Remove the antenna, belt clip, battery, and top volume & squelch/knobs

Remove the the black sticker (the one with the Ni-Cd battery disposal warning) and the small "sub-board". See Fig 1
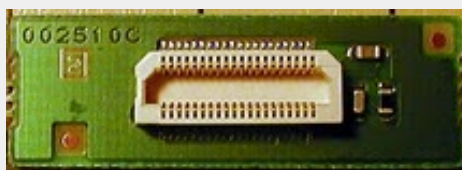*removing the sticker/sub-board reveals two smallphillips screws.
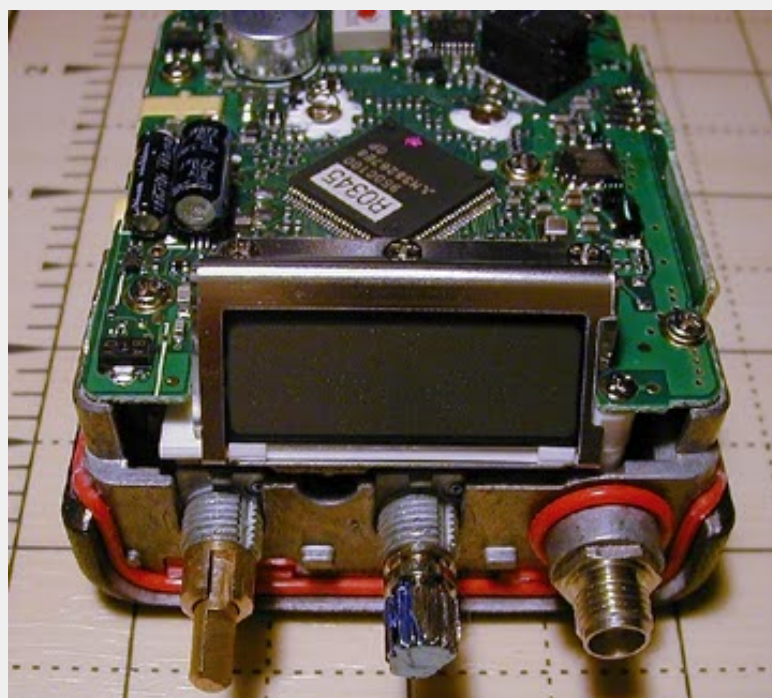

Fig 1 - Sub-Board

Remove the two screws that were under the sticker and sub-board, and remove the top LEFT screw - leaving the right screw alone. See Fig 2

Fig 2 Remove screws

Remove the rubber grommets under the volume & knob controls, and using a pair of hemos or small needle-nose pliers, remove the nuts for the volume & squelch/knob.

*Photo shown with nuts and case removed

Carefully slide the front and back case apart and remove the rubber piece around the mic element.
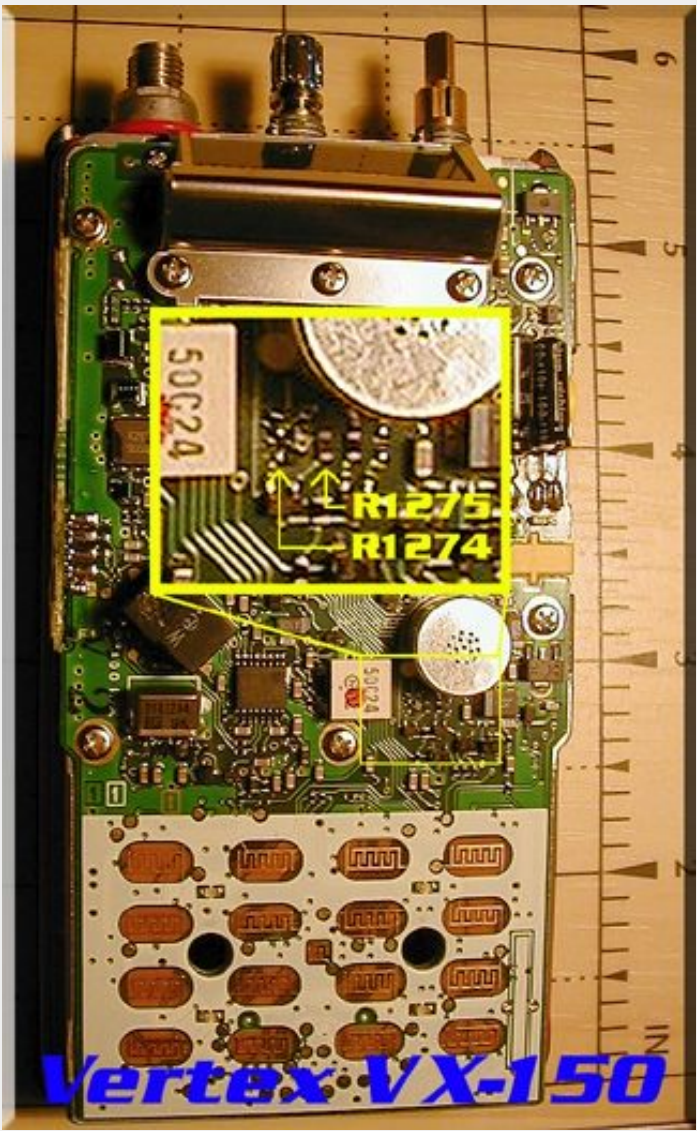

