

**Oil Jet screw plugs on left and right engine case****Affected models: 950 Adventure and Adventure “S” MY 2005**

- » The screw plugs that are fitted to the oil-jet casting on the left and right engine case may loosen or unscrew and cause damage to the crankshaft/connecting rod and loss of oil pressure.
- » The following procedure has to be carried out in conjunction with the 600 mile/1000km service or at the latest the 4700 mile/7500km service. Make sure that you have the required spare parts available! **NOTE: This Technical Bulletin *only* affects certain VIN numbers! The dealer must perform a Motorcycle History search under the Dealer Technical Service and Warranty tab. The bulletin can be viewed in the search results. KTM North America will not warranty units whose VIN numbers are not listed as this bulletin does not apply to them. It is the responsibility of the dealer to determine if the unit requires this update by checking the unit history.**
- » Place the bike on the center stand and remove the following components. **Please refer to the repair manual on CD for complete instructions.**
  - Seat
  - Side covers
  - Fuel tanks
  - Front cylinder exhaust header pipe
  - Drain coolant
  - Remove radiator
  - Remove oil tank
- » Disassembly of Airbox and Carburetor
  - Air box cover
  - Carburetor trumpets
  - Air filter
  - Remove the carburetors and fix them to the handlebar by using a flexible cord and a protective layer. See fig **A**

**Take extreme care not to change the carburetor settings**

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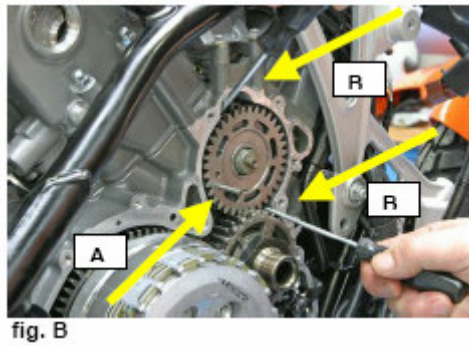
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Fig. A

» Preliminary work on the engine

- Remove stick coils
- Remove spark plugs
- Remove both valve covers
- Remove inner and outer clutch cover complete
- Lock front cylinder at TDC compression. Please refer to repair manual!
- Remove camshafts of front cylinder. **NOTE:** Camshaft's can only be removed at TDC compression stroke. Damage **WILL** occur if not set correctly. Check valve clearance before disassembly
- Remove front cylinder cam chain tensioner
- Rotate engine to TDC compression on rear cylinder and lock crankshaft. (**see repair manual**)
- Remove camshafts on rear cylinder
- Remove chain tensioner of rear cylinder
- Remove ignition rotor (flywheel)
- Remove starter idler gear 23T
- Remove both camshaft intermediate gear bearing bolts with needle bearings
- Insert pin into scissor gear (fig. **B**, arrow **A**)
- Remove the nut (M22x 1,5) from the multi shaft
- Remove scissors gear by means of 2 screw drivers (fig. **B** arrows **B**)



- You can now rotate the multi shaft where as the balancer weight can be removed past the primary gear. Remove the woodruff key.
- Leave the cam chains attached to the 32T intermediate gears.
- Pull the lower cam chain gear from the clutch side of the multi shaft and remove the woodruff key and bearing support ring
- Remove the multi shaft from the generator side by tapping lightly with a soft hammer

» Secure screw plugs on both engine cases

- Remove the crankshaft locking screw and turn the crankshaft to enable access to the oil jets located between the engine cases
- Illuminate the engine case through the bearing of the multishaft (fig. C)



- The screw plugs must be between 0.5mm and 1.0mm below the surface of the engine case. (Fig **D** and **E**)



fig. D

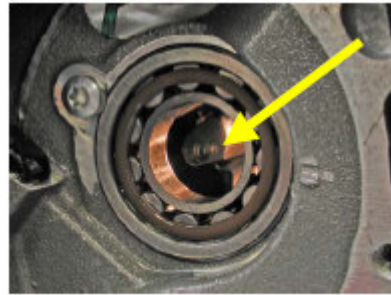


fig. E

- Screw both oil jet plugs with supplied 2.5mm Allen key through the multi shaft bearing bores. (Fig **F**)

