/4W SJ 22kΩ                | C5069,5072,5086                                  | K40129012  | ., ., 10μF                         |
| R5001,5011,5012,<br>5026,5027                    | J02245473 | " " " 47kΩ                      | C5085  | K40109001  | (16RC2-10)<br>" 10WV 100μF         |
| R5009,5022                                       | J01245473 | " " TJ 47kΩ                     |  |  | (10RE100)                          |
| R5006-5008,<br>5010,5014,5028,<br>5029,5031-5033 | J02245104 | SJ 100kΩ                        | C5080  | K40129019  | ., 16WV 1000μF<br>(16RC1000)       |
| · · · · · · · · · · · · · · · · · · ·            |           |                                 |  |  |                                    |
| R5034  | J01215104 | " " 1/8W TJ 100kΩ               |  |  | TRIMMER CAPACITOR                  |
| R5002  | J02245225 | " " 1/4W SJ 2.2MΩ               | TC5001   | K91000028  | ECV-1ZW 10x53T 10pF                |
| <del></del>                                      |           | BLOCK RESISTOR                  |  | K91000029  | ECV-1ZW 20x53T 20pF                |
| RB6002   | J40900023 | DA-2                            | TC5002   | K91000029  | ECV-12W 20X331 20P1                |
|  |           | POTENTIOMETER                   |  |  | INDUCTOR                           |
| VR5003   | J51745102 | H0651A007-1KB 1kΩB              | 7.5002.5002                                      | T 1100000  | LAL04NA1R0M 1µH                    |
| VR5004   | J51745103 | H0651A013-10KB 10kΩB            | L5002,5003                                       | L1190089   |                                    |
| VR5006   | J51745223 | H0651A015-22KB 22kΩB            | L5001  | L1190004   | FL4HR68M 0.68µH                    |
| VR5005,5006                                      | J51745473 | H0651A017-47KB 47kΩB            | L5004  | L0021355   |                                    |
|  |           | CAPACITOR                       | L5005,5008                                       | L0021356   |                                    |
| C5017  | K02182059 | Ceramic 63WV CH 0.5pF           | L5006  | L1020673   |                                    |
|  |           | (RD870-1NPO-0R5C63V)            | L5007  | L0021357   |                                    |
| C5012,5024,5054,                                 | K02179001 | " 50WV" 1pF                     |  |  |                                    |
| 5061   |           | (DD104CK010C50V)                |  |  |                                    |
| C5015,5019,5030,                                 | K02179003 | " " 2pF                         |  |  | TRANSFORMER                        |
| 5049,5052,5056                                   |           | (DD104CK020C50V)                | T5001  | L0021353   |                                    |
| C5009  | K02172040 | " CH 4pF<br>(DD104CH040C50V)    | T5002-5006,<br>5012-5015                         | L0020907   |                                    |
| C5011,5016,5018,                                 | K05173080 | " " RH 8pF                      | T5007,5008-5010                                  | L0021162   |                                    |
| 5025   |           | (DD104RH080D50V)                | T5011  | L0021161   |                                    |
| C5053,5055,5062                                  | K02173080 | " CH 8pF                        |  |  |                                    |
|  |           | (DD104CH080D50V)                |  |  |                                    |
| C5002  | K02173100 | " " 10pF                        |  |  | CONNECTOR                          |
|  |           | (DD104CH100D50V)                | J5001  | P0090051   | 5048-06A                           |
| C5029  | K05173100 | " RH 10pF                       | 15002  | P0090189   | 5049-11A                           |
|  |           | (DD104RH100J50V)                | J5003  | P0090041   | 5048-03A                           |
| C5003,5051,5057,                                 | K02175120 | " CH 12pF                       | J5004  | P0090042   | 5048-05A                           |
| 5074   |           | (DD104CH120J50V)                | J5005,5006                                       | P1090255   | TMP-JA                             |
| C5014,5023                                       | K05175120 | " " RH 12pF<br>(DD104RH120J50V) |  |  |                                    |
| C5047,5048                                       | K02175150 | " " CH 15pF                     |  |  | RELAY                              |
| C3047,3046                                       | K02173130 | (DD104CH150J50V)                | RL5001   | M1190006   | FBR221D012M                        |
| 05026  | K02179009 | " " 22pF                        |  |  |                                    |
| C5026  | KU21/3003 | (DD104CH220J50V)                |  |  |                                    |
| 05060  | K00175470 | " " SL 47pF                     |  |  | FERRITE BEADS                      |
| C5063  | KUU1/34/U | (DD104SL470J50V)                | FB5001   | L9190001   | Ri 3x3-1                           |
|  | V02175470 | " " CH 47pF                     | 1 00001  |  |                                    |
| C5075,5103                                       | K02175470 | (DD106CH470J50V)                | <del></del>                                      | <del> </del>                                     |                                    |
| 05067  | K02175560 | " " 56pF                        |  |  |                                    |
| C5067  | KUZ1/3300 | (DD106CH560J50V)                |  | <del>                                     </del> |                                    |
| 05001 5001                                       | V10176160 | " " B 0.001µF                   |  | <del> </del>                                     |                                    |
| C5001,5064,<br>5066,5068,5070                    | K10176102 | ,                               |  | * * * 144MHz                                     | PLL UNIT * * *                     |
|  | V10171100 | (DD104B102K50)<br>" Ε 0.001μF   | Symbol No.                                       | Part No.   | Description                        |
| C5005,5013,<br>5027,5031,5036,                   | K12171102 | •                               | PB-2447A   | F0002447A  | Printed Circuit Board              |
| 5040,5040,5058,                                  |           | (DD104E102P50V)                 |  | C024471A   | PCB with Components                |
| 5076-5079.                                       |           |                                 |  |  | (w/VCO Board) Model A              |
| 5081-5084,<br>5089-5096,5098                     |           |                                 |  | C024471B   | " Model X                          |
|  | V12170000 | " F 0.01μF                      | <del>                                     </del> | C024471C   | " Model B                          |
| C5004,5006,5008,<br>5010,5020,5022,              | K13179008 |                                 |  | C024471D   | " Model C                          |
| 5028.  |           | (DD106F103Z50V)                 |  | C024471E   | " Model D                          |
| 5032-5034,                                       |           |                                 |  | C024471E   | " Model E                          |
| 5037,5039,<br>5044-5046,5060                     |           | i i                             |  |  | " Model F                          |
| 5044-5046,5060                                   | 1         |                                 |  | C024471G   | " Model F                          |

| PB-2442                                    | F0002442               | Printed Circuit Board     | R6031   | J02245221  | Carbon film 1/4W SJ 220Ω     |
|--|------------------------|---------------------------|---|------------|------------------------------|
|  | C024421A               | PCB with Q6001,D6001-     | R6002   | J02245331  | " " " 330Ω                   |
| ĺ  | i                      | D6003,R6000-R6003,TH6001, | <del></del>   | J02245331  | " " " 330Ω                   |
| ĺ  | j                      | C6001-C6013,TC6001,6002,  | R6086   | J01245471  | " " TJ 470Ω                  |
| [  | 1                      | L6001-L6006               | R6020,6027  | J02245681  | " " 1/4W SJ 680Ω             |
|  |                        |                           | R6025,6041,6044,<br>6046,6049,6056                            | J02245102  | " " " 1kΩ                    |
|  |                        | IC                        | R6015,6029,6032,  | J02245222  | " " " 2.2kΩ                  |
| Q6021                                      | G1090342               | MB84024B                  | 6033,6052   |            |                              |
| Q6023                                      | G1090053               | MC14081B                  | R6039   | J02245272  | 2.7kΩ                        |
| Q6025                                      | G1090343               | MC14094B                  | R6021   | J02245332  | " " " 3.3kΩ                  |
| Q6028                                      | G1090312               | MC14504B                  | R6063   | J02245392  | 3.9kΩ                        |
| Q6024                                      | G1090298               | MC14560B                  | R6009,6026,6036   | J02245472  | ., ., ., 4.7kΩ               |
| Q6005                                      | G1090012               | SN16913P                  | R6034   | J01245472  | " " TJ 4.7kΩ                 |
| Q6016                                      | G1090062               | SN76514N                  | R6028,6043,6048,  | J02245562  | " " " SJ 5.6kΩ               |
| Q6009                                      | G1090473               | TC5081AP                  | 6055  |            |                              |
| Q6008                                      | G1090247               | TC9122P                   | R6060,6072  | J02245103  | 10kΩ                         |
| Q6027                                      | G1090084               | μPC78L05                  | R6035,6037,6038,  | J02245223  | 22kΩ                         |
| Q6032                                      | G1090294               | μPC7808H                  | 6042,6047,6054,<br>6061,6062,6066,<br>6073,6076,6080,<br>6081 |            |                              |
|  | 1                      | FET                       | R6082   | J01215223  | " " 1/8W TJ 22kΩ             |
| Q6001                                      | G3801921G              | 2SK192AGR                 | R6030   | J02245273  | " " 1/4W SJ 27kΩ             |
| Q6002,6004                                 | G3802410Y              | 2SK241Y                   | R6087   | J01215393  | " " 1/8W TJ 39kΩ             |
| Q6003                                      | G4800730Y              | 3SK73Y                    | R6010,6011  | J02245473  | " " " SJ 47kΩ                |
|  | 1 10001001             | 3021.0                    | R6071   | J02245563  | " " 56kΩ                     |
|  | T                      |                           | R6004,6008,6013,  | J02245104  | " " " 100kΩ                  |
|  |                        | TRANSISTOR                | 6016,6023,6058,   | ""         | 100122                       |
| Q6019                                      | G3105641               | 2\$A564A                  | 6059,6064,6065,<br>6067–6070,                                 |            |                              |
| Q6013                                      | G3304600B              | 2SC460B                   | 6074,6079   |            |                              |
| Q6017                                      | G3305350B              | 2SC535B                   | R6075   | J01245104  | " " TJ 100kΩ                 |
| Q6006,6007,                                | G3309451P              | 2SC945AP                  | R6077,6078  | J02245224  | " " SJ 220kΩ                 |
| 6010-6012,                                 |                        |                           | R6022   | J02245334  | " " " 330kΩ                  |
| 6014,6015,6018,<br>6020,6026,6029,<br>6030 |                        |                           | R6001   | J02245474  | " " 470kΩ                    |
| Q6022,6031                                 | G3408920Q              | 2SD892Q                   |   |            | BLOCK RESISTOR               |
| <del></del>                                |                        |                           | RB6001  | J40900022  | DA-1                         |
|  | -                      |                           |   | - 10200022 |                              |
|  | +                      | DIODE                     | -   | -          | CAPACITOR                    |
| D6003,<br>6005-6010,                       | G2090027               | Si 1SS53                  | C6055,6077,6085   | K00179001  | Ceramic 50WV SL 0.5pF        |
| 6012-6015,<br>6017,6018,                   |                        |                           | C6017,6018,6027   | K00172010  | (DD104SL0R5C50V) " " 1pF     |
| 6018-6020,<br>6024-6026                    |                        |                           | C6007,6022  | K02179003  | (DD104SL010C50V) " CH 2pF    |
| D6001,6002,6004                            | G2090107               | Varactor 1T25             | 1   | 11021/7000 | (DD104CK020C50V)             |
| D6011,6016                                 | G2090003               | Si V06B                   | C6002.6003  | K06172040  | " " UJ 4pF                   |
|  |                        |                           |   |            | (DD104UJ040J50V)             |
|  |                        |                           | C6074   | K02172040  | " " CH 4pF                   |
|  |                        | CRYSTAL                   |   |            | (DD104CH040C50V)             |
| X6001                                      | H0102508               | HC-18/U3P 60.7018MHz      | C6004,6012,6014   | K02172050  | " " SpF                      |
| X6002                                      | H0102338               | HC-18/U 6.4MHz            |   | _          | (DD104CH050C50V)             |
|  |                        |                           | C6005   | K02173070  | " " 7pF                      |
|  | <u> </u>               |                           | <u> </u>  |            | (DD104CH070D50V)             |
| THEOD!                                     | Coocce                 | THERMISTOR                | C6008   | K02173080  | " " # 8pF                    |
| TH6001                                     | G9090008               | 31D26                     | 00001 0000 11-11  |            | (DD104CH080D50V)             |
|  | -                      | RESISTOR                  | C6021,6075,6078,<br>6079,6083,6086                            | K05173100  | " " RH 10pF                  |
| R6005,6007,6014,                           | J02245560              | Carbon film 1/4W SJ 56Ω   | C6076   | K02173100  | (DD104RH100D50V) " " CH 10pF |
| 6018,6019,6024,                            |                        | 2, 1 20                   |   | R021/3100  | (DD104CH100D50V)             |
| 6051                                       | [                      |                           | C6053,6054  | K05175120  | " " RH 12pF                  |
| R6003                                      | J00215101              | " " 1/8W VJ 100Ω          | ,   |            | (DD104RH120J50V)             |
| R6015,6040,6045,<br>6050,6057              | J02245101              | " " 1/4W " 100Ω           | C6011   | K06175150  | " " UJ 15pF                  |
| R6053                                      | J01245101              | " " TJ 100Ω               | C6032,6035,6081   | K00175220  | (DD104UJ150J50V)             |
| R6083                                      | J01245101<br>J01215101 | " " 1/8W " 100Ω           | C0032,0033,0081   | K00175330  | " " SL 33pF                  |
|  | 201212101              | 1/0W " 1001               |   |            | (DD104\$L330J50V)            |

