

SERVICE BULLETIN



M-1122

April 8, 2002

FLHRSEI TURN SIGNAL BRACKETS

Purpose

The purpose of this bulletin is to inform dealers of a running change to 2002 FLHRSEI models which relocates the front turn signals. This bulletin provides information about the new turn signal mounting assemblies and their related procedures. As a result of this change occurring as a 2002 model year change, this information was not contained in the 2002 FLHRSEI Service Manual Supplement (Part No. 99500-02).

Motorcycles Involved

2002 FLHRSEI models built prior to 4/8/02.

Required Dealer Action

The following procedure covers replacing the front turn signal brackets and if necessary, adjusting the handlebars.

Replace Front Turn Signal Brackets

See [Figure 1](#). The replacement left and right turn signal brackets may be distinguished from each other by the presence of a half-moon relief (3) cut into the face of the right turn signal bracket (1) for clearance around the front brake lever pivot pin.

1. Place protective covers over fuel tank and front fender.
2. Remove old right front turn signal bracket:
 - a. See [Figure 2](#). Hold ball stud clamp (5) with a wrench. Loosen jam nut (3).
 - b. Hold right retainer (6) with a wrench. Unscrew ball stud clamp.
 - c. Unscrew ball stud (4) and jam nut from turn signal housing. Set ball stud and jam nut aside for re-use. Discard ball stud clamp.
 - d. Unscrew right retainer from mirror stem. Discard right retainer and lock washer (8).

