SERVICE BULLETIN

M-938 December 5,1986

1987 XLH IGNITION MODULES AND LEFT MAIN BEARING END-PLAY

Ignition Modules

Testing at the factory has shown that the 1986 ignition module, Part No.32410-86, provides performance equal to that provided by the 1987 ignition module. See Figure 1. Beginning with crankcase number 1787 314 005 on 883cc models and 1887 311 005 on 1100cc models, ignition module, Part No. 32410-86 is being installed at the factory. Part No. 32410-87 has been obsoleted. Dealers can service all XLH Evolution models by stocking only one module.

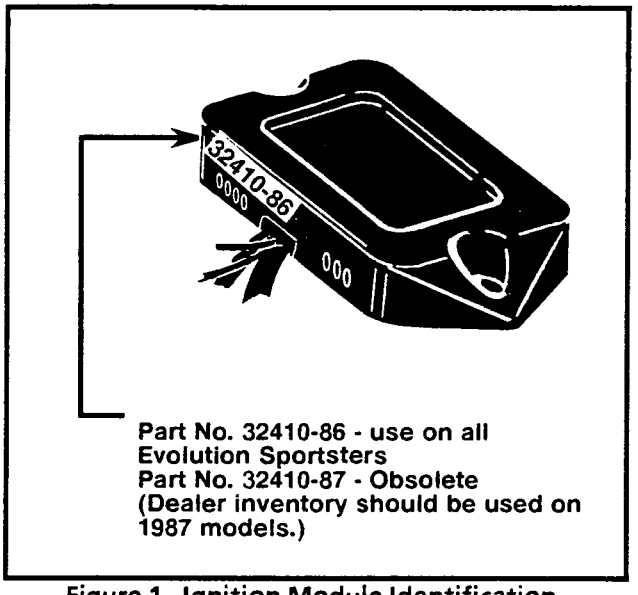


Figure 1. Ignition Module Identification

Module Identification, Ordering Information and Stock Disposition

See Figure 1. The Part No. is stamped on the module as shown. Orders for the 32410-87 module will be filled with the 32410-86 module. Any 32410-87 modules in stock at your dealership should be used on 1987 models. PART NO. 32410-86 MODULES MAY BE USED ON ALL EVOLUTION XLH MODELS (1986 and 1987, 883cc and 1100cc).

Left Main Bearing End Play

GENERAL

When performing an entire engine overhaul, it is important that the left main bearing end-play be within the newly recommended 0.001 to 0.005 in. specification to prevent bearing damage.

Individual shims are now available for XLH sprocket shaft bearings. Flywheel end-play can now be adjusted by selecting the required bearing shim. The end-play specification previously was 0.001-0.007 in. The end-play Service Wear Limit remains at 0.007 in.

CHECKING FLYWHEEL END-PLAY

Before completely disassembling crankcases it is recommended that flywheel end-play be checked to determine the amount of sprocket shaft bearing wear. To check flywheel end-play, the sprocket shaft nut must be tight. Do not remove or loosen sprocket.

1. See Figure 2. Secure a dial indicator to crankcase with indicator stem against sprocket shaft nut.

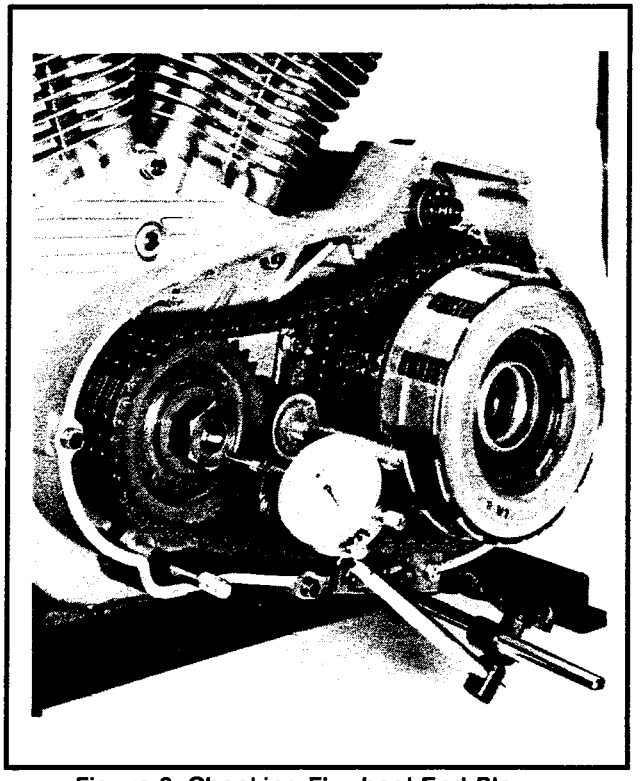


Figure 2. Checking Flywheel End-Play

2. Rotate flywheels and at the same time, push and pull on the sprocket shaft. Read shaft travel on dial indicator. Shaft end-play should not exceed 0.007

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

in. If end-play exceeds maximum, sprocket shaft bearings should be inspected.

