

This is 858 SSB Chassis Trouble-Shooting Chart
Use in correlation with appropriate SAMS, Reference Radio Shack: TRC-449

General: Unit will not turn on: Broken Power cable, Fuse Blown (Check cause),
Bad Power Switch, wiring to power supply ckts.
No RX: Defective RF ckt, Noise Blanker, AGC, PLL ckts. Also Ant. Conn.
No Sound: RX Power, RX Audio, PLL ckts. Channel Switch, PA/CB switch,
Ext. Sp. jack, and SQ ckts.
No TX: Microphone, Relay, Power supply ckts., PLL ckts, Mike Amp/Bal.
Mod. ckts, TX Amp.
No Mod: Mike/connector, TR20 or IC4 (AM Mode), Mike amplifier.

Amplification:

No Rx Sound: 1. Check for short ckt or broken wire in output Xfmr (T1) also
cold solder joints on PCB. Pri-0.2 ohm, Sec.-0.5 ohm.

2. Audio Chip-IC4, Pin 10 should be approx 7VDC.

3. Squelch always on: TR12, TR13, TR14, TR21, also check for
cold solder on Sq cntrl ground.

4. Sig. Mtr deflects: D10, D11, D12, TR15.

5. No Audio even in SSB mode: FET-1, TR9, TR8, TR6, TR5, TR4.

No TX-AM: 1. TR43, TR44, TR25, TR26, TR27, TR28, FET6, FET7, D7, D35 and
related circuits.

No TX-SSB: 1. If AM TX and Modulation O.K., TR6, IC2, TR16, FET7 and related
circuits.

No AM Modulation: Signal flow is IC3, D22, D21, TR20, TR22, IC4; also check
TR18, TR19.

No Noise Blanker Operation: Mis-alignment of L1 and L2, TR1, TR2, TR3.

No LED Channel indicator Lights: TR36, TR37, if unit has sockets to these
check also for corrosion build-up.

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PLL Chip Trouble-shooting:

Should be RF at TP8; if not—check for 9.2VDC approx at Pin 1 IC5; if so
IC5 bad, L17 open, poor soldering. No voltage
D44 bad, L16 open, soldering again.

Should be 2.2VDC at.....—1. Check for 0.5V P-P RF at TP6; if not
TP7; if not..... ck TR40, L24, TR34, TR38, TR39, X3, X4,
X6, selector switch, and poor soldering.
2. If RF present, ck Pin 5/6 IC7 for 10KHz
Sawtooth waveshape. If not there, Ck for
5VDC Pin 2 IC6, X5, IC7, poor soldering,
also 5VDC P/S line.
3. Ck Pin 13-21 IC7, logic per truth table
vs selector. If not, ck at switch and
cable, for bad sw or cable.
4. Ck Pin 11 IC7 for readable MHz signal,
also at base TR30. If not, Ck FET4, L19,
TR30, TR31, TR35, defective soldering pins
2, 3, 4 of IC7.

TP7, Check that the Ch.....—Recheck Step 3 above, double check the cable
Fø matches truth table;.... contact with socket..
if not.....

TP7, Ch. 1 on selector;....— Realign L-17...
Check for 2VDC, if not.....

IF AFTER ALL ABOVE CAN'T GET PLL TO WORK CORRECTLY! - BAD CHIP!