

SERVICE BULLETIN

SB05-8A

Compliance Will Enhance Safety

Supersedes SB05-8
**Technical Portions FAA
 Approved**

SUBJECT: IMPROVED CAMSHAFT GEAR P/N 656818

PURPOSE: To announce the production of an improved camshaft gear P/N 656818 which supersedes the current camshaft gear P/N 656031

COMPLIANCE: At next engine overhaul or at camshaft gear replacement.

MODELS AFFECTED: IO-470-U,V; IO-520-Series; TSIO-520-Series; IO-550-Series; IOF-550-Series; TSIO-550-Series; TSIOL-550-Series

GENERAL

As part of our ongoing product improvement initiative, Teledyne Continental Motors has released for production an improved camshaft gear, P/N 656818, for the above listed engines. The new camshaft gear will supersede the current production camshaft gear P/N 656031. TCM recommends that the new gear be incorporated at the next engine overhaul or whenever replacement of the camshaft gear is required.


The P/N 656818 camshaft gear is nominally 0.060" wider than the P/N 656031 camshaft gear. On engine models utilizing the Sandcast style crankcase, the P/N 656818 camshaft gear may be installed as a direct replacement for the P/N 656031 camshaft gear. On engine models utilizing the Permold style crankcase, modification of the starter adapter shaftgear bearing boss is required to provide clearance for the wider camshaft gear.

NOTE... On Sandcast crankcase installations clearance must be verified between the new P/N 656818 camshaft gear and the oil gallery plug located directly below the starter adapter boss.
 (Reference figure 4.)

PERMOLD CRANKCASE MODIFICATION

The Permold style of crankcase must be modified to allow use of the new, thicker camshaft gear. A clearance cut is made in the starter drive bearing boss in accordance with the dimensions shown in Figure 3. TCM recommends that a properly certified repair station machine the required clearance.

CAUTION... Installation of the new P/N 656818 gear in an unmodified permold style crankcase will result in damage to the gear and/or the crankcase

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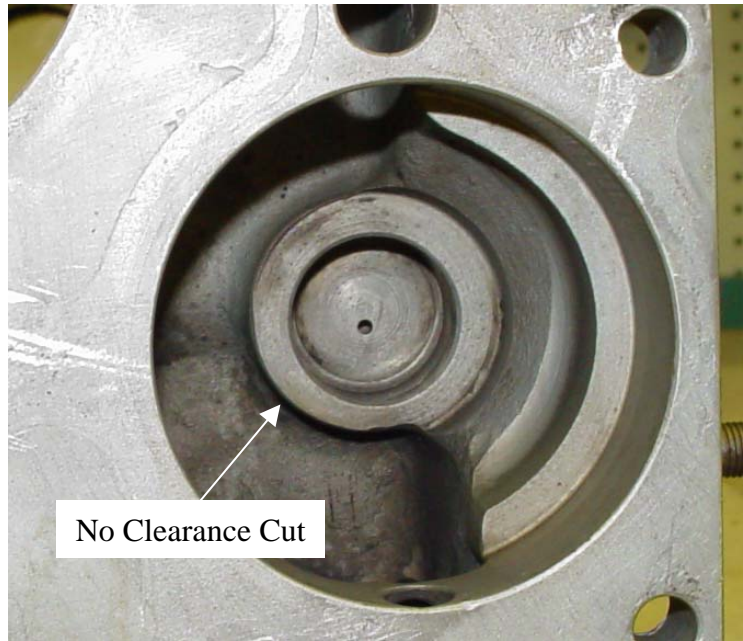