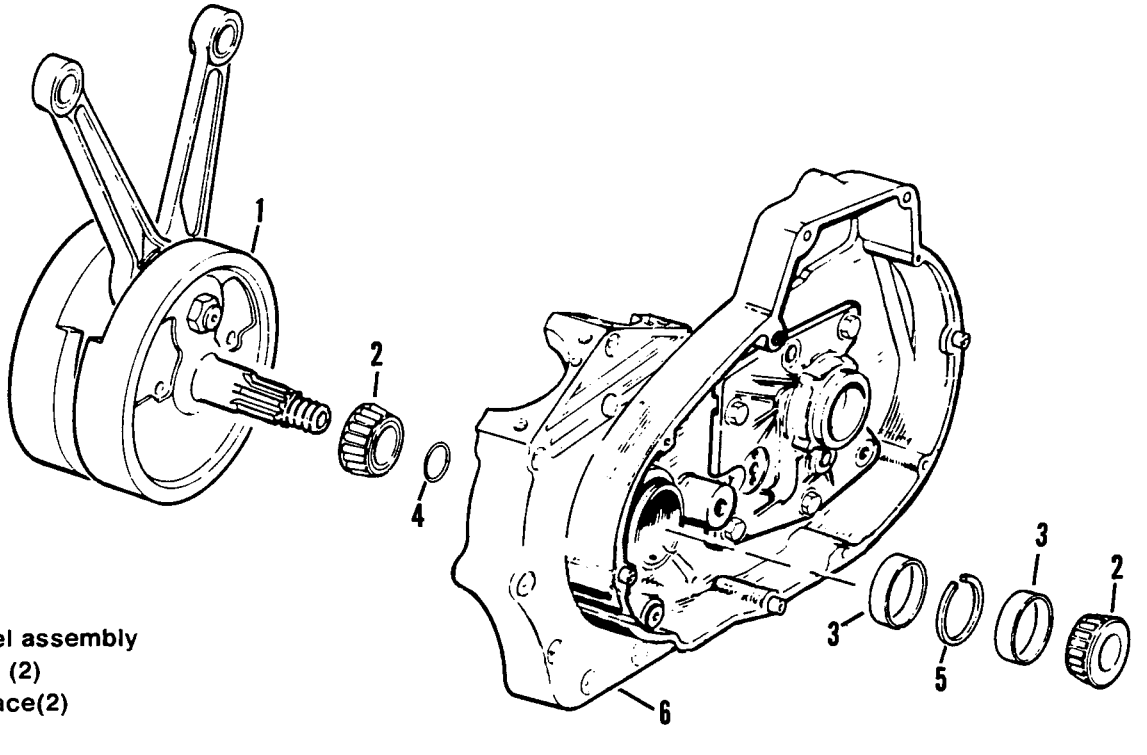
3. See Figure 3. Disassemble crankcase following instructions in the appropriate XLH Service Manual. Inspect sprocket bearings (2) and races (3). If bearings and races are serviceable, measure thickness of shim (4). Install a thinner shim to reduce end-play or a thicker shim to increase end-play.See Table 1 for shim Part No. and available thicknesses.
4. If bearings or races must be replaced order Bearing Assembly, Part No. 24729-74. This assembly includes items (2 through 5) shown in Figure 3.
5. Install new bearing assembly and place shim contained with bearing assembly between bearings. Shim must be installed on sprocket shaft before left crankcase is assembled to flywheel assembly. Follow instructions in the appropriate XLH Service Manual.
6. Assemble crankcase halves following the appropriate XLH Service Manual procedures.
7. Recheck flywheel end-play. If end-play is not within 0.001-0.005 in., disassemble crankcase halves and install the required shim,listed in Table 1, that will adjust end-play to 0.001-0.005 in.

Table 1. Shims

Part No.	Thickness
9142	0.0995-0.1005
9143	0.1015-0.1025
9144	0.1035-0.1045
9145	0.1055-0.1065
9146	0.1075-0.1085
9147	0.1095-0.1105
9148	0.1115-0.1125
9149	0.1135-0.1145

Service Manual and Part Catalog Note

Please put a note in your dealership XLH Service Manuals and XLH Part Catalogs referencing this Service Bulletin.



1. Flywheel assembly
2. Bearing (2)
3. Outer race(2)
4. Shim
5. Retaining ring
6. Left crankcase half

Figure 3. Left Main Bearing