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MANDATORY SERVICE BULLETIN P-2

LANDING GEAR HYDRASORB INSPECTION

DATE: June 4, 2012 Revision None

SUBJECT: Inspection of landing gear hydrasorb shock struts.

MODELS AFFECTED: Piper PA-25-235 and Piper PA-25-260 Pawnee aircraft with Univair hydrasorb shock struts p/n U486-604-1 as used on the Univair U64052-002 and U64052-003 shock strut assemblies.

COMPLIANCE: Inspection is required prior to further flight. Continued inspections are required at every 100 hour / annual inspection.

STATEMENT OF DIFFICULTY:

There has been a field report of a failure of the Univair manufactured Piper PA-25 Pawnee shock strut (hydrasorb), Univair part number U486-604-1. Failure occurred at the lower end of the unit (landing gear attach point). A failure in this area could cause loss of ground control and possible damage of the aircraft.

Failure was comprised of a fatigue crack that propagated from the edge of the bolt hole, across a portion of the length of the hole until the end of the unit broke off. The initial crack appears to have developed over the course of time before final failure occurred.

This Service Bulletin requires the examination of both left and right hydrasorbs for any possible cracks or irregularities.

PROCEDURE:

1. Ensure aircraft is situated in a stable configuration, incapable of moving.
2. Raise and support wing to take weight off of the shock strut assembly of the side to be inspected.
3. Remove shock strut assembly from aircraft. Verify that the hydrasorb unit is manufactured by Univair by the crossed-line identification mark as illustrated in figures 1 and 2.
4. Visually inspect lower end fitting for any obvious cracking and/or hole elongation. Also, examine lower end fitting with a dye-penetrant inspection per AC43.13-1A. See figures 1 and 2.

Note: The hydrasorb that failed had an end fitting as in figure 1. Figure 2 is a hydrasorb with a newly designed end fitting.

5. If any hole elongation is found, or if any cracking is found, replace the U486-604-1 hydrasorb unit prior to re-installation of the U64052- series shock strut assembly.
6. Inspect attach hardware and elastic shock cords. Replace as necessary.
7. Installation of the shock strut assembly is the opposite of the removal.
8. Repeat procedures 1 through 7 for the other landing gear.

Figure 1

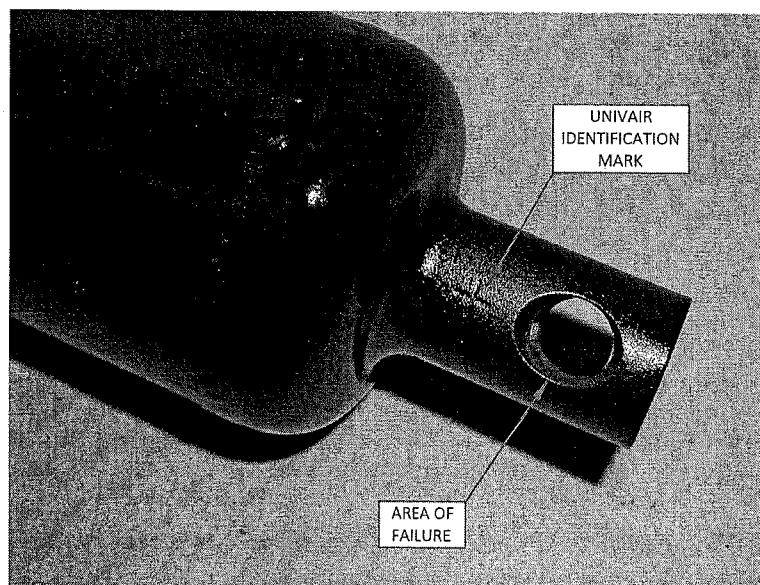
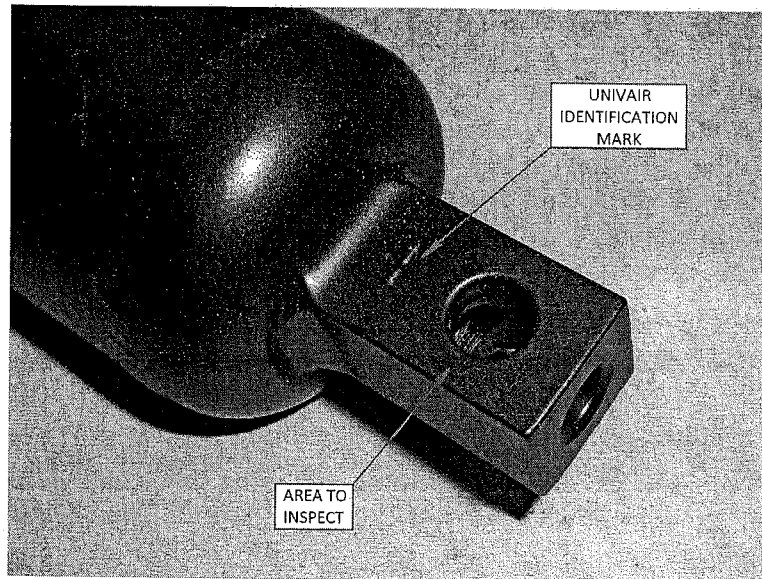


Figure 2



At every 100 hour time in service interval and/or annual inspection, make a logbook entry stating that Univair Service Bulletin No. P-2, Revision None (or later revisions) has been complied with.

INFORMATION AND PARTS AVAILABILITY:

Please contact Univair Aircraft Corporation with any questions or concerns regarding the information contained in this Service Bulletin.

Contact Univair Aircraft Corporation for availability and pricing of U486-604-1 replacement hydrasorbs incorporating the new style square end fitting.

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