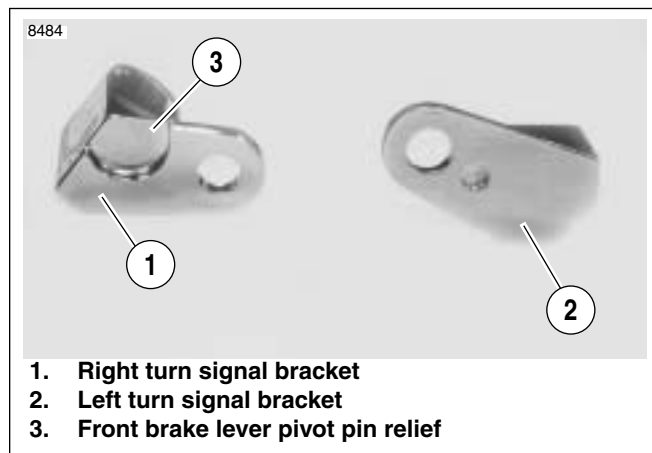


Figure 1. New Turn Signal Brackets

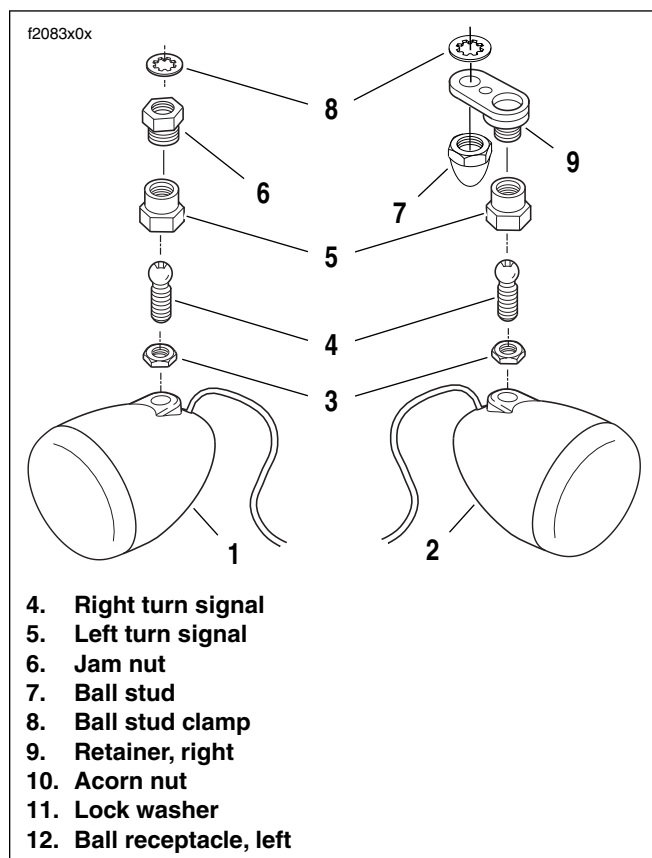


Figure 2. Old Turn Signal Bracket Assemblies

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

3. Install new right front turn signal bracket:
 - a. See [Figure 3](#). Attach right turn signal bracket (5) to mirror stem with **new** lock washer (8) and acorn nut (7) from kit. Finger-tighten only at this time.
 - b. Slide ball stud (4) into turn signal bracket from inboard side. Thread jam nut (3) all the way onto ball stud.
 - c. Screw ball stud into right turn signal housing (1). Finger-tighten jam nut against turn signal housing.
 - d. Screw setscrew (9) into turn signal bracket. Do not tighten at this time.
4. Remove old left front turn signal bracket:
 - a. See [Figure 2](#). Hold ball stud clamp with a wrench. Loosen jam nut.
 - b. Unscrew ball stud clamp from left ball receptacle (9).
 - c. Unscrew ball stud and jam nut from turn signal housing. Set ball stud and jam nut aside for re-use. Discard ball stud clamp.
 - d. Unscrew acorn nut (7). Remove left ball receptacle and lock washer (8) from mirror stem. Discard left ball receptacle and lock washer. Set acorn nut aside for re-use.
5. Install new left front turn signal bracket:
 - a. See [Figure 3](#). Attach left turn signal bracket (6) to mirror stem with **new** lock washer from kit and acorn nut previously set aside. Finger-tighten only at this time.
 - b. Slide ball stud into turn signal bracket from inboard side. Thread jam nut all the way onto ball stud.
 - c. Screw ball stud into left turn signal housing (2). Finger-tighten jam nut against turn signal housing.

NOTE

If handlebars were adjusted high for clearance between turn signals and fuel tank, continue with [Adjust Handlebars](#). Otherwise, proceed to [Adjust Mirrors and Turn Signals](#).