| 6045,6046,<br>6050–6052,   | 5470<br>5470<br>5680<br>5101<br>5151<br>6102<br>1102<br>9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021 | (DD104UJ330J50V)  (DD104UJ470J50V)  (DD104SL470J50V)  (DD104SL680J50V)  (DD105SL101J50V)  (DD106SL151J50V)  (DD104B102K50V)  (DD104E102P50V)  (DD104E102P50V)  ERVICE MANUALS CONTACT: NTECHNICAL SERV  Mauritron.co.uk  01844 - 351694  C01844 - 352554  Semiconductor Cerami  | ic 0.047µF<br>E) 1µF   | T6001,6003,6004, 6007-6011 T6002 T6005,6006  RL6001  J6004 J6002 J6003 J6001  Symbol No. PB-2451 | L0020907  L0020533 L0020782  M1190002  P0090041 P0090097 P0090051 P0090100  Q5000036  **144MHz P. Part No. F0002451 C024511A | Description Printed Circuit Board PCB with Components  POWER MODULE  |
|--|---|---|--|--|--|--|
| C6057,6060         K00173           C6034         K00173           C6099         K00173           C6093,6096         K00173           C6001,6006,6013         K10176           C6019,6033,6036, 6037,6040,6041, 6036,6070,6072, 6090,6097,6112, 6113         K12173           C6009,6015,6016, 6020, 6023,6026, 6028,6031, 6045,6046, 6050,6052, 6067,6069, 6071,6073,6080, 6082,6084,6095, 6104,6106,6111         MAURI           C6038,6042,6058, 6059, 6061,6060, 6011,6073,6080, 6082,6084,6095, 6104,6106,6114         K54200           C6044         K54200           C6044         K54200           C6088         K70167           C6087         K70120           C6087, 6100         K40179           C6088,6100         K40179           C6098,6100         K40129           C6089,6101,6102         K40149 | 5470<br>5680<br>5101<br>5151<br>6102<br>1102<br>9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>EAX                 | (DD104UJ470J50V) (DD104SL470J50V) (DD104SL680J50V) (DD104SL680J50V) (DD105SL101J50V) (DD106SL151J50V) (DD104B102K50V) (DD104B102K50V) (DD104E102P50V) (DD104E102P50V) (DD106F103Z50V) (ERVICE MANUALS CONTACT: NTECHNICAL SERV V.mauritron.co.uk (D1844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J) | SL 47pF  " 68pF " 100pF " 150pF  B 0.001µF  E 0.001µF  O.001µF  O.0047µF  E)  1µF    | G007-6011 T6002 T6005,6006  RL6001  J6004 J6002 J6003 J6001                                      | L0020533 L0020782  M1190002  P0090041 P0090097 P0090051 P0090100  Q5000036  **144MHz P/ Part No. F0002451 C024511A           | CONNECTOR 5048-03A 5049-05A 5049-12A  TP TERMINAL TP-G  A UNIT * * *  Description Printed Circuit Board PCB with Components                  |
| C6057,6060         K00173           C6034         K00173           C6099         K00173           C6093,6096         K00173           C6001,6006,6013         K10176           C6019,6033,6036, 6037,6040,6041, 6056,6070,6072, 6090,6097,6112, 6113         K12173           C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115         MAURI           C6038,6042,6058, 6059, 6061-6065,6094, 6114         K54206           C6088         K70167           C6088         K70167           C6043         K70126           C6087         K40179           C6091,6105         K40179           C6098,6100         K40179           C6089,6101,6102         K40149           C6039,6103         K40129                                  | 5470<br>5680<br>5101<br>5151<br>6102<br>1102<br>9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>EAX                 | (DD104SL470J50V) (DD104SL680J50V) (DD104SL680J50V) (DD105SL101J50V) (DD106SL151J50V) (DD104B102K50V) (DD104B102K50V) (DD104E102P50V) (DD104E102P50V) (DD106F103Z50V) (ERVICE MANUALS CONTACT: NTECHNICAL SERV V.mauritron.co.uk (D1844 - 351694 (D1844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)  | " 68pF " 100pF " 150pF B 0.001μF E 0.001μF  G 0.047μF E) 1μF                         | T6005,6006  RL6001  J6004  J6002  J6003  J6001   | M1190002  P0090041 P0090097 P0090051 P0090100  Q5000036  **144MHz P/ Part No. F0002451 C024511A                              | CONNECTOR 5048-03A 5049-05A 5049-12A  TP TERMINAL TP-G  A UNIT * * *  Description Printed Circuit Board PCB with Components                  |
| C6034         K00173           C6099         K00173           C6093,6096         K00173           C6001,6006,6013         K10176           C6019,6033,6036, 6037,6040,6041, 6036,6070,6072, 6090,6097,6112, 6113         K1217.           C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115         MAURI           C6038,6042,6058, 6059, 6061-6065,6094, 6114         K54206           C6044         K54206           C6088         K70167           C6087         K70126           C6087         K70126           C6091,6105         K40179           C6098,6100         K40179           C6039,6103         K40129   | 5680<br>5101<br>5151<br>6102<br>1102<br>9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021                 | (DD104SL470J50V) (DD104SL680J50V) (DD104SL680J50V) (DD105SL101J50V) (DD106SL151J50V) (DD104B102K50V) (DD104B102K50V) (DD104E102P50V) (DD104E102P50V) (DD106F103Z50V) (ERVICE MANUALS CONTACT: NTECHNICAL SERV V.mauritron.co.uk (D1844 - 351694 (D1844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)  | " 68pF " 100pF " 150pF B 0.001μF E 0.001μF  G 0.047μF E) 1μF                         | RL6001  J6004 J6002 J6003 J6001  | M1190002  P0090041 P0090097 P0090051 P0090100  Q5000036  **144MHz P/ Part No. F0002451 C024511A                              | CONNECTOR 5048-03A 5049-05A 5049-12A  TP TERMINAL TP-G  A UNIT * * *  Description Printed Circuit Board PCB with Components                  |
| C6034         K00173           C6099         K00173           C6093,6096         K00173           C6001,6006,6013         K10176           C6019,6033,6036, 6037,6040,6041, 6036,6070,6072, 6090,6097,6112, 6113         K1217.           C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115         MAURI           C6038,6042,6058, 6059, 6061-6065,6094, 6114         K54206           C6044         K54206           C6088         K70167           C6087         K70126           C6087         K70126           C6091,6105         K40179           C6098,6100         K40179           C6039,6103         K40129   | 5101<br>5151<br>6102<br>1102<br>9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021                         | (DD104SL680J50V) (DD105SL101J50V) (DD106SL151J50V) (DD104B102K50V) (DD104B102K50V) (DD104E102P50V) (DD106F103Z50V) ERVICE MANUALS CONTACT: N TECHNICAL SERV Mauritron.co.uk (D1844 - 351694 C01844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)  | " 100pF " 150pF B 0.001μF E 0.001μF  F 0.01μF  G  G  G  G  G  G  G  G  G  G  G  G  G | J6004<br>J6002<br>J6003<br>J6001   | P0090041 P0090097 P0090051 P0090100  Q5000036  **144MHz P/ Part No. F0002451 C024511A  | CONNECTOR 5048-03A 5049-05A 5049-12A  TP TERMINAL TP-G  A UNIT * * *  Description Printed Circuit Board PCB with Components                  |
| C6099 K00173 C6093,6096 K00173 C6001,6006,6013 K10176 C6019,6033,6036, 6037,6040,6041, 6056,6070,6072, 6090,6097,6112, 6113 C6009,6015,6016, 6028,-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115 C6038,6042,6058, 6059, 6061-6065,6094, 6114 C6044 K54206 C6088 K70167 C6088 K70167 C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149  | 5101<br>5151<br>6102<br>1102<br>9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021                         | (DD104SL680J50V)  (DD105SL101J50V)  (DD106SL151J50V)  (DD104B102K50V)  (DD104B102K50V)  (DD104E102P50V)  (DD106F103Z50V)  ERVICE MANUALS CONTACT: NTECHNICAL SERV  Mauritron.co.uk  01844 - 351694  C01844 - 352554  Semiconductor Cerami 25WV  (UAT-08X473K-L45A  Polycarbonate 100WV  (B32561A1105J)  | " 100pF " 150pF B 0.001μF E 0.001μF  F 0.01μF  G  G  G  G  G  G  G  G  G  G  G  G  G | J6004<br>J6002<br>J6003<br>J6001   | P0090041 P0090097 P0090051 P0090100  Q5000036  **144MHz P/ Part No. F0002451 C024511A  | CONNECTOR 5048-03A 5049-05A 5049-12A  TP TERMINAL TP-G  A UNIT * * *  Description Printed Circuit Board PCB with Components                  |
| C6093,6096 K00173 C6001,6006,6013 K10176 C6019,6033,6036, 6037,6040,6041, 6056,6070,6072, 6090,6097,6112, 6113 C6009,6015,6016, 6028,-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115 C6038,6042,6058, 6059, 6061-6065,6094, 6114 C6044 K54206 C6088 K70166 C6066 K70146 C6087 K70126 C6091,6105 K40175 C6098,6100 K40175 C6089,6101,6102 K40145  | 5151<br>6102<br>1102<br>9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021                                 | (DD105SL101J50V)  (DD106SL151J50V)  (DD104B102K50V)  (DD104B102K50V)  (DD104E102P50V)  (DD106F103Z50V)  ERVICE MANUALS CONTACT: N TECHNICAL SERV  Mauritron.co.uk  01844 - 351694  C01844 - 352554  Semiconductor Cerami 25WV  (UAT-08X473K-L45A  Polycarbonate 100WV  (B32561A1105J)   | " 150pF B 0.001μF E 0.001μF F 0.01μF G CCES  | J6004<br>J6002<br>J6003<br>J6001   | P0090041 P0090097 P0090051 P0090100  Q5000036  **144MHz P/ Part No. F0002451 C024511A  | CONNECTOR 5048-03A 5049-05A 5049-12A  TP TERMINAL TP-G  A UNIT * * *  Description Printed Circuit Board PCB with Components                  |
| C6093,6096         K00173           C6001,6006,6013         K10176           C6019,6033,6036, 6037,6040,6041, 6056,6070,6072, 6090,6097,6112, 6113         K1217.           C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115         MAURI           C6038,6042,6058, 6059, 6061-6065,6094, 6114         K54206           C6088         K70167           C6044         K54206           C6087         K70126           C6088         K70126           C6091,6105         K40179           C6098,6100         K40179           C6089,6101,6102         K40149           C6039,6103         K40129  | 5151<br>6102<br>1102<br>9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021                                 | (DD105\$L101J50V)  (DD106\$L151J50V)  (DD104B102K50V)  (DD104B102K50V)  (DD104E102P50V)  (DD106F103Z50V)  ERVICE MANUALS CONTACT: N TECHNICAL SERV  Mauritron.co.uk  01844 - 351694  C01844 - 352564  Semiconductor Cerami 25WV  (UAT-08X473K-L45A Polycarbonate 100WV  (B32561A1105J)  | " 150pF B 0.001μF E 0.001μF F 0.01μF G CCES  | J6004<br>J6002<br>J6003<br>J6001   | P0090041 P0090097 P0090051 P0090100  Q5000036  **144MHz P/ Part No. F0002451 C024511A  | CONNECTOR  5048-03A  5049-05A  5048-06A  5049-12A  TP TERMINAL  TP-G  A UNIT * * *  Description  Printed Circuit Board  PCB with Components  |
| C6001,6006,6013 K10176 C6019,6033,6036, 6037,6040,6041, 6036,6070,6072, 6090,6097,6112, 6113 C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115 C6038,6042,6058, 6059, 6061-6065,6094, 6114 C6044 K54206 C6088 K70166 C6066 K70146 C6087 K70126 C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149  | 9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021   | (DD106SL151J50V)  (DD104B102K50V)  (DD104B102K50V)  (DD104E102P50V)  (DD106F103Z50V)  ERVICE MANUALS CONTACT: NTECHNICAL SERV  Mauritron.co.uk  (01844 - 351694  C01844 - 352554  Semiconductor Cerami 25WV  (UAT-08X473K-L45A  Polycarbonate 100WV  (B32561A1105J)   | B 0.001μF E 0.001μF F 0.01μF G CICES   | J6002<br>J6003<br>J6001  | P0090097 P0090051 P0090100  Q5000036  **144MHz P. Part No. F0002451 C024511A   | S048-03A  S049-05A  S048-06A  S049-12A  TP TERMINAL  TP-G  A UNIT ***  Description  Printed Circuit Board  PCB with Components  POWER MODULE |
| C6001,6006,6013 K10176 C6019,6033,6036, 6037,6040,6041, 6036,6070,6072, 6090,6097,6112, 6113 C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115 C6038,6042,6058, 6059, 6061-6065,6094, 6114 C6044 K54206 C6088 K70166 C6066 K70146 C6087 K70126 C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149  | 9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021   | (DD106SL151J50V)  " " I (DD104B102K50V)  " " I (DD104E102P50V)  " (DD106F103Z50V)  ERVICE MANUALS CONTACT: N TECHNICAL SERV  V. mauritron.co.uk : 01844 - 351694 C01844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)   | B 0.001μF E 0.001μF F 0.01μF G CICES   | J6002<br>J6003<br>J6001  | P0090097 P0090051 P0090100  Q5000036  **144MHz P. Part No. F0002451 C024511A   | S048-03A  S049-05A  S048-06A  S049-12A  TP TERMINAL  TP-G  A UNIT ***  Description  Printed Circuit Board  PCB with Components  POWER MODULE |
| C6019,6033,6036, 6037,6040,6041, 6036,6070,6072, 6090,6097,6112, 6113  C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  C6088  K70167  C6087  K70120  C6091,6105  K40179  C6089,6101,6102  K40129  | 9008<br>OR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021   | (DD104B102K50V)  (DD104B102K50V)  (DD104E102P50V)  (DD106F103Z50V)  ERVICE MANUALS CONTACT: N TECHNICAL SERV  V. mauritron.co.uk  01844 - 351694  C01844 - 352554  Semiconductor Cerami 25WV  (UAT-08X473K-L45A Polycarbonate 100WV  (B32561A1105J)   | E 0.001μF  F 0.01μF  CICES  ic     0.047μF  E)     1μF                               | J6002<br>J6003<br>J6001  | P0090097 P0090051 P0090100  Q5000036  **144MHz P. Part No. F0002451 C024511A   | S048-03A  S049-05A  S048-06A  S049-12A  TP TERMINAL  TP-G  A UNIT ***  Description  Printed Circuit Board  PCB with Components  POWER MODULE |
