

# SERVICE BULLETIN



M-913A (Replaces Service Bulletin M-913)

January 7, 1986

## FINE-TUNING THE 1986 SOUND SYSTEM

### NOTE

*Read all instructions carefully before you begin any work on the vehicle.*

### General

Recent production changes to the Harley-Davidson sound system assure the unit will deliver superior performance. However, a few vehicles in the field, and in your dealership, require some fine-tuning to develop the sound system's full potential.

The following is a summary of what must be done, and the information presented in this Service Bulletin.

1. Remove Power Interrupt System (P.I.S.) Circuit — All Models. Submit a warranty claim form using job code 6615 for 0.3 hour.
2. Replace speaker mounting speednuts. Pad the bottom of the radio caddy — FLTC only. Submit a warranty claim form using job code 6617 for 0.8 hour for both operations.
3. Check radio function and nosepiece engagement — All Models.
4. Use demonstration tape to check the tape player functions — All Models. See the specific instructions for job code.

### WARNING

To avoid accidental start-up of vehicle and possible personal injury, disconnect the battery cables (negative cable first) before performing any of the following procedures.

### CAUTION

Any connections or disconnections made to the Sound System or any of its components while power is being supplied to the system can cause damage to the radio function. Disconnect battery, negative cable first, before servicing system.

### Removal of P.I.S. Circuit

### NOTE

*See Figure 1. The P.I.S. circuit module is a black box. It can be identified by the color coded wires: red, black and yellow. All wire colors are solid.*

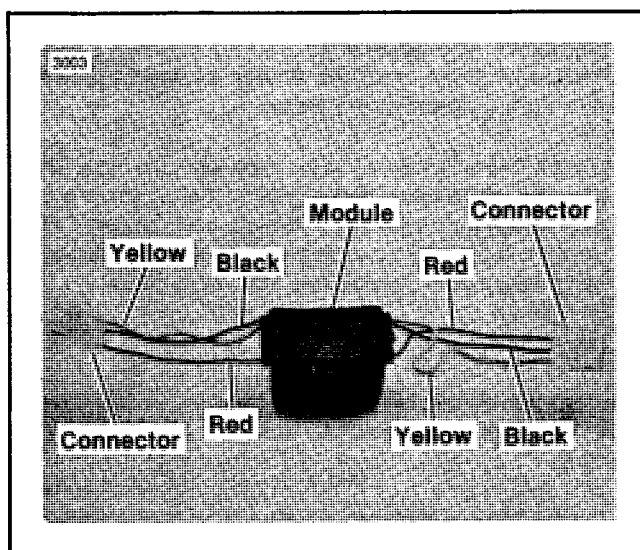


Figure 1. P.I.S. Module

### NOTE

*The following radio equipped vehicles with a VIN number smaller than that listed require removal of the P.I.S. circuit.*

FLTC — VIN 1HD1DBL13GY501080

FXRD — VIN 1HD1EHL15GY113297

FLHTC — VIN 1HD1DJL14GY501096

The following procedures describe the easiest methods of P.I.S. module removal from affected vehicles.

### FLTC

1. Remove the headlamp housing. Refer to the 1984 to 1986 FLT/FXR Service Manual.

### NOTE

*The P.I.S. module is located in the fairing above the headlamp opening. There are two modules on the shelf. See Figure 1. The P.I.S. Module has solid red, black and yellow wires. The remaining module is the choke module.*

ROUTING:	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	CHIEF MECHANIC	MECHANIC NO. 1	MECHANIC NO. 2	MECHANIC NO. 3	MECHANIC NO. 4	RETURN THIS TO:
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#### NOTE

*The modules should be glued to the shelf.*

2. Reach in through the headlamp opening and up on to the shelf. Pull the module loose and check the wire colors for the P.I.S. Circuit. Unplug and discard the P.I.S. module. Connect the wiring harness by plugging the two circuit connectors into each other.

#### NOTE

*If the choke module is not glued in place, apply a light coating of adhesive and secure it to the shelf.*

3. Install the headlamp housing. Refer to the 1984 to 1986 FLT/FXR Service Manual.

#### FLHTC

1. Remove the headlamp housing. Refer to the 1984 to 1986 FLT/FXR Service Manual.

#### NOTE

*The P.I.S. and choke modules should be ty-wrapped to the inner fairing metal cross brace.*

2. Check the wire colors to be sure you are removing the correct module. See Figure 1. Reach in through the headlamp opening. Unplug and discard the P.I.S. module. Connect the wiring harness by plugging the circuit connectors into each other.

#### NOTE

*If the remaining module was not secured to the cross brace, ty-wrap the module before installing the headlamp.*

3. Install the headlamp housing. Refer to the 1984 to 1986 FLT/FXR Service Manual.

#### FXRD

1. Remove the speedometer/tachometer instrument panel and set aside. Refer to the 1984 to 1986 FLT/FXR Service Manual.

#### NOTE

*The P.I.S. module is located above the radio.*

2. Check the wire colors. See Figure 1. Unplug and discard the P.I.S. module. Connect the wiring harness by plugging the remaining circuit connectors into each other.
3. Install the instrument panel. Refer to the 1984 to 1986 FLT/FXR Service Manual.

