

SERVICE BULLETIN NO. 160  
"FAA (DER) APPROVED"

DATE: MARCH 21, 1977

SUBJECT: ALTERNATE STATIC VALVE INSPECTION AND CLEANING

SERIALS AFFECTED: AA5A-0001 thru AA5A-0340 and AA5B-0001 thru AA5B-0451  
AIRCRAFT EQUIPPED WITH AN ALTERNATE STATIC SOURCE SYSTEM.  
ALL OTHER AIRCRAFT THAT HAVE BEEN MODIFIED BY THE ADDITION  
OF GERDES A-1390 VALVE. ALL GERDES A-1390 VALVES SHIPPED  
FROM GRUMMAN AMERICAN PRIOR TO MARCH 19, 1977.

TIME OF COMPLIANCE: BEFORE FURTHER FLIGHT IN INSTRUMENT METEOROLOGICAL  
CONDITIONS, OR NIGHT FLIGHT, OR WITHIN THE NEXT 5 HOURS  
DAY VISUAL FLIGHT RULES.

GENERAL

Excessive grease has been found in some alternate static source valves, Gerdes P/N A-1390, which may cause erroneous altitude, vertical speed and airspeed indications.

The information contained below provides the instructions to inspect and clean the valve. This Bulletin must be accomplished in the time of compliance indicated.

INSPECTION AND CLEANING

1. Remove static source valve knob and jamb nut.
2. Note static line routing and remove lines from valve body.
3. Remove attach screws and valve assembly from aircraft.
4. Disassemble valve by removing hex bushing from forward end of valve and pushing valve shaft thru valve body.
5. Wipe and save all grease from valve shaft with a clean lint free cloth.
6. Clean inside valve body with a lint free cloth.
7. Blow compressed air thru fittings into valve body to clear ports.
8. Reclean inside of valve body.
9. Lubricate O-Rings only with a very thin film of grease removed in Step 5. Keep rest of shaft dry.

10. Reassemble valve, mark serial number plate with a red dot, reinstall in instrument panel and reconnect lines to their respective ports.
11. Conduct a static system leak test as follows:

**C A U T I O N**

Never apply positive pressure to the static system unless all instruments disconnected.

- a. Seal off one static port opening with plastic tape. This must provide an air tight seal.
- b. Attach a source of suction to the remaining static port. Assure that alternate static source control is in "off" position.
- c. Slowly apply suction until the altimeter indicates a 1,000-foot increase in altitude.
- d. Secure the suction source to maintain a closed system. Leakage shall not exceed 100 feet of altitude lost per minute, as indicated on the altimeter.
- e. If the leakage rate exceeds 100 feet per minute, tighten all connections and add sealant sparingly to the fittings as required.
- f. Repeat the above test.
- g. If the leakage rate is still too high, disconnect the static lines from the individual instruments.
- h. Proceeding one at a time, and using suitable fittings, connect the lines together so that the altimeter is the only instrument still connected to the static pressure system.
- i. Repeat the leakage test to determine whether the static pressure system or the removed instruments are the cause of leakage. If the instruments are at fault, they must be repaired by an "appropriately rated repair station" or replaced. If the static pressure system is at fault, use the above procedure given in a. thru d.
- j. Remove all tape.

12. Record compliance with this Bulletin in the aircraft logs.

CREDIT INFORMATION

A labor allowance of 0.5 hour at the Dealer's prevailing shop rate will be available for each affected aircraft that requires inspection and cleaning of the alternate static valve.

All work must be performed or authorized by a Grumman American Aviation Dealer. A completed Warranty Claim Form No. GAA-740 must be received at the factory before September 30, 1977 for credit allowance.

Immediately on completion of this Service Bulletin, a Service Reply Card is to be completed and returned noting compliance with the requirements of this Bulletin.

GRUMMAN AMERICAN AVIATION CORPORATION

REB:rjm

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