

VT No. 12-8012

This kit is designed for use on all 1973-91 1200/1340cc engine model motorcycles.

Kit Contents

Table 1. Kit Contents

Quantity	Description
1	Oil pump assembly
2	Gasket, pump cover
3	Gasket, pump body
4	Retaining ring
5	Plug (V2 Evo engines only)

INSTALLATION

NOTE

A service manual for your motorcycle is available at your dealer.

This pump body can be fitted to 1973 -80 style crankcases, provided the cases are drilled to match the pressure relief passage in the oil pump body. See Figure 1. This is accomplished with the use of a DRILL JIG Kit, VT No. 16-1843, as shown in Figure 2. The kit includes four screws which properly align the jig to the crankcases.

NOTE

DRILL JIG Kit, OEM 94461-81, was originally supplied with four 1/4 - 20 in. screws. These screws will not fit 1973 through 1978 crankcases. Use two HEX HEAD SCREWS, 1/4 - 24 in., Part No. 18669-53, in these applications. Any new drill jig kits purchased will come complete with both thread types.

For older crankcases with the two oil pump studs, as shown in Figure 2 , mount the jig as shown. On newer crankcases without studs, use all four screws for proper jig alignment. Be sure to tighten the jig securely to the crankcase surface. Drill this hole all the way into the gear case compartment using a 5/32 in. drill bit. Be sure to remove all shavings before reassembling the engine.

Since the 1973 - 1980 style crankcases are no longer available, the new cases are supplied with a TAPERED PLUG, Part No. 723. See Figure 3. It is not necessary to drill a hole in these new cases. Removing the TAPERED PLUG serves the same purpose.

NOTE

This oil pump may have to be painted to match the old oil pump prior to installation on crankcase. Do not allow paint on any gasket surfaces or internal parts of pump or damage to engine may result.

- 1 5/32" drill bit
- 2 Drill jig

Figure 3. New Style Crankcase

Vehicle Fitment

See Figure 4. Configuration of oil line connection nipple fittings on the oil pump cover are different on certain model motorcycles. The oil pump kit will come assembled for fitment on all vehicles with 4-speed transmissions. Motorcycles equipped with 5-speed transmissions have a different oil return and feed fitting configuration. it will be necessary to change the angle of the fittings coming off the top of the oil pump cover.

The FXDG needs a different oil return line fitting to accommodate the braided oil lines. Remove the existing fitting and insert HD Part No. 63540-62. Position this fitting 35° to 40° away from the feed line fitting.

sssss

- 1 5-speeds
- 2 Primary chain oiler
- 3 4-speeds
- 4 FXDG only
- 5 Late 1984 & later FXR Models

Figure 4. Top View Fitting Configuration

- 1 Primary chain oiler line
- 2 Main oil-feed line
- 3 Oil return line

Turn first the oil feed fitting and then the oil return fitting 30° counterclockwise.