FIGURE 1
UN-MODIFIED PERMOLD CRANKCASE

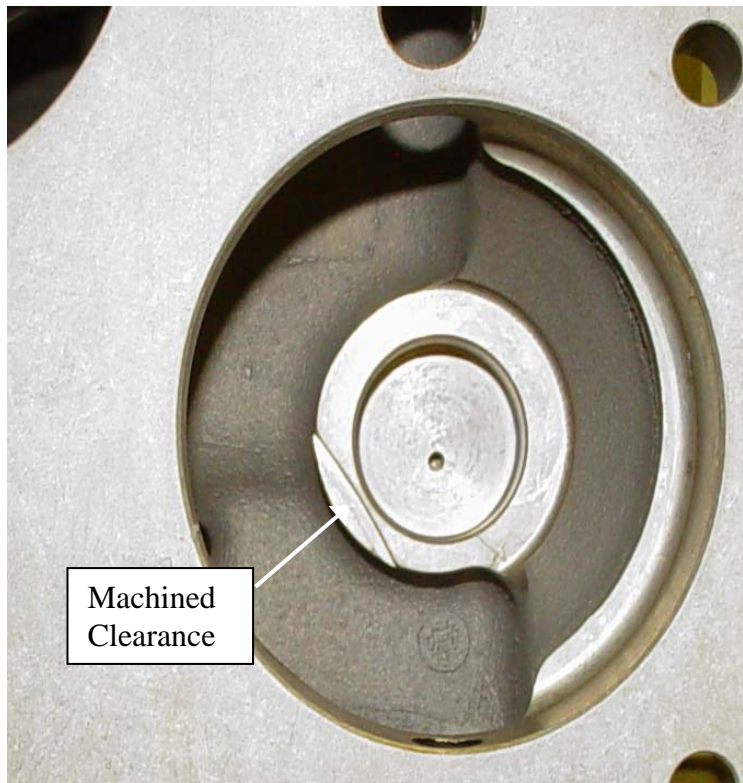



FIGURE 2
MODIFIED PERMOLD CRANKCASE

