

# SERVICE BULLETIN

M-931

June 24, 1986



## SOUND SYSTEM REMOVAL AND INSTALLATION

### General

This service bulletin covers the procedures for removing and installing the Premium Sound System chassis from FLHTC, FXRD and FLTC model vehicles. The electrical connections at the radio chassis are the same on all models. To free the radio chassis electrically, it will be necessary to separate the following connectors:

Automatic volume control  
(with or without timer) — Four pin connector

Power supply — Three pin connector

Handlebar controls — Six pin connector

Speaker — Four socket connector

Antenna — Single socket connector

### WARNING

**Turn the ignition switch to the OFF position and disconnect the negative lead from the battery before doing any electrical work on the sound system. When finished, connect the negative lead to the battery with the ignition switch in the OFF position. Failure to do so may cause irreversible damage to the radio and possible personal injury.**

### Removal — FLHTC

1. Place ignition switch in OFF position. Disconnect battery negative cable to avoid damaging sound system and possible personal injury.
2. Remove headlamp housing.
3. Remove outer fairing and windshield following procedure in the 1984 to 1986 FLT/FXR Service Manual.
4. Cut ty-wraps holding automatic volume control/timer and choke to crossbar at backside of fairing. Disconnect speedometer cable at instrument.
5. See Figure 1. Move radio connectors from behind crossbars. Separate connector halves.
6. See Figure 2. Remove radio hood and control panel assembly (4).
7. Remove radio front stud nuts (3) and washers (2).
8. See Figure 3. Remove rear support screw (5) with lockwasher (4) and washer (3).
9. Loosen screws (6) and remove rear support (1).
10. Carefully remove radio chassis (9).

### Installation — FLHTC

1. See Figure 3. Remove weather shield (12) from original radio chassis and remove old mounting tape. See Figure 4. Install new mounting tape Part No. 76301-86 in the three locations shown. Press weather shield into place on top of radio chassis.
2. See Figure 3. Install bracket (10) and place radio in position with front support studs extending through fairing. See Figure (2). Install washers (2) and nuts (3). Tighten nuts (3) finger tight only.
3. Position support (1) with slots around screws (6) and under washers (7). Loosely snug down screws (6).
4. Insert screw (5) through lockwasher (4), washer (3), grommet (2) and spacer (8). Thread and tighten screw (5) into threaded hole in back of radio (9). Tighten screws (6).
5. Join electrical connectors and connect speedometer cable. See Figure 2. Tighten nuts (3).

