SERVICE BULLETIN

M-1013

July 25, 1991

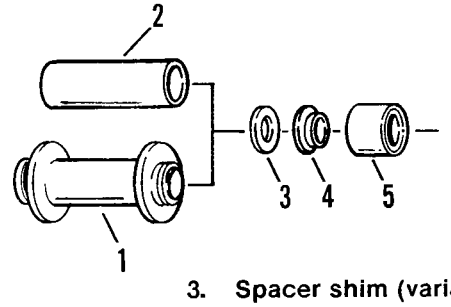
1991 MODEL UPDATE

General

The purpose of this Service Bulletin is to advise you of the various changes that took place after the initial 1991 model year introduction.

Wheel Bearing Sleeves - All Models

See Figure 1. As of May 15, 1991, all wheels are using FLT-style sleeves (1 and 2) and spacer shims (3) to adjust wheel end play. When installing wheel bearing components, make certain smaller O.D. side of shoulder washer (4) faces toward bearing (5). The charts which follow show the bearing sleeves and spacers used on the different sizes and styles of wheels.



1. Sleeve
2. Sleeve
3. Spacer shim (variable)
4. Shoulder washer
5. Bearing (2)

Figure 1. Wheel Bearing Sleeve

Wheel Bearing Sleeve Application

BEARING SLEEVE PART NUMBER	APPLICATION
43608-82	All 16-in. cast wheels (except FLSTF front 16-in. disc wheel). FXSTC/S front 21-in. laced wheels.
43613-92	FXLR 21-in. laced aluminum hub. All 19-in. cast and laced wheels.
43612-92	FLSTF front 16-in disc wheels.
43668-82	All 16-in. front or rear laced wheels. 1986 and earlier FLT 16-in. cast wheels (16-spoke).
43634-92	1982 and earlier XLH rear 16-in. laced wheels.

Spacer Shim Thickness

SPACER PART NUMBER	THICKNESS (in inches)
43290-82	0.033 - 0.030
43291-82	0.017 - 0.015
43292-82	0.0085 - 0.0075
43293-82	0.0045 - 0.0035
43294-82	0.0025 - 0.0015

Air / Oil Separator - All 1340cc Engines

See Figure 2. As a running change in April 1991, all 1340cc engines have an air/oil separator inserted in the air duct tube on the gearcase cover. This labyrinth-style baffle aids in the separation of oil mist from the crankcase air, and further reduces the likelihood of oil carryover to the air cleaner.

You may retrofit the air/oil separator on 1984 and later 1340cc engines. The air/oil separator (H-D Part No. 25329-91) is available from Harley-Davidson on a regular parts order basis.

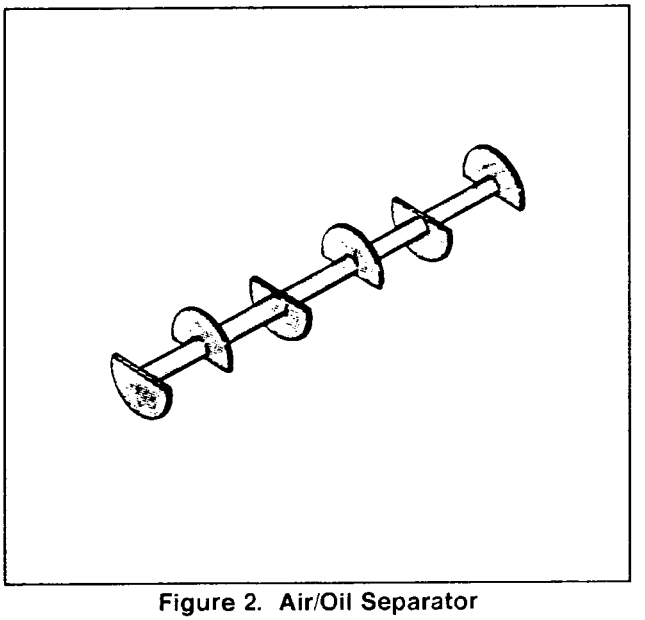


Figure 2. Air/Oil Separator

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									

Four-Sided Fuel Inlet Valve - All 1340cc Engines

See Figure 3. As of June 1991, all 1340cc engine carburetors will have a four-sided fuel inlet valve, which improves alignment and replaces the previous three-sided style. The new inlet valve can be used on all Keihin carburetors. The four-sided inlet valve (part of Fuel Inlet Valve Kit, H-D Part No.27886-78A) is available from Harley-Davidson on a regular parts order basis.

