



**Customer Services**

Piper Aircraft Corporation

# SERVICE LETTER

No. 420A

Lock Haven, Pennsylvania, U.S.A.

March 10, 1972

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This Service Letter supersedes and voids Service Letter No. 420.

Reason for Revision: Additional Aircraft Affected (See Serial Numbers Affected, below).

Subject: Removal of Vanes from Throat of Carburetor Air Box

Models Affected: PA-24-250 Comanche

Serial Numbers Affected:

1. 24-1477 to 24-3646 incl. NOTE: This serial number group is the same as appeared on Service Letter No. 420 dated March 5, 1964. No action is required of aircraft within this group that have complied with Service Letter No. 420.
2. 24-105 to 24-1476 that have installed Carburetor Air (paper) Filter Kit Piper part number 754 285 only.

Compliance Time: Within the next 100 hours of operation.

Purpose: To modify carburetor air box assemblies (part number 21943-03) that were supplied with Carburetor Air Filter Kit, Piper part number 754 285, applicable to PA-24-250 Comanche Serial Numbers 24-105 to 24-1476 incl. The modification consists of removing the vanes which are located in the throat of the carburetor air box, part number 21943-03. After removal of vanes, the 21943-03 Air Box part number changes to 21943-05. FAA Airworthiness Directive 64-10-4, effective May 12, 1964 relates to this situation.

The explanatory portion of Service Letter No. 420 is reproduced below:

"A few reports have been received by the Service Department indicating that cracks have occurred in the vanes located in the throat of the carburetor air box, part number 21943-03. There have also been a few instances where a piece of the vane has broken off and lodged in the carburetor, causing a reduction in engine power.

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Purpose: (Continued)

"The removal of the vanes will not affect engine operation, therefore, they are to be removed from the air box on aircraft, serial numbers listed above."

Refer to the sketch on page 3 of this Service Letter for information and instructions concerning the removal of the vanes.

Proper air box/aircraft model application is:

PA-24-180; Carburetor Air Box Assembly, part number 21943-03 (with vanes)

PA-24-250; Carburetor Air Box Assembly, part number 21943-05 (without vanes)

Instructions:

Contained on the sketch on page 3 of this Service Letter.

Material Required:

Not applicable.

Availability of Parts:

Not applicable.

Effectivity Date:

This Service Letter is effective March 20, 1972.

The vanes may be removed in the following manner

1. Remove the carburetor air scoop assembly.
2. Remove the carburetor air filter.
3. Remove the clamp at the carburetor air box end of the carburetor air filter coupling. Compress the coupling and lay it on the top of the box.
4. With a blunt bladed tool, such as a wide blade screw driver (do not use a chisel), gently tap each side of the vanes at the welded attachment point until it breaks loose from the air box throat. (Due to the softness of the metal vanes they will generally break clean. However, be certain that there are no ragged edges left in the throat and that all particles of metal have been removed from the area.)

