## SERVICE BULLETIN

NUMBER: M20-225A

BOX 72 . KERRVILLE, TEXAS 78028



THIS BULLETIN IS FAA APPROVED

**DATE:** 7-9-82

SUBJECT: ENGINE TURBOCHARGER OIL PRESSURE INLET CHECK VALVE, TELEDYNE CONTINENTAL MOTORS (TCM) P/N 642211

MODELS/SERIAL NUMBERS AFFECTED: Model M20K - S/N 25-0001 thru 25-0447

TIME OF COMPLIANCE: Within next 25 hours of operation or at next scheduled maintenance, whichever is sooner. NOTE: If TCM S.B. 81-21 is complied with this S.B. and TCM S.B. 80-19 are not required.

INTRODUCTION: It has been determined that in some instances during installation of the subject check valve the recommended torque values may have been exceeded. Replacement of the pipe thread end of check valve is required per this Service Bulletin. This S.B. is to be done in conjunction with TCM S.B. M80-19. Warranty claims to be filed with TCM distributor for all parts and one (1) hour labor allowance to accomplish both bulletins.

## **INSTRUCTIONS:**

1. Remove top and bottom cowling from aircraft.

2. Remove the check valve from 45° fitting on oil inlet portion of turbocharger. This is the smaller of the two check valves located near bottom of turbocharger.

3. Place check valve, P/N 642211, in vise or clamping device. Clamp the hex portion at the flare fitting end with arrow on check valve pointing straight up.

4. Remove the pipe thread fitting end cap assy by turning hex portion on that end of valve with wrench.

5. Install new cap end and "O" ring assy, TCM P/N 643825, after coating threads of cap body with engine oil. Torque to body of check valve with 55-60 inch lbs. The new cap end will be blue color for identification.

6. Reinstall complete check valve assy to the 45° fitting on turbocharger after coating pipe thread end with engine oil.

Torque unit 60-80 inch lbs. into the 45° fitting. Be careful to prevent any bending or torsional loads to the pipe thread end.

7. Attach the hose and tighten while holding the check valve with wrench to prevent bending or torsional loads being transmitted to the pipe thread end. Torque this flare nut 75 to 125 inch lbs.

8. Leak check the installation and inspect the routing of the turbocharger oil in and oil out lines to insure that neither are secured to the engine mount.

9. Replace cowling, connect landing lights and cowl flaps.

10. Enter compliance note in Engine Log Book and release aircraft for service.

## REFERENCE DATA: N/A

PARTS LIST: QTY.

PART NO. DESCRIPTION

1 ea.

643825

Cap End and "O" Ring Assy

Procure new assembly through nearest Teledyne Continental Motor (TCM) distributor.

Process warranty claims through TCM.

FIGURE/TABLE: See Figure 1.