| C6019,6033,6036, 6037,6040,6041, 6036,6070,6072, 6090,6097,6112, 6113  C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  C6088  K70167  C6087  K70120  C6091,6105  K40179  C6089,6101,6102  K40129  | 9008<br>OR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021   | (DD104B102K50V)  " " I (DD104E102P50V)  " (DD106F103Z50V)  ERVICE MANUALS CONTACT: N TECHNICAL SERV V.mauritron.co.uk : 01844 - 351694 C01844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)   | E 0.001μF  F 0.01μF  CICES  ic     0.047μF  E)     1μF                               | J6002<br>J6003<br>J6001  | P0090097 P0090051 P0090100  Q5000036  **144MHz P. Part No. F0002451 C024511A   | S049-05A S048-06A S049-12A  TP TERMINAL TP-G  A UNIT ***  Description Printed Circuit Board PCB with Components  POWER MODULE                |
| 6037,6040,6041, 6056,6070,6072, 6090,6097,6112, 6113  C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  K54206  C6088  K70167  C6087  K70126  C6091,6105  K40179  C6089,6100  K40179  | 9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021   | " " I (DD104E102P50V)  " " "   (DD106F103Z50V)  ERVICE MANUALS CONTACT: N TECHNICAL SERV V.mauritron.co.uk : 01844 - 351694 C01844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)  | F 0.01µF  CICES  ic  0.047µF  E)  1µF  | J6003<br>J6001<br>*<br>Symbol No.  | P0090051 P0090100  Q5000036  **144MHz P, Part No. F0002451 C024511A  | TP TERMINAL TP-G  A UNIT ***  Description Printed Circuit Board PCB with Components  POWER MODULE  |
| 6037,6040,6041, 6056,6070,6072, 6090,6097,6112, 6113  C6009,6015,6016, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  K54206  C6088  K70167  C6087  K70126  C6091,6105  K40179  C6089,6100  K40179  | 9008<br>DR S<br>ITRO<br>WWW<br>TEL<br>FAX<br>9021   | (DD104E102P50V)  " "   (DD106F103Z50V)  ERVICE MANUALS CONTACT: N TECHNICAL SERV V.mauritron.co.uk : 01844 - 351694 C01844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)  | F 0.01µF  CICES  ic  0.047µF  E)  1µF  | J6001  * Symbol No.  | P0090100  Q5000036  **144MHz P, Part No. F0002451 C024511A   | TP TERMINAL TP-G  A UNIT ***  Description Printed Circuit Board PCB with Components  POWER MODULE  |
| 6056,6070,6072, 6090,6097,6112, 6113  C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  C6044  K54200  C6088  K70167  C6087  K70120  C6091,6105  K40179  C6089,6101,6102  K40179  | OR S ITRO  WWW  TEL  FAX 9021   | " " " " " " " " " " " " " " " " " " "   | ic<br>0.047µF<br>1µF   | * Symbol No.   | Q5000036  **144MHz P/ Part No. F0002451 C024511A   | TP TERMINAL  TP-G  A UNIT ***  Description  Printed Circuit Board  PCB with Components  POWER MODULE   |
| 6090,6097,6112, 6113 C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115 C6038,6042,6058, 6059, 6061-6065,6094, 6114 C6044 K54200 C6088 K70167 C6087 K70120 C6091,6105 K40175 C6098,6100 K40175 C6039,6103 K40129  | OR S ITRO  WWW  TEL  FAX 9021   | (DD106F103Z50V) ERVICE MANUALS CONTACT: N TECHNICAL SERV V.mauritron.co.uk : 01844 - 351694 - 01844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)   | ic<br>0.047µF<br>1µF   | Symbol No.   | * * 144MHz P/<br>Part No.<br>F0002451<br>C024511A  | TP-G  A UNIT * * *  Description  Printed Circuit Board  PCB with Components  POWER MODULE  |
| C6009,6015,6016, 6020, 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  C6044  C6044  K54200  C6088  K70167  C6087  K70120  C6091,6105  K40179  C6089,6101,6102  K40179   | OR S ITRO  WWW  TEL  FAX 9021   | (DD106F103Z50V) ERVICE MANUALS CONTACT: N TECHNICAL SERV V.mauritron.co.uk : 01844 - 351694 - 01844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)   | ic<br>0.047µF<br>1µF   | Symbol No.   | * * 144MHz P/<br>Part No.<br>F0002451<br>C024511A  | TP-G  A UNIT * * *  Description  Printed Circuit Board  PCB with Components  POWER MODULE  |
| 6020,<br>6023-6026,<br>6028-6031,<br>6045,6046,<br>6050-6052,<br>6067-6069,<br>6071,6073,6080,<br>6082,6084,6095,<br>6104,6106-6111<br>6115  C6038,6042,6058,<br>6059,<br>6061-6065,6094,<br>6114  C6044  K54200  C6088  K70167  C6087  K70120  C6091,6105  K40179  C6089,6100  K40179   | OR S ITRO  WWW  TEL  FAX 9021   | (DD106F103Z50V) ERVICE MANUALS CONTACT: N TECHNICAL SERV V.mauritron.co.uk : 01844 - 351694 - 01844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)   | ic<br>0.047µF<br>1µF   | Symbol No.   | * * 144MHz P/<br>Part No.<br>F0002451<br>C024511A  | TP-G  A UNIT * * *  Description  Printed Circuit Board  PCB with Components  POWER MODULE  |
| 6023-6026, 6028-6031, 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  K54200  C6088  K70167  C6087  K70120  C6091,6105  K40179  C6089,6101,6102  K40149  | ITRO<br>WWV<br>TEL<br>FAX<br>9021   | ERVICE MANUALS CONTACT: N TECHNICAL SERV V.mauritron.co.uk : 01644 - 351694 C 01844 - 352554 Semiconductor Cerami 25WV (UAT-08X473K-L45A Polycarbonate 100WV (B32561A1105J)   | ic 0.047µF<br>E) 1µF   | Symbol No.   | * * 144MHz P/<br>Part No.<br>F0002451<br>C024511A  | Description Printed Circuit Board PCB with Components  POWER MODULE  |
| 6045,6046, 6050-6052, 6067-6069, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  C6044  K54200  C6088  K70140  C6087  C6091,6105  K40175  C6098,6100  K40175  C6039,6103  K40129  | ITRO<br>WWV<br>TEL<br>FAX<br>9021   | N TECHNICAL SERV<br>v.mauritron.co.uk<br>: 01844 - 351694<br>: 01844 - 352554<br>Semiconductor Cerami<br>25WV<br>(UAT-08X473K-L45A<br>Polycarbonate 100WV<br>(B32561A1105J)   | ic 0.047µF<br>E) 1µF   | Symbol No.   | Part No.<br>F0002451<br>C024511A   | Description Printed Circuit Board PCB with Components  POWER MODULE  |
| 6050-6052, 6067-6065, 6071,6073,6080, 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  C6044  K54200  C6088  K70167  C6087  K70120  C6091,6105  C6098,6100  K40179  C6089,6101,6102  K40129  | WWV<br>TEL<br>FAX<br>9021   | N TECHNICAL SERV<br>w.mauritron.co.uk<br>: 01844 - 351694<br>: 01844 - 352554<br>Semiconductor Cerami<br>25WV<br>(UAT-08X473K-L45A<br>Polycarbonate 100WV<br>(B32561A1105J)   | ic<br>0.047μF<br>E)<br>1μF   | Symbol No.   | Part No.<br>F0002451<br>C024511A   | Description Printed Circuit Board PCB with Components  POWER MODULE  |
| 6067-6069,<br>6071,6073,6080,<br>6082,6084,6095,<br>6104,6106-6111<br>6115  C6038,6042,6058,<br>6059,<br>6061-6065,6094,<br>6114  C6044  K54200  C6088  K70167  C6066  K70140  C6087  K70120  C6091,6105  K40175  C6098,6100  K40175  C6039,6103  K40129   | WWV<br>TEL<br>FAX<br>9021   | v.mauritron.co.uk<br>: 01644 - 351694<br>: 01844 - 352554<br>Semiconductor Cerami<br>25WV<br>(UAT-08X473K-L45A<br>Polycarbonate 100WV<br>(B32561A1105J)   | ic<br>0.047μF<br>E)<br>1μF   | Symbol No.   | Part No.<br>F0002451<br>C024511A   | Description Printed Circuit Board PCB with Components  POWER MODULE  |
| 6082,6084,6095, 6104,6106-6111 6115  C6038,6042,6058, 6059, 6061-6065,6094, 6114  C6044  K54200  C6088  K70167  C6087  K70120  C6091,6105  K40179  C6089,6101,6102  K40149  C6039,6103  K40129   | WWV<br>TEL<br>FAX<br>9021   | v.mauritron.co.uk<br>: 01644 - 351694<br>: 01844 - 352554<br>Semiconductor Cerami<br>25WV<br>(UAT-08X473K-L45A<br>Polycarbonate 100WV<br>(B32561A1105J)   | ic<br>0.047μF<br>E)<br>1μF   | Symbol No.   | Part No.<br>F0002451<br>C024511A   | Description Printed Circuit Board PCB with Components  POWER MODULE  |
| 6104,6106-6111<br>6115  C6038,6042,6058,<br>6059,<br>6061-6065,6094,<br>6114  C6044  K54200  C6088  K70167  C6066  K70140  C6087  K70120  C6091,6105  K40179  C6098,6100  K40179  C6039,6103  K40129   | TEL<br>FAX<br>9021  | : 01844 - 351694<br>: 01844 - 352554<br>Semiconductor Cerami<br>25WV<br>(UAT-08X473K-L45A<br>Polycarbonate 100WV<br>(B32561A1105J)  | 0.047μF<br>.E)<br>1μF  | Symbol No.   | Part No.<br>F0002451<br>C024511A   | Description Printed Circuit Board PCB with Components  POWER MODULE  |
| C6038,6042,6058, 6059, 6061-6065,6094, 6114 C6044 C6088 C6066 C6043 C6087 C6091,6105 C6098,6100 C6089,6101,6102 C6039,6103 K40129  | FAX<br>9021   | 01844 - 352554<br>Semiconductor Cerami<br>25WV<br>(UAT-08X473K-L45A<br>Polycarbonate 100WV<br>(B32561A1105J)  | 0.047μF<br>.E)<br>1μF  | Symbol No.   | Part No.<br>F0002451<br>C024511A   | Description Printed Circuit Board PCB with Components  POWER MODULE  |
| 6059, 6061-6065,6094, 6114 C6044 K54200 C6088 K70167 C6066 K70140 C6087 K70120 C6091,6105 K40179 C6098,6100 K40179 C6039,6103 K40129   | 9021  | Semiconductor Cerami<br>25WV<br>(UAT-08X473K-L45A<br>Polycarbonate 100WV<br>(B32561A1105J)  | 0.047μF<br>.E)<br>1μF  | <del></del>  | F0002451<br>C024511A   | Printed Circuit Board PCB with Components POWER MODULE   |
| 6059, 6061 – 6065, 6094, 6114  C6044  C6044  K54200  C6088  K70167  C6066  K70140  C6087  K70120  C6091, 6105  K40179  C6098, 6100  K40179  C6039, 6103  K40129  |   | 25WV<br>(UAT-08X473K-L45A<br>Polycarbonate 100WV<br>(B32561A1105J)  | 0.047μF<br>.E)<br>1μF  | 10-24-31   | C024511A   | PCB with Components  POWER MODULE  |
| 6114 C6044 K54200 C6088 K70167 C6066 K70140 C6043 K70120 C6087 K70120 C6091,6105 K40175 C6098,6100 K40175 C6039,6103 K40129  | 0001  | (UAT-08X473K-L45A<br>Polycarbonate 100WV<br>(B32561A1105J)  | .Ε)<br>1μF   |  |  | POWER MODULE   |
| C6044         K54200           C6088         K70167           C6066         K70140           C6043         K70120           C6087         K70120           C6091,6105         K40179           C6098,6100         K40179           C6089,6101,6102         K40149           C6039,6103         K40129  | 0001  | Polycarbonate 100WV<br>(B32561A1105J)   | 1μF  |  |  |  |
| C6066 K70140 C6043 K70120 C6087 K70120 C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129  | •   | <del></del>   | 0.47 5   |  |  |  |
| C6066 K70140 C6043 K70120 C6087 K70120 C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129  |   | <del></del>   | 0.47 5   |  |  |  |
| C6043 K70120 C6087 K70120 C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129   | 7474  |   | $0.47 \mu F$   | O7001  | G1090295   | M57713   |
| C6043 K70120 C6087 K70120 C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129   |   | (CS15E1VR47M)   | ·  |  |  |  |
| C6087 K70120 C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129  | 0007  | " 25WV  | 1μF  |  |  |  |
| C6087 K70120 C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129  |   | (489D105X0025A1)  |  |  |  | DIODE  |
| C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129   | 0006  | " "   | 3.3µF  | D7002  | G2090118   | Schottky barrier 1SS97   |
| C6091,6105 K40179 C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129   |   | (489D335X0016B1)  |  | D7001  | G2090003   | Si V06B  |
| C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129   | 0002  | 16WV  | 10μF   |  |  |  |
| C6098,6100 K40179 C6089,6101,6102 K40149 C6039,6103 K40129   |   | (489D106X0016C1)  |  |  |  |  |
| C6089,6101,6102 K40149 C6039,6103 K40129   | 9002  | Electrolytic 50WV   | $0.1\mu$ F   |  |  | RESISTOR   |
| C6089,6101,6102 K40149 C6039,6103 K40129   |   | (ECE-A1HK0R1)   |  | R7003  | J30356019  | Cement 3W 0.1Ω   |
| C6039,6103 K40129  | 9001  |   | lμF  | R7004  | J02245222  | Carbon film 1/4W SJ 2.2kΩ  |
| C6039,6103 K40129  |   | (ECE-A1HK1R0)   |  |  |  |  |
|  | <i>9</i> 011  | " 25WV  | 4.7μF  |  | ļ. <u> </u>  |  |
|  | 20.2  | (ECE-A1EK4R7)   | 10.7   | 07015  | V02170002  | CAPACITOR 50WV CH 2nF  |
| C6010 K40109   | <del>7</del> 012  | " 16WV  | 10µF   | C7015  | K02179003  | Ceramic 50WV CH 2pF  |
| K40109   | 2021  | (ECE-A1CK100)<br>" 10WV   | 100µF  | C7012 7012   | V02175160  | (DD104CK020C50V)   |
|  | 1000  |   | τυυμτ  | C7012,7013,<br>7016-7018   | K02175150  | (DD104CH150J50V)   |
|  |   | (10RE100) TRIMMER CAPACITOR   | <u> </u>   | C7011  | K02175180  | (DD104CH150J50V) " " 18pF  |
| TC6001,6002 K91000   | 1056  | ECV1ZW 06x53T   | 6pF  | 10,011   | K021/3180  | (DD104CH180J50V)   |
| TC6003 K91000  |   | ECV-1ZW 00x53T  | 20pF   | C7014  | K02179012  | " " 30pF   |
| 100000 K91000  | ,04)  | DOT TON BUXUUT  | 20hr   | 1 - 7 - 7 - 7  |  | (DD105CH300J50V)   |
|  |   | INDUCTOR  |  | C7001-7003.  | K10176102  | " B 0.001#F  |
| L6006 L11901   | ,   | FL3H-R68M   | 0.68µH   | 7005,7007,7009,  |  | (DD104B102K50V)  |
| L6014 L11900   | 08  | FL4H-R68M   | 0.68µH   | 7010,7019,7020   |  |  |
| L6001-6004 L11901  |   | FL3H1R0M  | 1μΗ  | C7021-7025   | K21170002  | Feed thru " 0.001#F  |
| L6013 L11900   | 04  | LAL04NA1R0M   | 1μH  |  |  | (ECKY1H-102WE)   |
| L6009,6010 L11900  | )04<br>  29   | FL4H-100K   | 10µH   | C7026,7027   | K13179009  | Ceramic 50WV F0.047µF  |
| L6015 L11900   | )04<br>129<br>)89   | FL5H-330K   | 33µH   | 1  | 1  | (DD110F473Z50V)  |
| L6012 L11900   | )04<br>  29<br>  089<br>  014   |   | lmH  | C7004,7006,7008  | K40129012  | Electrolytic 16WV 10µF   |
| L6007,6008 L10206  | )04<br> 29<br> )89<br> )14<br> )25  | FL5H-102K   |  | 1  |  | (16RC2-10)   |
|  | 004<br>129<br>089<br>014<br>025   | FL5H-102K   |  | •  | <del> </del>   |  |
|  | 004<br>129<br>089<br>014<br>025   | FL5H-102K   |  | <b>———</b>   | 1  | I  |

