# **SERVICE BULLETIN**



M-1048 November 21, 1994

# **MODEL 1340cc JACKSHAFT RUNOUT**

#### **GENERAL**

Harley-Davidson has learned that the starter jackshafts used in production on a number of 1995 1340cc model vehicles (manufactured and shipped from the York, Pennsylvania Assembly plant between October 13th and October 20th, 1994) may have excessive shaft runout. Excessive runout can lead to leakage at the starter jackshaft oil seal in the inner primary chaincase cover. In the event that oil leakage is noted at this location, check the jackshaft runout using one of the two methods presented in this bulletin.

#### NOTE

Excessive shaft runout may exceed the oil control capabilities of the oil seal and/or tends to accelerate seal lip wear.

#### PRELIMINARY INSTRUCTIONS

- Remove the outer primary chaincase cover and disassemble the starter jackshaft. See Starter Jackshaft, Removal/Disassembly, in Section 5 of the Service Manual.
- 2. If the jackshaft seal surface is smooth, refer to Method 1 or Method 2 below.

#### Method 1

- 1. Select any tooth on the jackshaft spur gear and mark the face as shown in Figure 1, position 1.
- 2. Place the jackshaft seal surface in a lathe or V-block.
- Check the runout in four positions (as shown in Figure 1) using a dial indicator on the tooth tips.
- 4. Refer to Final Instructions.

#### Method 2

# **ACAUTION**

Only use drill bits in good condition. If the bit shanks are nicked, gouged or bent, the clearance measurements will be incorrect.

- See A in Figure 2. Place a 1/8 inch diameter drill bit in the root between two teeth on the spur gear. Place a second 1/8 inch diameter drill bit in the root 180° from the first location. Using a vise grips, lock the bits in place.
- Use a feeler gauge to measure the gap between each bit shank and the jackshaft seal surface. See B in Figure 2. Record both clearances. Release the vise grips and remove the drill bits.

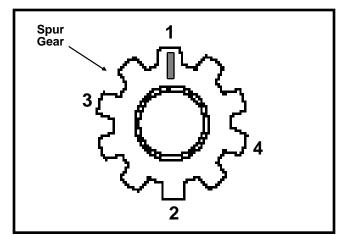


Figure 1. Check Jackshaft Runout - Method 1

- Place a drill bit in the root approximately 90° from the location where the second measurement was performed. See C in Figure 2. Place the second drill bit in the root 180° from this location. Lock the bits in place with the vise grips.
- Use a feeler gauge to measure the gap between each bit shank and the jackshaft seal surface. Record both clearances. Release the vise grips and remove the drill bits.
- 5. Refer to Final Instructions.

### **FINAL INSTRUCTIONS**

- Select the largest and the smallest of the four clearance/indicator readings. Subtract the smallest number from the largest.
  - If the remainder is less than 0.007 inch (0.178 mm), the jackshaft is not the cause of seal leakage.
    Replace the oil seal (HD Part No. 12066).
  - If the remainder exceeds 0.007 inch (0.178 mm), then the jackshaft runout is excessive. Replace both the jackshaft (HD Part No. 33127-94) and the oil seal (HD Part No. 12066).
- Install a new oil seal in the inner primary chaincase cover. Be sure to install the seal to the correct depth.
  See Primary Chaincase, Cleaning, Inspection and Repair, in Section 6 of the Service Manual.

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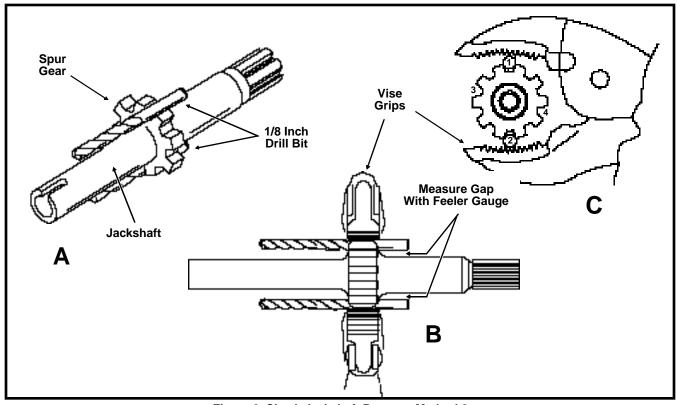


Figure 2. Check Jackshaft Runout - Method 2

- Install the starter jackshaft assembly and the outer primary chaincase cover. See Starter Jackshaft, Assembly/Installation in Section 5 of the Service Manual.
- 4. See the Credit Procedure which follows.

# **Credit Procedure**

If the jackshaft runout is excessive, complete a regular Warranty Claim Form referencing Service Bulletin M-1048 in the "DESCRIPTION OF REPAIR" section. Fill in the rest of the claim form as follows:

CLAIM TYPE (If in Warranty)	MC				
CLAIM TYPE (If Out of Warranty)	GDW*				
QTY. (If Replaced)	1				
EVENT 1, PROBLEM PART NO.	33127-94				
PART DESCRIPTION	Starter Jackshaft				
PRIMARY LABOR CODE	5850				
TIME	Applicable by Model/ Model Year				
CUSTOMER CONCERN	9901				
CONDITION CODE	9105				
* Requires Prior Authorization					

#### NOTE

Any and all additional parts needed to perform the repair (i.e., primary cover gasket, oil seal) are to be claimed on the same form as "ADDT'L PARTS" for the same event.

Send a properly completed claim form to Harley-Davidson for each vehicle serviced. Upon receipt of the claim, you will be credited for the cost of all applicable parts and labor time for code 5850.

ROUTING	SERVICE	SALES	PARTS	LEAD	TECHNICIAN	TECHNICIAN	TECHNICIAN	TECHNICIAN	RETURN
	MANAGER	MANAGER	MANAGER	TECHNICIAN	NO. 1	NO. 2	NO. 3	NO. 4	THIS TO:
INITIAL HERE									

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