

# CENTRIFUGAL OIL BREATHER KIT

Pesaro 23/02/2006

To all TM Racing Dealers

We advise you that, starting from 02/27/2006, an "oil breather update kit" will be available for all the 4Stroke 450 / 530 / 660 bike models. The 4Stroke 250 are excluded.

This kit has been made to reduce drastically the oil leakage from the breather on the engine head, which sometimes occurs when using the bike under very hard conditions.

The TM Racing Kit Part Number is F 32524 "Centrifugal Oil Breather Kit" and is composed of:

-	F 32523 Breather slinger	1pc.
-	F 30868 Camshaft cover for centrifugal breather	1pc.
-	F 04361 Oil seal 20x30x5	1pc.
_	F 26377 Camshaft plug	1pc.

Part F 32523 replaces part F 26377 on the exhaust camshaft (timing chain side)
Part F 30868 replaces part F 30833 or F 30867, still using o-ring gasket F 12307.

# KIT ASSEMBLING PROCEDURE

### DISASSEMBLY:

- Remove seat and tank
- Remove valve cover
- Rotate the crankshaft until the piston reaches TDC (closed valves) with the help of a dial gauge positioned in the plug hole
- Remove the chain tensioner
- Remove the standard breather
- Remove the exhaust camshaft caps
- Remove the exhaust camshaft

Now you have to work on the exhaust camshaft to assemble the part F 32523.

# CAMSHAFT MODIFICATION:

- Place the exhaust camshaft standing in a column drilling machine, with the chain sprocket laying on the machine table, you will have the opposite side plug in sight
- Drill the plug bottom with a 10mm. diam. twist drill (please be sure no metal shaving goes into the ball bearing)
- Insert in the drilled hole a diam. 8-10 mm. bar and beat it with a hammer until the the plug on the sprocket side is removed
- Insert in the camshaft a bigger bar, beat it with a hammer until you remove the drilled plug
- Wash carefully with a dry cleaner the camshaft, the ball bearing and the automatic decompressor
- Press the new plug F 26377 (enclosed in the kit) with a pin acting on the plug bottom surface, carefully positioning the plug so as the milled surface is facing the lubrication hole on the cam lobe. The inobservance of this assembling warning may lead to a big engine damage!
  - Press until the plug edge is mm. 1.5 below the camshaft edge
- Press the slinger F 32523 with a pin acting on the slinger bottom surface, and go on to the counterboring. There is no need of a fixed positioning
- Exhaust camshaft is ready

# REASSEMBLY:

- Check that the piston is still at TDC (closed valves)
- Reassemble the exhaust camshaft placing it with the marks aligned to the head upper face
- Reassemble the caps and tighten the screws @ 10-12 Nm
- Reassemble the timing chain tensioner and adjust the chain tension as prescribed accordingly to the tensioner type used
- Rotate the crankshaft and check that all the timing system moves without abnormal friction
- Reassemble the cover F 30868 to the head, being careful that the oil seal lip fits the slinger edge without damage
- Apply sealant paste where necessary and reassemble the valve cover
- Reassemble tank and seat.