SERVICE BULLETIN

M-1006 December 12, 1990

1991 ALTERNATOR ROTOR AND COMPENSATING SPROCKET SPACING

General

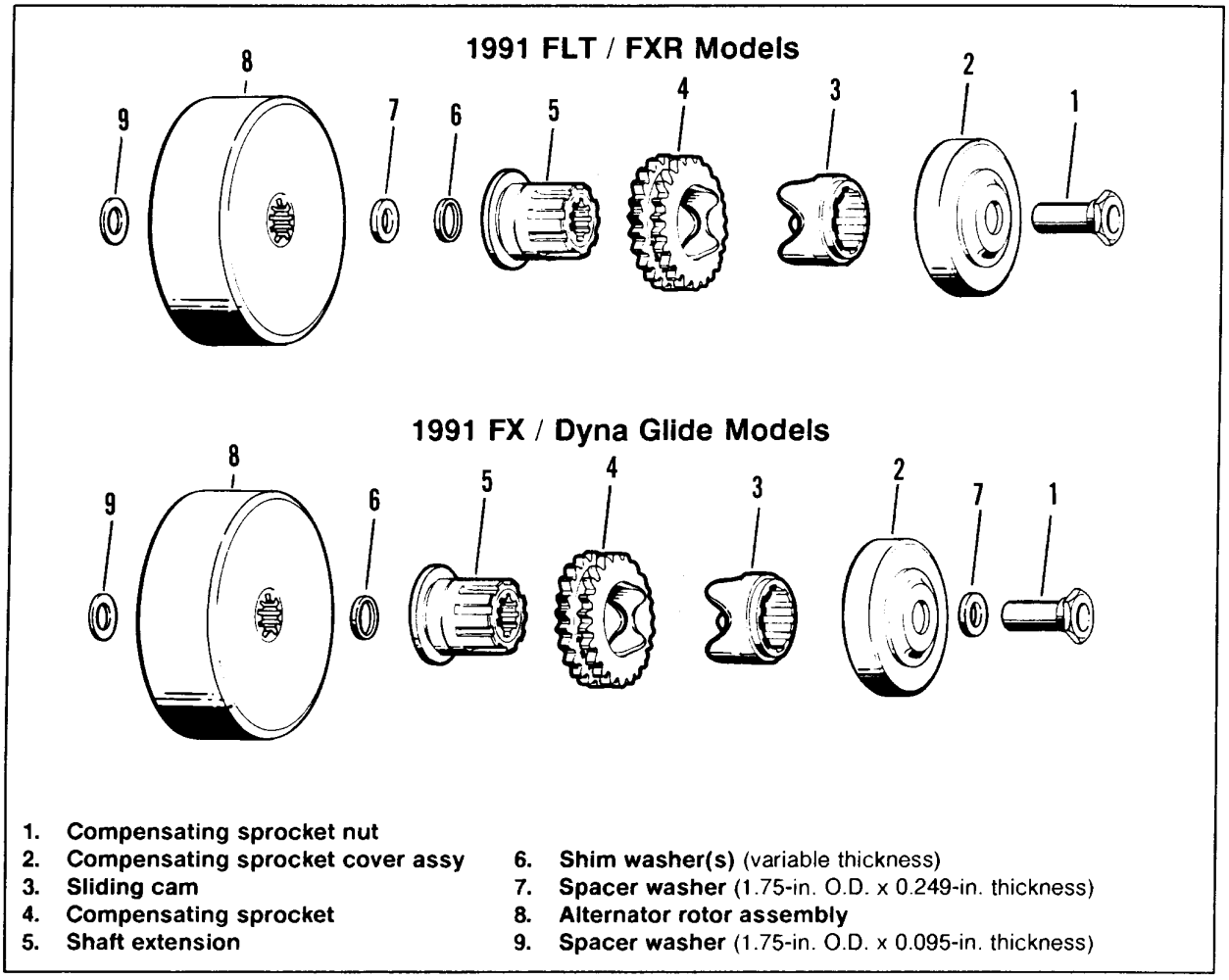
This Service Bulletin is being issued to inform Dealers about alternator rotor and compensating sprocket spacing on 1991 model year motorcycles with 1340cc Big Twin engines. The positioning of the spacer/shim washers on 1991 Big Twins will vary, depending upon the particular motorcycle model involved. In addition, the spacer/shim washers used on 1991 Big Twins are different, in size and/or positioning, than those used on earlier models. See illustration below.

NOTE

All Big Twin models have a 1.75-in. O.D. x 0.095-in. thick spacer washer (9) immediately inboard of the alternator rotor assembly (8) on the sprocket shaft.