Fig 3

For Mars/Cap(140-174Mhz TX) remove R1275, and solder it to the blank solder pads labeled R1274 - Fig 3.

For Freeband (100-200Mhz TX) remove R1275 - Fig 3.

R1274	R1275	Transmit Coverage
Blank	Soldered	144-148Mhz (Factory Config)
Soldered	Blank	140-174Mhz (mars/Cap)
Blank	Blank	100-200Mhz* (Freeband)

*The VX-110 & VX150 can be opened for 100-200Mhz, but the radio's circuitry is not wide-banded enough to cover the entire 100-200Mhz spread. When the radios display starts flashing/blinking, this means the radio's VCO is out-of-lock and no receive or transmitting is possible. A typical radio should RX/TX from approx. 125-180Mhz when the freeband mod is performed.

Reassemble the radio carefully. Most of the time resetting the radio is NOT necessary, but have a backup of your frequencies just in case, because the radio will reset itself most of the time after a modification is made.

I have noticed a major bug in the memory channels. This bug has to do with memory channel #1. Example: Lets say you program: ch. #1 with 147.000, and ch #2 with 154.570, and the last channel (I will call ch # 200) in your memory bank with 144.000

So......

CH 200 144.000
CH 1   147.000
CH 3   154.570

Now, go to memory channel 1, and it will be 147.000, but rotate the knob to memory channel 2 (154.570) and back to 1, and the memory contents from CH 2 are now in CH1, which is 154.570 on memory channel 1(should be 147.000). The same

thing will happen if you go to memory channel 200, and rotate knob one click to to memory CH 1, the contents from CH 200 will be on CH 1. This bug does not rewrite the memory contents in CH 1. This bug basically moves the frequency from the memory channel below CH 1, and above CH 1 to memory CH 1 while your rotating the knob through the memory channels. Scanning seems OK, and is not affected by the memory CH 1 bug.

Solution #1 for this is to make CH 200, CH 1, and CH 2 all to the same frequency. OR
Solution #2 set the "edge beep" to on. <---thanks goes to Susie for this info!!

My VX-150 with the LCD display LED changed to Blue. The original LED was removed and replaced with a blue SMT LED (1206 size). R1239 (220Ohm) was removed and replaced with a 0 Ohm resistor.

This mod is also available at http://www.icongrp.com/~sllewd/vx150main.html

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06-08-2000
(VX-150) MARS/CAP modification for VX-150R 140-174 MHz

Author: John Kellas - *jkellas@telusplanet.net.MODIFICATION.NET*

Open the Radio by takeing the battery off lift the black cover off the one say's ni-cd disposed of properley then take the 2 silver.
Things and then the one black one one the top left not the under the belt clip then the 2 nuts under the knobs pull the knobs and rubber things and the ANT off, gently slide the top cover off.

Remove R1275 (see picture)
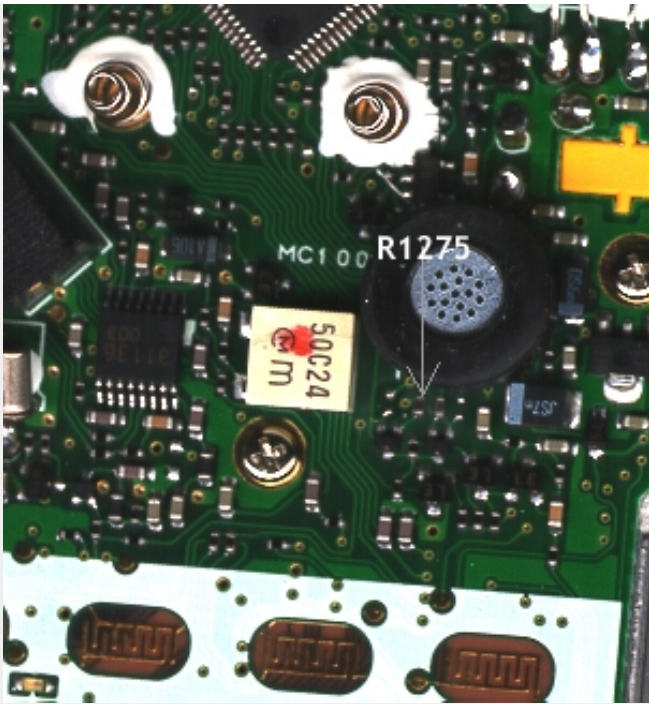
Then put the radio back together and go be careful and not get a solder bridge!!!!

