TELEDYNE CONTINENTAL ® AIRCRAFT ENGINE

# SPECIAL SERVICE INSTRUCTION

Compliance Will Enhance Safety

Category 6

**SSI10-5**

**Technical Portions FAA Approved**

SUBJECT: Part 1; Sump inspection and Oil Gage Rod replacement O200D1B S/N as listed.
Part 2; Inspection for machining material, all O200D1B and D2B

PURPOSE: Part 1; To remove potential of Oil Gage Rod tip chafing the oil sump wall.
Part 2: To inspect for and remove any machining debris from the engine

COMPLIANCE: Immediately, upon receipt of this instruction

MODELS AFFECTED: Remove oil sump on the following O200D1B serial numbers; **916061-916064; 916066-916068; 916070-916076; 1000004; 1002272**

All O200D1B and O200D2B must be inspected for machining debris as instructed in part 2 of this instruction

**Part 1:** Inspection of the oil gage rod and oil sump (O200D1B only)

TCM has been notified of certain engines in which the Oil Gage Rod (Dipstick) is chafing the inside of the oil sump directly below the oil filler housing. This chafing of the oil gage rod can cause metal shavings to be displaced from the sump wall. The shavings may be visible in the oil filter assembly and/or drain oil.

The engine serial numbers listed above and any other operational (flying) O200D1B engines must have the oil sump removed and the left sump wall inspected directly below the oil filler/oil gage rod housing. Inspect the sump wall for chafing or any indication of contact of oil gage rod to sump.

Drain the oil sump, remove sump from the bottom of the crankcase. Inspect the left wall of the oil sump directly below the lower termination of the oil filler/oil gage rod housing. A mirror/light combination or borescope may be used in this inspection.

If no indication of chafing is observed, the oil sump may be reinstalled after compliance with the inspection in Part 2 of this instruction.

If the oil sump is chafed, contact Cessna for a replacement oil sump. Do not reinstall a confirmed chafed oil sump.

All oil gage rods are to be replaced either during this inspection process or prior to flight operations for aircraft not yet in operation Order a replacement oil gage rod P/N TBD from Cessna for replacement.

Inspected engines may continue in use, pending a replacement of the oil gage rod. The original oil gage rod, part number 657474-1, is to be temporarily replaced with a modified oil gage rod part number 657474-1-M. This oil gage rod (plug) is shortened and cannot contact the oil sump.

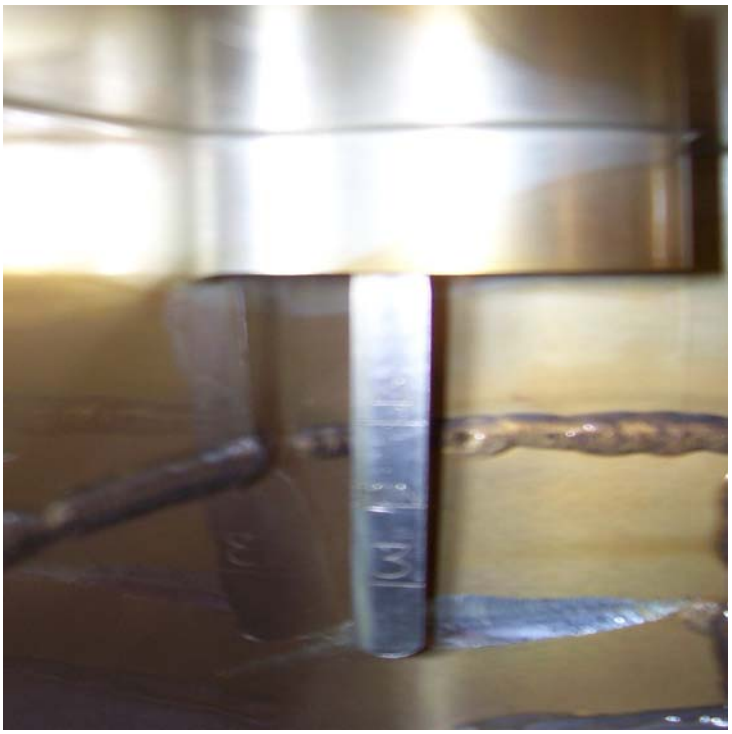
**The original oil gage rod must be removed and kept stored in the aircraft in a suitable protective container to allow access for use during preflight or post flight inspections and oil level servicing until a replacement oil gage rod is installed**.

After each preflight, post flight or oil level check, the original oil gage rod is to be removed from the engine and returned to its suitable protective container in the aircraft prior to starting the engine. The modified oil gage rod (plug) must be installed for all ground and flight operation of the engine.

**WARNING**

**DO NOT OPERATE THE ENGINE OR AIRCRAFT WITH THE ORIGINAL 657474-1 OIL GAGE ROD INSTALLED IN THE OIL SUMP OF THE ENGINE. ENGINE IS TO BE OPERATED ONLY WITH THE MODIFIED OIL GAGE ROD (PLUG) 657474-1-M INSTALLED UNTIL SUCH TIME THAT A NEW REPLACEMENT OIL GAGE ROD IS OBTAINED FROM CESSNA AND INSTALLED IN THE ENGINE**

**These special requirements will be no longer required after the replacement oil gage rod is installed**.



**Part 2**: All O200D1B and O200D2B are to be inspected and flushed as follows

1. Remove the vacuum pump cover pad ahead of the sump on the lower crankcase split line between cylinders 3 and 4. There will be oil captured in this cover, take precautions during removal.
2. Inspect the inside of this cover and the area visible around this cover in the lower crankcase area for any machining debris. A drain pan or bucket to catch any oil flow from the crankcase or cover area should be placed below the engine. This pan/bucket will be needed later in this inspection.
3. Remove the crankcase breather fitting from the right forward crankcase location in front of the number 3 cylinder.
4. Procure a 5 inch diameter funnel fitted with a clean, lint-free cloth as filter material attached.
5. Place the funnel, with the filter securely attached, directly under the vacuum pump cover (removed) boss.
6. Using clean Stoddard solvent and a clean dry air pressure source flush the area above the front main bearing saddle through the crankcase breather boss (fitting removed in number 3 above) with solvent at 25-30PSI. Regulate the air pressure to allow best flow, higher solvent flow is more important than a specific PSI.
7. Flush the upper main bearing area until no evidence of machining debris exits the engine or at least 1 (one) gallon of solvent has been flowed through the crankcase.
8. If the lint free cloth contains any debris, remove the filter cloth from the funnel, carefully let the filter cloth drain off any excess liquid, put the cloth with the debris included into a Ziploc style plastic bag. Identify the bag with the engine Serial Number and Total Time. Seal the bag to allow shipment.
9. Contact TCM Technical Services at 1-888-826-5465 for return authorization of cloth and debris Ziploc. Please have Engine Serial Number and Total Time available at time of request.
10. Upon completion of this flush procedure; drain oil sump, refill with new oil. Replace oil filter.
11. Reassemble all parts removed according to maintenance manual instruction.
12. Prior to return to service make entry in log book that this SSI has been complied with.