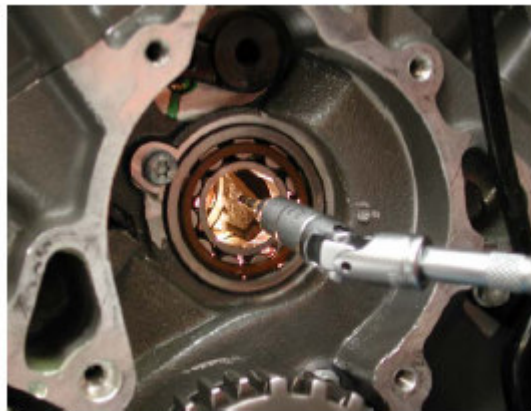


fig. F

- Insert the special punch from the left and right side multi-shaft bearing bores and dot punch each case so that the screw becomes secured. (Fig **G** and **H**)

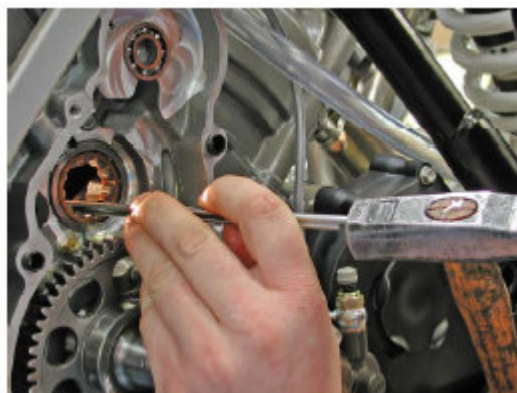


fig. G

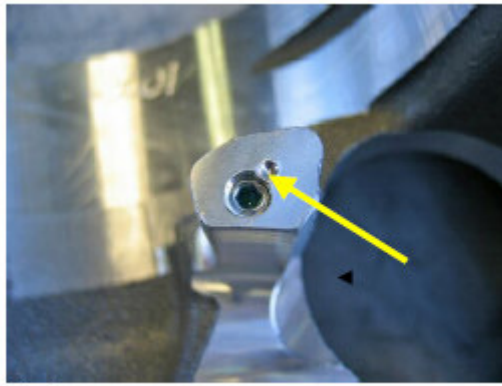


fig. H

- **CAUTION:** The position and dimension of the punches have to be as shown in Fig **H**



fig. J

- Special tools as shown in Fig **J** will be supplied automatically and free of charge
- » To verify that the oil jets are clear and passages are clear, please test with compressed air:
- Block the crankshaft on the generator side with ignition rotor mounting bolt. Fig **L**



fig. L

- Fit supplied plastic cap to crankshaft on the clutch side and inject air. Fig **M**



fig. M



- At the oil jet of the left case, airflow must be noticed. If there are any doubts please check with paper strip **Fig N**



fig. N

- Attention: Fig **N** only demonstrates the procedure and the positions as they are not visible with the top ends installed
- Plug oil bore at the front cylinder head with plastic cap and block timing chain tensioner. Fig **O**

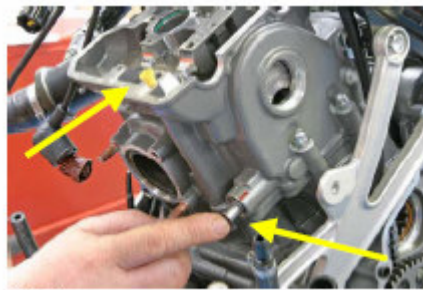


fig. O

- Inject air into the oil bore of the right engine case Fig **P**

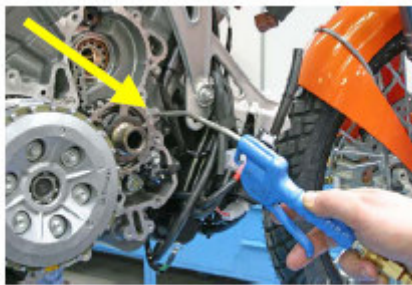


fig. P

- At the oil jet of the right case, airflow must be noticed. If there are any doubts please check with paper strip Fig **Q**

