

THIS BULLETIN IS FAA APPROVED FOR ENGINEERING DESIGN

SERVICE BULLETIN M20-256
DATE:1-24-95

SUBJECT: Retrofit of Gerdes Fuel Selector Valve with Airight Fuel Selector Valve.

(REFERENCE AD# 95-18-12)

MODEL/S/N

AFFECTED:M20K, S/N 25-0001 THRU 25-0091 (excluding S/N 25-0017, 25-0027, 25-0052, 25-0063, 25-0067, 25-0068, 25-0073, 25-0078, 25-0081 THRU 25-0086 AND 25-0089), AND ANY M20K AIRCRAFT THAT MAY HAVE HAD A GERDES VALVE INSTALLED AFTER ORIGINALDATE OF MANUFACTURE.

TIME OF

COMPLIANCE: Within next 50 hours of operation.

INTRODUCTION: There has been one incident reported of a Gerdes fuel selector valve malfunction. However, any malfunction that will not allow fuel tank selection may lead to an off field landing, therefore, the FAA has determined that retrofit of Gerdes fuel selector valves, A-2580, in the Mooney M20K aircraft, is mandatory.

INSTRUCTIONS:

1. Drain fuel from fuel tanks into suitable containers.
2. Remove belly skins from fuel selector location.
3. Remove escutcheon and carpet from inside cabin to gain access to top side of floorboard at fuel selector valve area.
4. Remove existing Gerdes fuel selector valve, A-2580, and 610256-021 tube assembly.
5. Use Figure SB M20-256-1 as a reference to locate aircraft center line and existing bends in floorboard.
6. Layout new hole cutout on floorboard (over existing cutout) for new fuel selector valve according to dimensions of Figure SB M20-256-1.
7. Smooth all edges of cutout on floorboard.
8. Install fuel selector valve/fitting assembly, 610256-920, and new 610256-047 tube assembly to existing tube assemblies. Slight rotation of elbows may be necessary to match existing tubes. Do not tighten mounting screws on fuel selector valve until all tube fittings are tight.
9. Do not put valve assembly and attaching tubes into a bind when installing mounting screws to valve flange. Reposition all components as needed to prevent binding.

NOTE

Gerdes valve has 3/8 inch NPT threads and new valve has UNF threads. Therefore, new adapter fittings are supplied with new valve to allow connection to existing tube assemblies.

10. The 610256-047 tube assembly will replace the 610256-021 tube assembly.
11. Leak check all fitting connections.

NOTE

It is recommended that only partial fueling of both wing tanks be done until all fittings have been leak checked and determined to be satisfactory.

12. Refuel both aircraft fuel tanks sufficiently to test run engine and verify fuel selector valve will switch from LEFT and RIGHT tank and engine continues to run and to the OFF position and engine will quit.
13. Reinstall carpet and ABS escutcheon inside cabin. Reinstall belly skins.
14. Complete enclosed compliance card, make entry in log book and return aircraft to service.

REFERENCE

DATA: AIRWORTHINESS DIRECTIVE BEING PREPARED BY THE FAA.

PARTS LIST(KIT PART NUMBER — SB-M20-256-1)

ITEM	P/N	DESCRIPTION	QTY
1	610256-047	TUBE ASSEMBLY	1
2	610256-920	VALVE/FITTING ASSEMBLY	1
CONSISTING OF THE FOLLOWING ASSEMBLED COMPONENTS:			
-	610289-001	VALVE, FUEL SELECTOR	1
-	AN815-8D	UNION	3
-	AN815-4D	UNION	2
-	AN924-8D	NUT	1
-	MS29512-08	O'RING	3
-	MS29512-04	O'RING	3
-	610272-001	ELBOW	1

