



SERVICE BULLETIN #55

DATE: December 01, 2001
SUBJECT: Nose Gear Strut
APPLICABILITY: All Series 5 (Vixen, Voyager) Tricycle Gear Aircraft
COMPLIANCE: Pre-flight
FROM: SkyStar Aircraft Engineering

We have received reports of cracks developing forward of the rod end attach point where the support tubes are welded to the main nose landing gear strut (figure 1). These cracks could be caused by heavy side loading, a strong shimmy, twisting motion from rough field operations, or a hard landing. Some of these have been missed during pre-flight inspections and have resulted in failure of the nose gear. The reports have been most common with aircraft supporting the heavier powerplants such as the Continental O-200, IO-240B, Lycoming O-235, and converted Subaru engines.

ACTION: Prior to every flight the nose gear assembly should be carefully inspected. Rock the nose gently to the left & right to help make cracks more visible. It may be difficult to see an incipient crack under powder coating or paint. **For a Full Inspection:** Remove the powder coating or paint in the affected area and apply a dye penetrant to assure that hair line cracks have not developed. If any suspected side loading or shimmy occurs the nose gear should be inspected immediately. With the development of the Series 6, a heavy duty nose gear strut was created for the use of a larger nose wheel. This strut was also used on some late Series 5 aircraft. The heavy duty strut will have six rosett welds, 3 on each side of the main strut that incorporates an internal reinforcement and should be easy to identify. Those choosing to upgrade before February 1st 2002 can save \$445.71. In some cases the pivot bearings will need to be replaced. The diameter of the pivot pin on the newer nose gear strut measures 0.4375 (7/16"). Measure the pivot pin on your current gear and if it measures other than 0.4375 you will need to replace the pivot bearings as well.

Part Number: 35027.000 Nose Gear Strut 1 required Retail \$905.71 Before 02-01-02 \$460.00
Part Number: 33038.000 Pivot Bearing 2 required Retail \$4.50 ea.

To order parts please contact Customer Service at 208.454.1443.



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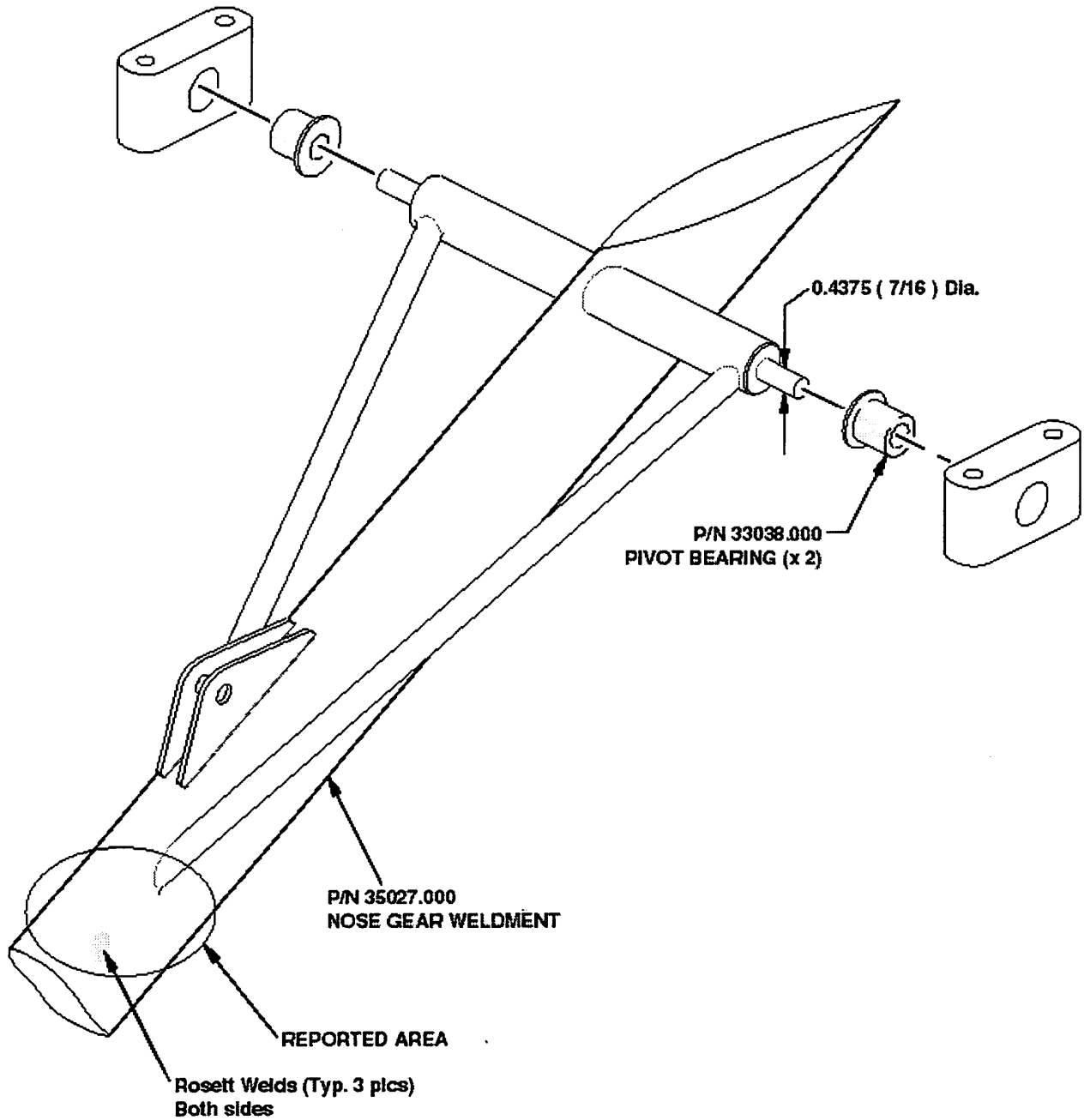


Figure 1