



## SUBJECT:

PART I: REPLACEMENT OF O-RING SEALS, PITOT AND STATIC SYSTEM QUICK-DRAIN VALVES

PART II: INSTALLATION OF PITOT AND STATIC SYSTEM QUICK-DRAIN VALVES

## MODELS

## AFFECTED:

PART I: M20F, S/N 680001, 680003 thru 680027, 680029 thru 680033

PART II: M20C, S/N 1852 thru 3466, 670001 thru 670149  
M20D, S/N 101 thru 260  
M20E, S/N 101 thru 1308, 670001 thru 670062  
M20F, S/N 660002 thru 660004, 670001 thru 670539

## TIME OF

## COMPLIANCE:

PART I: MANDATORY compliance within the next 25 hours.

PART II: Compliance at owner's option.

## INTRODUCTION:

PART I: To provide an improved valve seat, install larger O-ring seals in pitot and static system quick-drain valves.

PART II: To provide a means for systems drainage without disassembly of fittings and tubing, install a quick-drain valve at the lowest points in the pitot and static systems.

## INSTRUCTIONS:

- PART I:
1. Remove pilot seat and left cabin side panel.
  2. Disconnect pitot tubing at quick-drain valve.
  3. Unscrew Tee-fitting from button, and remove spring, clevis pin, and O-ring seal (P/N AN6227-1).
  4. Replace O-ring seal (P/N AN6227-1) with a larger O-ring seal (P/N 6227-3). Reassemble quick-drain valve, threading Tee-fitting in to button three to three and one-half turns. Seal Tee-fitting with Seal-Tite or equivalent sealant.
  5. Reconnect pitot system tubing to Tee-fitting, and leak-check system according to standard approved practices.
  6. Reinstall cabin side panel and pilot seat.
  7. Remove tailcone access door, disconnect static system tubing at quick-drain Tee-fitting, and repeat steps 3 and 4 above.
  8. Reconnect static system tubing to Tee-fitting and leak-check system according to standard approved practices.

Kit No. M20-167-2  
(REF: Part II)  
Will Not Be Available  
Until December 10, 1968



9. Reinstall tailcone access door.
10. Fill out and mail Service Bulletin Compliance card.

PART II: 1. Remove pilot seat.

2. Remove left cabin side panel.
3. Drill a 3/8-inch diameter hole through left bottom wing skin, between fuselage structure and left wing rib, where pitot line enters cabin. (Refer to illustration on page 3.)
4. Position quick-drain valve assembly with push bottom through hole in skin and drill four number 40 holes through skin, to match holes on drain valve assembly. Rivet drain valve assembly to wing skin with four AN470-AD3 rivets.
5. Cut pitot tubing and connect tubing to Tee-fitting on drain valve.
6. Leak-check pitot system according to standard approved practices.
7. Reinstall cabin side panel and pilot seat.
8. Remove tailcone access door.
9. Drill a 3/8-inch diameter hole through bottom tailcone skin, on left side, at lowest point in static system tubing (approx. at center on tailcone access door) as shown in illustration on page 3.
10. Position quick-drain valve assembly with push bottom through hole in skin. Drill four number 40 holes through skin, using valve assembly as guide. Rivet drain valve assembly to tailcone skin with four AN470-AD3 rivets.
11. Cut static tubing and connect tubing to Tee-fitting on drain valve.
12. Leak-check static system according to standard approved practices.
13. Reinstall tailcone access door.
14. Fill out and mail Service Bulletin Compliance card.

SERVICE  
BULLETIN KITS:

PART I: No. M20-167-1

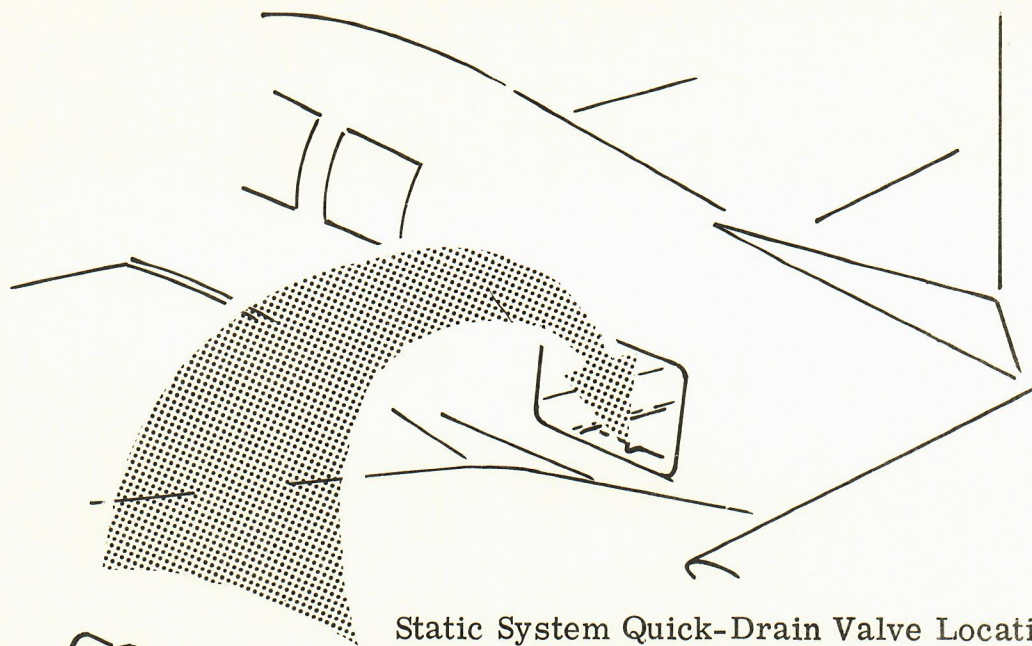
AN6227-3 O-ring . . . . . (2)  
Service Bulletin Compliance Card . . . . . (1)

