

MOONEY AIRCRAFT INC.  
KERRVILLE, TEXAS

SERVICE LETTER 20-24

SERVICE BULLETIN M.20-24

DATE: 5-10-57

SUBJECT: Kit-Improved replacement for P/N 7039 "Shaft assembly  
Nose Gear Steering Horn".

MODELS AFFECTED: M-20 Serial Number 1002 thru 1101.

PARTS LIST: P/N7039 Shaft Assy. Containing Torrington E-47 Bearing

There have been a few instances of failure of P/N 7039 (See figure 1) in which the long shaft separated from the tubular lug attaching it to the nose gear leg. A minor design change has strengthened this joint on the enclosed P/N 7039. To install this part follow the instructions below. (see figure 1).

1. Remove the side cowls.
2. Remove P/N 6197.
3. Remove bolt A and B.
4. P/N 7043 may then be removed from the airplane by detaching the Heim link at the rudder torque tube fittings. Do not change the adjustment of this link.
5. Remove P/N 7041 collar and P/N 7039.
6. Install new P/N 7039 and replace collar. Apply a light grease to the shaft. P/N 7039 should turn freely but should have a minimum of end play. The fit may be adjusted if necessary by filing P/N 7041 or using shims between it and P/N 7040.
7. Reinstall P/N 7043. At bolt A reinstall the hardened bushing from the old assembly, applying a light grease to its external surface. Bolt A should be pulled down tight. Screw C attaching P/N 6197 to the firewall has a loose speed nut behind the firewall access must be gained through partial removal of the exhaust cavities to position this nut.

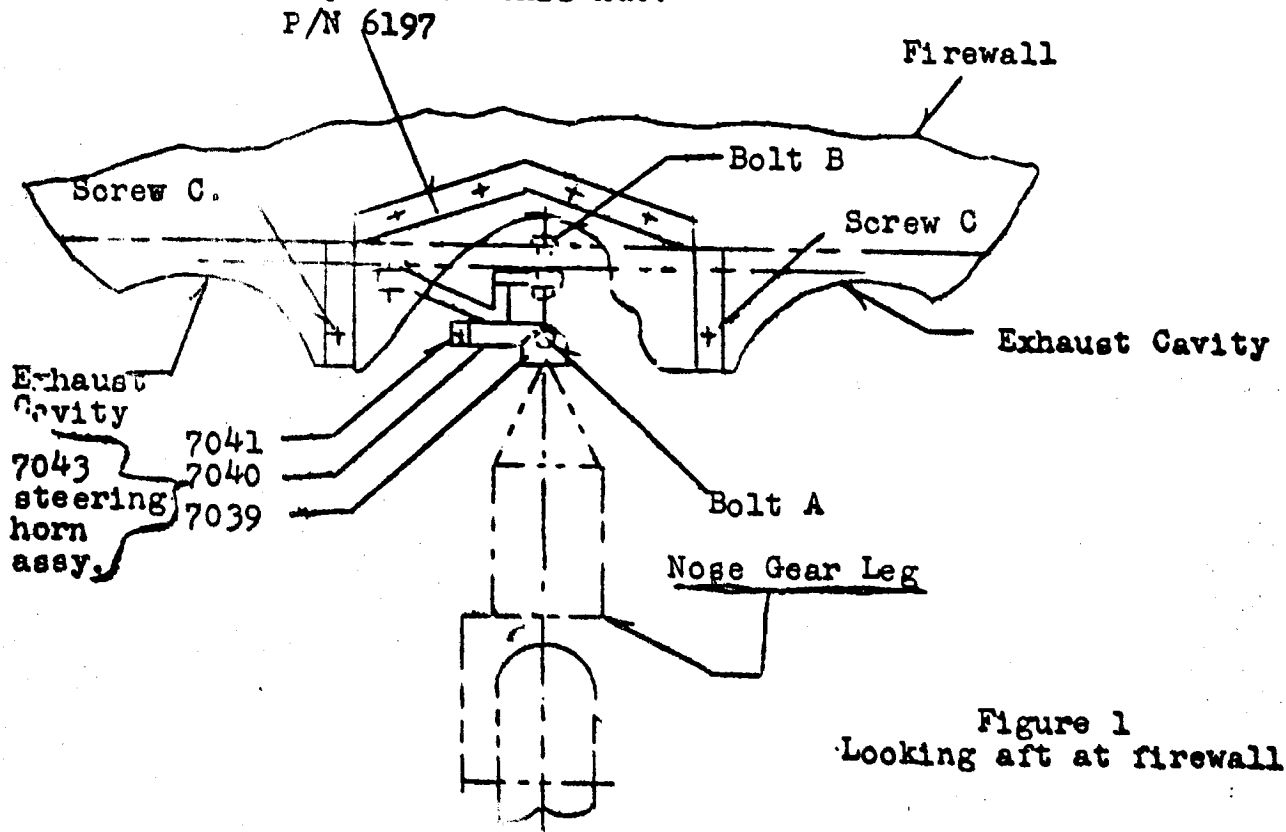


Figure 1  
Looking aft at firewall