



**PIPER**

***Customer Services***

# SERVICE LETTER

**No. 578A**

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

August 29, 1972

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(Supersedes and voids Service Letter No. 578 dated May 10, 1971)

Reason for Revision:

Avco Lycoming Service Bulletin No. 335, distributed with Piper Service Letter No. 578, has been revised (reference Avco Lycoming Service Bulletin No. 335A, dated April 14, 1972, attached).

Subject:

Fuel Line Inspection and Support Clamp Installation (Reference attached Lycoming Service Bulletin No. 335A, dated April 14, 1972).

Models Affected:

PA-31 Navajo Series

Serial Numbers Affected:

Reference attached Avco Lycoming Service Bulletin No. 335A, Models Affected.

Compliance Time:

Reference attached Avco Lycoming Service Bulletin No. 335A, Time of Compliance.

Purpose:

To provide distribution of the attached Avco Lycoming Service Bulletin No. 335A.

Balance of Service Letter Format:

Not applicable; refer to attached Avco Lycoming Service Bulletin No. 335A for necessary modification material, installation instructions, etc.

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## Service Bulletin



DATE: April 14, 1972

Service Bulletin No. 335A  
(Supersedes Service Bulletin No. 335)  
Engineering Aspects are  
FAA (DEER) Approved

SUBJECT: Fuel Line Inspection and Support Clamp Installation

MODELS AFFECTED: TIO-540-A series with serial numbers lower than 1931-61.

TIME OF COMPLIANCE: Within next 50 hours. NOTE: Aircraft owners who installed kit no. 12181, as required by the previous edition of this bulletin, must also install the new kit no. 12181-1 as herein described.

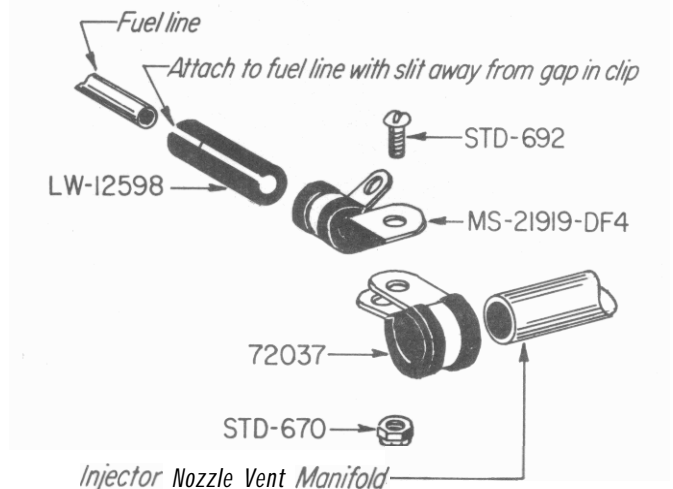
The fuel supply lines between the fuel injector manifold and the nozzles can become damaged and leak if they are severely **bent** during engine maintenance. Impact of cooling air, vibration from the engine and aircraft are **also** contributing causes.

As a means of minimizing the hazards caused by leaking fuel lines the following inspection and clamp-  
ing modification is recommended.

1. The fuel lines to the nozzles are made from 1/8 inch tubing and are located on the underside of the engine. A separate tube supplies fuel to the intake port of each cylinder. Check each line visually for evidence of physical damage and for stains caused by fuel leakage.

2. Remove any line that appears faulty. Do not attempt to repair any line that leaks. Bent lines may be **straightened**; an inside radius must not be less than 5/8 inch at any location. Do not **reuse** any line that is dented; cracks can develop at the site of a dent. See Parts Data for replacement information.

3. Examine the location of the clamps that secure the lines to the engine and compare them with the illustrations shown here. If any clamp **is not** located exactly as shown, correct it before proceeding to the next step. Also, examine the line at the clamp location for chafing. Replace any line that is chafed at the clamp location.



Fuel Line Support Kit, View Showing Order of Assembly

4. Using the parts furnished in the modification kit, proceed to assemble the additional clamps as shown in the accompanying illustration.

