

TEXTRON Lycoming

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MANDATORY SERVICE BULLETIN

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Service Bulletin No. 488A
(Supersedes Service Bulletin No. 488)
Engineering Aspects are
FAA Approved

SUBJECT: Propeller Governor Line Support

MODELS AFFECTED: All 4 cylinder engines with rear mounted governor

TIME OF COMPLIANCE: Within the next 25 hours of operation and at engine overhaul.

Reports from the field have revealed a number of engine failures due to oil starvation resulting from broken governor lines on four cylinder engines with rear mounted governor.

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 replaced or thoroughly inspected to insure that no cracks exist. This includes fluorescent penetrant inspection of the area under the ferrules at the flared ends

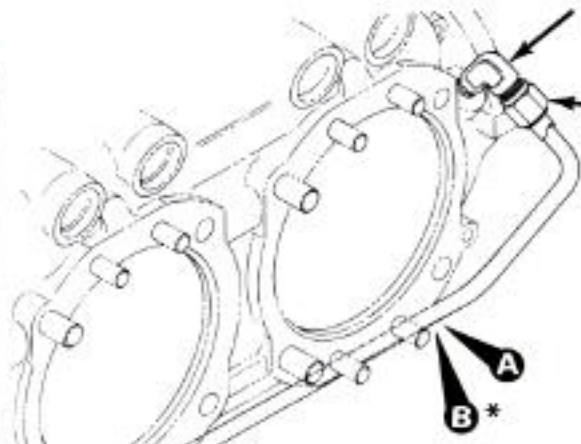
of the lines.

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 Also, the aluminum elbow at the front of the crankcase has been replaced by a steel elbow, P/N MS20822-6; see Figure 1.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.

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Textron Lycoming has approved the usage of the Piper Aircraft Corp. air conditioning bracket as a support of the propeller governor line. The split Hose P/N STD-1930 must still be used along with the bracket and hardware supplied by the airframe manufacturer. It is essential that the attaching bracket is properly installed so that it firmly supports the split hose covered governor line to the crankcase.



Steel Elbow
P/N MS20822-6
(Typical)

Steel Nut
P/N AN818-6
(Typical)

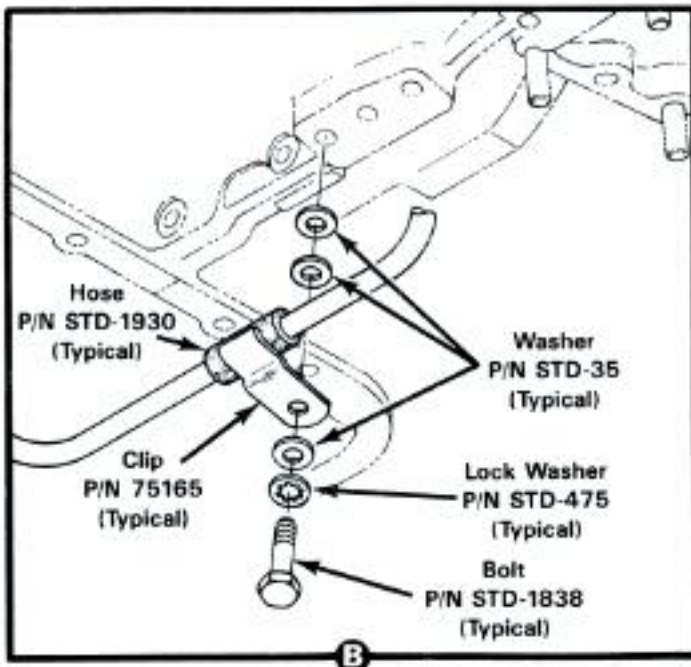


Steel Elbow
P/N 74070
(Typical)

Steel Nut
P/N AN818-6
(Typical)

Steel Nipple
P/N 75739
(Typical)

* Most older standard cylinder flange engines differ at this crankcase attaching point of the propeller governor line as opposed to the wide cylinder flange attachment shown in this illustration. Standard cylinder flange engines use an Adel clamp which attaches to the bottom crankcase perimeter bolt directly aft of the generator bracket. Fittings for standard cylinder flange line may be -5 (5/16") instead of -6 (3/8"). Also, some earlier model propeller governor drives used 1/4" NPT fittings in the prop. governor adapter. If any of these fittings are found, replace with equivalent AN or MS steel fittings.



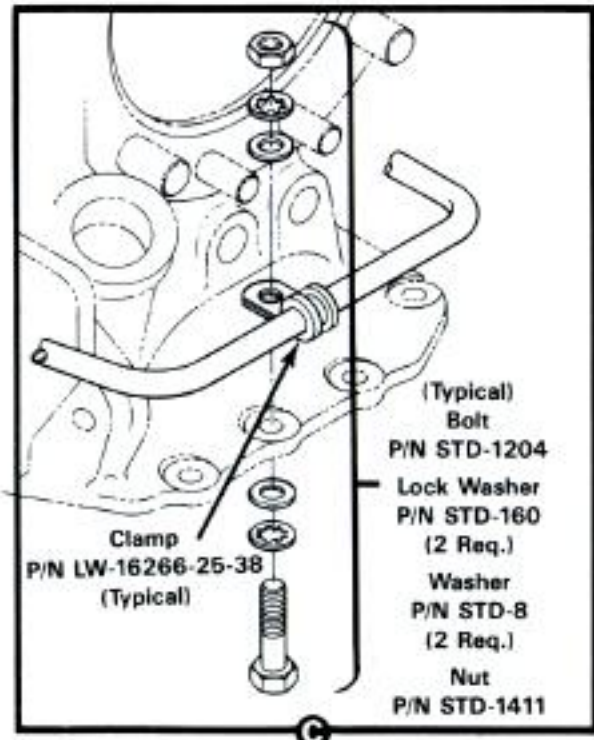
Hose
P/N STD-1930
(Typical)

Clip
P/N 75165
(Typical)

Washer
P/N STD-35
(Typical)

Lock Washer
P/N STD-475
(Typical)

Bolt
P/N STD-1838
(Typical)



Clamp
P/N LW-16266-25-38
(Typical)

(Typical)
Bolt
P/N STD-1204

Lock Washer
P/N STD-160
(2 Req.)

Washer
P/N STD-8
(2 Req.)

Nut
P/N STD-1411

Figure 1. Propeller Governor Line Support

NOTE: Revision "A" adds note to illustration for Piper Aircraft Corp.