

# service bulletin

M79-12

FAA-DER Approved

1 August 1979

TO: Distributors, Dealers, Engine Overhaul Facilities, Owners and Operators of Teledyne Continental Motors' Aircraft Engines.

SUBJECT: STARTER ADAPTER SHEAVE

MODELS

AFFECTED: TSIO520-E, EB, TSIO-520-J, JB and TSIO-520-K, KB

Gentlemen:

The affected engine models, as installed in certain Cessna twin engine aircraft, may have an optional starter adapter with a power take-off provision and sheave to drive an air conditioning compressor.

Early versions of the starter adapter utilized a keyed shaft (.4380 to .4375 in. diameter) to attach a double groove sheave, TCM P/N 637811. This system used two belts to drive the air conditioning compressor.

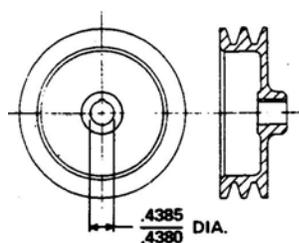
Later, a change was made by Cessna to a single belt drive with a new single groove sheave supplied by Cessna, P.N 5690511-1 (refer to Cessna Service Letter ME73-19, "Operation Cool").

TCM has since made a revision to the starter adapter shaft which eliminated the key and increased the shaft diameter to .562 to .560 in. Therefore, the old small shaft hole diameter sheaves, both single (Cessna) and double grooves, (TCM) will no longer fit.

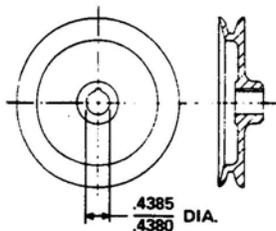
A new double groove sheave is available, TCM P/N 641907 and should be ordered when the latest starter adapter, TCM P/N 642087A7, is ordered. This sheave may be used with the single belt drive air conditioning compressor if the groove closest to the starter adapter housing or forward groove is used.

When installing sheave P/N 641907 to the larger non-keyed shaft use washer P/N MS 9320-15 and nut P/N AN-320-9. Torque nut to 700-850 in-lb. Do not over torque - change nut and/or washer if required to install cotter pin.

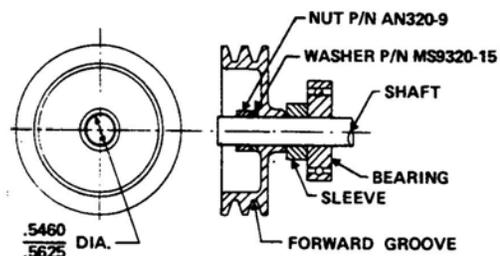
If sheave P/N 641907 is currently installed with nut P/N MS9358-15, remove this nut and replace with washer P/N MS9320-15 and nut AN320-9 within the next 50 hours of operation. Torque nut to 700-850 in-lb per instructions outlined above.



**TCM P/N 637811**



**CESSNA P/N 5690511-1**



**TCM P/N 641907**