

YAESU FT-7B 11M CONVERSION

26,000 - 28,000

1. You will need 4 xtals from your favorite parts supplier:
 - A. 40.500 - 26.000 to 26.500
 - B. 41.000 - 26.500 to 27.000
 - C. 41.500 - 27.000 to 27.500
 - D. 42.000 - 27.500 to 28.000

The xtals must meet these specifications:

<u>TYPE</u>	<u>HC-25 U</u>
Load capacitance	30 pf
Series resistance	25 ohms or less
Static capacitance	7 pf or less
Drive level	5mw

2. If you want to use your fixed position here is the formula for this: $Xtal F\phi = F1 - \text{operating } F\phi$. Let's take Ch. 19 AM as an example.

AM OR CW F1 CHART

11 A - 31500.7 KHz
11 B - 32000.7 KHz
11 C - 32500.7 KHz
11 D - 33000.7 KHz

$F\phi$ IN MHZ FOR AM 19 = 27.185
so subtract 27,185.0 from
32500.7 in band C

$32500.7 - 27185.0 = 5315.7\text{KHz}$
This is the xtal $F\phi$ for AM 19
fixed.

For LSB add 0.8 to F1

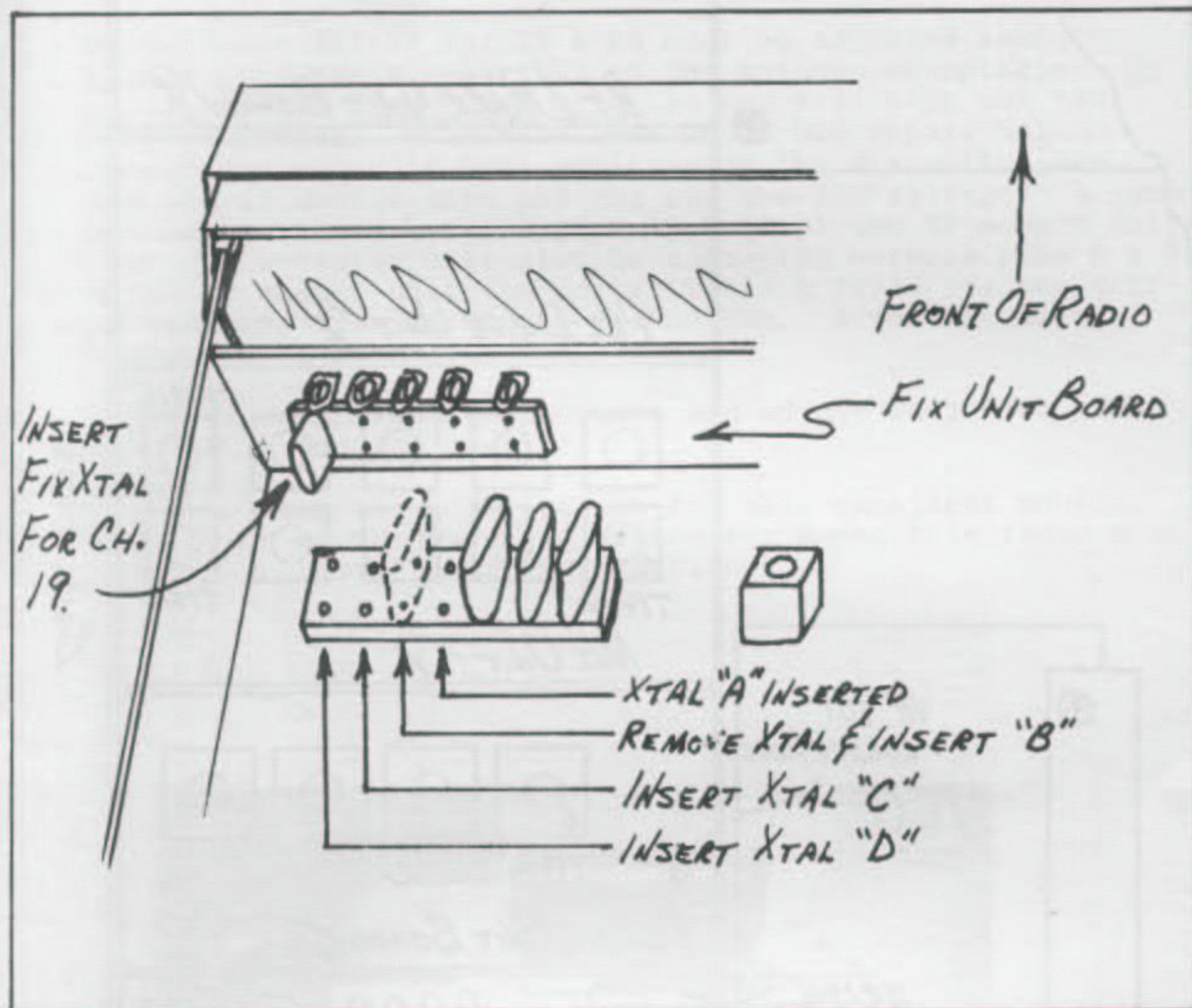
For USB subtract 2.2 from F1

CONVERSION

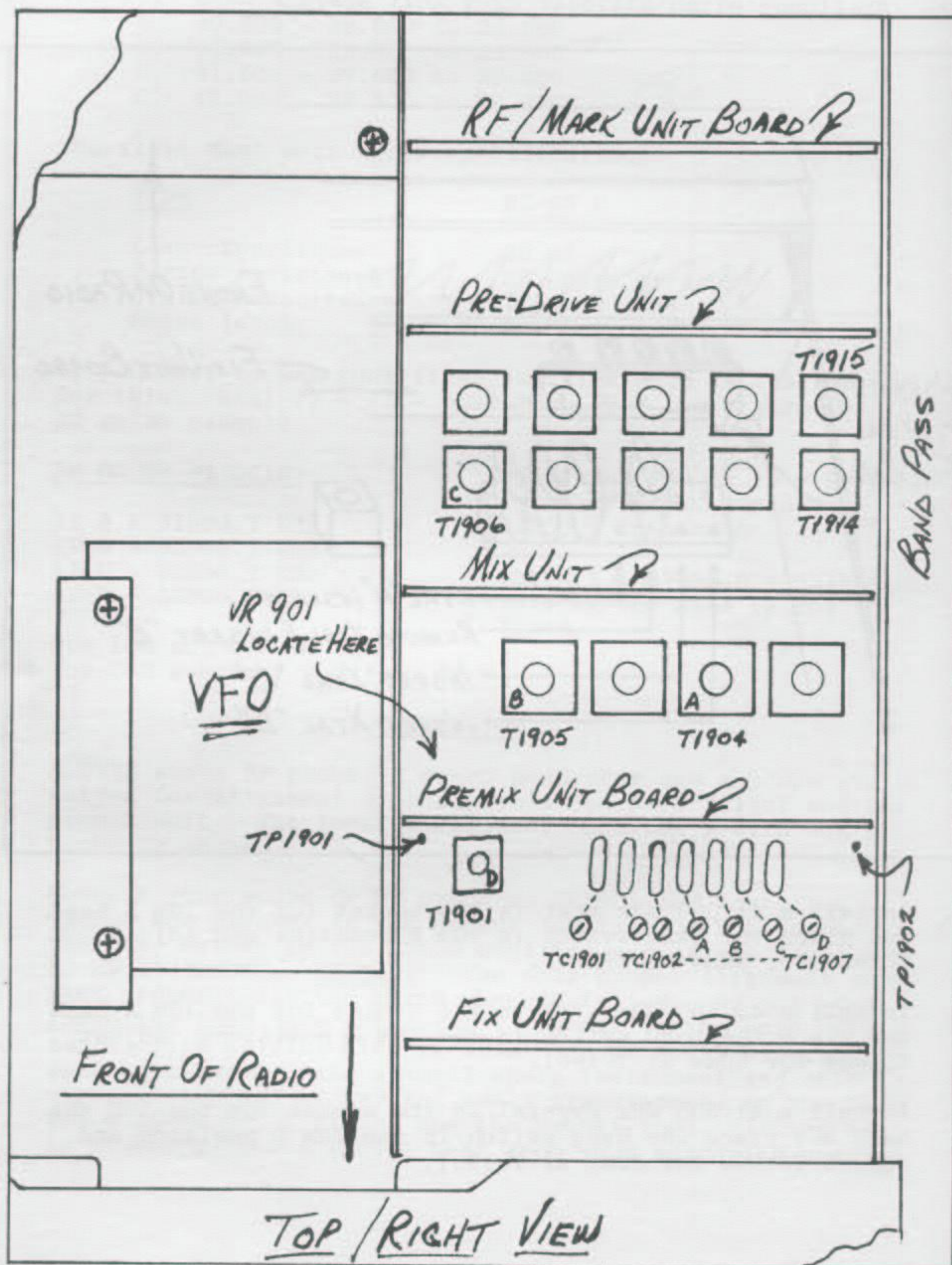
1. A VTVM and a RF probe, a sweep generator and a scope are required for alignment of the premix bandpass filter and the premix unit. The local oscillator requires a VTVM and a RF probe or scope.
2. Connect your scope or RF probe to TP1901 and install a 42.000 MHz crystal in the socket for the 10m D band and place the band switch in the 10m D position and adjust T1901 for 50 mv at TP1901. CAUTION: Use only proper alignment tools that properly fit the cores when installed. Do not ever force the tool into the core!!! Damage to the core will result. This helpful hint is from hard personal experience as I have had to take a small sharp instrument and chip the core or slug out of several small transformers in the past, and believe me, I always use the proper tool. If the slug is stubborn, use a little heat from your soldering station.