| <u> </u>   | T   | INDUCTOR  | D5007,5014  | G2090118  | Schottky Barrier 18897  |
|--|---|---|---|---|---|
| L7001  | L1020673  | 1   | D5010,5011  | G2090033  | PIN MI301   |
| L7002  | L1020663  |   | D5009   | G2090003  | Si V06B   |
| L7003  | L0020678  |   |   |   |   |
| L7004-7006   | L0020679  |   |   | †   |   |
|  | 1   |   |   | 1   | CRYSTAL   |
|  |   |   | X5001   | H0102507  | HC-18/U3P 56.805MHz   |
|  |   | RELAY   |   |   |   |
| RL7001   | M1190006  | FBR221D012M   |   |   |   |
|  |   |   |   |   | THERMISTOR  |
|  |   |   | TH5001,5002   | G9090008  | 31D26   |
|  |   | CONNECTOR   | TH5003  | G9090001  | SDT250  |
| J7001  | P1090192  | FM-MR   |   | ·   |   |
| J7002  | P1090005  | SG8050  |   |   | CRYSTAL FILTER  |
|  |   |   | XF5001  | H1102072  | XF-67JX 67.615MHz   |
|  |   |   |   |   |   |
|  |   | PLUG  |   |   | RESISTOR  |
| P7001 (with wire)  | T9204523  |   | R5007,5033  | J01215150   | Carbon film 1/8W TJ 15Ω   |
|  |   |   | R5014,5018,   | J02245560   | " " 1/4W SJ 56Ω   |
|  |   |   | 5021,5022<br>5026,5037,5058,  |   |   |
|  | <u>                                     </u>                            | TP TERMINAL   | 5062,5063   | 1   | ī.  |
|  | Q5000036  | TP-G  | 7.405   |   | l   |
|  | Q5000020  | MS-60121  | R5023   | J01245560   | " " TJ 56Ω  |
|  | 1   |   | R5019   | J01215560   | " " 1/8W TJ 56Ω   |
| Paror  | maga. 1555 :  | CONNECTION CABLE  | R5043   | J01215680   | " " 68Ω<br>" " 1/4W SJ 100Ω   |
| P7505  | T9204527A   |   | R5022,5052  | J02245101   |   |
| P7506  | T9204527A   |   | R5031   | J01215101   | " " 1/8W TJ 100Ω " " 1/4W SJ 150Ω   |
| P7507  | T9204529A   |   | R5001,5013<br>R5002,5067,5068   | J02245151<br>J00215151  | " " 1/4W SJ 150Ω  |
|  |   | <u> </u>  | R5006,5034  | J01215271   | " " TJ 270Ω   |
|  | <u>-</u>  |   | R5000,3034  | J02245271   | " " 1/4W SJ 270Ω  |
| ·  |   |   | R5041,5065  | J01215331   | " " 1/8W TJ 330Ω  |
| 430M   | Hz MODULE   | (OPTION)  | R5008,5032  | J01215561   | " " 560Ω  |
|  | * * 430MHz RI   |   | R5044   | J02245681   | " " 1/4W SJ 680Ω  |
| Symbol No.   | Part No.  | Description   | R5053   | J01215681   | " " 1/8W TJ 680Ω  |
| PB-2453A   | F0002453A   | Printed Circuit Board   | R5047,5048,5061   | J02245102   | " " 1/4W SJ 1kΩ   |
|  | C024530A  | PCB with Components   | R5070,5073  | J01215102   | 1/8W TJ 1kΩ   |
|  |   |   | R5042   | J02245122   | " " 1/4W SJ 1.2kΩ   |
|  |   |   | R5066,5038  | J00215152   | " " 1/8W VJ 1.5kΩ   |
|  |   | TRANSISTOR  | R5012,5072  | J02245152   | " " 1/4W SJ 1.5kΩ   |
| Q5013  | G3107331Q   | 2SA733AQ  | R5020,5049,5057,  | J02245222   | " " 2.2kΩ   |
| Q5015,5016   | G3304600B   | 2SC460B   | 5064  |   | . (014 57) . 0 71 -   |
| Q5012  | G3314260  | 2SC1426   | D COCA  | J01215272   | " " 1/8W TJ 2.7kΩ " " 1/4W SJ 4.7kΩ   |
| Q5014  | G3320260  | 2SC2026   | R5054   | J02245472   | 2 (1 -  |
| Q5011  | G3324070  | 2SC2407   | R5060   | J02245562   |   |
|  |   |   | R5046   | J02245103<br>J02245223  | " " " 10kΩ  |
|  |   |   | R5009,5028,5059,  |   | 401 -   |
| 04000 4010   | L   | FET   | R5015,5016,5024,<br>5025,5030,5055,                                     | J02245473   | " " 4/kΩ  |
| Q5002,5010   | C2001250  |   |   | 1   | 1   |
|  | G3801250  | 2SK125  | 5056  |   |   |
| Q5006,5007   | G3802410Y   | 2SK241Y   |   | 101215472   | 1/9W TI 47b0  |
| Q5006,5007<br>Q5005  | G3802410Y<br>G4800510C  | 2SK241Y<br>3SK51-03   | R5029   | J01215473   | 1/8W TJ 47kΩ  |
| Q5006,5007<br>Q5005<br>Q5004,5008                            | G3802410Y<br>G4800510C<br>G4800730Y                                     | 2SK241Y<br>3SK51-03<br>3SK73Y   | R5029<br>R5071  | J01215563   | " " 56kΩ  |
| Q5006,5007<br>Q5005  | G3802410Y<br>G4800510C  | 2SK241Y<br>3SK51-03   | R5029<br>R5071<br>R5010   | J01215563<br>J02245104  | " " 56kΩ<br>" " 1/4W SJ 100kΩ   |
| Q5006,5007<br>Q5005<br>Q5004,5008                            | G3802410Y<br>G4800510C<br>G4800730Y                                     | 2SK241Y<br>3SK51-03<br>3SK73Y   | R5029<br>R5071<br>R5010<br>R5027  | J01215563<br>J02245104<br>J01215104   | " " 56kΩ " " 1/4W SJ 100kΩ " " 1/8W TJ 100kΩ  |
| Q5006,5007<br>Q5005<br>Q5004,5008                            | G3802410Y<br>G4800510C<br>G4800730Y                                     | 2SK241Y<br>3SK51-03<br>3SK73Y<br>3SK121   | R5029<br>R5071<br>R5010   | J01215563<br>J02245104  | " " 56kΩ<br>" " 1/4W SJ 100kΩ   |
| Q5006,5007<br>Q5005<br>Q5004,5008<br>Q5001                   | G3802410Y<br>G4800510C<br>G4800730Y<br>G4801210                         | 2SK241Y<br>3SK51-03<br>3SK73Y<br>3SK121   | R5029<br>R5071<br>R5010<br>R5027  | J01215563<br>J02245104<br>J01215104   |   |
| Q5006,5007<br>Q5005<br>Q5004,5008<br>Q5001                   | G3802410Y<br>G4800510C<br>G4800730Y<br>G4801210<br>G2090247             | 2SK241Y<br>3SK51-03<br>3SK73Y<br>3SK121<br>QUAD DIODE<br>ND487C1-3R               | R5029<br>R5071<br>R5010<br>R5027<br>R5011                               | J01215563<br>J02245104<br>J01215104<br>J02245225  |   |
| Q5006,5007<br>Q5005<br>Q5004,5008<br>Q5001                   | G3802410Y<br>G4800510C<br>G4800730Y<br>G4801210                         | 2SK241Y<br>3SK51-03<br>3SK73Y<br>3SK121   | R5029<br>R5071<br>R5010<br>R5027  | J01215563<br>J02245104<br>J01215104   |   |
| Q5006,5007<br>Q5005<br>Q5004,5008<br>Q5001                   | G3802410Y<br>G4800510C<br>G4800730Y<br>G4801210<br>G2090247             | 2SK241Y<br>3SK51-03<br>3SK73Y<br>3SK121<br>QUAD DIODE<br>ND487C1-3R               | R5029<br>R5071<br>R5010<br>R5027<br>R5011                               | J01215563<br>J02245104<br>J01215104<br>J02245225<br>J51745102                           |   |
| Q5006,5007<br>Q5005<br>Q5004,5008<br>Q5001                   | G3802410Y<br>G4800510C<br>G4800730Y<br>G4801210<br>G2090247             | 2SK241Y<br>3SK51-03<br>3SK73Y<br>3SK121<br>QUAD DIODE<br>ND487C1-3R               | R5029<br>R5071<br>R5010<br>R5027<br>R5011<br>VR5003<br>VR5004           | J01215563<br>J02245104<br>J01215104<br>J02245225<br>J51745102<br>J51745103              | '' ' ' ' 56kΩ   '' ' 1/4W SJ 100kΩ   '' 1/8W TJ 100kΩ   '' 1/8W TJ 100kΩ   '' 1/4W SJ 2.2MΩ   '' 1/4W SJ  |
| Q5006,5007<br>Q5005<br>Q5004,5008<br>Q5001                   | G3802410Y<br>G4800510C<br>G4800730Y<br>G4801210<br>G2090247             | 2SK241Y<br>3SK51-03<br>3SK73Y<br>3SK121<br>QUAD DIODE<br>ND487C1-3R<br>ND487C2-3R | R5029<br>R5071<br>R5010<br>R5027<br>R5011<br>VR5003<br>VR5004<br>VR5006 | J01215563<br>J02245104<br>J01215104<br>J02245225<br>J51745102<br>J51745103<br>J51745223 | '' ' ' ' 56kΩ   '' ' 1/4W SJ 100kΩ   '' 1/8W TJ 100kΩ   '' 1/8W TJ 100kΩ   '' 1/4W SJ 2.2MΩ   '' 1/4W SJ 100kΩ   '' 1/4W SJ 100kΩ   '' 1/4W SJ 100kΩ   '' 1/4W SJ 100kΩ   '' 1/4W SJ 2.2MΩ   '' 1/4W SJ  |
| Q5006,5007<br>Q5005<br>Q5004,5008<br>Q5001<br>Q5003<br>Q5009 | G3802410Y<br>G4800510C<br>G4800730Y<br>G4801210<br>G2090247<br>G2090135 | 2SK241Y<br>3SK51-03<br>3SK73Y<br>3SK121<br>QUAD DIODE<br>ND487C1-3R<br>ND487C2-3R | R5029<br>R5071<br>R5010<br>R5027<br>R5011<br>VR5003<br>VR5004<br>VR5006 | J01215563<br>J02245104<br>J01215104<br>J02245225<br>J51745102<br>J51745103<br>J51745223 | '' ' ' ' 56kΩ   '' ' 1/4W SJ 100kΩ   '' 1/8W TJ 100kΩ   '' 1/8W TJ 100kΩ   '' 1/4W SJ 2.2MΩ   '' 1/4W SJ  |
| Q5006,5007<br>Q5005<br>Q5004,5008<br>Q5001<br>Q5003<br>Q5009 | G3802410Y<br>G4800510C<br>G4800730Y<br>G4801210<br>G2090247<br>G2090135 | 2SK241Y 3SK51-03 3SK73Y 3SK121  QUAD DIODE ND487C1-3R ND487C2-3R  DIODE Si 1S1555 | R5029<br>R5071<br>R5010<br>R5027<br>R5011<br>VR5003<br>VR5004<br>VR5006 | J01215563<br>J02245104<br>J01215104<br>J02245225<br>J51745102<br>J51745103<br>J51745223 | '' ' ' ' 56kΩ   '' ' 1/4W SJ 100kΩ   '' ' 1/8W TJ 100kΩ   '' ' 1/8W TJ 100kΩ   '' ' 1/4W SJ 2.2MΩ   '' 1/ |

