INNER PRIMARY CHAIN HOUSING/1200 AND 1340 CC MOTORCYCLES

The transmission shaft ball bearing, Part No. 9061, located within the inner primary chain housing has exhibited shortened life in some 1200 and 1340cc motorcycles. This can be caused by a slight misalignment of the transmission shaft within the chain housing or slight flexing of the housing walls causing accelerated bearing wear.

An improved, strengthened inner primary chain housing has been put into production that should minimize this occurrence along with improved transmission shaft alignment techniques at the York assembly facility. The inner wall of the housing has been strengthened with ribs which greatly reduce flexing of the housing (see Figure 1.) These improved housings were put into production above V.I.N. number 25186 JO on all 1200 and 1340cc models, and all Parts and Accessories stock contains the improved design. (See Paragraph 19 for affected part numbers and models.)

Whenever you encounter a motorcycle with a transmission shaft bearing failure, check for proper alignment of the transmission shaft (see “Transmission” section of 1978½ FL/ FX Service Manual) and inspect the inner primary chain housing for evidence of cracking and/or distortion around the bearing and inner walls of the housing. If such cracks or distortion are evident, replace with strengthened inner housing unit and discard the old one.

WARNING

Disconnect the battery cables (negative cable first) to avoid accidental start-up of the vehicle and possible personal injury.

REPAIR PROCEDURE

1. FX models - Remove shift lever.
   FL models - Remove left footboard and left muffler and exhaust pipe.

2. Remove outer chain cover, chain tensioner, chain, clutch, clutch shell, clutch hub and compensating sprocket according to appropriate instructions found in the 1978½ FL/FX Service Manual, Part No. 99482-78E.

3. Remove starter motor and housing and disconnect wires from solenoid.

4. Remove (2) front bolts and washers holding primary housing to engine.

5. Remove the (2) rear bolts and washers holding primary housing to engine. Take special note that these (2) bolts are secured by a wire run through the drilled head end of each. Remove carefully.

6. Remove (4) nuts and washers holding primary housing to transmission.

NOTE

On some 1980 models, the two rear studs have been replaced with bolts.

7. Remove the entire inner housing and chain housing O-ring, Part No. 11125. Disconnect chain oiler, vent line and primary return line.

8. Loosen the (4) bolts attaching the transmission to the frame.
9. Insert a new O-ring into the groove on engine. Then install new housing on starter housing mounting bolts. Reconnect vent line, chain oiler and primary return line.

10. Reinstall (4) nuts and washers that attach housing to transmission. Reinstall (2) rear transmission bolts, if used. Do not tighten at this time.

11. Attach the inner primary to the engine using the original four bolts and washers. Place the two bolts with the heads drilled through into the rear mounting holes. Tighten all four bolts to 18 to 22 ft-lbs torque. Safety wire the two rear bolts together.

12. Align the transmission case so the inner primary does not bind on the mainshaft or mounting hardware. Tighten the inner primary to transmission mounting hardware to 18-22 ft-lbs torque. Then tighten the transmission to frame mounting hardware to 18-22 ft-lbs, also.

13. Reinstall starter motor and housing.

14. Reassemble compensating sprocket, clutch shell, and clutch hub per instructions found in the "Clutch" and "Charging System" sections of your FL/FX Service Manual. Be sure to reinstall the same thickness of spacers as you removed on the compensating sprocket to assure proper alignment with clutch sprocket.

15. Reassemble the chain and chain shoe tensioner. Reset shoe support to achieve the recommended free movement in the chain per the instructions found in the "Drive" section of your FL/FX Service Manual.

16. Reinstall the cover and cover gasket. Reconnect the solenoid wires and battery cables.

**NOTE**

After reassembly, chain housing must be airtight. Check using a Vacuum Gauge, Part No. 96950-68. Remove one of the four screws securing the front chain inspection cover and in its place screw in the threaded fitting of the gauge. Then, with the engine running and the vent hose to oil tank pinched closed with pliers between the chain housing and "T" fitting, check gauge to see that there is a reading indicating 25-30 inches water vacuum or more at 1500 rpm. A significantly lower reading indicates an air leak into the chain housing.

17. Check the clutch adjustments. See "Clutch" section of your FL/FX Service Manual.

18. When the repairs are completed, submit a warranty claim form entering the part numbers, quantities and job code #2606 for labor. Upon receipt of the properly completed claim form, your account will be credited for parts and 1.2 hours labor.

19. Replacement inner chain housings are available from the Parts and Accessories Division under the following Part Numbers.

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>MODELS USED ON</th>
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<tbody>
<tr>
<td>60411-79</td>
<td>FL, FLH, FLH-80</td>
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<td>60421-79</td>
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<td>FXS, FXS-80</td>
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