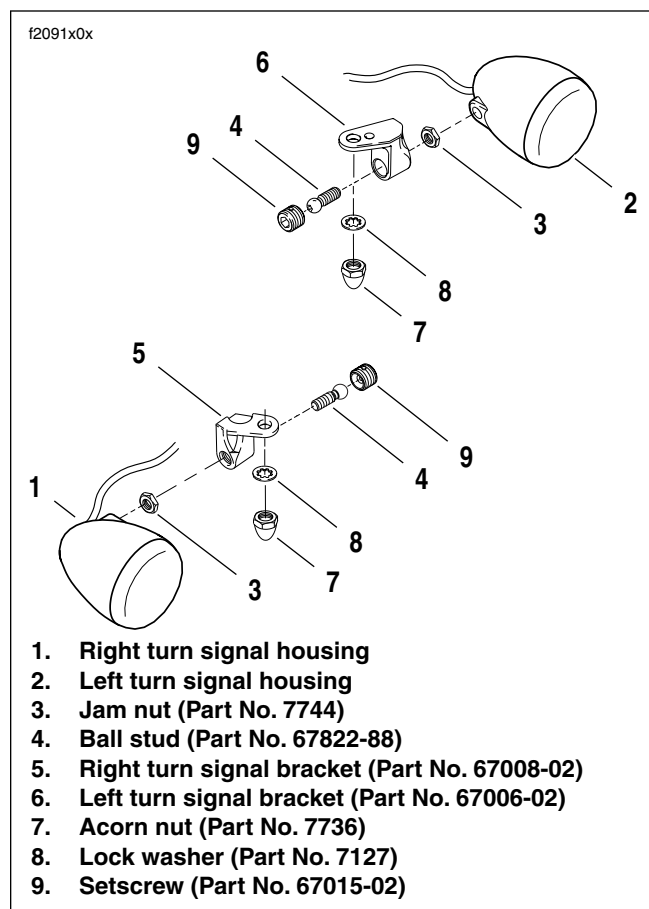


Figure 3. New Turn Signal Bracket Assemblies

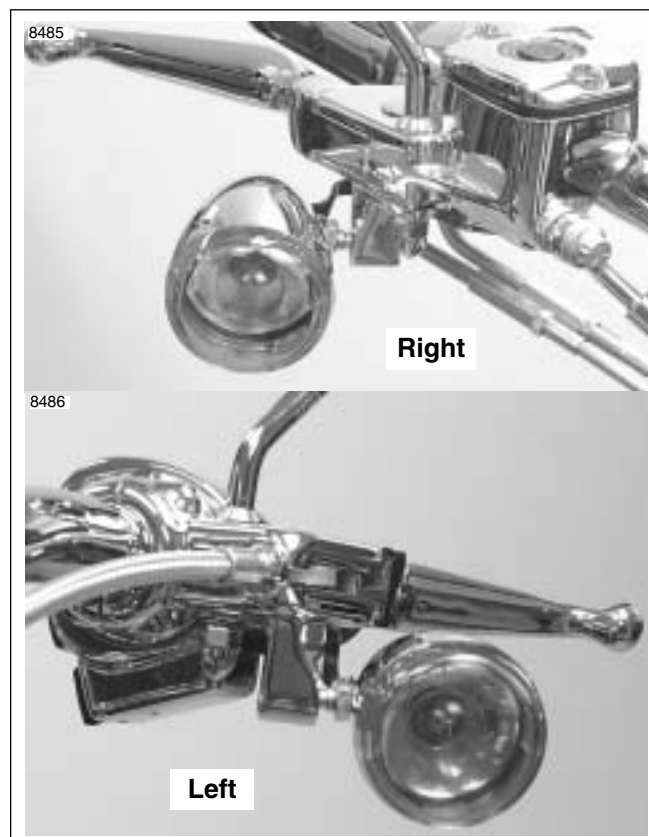


Figure 4. Turn Signal Assemblies

Adjust Handlebars

If necessary, adjust handlebar as follows:

1. See [Figure 5](#). Standing in front of motorcycle, raise wire-form latch springs on each side of wind deflector.
2. Gently pull on top of wind deflector until upper notches on side brackets are free of rubber grommets on headlamp nacelle studs.

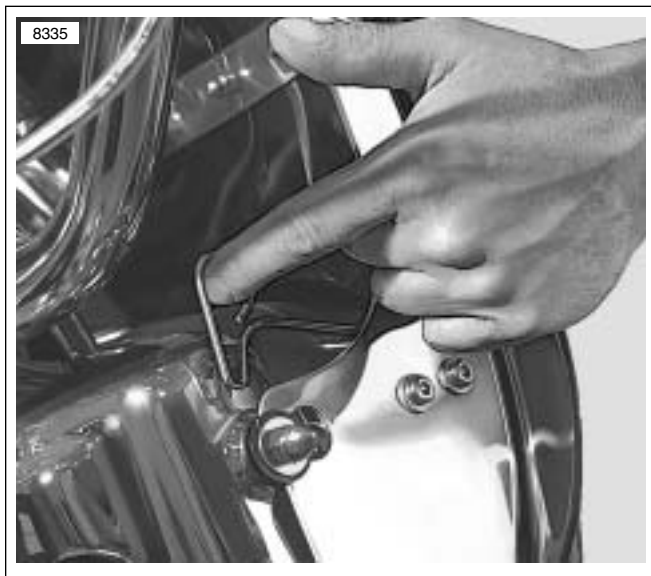


Figure 5. Removing/Installing Wind Deflector

3. Raise wind deflector until lower notches in adjusting brackets are free of lower grommets.
4. See [Figure 6](#). Remove screw (12) and chrome ring (11) from headlamp nacelle (7).
5. Remove eight screws (10) and headlamp assembly (9) from headlamp nacelle. Squeeze two external tabs to remove wire connector at back of headlamp bulb.
6. Loosen tach can screw (13) several turns. Push up on screw to dislodge tachometer assembly (16) from tach gasket (15). Remove screw and tach can.

NOTE

The tach can screw may be easily accessed with the use of a ground-down or shortened allen wrench.

7. Remove nut (1) (inside headlamp nacelle) and nacelle trim (2) from headlamp nacelle.
8. Loosen (but do not remove) screw (3), nut and washer (4) from front of handlebar clamp shroud (8).
9. Gently pry off fork lock plate (5) at rear of handlebar clamp shroud. Remove two screws (6) beneath lock plate.

