

# service bulletin

M90-16 Technical Portions Are FAA-Approved
--

22 August, 1990

TO: Aircraft Manufacturers, Distributors, Dealers, Engine Overhaul Facilities, Owners and Operators of Continental Aircraft Engines

SUBJECT: **7TH STUD IMPROVEMENT ON TCM CRANKCASES**

MODELS  
AFFECTED: IO520, TSIO520, GTSIO520, IO550

COMPLIANCE: At time of installation of 7th stud crankcases

TCM has incorporated into its engine crankcases an additional stud adjacent to each cylinder. This 7th stud improvement reduces stresses and increases crankcase durability.

When installing the new 7th stud crankcase on any of the above referenced engines, it will be necessary to change and/or modify certain parts. The following is a listing of these kit and parts requirements.

NOTE...If the crankcase being replaced already incorporates this 7th stud feature, the requirements of this bulletin will not be necessary.

For: IO520C, CB, M, MB  
TSIO520B, BB, E, EB, J, JB, K, KB, L, LB, N, NB, VB, WB  
Use Kit P/N 649406-1A1

For: IO520BA, BB, N, NB  
IO550B  
TSIO520D, DB, UB  
Use Kit P/N 649406-3A1

For: IO520A, D, E, F, J, K, L  
TSIO520C, G, H, M, P, R, T, AF, AE  
Use Kit: 652657A1 (For engines with Standard Oil Cooler)  
652618A1 (For engines with Non-Congeaing Oil Cooler)

NOTE...Kit part numbers 652657A1, 652618A1 contain oil cooler modification information. This modification will require detailed machining by an experienced machine shop. Should this modification prove unfeasible, it will then become necessary to replace the oil cooler. The following are replacement parts numbers:

Existing Cooler P/N	Replacement Cooler P/N
626189	652671
639151	652660
639152	652759
639171	652661

For: All GTSIO520 Series Engines  
Use Kit P/N ALT01800 (continued)

NOTE...Slight modifications will be required on certain airframe supplied baffling components. Contact the manufacturer of the airframe in question to determine whether airframe modifications are required and to obtain further information and instructions regarding any such modification.

In conjunction with these kits, the following engines will require dipstick replacement:

<b>ENGINE</b>	<b>DIPSTICK P/N</b>
IO520BA, BB	652171-15
IO520C, CB, L/H	652171-18
IO520C, CB, R/H	652171-16
IO520M, MB, L/H	652171-19
IO520M, MB, R/H	652171-14
TSIO520B, BB, L/H	652171-17
TSIO520B, BB, R/H	652171-12
TSIO520D, DB	652171-15
TSIO520E, EB, L/H	652171-17
TSIO520E, EB, R/H	652171-12
TSIO520J, JB, L/H	652171-17
TSIO520J, JB, R/H	652171-12
TSIO520K, KB, L/H	652171-17
TSIO520K, KB, R/H	652171-12
TSIO520L, LB, L/H	652171-11
TSIO520L, LB, R/H	652171-16
TSIO520N1, NB1, L/H	652171-17
TSIO520N2, 4, 6, 8, NB2, 4, 6, 8	652171-12
TSIO520N5, NB5	652171-13
TSIO520VB, L/H	652171-13
TSIO520VB, R/H	652171-12
TSIO520WB, L/H	652171-11
TSIO520WB, R/H	652171-16