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

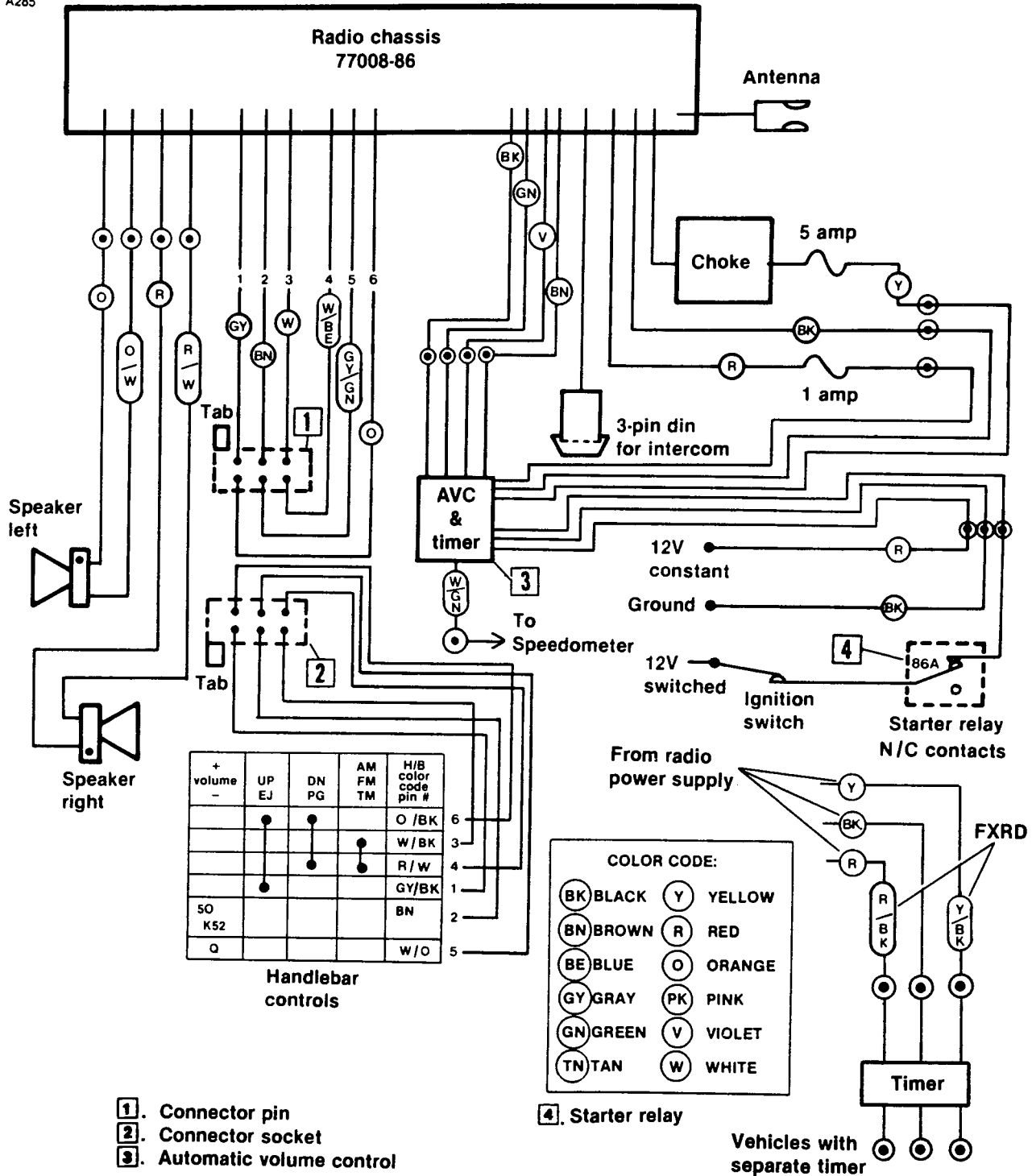


Figure 1. Wiring Diagram

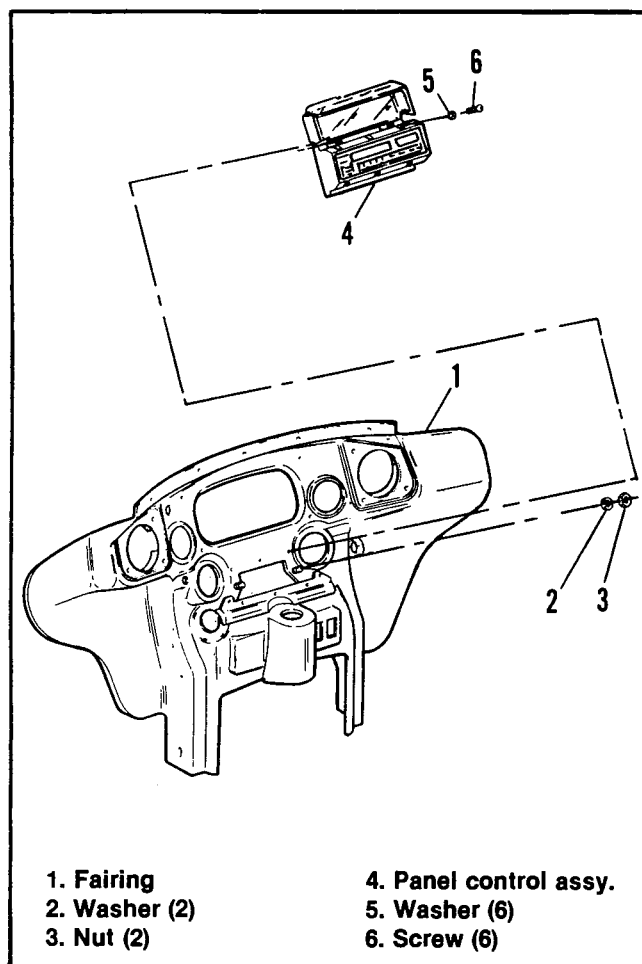


Figure 2. Front Radio Mounting — FLHTC

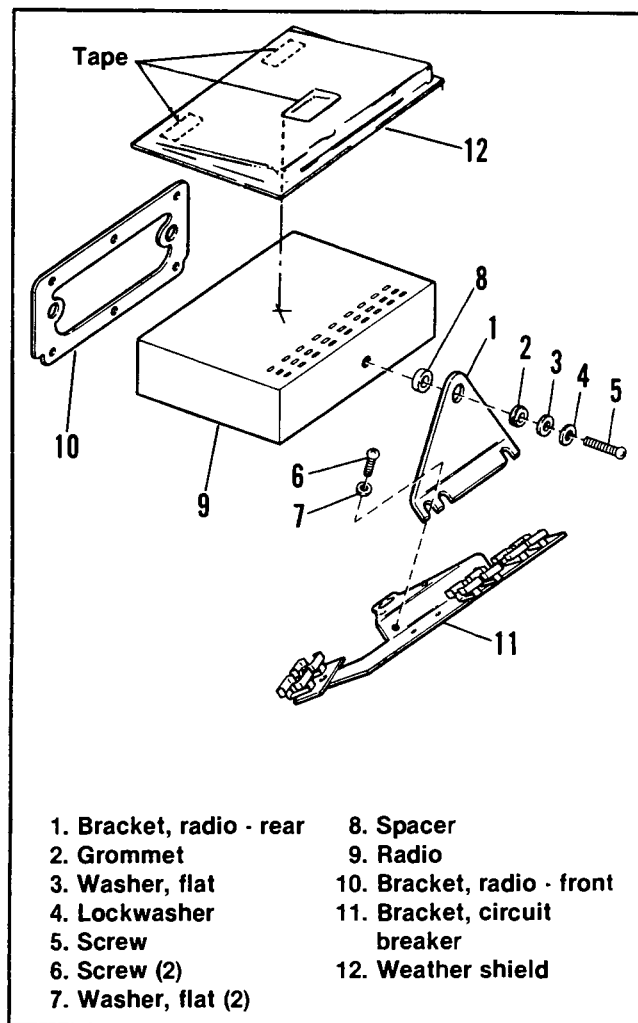


Figure 3. Rear Radio Mounting — FLHTC

6. Ty-wrap automatic volume control and choke to crossbrace at rear of fairing.

### CAUTION

See Figure 2. Do not overtighten mounting screws (8). Overtightening mounting screws will distort rubber hood (6) and prevent the hinged cover from operating properly.

7. Install radio hood and control panel assembly (4) using screws (6) and washers (5).
8. Install headlamp housing.
9. Check to be sure ignition is in OFF position and connect negative lead to battery.
10. Check headlamp adjustment following procedure in 1984 to 1986 FLT/FXR Service Manual.