(430 MHz MODULE)

|                                  | W00-55-55                          | 217   | L5003,5005,5008,                           | L1020673                              |   |
|----------------------------------|------------------------------------|---|--|---------------------------------------|---|
| C5024                            | K00172020                          | " " 2pF<br>(DD104SL020C50V)   | 5003,5003,5008,<br>5009,5011,5018,<br>5020 | L10200/3                              |   |
| G5006 5000 5045                  | K02179003                          | " CH 2pF (DD104CK020C50V) " " 3pF   | L5004,5010,5015<br>5019                    | L0021359                              |   |
| C5006,5009,5045,<br>5047,5076    | K02179004                          | (DD104CH030C50V)  | L5013                                      | L1020672                              |   |
|                                  | K02172040                          | " " 4pF   | L5014                                      | L0020903                              |   |
| C5001                            | K02172040                          | (DD104CH040C50V)  | L5016                                      | L0020474                              |   |
| C5048                            | K02173070                          | " " 7pF   | L5017                                      | L0020900                              |   |
| C3048                            | K021/30/0                          | (DD104CH070D50V)  | L5024                                      | L0020342                              |   |
| C5029,5030,5052                  | K02173080                          | " " 8pF   |  |                                       |   |
| 00023,0000,000                   |                                    | (DD104CH080D50V)  |  |                                       |   |
| C5002                            | K02173090                          | " " 9pF   |  |                                       | CAVITY  |
|                                  |                                    | (DD104CH090D50V)  | CV5004                                     | Q9000214                              | CV370   |
| C5018,5070,5071                  | K02173100                          | " " 10pF  | CV5001-5003                                | Q9000114B                             | CV441B  |
|                                  |                                    | (DD104CH100D50V)  |  |                                       |   |
| C5022                            | K00173100                          | " SL 10pF   |  |                                       |   |
|                                  |                                    | (DD104SL100D50V)  | mc001 5000 5010                            | 10100007                              | TRANSFORMER   |
| C5034                            | K00175120                          | " " SL 12pF<br>(DD104SL120J50V)   | T5001,5002,5012,<br>5013                   | L0190007                              |   |
| C5021,5084                       | K05175150                          | " " RH 15pF<br>(DD104RH150J50V)   | T5003,5004,<br>5009-5011                   | L0021165                              |   |
| C5079                            | K06175330                          | " " UJ 33pF   | T5005,5015                                 | L0021358                              |   |
| 000,7                            | 110011000                          | (DD104UJ330J50V)  | T5006-5008                                 | L0021161                              |   |
|                                  | K00175330                          | " SL 33pF   | T5014                                      | L0020533                              |   |
|                                  |                                    | (DD104SL330J50V)  |  |                                       |   |
| C5005,5008,5014,                 | K00175470                          | " " SL 47pF   |  | ļ <u>-</u>                            | RELAY   |
| 5035,5044,5074                   |                                    | (DD104SL470J50V)  | D1 6001                                    | M1100006                              | FBR221D012M   |
| C5080                            | K06175470                          | " " UJ 47pF   | RL5001                                     | M1190006                              | FBR221D012W   |
| G5002 5004 5007                  | W12171102                          | (DD104UJ470J50V)<br>" Ε 0.001μF   |  |                                       |   |
| C5003,5004,5007, 5025,5019,5026, | K12171102                          | (DD104E102P50V)   |  |                                       | CONNECTOR   |
| 5028,                            |                                    | (DD104E1021304)   | J5003                                      | P0090041                              | 5048-03A  |
| 5039-5043,<br>5049,5050,5053,    |                                    |   | J5001                                      | P0090054                              | 5048-07A  |
| 5055,5056,5059,                  |                                    |   | J5002                                      | P0090189                              | 5049-11A  |
| 5061-5064,<br>5066-5068.         |                                    |   | J5004-5007                                 | P1090255                              | TMP-JA  |
| 5072,5073,5075,                  |                                    |   |  |                                       |   |
| 5078,5082,<br>5089-5092,         |                                    |   |  |                                       |   |
| 5094,5095,5098                   |                                    |   |  |                                       | TP TERMINAL   |
|                                  |                                    |   | <u></u>                                    | Q5000016                              | TP-G  |
| C5012,5013,                      | K13179008                          | " F 0.01μF  |  |                                       |   |
| 5015-5017,<br>5020,5023,5025,    |                                    | (DD106F103Z50V)   |  | · · · · · · · · · · · · · · · · · · · |   |
| 5027,                            |                                    |   |  | +++43084Hz                            | PLL UNIT * * *  |
| 5031-5033,<br>5036-5038,         |                                    |   | Symbol No.                                 | Part No.                              | Description   |
| 5057,5060,5069,                  |                                    |   | PB-2446A                                   | F0002446A                             | Printed Circuit Board                                 |
| 5081,5083,<br>5085-5087,         |                                    |   | 122  | C024460A                              | PCB with Components                                   |
| 5093,5097                        |                                    |   |  |                                       | (w/VCO Board) Model A                                 |
| C5099,5101                       | K23170020                          | Chip " 0.001µF  | · <del></del>                              | C024460B                              | " "В  |
| ,                                |                                    | (GR40W5R102M50V)  |  | C024460C                              | ., ., C   |
| C5051,5054,5058,                 | K40129012                          | Electrolytic 16WV 10µF  |  | C024460D                              | ,, ,, X   |
| 5096                             | <u> </u>                           | (16RC2-10)  |  | C024460E                              | " " F   |
| C5065                            | K40129019                          | 1000μF  | PB-2442A                                   | F0002442                              | Printed Circuit Board                                 |
|                                  |                                    | (16RC1000)  | 4  | C002442A                              | PCB with Q6001,D6001,6002,<br>6018-6025,TH6001,R6001- |
|                                  | I                                  |   |  |                                       | 6003,C6001-6010,TC6001,                               |
|                                  |                                    | : TOIMMED CADACITAD   | 1  | }                                     | L6001-6004  |
|                                  | ***********                        | TRIMMER CAPACITOR   | 1  |                                       |   |
| TC5001                           | K91000060                          | ECV-1ZW 02x53 2pF   | <del></del>                                |                                       | 20001 0001  |
| TC5002                           | K91000059                          | ECV-1ZW 02x53 2pF<br>ECV-1ZW 04x53 4pF  |  |                                       | 20001 0001  |
|                                  |                                    | ECV-1ZW 02x53 2pF   |  |                                       | IC  |
| TC5002                           | K91000059                          | ECV-1ZW 02x53 2pF<br>ECV-1ZW 04x53 4pF<br>ECV-1ZW 06x53N 6pF                      | O6030                                      | G1090053                              |   |
| TC5002<br>TC5003                 | K91000059<br>K91000055             | ECV-1ZW 02x53 2pF<br>ECV-1ZW 04x53 4pF<br>ECV-1ZW 06x53N 6pF<br>INDUCTOR          | Q6030<br>Q6028                             | G1090053<br>G1090343                  | IC  |
| TC5002<br>TC5003                 | K91000059<br>K91000055<br>L1190004 | ECV-1ZW 02x53 2pF ECV-1ZW 04x53 4pF ECV-1ZW 06x53N 6pF  INDUCTOR FL4H-R68M 0.68µH | Q6028                                      |                                       | IC<br>MC14081B  |
| TC5002<br>TC5003                 | K91000059<br>K91000055             | ECV-1ZW 02x53 2pF<br>ECV-1ZW 04x53 4pF<br>ECV-1ZW 06x53N 6pF<br>INDUCTOR          |  | G1090343                              | IC<br>MC14081B<br>MC14094B                            |

(430MHz MODULE)

| 06010                              | C1000472               | TOSOGIAD                             | D6062.6062                              | 100045100              |                              |
|------------------------------------|------------------------|--------------------------------------|---|------------------------|------------------------------|
| Q6010<br>Q6009                     | G1090473<br>G1090239   | TC5081AP<br>TC5082P                  | R6062,6067<br>R6037                     | J02245102<br>J02245182 | Carbon film 1/4W SJ 1kΩ      |
| Q6008,6023                         | G1090239<br>G1090247   | TC9122P                              | R6009,6064                              | J02245182<br>J02245222 | 1.8832                       |
| Q6003,0023                         | G1090084               | μPC78L05                             | R6021                                   | J02245222<br>J02245332 | Z. ZK32                      |
| Q6033                              | G1090294               | μPC7808H                             | R6026,6028,6029,                        | J02245472              | " " " 3.3kΩ                  |
|                                    |                        |                                      | 6034,6043,6045                          |                        | 7.78.12                      |
|                                    |                        |                                      | R6056,6061                              | J02245561              | " " " 5.6kΩ                  |
|                                    |                        | FET                                  | R6008,6030,6032                         | J02245103              | " " " 10kΩ                   |
| Q6001,6017                         | G3801921G              | 2SK192AGR                            | R6084                                   | J02245153              | " " " 15kΩ                   |
| Q6002,6004,6018,                   | G3802410Y              | 2SK241Y                              | R6035,6036,6055,                        | J02245223              | " " " 22kΩ                   |
| 6019                               | <u> </u>               |                                      | 6060,<br>6068–6070,                     |                        |                              |
|                                    | <u> </u>               |                                      | 6078,6079,6082                          |                        |                              |
|                                    | <del> </del>           | TRANSISTOR                           | R6021                                   | J01215223              | " " 1/8W TJ 22kΩ             |
| Q6011                              | G3107331Q              | 2SA733AQ                             | R6086                                   | J01215393              | " " " 39kΩ                   |
| Q6013                              | G3304600B              | 2SC460B                              | R6087                                   | J00215473              | 47kΩ                         |
| Q6006,6007,6012,                   | G3309451P              | 2SC945AP                             | R6083                                   | J02245563              | " " 1/4W SJ 56kΩ             |
| 6015,<br>6020–6022.                |                        |                                      | R6004,6015,6031,<br>6033,6049,6051,     | J02245104              | " " " 100kΩ                  |
| 6024,6025,6032                     |                        |                                      | 6073,6076,6077,<br>6080,6081            |                        |                              |
| Q6003                              | G3320260               | 2SC2026                              | R6072                                   | 101245104              | " ' " TI 100kΩ               |
| Q6026,6031                         | G3408920Q              | 2SD892O                              | R6022,6040,6065.                        | J01245104<br>J02245224 | " " " TJ 100kΩ " " SJ 220kΩ  |
| Q0020,0031                         | G3408720Q              | 230092Q                              | 6074,6075                               | 302243224              | 33 220838                    |
|                                    | <u> </u>               |                                      | R6020                                   | J02245334              | " " 330kΩ                    |
|                                    |                        | DIODE                                | R6001                                   | J02245474              | " " 470kΩ                    |
| D6003,6004,                        | G2090027               | Si 1SS53                             |   |                        |                              |
| 6006-6009,<br>6011-6016,           | İ                      |                                      |   |                        | CAPACITOR                    |
| 6018,6019,<br>6021–6025            |                        |                                      | C6015,6023,6090                         | K00179001              | Ceramic 50WV SL 0.5pF        |
|                                    | C2000107               | V 1T25                               | G(0(1                                   | W00172010              | (DD104SL0R5C50V)             |
| D6001,6002,6005<br>D6010,6017      | G2090107<br>G2090003   | Varactor 1T25<br>Si V06B             | C6061                                   | K00172010              | " " 1pF<br>(DD104SL010C50V)  |
| 20010,0017                         | 32070003               | 31 ¥00B                              | C6086                                   | K02179001              | " " CH 1pF                   |
|                                    | 1                      |                                      | 1                                       | 1102173001             | (DD104CK010C50V)             |
|                                    |                        | CRYSTAL                              | C6077                                   | K02179003              | " " 2pF                      |
| X6001                              | H0102506               | HC-18/U 8.5333MHz                    | 1                                       |                        | (DD104CK020C50V)             |
| X6002                              | H0102505               | HC-18/U3P 57.4333MHz                 | C6088                                   | K00172020              | " SL 2pF                     |
| (Model A,B,C)                      | *********              | 50.1000144                           |   | ******                 | (DD104SL020C50V)             |
| X6002 (Model X)                    | H0102518               | " 59.1000MHz                         | C6114                                   | K02179004              | " " CH 3pF                   |
|                                    |                        | THERMISTOR                           | C6020                                   | K02172040              | (DD104CH030C50V) " " 4pF     |
| TH6001,6002                        | G9090008               | 31D26                                | 00020                                   | K02172040              | (DD104CH040C50V)             |
|                                    |                        |                                      | C6011                                   | K02172050              | " " 5pF                      |
|                                    |                        |                                      |   |                        | (DD104CH050C50V)             |
|                                    |                        | POSISTOR                             | C6007,6081                              | K02173060              | " " 6pF                      |
| PTH6001                            | G9090019               | PTH-2928                             |   |                        | (DD104CH060D50V)             |
|                                    |                        | RESISTOR                             | C6002,6078*                             | K02173070              | " " 7pF                      |
| R6011                              | J01215100              | Carbon film 1/8W TJ 10Ω              | C6078                                   | K05173080              | (DD104CH070D50V)<br>" RH 8pF |
| R6013                              | J01215150              | " " " 15Ω                            | C0078                                   | K031/3080              | (DD104RH080D50V)             |
| R6005,6007,6017,                   | J02245560              | " " 1/4W SJ 56Ω                      | C6006.6080                              | K02173090              | " " CH 9pF                   |
| 6039,6041,6053                     |                        |                                      | , |                        | (DD104CH090D50V)             |
| R6024,6025,6058,                   | J02245101              | 100Ω                                 | C6004,6005                              | K06173100              | " " UJ 10pF                  |
| 6063,6066                          |                        |                                      |   |                        | (DD104UJ100D50V)             |
| R6038                              | J01245101              | " " TJ 100Ω                          | C6068                                   | K00173100              | " " SL 10pF                  |
| R6003<br>R6048                     | J01215101<br>J00215101 | " " 1/8W TJ 100Ω<br>" " 1/8W VJ 100Ω | C6002 6070                              | V03155135              | (DD104SL100D50V)             |
| R6010                              | J00215101<br>J02245221 | " " 1/4W SJ 220Ω                     | C6003,6079                              | K02175120              | " " CH 12pF                  |
| R6012,6014                         | J01215271              | " " 1/8W TJ 270Ω                     |   | K05175120              | (DD104CH120J50V)<br>" RH12pF |
| R6047                              | J00215331              | VJ 330Ω                              |   | -1001/0120             | (DD104RH120J50V)             |
| R6002                              | J02245331              | " " 1/4W SJ 330Ω                     | C6041                                   | K00175150              | " " SL 15pF                  |
| R6027                              | J02245391              | 390Ω                                 |   |                        | (DD104SL150J50V)             |
| R6085                              | J01245471              | " " TJ 470Ω                          | C6060,6062                              | K05175150              | " RH 15pF                    |
| R6019                              | J02245681              | " " SJ 680Ω                          | 00000 0000                              |                        | (DD104RH150J50V)             |
| R6023,6042,6044,<br>6054,6057,6059 | J02245102              | " " " 1kΩ                            | C6008,6082                              | K02175180              | " " CH 18pF                  |
|                                    |                        |                                      |   | i                      | (DD104CH180J50V)             |

(\* 440–450MHz) (430MHz MODULE)

