

Refer to drawing 7-L-1 to check for the orientation of the nose gear strut assembly



7L1-1J Rev. 1

Nose Gear Strut

Assembly

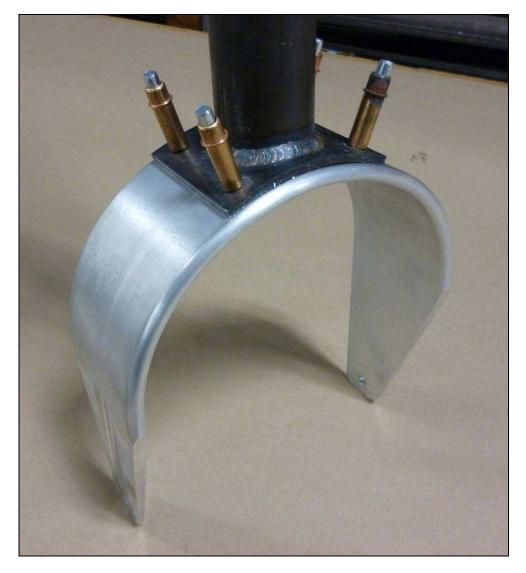


Rounded nose wheel fork

Orientation: the flat side is the rear.

Center the Nose Gear Strut Assembly on the Wheel Fork Doubler and Wheel Fork

Clamp the nose wheel fork to the bottom of the gear leg assembly.



7L1-1J Nose Gear Strut Assembly

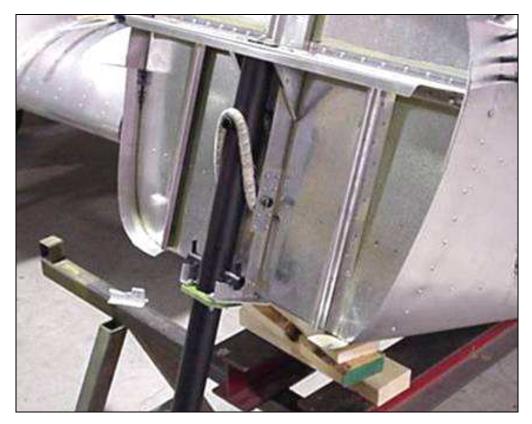
**7L2-4J Nose Wheel Fork** 

Make sure that the Nose Gear Strut is facing forward (7L1 Drawing). Once the Gear is squared and center on the Fork, drill and cleco.





The holes can be opened up to the correct size and bolted together.



1080 Shock Ring Bungee

Attach the Shock Ring Bungee to the Nose Gear and position on the Firewall (refer to Fuselage Assembly Section 7 Page 9 of 9).



7L1-1J Nose Gear Strut Assembly

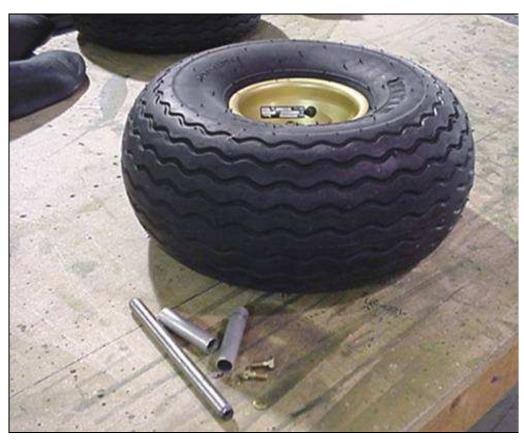
7F8-6 Nose Gear Stop

Check to make sure that the Nose Gear steering arms are both sitting the same on the Nose Gear Stop 7F8-6.





**Follow the Matco instructions for the** Tubeless Kit O-Ring installation on the MH wheels <a href="http://static.veracart.com/matco/item">http://static.veracart.com/matco/item</a> <a href="pdfs/2659/document1.pdf">pdfs/2659/document1.pdf</a>



7L1-3J Nose Wheel Axle Matco Nose Wheel

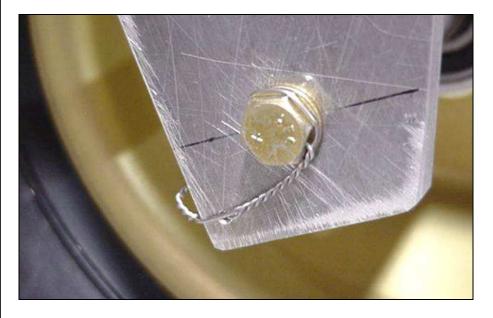
Mount the tires to the rim for the Nose and Main Wheel (refer to the Matco Installation Drawing for Tubeless Kit Installation).