1991 FLT / FXR MODELS

On 1991 FLT / FXR models, a 1.75-in. O.D. x 0.249-in. thick spacer washer (7) is positioned immediately outboard of the rotor, followed by a variable thickness shim washer(s) (6), and then the shaft extension (5).



1. **Compensating sprocket nut**
2. **Compensating sprocket cover assy**
3. **Sliding cam**
4. **Compensating sprocket**
5. **Shaft extension**
6. **Shim washer(s)** (variable thickness)
7. **Spacer washer** (1.75-in. O.D. x 0.249-in. thickness)
8. **Alternator rotor assembly**
9. **Spacer washer** (1.75-in. O.D. x 0.095-in. thickness)

Alternator Rotor and Compensating Sprocket Assembly

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									

1991 FX / DYNA GLIDE MODELS

On 1991 FX / Dyna Glide models, the variable thickness shim washer(s) (6) is positioned between the rotor and the shaft extension (5); the 1.75-in. O.D. x 0.249-in. thick spacer washer (7) is positioned between the compensating sprocket cover assembly (2) and the compensating sprocket nut (1).

Service Manual Changes

Certain references to spacer/shim washer size and positioning in the 1991 Big Twin Service Manuals require clarification or correction. The required changes to the Service Manuals are listed below. Please make a note of these changes, and write in the revised information within the Service Manuals used by your Service/Parts Department personnel.

1991 FLT / FXR SERVICE MANUAL

- In the sectioned view of Figure 6-3 on Page 6-3, alternator rotor spacer (7) appears to have a larger outside diameter than alternator rotor spacer (9). The O.D. of both spacers is actually the same - 1.75 inches.
- In Figure 8-13 on Page 8-18, spacer (2) is incorrectly listed as having an O.D. of 2.81 inches. Spacer (2) actually has an O.D. of 1.75 inches, and has a thickness of 0.249 inches. Spacer (3) is correctly listed as having an O.D. of 1.75 inches, but is only 0.095 inches thick.
- The third sentence of Step 2 (ASSEMBLY) on Page 8-19 reads as follows: "Place the small diameter spacer (3) at the inside (stator side) of rotor (1) and the larger diameter spacer (2) at the outside of the rotor." The sentence should actually read as follows: "Place the **0.095-in. thick spacer** (3) at the inside (stator side) of rotor (1) and the **0.249-in. thick spacer** (2) at the outside of the rotor." The remainder of the procedure is correct as printed.

1991 FX / SOFTAIL SERVICE MANUAL

- The third sentence of Step 2 (PRIMARY CHAIN INSTALLATION: Sprocket Alignment) on Page 6-3 reads as follows: "The difference will be the spacer (6, Figure 6-3) thickness that needs to be added or subtracted." The sentence should actually read as follows: "The difference between the two measurements must be within 0.030 in. for proper primary chain alignment. A difference greater than 0.030 in. indicates a variable thickness spacer (Item 2 [*after correction*], Figure 8-16, Page 8-18) should be removed from or installed to the position between the alternator rotor and the shaft extension."
- In Figure 6-3 on Page 6-3, spacer (6) is incorrectly listed as being of variable thickness. Spacer (6) actually has a thickness of 0.249 inches, with an O.D. of 1.75 inches.
- In Figure 8-16 on Page 8-18, spacer (2) is incorrectly listed as having an O.D. of 2.81 inches. Spacer (2) is actually the variable thickness shim spacer which is referred to in the corrected "Sprocket Alignment" procedure of Section 6 "PRIMARY CHAIN INSTALLATION". Spacer (3) in Figure 8-16 is correctly listed as having an O.D. of 1.75 inches. However, in order to distinguish spacer (3) from the other 1.75-in. O.D. spacer (which is positioned between the compensating sprocket cover assembly and the compensating sprocket nut), please note that spacer (3) has a thickness of 0.095 inches. The other spacer (Item 6 [*after correction*], Figure 6-3, Page 6-3), positioned between the compensating sprocket cover assembly and the compensating sprocket nut, has a thickness of 0.249 inches.

1991 DYNA GLIDE SERVICE MANUAL

- Figure 8-16 on Page 8-18, spacer (3) is correctly listed as having an O.D. of 1.75 inches. However, in order to distinguish spacer (3) from the other 1.75-in. O.D. spacer (which is positioned between the compensating sprocket cover assembly and the compensating sprocket nut), please note that spacer (3) has a thickness of 0.095 inches. The other spacer (Item 6, Figure 6-3, Page 6-3), positioned between the compensating sprocket cover assembly and the compensating sprocket nut, has a thickness of 0.249 inches.