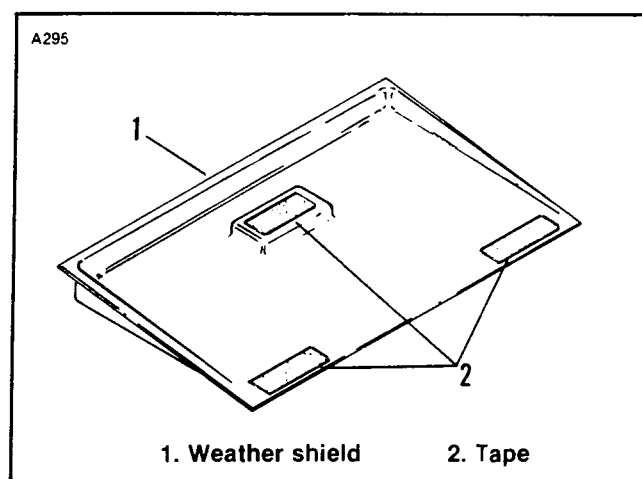
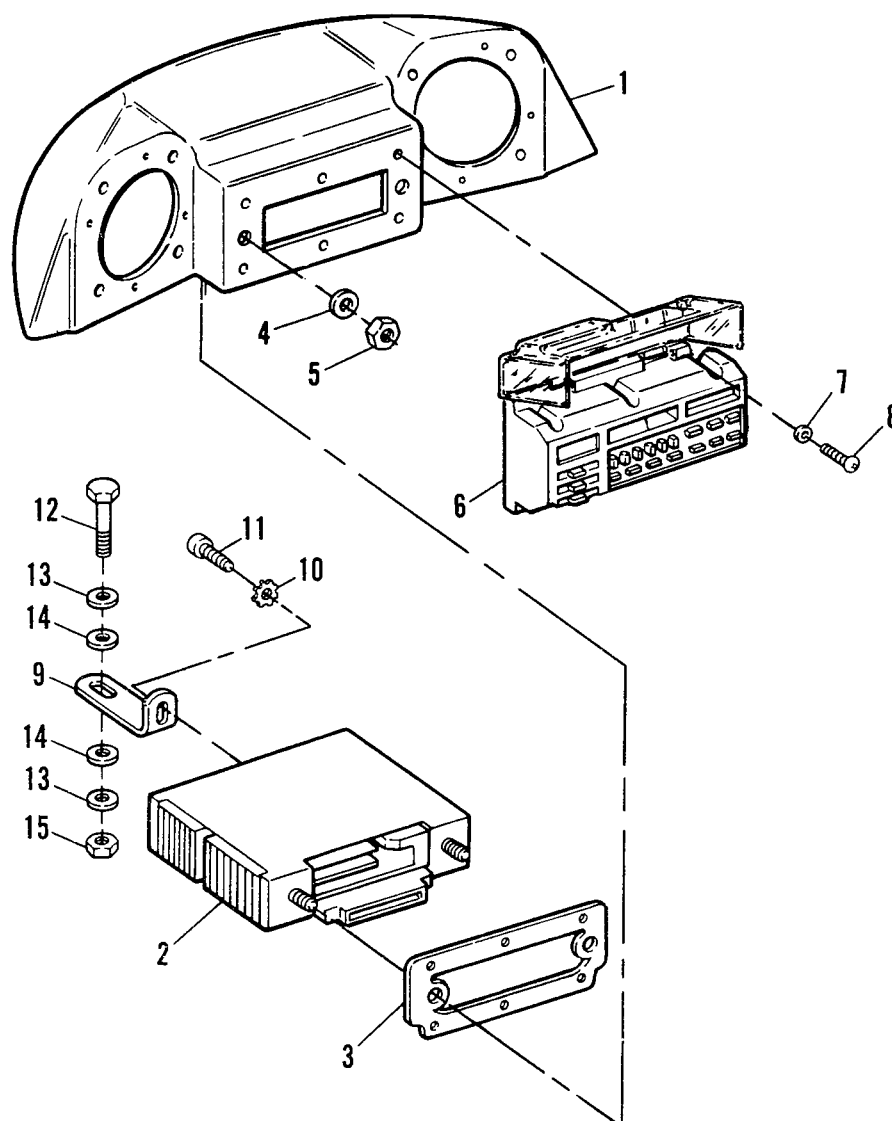


Figure 4. Mounting Tape on Weather Shield



- |                                    |                                |                            |
|------------------------------------|--------------------------------|----------------------------|
| 1. Caddy, radio                    | 6. Panel control assy.         | 11. Screw, 6mm x 1-1/4 in. |
| 2. Radio                           | 7. Washer, black - locking (6) | 12. Bolt, 1/4-20 x 1 in.   |
| 3. Bracket, radio mounting (front) | 8. Screw, #6-32 x 1 in. (6)    | 13. Washer                 |
| 4. Washer, flat - 9mm (2)          | 9. Bracket, radio caddy        | 14. Washer, rubber         |
| 5. Nut, 9mm (2)                    | 10. Star washer                | 15. Locknut, 1/4 in.       |

Figure 5. Radio Mounting — FLTC

## Removal — FLTC

### WARNING

Turn the ignition switch to the OFF position and disconnect the negative lead from the battery before doing any electrical work on the sound system. When finished, connect the negative lead to the battery with the ignition switch in the OFF position. Failure to do so may cause irreversible damage to the radio and possible personal injury.

