

Service Bulletin

Amateur Radio Division

Subject: TS-50S Lithium Battery Replacement Notes

Date: May 10, 1993

Procedure:

Immediately after replacing the Lithium battery you must cycle the radio ON then OFF. Failure to follow this procedure will result in premature failure of the battery. If the power is not cycled ON then OFF the microprocessor will immediately begin drawing approximately 1 mA of power from the Lithium battery, resulting in poor battery life.

When the battery is replaced we recommend the insulation sheet also be changed. Part numbers for the battery and insulation sheet follow.

Parts Required:

Qty	Description	Kenwood Part No.	Circuit Description
1	Lithium Battery	W09-0515-05	BA1
1	Insulating Sheet	F20-0521-04	--

Caution: This modification requires soldering equipment rated for CMOS type circuits. It also requires familiarity with surface mount soldering techniques. If you do not have the proper equipment or knowledge do not attempt this modification yourself. Seek qualified assistance.

KENWOOD

ASB-1030

Service Bulletin

Amateur Radio Division

Subject: TS-50S "HELLO" Displayed during TX

Date: June 29, 1993

Symptom:

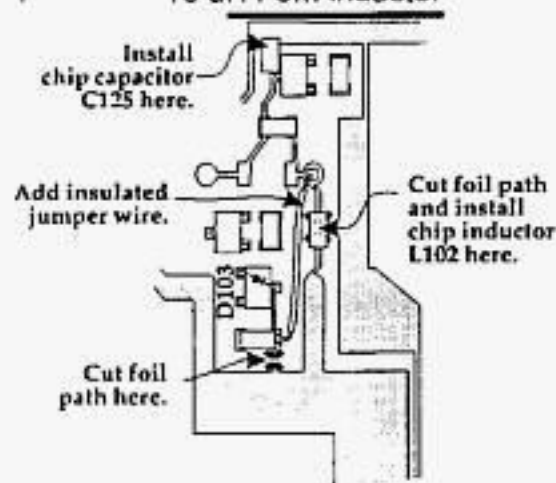
Occasionally an "HELLO" message will appear in the display of the transceiver when the TS-50S is loaded into an antenna without the use of an antenna tuner. This symptom usually occurs when the negative terminal of the power supply is floating (un-grounded for RF). This can result in RF feedback that causes the supply voltage to exceed 16 vdc.

Corrective Action:

1. Cut the Final Unit PC Board foil in two places, as shown below.
2. Add a .1uF chip capacitor (C125) as shown below.
3. Add a 10 uH chip ferri-inductor (L102) as shown below.
4. Add an insulated jumper wire as shown below.

Parts Required:

Qty	Description	Kenwood Part No.	Circuit Description
1	.1uF Chip Capacitor	CK73EB1E104K	C125
1	10 uH Ferri-inductor	L40-1001-48	L102



Caution: This modification requires soldering equipment rated for CMOS type circuits. It also requires familiarity with surface mount soldering techniques. If you do not have the proper equipment or knowledge do not attempt this modification yourself. Seek qualified assistance.

Final Unit (X45-3460-00) (B/2)
Foil side View

Time required for this modification is 30 minutes or less.

Service code A:46 B:X45-3460 B/2 C:L102 D:91

KENWOOD

ASB-1035

Service Bulletin

Amateur Radio Division

Subject: TS-50S Antenna Lead Wire

Date: December 7, 1993

Symptom:

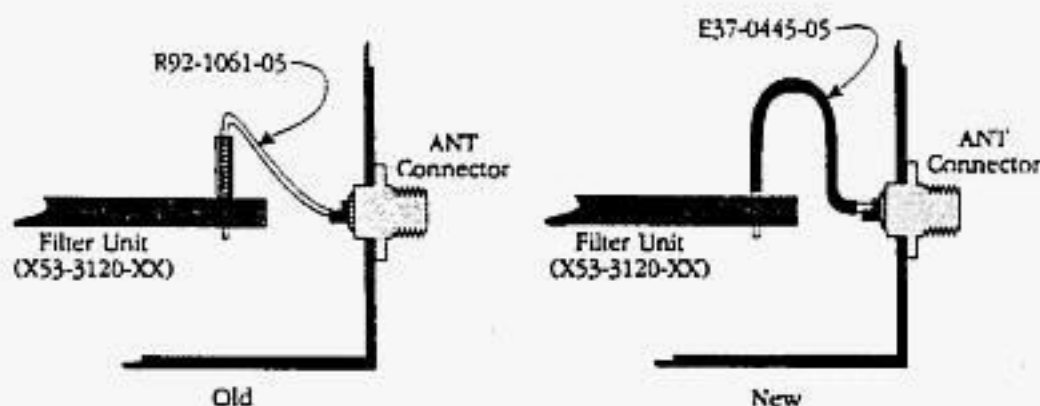
Several users have reported a problem with the antenna lead connection, i.e. the lead that connects the antenna connector to the Filter Unit (X53-3120-XX). Originally this connection was made by a zero ohm resistor. If excessive stress is placed on the antenna connector this lead is easily broken, with a resulting loss of receiver sensitivity and transmitter power. The use of a small flexible jumper wire will increase the flexibility of this connection, thus minimizing the effects of mechanical stress.

Parts Required:

Qty	Description	New Part No.	Circuit Description
1	Cable	E37-0445-05	W2

Procedure:

Remove the zero ohm resistor and replace it with the small piece of cable. See accompanying diagram.



Caution: This modification requires surface mount soldering equipment that is rated for CMOS circuits. It also requires familiarity with surface mount soldering techniques. If you do not have the proper equipment or knowledge do not attempt this modification yourself. Seek qualified assistance from your closest Kenwood Service Center (Long Beach, CA, or Virginia Beach, VA).

Time required for this modification is 30 minutes or less.

Service code A:05 B:X53-3120 C:W2 D:91

KENWOOD

ASB-1044

Service Bulletin

Amateur Radio Division

Subject: TS-50S Mechanical Noise from Final Unit

Date: March 28, 1994

Symptom:

When the transceiver is subjected to vibration a mechanical noise can be heard from the output transformer area. This has led to concern by several consumers that something is loose or improperly installed.

Corrective Action:

In order to ease consumer concerns you should add a cushion under transformer L4 as shown in the accompanying diagram, and replace transformer L13 at the same time. This transformer has been fastened to the circuit board with high temperature adhesive, so use caution when removing it from the circuit board.

Parts Required:

Qty	Description	Old Part No.	New Part No.	Circuit Description
1	Cushion	NA	G13-0871-04	(Under L4)
1	Output Transformer	L39-1209-25	L39-1252-05	L13