15-09-2001
(VX-150) Expanded Transmit for the Vertex VX-110 & VX-150

Remove the antenna, belt clip, battery, and top volume & squelch/knobs

Remove the the black sticker (the one with the Ni-Cd battery disposal warning) and the small "sub-board". See Fig 1
*removing the sticker/sub-board reveals two smallphillips screws.
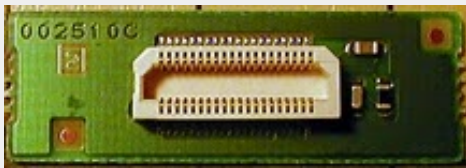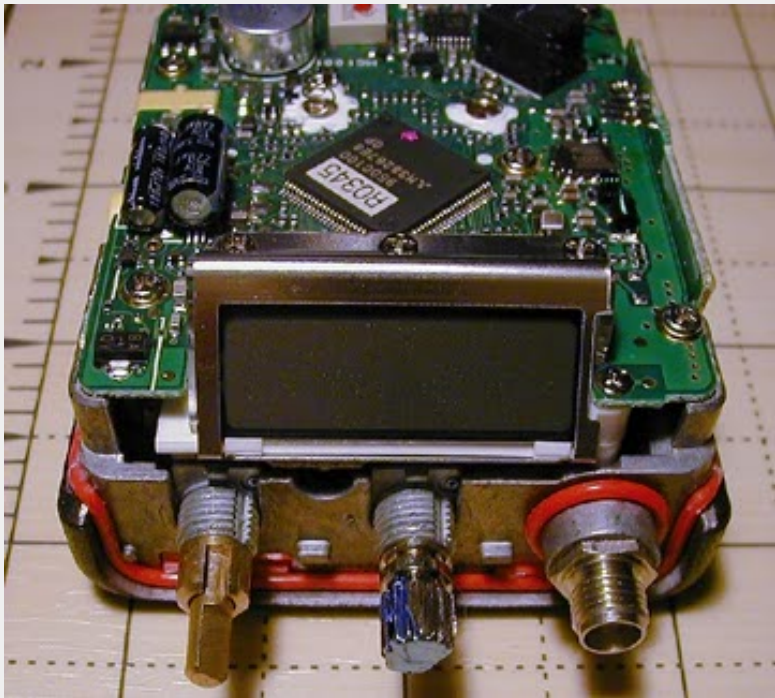

Fig 1 - Sub-Board

Remove the two screws that were under the sticker and sub-board, and remove the top LEFT screw - leaving the right screw alone. See Fig 2

Fig 2 Remove screws

Remove the rubber grommets under the volume & knob controls, and using a pair of hemos or small needle-nose pliers, remove the nuts for the volume & squelch/knob.

*Photo shown with nuts and case removed

Carefully slide the front and back case apart and remove the rubber piece around the mic element.

Fig 3

For Mars/Cap(140-174Mhz TX) remove R1275, and solder it to the blank solder pads labeled R1274 - Fig 3.

For Freeband (100-200Mhz TX) remove R1275 - Fig 3.

R1274	R1275	Transmit Coverage
Blank	Soldered	144-148Mhz (Factory Config)
Soldered	Blank	140-174Mhz (mars/Cap)

Blank	Blank	100-200Mhz* (Freeband)

*The VX-110 & VX150 can be opened for 100-200Mhz, but the radio's circuitry is not wide-banded enough to cover the entire 100-200Mhz spread. When the radios display starts flashing/blinking, this means the radio's VCO is out-of-lock and no receive or transmitting is possible. A typical radio should RX/TX from approx. 125-180Mhz when the freeband mod is performed.

Reassemble the radio carefully. Most of the time resetting the radio is NOT necessary, but have a backup of your frequencies just in case, because the radio will reset itself most of the time after a modification is made.