1. Disconnect negative battery cable to avoid damaging sound system and possible personal injury.
2. Remove windshield following procedure in 1984 to 1986 FLT/FXR Service Manual.
3. Remove headlamp housing following procedure in 1984 to 1986 FLT/FXR Service Manual.
4. Working through headlamp opening separate antenna and electrical connectors that are accessible.

5. See Figure 5. Through headlamp opening remove the four nuts that attach the radio caddy (1) to top of fairing.
6. Lift caddy off of fairing and remove bottom panel from caddy.
7. Remove rear mounting bolt (12), washers (13), washers (14) and nut (15).
8. Remove screws (8) and washers (7). Pull control panel assembly (6) free of radio chassis.
9. Remove stud nuts (5) and washers (4).
10. Separate halves of remaining electrical connectors. Pry choke free of caddy. Slide radio chassis free of caddy.
11. Remove bracket (9) screw (11) and washer (10).

## Installation — FLTC

1. See Figure 5. Attach bracket (9) to rear of radio using screw (11) and washer (10).
2. Place radio mounting bracket (3) over radio chassis front mounting studs and position radio chassis inside caddy opening.
3. At front of caddy install washers (4) and nuts (5) on radio front mounting studs. At back of radio attach bracket (9) to caddy using bolt (12) washers (13) washers (14) and nut (15).
4. Apply adhesive to choke and mount to caddy. Join all electrical connectors that are accessible from inside caddy opening.

### CAUTION

**Do not overtighten mounting screws (8). Overtightening mounting screws will distort rubber hood (6) and prevent the hinged cover from operating properly.**

5. Install control panel and hood assembly (6) with washers (9) and screws (10).
6. Install bottom panel then position radio caddy, with mounting studs through holes in top of fairing. Install washers and nuts on caddy mounting studs.
7. Working through headlamp opening, join remaining electrical connectors.
8. Install headlamp housing and windshield. Follow procedures in 1984 to 1986 FLT/FXR Service Manual.
9. Check to be sure ignition is in OFF position. Connect negative lead to battery.