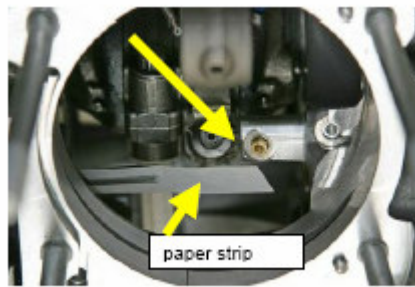


fig. Q

» Assembling the engine: **Please assemble the engine according to specifications and torque settings in repair manual.**

- Lock the rear cylinder at TDC and verify through spark plug hole.
- Insert the multi-shaft from the generator side and mount support ring for inner bearing race from the clutch side.
- Mount woodruff key and timing gear 18T on the multi-shaft (clutch side)
- Install woodruff key for balancer weight and turn multi-shaft so that balancer weight will pass the primary gear
- Preassemble the scissor gear according to repair manual chapter 5-14
- Mount preloaded scissor gear on multi-shaft. Pay attention to reference mark are described in repair manual chapter. 6-9
- Torque nut M22x1,5 on multi-shaft. Secure with Loctite 243
- Remove locking pin from scissor gear
- Mount both timing gears (intermediate gears for camshafts) with bearing bolts and needle bearings
- Mount chain tensioner in rear cylinder
- Install camshafts into rear cylinder
- Rotate crankshaft 435 degrees and lock crankshaft at TDC front cylinder
- Install cam chain tensioner in front cylinder
- Install camshafts in front cylinder and install bearing bridge according to manual
- Install starter idler gear and mount flywheel rotor
- Mount the ignition cover and clutch covers
- Adjust valve clearance if necessary
- Remove crankshaft locking bolt and install screw
- Refit valve covers
- Install spark plugs
- Install stick coils
- Install the radiator and oil tank

» **Additional Information:**

In the course of the scheduled service please check the expansion cooling reservoir for sand deposits from the casting process

If this is the case, drain the reservoir and flush the cooling system and carefully clean the reservoir and radiator cap before reassembling the motorcycle.

- Refit all remaining chassis parts
- Fill with coolant according to TB0533
- Fill and check oil level
- Start engine and check for any leaks

» Please be advised that there is a new feature on [www.ktmdealer.net](http://www.ktmdealer.net) that will help speed up the warranty claim data entry process when creating a claim for a motorcycle that is affected by this technical bulletin.

» Create a predefined warranty claim with Campaign Codes in KTM Dealer.net by using the following steps:

1. Click on Dealer Technical Service & Warranty from the menu.
2. Click on Warranty Claims from the menu.
3. Click on Create Claim from the menu.
4. Select TI Warranty incl. Campaign Code from the warranty type drop down list.
5. Enter the VIN number of the motorcycle in the VIN field.
6. Click the “Next” button to display the drop down list of Technical Bulletins and Campaign Codes related to the VIN number.
7. Choose the Campaign Code you want to create the warranty claim for and click “Next”.
8. A predefined warranty claim form will be displayed with a list of all of the parts and labor that will be credited for performing the repair.
9. The following fields are required to be filled in before submitting the claim to KTM:
  - Mileage
  - Failure Date
  - Repair Date
  - Dealer Failure Description
10. The ability to add more items to credit on the claim depends on the content of the Technical Bulletin and the Campaign Code. The additional lines can be filled in as usual.
11. Click the “Submit to KTM” button when the claim is completed.



Warranty Claim input Information	
Warranty Type	TI-Warranty (new)
Spare Part Group	30 (Engine Case)
Failure Code Category	Component Joint / Bonding
Failure Code	Loose (450)
Failure Causing Part	600 30 000 144 engine case cpl.
Campaign Code for 600 miles / 1,000 km Service	G.05.001.30 additional labor 130 min. included
Campaign Code for 4,700 miles / 7,500 km Service	G.05.002.30 additional labor 190 min. included
Parts	0603162013 CU seal ring 16x20x1.3 2 pcs. 58038017100 CU seal ring 22x27x2 1 pc. 0603061001 CU seal ring 6x10x1 2 pcs. 00050256706 Variable one-ear clamp 25.66 mm 2 pcs. 0770290020 O-ring 29x2 VITON 2 pcs. 60030040100 Ignit. Cover gasket. Matri. CS 0.5 mm 1pc. 60030025000 Clutch cover gasket inside Kli. Sil. 1 pc.
Labor Time	The labor time is included in the appropriate campaign code
Stock Parts Affected	No

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