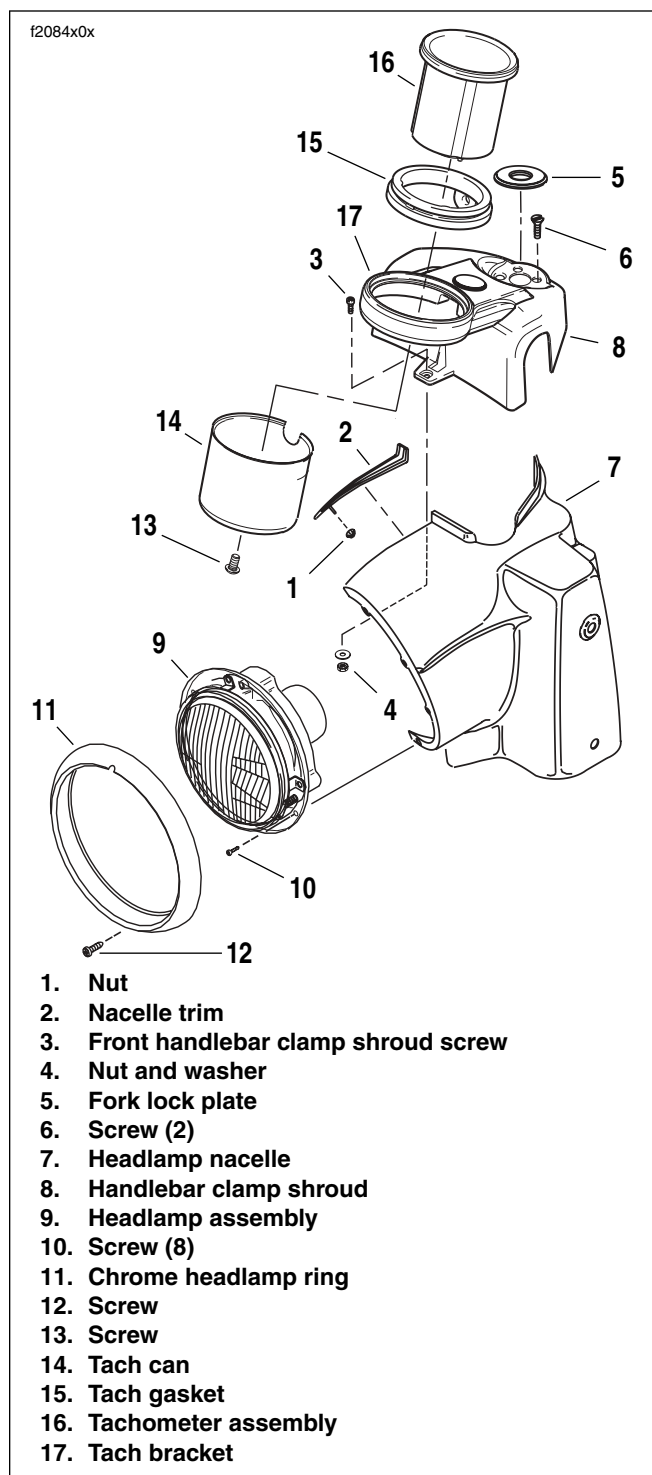


Figure 6. Headlamp Nacelle Components

10. See [Figure 7](#). Separate tach wire harness connectors [32, 108] (1, 2) inside headlamp nacelle.
11. Loosen four acorn nuts securing headlamp nacelle halves to fork studs. Spread headlamp nacelle halves slightly and remove handlebar clamp shroud.
12. See [Figure 8](#). Loosen two rear handlebar clamp screws (3).
13. If there is a gap between either handlebar lower clamp (1) and upper clamp (2) at front, tighten front screw (4) only enough to close gap. If handlebars do not move freely, loosen rear screws until they do.
14. Raise or lower handlebars to normal riding position. To be sure handlebars are properly centered, verify that equal amounts of knurled areas on handlebar protrude from outboard sides of both handlebar clamps.
15. Tighten rear handlebar clamp screws to 12-16 ft-lbs (16.3-21.7 Nm). Slight gap should exist between upper and lower clamps at rear.
16. Check torque on front handlebar clamp screws. Tighten screws to 12-16 ft-lbs (16.3-21.7 Nm).
17. Feed tachometer cable assembly down between handlebars and headlamp nacelle. See [Figure 7](#). Connect tach wire harness connectors [32, 108] (1, 2) inside headlamp nacelle.
18. See [Figure 6](#). Reinstall handlebar clamp shroud (8). Tighten acorn nuts securing nacelle halves to fork studs to 72-108 **in-lbs** (8.1-12.2 Nm).
19. Install two screws (6) to handlebar clamp shroud and tighten to 10-20 **in-lbs** (1.1-2.3 Nm). Gently press fork lock plate (5) into place on handlebar clamp shroud.
20. Tighten front handlebar clamp shroud nut (4) to 10-20 **in-lbs** (1.1-2.3 Nm).
21. Install nacelle trim (2). Install nut (1) (inside nacelle) securing nacelle trim. Tighten to 15-20 **in-lbs** (1.7-2.3 Nm).
22. Slide tachometer assembly (16) into tach gasket (15) in tach bracket (17).
23. Install tach can (14) and secure with screw (13).