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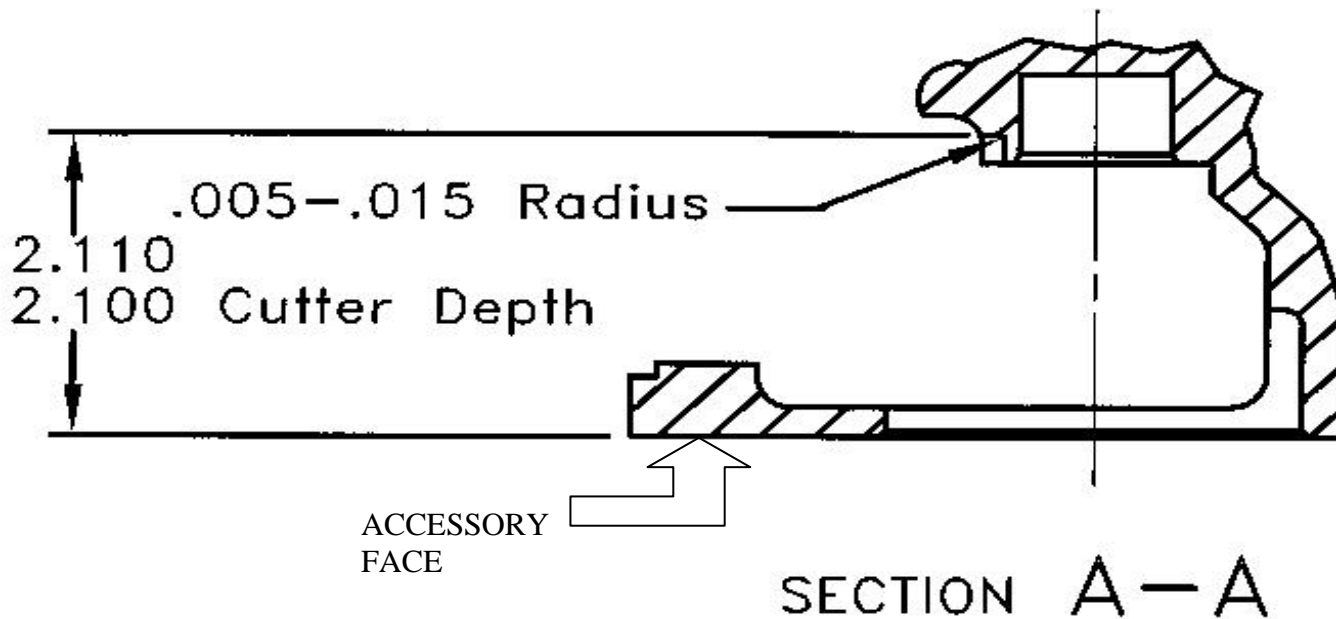
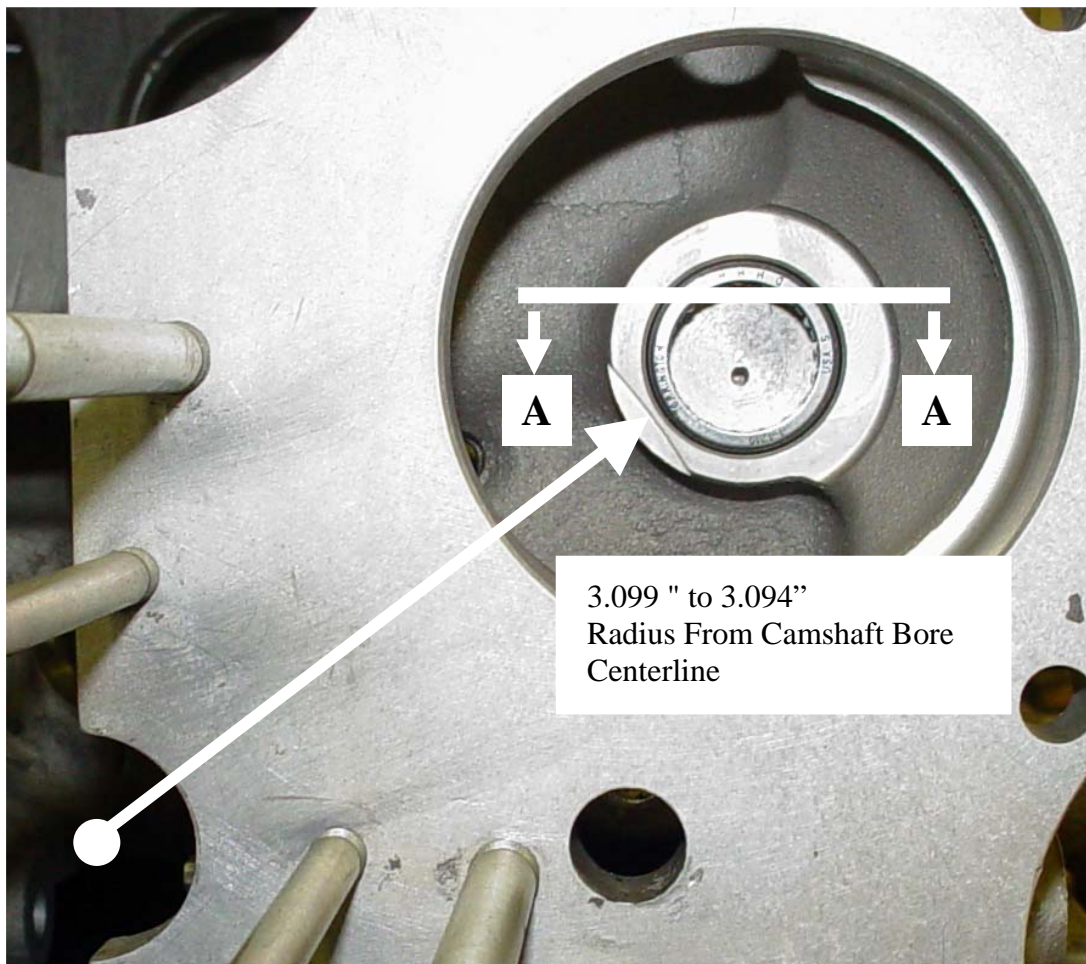



