Date: February 2005 Bulletin #11 002 05 (015) Service Information Bulletin

Subject:

Damage to the gearbox and/or engine due to the incorrect checking and subsequent over filling of engine oil.

Models:

F 650 GS, F 650 CS

Details:

Indicator #1

-On F series motorcycles, gears 2nd thru 5th can be selected,however neutral and 1st gear cannot be selected.

Note: During the disassembly of engines/gearboxs returned under warranty,the plastic insulating washer (part # 23 21 7 652 930) was found to be missing from the selector drum. This plastic washer prevents the neutral switch from making contact to ground.

Indicator #2

-Pin to the neutral switch may be bent.

Indicator #3

-A significant amount of oil in the air intake system.

Indicator #4

-Damaged plastic parts in the engine (gears and seals).

Indicator #5

-In cases specific to the F 650 CS, the plastic Y-piece (part number 11 43 7 688 996) used to connect the hose to the in-frame oil tank breaks. A break at this Y connection causes an oil leak at the connection.

Indicator #6

-Damage to the connecting rod bearings.

Cause:

Engine oil far in excess of specified maximum level.

The engine oil becomes contaminated and overheats. The overheated oil will then damage the various plastic engine / gearbox parts as they become exposed to temperatures higher than their melting point. In addition the change in oil viscosity may severely reduce oil pressure, a condition that may result in connecting rod bearing failure.

Important Note:

The coolant temperature warning light may not become illuminated in these cases. The coolant's temperature gauge is designed to read the temperature of the coolant as it passes from the radiator to the engine block, not the temperature of the oil. As a result there is a lag in the coolant temperature warning light detecting the effects of the rapid increase in oil temperature.

Aftersales Solution:

- -Repairing the damage:
- --Replace the crankshaft.
- --Replace all plain bearings that use plastic cages (except the gearbox output bearing)
- --Replace the plastic gears of the coolant and oil pumps
- --Replace both plastic mushroom heads of the oil pressure maintenance / oil pressure --control valve. This part, part No. 11 11 2 343 009, is accessible once the oil filter --cartridge has been removed.
- --Install a new insulating washer for the selector drum.
- --Install a new Y piece at the connection between the two sides of the oil tank.

Important Note:

The K 1200 S model also uses a dry sump lubrication system. The procedure regarding the checking of engine oil level, as described below, applies, without changes, to the K 1200 S model as well.

Procedure:

It is essential to remind all F 650 and K 1200 S customers of the need to follow the specific procedure, noted below, for checking the oil level of a motorcycle with a dry-sump lubrication.

Make sure that the engine is at operating temperature when the oil is checked, referably after a ride of at least 20 miles.

After the engine has reached operating temperature, allow it to idle for one minute, before checking the oil level. Without this precaution there is a possibility that the reading will indicate an oil level lower than the true level.

During the one minute wait, the motorcycle must remain upright and tationary on level ground. Do not put the motorcycle on the side stand. Turn off the engine and check the oil level without moving the motorcycle. If the motorcycle does not have a sight glass, check the oil level with the oil dip stick.

- 1) Remove and clean the dip stick.
- 2) Place the dip stick back in the filler neck, resting it on the top of the oil filler neck.
- 3) Do not screw the dip stick into the filler neck to read the engine oil level.
- 4) Remove the dip stick and read the oil level.
- 5) Adjust the oil level as necessary.
- 6) Install the dip stick in the filler neck tightening as required.

Warranty Information:

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