



EDGE PERFORMANCE
AIRCRAFT ENGINES - FUEL INJECTION KITS - TURBO CONVERSIONS



ALERT SERVICE BULLETIN

CHECKING OF THE OIL SCAVENGE PUMP HOUSING & OIL PUMP SHAFT INSTALLED ON EP912STi (155HP) & EP914Ti (126HP) ENGINES

ASB-EP912STi/EP914Ti-002

1) Affected Engines

All EP912STi & EP914Ti engines manufactured in the period between 01/2018 - 05/2021. This includes all std. scavenge housings and the 19/22mm high flow housings.

2) Reason

There have been some manufacturing deviations resulting in a too great clearance between the scavenge rotor set and the pump cover. This results in a lack of suction during low rpm operations and idle. As a result of this the oil scavenge sump on the turbocharger has not been scavenging sufficiently resulting in internal oil leaks within the turbine and compressor housing, and smoking exhaust while idling. In some rare cases. the pin bores on the pump shaft have also been machined 0,5-0,1mm to large, resulting in one case where a shaft broke.

3) Actions Required

Inspect and if necessary, replace the oil scavenge pump housing and/or shaft. Contact your nearest EP dealer for replacement parts.

4) Work Required

Remove and inspect the scavenge pump housing and shaft. Use a digital vernier caliper and measure the bore depth where the scavenge gear set sits. It should measure between 8.00-8.05mm in depth. Those with 8.20-8.35mm depth should all be replaced within the next **25 hours** of flight time. The same applies to the shafts where the pin bores measure above 4.15mm.

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5) List Of Parts Required

- ✓ 1x EP Scavenge pump housing (Std/19/22mm) *SPECIFY WHICH*
- ✓ 1x EP Oil pump shaft (19/22mm) *SPECIFY WHICH*
- ✓ 1x PN: 950410 – O-Ring 30x2.5
- ✓ 1x PN: 430405 – O-Ring 57x3
- ✓ 2x PN: 250460 – O-Ring 11x2.7
- ✓ 1x PN: 430175 – O-Ring 46x3
- ✓ 7x PN: 230150 – Sealing ring A 10x14x1 DIN 7603

6) Work Description

Drain the engines oil before starting on the pump disassembly, to prevent oil pouring out of the front of the crankcase.

1. Loosen and disconnect the two M10 banjo bolts on the bottom of the scavenge pump housing.
2. Undo the 4x M6 socket head bolts on the front of the oil pump cover.
3. Remove the pump cover and pull out the gear rotor set.
4. Remove the 4x15.8 needle pin on the pump shaft and slide off the scavenge pump housing.
5. Use the back side of you vernier caliper and measure the bore depth as per fig.01
6. If necessary, replace the scavenge pump housing, and install it back in reverse order with new O-rings. Apply a small bead of Loctite 5910 or equivalent silicon gasket sealant where the 30x2.5 O-ring mates to the crankcase.
7. Re-torque the 4x M6 socket head bolts to 12Nm.
8. Perform a test run on ground to ensure there is no oil leaks from the oil pump assembly, and no smoking exhaust once the turbo and exhaust has reached operating temperature.

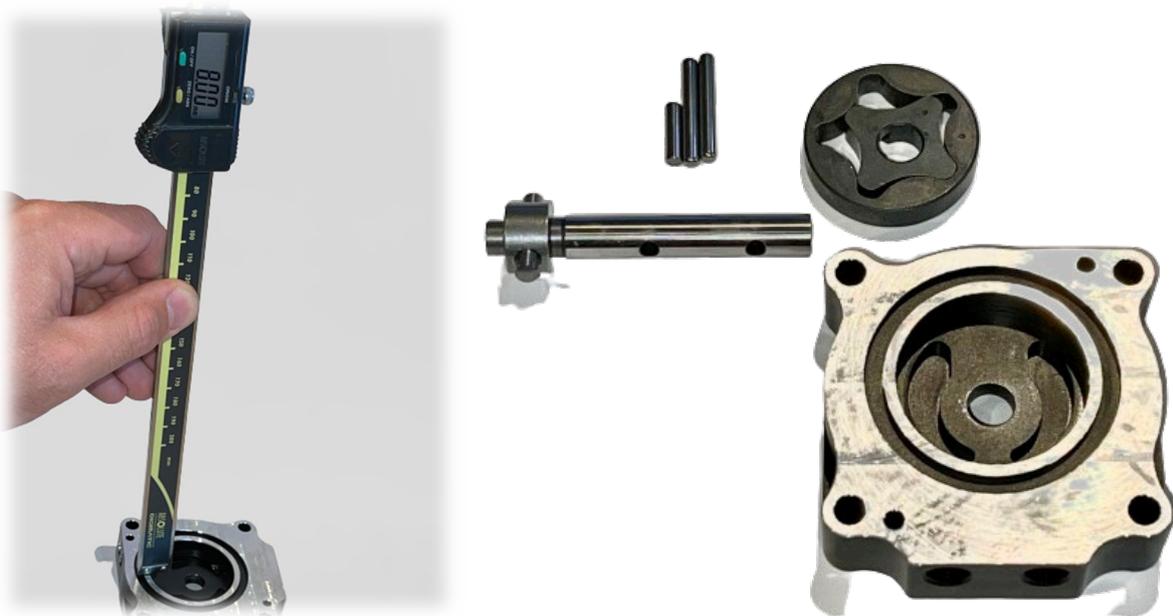


Fig.1

Scavenge pump assy.

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Broken shaft



How to identify affected shafts (Those over 52mm)



Good shaft bore diameter



Bad shaft bore diameter