1987 XLH REAR WHEEL SPROCKET

General

A quantity of 1987 XLH (883 cc and 1100 cc) vehicles may have been shipped with improperly machined rear wheel sprockets. This could result in premature chain wear. It is important that the mismachined sprockets on all affected motorcycles be replaced as soon as possible. The inspection procedure will differ between new motorcycles and motorcycles with accumulated mileage (over 20 miles). Refer to the two flow charts that follow for the proper inspection procedure. See pages 3, 4.

New Vehicle Inspection Procedure-No Mileage Accumulation

1. Check rear chain adjustment. The rear chain must have 1/2 in. total up-and-down movement at mid span on the bottom strand. Check the chain adjustment with the motorcycle upright and the weight of one rider sitting on it.

2. If the chain requires adjustment follow the procedure under ADJUSTMENT, REAR CHAIN on page 6-6 in the 1986-1987 XLH SERVICE MANUAL.

3. See Figure 1. Grasp the chain at the rear of the sprocket and move the chain from side-to-side in a plane parallel to the axle. The chain should move with relative ease, without forcing.

4. If chain movement is satisfactory the sprocket does not require replacement.

5. If chain movement is not present proceed to Inspection Procedure For Vehicles With Mileage Accumulated.

CAUTION

Chain stretch and wear may allow vehicles with accumulated road mileage to pass inspection with wheel on vehicle even though it has a faulty sprocket. For this reason vehicles in service must be inspected with the wheel off vehicle. Vehicles placed back in service with a faulty sprocket will result in accelerated chain wear and possible chain failure.

Inspection Procedure For Vehicles With Mileage Accumulated

1. Remove the wheel following the procedure under Removal, REAR WHEEL page 2-8 in the 1986-1987 XLH SERVICE MANUAL.

2. Refer to Figure 2. Take a new chain, Part No. 40029-15E and loop the chain fully around the sprocket. The chain should seat with the rollers fully into the sprocket teeth as shown in view “A”. If the chain rollers seat fully the sprocket is satisfactory and the wheel can be reinstalled. If the chain seats fully at the upper portion of the sprocket, then begins to climb the sprocket teeth as shown in view “B” the sprocket must be replaced. On vehicles already in service, with mileage accumulated, the chain must also be replaced.

Figure 1. Inspecting Sprocket With Wheel On Vehicle

Replacement And Installation Procedure

1. Install a new replacement sprocket. Tighten sprocket
bolts to 45-50 ft. lbs. on laced wheels and 50-55 ft.
lbs. on cast wheels.

2. Place wheel centrally in the rear swingarm with the
brake disc in the caliper.

3. If the chain requires replacement install a new chain
following the procedure under REMOVAL AND
INSTALLATION, REAR CHAIN on pages 6-6 and 6-7
in the 1986-1987 XLH SERVICE MANUAL.

4. Install the rear wheel and adjust the chain as described
under INSTALLATION, REAR WHEEL page 2-10 in
the 1986-1987 XLH SERVICE MANUAL.

Replacement sprockets and chains can be obtained by
ordering Rear Chain part No. 40029-15E, Rear wheel
sprocket Part No. 41470-86 through regular parts channels.

Credit Procedure

After inspecting/servicing each vehicle as required submit a
properly completed warranty claim using the appropriate
labor code as listed on Pages 3, 4. If the sprocket and/or
chain were replaced, return the completed warranty claim
form along with the original parts using a return address P-
label, Form Number 1248 on the outside of the box. Parts
must be returned postage prepaid. Upon receipt of the
claim and/or parts, you will be credited for parts, labor and
postage.

Figure 2. Inspecting Sprocket With Wheel Off Vehicle
New Vehicle Inspection Procedure-No Mileage Accumulation

1. Inspect for chain movement with wheel on vehicle. See Figure 1.
   
   Is there chain movement?

   - Yes
   - No

   Sprocket is OK, no replacement is required.

   2. Remove rear wheel and place new chain over sprocket.

   - If condition A in Figure 2 exists
   - If condition B in Figure 2 exists

   3. Sprocket is OK, no replacement is required.
   - Submit warranty claim for sprocket inspection using labor code 2038 for 0.4 hours.
   - Submit warranty claim for sprocket replacement using labor code 2040 for 0.5 hours.
   3. Replace sprocket.
1. Remove rear wheel and place new chain over sprocket.

If condition A in Figure 2 exists

2. Sprocket is OK, no replacement is required.

3. Submit warranty claim for sprocket inspection using labor code 2038 for 0.4 hours.

If condition B in Figure 2 exists

2. Replace sprocket and rear drive chain.

3. Submit warranty claim for sprocket/chain replacement using labor code 2042 for 0.6 hours.