NOTE

Make sure throttle cables and front brake hose are properly routed in headlamp nacelle. Make sure throttle cables operate freely without binding.

WARNING

Throttle control must operate freely without binding. Irregular or sticking throttle cables could cause a loss of vehicle control which could result in death or serious injury.

24. Connect wire connector to socket on back of headlamp bulb. Install and secure headlamp assembly (9) to headlamp nacelle (7) with eight screws (10).
25. Secure chrome ring (11) to headlamp nacelle with screw (12).
26. See [Figure 5](#). Standing in front of motorcycle, lower wind deflector into position on rubber grommets on lower headlamp nacelle fork studs.

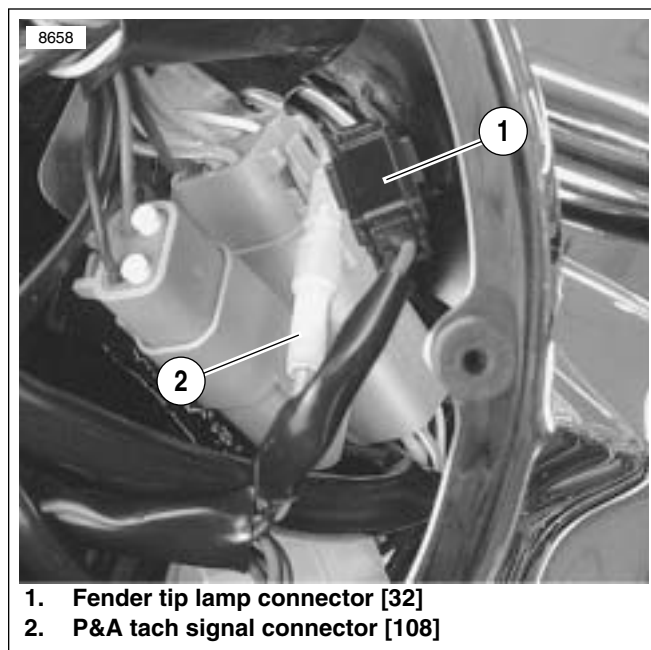


Figure 7. Tach Wire Harness Connectors

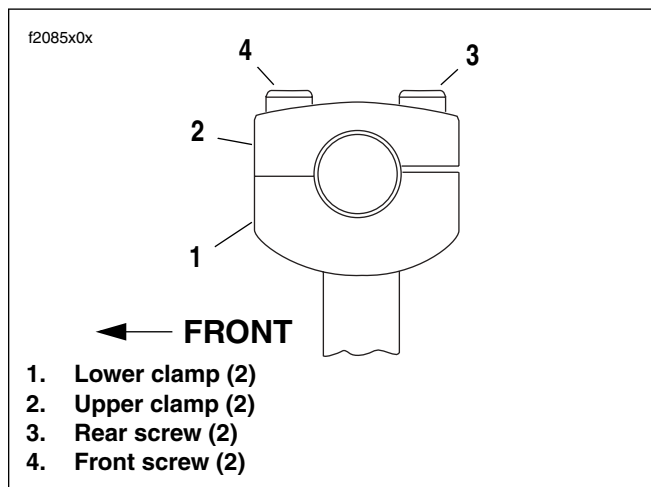


Figure 8. Handlebar Clamps

27. Raise wireform latch springs and push wind deflector in until upper notches on side brackets engage upper rubber grommets and wireform latch springs overhang grommets behind bracket.