YAESU 11M CONVERSION CONTINUED:

Place the tip on the slug and heat it up, then even the most stubborn slug will move. Break it and you have had it.



3. Install a 41.000 MHz xtal in the socket for the 10m B band and place the band switch in 10m B position and adjust TC1905 for 50mv at TP1901.
4. Install a 40.500 MHz xtal in the socket for the 10m A band and place the band switch in the 10m A position. Adjust TC1904 for 50mv at TP1901.
5. Install a 41.500 MHz crystal in the socket for the 10C MHz band and place the band switch in the 10m D position and adjust TC1906 for 50mv at TP1901.



YAESU 11M CONVERSION CONTINUED:

6. Premix balance adjust is VR901. Using your RF probe, connect it to TP1902. Adjust the VFO/FIX switch to the FIX position and adjust for a minimum reading with VR901 on your VTVM.
7. The bandpass filter for TX & RX must be adjusted next. Connect your sweep generator to the antenna receptacle. Do not transmit. Remove the mike, as you will wipe out your sweep generator. This will cost you a BIG repair bill. Connect the scope to Q201 emitter on the mix unit. Remove the IF module unit and cut off the AGC voltage. A jumper must be installed between pins 10 & 11 of the RF module unit. A 100 ohm resistor must also be connected between pins 8 & 9 on the RF module unit and adjust T1914 & T1915 for the flattest response from 26.000 to 28.000 MHz. After alignment return set to normal.
8. Connect a dummy load to the unit and adjust T1920 for maximum out in the 10m section.

This completes the modification for this excellent mobile. The installation of the matching F \emptyset counter makes this radio a winner. Good luck with your modification.

