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Service bulletin

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17-00154

ISSUE 1

July 1996

9350 Auto Antenna tune-fails at approximately 22MHz.

1. Scope

This service bulletin pertains to an intermittent 9350 tune failure at approximately 22MHz, only when used with the 9323/9360 series transceivers. The problem has been identified as being caused by the transceiver to which it is attached.

This affects transceivers manufactured between December 1994 and July 1996.

2. Symptom

The 9350 intermittently fails to tune on frequencies around the 22MHz mark.

3. Details

The problem is due to some alternative capacitors for C107 and C108 fitted to the PA assemblies used in the 9323/9360 transceivers. The alternatives are Silver Mica types and are unsuitable for use in this position resulting in possible oscillations from the PA at the critical frequencies.

Tools required.

- ◆ Pozidrive screwdriver

Tools required if capacitors need changing.

As above plus:

- ◆ Soldering iron with heavy duty tip
- ◆ Safety glasses for use during soldering
- ◆ Solder

4. Identifying the capacitors

The capacitors are in parallel and are fitted across the collectors of V23 and V24 on the PA assembly.

- 1) Remove the transceiver from the installation, ensure the power is disconnected.
- 2) Remove the two screws securing the bottom cover and remove the cover. The bottom cover is the one fitted with 4 rubber feet.
- 3) Locate the PA assembly at the rear of the transceiver.
- 4) Disconnect all the cables and looms which go over the PA shield.
- 5) Remove the 8 shield securing screws, (Qty 2 are located on the rear panel of the radio).
- 6) Remove the shield.
- 7) Locate C107 and C108 across the collectors of the PA output transistors, V23 and V24.

8) Check if these capacitors are a Dark Brown colour and are shaped as shown below.

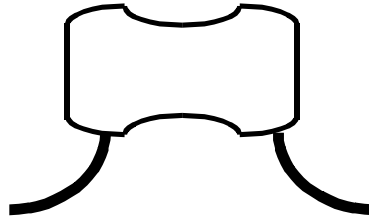


Diagram showing shape of incorrect capacitor

9) If the fitted capacitors match the above description, then they are unsuitable in this location and should be changed.

Note: These capacitors may also be used in other locations on the PA. This type of capacitor is perfectly OK in these locations.

10) If the capacitors are NOT of this type, proceed to section 6, reassembly.

5. Changing the capacitors (where required)

Parts required.

- ◆ 2 x 180 pf, 5%, 500V, NPO Disc Ceramic capacitors. (Codan Part number 46-21800-020).

Codan will supply the correct capacitors free of charge on request.

- 1) Using a very hot, heavy duty soldering iron, remove the capacitors. Take care not to melt or burn any surrounding wires or components.
- 2) Prepare the replacement capacitors by holding the bodies of the two capacitors together and twisting the leads together. (As per the original capacitors). Trim the leads.
- 3) Solder the capacitors across the collector tabs of V23 and V24. Keep the capacitor leads very short. Take care not to melt or burn any surrounding wires or components.
- 4) Ensure that the connections to the PA output transformer T4 are maintained and that no short circuits are created.

6. Reassembly

Reassemble the transceiver in reference to steps 2 - 5 of section 4 above, but in reverse order paying particular attention to the following points.

- ◆ Check no wires are trapped or pinched by the PA shield.
- ◆ Check the orientation and location of connectors.

7. Checks following replacement of capacitors

Check the radio transmits at full power.

8. Final

Reinstall the transceiver and perform on air tests.