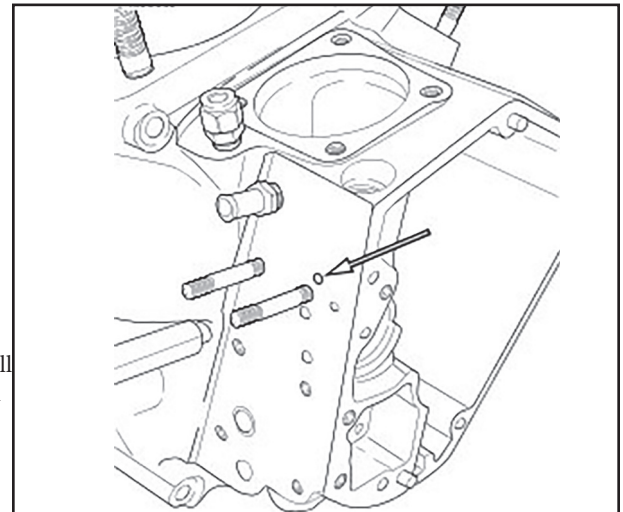


Figure 1. Pressure Relief Hole Drilled in Old Style Crankcase

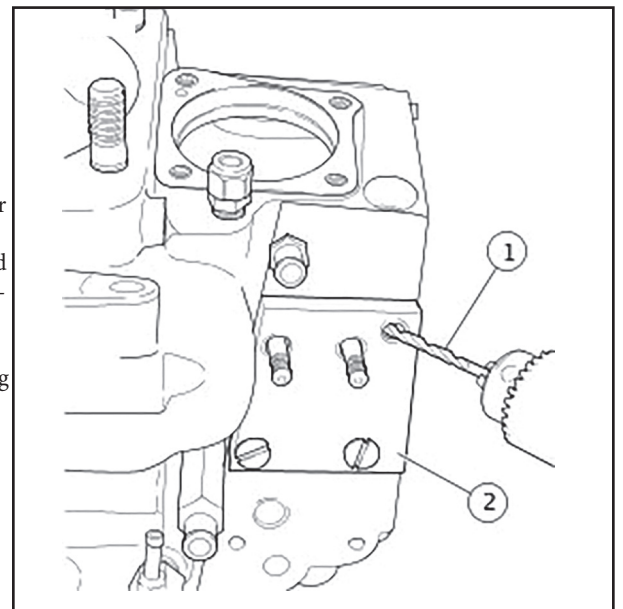


Figure 2. Drilling Old Style Crankcase

- 1 5/32" drill bit
- 2 Drill jig

For late 1984 and later FXR models, the feed (F) fitting must be in a vertical position. Remove the feed nipple and elbow from pump. Replace only the nipple into the pump. The elbow is not needed.

NOTE

To avoid leaks, apply a coat of Loctite Pipe Sealant with Teflon to threads when replacing or repositioning fittings.

Primary Chain Oiler

On 1981 and later 5-speed models, late 1984 and later 4-speed models, or any vehicle with a primary belt, the primary chain oiler must be blocked off.

You may use one of the following procedures to block off the primary chain oiler:

Braze shut the tube on the oil pump. (Item 1 in Figure 5 is connected to this tube.)

Clamp a 1/4 in. bolt into one end of a short length of oil line hose (about 4 in.). Connect other end of hose to the primary chain oiler tube. To prevent leakage, use a bolt that is not threaded all the way to the head and tighten clamps securely.

Installing Plug or Oil Switch

See Figure 6. For Evolution* engines, install the plug (1) as shown. On all other models, install the original oil pressure switch (2) instead. Remember to coat threads of plug or switch with Loctite Pipe Sealant with Teflon.

Check engine oil pressure after installation.

Check oil.

Return to tank at oil tank fill plug.

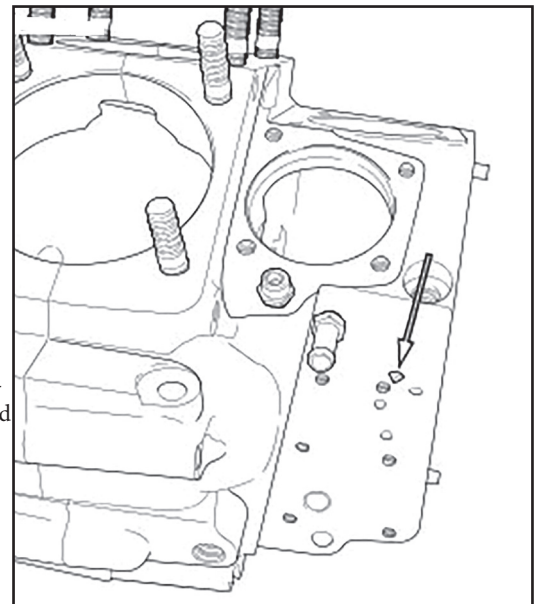
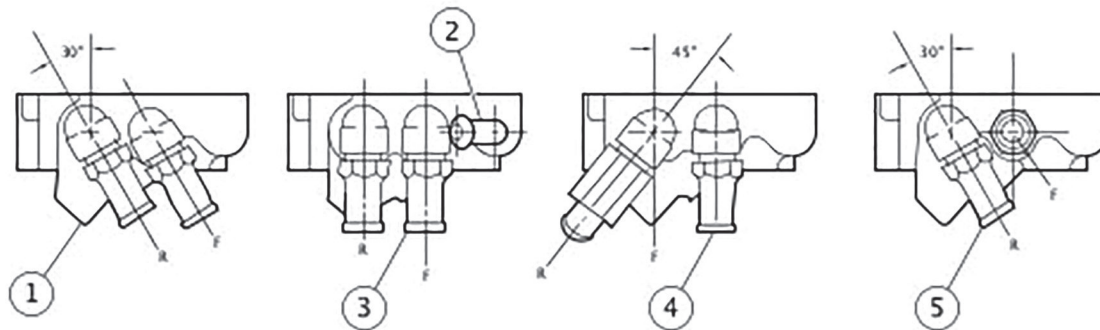