CAUTION

When installing the kit, the carburetor float level must be checked according to the instructions furnished with the kit.

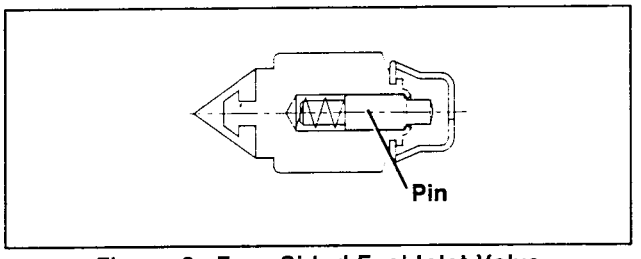
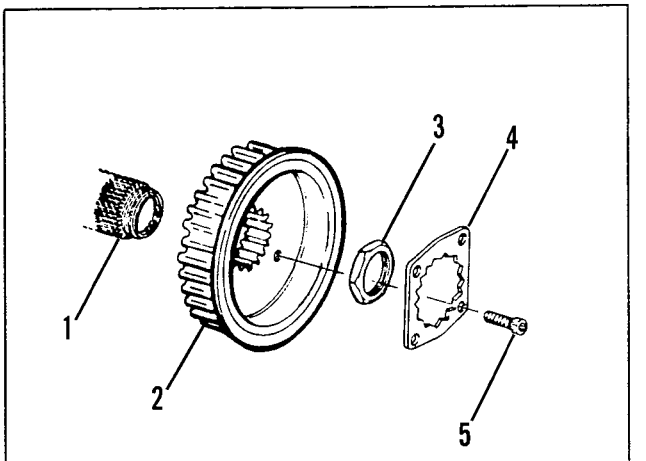


Figure 3. Four-Sided Fuel Inlet Valve

Transmission Sprocket Lockplate - All 1340cc Engines

See Figure 4. Starting in mid-June (transmission No. 91168061), all 1340cc engines will be equipped with a new style lockplate (4) for the transmission sprocket (2). This change will also affect Sportster transmissions beginning with the 1992 model year. The lockplate is shaped to fit around the six corners of the transmission sprocket nut (3). The lockplate can be rotated to a number of positions, and can be positioned with either side facing the sprocket, to allow for easy alignment of two of its four drilled holes (diagonally opposite) with the sprocket's two tapped holes. The lockplate is secured to the sprocket by two hex socket head screws (5). The lockplate offers increased sprocket nut retention; it will be furnished with all new 1340cc sprocket parts orders.



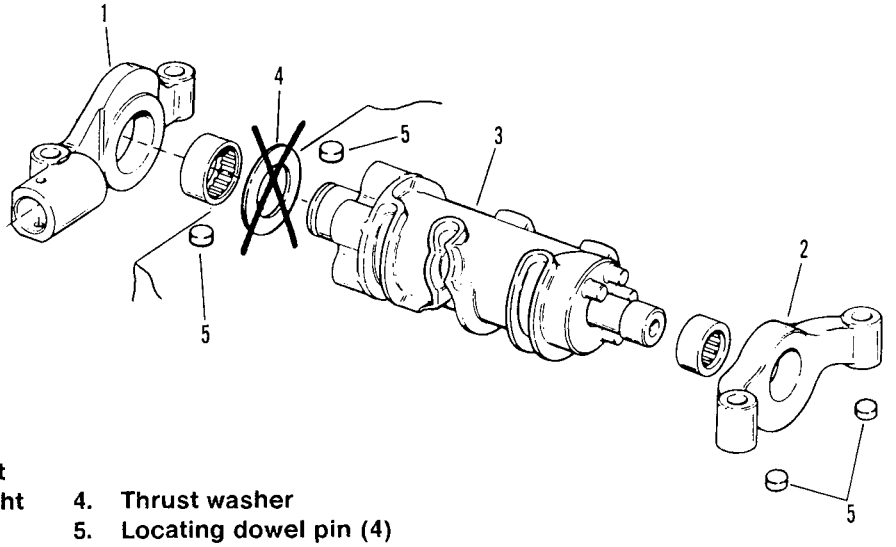
1. **Main drive gear shaft**
2. **Transmission sprocket**
3. **Transmission sprocket nut**
4. **Lockplate**
5. **Socket head screw (2)**