I have noticed a major bug in the memory channels. This bug has to do with memory channel #1. Example: Lets say you program: ch. #1 with 147.000, and ch #2 with 154.570, and the last channel (I will call ch # 200) in your memory bank with 144.000

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 CH 200 144.000
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Solution #1 for this is to make CH 200, CH 1, and CH 2 all to the same frequency. OR
Solution #2 set the "edge beep" to on. <---thanks goes to Susie for this info!!

My VX-150 with the LCD display LED changed to Blue. The original LED was removed and replaced with a blue SMT LED (1206 size). R1239 (220Ohm) was removed and replaced with a 0 Ohm resistor.

This mod is also available at http://www.icongrp.com/~sllewd/vx150main.html

I recently purchased a new VX-150 (01/25/2002) and I do not have the bug that is mentioned with the ch 1,2 and 199. Perhaps it has been corrected. Just my two cents worth. I really like the ease of operation with this radio and the features it provides for the price.

Subject: My bug fix

As to my comment about the memory bug, after I made the mod, I discovered the problem. I seem to have overcome this problem in a round about way. By adding alpha tags to mem ch 1, 2 and 199, you can outsmart the radio.The alpha tag will remain as entered and will not change as when using the frquency display. EX: in mem ch 199 I have wx freq of 162.400, named it NOAA, in mem ch 1, I have local ambulance frq 155.325 and named it mems-1, and in mem ch 2 ambulance freq 150.775 named pvt. Now whenever I switch between the three, the tag stays the same as entered. James

Subject: Yaesu VX-150 extended transceive mod additional info

Looking at the VX-150 mod for extended transmit, it makes sense to do the Freeband mod. With the freeband mod, you simply remove R1275 which is a grain of salt sizedSMT resistor.

This way, you don't have to do any extra work, resoldering. The display will flash when the radio is too far out of band, but it will cover roughly 127-178 MHZ, depending on radio, alignment, and ambient temp.
However, the effect of the FREEBAND mod may or may not affect the radios "Smart Search" feature, causing it to stop at the band edge when the radio is out of lock, and not cycling thru to the beginning band edge-this problem needs further research. Also, when removing the VOL and VFO knobs on top, the nuts are somewhat difficult to remove. I held the radio in my left hand(which I had a thick leather glove on) and used a protractor point to get each nut loose, since they are round and only have two notches to work with.

The radio is full of goodies.

KC0LXP

Subject: Battery

Instructions for the VX150 battery say "Do not overcharge". I had difficulty contacting Vertex to determine what is overcharge time. The person I finally reached said the battery should charge in four (4) hours. Not so. I tried different charging times and the one that brings it to the 8.5V level is 12 to 14 hours. I use two different batteries and change them out when one goes dead. Did not want to spend $70 for a special charger for charging removed battery so I made my own. Big mistake. Cooked the battery. Also, I noticed a comment about the removal of the nuts under the VOL and Dial Select knob. I use a snap ring plier with an angle attachment. Two to five bucks at a discount tool supply.

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19-07-1998
(VX-1R) VX-1R Cell and expanded TX RX Mod

I du not represent any of these Yaesu, and cannut be responsibIe for improper use or performance of the radio after the mod (standard disclaimer BS, yuu all know that..)

VX-1R Cell and expanded TX RX Mod

This is the basic VX-IR mod. Itve taken what I've found on the net, and expanded on it slightly, after perfomning the mod to my radio. Note that after perfonning the mod, ARS (Autumatic Repeater Offset) will nut functiun (whether it's turned on or not), and you will lose any stored memuries and preferences. The mod is very simple. First, put the piece of protective plastic back on the display, or take a 3M Post-It Note (tm), and stick it to the display. Work on top of a piece of 8 I/Z XI 1 paper (good contrast, will also keep from marring the radio). Open the radio by removing the 3 screws. Taking a smallflat screwdriver, release the tab on the left, inside the battery compartment (assume radio is facing down, antenna away from you).
Release the 2nd ~ tab and tht's about halfway up the inside of the battery compartment Being very careful, separate the 2 halves the radio. Yuu'll need to apply a kind of rotation along with the separation. Note that the battery compartment lid and hinge pin will fall out. Keep track of these l the left uf the to the edge of the case, you'll see two pads, (closer to the top) O). They look like a gold circle with a line down the middle. You won't move the battery to see these. Each of these pads need to be bridged with a solder blod. Use a small iron, and work careful, or you'll burn the case. After brindgin the pads snap the radio back together. 1 had a slight amount of difficulty getting the right side of the case aligned, so you may have to work at it sligtly. Before you acWly perfonn the "snapll, put the hinge pin through the battery comparfrnent lid, and reinstalled the lid.