FIGURES/
 TABLES: SEE FIGURE SBM20-256-1 BELOW

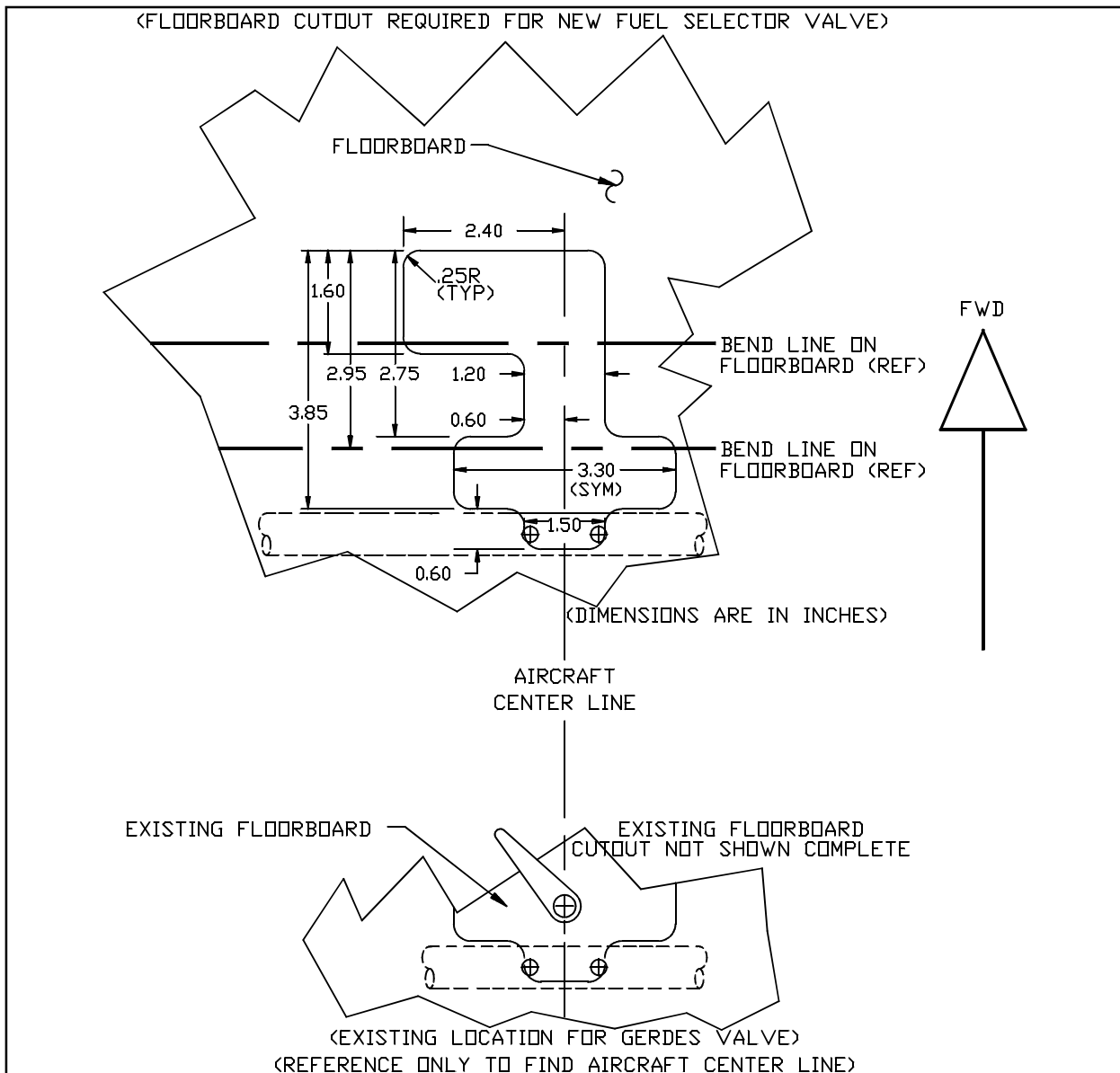


FIGURE SB M20-256-1