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**SERVICE BULLETIN**

**SB014-93**

Subject: Lancair 200, 235, 320, 360 Main Gear Overcenter Links

Date: September, 1993

Ref: -

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Status: Advisory - Immediate Inspection! Replacement

The smaller, lower end of the GM3 Overcenter Link assembly is fitted with an AN490 series rod end. This rod end is bolted into position and we have recommended that it also be inserted with Hysol paste adhesive.

We've recently heard of two cases where, with what was explained as normal aircraft operations, the rod end separated from the GM3 causing the gear leg to partially fold while taxiing.

We recommend that you immediately inspect your assemblies for any signs of looseness and/or bending and recommend replacement with the revised model

The installation alignment of the attachment bolt (AN3-7A) has proven critical to proper integrity of the finished component. It appears that this installation, to be done correctly and attain full strength, is difficult and an incorrect installation is equally difficult to detect. Typical errors include nicking the upper or lower walls of the rod end or not leaving maximum available edge distance. Consequently, we have developed a fully retro-fittable replacement component which eliminates this difficult assembly nature and at the same time offers increased margins.

**Inspection Procedure:**

1. Remove and inspect the GM3 (lower) assembly. Check that the rod end attaching bolt is properly installed.
2. Remove the AN-7A bolt. Remove the rod end and inspect it for any signs of wear, bending or cracking, etc.

**Recommended component replacement:**

To eliminate the variables of this component assembly process and increase margins at the same time, we are now producing a modified system which replaces the entire GM3 (lower) link. This system eliminates the need to drill and attach a rod end. It comprises a longer, internally threaded, (using a helicoil) GM3 (lower) and replaces the rod end and female HF6 rod end bearing with a single male, HM6 rod end bearing.

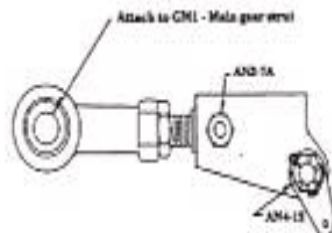
Based on a builder survey, builder assembly variations have also resulted in differing overall lengths required. So when ordering, note the center to center length required for your particular aircraft.

This system is recommended as it greatly reduces possible assembly errors and is completely retrofittable. These items are currently in stock and are available on a low cost basis so as to encourage replacement.

Cost: Either "A" or "B" version - \$74.00 (includes GM3 L & K (2) HM6 rod ends with check nuts).

Availability: In stock

Original GM3 lower assembly:



Revised GM3-A/B lower assembly:

Measure distance "X" (bearing center to pivot bolt center) on your aircraft if for a retrofit:  
• for distance up to 3.92" - use GM3-A  
• for distance over 3.92" - use GM3-B  
(use style "B" for first time installation)