FIGURE 3
PERMOLD CRANKCASE MODIFICATION

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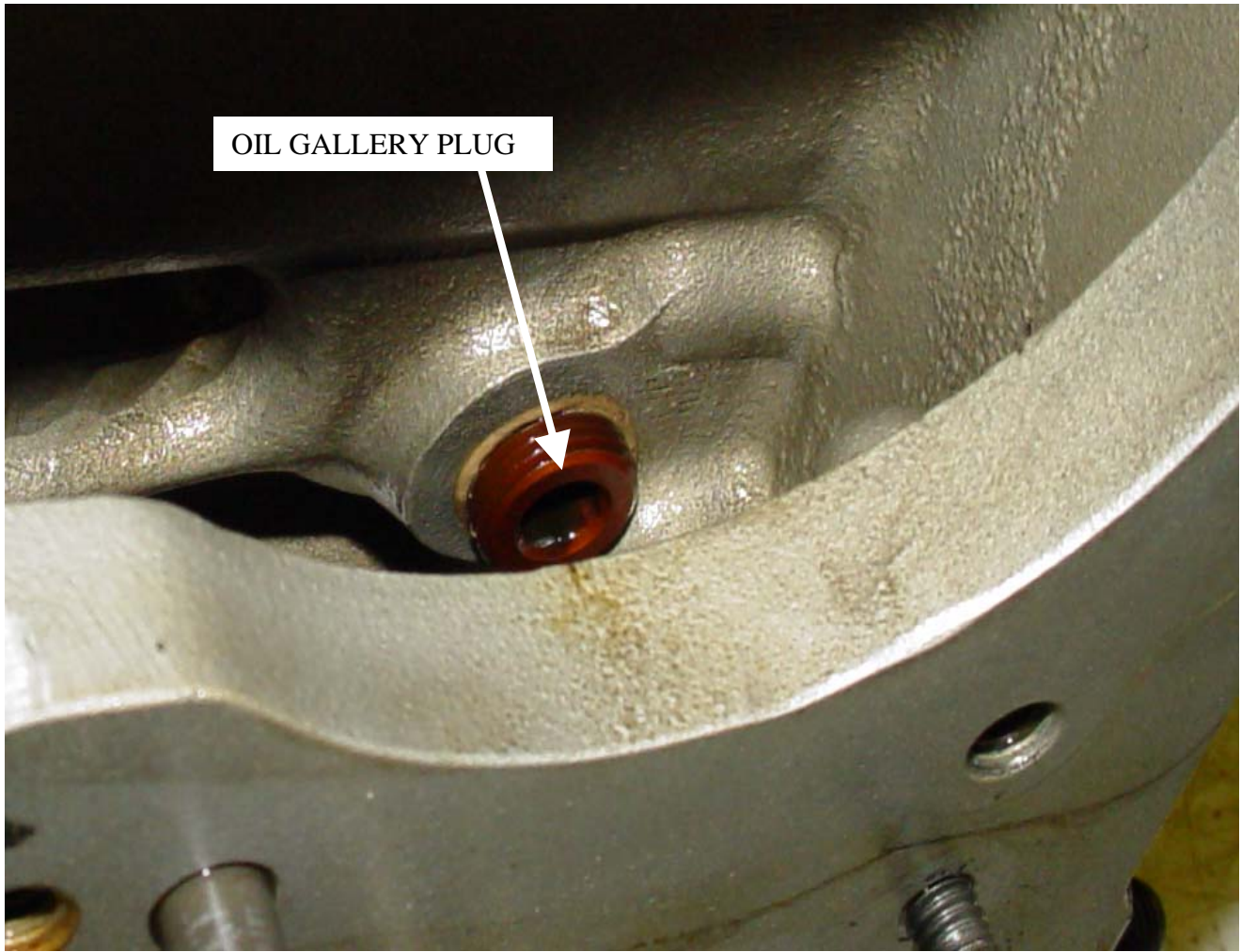



FIGURE 4
INSTALL CAMSHAFT IN CRANKCASE HALF
INSPECT FOR MINIMUM OF .030 CLEARANCE BETWEEN THE CAMSHAFT
GEAR AND THE END OF THE OIL GALLERY PLUG (WHERE INDICATED).

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