CAUTION

Be sure notches in wind deflector bracket fit into grooves in rubber grommets. Incorrect mounting could result in damage to wind deflector.

NOTES

If wind deflector contacts clutch cable, reposition handlebars.

If controls need to be adjusted for new handlebar position, continue with [Adjust Handlebar Controls](#), otherwise proceed to [Adjust Mirrors and Turn Signals](#)

Adjust Handlebar Controls

If necessary, adjust handlebar controls as follows:

1. See [Figure 9](#). On right side of handlebar, loosen (but do not remove) front brake lever assembly clamp screws (1) and handlebar switch housing screws (2).

CAUTION

Control wiring is routed inside handlebar and may be pinched or cut if controls are rotated too far.

CAUTION

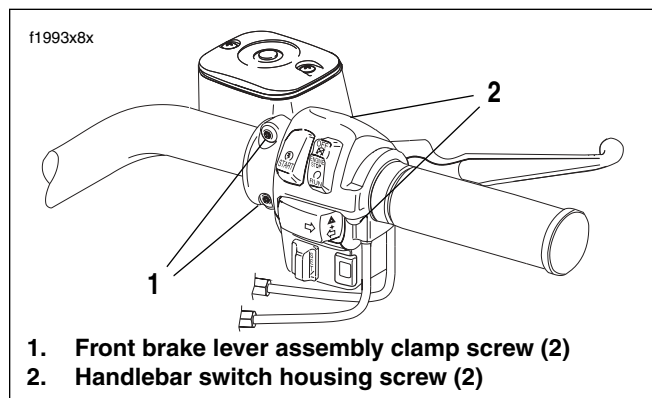
Do not rotate front brake lever assembly too far. Brake master cylinder fits into a swedge in handlebar. If forced up out of the swedge, master cylinder can be damaged when clamp screws are tightened.

2. Rotate switch housing and front brake lever assembly **slightly** for most comfortable position.
3. Beginning with top screw, tighten front brake lever assembly clamp screws to **60-80 in-lbs** (6.8-9.0 Nm).
4. Beginning with lower screw, tighten handlebar switch housing screws to **35-45 in-lbs** (4-5 Nm).
5. On left side of handlebar, loosen (but do not remove) clutch lever assembly clamp screws and handlebar switch housing screws.

CAUTION

Control wiring is routed inside handlebar and may be pinched or cut if controls are rotated too far.

6. Rotate switch housing and clutch lever assembly **slightly** for most comfortable position.
7. Beginning with top screw, tighten clutch lever assembly clamp screws to **60-80 in-lbs** (6.8-9.0 Nm).
8. Beginning with lower screw, tighten handlebar switch housing screws to **35-45 in-lbs** (4-5 Nm).
9. Test handlebar switches to make sure they are functioning properly and wiring has not become pinched or otherwise damaged.



**Figure 9. Handlebar Control Mounting Screws
(Right Side Shown)**

Adjust Mirrors and Turn Signals

1. Have an assistant sit on motorcycle and hold it upright with front fork pointed straight ahead.
2. Position mirror stems equally and adjust mirrors to clearly reflect the area behind the motorcycle.

NOTE

Adjust mirrors so a small portion of the rider's shoulder is visible in each mirror. This helps establish the relative distance of vehicles to the rear of the motorcycle.

3. See [Figure 3](#). Tighten mirror stem acorn nuts (7) to **60-96 in-lbs** (6.8-9.0 Nm).
4. Position front turn signal housings (1, 2) evenly with lenses pointing straight ahead. Tighten each setscrew (9) to **50-60 in-lbs** (5.7-6.8 Nm).

NOTE

After setscrew is initially tightened, it is not necessary, nor desirable, to completely remove setscrew to re-adjust turn signal housing. It is only necessary to loosen setscrew 1/8 turn, adjust turn signal and re-tighten. Nylon lock pellet on setscrew maintains locking ability after many loosening/tightening cycles. If setscrew is completely removed it should be replaced.

5. Hold each turn signal housing and tighten jam nut (3).
6. Test turn signals to make sure they operate properly and wiring has not become pinched or otherwise damaged.
7. Remove protective covers from fuel tank and front fender.

New Job Time Code

Harley-Davidson has determined the time to replace the front turn signal brackets, whenever necessary, is 0.1 hour per bracket. The newly created labor code for this operation is 5240.

NOTES
