# SERVICE BULLETIN

M-971 November 11, 1988



# 1340 cc ENGINE THREE-PIECE FLYWHEEL ASSEMBLY, CODING (MARKING) OF CRANKCASE SETS & FLYWHEEL ASSEMBLIES, ALL MODELS

### **Purpose**

The purpose of this Bulletin is to inform you of :

- (1) The Part Nos. and procedures needed to service the one-piece right or gear side flywheel on 1340 cc engines.
- (2) The size markings on 1340 cc crankcase sets and flywheel assemblies.
- (3) The changed engine displacement color code that identifies XL flywheel assemblies.

### Beginning (1340cc) Crankcase Numbers

The right one-piece flywheels were installed in 1989 1340 cc engines, crankcase no. 1589 221 007.

## Part No. Of Repair Parts (1340 cc)

#### FLYWHEEL ASSEMBLIES WITH CONNECTING RODS

Part No. 23906-78G includes:

23985-54, two keys for oil pump and pinion gears 11177, retaining ring that secures pinion bearing

#### NOTE

The 1340cc flywheel assemblies have paint dabs that indicate the outside diameter (OD) of the pinion shaft inner bearing race. The code for the 1340cc race OD is given in Figure 3-64 of the FLT/FXR Service Manual, Part No. 99483-89.

#### **CRANKCASE SETS**

Part No. 24469-83 includes:

Crankcase set with "as-cast" finish and installed camshaft needle bearing.

Part No. 24473-85 includes:

Same as Part No. 24469-83, except, black wrinkle finish.

#### CAUTION

On all models, always install camshaft needle bearing or bearings in right crankcase half before lapping or measuring pinion shaft outer race. Removing and installing the cam bearing (s) can affect the size of the pinion shaft outer race.

# SIZE MARKING ON 1340 cc RIGHT CRANKCASE HALF

See Figure 1. The pinion shaft outer race (bore) inside diameter (ID) is marked on the inside surface of the right crankcase half as shown in Figure 1.

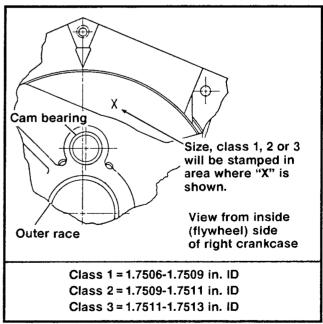


Figure 1. ID Codes, Outer Race Of 1340cc Engines

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									

### Service Instructions For 1340 cc Engines With One-Piece Right Flywheel

See pages 3-51 and 3-52 in the FLT/FXR Service Manual, Part No. 99483-89 for service instructions. These instructions may be used for all 1989 1340 cc engines equipped with the one-piece right flywheel.

#### NOTE

You may wish to put a note in the Engine Section of 1989 FX/SOFTAIL Service Manuals, used by your technicians, referencing this Service Bulletin.

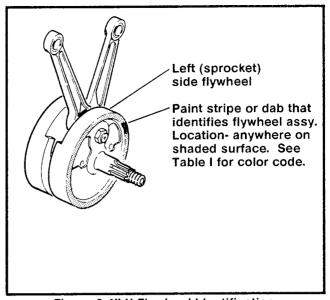


Figure 2. XLH Flywheel Identification

#### TABLE I. XLH FLYWHEEL COLOR CODE

XLH ENGINE	PART NUMBERS AND COLOR CODE				
(cc)	OLD	NEW			
883	23905-88, yellow	23905-88 <b>A</b> , green			
883	23905-86A, yellow	No change.			
883	23905-87, yellow	No change.			
1200	23900-88, white	23900-88 <b>A</b> , red			
1100	23900-86 <b>A</b> , blue	No change.			
1100	23900-87, blue	No change.			

# Color Code Change On 1989 XLH Flywheel Assemblies

Beginning June 1st, 1988, flywheels forged from a micro-alloyed steel went into production. The part numbers and color codes of flywheel assemblies containing the new material were changed as shown in Table I. The changed flywheel assemblies are shown in bold type. Figure 2 shows the location of the color code that identifies what displacement engine the flywheel assembly was balanced for.

Please mark a reference to this Service Bulletin on page 3-53 of the 1989 XLH Service Manual, Part No.99484-89.

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