10. Check headlamp adjustment following procedure in 1984 to 1986 FLT/FXR Service Manual.

## Removal — FXRD

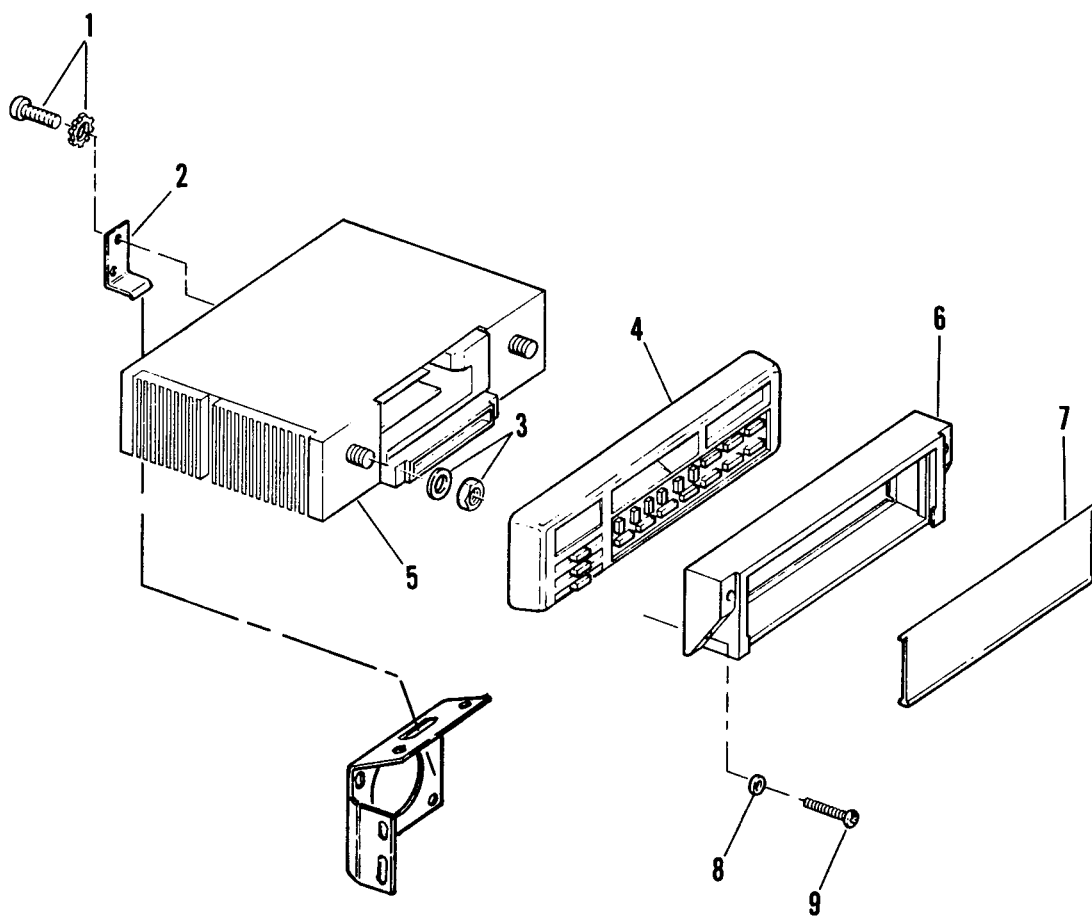
### WARNING

**Turn the ignition switch to the OFF position and disconnect the negative lead from the battery before doing any electrical work on the sound system. When finished, connect the negative lead to the battery with the ignition switch in the OFF position. Failure to do so may cause irreversible damage to the radio and possible personal injury.**

1. Place ignition switch in OFF position. Disconnect battery negative cable to avoid damaging sound system and possible personal injury.
2. Remove instrument cluster from top of fairing. Follow procedure in 1984 to 1986 FLT/FXR Service Manual.
3. Refer to Figure 1. Turn the handlebars to extreme left. Disconnect the six pin connector (remote handlebar controls) and remove connector from retainer.
4. Separate all electrical connectors that are accessible through instrument cluster opening.
5. See Figure 6. Remove screws (9), washers (8), radio hood (6) and control panel (4).
6. Remove nuts and washers (3).
7. If timer module is taped to top of radio remove at this time for additional clearance. If module is ty-wrapped to fairing leave module in place. If removal is too difficult with module ty-wrapped to fairing, cut ty-wraps and remove module.
8. Push radio chassis straight back a minimum of 1/2 in. to release bracket (2) from its mounting slot.
9. Lift radio upward and carefully work radio out through instrument opening as far as wiring permits. Separate remaining electrical connectors freeing radio.
10. Remove screw and washer (1) and bracket (2) from back of radio.

## Installation — FXRD

1. See Figure 6. Install bracket (2) at back of radio using washer and screw (1).
2. Insert radio through instrument opening and join the electrical connectors that are accessible. Posi-



- |                         |               |
|-------------------------|---------------|
| 1. Screw and lockwasher | 6. Radio hood |
| 2. Bracket              | 7. Cover      |
| 3. Washer and nut (2)   | 8. Washer     |
| 4. Control panel        | 9. Screw      |
| 5. Radio chassis        |               |

**Figure 6. Radio Mounting — FXRD/FXRT**

tion radio back far enough for bracket (2) to enter retaining slot. Move radio forward so that studs at front of radio enter holes in fairing and bracket (2) slides into retaining slot.

3. Lift upward on back of radio. If radio lifts up the mounting bracket is not into the retaining slot. Refer to Step 2.
4. Check to be certain the control panel connector is centered in the fairing window to insure control panel will seat fully when connected. When radio is properly seated in rear retaining slot and the control panel connector is centered, install washer and nut (3) on front mounting studs.
5. Place new tape, Part No. 76301-86, on timer module and mount to top of radio. If module was ty-wrapped and removed ty-wrap module to fairing in original location.

6. Mount six pin (remote handlebar controls) connector in retainer then join all electrical connectors.

#### **CAUTION**

**Do not overtighten mounting screws (9). Overtightening mounting screws will distort rubber hood (6) and prevent cover (7) from operating properly.**

7. Install control panel (4), radio hood (6), washers (8) and screws (9).
8. Install instrument cluster. Follow procedure in 1984 to 1986 FLT/FXR Service Manual.
9. Check to be sure ignition switch is in OFF position then reconnect negative battery lead.