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Expanded Instructions & Tips For The Removal of the Magnetic Plug (Mag Plug) On Rotax 912 & 914 Engines

The following expanded instructions are based on proven overhaul shop techniques and should be employed to reduce the risk of damaging the magnetic plug or the engine crankcase when removing the magnetic plug for inspection.

CAUTION! - The following instructions assumes the user has a basic understanding of good shop practices and techniques. Users with limited shop or mechanical experience are strongly advised to seek assistance from an authorized Rotax Service Center or Repair Station.

The magnetic plug uses a self sealing contact area that eliminates the need for a gasket or thread sealant. This sealing surface combined with the amount of torque applied at installation may cause the plug to be difficult to remove.





The correct tool for removing the magnetic plug on newer engines is a #40 Torx socket. Older engines may have a plug with a 6mm Allen fitting. Always carefully check the magnetic plug fitting and select the appropriate tool before attempting to remove the magnetic plug.

IMPORTANT: Use of a high quality Torx tool is very important as the magnetic plug can be easily damaged during removal.

Snap-on, Mac and other top-end tools are more expensive but their superior quality makes them a bargain compared to the loss of time and frustration resulting from the use of second-rate tools. *Note: some tools are labeled "Professional" and have the appearance of high end tools but do not have the same quality of steel, forging and machining found in Snap-on or Mac brand tools.*

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Expanded Instructions & Tips For The Removal of the Magnetic Plug (Mag Plug) On Rotax 912 & 914 Engines continued...

Magnetic Plug Removal Procedure:

- 1. The magnetic plug can be removed more easily if the engine is warm from a flight or run-up. If possible, warm the engine up prior to attempting to remove the magnetic plug.
- 2. Properly secure the aircraft and engine against unintentional movement or operation prior to attempting to remove the magnetic plug.
- 3. Insert the Torx socket into the magnetic plug.
- 4. Hit the socket with a small to medium sized hammer to "set" the tool and to loosen the sealing surface. The force of the hit is described as a "smart blow" but common sense must prevail so that the crankcase or plug is not damaged.
- 5. Install a "breaker bar" or a ratchet with a "snipe" bar onto the Torx tool.
- 6. Turn the ratchet in a counter clockwise direction. Keep the Torx tool firmly imbedded into the magnetic plug and perpendicular in order to avoid stripping the magnetic plug. *NOTE: Using a heat gun to warm up the aluminum around the magnetic plug may ease magnetic plug removal. Cold spray may also be used to "flash cool" the magnetic plug. The combination of the expansion of the aluminum from heating and the contraction of the steel due to the cooling of the cold spray will help with removing the plug.*
- 7. If the tool starts to slip, STOP and repeat steps 3-6.
- 8. If the tool starts to slip again on a second attempt, seek further assistance from an authorized Rotax Service Center or Repair Station.