PART II: No. M20-167-2

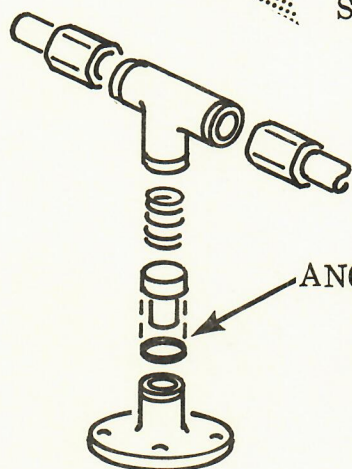
860049 Quick-drain Valve Assembly . . . . . (2)  
AN470-AD3 Rivets . . . . . (8)  
Service Bulletin Compliance Card . . . . . (1)

M20-167-1 and -2 kits may be ordered from your nearest Mooney distributor or dealer. No factory orders will be accepted.

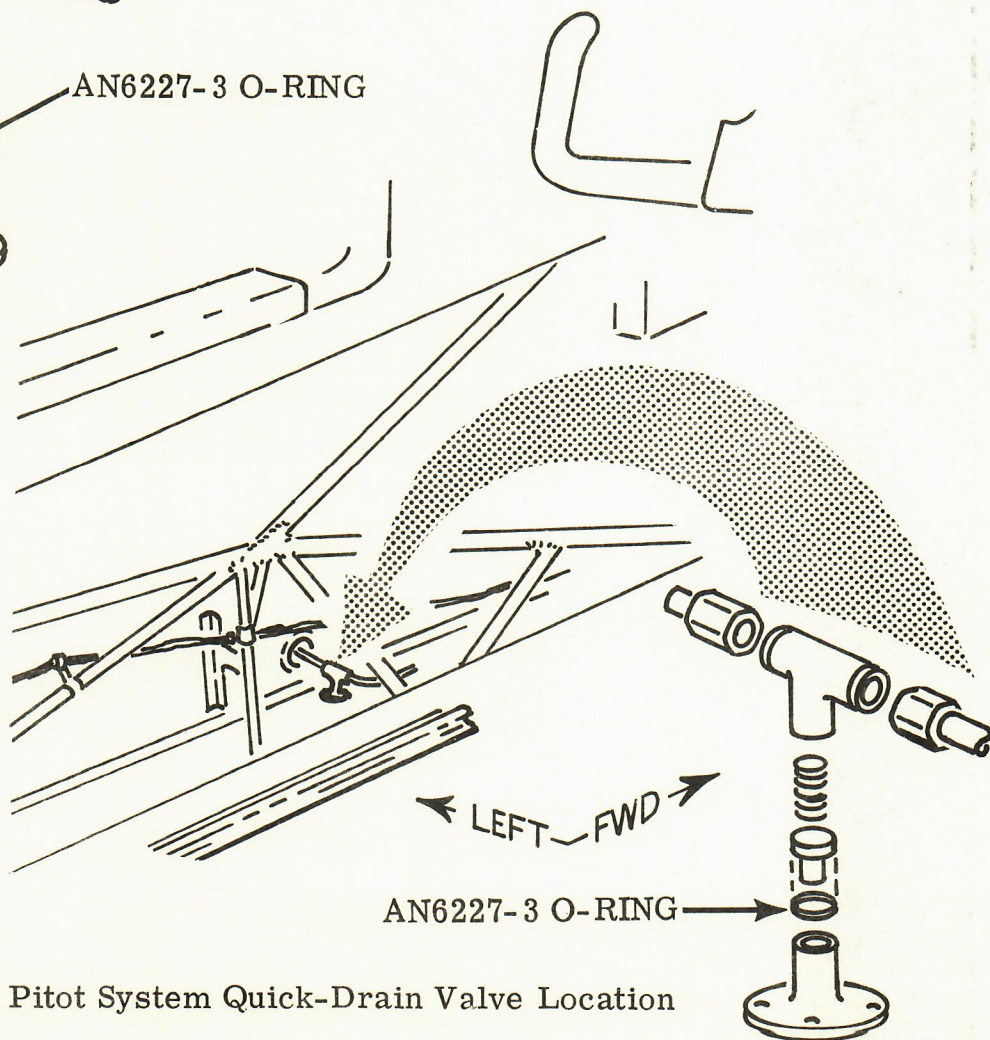




Static System Quick-Drain Valve Location



AN6227-3 O-RING



AN6227-3 O-RING

Pitot System Quick-Drain Valve Location

LOWER LEFT-SIDE VIEW OF CABIN INTERIOR  
(with left seat and upholstery panel removed)