#### FLTC Radio Caddy Changes

When the sound system gain is increased, the stereo speakers' back wave lifts the caddy speaker compartments off the fairing. This is a source of rattling, or speaker distortion, that may be heard by the rider. Pad and seal installation will eliminate the noise problems originating in the radio caddy.

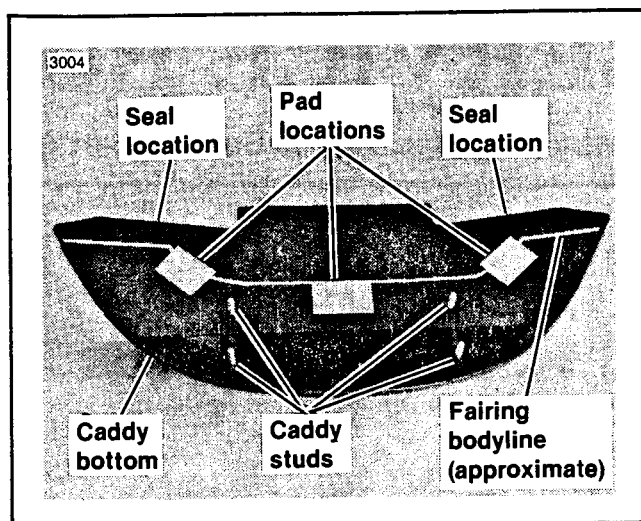


Figure 2. Radio Caddy Mounting

Another change for this unit is the speednuts mounting the speakers. The speednuts retaining the speakers should be replaced with self-locking nuts.

These two changes are not related, but should be performed at the same time.

1. Remove the windshield. Refer to the 1984 to 1986 FLT/FXR Service Manual.
2. Remove the headlamp housing. Refer to the 1984 to 1986 FLT/FXR Service Manual.
3. See Figure 2. Remove the nuts from the radio caddy studs through the headlamp opening.
4. Disconnect the circuit connectors and the radio antenna lead.

#### NOTE

*Before removing the radio caddy reach under the caddy and scribe the outline of the fairing on the caddy bottom plate. See Figure 2. The fairing bodyline that you trace will assure proper placement of the pads.*

5. Lift the caddy off the fairing and turn it over.
6. See Figure 2. Place three radio caddy pads, Harley-Davidson part number 66104-84, on the bottom plate of the caddy. Place the U-shaped seal strips, Harley-Davidson part number 77060-86, directly under the speakers, on the caddy edge.

#### NOTE

*Place the outer pads so they are centered over the fairing bodyline traced on the bottom of the caddy. Place the middle pad so it will be just behind the fairing bodyline when the caddy is in position. When the caddy pads and seals are properly positioned they will pre-load each compartment in the caddy, eliminating rattle.*

#### NOTE

*The caddy pads have an adhesive on one side, protected by a backing material. Peel the backing off the adhesive side and press this side onto the caddy bottom plate.*

7. Remove the screws securing the caddy bottom plate to the caddy.
8. Replace the speednuts securing the speakers with self locking nuts, Harley-Davidson part number 7609W, or equivalent.

#### NOTE

*While the caddy bottom is off, check to be sure the speakers are wired in phase. The solid color wire should be connected to the tab marked with the red dot, on each speaker.*

9. Place the caddy bottom plate in position and install the screws.
10. Place the caddy on the fairing and check to be sure the pads are properly positioned. Center the caddy on the fairing.
11. Connect the circuits and the antenna lead.
12. Install the nuts on the radio caddy studs.
13. Install the headlamp housing. Refer to the 1984 to 1986 FLT/FXR Service Manual.
14. Install the windshield. Refer to the 1984 to 1986 FLT/FXR Service Manual.

## Radio Nosepiece Engagement

FLTC/FLHTC/FXRD

The sound system on a motorcycle is not in a protected environment, as it would be in a car. Harley-Davidson engineering has developed a weather resistant "hood" to protect the nosepiece and radio from the environment. This "hood" can prevent complete nosepiece engagement if it is not correctly positioned.

1. During Pre-Delivery and Set-up of vehicles use the demonstration tape provided with each unit and test the tape player operation.
2. Check the engagement of the circuit plug on the nosepiece. Firmly press the nosepiece toward the radio body. Check the tightness of the nosepiece mounting screws.
3. In some cases you may find that the cassette will not engage in the tape player. This is caused by the position of the nosepiece backing plate. Some backing plates were installed upside down.
  - a. Remove the screws that secure the nosepiece. Remove the nosepiece.
  - b. Pull the backing plate out of the hood.

#### NOTE

*The cassette opening is not centered vertically. The opening is toward the top of the plate. The narrow part of the plate must be toward the top, and the wider part should be toward the bottom.*

- c. Position the backing plate correctly, narrow edge toward the top, in the hood. Open the cassette door to be sure it will open all the way.
- d. If the cassette door function seems correct, install the nosepiece. Be sure the circuit plug is fully engaged. Use the demonstration tape to test tape player function. Submit a warranty claim form for performing the radio backing plate relocation. The job code for backing plate relocation is 6603 for 0.2 hour on all models.