

SERVICE KIT NO. SK-120-1A
 Supersedes SK-120-1

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DATE: MARCH 14, 1974

TITLE: CARBURETOR AIRBOX IMPROVEMENTS

SERIALS AFFECTED: AA5-0001 through AA5-0070

WEIGHT AND BALANCE CHANGE: NEGLIGIBLE

PARTS LIST

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	5503001-502	Shaft Assembly
1	5503001-504	Valve Assembly
2	MS35457-9	Screw
2	MS20365-632C	Nut
4	AN960-6	Washer
2	MS35489-7	Grommet
2	4L4-F	Nyliner
1	3A-665-3/16	Swivel Assembly (Shakespear)
1	AN960-416	Washer
1	AN960-416L	Washer
3	AN960-10	Washer
1	AN960-10L	Washer

Use with swivel assy.

DESCRIPTION OF MODIFICATION

This modification covers the installation of stronger components in the carburetor airbox to provide increased service life. These include a new shaft with smaller screw holes and a thicker arm, a new valve assembly incorporating a doubler plate and smaller holes, stronger screws and nuts, and stronger bearing mounts.

MODIFICATION INSTRUCTIONS

1. Remove airbox from aircraft.
2. Remove and discard the original shaft assembly, valve and attaching nuts and screws.
3. Remove and discard original bearings and washers.
4. Enlarge the original bearing mounting holes in the sides of the airbox to 3/4" diameter. BE SURE HOLE CENTERLINES ARE LOCATED AS SHOWN IN FIGURE 1 TO ASSURE PROPER VALVE PLATE OPERATION.
5. Insert the MS35489-7 grommets (2) and 4L4-F nyliners (2) in the airbox as shown in Figure 3. Install the 4L4-F nyliners with the shoulder on the inside.
6. Assemble the new 5503001-502 shaft and 5503001-504 valve assemblies using the new MS35457-9 screws, AN960-6 washers and MS20365-632C nuts.
7. Check valve for proper operation, i.e. valve closes fully in both the carburetor heat "on" and "off".
8. Reinstall airbox on aircraft. Replace valve control arm swivel fitting with new fitting supplied in Kit, shimming as required with washers supplied in Kit. (See Figure 4). Check swivel fitting for freedom of movement on arm.

GRUMMAN AMERICAN AVIATION CORPORATION

NOTE: REVISION A INCORPORATES MS35489-7 GROMMETS AND 4L4-F NYLINERS

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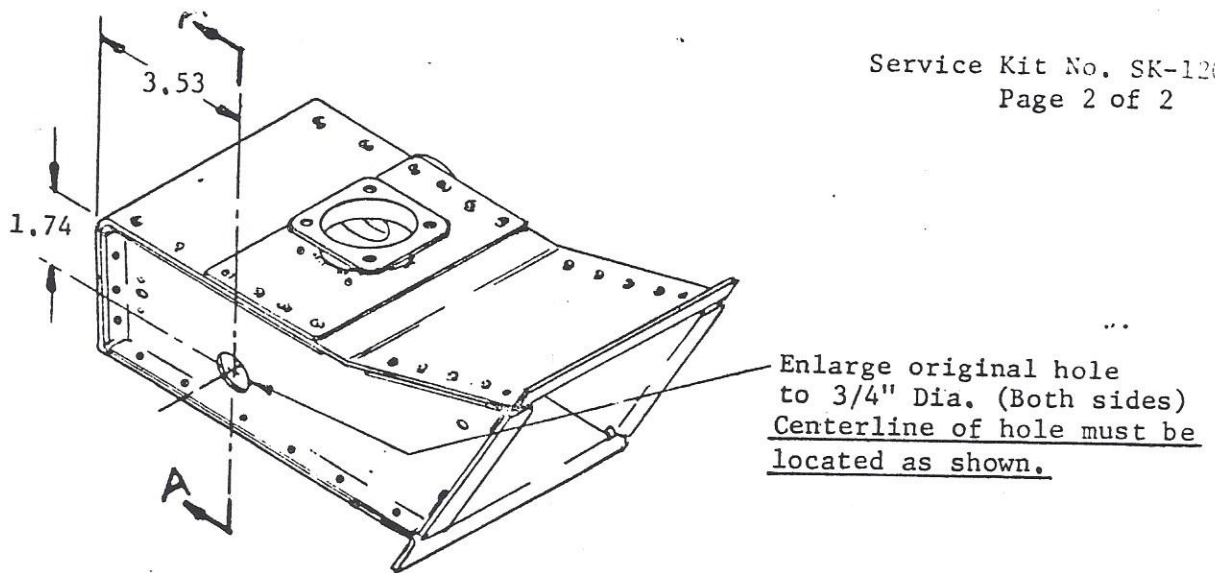
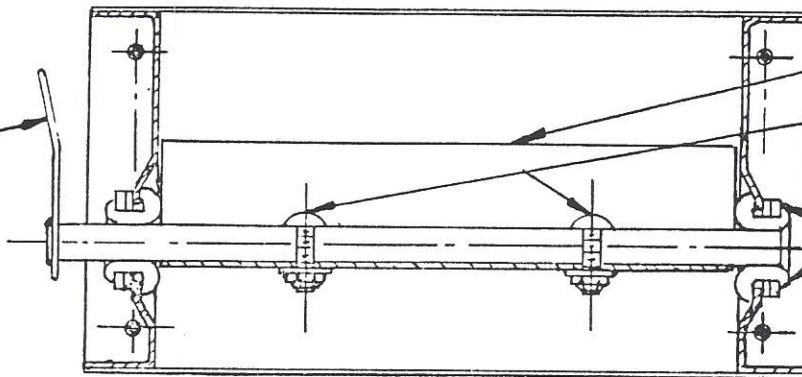


