

SERVICE BULLETIN 86

SUBJECT: LYCOMING AIRWORTHINESS DIRECTIVE CONCERNING PROPELLER GOVERNOR
EXTERNAL OIL LINE

APPLICATION: ALL STAINLESS STEEL PROPELLER GOVERNOR OIL LINE KITS FOR GLASAIR
I, GLASAIR II, AND GLASAIR II-S

DESCRIPTION: Lycoming has issued an Airworthiness Directive (#90-04-06) that applies to external stainless steel propeller governor oil lines. The AD requires inspection and replacement of the line if it is damaged or leaking, and also requires that any aluminum fittings in the assembly be replaced with steel fittings when the oil line is next removed for any reason. A copy of the Airworthiness Directive is included with this Service Bulletin.

SOLUTION: Comply with Airworthiness Directive 90-04-06 for your Stoddard-Hamilton stainless steel propeller governor oil line kit. Support the oil line in the section forward of the engine baffling bulkhead fitting in a manner similar to that shown in Figure 1 of the Lycoming Airworthiness Directive.



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AVCO CORPORATION, LYCOMING DIVISION
AIRWORTHINESS DIRECTIVE
ENGINE
SMALL AIRCRAFT

90-04-06 TEXTRON LYCOMING: Amendment 39-6427.

Applicability: All Textron Lycoming four cylinder piston engines equipped with a rear mounted propeller governor and external oil line.

Compliance: Required as indicated, unless already accomplished.

To prevent oil line fracture and loss of engine oil, accomplish the following:

(a) Within the next 25 hours in service or whenever the propeller governor oil line is removed, whichever occurs first, accomplish the following:

(1) Inspect the propeller governor external oil line for abrasions, cracks, and oil leaks along the length of the line and at the end attachment fittings. Inspect to determine that the two cushion type support clips (clamps) are properly installed as shown in Figure 1 of the Appendix to this AD, and assure that sufficient clearances exist between the oil line and adjacent components.

(2) If any leaks, damage, or interference condition exists or if support clips are not properly installed, replace the governor oil line and its attachment end fittings with new parts even though the parts show no visible damage. Refer to Figure 1 in the Appendix to this AD, for parts identification, line routing, and location of support clips.

(b) At the next engine overhaul or anytime the governor oil line is removed for any reason, whichever occurs first, remove any governor oil line assembly having aluminum attachment nuts and fittings (elbow/nipples) and reinstall an oil line assembly with corresponding steel end fittings.

NOTES: (1) Special attention should be given to insure both clips and/or supports are reassembled to the original configuration.

(2) The attachment nuts are components of the governor oil line tube assembly which have been changed by Textron Lycoming from aluminum to steel without changing the oil line part number. Aluminum nuts may be identified by their blue colored anodized surface. The attachment nuts as well as the elbow/nipple end fittings may also be identified by using a magnet to differentiate aluminum from steel.

(3) Textron Lycoming Service Bulletin No. 488, dated September 9, 1989, Textron Lycoming Service Instruction Letter No. 1435, Part III, dated April 25, 1986, and Lycoming Parts Catalog Manual for the particular engine model, contain related information on correct oil line installation and end fitting attachments.

(c) Aircraft may be ferried in accordance with the provisions of FAR 21.197 and 21.199 to a base where the AD can be accomplished.

(d) Upon submission of substantiating data by an owner or operator through an FAA Airworthiness Inspector, an alternate method of compliance with the requirements of this AD or adjustments to the compliance times specified in this AD, may be approved by the Manager, New York Aircraft Certification Office, Engine and Propeller Directorate, Aircraft Certification Service, Federal Aviation Administration, 181 South Franklin Avenue, Room 202, Valley Stream, New York 11581.

This amendment (39-6427, AD 90-04-06) becomes effective on February 15, 1990.

FOR FURTHER INFORMATION CONTACT:

Mr. Pat Perrotta, or Mr. Nick Minniti, Propulsion Branch, ANE-174, New York Aircraft Certification Office, Engine and Propeller Directorate, Aircraft Certification Service, Federal Aviation Administration, 181 South Franklin Avenue, Room 202, Valley Stream, New York 11581; telephone (516) 791-7421.

APPENDIX
90-04-06

In all cases one or both of the Textron Lycoming supplied governor line clamps and/or supports installed at the plant and conforming to Textron Lycoming standards were missing. After careful inspection, it was determined that the clamps and/or supports had not been re-installed per Textron Lycoming specifications during field work on the engine. Proper governor line support is mandatory to avoid engine failure.

A visual inspection should be made to ascertain that both the Textron Lycoming specified clamps and/or supports are installed properly and are intact.

If the visual inspection reveals that clamps and/or supports are missing, the governor oil line should be thoroughly inspected to insure that no cracks exist. This includes that area under the ferrules at the flared ends of the lines.

