DEPARTMENT OF TRANSPORTATION Federal Aviation Administration 14 CFR Part 39 [SN][R SeeADT]	Grumman American AD 77-07-04 Amendment 39-2861 Effective April 11, 1977 Recurring: See AD

[Docket No. ; Amendment 39-2861; AD 77-07-04]

Airworthiness Directives; Grumman American Aviation Models AA-5 and AA-5A Airplanes.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

DATES: Effective April 11, 1977.

77-07-04 GRUMMAN AMERICAN AVIATION CORPORATION: Amendment 39-2861.

Applies to GAAC Model AA-5, Serial Numbers 0641 through 0834, and to Model AA-5A, Serial Numbers 0001 through 0321, airplanes certificated in all categories.

Compliance required as indicated below after the effective date of this AD unless already accomplished.

(a) Within 10 hours of flight after the effective date of this AD, in order to prevent possible failure of the carburetor heat valve assembly, remove the lower cowl and inspect the carburetor heat valve assembly for configuration as shown in **Figure 1**.

[Figure 1. Butterfly Assembly Configuration.] [PDF with Graphics]

(1) If Configuration B is installed, reinstall lower cowl, and the aircraft may be approved for return to service.

(2) If Configuration A is installed, remove the carburetor heat valve assembly and inspect for cracks in the bend radius. If cracks are found, remove valve assembly from service and replace with a new valve assembly Part Number 5503006-505. Do not reuse the removed carburetor heat valve assembly which must be discarded.

(b) If no cracks are found in Configuration A carburetor heat valve assembly, valve assembly may be reinstalled, the lower cowl reinstalled, and after compliance with (c)

below, the aircraft may be approved for return to service for twenty-five (25) hours of operation.

(1) **At the end of the first period not to exceed twenty-five hours of operation after the initial inspection required in (a)(2), repeat the initial inspection procedure required in (a)(2).**

(2) If no cracks are found at this second inspection of the carburetor heat valve assembly, the valve assembly may be reinstalled, the cowl replaced, and after compliance with (c) below, **the aircraft may be approved for return to service for a second and final operational period not to exceed 25 hours**.

(3) No Configuration A carburetor heat valve assembly may be continued in service in excess of 50 hours after the initial inspection required in (a)(2) above.

(c) To insure adequate carburetor heat rise, after the removal and reinstallation of the carburetor heat valve assembly, the following checks must be made prior to flight:

(1) After carburetor heat valve assembly is installed into air box assembly, temporarily install air box assembly onto lower cowl. Remove air filter and check forward and aft gap between the valve assembly and carburetor heat box/ lower cowl contact points. Maximum gap is 0.120 inches at both ends of valve with carburetor heat in the on and off position. If excessive gap exists, remove air box assembly and crimp edge of valve assembly up or down as required to obtain a gap less than 0.120 inch as specified in the **GAAC Service Bulletin No. 159**.

(2) Following cowl installation, perform engine run up to check carburetor heat drop (50 RPM drop minimum). If drop does not meet minimum requirements, rework valve per subparagraph (c)(1) above.

(3) Carburetor heat rigging to be accomplished in accordance with the AA-5 series Service Manual.

Grumman American Aviation Corporation Service Bulletin No. 159 dated February 25, 1977, or later approved revisions, pertains to this subject.

Equivalent methods of compliance with this AD must be approved by the Chief, Engineering and Manufacturing Branch, Flight Standards Division, Southern Region, 3400 Whipple Street,
East Point, Georgia 30344.

This amendment becomes effective April 11, 1977.

Manufacturer's Service Information:
Grumman American Aviation Corporation Service Bulletin No. 159