### NOTE

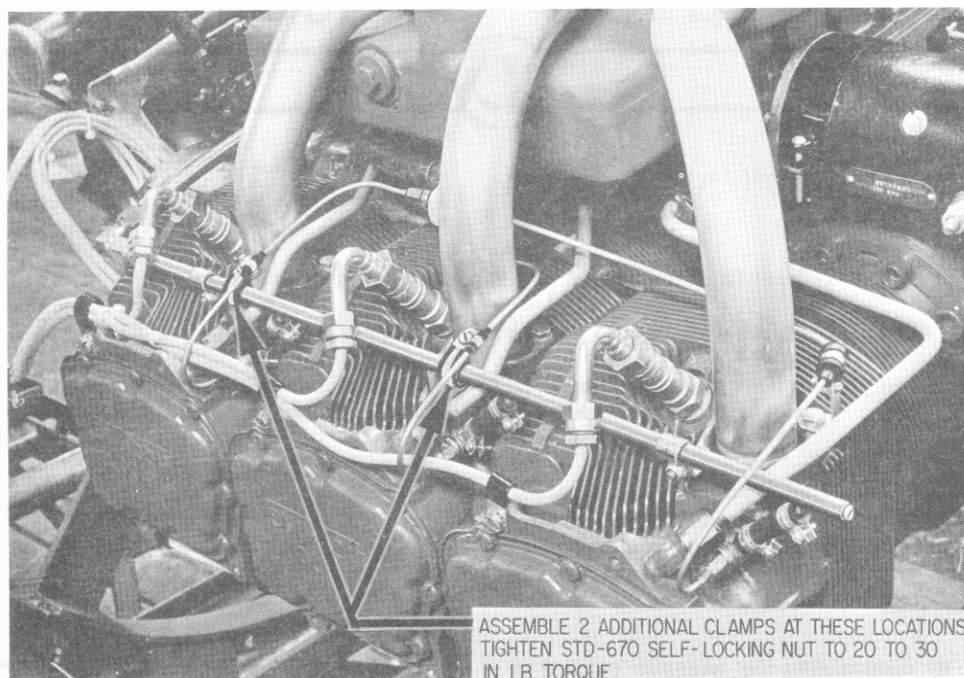
If difficulty is experienced when installing clamps on a cylinder fuel injector line due to aircraft baffling, the clamps may be installed in reversed position to provide clearance.

Completion of this bulletin should be noted in the aircraft log book.

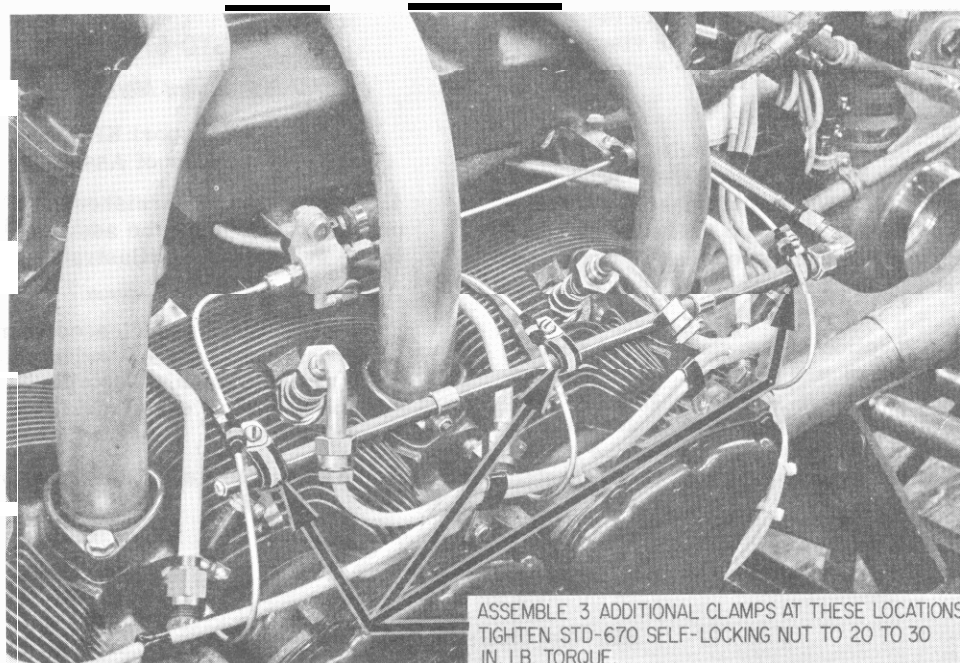
### PARTS DATA:

Part No.	Qty.	Name
LW-12181-1	1	Kit, fuel line support
Consists of:		
MS-21919.DF4	(5)	Clip 25 in. dia.
12037	(5)	Clip 38 in. dia.
LW-12598	(5)	Sleeve - Slit
STD-692	(5)	screw #10-32 x .50
STD-670	(5)	Nut #10-32 self-locking
75469	1	Manifold to nozzle tube assembly (used at No. 1, 3, 4 and 6 cylinders)
13964	1	Manifold to nozzle tube assembly (used at No. 2 and 5 cylinders)

Fuel line support kit, No. LW- 12181-I may be obtained directly from Avco Lycoming at Williamsport at no cost. Please include serial number of the engine with your order.



Left, Underside View of Engine Showing Location of Fuel Line Clamps



Right, Underside View of Engine Showing Location of Fuel Line Clamps

NOTE: Revision "A" to Service Bulletin No. 335 deletes LW-12145; adds MS-21919.DF4 and LW-12598 at same locations, revises step 3 to add inspection for chafing, and adds -1 to Kit No.

16507, 16734-A, 16992 These numbers for Avco Lycoming reference only