Figure 4. Transmission Sprocket Lockplate

When installing the transmission sprocket nut (3), apply LOCTITE® Threadlocker 262 (red) and tighten the nut to 110 - 120 ft-lbs torque. If you cannot align the lockplate (4) and sprocket screw (5) holes, the nut (3) may be additionally tightened until the screw holes line up. However, do not tighten the nut to more than 150 ft-lbs torque, and never loosen the nut, while attempting to align the screw holes. Tighten the two socket head screws (5) to 7 - 9 ft-lbs torque.

Transmission Support Block Dowel Pins - All 1340cc Engines

See Figure 5 As of early May (transmission No 91122004), both transmission support blocks (1 and 2) are equipped with locating dowel pins (5). With the pins at both support blocks, the distance between the support blocks can be more accurately maintained. The shifter cam (3) is now machined to allow for proper alignment with the shift forks, without the use of the thrust washer (4).



1. **Support block, left**
2. **Support block, right**
3. **Shifter cam**
4. **Thrust washer**
5. **Locating dowel pin (4)**

Figure 5. Transmission Support Block Dowel Pins

Fuel Tank Filler Cap Gasket - All Models Except FLT Models

Fuel tank filler cap gasket (H-D Part No. 61109-85C) will no longer be included with the replacement fuel tanks supplied by Harley-Davidson Parts & Accessories. However, it is important to use this particular gasket when replacing fuel tanks. This gasket is made of a material that is highly resistant to the chemicals found in gasoline (and gasoline/alcohol blends). Use of a different gasket might result in staining of the fuel tank paint finish around the tank's filler neck. This staining is due to the gasoline's chemical reaction with the materials in the non-specified gasket.

Vehicle Alignment Tool - FXR Models

Starting in late March or early April, the rear fork on all FXR vehicles will include a hole on each side for using the same alignment tool currently used on Dynaglide and Sportster models. The holes in the rear fork permit alignment measurements to be taken at a much shorter distance providing increased accuracy. This also eliminates the long tool used to take measurements from the center of the axle to the center of the fear fork pivot. A drawing, enabling you to make the new tool, is shown in Figure 6.

Sound System - FLTC / FLHTC Ultra Models

There were two significant changes on the FLTC/FLHTC ULTRA Sound System in February 1991:

- The radio input impedance was lowered on the mute lead (in the 3-pin DIN cable) to prevent audio muting should the DIN connector become water-contaminated.

- See Figures 7 and 8 (on page 4 of 4). A circuit that disables the radio amplifier during CB transmission has been added. Disabling the amplifier eliminates the squealing noise at the fairing speakers, which is caused by feedback. The amplifier disabling circuit may be installed on any 1991 FLTC / FLHTC Ultra model.