| 00020                              | K00175220            | Ceramic 50WV SL 22pF             | L6017            | L1190090             | LAL04NA102K 1mH                           |
|------------------------------------|----------------------|----------------------------------|------------------|----------------------|---|
| C6039                              | K00173220            | (DD104SL220J50V)                 | L6003            | L1090016             | 2.120.1.1102.1                            |
| C6049                              | K00175330            | " " 33pF                         | L6004            | L1190108             |   |
| 0049                               | 100173330            | (DD104SL330J50V)                 | L6005,6007,6021, | L1020680             |   |
| C6056                              | K06175330            | " " UJ 33pF                      | 6022             |                      |   |
|                                    |                      | (DD104UJ330J50V)                 | L6006            | L0020852             |   |
| C6029,6031,6089,                   | K00175470            | " " SL 47pF                      | L6014            | L0020533             |   |
| 6092,6096,6117                     |                      | (DD104SL470J50V)                 | L6019            | L0190016             |   |
| C6057                              | K06175470            | " " UJ 47pF                      |                  |                      |   |
| 00000000000000                     | V00175101            | (DD104UJ470J50V)<br>" SL 100pF   |                  |                      | TRANSFORMER                               |
| C6030,6069,6070,<br>6113           | K00175101            | (DD105SL101J50V)                 | T6002,6003       | L0020907             | THATO, O.M.                               |
| C6001,6019,6021                    | K10176102            | " " B 0.001µF                    | T6004,6005       | L0020782             |   |
| 00001,0012,0021                    | RIGITOR              | (DD104B102K50V)                  |                  |                      |   |
| C6028,6032,6033,                   | K12171102            | E 0.001μF                        |                  |                      |   |
| 6036,6049,6051,<br>6063,6071,6072, |                      | (DD104E102P50V)                  |                  |                      | CAVITY                                    |
| 6100,6101,6112,                    |                      |                                  | CV6001           | Q9000214             | CV-370                                    |
| 6115,6116                          |                      |                                  |                  |                      |   |
| C6009,<br>6012-6014,               | K13179008            | " " F 0.01μF                     |                  |                      | BELAY                                     |
| 6022,                              |                      | (DD106F103Z50V)                  | RL6001           | M1190002             | FBR211D012M                               |
| 6024-6027,<br>6037.6038.6045,      | FOH:                 | SERVICE MANUALS                  | VE0001           | 141170002            | I DIVELLIMITED                            |
| 6046,6052,6053,                    |                      | CONTACT:                         |                  |                      |   |
| 6055,6058,6059,<br>6073,6074,6076, | MAURITRO             | ON TECHNICAL SERVICES            |                  |                      | CONNECTOR                                 |
| 6083,6087,6091,                    | ww                   | w.mauritron.co.uk                | J6001            | P1090255             | ТМР-ЈА                                    |
| 6102,6110                          | TE                   | L: 01844 - 351694                | J6002            | P0090041             | 5048-03A                                  |
| C6064-6067                         | K141801              | X: 01844 - 352654/ FZ 0.01µF     | J6003            | P0090097             | 5049-05A                                  |
|                                    |                      | (RD871-1FZ103Z63V)               | J6004            | P0090100             | 5049-12A                                  |
| C6034,6043,                        | K19149021            | Semiconductor Ceramic            |                  |                      |   |
| 60936095,<br>60976099,             |                      | 25WV 0.047μF                     |                  |                      |   |
| 6119                               |                      | (UAT08X473K-L45AE)               |                  | 05000036             | TP-G                                      |
| C6047                              | K70167474            | Tantalum 35WV 0.47μF             |                  | Q5000036             |   |
| 06044.6075                         |                      | (CS15E1VR47M)<br>" 25WV 1μF      |                  | Q5000020<br>O5000037 | MS-60121<br>TP-H                          |
| C6044,6075                         | K70140007            | , 25 W 1μr<br>(489D105X0025A1)   |                  | Q3000037             | II-n                                      |
| C6042                              | K70107335            | " 10WV 3.3μF                     |                  |                      |   |
|                                    |                      | (CS15E1A3R3M)                    |                  |                      |   |
| C6050                              | K70100003            | 10μF                             |                  | * * * 430MHz         |   |
|                                    |                      | (489D106X0010B1)                 | Symbol No.       | Part No.             | Description Printed Circuit Board         |
| C6109,6111                         | K40179002            | Electrolytic 50WV 0.1µF          |                  | F0002454             | Printed Circuit Board PCB with Components |
| 26.36                              | 11.40.170.001        | (ECE-A1HK0R1) " " 1μF            | ·                | C024540A             | PCB with Components                       |
| C6106                              | K40179001            | (ECE-A1HK010)                    |                  |                      |   |
| C6048,6104,6105                    | K40129015            | " 16WV 4.7μF                     |                  |                      | POWER MODULE                              |
| 000 10,010 1,010                   |                      | (ECE-A1CK4R7)                    | Q7001            | G1090497             | S-AU4                                     |
| C6035,6054,6084,                   | K40129012            | " 10μF                           |                  |                      |   |
| 6108                               |                      | (ECE-A1CK100)                    |                  |                      |   |
| C6103                              | K40109002            | 10WV 47μF                        | P.7000           | 63000:10             | DIODE                                     |
|                                    |                      | (10RE47)                         | D7002            | G2090118             | Schottky Barrier 18897<br>Si V06B         |
| C6010                              | K40109001            | " " 100µF                        | D7001            | G2090003             | Si VUOB                                   |
| C(118                              | V40120021            | (10RE100)<br>" 16WV 1000μF       |                  |                      |   |
| C6118                              | K40129021            | (16R102S-13X16)                  |                  | † · · · · · · · ·    | RESISTOR                                  |
|                                    |                      | TRIMMER CAPACITOR                | R7003            | J30356019            | Cement 3W 0.1Ω                            |
| TC6001,6003                        | K91000055            | ECV1ZW 06x53N 6pF                | R7004            | J02245222            | Carbon film 1/4W SJ 2.2kΩ                 |
| TC6002                             | K91000029            | ECV1ZW 20x53 20pF                |                  |                      |   |
|                                    |                      | INDUCTOR                         |                  |                      |   |
| L6015                              | L1190004             | FL4H-R68M 0.68µH                 |                  | **********           | CAPACITOR SOWY CH INF                     |
| L6020                              | L1190108             | FL3H-R68M 0.68µH                 |                  | K02179001            | Ceramic 50WV CH 1pF                       |
| L6002,6018                         | L1190105             | FL3H-1R0M 1µH                    | 07000 7012       | V03170003            | (DD104CK010C50V) " " 2pF                  |
| L6012                              | L1190014             | FL4H-100K 10µH                   | C7009,7013       | K02179003            | (DD104K020C50V)                           |
| L6013                              | L1190138             | LAL04NA100K 10µH                 | C7012            | K02172050            | " " 5pF                                   |
| L6008,6009                         | L1190015             | FL5H-120K 12μH<br>FL5H-330K 33μH | 1 07012          | K021/2030            | (DD104CH050C50V)                          |
| L6010                              | L1190025<br>L1190029 | FL5H-330K 33µH<br>FL5H-470K 47µH | <del> </del>     | <del> </del>         | (22.0.0000000)                            |
| L6016                              | F1130073             | 1 2311-470Κ - 47μπ               | L                | <u> </u>             |   |

(430MHz MODULE)

| 02011 7016           | V00170000  | Coromia SOURI CII (-F        |   | T  |      |
|----------------------|--|------------------------------|---|--|------|
| C7011,7016           | K02173060  | Ceramic 50WV CH 6pF          |   |  |      |
| C7015                | V02176120  | (DD104CH060D50V)<br>" " 12pF |   |  |      |
| C7015                | K02175120  |                              |   |  |      |
| -                    | 7710106100                                       | (DD104CH120J50V)             |   |  |      |
| C7001,<br>7003-7005, | K10176102  | " " B 0.001μF                |   | =  |      |
| l 7008.7014.7017.    |  | (DD104B102K50V)              |   |  |      |
| 7019,7026            |  |                              |   |  |      |
|                      |  |                              |   |  |      |
| C7020,7025           | K21170002  | Feed thru 0.001 $\mu$ F      |   |  |      |
|                      |  | (ECKY1H-102WE)               |   |  |      |
| C7027,7028           | K13179009  | Ceramic 50WV F 0.047μF       |   |  |      |
|                      |  | (DD110F473Z50V)              |   |  |      |
| C7002,7006,7007      | K40129012  | Electrolytic 16WV 10µF       |   |  |      |
|                      |  | (16RC2-10)                   |   |  |      |
|                      |  |                              |   |  |      |
|                      |  |                              |   |  |      |
|                      |  | INDUCTOR                     |   |  |      |
| L7001,7002           | L1020673   |                              |   |  |      |
| L7003                | L0020916   |                              |   | .,   |      |
| L7004,7005           | L0021273   |                              |   | L  |      |
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|                      |  |                              |   |  |      |
|                      |  | RELAY                        |   |  |      |
| RL7001               | M1190044   | G4Y152P                      |   |  |      |
|                      |  |                              |   |  |      |
|                      |  |                              |   |  |      |
|                      |  | CONNECTOR                    |   |  |      |
| J7001                | P1090209   | N-R                          |   |  |      |
| J7001                | P1090291   | MR-10 (Model F)              |   |  |      |
| J7002                | P1090005   | SG8050                       |   |  |      |
|                      |  |                              |   |  |      |
|                      |  |                              |   |  |      |
|                      |  | PLUG                         |   |  |      |
| P7001 (with wire)    | T9204542A  |                              |   |  |      |
| 17001 (3100 310)     | 1,20101211                                       |                              | · _ · · _ · _ · _ · _ · _ · _ · _ · _ · |  |      |
| P7503,7504           | T9204526   |                              |   |  |      |
| P7505                | T9204527A  |                              |   |  |      |
| P7506                | T9204528A  | ··                           |   |  |      |
| P7507                | T9204529A  |                              |   |  |      |
|                      |  |                              |   |  |      |
|                      |  | TP TERMINAL                  |   |  |      |
|                      | Q5000036   | TP-G                         |   |  |      |
|                      | Q3000030   | 11-0                         |   |  |      |
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|                      |  |                              | FOR SEF                                 | NICE MAN                                     | UALS |
|                      |  |                              | C                                       | ONTACT:                                      |      |
|                      |  |                              | MAURITRON                               |  |      |
|                      |  |                              |   |  |      |
|                      | <u> </u>   |                              | 1.WWW                                   | nauritron.co                                 | ).uk |
|                      |  |                              | TEL: (                                  | 1844 - 351                                   | 694  |
|                      |  |                              | FAX: (                                  | 1 <del>844 - 352</del>                       | 554  |
|                      |  |                              | .,,,,,                                  |  |      |
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(430MHz MODULE)

|                                     | 2128 MH              | z Module (OPT                                    | ION)           | R5061,5065,5070  | J02245560 | Carbo       | n film              | 1/4W | SJ       | 56Ω          |
|-------------------------------------|----------------------|--|----------------|--|-----------|-------------|---------------------|------|----------|--------------|
| Symbol No.                          | Part No.             |  | ription        | R5073,5083,5087  | J02245680 | ,,          | "                   | "    | ••       | 68Ω          |
| *                                   | * * 21-28 MH         | RF UNIT * * *                                    |                | R5076  | J02245820 | "           |                     | ,,   | .,       | 82Ω          |
|                                     | F2539000<br>C025390A | Printed Circui                                   |                | R5012,5015,5017,<br>5030,5069,5077   | J02245101 | "           | "                   | "    | "        | 100Ω         |
|                                     | C023390A             | TCB WITH CON                                     | iponents       | R5064.5099   | J01245101 | **          | **                  |      | TJ       | 100Ω         |
|                                     |                      |  |                | R5050  | J02245151 | .,          | "                   | .,   | ŞJ       | 150Ω         |
|                                     |                      | IC   |                | R5008  | J02245221 | .,          | **                  | ,,   |          | 220Ω         |
| 05021                               | G1090080             | μPC78L08   |                | R5078  | J02245271 | 17          |                     | ,,   | ••       | 270Ω         |
| Q5021                               | G2090135             | ND487C2-3R                                       |                | R5018,5042,5044  | J02245471 |             | .,                  | .,   | "        | 470Ω         |
| Q5006                               | G2090133             | ND467C2-3K                                       | <del></del>    | R5084,5088   | J02245681 | <del></del> |                     | ,,   | ,,       | 680Ω         |
|                                     |                      |  | <del></del> -  | R5082  | J02245751 |             | -,,                 | "    | "        | 750Ω         |
|                                     |                      | FET  |                | R5023-5026,5093  | J02245102 | ,,          | **                  |      | "        | 1kΩ          |
| Q5007                               | G3801250             | 2SK 125  |                | R5031  | J02245152 | .,          |                     | ,,   | "        | 1.5kΩ        |
| Q5008,5011,5012                     | G3801230             | 2SK 241GR  |                | R5011,5021,5022,   | J02245222 | - ,,        | ••                  | **   | "        | $2.2k\Omega$ |
| Q5009,5010                          | G3802410S            | 2SK241Y  |                | 5027,5033,5034,  |           |             |                     |      |          |              |
| Q5034,5010                          | G4800510C            | 3SK51-03   | <del></del>    | 5036,5038,5040,<br>5043,5052,5056,   |           |             |                     |      |          |              |
| Q5005                               | G4800740L            | 3SK74L   |                | 5057,5066,5072,  | 1         |             |                     |      |          |              |
| 20002                               |                      |  |                | 5074   |           |             |                     |      |          |              |
|                                     |                      |  |                | R5003,5014   | J02245332 | ,,          | "                   |      | "        | 3.3kΩ        |
|                                     |                      | TRANSISTOR                                       |                | R5035,5037,5097  | J02245472 | ,,          | ·· .                | **   | "        |              |
| Q5020,5022                          | G3107331Q            | 2SA733AQ   |                | R5007  | J02245562 | ,,          | .,                  |      |          |              |
| Q5020,5022<br>Q5001,5002            | G3304600B            | 2SC460B  |                | R5047,5091,5098  | J02245103 |             | .,                  |      | "        | 10kΩ         |
| Q5003                               | G3305350B            | 2SC535B  |                | R5039,5041   | J02245153 | "           | ,,                  | **   | "_       | 15kΩ         |
| Q5019                               | G3318150Y            | 2SC1815GR  |                | R5001,5002,5006,   | J02245223 | "           | ••                  | **   | "        | $22k\Omega$  |
| Q5013-5018                          | G3319730             | 2SC1973  |                | 5059,5060,5063,  |           |             |                     |      |          |              |
| Q5004                               | G3324070             | 2SC2407  |                | 5067,5094,5095   |           |             |                     |      |          |              |
|                                     |                      |  |                | R5048,5096   | J02245473 |             | ,,                  |      | "        | 47kΩ         |
| <u>-</u>                            |                      |  |                | R5028,5062   | J02245104 |             |                     |      | "        | 100kΩ        |
|                                     |                      | DIODE  |                | R5029  | J02245225 |             | "                   |      | "        | 2.2MΩ        |
| D5006,5008,5010,                    | G2015550             | Si   | 1S1555         |  |           |             |                     |      |          |              |
| 5012,5031,5032                      |                      |  |                |  |           | <u></u>     |                     |      |          | _            |
| D5001-5005,5007,                    | G2090027             | .,   | 1SS53          |  |           |             | RESIS               |      |          |              |
| 5009,5011,5013,                     |                      |  |                | RB5001   | J40900010 | RK1         | 16 B4R              | 10ks | 2x4      |              |
| 5015-5030,5033,<br>5038,5039        | İ                    |  |                |  |           | ļ           |                     |      |          |              |
| 5050,5057                           |                      |  |                |  |           |             | TIOME               |      |          |              |
| D5037                               | G2090211             | "  | V06C           | VR5001,5002  | J51752101 |             | SFAN 1              |      |          | 100ΩΒ        |
| D5034-5036                          | G2090118             | Schottky bar                                     | rier 1SS97     | VR5003   | J51745102 |             | 1A007-              |      |          | 1kΩB         |
| D5014                               | G9090007             | Varistor   | MV12           | VR5006   | J51745103 |             | 1A013-              |      |          | 10kΩB        |
|                                     |                      |  |                | VR5005   | J51745223 |             | 1A015-              |      |          | 22kΩB        |
|                                     |                      |  |                | VR5004   | J51745473 | H065        | 1A017-              | 47KB |          | 47kΩB        |
|                                     |                      | CRYSTAL  |                |  |           |             |                     |      |          |              |
| X5001                               | H0102546             | HC-18/U3P  | 57.065MHz      |  |           |             |                     |      |          |              |
|                                     |                      |  |                |  |           | CAPAC       | mic disc            | 500  | 37.0     | 1 2-E        |
|                                     |                      |  |                | C5055  | K00172020 |             | mic disc<br>104SL02 |      |          | ∟ Հիւ        |
|                                     |                      | CRYSTAL FIL                                      | TER            | 05000 5100 5105  | K00172040 | "           |                     |      |          | 4pF          |
| XF5001                              | H1102076             | XF-46JX  |                | C5098,5100,5105  | K001/2040 | 1           | <br>104SL04         |      |          | TPI          |
|                                     |                      |  | <u> </u>       | 000(1  | K00173060 | (00)        | 1043L0-             |      |          | 6pF          |
|                                     |                      |  |                | C5061  | K001/3000 | i           | 104SL06             |      |          | op.          |
|                                     |                      | THERMISTOR                                       |                | C5101 5104 5106  | V00172090 | (DD)        |                     |      | _        | 8pF          |
| TH5001                              | G9090008             | 31D26  |                | C5101,5104,5106  | K00173080 |             | <br>104SL08         |      |          | oh,          |
| TH5002                              | G9090026             | 22D47  |                | C5062 5064   | K02173080 | "           | ,,                  |      |          | I 8pF        |
| TH5003                              | G9090020             | 21D27  | . <u> </u>     | C5063,5064   | K021/3000 |             | <br>104CH0          |      |          | - op.        |
| TH5004,5005                         | G9090001             | SDT250   |                | C5052  | K00173100 | (00.        | 104CHU              |      |          | . 10pF       |
|                                     |                      |  |                | C5052  | K901/3100 |             | <br>104SL10         |      |          | P-           |
|                                     |                      |  |                | C5102,5103   | K00175120 | (DD         |                     |      |          | 12pF         |
| D 5005 5007 5000                    | 102245222            | RESISTOR   | 1/4W SJ 2.2Ω   | الاستان المستقال المس | R001/3120 | i           | 104SL1              |      |          |              |
| R5085,5086,5089,<br>5090            | J02245229            | Carbon film                                      | 1/717 33 2.224 | C5099  | K00175150 | "           | ,,                  |      | _        | 15pF         |
|                                     | 102245470            | <del> </del>                                     | 47Ω            | 7 530//  | 1001/3130 |             | 104SL1:             |      |          |              |
| R5019,5075,5079,<br>5080            | J02245470            | " "  | 4/12           | C5008,5051   | K05175150 | "           |                     |      |          | H 15pF       |
|                                     | 100015550            | <del>                                     </del> | 56Ω            |  | K03173130 |             | 104RH1              |      |          | F -          |
| R5004,5005,5009,<br>5011,5013,5016, | J02245560            | " "  | J022           | C5134,5135   | K00175180 | "           | ,,                  |      |          | 18pF         |
| 5020,5021,5032,                     |                      |  | •              | 00104,0100   | 1001/3100 |             | 104SL1              |      |          | - •          |
| 5045,5046,5049,                     |                      |  |                |  | 1         | + \-        |                     |      | <u> </u> |              |
| 5051,5055,5058                      | }                    | 1  |                | I  | 1         |             |                     |      |          |              |

