

SERVICE BULLETIN NO. 150A
(SUPERSEDES SB NO. 150)
"FAA DOA EA-4 APPROVED"

DATE: January 12, 1976
SUBJECT: CARBURETOR MIXTURE CONTROL REPLACEMENT
SERIALS AFFECTED: AA5B-0001 Thru AA5B-0215
TIME OF COMPLIANCE: Within ten (10) hours of operation.

GENERAL

Instances of carburetor mixture control wire failure in AA-5B airplanes have been reported. The source of the problem has been identified as the mixture control mounting at the firewall.

N O T E

SERVICE BULLETIN NO. 150 PROVIDED A SLIDING MOUNT AT THE FIREWALL, HOWEVER, SERVICE EXPERIENCE HAS SHOWN THAT THIS MODIFICATION WAS NOT TOTALLY EFFECTIVE. THIS REVISED BULLETIN REQUIRES THE INSTALLATION OF A NEW MIXTURE CONTROL ASSEMBLY WITH AN IMPROVED ROUTING AND ATTACHMENT.

REPLACEMENT PROCEDURE (See Figure 1)

1. Prepare the airplane for safe maintenance. Place the magneto and MASTER switches in the OFF positions.
2. Open the upper cowl assembly and remove the lower cowl assembly.
3. At the carburetor, remove cotter pin, nut, washers and swivel assembly. Straighten or cut the control wire as required to remove from swivel assembly.
4. Remove attaching hardware and retain clamp that secures mixture control housing to carburetor air box. Reinstall attaching hardware in air box.
5. At firewall, remove and discard cable clamp securing mixture control housing to firewall. If Service Bulletin No. 150 has been complied with, remove and discard clamp and flared tube. Clamp the primer line with existing hardware.
6. In cockpit, at rear of instrument panel, unscrew nut at rear of mixture control assembly. Cut tie wraps and withdraw assembly through instrument panel. If Service Bulletin No. 150 has been complied with, first remove and discard clamps and hardware attaching cabin heat control to mixture control. Destroy removed mixture control assembly. Do not reuse.

NOTE: Revision "A" identifies this bulletin, as revised and rewritten.

