

**SERVICE MANUAL SUPPLEMENT  
AND  
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS  
FOR  
RAM PMA P/N 1021 WASTEGATE ASSEMBLIES**

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS**

THE PURPOSE OF THIS DRAWING IS TO MEET THE REQUIREMENTS OF 14 CFR Part 33, Section 4,  
*Instructions for Continued Airworthiness.*

1. THE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS APPLY TO RAM P/N 1021 WASTEGATE ASSEMBLIES.

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ADDITIONAL COPIES OF THIS MANUAL CAN BE ORDERED FROM RAM AIRCRAFT

2. PARTS INFORMATION AND DETAIL PARTS CAN BE FOUND ON THE RESPECTIVE APPLICABLE PMA DRAWING, DETAIL DRAWINGS OR PMA SUPPLEMENT.
3. WASTEGATE ASSEMBLY INSTALLATION INSTRUCTIONS ARE UNCHANGED. USE THE AIRCRAFT SERVICE MANUAL PROCEDURES IF THEY DIFFER FROM THESE INSTRUCTIONS.
  - a. Remove the existing wastegate by removing the oil lines and the eight bolts and nuts (4 in each flange) securing the wastegate flanges to the turbocharger “wye” and the overboard pipe.
  - b. Note the orientation (Note: See Figure 209 enclosed) of the wastegate actuator, relative to the oil control lines and the turbocharger, and remove the wastegate from between the flanges and visually check that the wastegate “wye” flange and overboard pipe flange are flat, clean and not cracked. Clean any seal material from the flange as required.
  - c. Reinstall the test wastegate in the same orientation as the unit removed using new flange seals (TCM P/N 652456) and reinstall the 8 flange bolts and nuts with Fel-Pro C-5 or other anti seize compound. Torque to 70- 90 in. lb per Section 9 of Cessna 414 Service Manual. “Exhaust Elbow to Wastegate Assy Bolts”
  - d. Reconnect the oil control lines to the wastegate actuator and verify correct routing.
  - e. Perform a leak check prior to further engine testing.

4. SCHEDULED MAINTENANCE PROCEDURES: THERE IS NO CHANGE TO THE PUBLISHED SCHEDULED MAINTENANCE PROCEDURES ESTABLISHED BY CESSNA, BEECHCRAFT OR TELE-DYNE CONTINENTAL MOTORS, WITH THE INSTALLATION OF THESE WASTEGATE ASSEMBLIES.

CLEAN OR REMOVE CARBON DEPOSITS WITH BERRYMAN B-12 CHEMTOOL CLEANER AND LUBRICATE THE BUTTERFLY SHAFT WHEN STICKING IS EVIDENT WITH "MOUSE MILK" PENETRATING OIL.

5. AFTER THE INITIAL INSTALLATION, THE AIRWORTHINESS OF THESE COMPONENTS SHOULD BE DETERMINED IN THE NORMAL PRE-FLIGHT INSPECTION, 50, 100, 500 HOUR AND ANNUAL INSPECTION INTERVALS.
6. REPAIR PROCEDURES: THERE ARE NO APPROVED FIELD REPAIR PROCEDURES. IF AFTER CLEANING THE , CONTACT RAM AIRCRAFT TO OBTAIN A REPLACEMENT.