| Carota                              | T                    |   | T                        | T                    | T                     |
|-------------------------------------|----------------------|---|--------------------------|----------------------|-----------------------|
| C5067                               | K00175220            | · ·                                     | T5012,5013               | L0021165             |                       |
| 05000 5010                          | 1500155000           | (DD104SL220J50V)                        | T5015-5018               | L0021161             |                       |
| C5009,5010                          | K00175390            | " " " SL 39pF                           | T5019-5021               | L0021125A            |                       |
| G5047 5050 5056                     | +                    | (DD104SL390J50V)                        | T5022                    | L0021379             |                       |
| C5047,5050,5056,<br>5068,5092,5133  | K00175470            | " " 47pF                                | T5023                    | L0190007             |                       |
|                                     |                      | (DD104SL470J50V)                        | T5024                    | L0021378             |                       |
| C5001                               | K06175470            | " " UJ 47pF                             | ļ                        |                      |                       |
| 05000                               | +                    | (DD104UJ470J50V)                        |                          | ļ .                  |                       |
| C5002                               | K06179009            | " " " UJ 56pF                           |                          | <u> </u>             | INDUCTOR              |
| 05010 5041 5040                     | 110010000            | (DD104UJ560J50V)                        | L5001                    | L0020533             |                       |
| C5018,5041,5042                     | K00175820            | " " SL 82pF                             | L5003                    | L0021384             |                       |
| C5071.5073                          | V00170012            | (DD104SL820J50V)                        | L5005,5006               | L0021382             |                       |
| C30/1,30/3                          | K00179013            | " " 91pF                                | L5010                    | L0021381             |                       |
| C5016 5010 5072                     | V00175121            | (DD105SL910J50V)                        | L5013,5014               | L0021383             | _                     |
| C5016,5019,5072,<br>5082            | K00175121            | " " 120pF                               | L5018                    | L0021388             | <u></u> .             |
|                                     | V10176102            | (DD105SL121J50V)                        | L5019                    | L0021387             | FLATIBON 0.50         |
| C5005,5011,5034,<br>5059,5062,5074, | K10176102            | " " B 0.001μF                           | L5002                    | L1190108             | FL3H-R68M 0.68        |
| 5079,5111,5129,                     |                      | (DD104B102K50V)                         | L5004,5007               | L1190029             | FL5H-470K 47µH        |
| 5137                                |                      |   | L5008,5009,5015,<br>5016 | L1190014             | FL4H-100K 10μF        |
| C5132                               | K10176222            | " " "0.0022µF                           | L5011,5012               | L1190113             | FL3H-R22M 0.22        |
|                                     |                      | (DD106B222K50V)                         | L5017                    | L1190113             | FL4H-2R2M 2.2µ        |
| C5003,5004,5006,                    | K13179008            | " " F 0.01µF                            | L5020                    | L1190138             | LAL04NA100K 10µH      |
| 5007,5013,5031,                     | 1213177000           | (DD106F103Z50V)                         | L5021                    | L1190090             | LAL04NA102K 1mH       |
| 5057,5076,5078,                     |                      | (5510011032301)                         | L3021                    | L1170070             | CACO-NATOZK TAM       |
| 5085,5089,5094,<br>5107,5108,5110,  |                      |   |                          |                      |                       |
| 5114-5116,5121,                     |                      |   |                          | <del> </del>         | RELAY                 |
| 5122,5125-5128,<br>5136,5138-5143   |                      |   | RL5001                   | M1190006             | FBR221D012M           |
| 3130,3130-3143                      |                      |   | RESOUT                   | M1130000             | 1 BR221D012M          |
| C5012,5014,5017,                    | K13179010            | " " " 0.022µF                           |                          |                      |                       |
| 5020,5065,5066,                     |                      | (DD108F223Z50V)                         |                          |                      | MINI CONNECTOR        |
| 5070,5081,5083,<br>5086,5087        |                      | (========,                              | J5001                    | P0090189             | 5049-11A              |
| 3000,0001                           | i                    |   | J5002                    | P0090042             | 5048-05A              |
| C5022,5024,5026,                    | K13179009            | 0.047µF                                 | J5003                    | P0090054             | 5048-07A              |
| 5028-5030,5032,                     |                      | (DD110F473Z50V)                         | J5004                    | P0090050             | 5048-04A              |
| 5033,5036-5040,<br>5043-5046,5048,  |                      | , | J5005-5007               | P1090255             | TMP-JA                |
| 5049,5053,5054,                     |                      |   |                          |                      |                       |
| 5058,5060,5075,<br>5077,5080,5090.  | İ                    |   |                          |                      |                       |
| 5091,5096,5131                      |                      |   | 10.2                     | Q5000036             | TP TERMINAL           |
| ,,.                                 |                      |   |                          | Q5000037             | TP-G                  |
| C5095                               | K70127225            | Tantalum 16WV 2.2µF                     | · ··                     |                      | ТР-Н                  |
|                                     |                      | (CS15E1C2R2M)                           |                          |                      |                       |
| C5128                               | K40179002            | Electrolytic 50WV 0.1µF                 |                          |                      | • •                   |
|                                     |                      | (ECE-A1HKOR1 50V)                       |                          | R0100590             | HEAT SINK             |
| C5021,5023,5025,                    | K40179013            | 1μF                                     |                          |                      |                       |
| 5027,5117                           |                      | (50RE1)                                 |                          |                      |                       |
| C5015,5084,5124                     | K40129004            | " 16WV 10μF                             |                          |                      |                       |
|                                     |                      | (16RE10)                                |                          |                      |                       |
| C5088                               | K40089001            | " 6.3WV 100μF                           |                          |                      |                       |
|                                     |                      | (6.3RE100)                              | * 1                      | * * 21–28 MHz        | PLL UNIT * * *        |
| C5097                               | K40129020            | " 16WV 100μF                            |                          | F2540000             | Printed Circuit Board |
|                                     |                      | (16RC100)                               |                          | C025400A             | PCB with components   |
| C5109                               | K40129021            | " 1000μF                                |                          |                      |                       |
|                                     |                      | (16RS102S)                              |                          |                      |                       |
|                                     |                      |   |                          |                      | IC                    |
|                                     |                      |   | Q6034                    | G1090088             | MC14028B              |
|                                     |                      | TRANSFORMER                             | Q6031                    | G1090053             | MC14081B              |
| T5001,5014                          | L0021358             |   | Q6033                    | G1090343             | MC14094B              |
| T5002,5003                          | L0021313             |   | Q6032                    | G1090312             | MC14504B              |
| T5004                               | L0021312             |   | Q6036                    | G1090496             | MC145143P             |
| T5005                               | L0021311             |   | Q6012                    | G1090012             | SN16913P              |
| T5006,5007                          | L0021321             |   | Q6008                    | G1090062             | SN76514N              |
| T5008                               | L0021320             | -                                       | Q6035                    | G1090247             | TC9122P               |
|                                     |                      |   |                          |                      |                       |
| T5009<br>T5010,5011                 | L0021319<br>L0021351 |   | Q6037                    | G1090084<br>G1090080 | μPC78L05<br>μPC78L08  |

|                                     |           | FFT            | · · ·      | DC045 COC1 COC4                         | J02245104  | Conhan film 1/4W ST 100kg       |
|-------------------------------------|-----------|----------------|------------|---|------------|---------------------------------|
| 0.000                               | G2002410G | FET            |            | R6045,6061-6064,<br>6068,6069,6071,     | 302245104  | Carbon film 1/4W SJ 100kΩ       |
| Q6006                               | G3802410G | 2SK241GR       |            | 6086,6088,6089                          |            |                                 |
|                                     | G3803590  | (or 2SK359)    |            |   | 700017001  | 2001                            |
|                                     |           |                |            | R6065,6066                              | J02245224  |                                 |
|                                     |           |                |            | R6049                                   | J02245334  | " " 330kΩ " " 1/8W TJ 1MΩ       |
|                                     |           | TRANSISTOR     |            | R6099                                   | J01215105  | " " 1/8W TJ 1MΩ                 |
| Q6023,6024                          | G3107331Q | 2SA733AQ       |            |   |            |                                 |
| Q6001-6004                          | G3110050K | 2SA1005K       |            |   |            | BLOCK RESISTOR                  |
| Q6010,6011,6026                     | G3304600B | 2SC460B        |            | RB6001                                  | J40900039  | RA1/16K4R 100kΩx4               |
| Q6025                               | G3304960Y | 2SC496Y        |            |   |            | CAPACITOR                       |
| Q6009                               | G3305350B | 2\$C535B       |            | C6049,6058                              | K00172010  | Ceramic disc 50WV SL 1pF        |
| Q6013-6018,6022,                    | G3309451P | 2SC945AP       |            |   |            | (DD104SL010C50V)                |
| 6027-6030                           |           |                |            | C6003                                   | K00172020  | " " 2pF                         |
| Q6019-6021                          | G3318150G | 2SC1815GR      |            |   |            | (DD104SL020C50V)                |
| Q6005                               | G3319230O | 2SC1923-O      |            | C6008                                   | K00172030  | " " " 3pF                       |
| Q6007                               | G3324580Y | 2SC2458Y       |            |   |            | (DD104SL030C50V)                |
| Q6038                               | G3090005  | MPS-A13        |            | C6002,6007,6012,                        | K06172030  | ., ., ., UJ 3pF                 |
|                                     |           |                |            | 6017,6023,6028                          |            | (DD104UJ030C50V)                |
|                                     |           |                |            | C6129                                   | K06172040  | " " 4pF                         |
|                                     | -         | DIODE          |            |   |            | (DD106UJ040C50V)                |
| D6005-6021                          | G2090027  | Si 1SS         | 353        | C6011                                   | K02172040  | CH 4pF                          |
| D6022                               | G2090211  | V0e            | 6C         |   |            | (DD104CH040C50V)                |
| D6001-6004                          | G2090271  | Varactor 1T3   | 33         | C6016                                   | K02172050  | 5pF                             |
|                                     |           |                |            | 7                                       |            | (DD104CH050C50V)                |
|                                     |           | CRYSTAL        |            | C6013                                   | K00173060  | " " SL 6pF                      |
| X6001                               | H0102547  |                | 4685MHz    |   |            | (DD104SL060D50V)                |
| X6002                               | H0102557  |                | 0MHz       | C6018,6070                              | K00173080  | ., ., ., 8pF                    |
| 70002                               | 110102337 | 110 10, 0 0.0  |            | _                                       |            | (DD104SL080D50V)                |
| ·                                   |           | RESISTOR       |            | C6001                                   | K02173080  | CH 8pF                          |
| R6006,6010,6015,                    | J02245100 |                | W SJ 10Ω   |   |            | (DD104CH080D50V)                |
| 6020                                | 302243100 | Caroon man 174 | 11 03 1012 | C6009                                   | K02173090  | 9pF                             |
| R6032,6037,6044,                    | J02245560 |                | 56Ω        |   | 102113030  | (DD104CH090D50V)                |
| 6050,6091                           | 302243300 |                | 5042       | C6065,6067                              | K00175120  | " " SL 10pF                     |
| ·                                   | J02245101 |                | " 100Ω     |   | K00175120  | (DD104SL120J50V)                |
| R6004,6009,6014,<br>6019,6021,6026, | JU2245101 | " " "          | " 10042    | C6047,6055                              | K05173100  | " " RH 10pF                     |
| 6030,6042,6046,                     |           |                |            | 1 00047,0033                            | K03173100  | (DD104RH100D50V)                |
| 6055,6060,6077                      |           | 1              |            | C6050,6051,6057                         | K05175120  | " " 12pF                        |
| D/070                               | 101246221 |                | TJ 220Ω    | - C8030,0031,0037                       | K03173120  | (DD104RH120J50V)                |
| R6079                               | J01245221 |                |            |   | K00175120  | " " SL 12pF                     |
| R6028                               | J02245331 |                | 450-       | -                                       | K001/3120  | (DD104SL120J50V)                |
| R6023,6025,6031                     | J02245471 | ,, ,, ,,       |            | C(019                                   | K00175150  | 15pF                            |
| R6095                               | J02245561 | 11 11 11       |            | C6048                                   | K001/3130  | (DD104SL150350V)                |
| R6048                               | J02245681 |                | - 11 -     | GC005 (010 C015                         | K02175150  | " " CH 15pF                     |
| R6041,6043,6051,<br>6054,6056,6059  | J02245102 | " "            | " 1K75     | C6005,6010,6015,<br>6020                | K021/3130  | (DD104CH150J50V)                |
|                                     | 700015150 |                | 1 61-0     |   | V00176190  | " " SL 18pF                     |
| R6029,6092                          | J02245152 |                |            |   | K00175180  | (DD104SL180J50V)                |
| R6033,6038,6093,<br>6094            | J02245222 | " "            | 2.2kΩ      | <del></del>                             | K00175270  | (DD10432180330V)                |
|                                     | 103345333 |                | " 3.3kΩ    | C6069                                   | K001/32/0  | (DD104SL270J50V)                |
| R6022,6047,6096                     | J02245332 | " " "          |            |   | K00175330  | " " " 33pF                      |
| R6036,6085                          | J02245472 | " "            |            |   | V00113330  | (DD104SL330J50V)                |
| R6040,6052,6057                     | J02245562 | " " "          |            |   | K06175330  | " " UJ 33pF                     |
| R6024,6027,6078,<br>6087            | J02245103 | " " "          | " 10kΩ     | C6029,6038                              | K061/3330  |                                 |
|                                     |           | <del> </del>   | 101.0      |   | V06175200  | (DD104UJ330J50V)                |
| R6089                               | J02245123 | " " "          |            | C6109                                   | K06175390  | •                               |
| R6090                               | J02245153 | " " "          |            |   | V0C175170  | (DD104UJ390J50V)                |
| R6001,6006,6011,                    | J01215223 | " " 1/8        | WTJ 22kΩ   | C6037,6128                              | K06175470  | _ ·                             |
| 6016                                |           |                | W 01 201 - | 000000000000000000000000000000000000000 | W00175170  | (DD104UJ470J50V)<br>" " SL 47pF |
| R6034,6035,6039,                    | J02245223 | " " 1/4        | W SJ 22kΩ  | C6052,6078,6082                         | K00175470  | · .                             |
| 6053,6058,6067,<br>6070,6072–6075,  |           |                |            | 74000 4000 1000                         | 1700175555 | (DD104SL470J50V)                |
| 6080-6084,6098                      | ŀ         |                |            | C6032,6035,6068                         | K00175560  | 1                               |
|                                     |           |                |            |   |            | (DD104SL560J50V)                |
| R6002,6003,6007,                    | J02245333 | " "            | 33kΩ       | C6066                                   | K00175680  | " " 68pF                        |
| 6008,6012,6013,<br>6017,6018        | 1         |                |            |   | ļ          | (DD104SL680J50V)                |
| 0017,0010                           |           |                |            | C6034,6092                              | K00175101  | " " 100pF                       |
| R6076                               | J02245393 | ,, ,, ,,       |            |   | ļ          | (DD105SL101J50V)                |
| R6077                               | J02245563 | ,, ,, ,,       | 56kΩ       | ì                                       |            | <u> </u>                        |

