

# SERVICE BULLETIN



REPUBLIC AVIATION CORPORATION  
FARMINGDALE, LONG ISLAND, NEW YORK  
SERVICE DEPARTMENT

DECEMBER 18, 1946

**MANDATORY CHANGE**

SERVICE BULLETIN NO. 2

DOWNER AIRCRAFT INDUSTRIES, INC.  
P.O. BOX 41  
ALEXANDRIA, MINNESOTA

## REPLACEMENT OF INDUCTION SYSTEM BACKFIRE SCREEN

Reason for Change: To meet latest C.A.A. (FAA) requirements for backfire screens.

Airplanes Affected: Republic Serial Nos. 5 through 125 incl. Serial Nos. 126 and up have already had this change accomplished in production.

### Description of Change:

This change involves removing the flexible tube between the hot air shroud on the manifold and the carburetor intake duct, installing the new backfire screen in this tube and reinstalling the assembly and shall be accomplished as follows:

1. Open engine cowl.
2. Remove lower left engine cowl.
3. Remove five (5) screws from the flexible hot air tube assembly. This is located on the left side between the hot air shroud on the exhaust manifold and the carburetor intake duct.
4. Remove four (4) screws from heat shroud around exhaust.
5. Remove tape from crankcase breather line.
6. Slip hot air tube from the exhaust shroud and the carburetor air box.
7. Remove existing screen from flexible hot air tube.
8. Drill two (2) 1/8" diameter holes on opposite sides of the flexible hot air tube, 2 1/4" from the outboard (intake) end.

SERVICE BULLETIN NO. 2 (CONT.)

9. Install new type screen with the flush end at the carburetor air duct end of hot air tube, locating it so that no interference will exist with the carburetor air duct or the old screen which will be reinstalled. Attach screen to tube with two (2) S-589-6-6 self tapping screws and A-1181-62-1 Tinnerman nuts using holes just drilled. Refer to Fig. 1.
10. Reinstall cold screen.
11. Install hot air tube on carburetor air duct and exhaust shroud and attach with original hardware.
12. Attach exhaust shroud to its brackets with original hardware.
13. Secure the crankcase breather line to the intake manifold with friction tape and shellac.
14. Reinstall cowling.
15. Enter modification in engine log book.

Parts Required:

Parts may be obtained through your local dealer or distributor at no charge to owner and will be installed free of charge on airplanes within warranty at time of the modification.

Service Bulletin Kit No. 2 consists of the following:

<u>Quantity</u>	<u>Part Number</u>	<u>Part Name</u>
1	17P68019-2	Screen Assembly
2	S-589-6-6	Self-tapping screw
2	A-1181-62-1	Tinnerman Nut

Time Required:

Approximately 3 man-hours are required to accomplish this change.

W. H. Ehmann  
Service Manager

If you have sold your airplane, please forward this bulletin to the present owner.