As a product improvement, the propeller governor oil line now comes equipped with steel connecting nuts, P/N AN818-6. These nuts are a component of the tube assembly and have been changed from aluminum to steel without changing the tube assembly part number. Also, the aluminum elbow at the front of the crankcase has been replaced by a steel elbow, P/N MS20822-6; see Figure 1. There are two ways to identify which nuts and/or fitting you have; (1) aluminum nuts and fittings are anodized making them blue in color or (2) the use of a magnet to determine aluminum from steel. If aluminum components are found they should be replaced at overhaul or earlier at owners discretion.

In reference to Figure 1, the views and identification of parts are only typical. They may not necessarily portray your particular installation. Refer to Parts Catalog for proper clamps. Nevertheless, special attention should be given during dismantling of the governor oil line on your engine to insure both clamps and/or supports are reassembled to the original specified configuration.

APPENDIX
FIGURE 1
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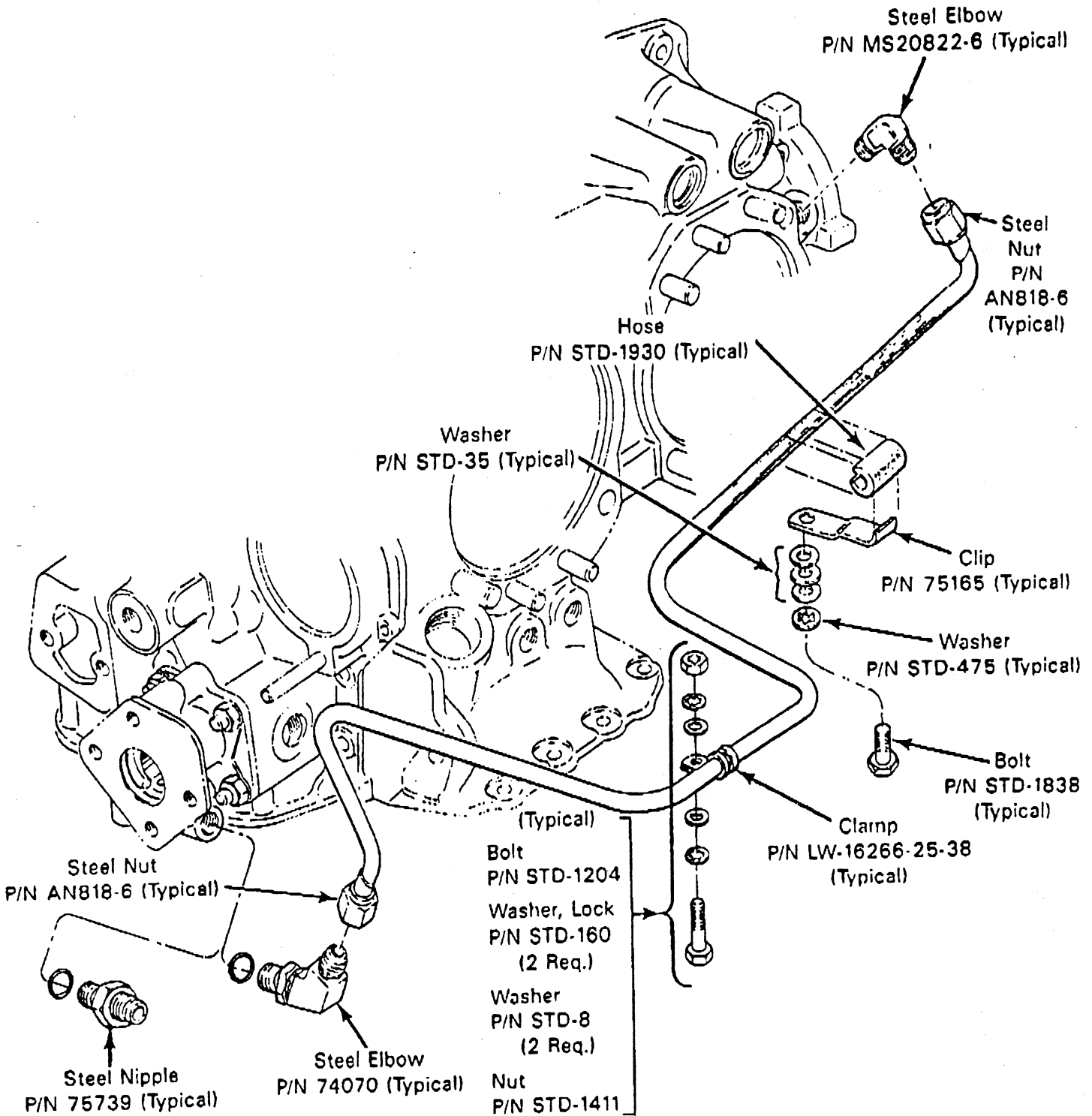


Figure 1. Propeller Governor Line Support