| C6020 6042 6044                     | V1017(102  | T 6 : 1: 60007 P 6 601                |                |                |                        |
|-------------------------------------|------------|---------------------------------------|----------------|----------------|------------------------|
| C6039,6042,6044,<br>6046,6059,6062, | K10176102  |                                       |                |                | MINI CONNECTOR         |
| 6063,6071,6075,                     |            | (DD104B102K50V)                       | J6001          | P0090100       | 5049-12A               |
| 6077                                |            |                                       | J6002          | P0090097       | 5049-05A               |
| C(004 (000 (014                     | 1112120000 |                                       | J6003          | P0090042       | 5048-05A               |
| C6004,6009,6014,<br>6019,6022,6024. | K13179008  | " " F 0.01μ                           |                | P0090050       | 5048-04A               |
| 6025,6030,6031,                     |            | SERVICE MANUALS                       | J6005          | P1090255       | TMP-JA                 |
| 6033,6036,6040,                     | , c., , c  |                                       |                |                |                        |
| 6041,6043,6045,<br>6053,6054,6056.  |            | CONTACT:                              |                |                |                        |
| 6061,6072-6074                      | MAURITRO   | ON TECHNICAL SERVICES                 |                |                | TP TERMINAL            |
| 6076,6087,                          | 1 10/10/   | w.mauritron.co.uk                     |                | Q5000036       | TP-G                   |
| 6095-6097,6100,<br>6110,6116,6117,  | .          | 4: 01844 - 351694                     |                | Q5000020       | MS60121                |
| 6119.6120.6123.                     | 1          | 1                                     |                |                |                        |
| 6130                                | FA         | X: 01844 - <b>352554</b>              |                | Q9000192       | THERMAL CONDUCTOR fo   |
| C6101-6108                          | K14180103  | " " FZ 0.01μ                          | F              | `              | Q6025                  |
|                                     |            | (RD871-1FZ103Z50V)                    |                |                |                        |
| C6118                               | K13179009  | " " F 0.047µ                          | F              |                |                        |
| ł                                   |            | (DD110F473Z50V)                       |                | <del> </del>   |                        |
| C6079-6081.                         | K19149021  | Semiconductor ceramic                 | <del></del>    | <del></del>    |                        |
| 6083-6085,6093,                     |            | 25WV 0.047 <sub>µ</sub>               | , <del> </del> |                |                        |
| 6094,6098,6114                      |            | 2511 4 0.041/4                        | <del></del>    |                | DA HINET A A           |
| C6126,6127                          | K21170002  | Ceramic feed thru                     | <del></del>    | * * * 21-28MHz |                        |
| 00120,0127                          | R21170002  |                                       | ,              | F2533000       | Printed Circuit Board  |
| 1                                   |            | 50WV 0.001µ                           | ` <del> </del> | C0253330A      | PCB with components    |
| C6113                               | V54200001  | (ECK-Y1H102WE)                        |                |                |                        |
| C0113                               | K54200001  | Poly carbonate100WV 1μF               |                |                |                        |
| C(111                               |            | (B32561A-1105J)                       |                |                | TRANSISTOR             |
| C6111                               | K70120001  | Tantalum 16WV $4.7\mu$ F              | Q7002,7003     | G3319450       | 2SC1945                |
|                                     |            | (489D475X0016B1)                      | Q7001          | G3408820Q      | 2SD880Q                |
| C6099                               | K70120002  | " 10μF                                |                |                |                        |
|                                     |            | (489D106X0016C1)                      | <u></u>        |                |                        |
| C6091,6121                          | K40179002  | Electrolytic 50WV 0.1μF               |                |                | DIODE                  |
|                                     |            | (ECE-A1HK0R1)                         | D7002          | G2015550       | Si 1S1555              |
| C6086,6124                          | K40179005  | " 0.47μI                              | D7003          | G2090211       | Si V06C                |
|                                     |            | (ECE-A1HK-R47)                        | D7001          | G9090017       | Varistor MV11          |
| C6088,6089,6112                     | K40129015  | " 16WV 4.7μF                          | † <del></del>  |                |                        |
|                                     |            | (ECE-A1CK4R7)                         | <del></del>    | <del></del>    |                        |
| C6115                               | K40109002  | " 10WV 47μF                           |                |                | RESISTOR               |
|                                     |            | (10RE47)                              | R7003,7004     | J10276150      | Carbon composition     |
| C6021,6060,6090,                    | K40129004  | " 16WV 10µF                           | -              |                | 1/2W GK 15Ω            |
| 6122,6125                           |            | (16RE10)                              | R7001,7002     | J10276560      | " " " 56Ω              |
|                                     |            |                                       | R7005          | J10276101      | " " " " 1000           |
|                                     |            |                                       | R7007          | J02245101      | " film 1/4W SJ 1000    |
|                                     |            | TRIMMER CAPACITOR                     | R7008          | J02245222      | " " " 2.2ks            |
| TC6001                              | J91000029  | ECV-1ZW 20x53T 20pF                   | R7006          | J30356019      | Cement 3W 0.1Ω         |
|                                     | 371000027  | 20V-12W 20X331 20P1                   | 17000          | 730336019      | Centent 3W 0.142       |
|                                     |            |                                       | <del> </del>   |                |                        |
|                                     |            | TRANSFORMER                           | <del> </del> - |                | BOTENIZIO: - ETES      |
| T6001-6004                          | L0021380   | INAMOFUNMEN                           | VD 7001        | 761746100      | POTENTIOMETER          |
| T6005                               |            | · · · · · · · · · · · · · · · · · · · | VR7001         | J51745102      | H0651A007-1KB 1kΩ1     |
|                                     | L0020533   |                                       | ļ              | ļ              |                        |
| T6006-6010                          | L0021358   |                                       |                |                |                        |
| T6011,6012                          | L0020782   |                                       |                |                | CAPACITOR              |
|                                     |            |                                       | C7008          | K30276390      | Dipped mica 500WV 39pF |
|                                     |            |                                       |                |                | (LCQ12390K5)           |
|                                     |            | INDUCTOR                              | C7034          | K30276820      | " " 82pF               |
| L6001                               | L1190022   | FL5H-181K 180µH                       |                |                | (LCQ12820K5)           |
| L6002-6004                          | L1190113   | FL3H-R22M 0.22μH                      | C7009,7010     | K30276181      | " " 180pl              |
| L6005                               | L1190108   | FL3H-R68M 0.68µH                      | -              | 1              | (LCQ17181K5)           |
| L6006                               | L1190016   | FL5H-101K 100μH                       | C7013          | K30276271      | " " 270pl              |
| L6007                               | L1190111   | FL4H-5R6K 5.6µH                       |                |                | (LCQ17271K5)           |
| L6008                               | L1190011   | FL4H-4R7K 4.7μH                       | C7029          | K02179003      | Ceramic disc 50WV 2pF  |
| L6009                               | L1190009   | FL4H-3R3K 3.3µH                       | 1              |                | (DD104CK020C50V)       |
| L6010,6012                          | L1190017   | FL5H-102K 1mH                         | C7030          | K02175120      | " " " 12pF             |
| L6011                               | L1190025   | FL5H-330K 33µH                        | 1              |                | (DD104CH120J50V)       |
|                                     |            |                                       | C7002          | K00175180      | " " SL 18pF            |
|                                     |            |                                       | 1              | 12001/3100     | (DD104SL180J50V)       |
|                                     |            |                                       | <del> </del>   |                | (~~1040F100110 A)      |
|                                     |            |                                       |                |                |                        |

| C7007                    | K00175470                             | Ceramic disc 50WV SL 47pF | 1           | 21 20 MU    | MAIN CHARGE                     |
|--------------------------|---------------------------------------|---------------------------|-------------|-------------|---------------------------------|
| 1 6,007                  | K00175470                             | (DD104SL470J50V)          | Symbol No.  | Part No.    | MAIN CHASSIS * * *  Description |
| C7001                    | K00175820                             | 82pF                      |             |             | IC                              |
|                          |                                       | (DD104SL820J50V)          | Q7501       | G1090294    | µРС7808Н                        |
| C7004,7006               | K00179013                             | " " " 91pF                |             | Q9000192    | Thermal conductor               |
| L                        |                                       | (DD105SL910J50V)          |             | S5000065    | Washer                          |
| C7014                    | K00175121                             | " " " 120pF               |             |             |                                 |
|                          |                                       | (DD106SL121J50V)          |             |             |                                 |
| C7003                    | K00175151                             | " " 150pF                 | <u></u>     |             |                                 |
|                          |                                       | (DD106SL151J50V)          |             |             |                                 |
| C7005                    | K00175181                             | " " " " 180pF             |             |             |                                 |
| 67000 7001 7000          | **********                            | (DD106SL181J50V)          |             |             |                                 |
| C7022,7031-7033,<br>7035 | K10176102                             | " " B 0.001µF             |             |             |                                 |
| C7026                    | K13179008                             | (DD104B102K50V)           |             |             |                                 |
| C/020                    | K13179006                             | (DD106F103Z50V)           |             |             |                                 |
| C7011,7012,7018,         | K13179009                             | " " " 0.047μF             |             | <del></del> |                                 |
| 7021,7023,7025,          | <b>K</b> 13173003                     | (DD110F473Z50V)           |             |             |                                 |
| 7027                     |                                       | (221011)                  |             |             |                                 |
| C7016,7017               | K50177154                             | Mylar 50WV 0.15μF         |             |             | · , ,                           |
|                          | <u></u>                               | (50F2U154M)               |             |             |                                 |
| C7015,7019               | K70120007                             | Tantalum 16WV 6.8μF       |             |             |                                 |
|                          |                                       | (489D685X0016C1)          |             |             |                                 |
| C7028                    | K40109005                             | Electrolytic 10WV 10μF    |             |             |                                 |
|                          |                                       | (ECE-A1AK100)             |             |             |                                 |
| C7024                    | K40089002                             | 6.3WV 33μF                |             |             |                                 |
| 07020                    | W40120007                             | (ECE-A0JK330)             |             |             |                                 |
| C7020                    | K40129007                             | 16WV 100μF<br>(16RE100)   |             |             |                                 |
|                          |                                       | (TORETOO)                 |             |             |                                 |
|                          | · · · · · · · · · · · · · · · · · · · | TRANSFORMER               |             |             |                                 |
| T7001                    | L0021377                              |                           |             |             |                                 |
| T7002                    | L0021376                              |                           |             |             |                                 |
|                          |                                       |                           |             |             |                                 |
| " <b>-</b>               |                                       |                           |             |             |                                 |
|                          |                                       | INDUCTOR                  |             |             |                                 |
| L7001                    | L1020015                              |                           |             |             |                                 |
| L7002                    | L1020032                              |                           |             |             |                                 |
| L7003                    | L0021386                              |                           |             |             |                                 |
| L7004<br>L7005           | L0020824<br>L0021385                  |                           |             |             |                                 |
| £7003                    | 1.0021363                             |                           |             |             |                                 |
|                          |                                       |                           |             | <u> </u>    |                                 |
|                          |                                       | RELAY                     |             |             |                                 |
| RL7001                   | M1190002                              | FBR211AD012M              |             |             |                                 |
|                          |                                       |                           | <del></del> |             |                                 |
|                          |                                       |                           |             |             |                                 |
|                          |                                       | TP TERMINAL               | FOR S       | ERVICE      | MANUALS                         |
|                          | Q5000036                              | TP-G                      |             | CONTA       | CT:                             |
|                          |                                       |                           | TEATIONTD/  | N TECHN     | ICAL SERVICES                   |
|                          | <u>.</u>                              |                           | MAUNITA     | w.mauritr   | an.co.uk                        |
| 17001                    | D1000102                              | RECEPTACLE                | WW          | W.ISIAULIU  | - 351694                        |
| J7001<br>J7002           | P1090192<br>P1090005                  | FM-MR<br>S-G8050          | TE.         | L: U1044    | - 352554                        |
| 1/002                    | t 1030003                             | 3-30030                   | FA          | X: U1844    | - 352554                        |
|                          | -                                     |                           |             | <u> </u>    | <u> </u>                        |
|                          | Q9000192                              | THERMAL CONDUCTOR for     |             |             |                                 |
|                          | ~ <del> </del>                        | Q7001                     |             |             |                                 |
|                          |                                       |                           |             |             |                                 |
|                          |                                       |                           |             |             |                                 |
|                          | R4083841A                             | HEAT SINK                 |             |             | Downloaded by ☐                 |
|                          | R0100540A                             | HEAT SINK COVER           |             |             | Amateur Radio Directory         |
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