# **SERVICE BULLETIN**

HARLEY-DAVIDSON

\*\*COMPANY\*\* \*\*

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# SEALING DIN CONNECTOR ON FLTC AND FLHTC ULTRA MODELS

## **Purpose**

The purpose of this Bulletin is to inform you of a possible problem you may encounter on Ultra Models. The problem is caused by water entering the 3-pin DIN connector that is connected directly to the console pod. This water shorts pin 2 to ground and causes continuous muting of the radio.

#### NOTE

The accessory CB/Intercom Kit, Part No. 77129-88, could also have the above problem.

The following procedure lists the symptoms of a "water-shorted" DIN connector and gives instructions for sealing the connector.

#### **Procedure**

#### **SYMPTOMS**

- Radio is constantly being muted.
- 2. CB and Intercom are operational.
- 3. Radio front panel display indicates normal reception.

# TROUBLESHOOTING

- Remove seat and and unplug DIN connector. See Figure 8-45 in 1984-1989 FLT/FXR Service Manual, Part No. 99483-89, the DIN connector is item (1).
- With radio "ON" and fairing speakers "ON", the front speakers should be operational.
- Plug connector together radio should mute if DIN is water-shorted. If radio mutes, check resistance between pin 2 in DIN connector and ground. Pin 2 is the center pin directly opposite the index groove. Resistance must be 100 K ohms minimum.

If resistance was less than 100 K ohms, but more than 100 ohms, check for water in the connector.

#### NOTE

If resistance between pin 2 and ground is less than 100 ohms, a partial short circuit is present and pod may require replacement. Water in connector will not cause a resistance less than 100 ohms.

See Figure 1. With screwdriver, pry up lock tab on plastic cover and slide cover off the connector and onto the cable.

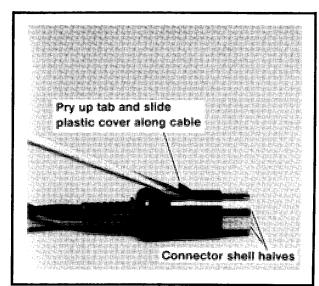


Figure 1. Disassembling DIN Pin Connector

- 6. Note the position of the metal connector shell halves and remove one of the shell halves.
- Check for water. If water is present, dry connector with compressed air or a heat gun.

ROUTING:	SERVICE	SALES	PARTS	LEAD	TECHNICIAN	TECHNICIAN	TECHNICIAN	TECHNICIAN	RETURN
	MANAGER	MANAGER	MANAGER	TECHNICIAN	NO. 1	NO. 2	NO. 3	NO. 4	THIS TO:
INITIAL HERE									

- Assemble the DIN connector and connect it to the mating connector and verify that radio operation is correct.
- To prevent water seeping into the connector and causing the muting problem again, obtain the following:
  - (1) heat shrink tubing with an inside diameter (ID) of 5/8 in. A piece 2-1/4 in. long is needed. (Heat shrink tubing with an ID of 3/4 in. and a minimum shrink ratio of 2:1 is also acceptable.)
  - (2) a tube of General Electric Co., N-SIL RTV 123 black silicone rubber adhesive sealant with a small diameter applicator tip.

The above items should be available at an automotive supply store such as **NAPA**. If you cannot obtain the shrink tubing and/or silicone sealant locally, order Part No. **76314-89** from **Radio Sound, Inc. (RSI)** at the following address:

#### Radio Sound, Inc.

1031 West Main Louisville, KY 40202 Phone: (800) 367-4506

Part No. 76314-89 contains twenty pieces of shrink tubing, 5/8 in. ID x 2-1/4 in. long and a tube of General Electric Co., N-SIL RTV 123 black silicone rubber adhesive. RSI is providing these items free of charge.

#### REPAIR

## **WARNING**

Do not use an open flame to heat the shrink tubing in the following step. The close proximity of the gas tank and possible gasoline fumes could cause a fire/explosion hazard and personal injury.

- See Figure 2. Unplug the DIN pin connector from its mating connector. Install shrink tubing on DIN pin connector and position the tubing as shown. Grasp metal shell of connector with a needle nose plier and apply heat to shrink tubing with a heat gun. Apply heat all around the outside surface of the tubing being careful not melt the tubing.
- Check that shrink tubing has completely covered the tab opening.

#### CAUTION

Point heat gun nozzle toward either side of motorcycle and make sure heated air is not directed toward gas tank or any component that might be damaged by the hot air.

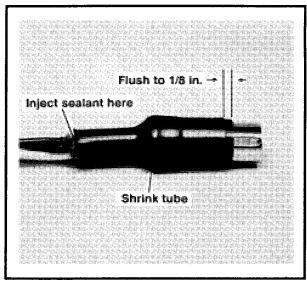


Figure 2. Sealing DIN Pin Connector

- Connect DIN connector to DIN cable and cover mating surface with two layers of electrical tape. Position the "sealed" end of the connector upward to prevent water seeping into the socket connector on the DIN cable.
- See Figure 2. Inject silicone sealant into cable end of shrink tubing. Allow sealant to cure overnight and do not move or handle connector while sealant is curing.

#### **CAUTION**

Do not apply sealant to the inside of the DIN pin connector.

5. Install seat.

## **Current Production Pods**

Current production pods and any pods repaired by RSI have sealed DIN pin connectors.

## Warranty

Upon completion of the repairs, submit a properly completed Warranty Claim Form using Labor Code 6620. Upon receipt of the claim, you will receive 0.4 hrs. labor credit. Credit will not be issued for parts (76314-89) if they were sent to you no charge from RSI.

If parts were obtained from any source other than RSI, submit a copy of the parts invoice along with the Warranty Claim Form. Parts credit will be issued accordingly.