Figure 1. Replacement Bearing Installation

5503001-502
Shaft Assembly
with .040 thick
arm. (Discard)



5503001-9 Valve
(Discard)

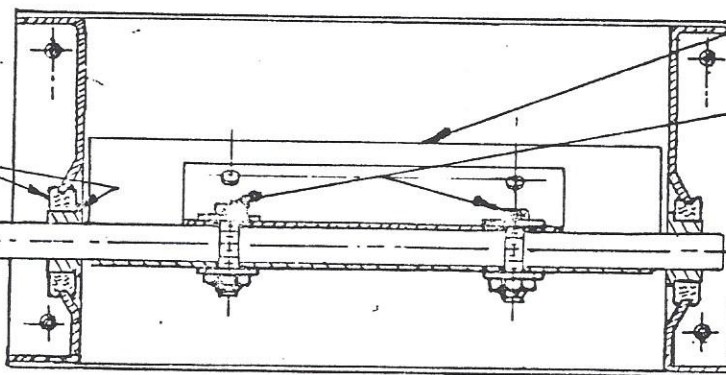
Discard original
screws, washers
and nuts.

Discard original
bearings and
washers.

Figure 2. Section AA - Original Airbox Design with valve and bearings installed.
(AA5-0001 thru AA5-0070)

5503001-502
Shaft Assembly
with .080 thick
arm.

Insert MS35489-7
grommet and 4L4-F
nyliner on each
side of airbox.
Install nyliner
with flange inside.



5503001-504
Valve Assembly

MS35457-9 screw (2)
MS20365-632C nut (2)
AN960-6 washer (4)

Figure 3. Section AA - Modified Airbox with SK-120-1A installed.

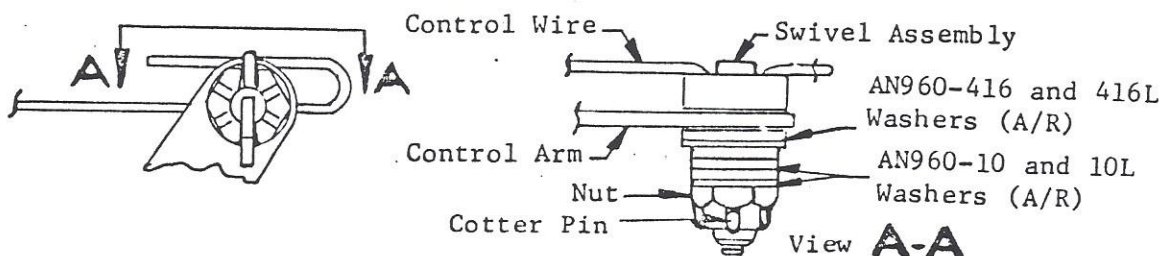


Figure 4. Control Arm Swivel Assembly