INNER PRIMARY CHAIN HOUSING/1200 AND 1340 CC MOTORCYCLES

The chain housing ball bearing, Part No. 9061, located within the inner primary chain housing has exhibited shortened life in some 1200 and 1340cc motorcycles. The bearing wears at an accelerated rate and must be replaced at frequent intervals. This can be caused by a slight misalignment of the transmission shaft within the housing. This causes excessive sideloading and the walls of the housing can flex with the shaft and accelerate 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 York. The inner wall of the housing has been strengthened with ribs which increase the stiffness of the wall and greatly reduce flexing of the housing. (See Figure 1.) These improved housings were put into production above V.I.N. number 25186 00 on all 1200 and 1340cc models, and all Parts and Accessories stock contains the improved design. (See Paragraph 13 for affected part numbers and models.)

Whenever you encounter a motorcycle with recurring chain housing bearing failure, check for proper alignment of the transmission shaft and inspect the inner primary chain housing for evidence of this condition. Look for cracks around the bearing and inner walls of the housing. If such cracks are evident, replace the entire inner housing.

WARNING: DISCONNECT THE BATTERY CABLES (NEGATIVE CABLE FIRST) TO AVOID ACCIDENTAL START-UP OF THE VEHICLE AND POSSIBLE PERSONAL INJURY.

REPAIR PROCEDURE

1. Remove the left side footboard or footboard to expose the chain housing cover.

2. Remove the chain cover, chain tensioner, chain, clutch, clutch sprocket, alternator and compensating sprocket according to appropriate instructions found in the 1978 ½ FL/FX Service Manual, Part No. 99482-78E.
3. Remove the two nuts and washers from the front starter housing mounting bolts.

4. Remove the two rear bolts. Take special note that these two bolts are secured by a wire run through the drilled head end of each. Remove carefully.

5. Remove the entire inner housing and chain housing O-ring, Part No. 11125.

6. Insert a new O-ring into the groove on the backside of the new inner chain housing. Then install new housing on starter housing mounting bolts.

7. Reinstall two washers and nuts on stud ends. Then reinstall the two bolts in the rear mounting holes. Tighten evenly to 18-22 ft-lbs torque so housing does not bind on transmission mainshaft or shoulder on engine crankcase.

8. Reinstall the safety wire through the bolt heads.

9. Reassemble alternator, compensating sprocket, clutch and clutch sprocket 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 the clutch sprocket.

10. 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. Check to be sure the main shaft and sprocket rotate freely without binding while rear chain is held stationary.

11. Reinstall the cover and cover gasket.

NOTE: After reassembly, chain housing must be airtight. Check using a Vacuum Gage, 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 gage. Then, with the engine running, check gage to see that there is a reading indicating 20 inches water vacuum or more at 1500 rpm. Perform the check with the vent hose to oil tank pinched closed with pliers between the chain housing and "T" fitting. A significantly lower reading indicates an air leak into the chain housing.

12. 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.

13. 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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</thead>
<tbody>
<tr>
<td>60411-79</td>
<td>FL,FLH,FLH-80</td>
</tr>
<tr>
<td>60421-79</td>
<td>FX,FXEF,FXEF-80</td>
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<td>60431-79</td>
<td>FXS,FXS-80</td>
</tr>
<tr>
<td>60441-79</td>
<td>CLASSIC</td>
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HARLEY-DAVIDSON MOTOR CO., INC.