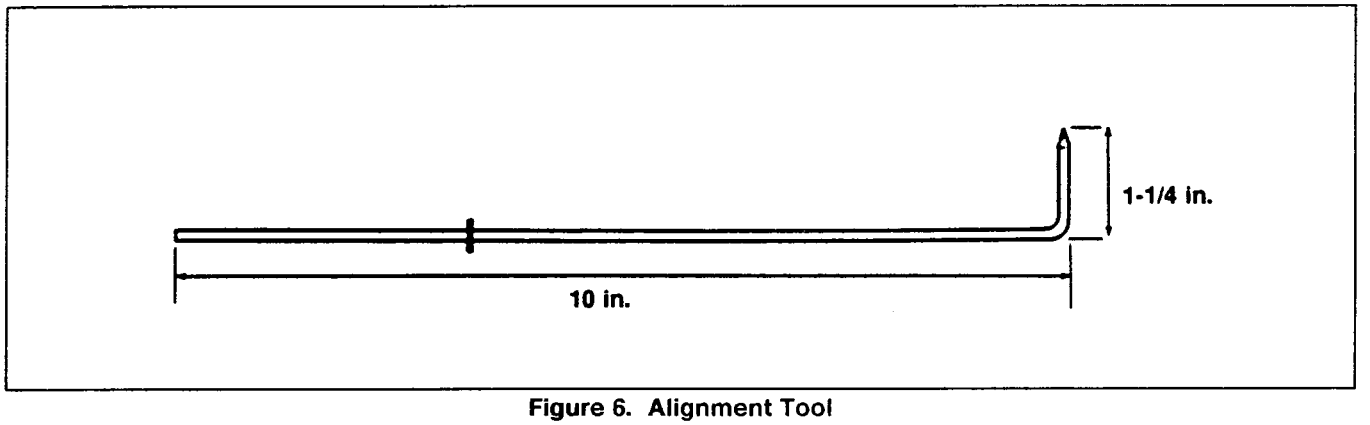


Figure 6. Alignment Tool

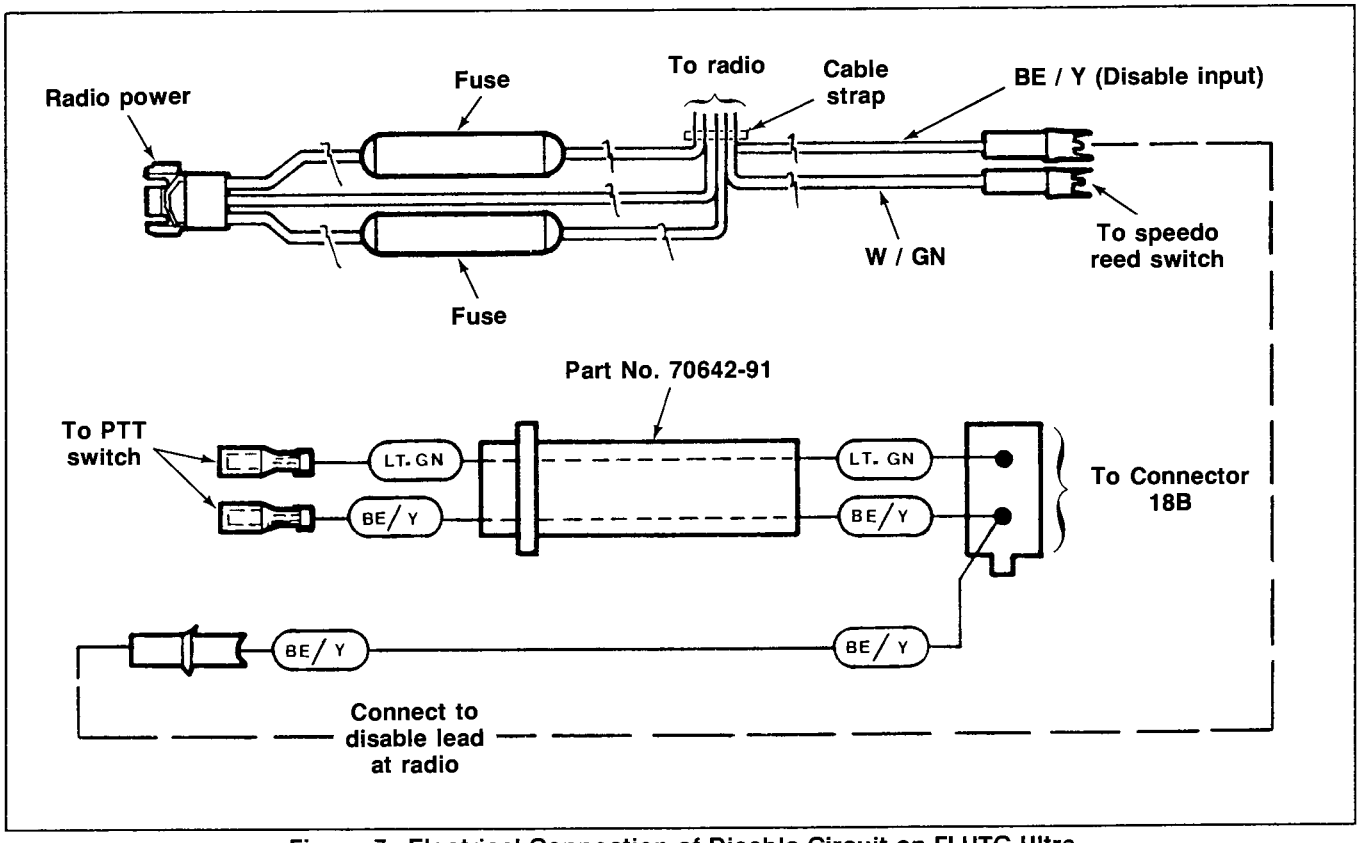


Figure 7. Electrical Connection