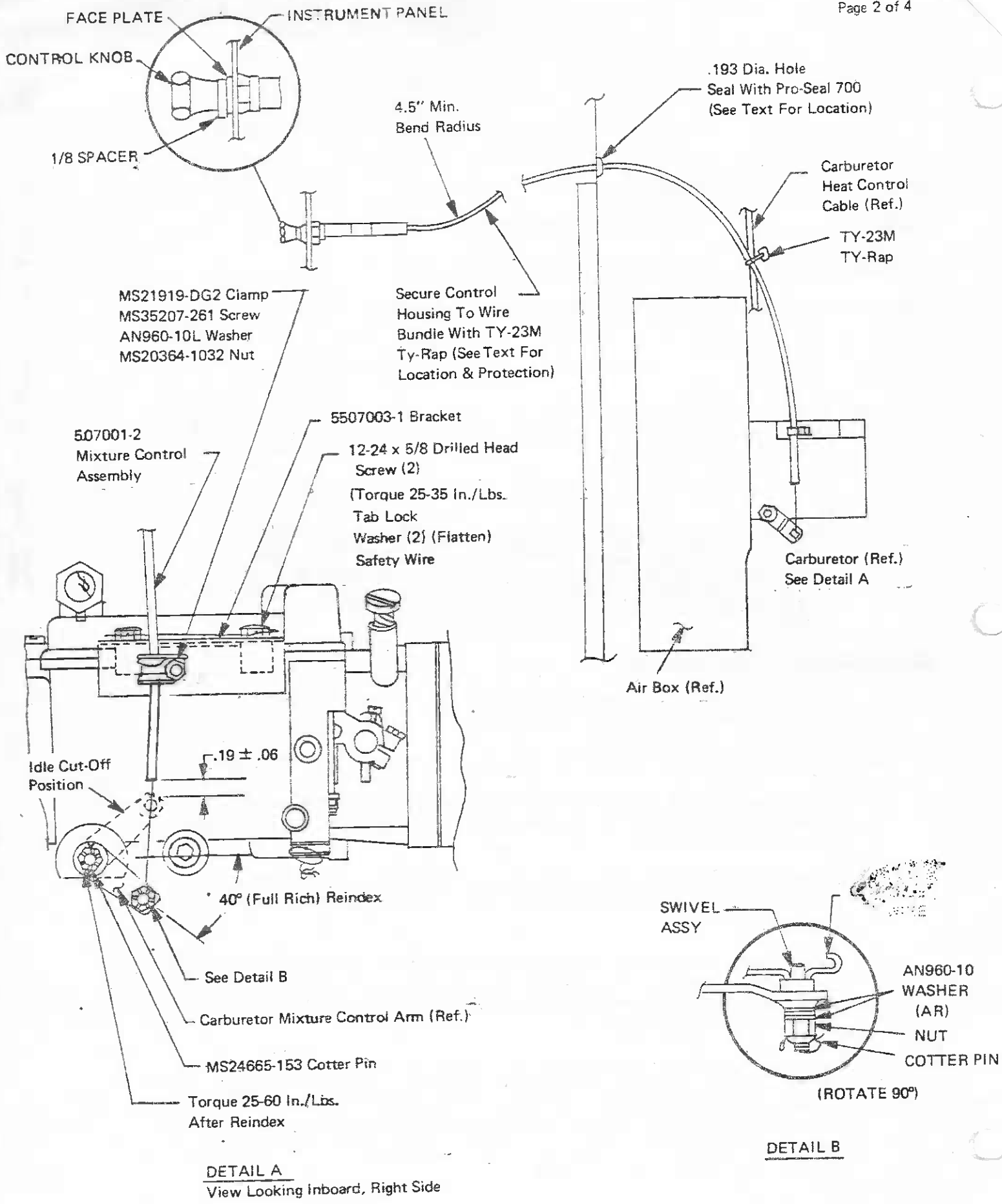


Figure 1. Carburetor Mixture Control Replacement

7. Seal resulting hole with Pro-Seal 700 or equivalent firewall sealant.
8. Drill a .193 inch hole through firewall, $6 \pm 1/8$ inches below upper cowl contour and $.50 \pm 1/8$ inches right of aircraft centerline.

C A U T I O N

DO NOT BEND OR KINK MIXTURE CONTROL ASSEMBLY DURING INSTALLATION.

9. In cockpit pass a new 507001-2 Mixture Control Assembly through the instrument panel. Install locknut and PVC-105-3/8 Clear Tubing onto control housing and feed control housing through new .193 inch hole in firewall. Secure control housing to instrument panel with nut.
10. Secure mixture control housing to wire bundle as required with Ty-rap, such that cable is clear of control column and insulated from wire bundle.
11. Remove and discard two top screws from right side of carburetor. Remove and flatten tab lock washers. Position 5507003-1 Bracket on carburetor, such that side of bracket with single hole faces down. Secure bracket with two (2) 12-24 X 5/8 drilled head Screws and two (2) Tab lock washers. Torque screws to 25-35 inch pounds and safety wire.
12. Remove cotter pin and nut on carburetor mixture arm and reindex arm forward and approximately 40° below horizontal at rich limit. Torque nut to 25-60 inch pounds and install new MS24665-153 Cotter Pin.
13. Attach mixture control housing to clamp removed from air box, such that clamp seats flat against bracket installed on carburetor. Also, clamp is to be positioned aft of clamp attach hole and is to direct the mixture control housing 90° to the horizontal. Attach clamp with MS35207-261 Screw, AN960-10L Washer and MS20364-1032 Nut. Secure clamp to locate housing $.19 \pm .06$ from mixture control idle cut off position as shown in Figure 1.
14. Assemble the swivel assembly, washers and nut loosely on the carburetor mixture control. Pass the carburetor mixture control wire through the hole in the swivel assembly.
15. In the cockpit, position the control knob against the full rich stop, then back off as required so that a 0.125 inch spacer can be inserted between the mixture control knob and the control face plate.
16. At the carburetor, move the mixture control lever to its full rich stop. While maintaining the control knob clearance obtained in the previous step, tighten the control arm attaching nut as required to clamp the wire securely.

17. In the cockpit operate the carburetor mixture control through its full range, making sure it operates freely and smoothly. With the mixture control arm against the full rich stop, there must be 0.125 inch clearance at the control knob as shown in Figure 1.
18. Bend the mixture control wire as shown in Figure 1 and install cotter pin. Cut off excess wire beyond bend.
19. Secure mixture control housing to carburetor heat control with TY-23M Ty-rap approximately 6.0 inches forward of firewall.

PARTS INFORMATION

Service Kit SB-150A will be available through your authorized Grumman American Aviation Dealer at a cost of \$20.00. The kit contains the hardware necessary for compliance with the requirements of this Service Bulletin.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
507001-2	Mixture Control Assembly
5507003-1	Bracket
MS35207-261	Screw
AN960-10L	Washer
MS20364-1032	Nut
12-24 X 5/8	Drilled Head Screw (2)
TY-23M	Ty-rap (5)
MS24665-153	Cotter Pin
EVC-105-3/8	Clear Tubing (One Ft.)

CREDIT ALLOWANCE

A full parts and labor credit allowance of 3.0 hours at the dealer's prevailing shop rate will be available for each airplane.

All work must be performed or authorized by a Grumman American Aviation Corporation Dealer. A completed Warranty Claim Form No. GAA-740 must be submitted to the factory before July 31, 1976 for credit allowance.

SERVICE REPLY CARD

IMMEDIATELY ON COMPLETION OF WORK, A SERVICE REPLY CARD IS TO BE COMPLETED AND RETURNED, NOTING COMPLIANCE WITH THE REQUIREMENTS OF THIS SERVICE BULLETIN NO. 150A.

Prices subject to change without notice.

GRUMMAN AMERICAN AVIATION CORPORATION

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