Figure 3. New Style Crankcase

This oil pump does NOT have a provision for a secondary chain oiler. Therefore, the rear drive chain must be inspected and/or lubed regularly. Refer to the appropriate Owner's Manual for maintenance and lubrication.

- 1 Evolution engine
- 2 All other models

Figure 4. Top View Fitting Configuration



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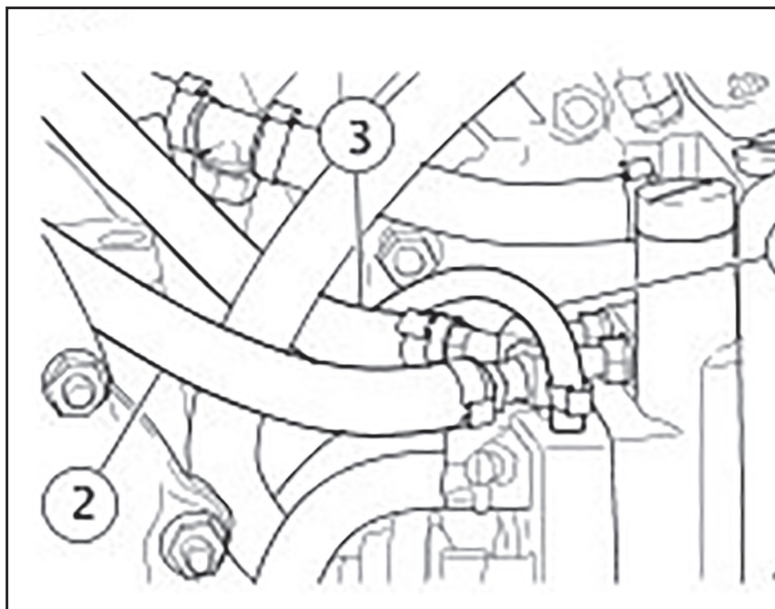


Figure 5. Pump Cover Oil Pressure Switch Mounting Hole

FLT/FXR

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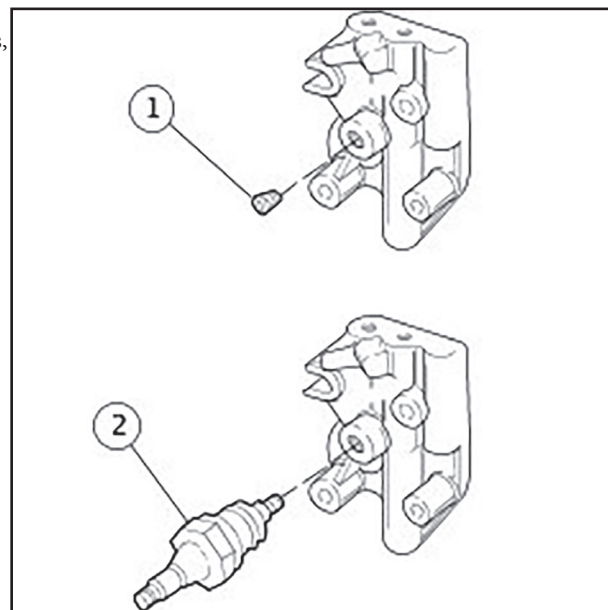


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