of Disable Circuit on FLHTC-Ultra

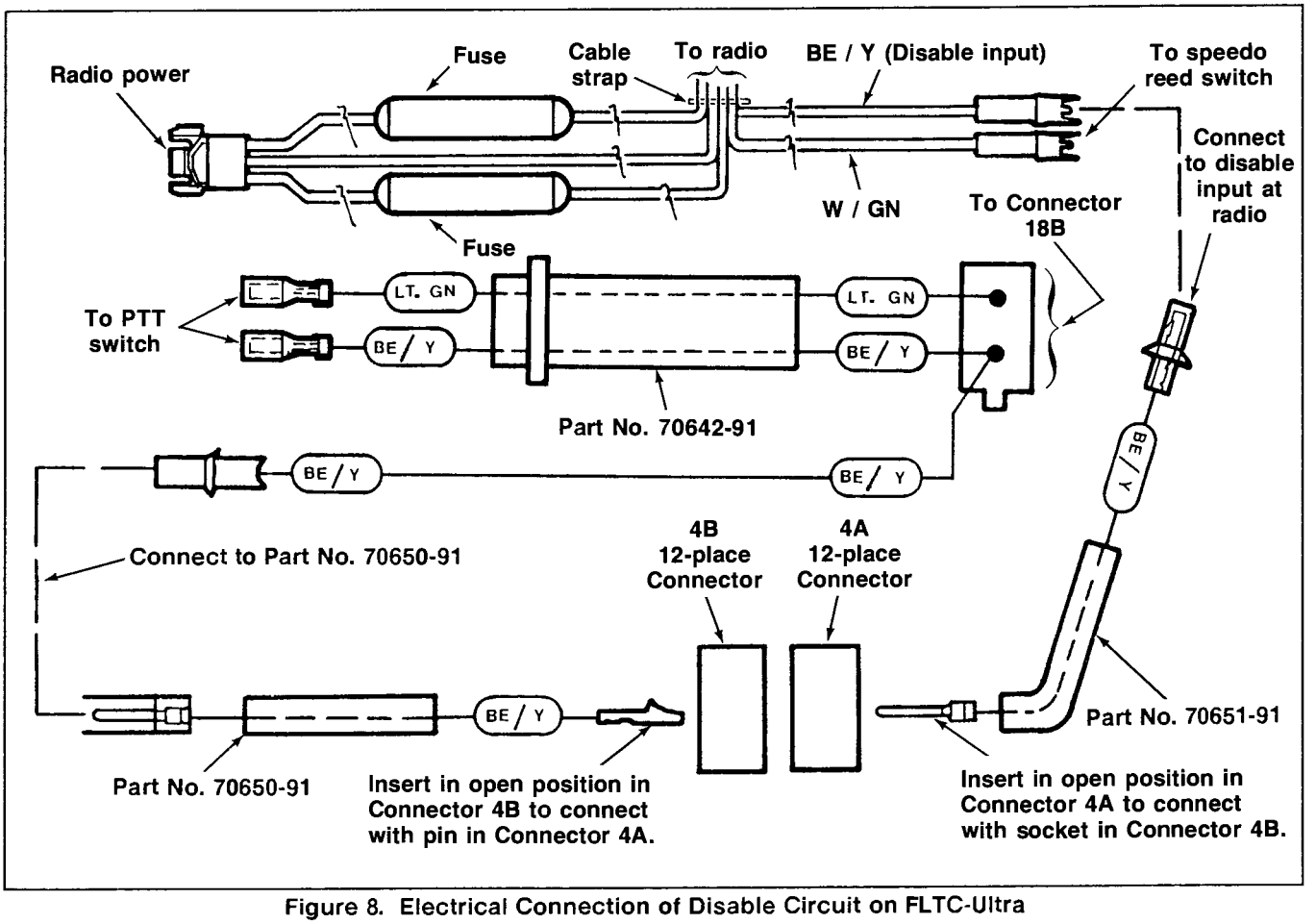


Figure 8. Electrical Connection of Disable Circuit on FLTC-Ultra