Nose Wheel Assembly

ORIENTATION: The tapered side is towards the front.

Slide the Axle through the wheel and apply grease to the Axle. Position the Axle Spacers 7L1-4J on the correct side for proper centering of the Nose Wheel. Bolt the Axle to the Nose Fork with AN5H-5A bolts.



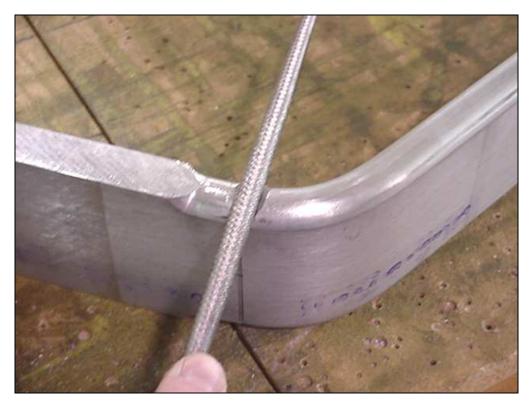
7L2-4J Nose Wheel Fork

The Axle bolt will have to be secured to the Fork with Safety Wire. Drill a #40 hole on the rear corner of the Nose Fork. Safety Wire with .025" Wire (see AC43.13 for Safety Wiring).



7L2-1J Main Gear Spring

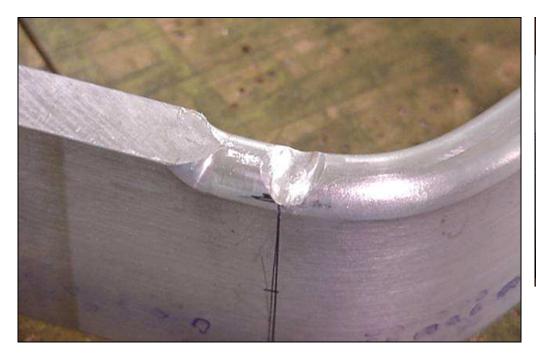
Locate the center of the Main Gear Spring. Measure and mark the location where the Gear/Strut Fitting 7F17-1SP bolt will be positioned on the Main Gear.





7L2-1J Main Gear Spring

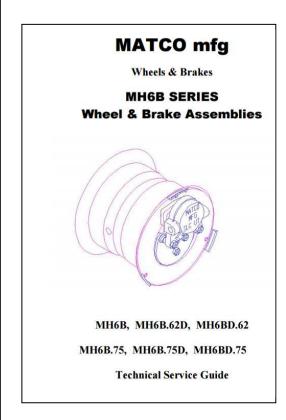
Once the correct position is determined. Filing a notch is needed to secure the Gear in place from moving side-to-side and front to back. Using a Dremil tool will also work. Make sure not to make the notch too large.



Make sure that all the file marks are removed.



CHECK: The notch is not too tight: taper the sides of the notch to allow the gear to flex around the welded gear bolts.





http://www.matcomfg.com/TechnicalManualsServiceBulletins-tp2-23.html

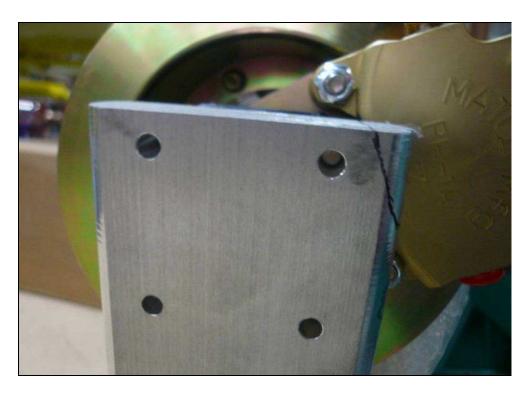
Refer to the Matco installation instructions supplied with the wheels. The info is also available on line:

http://static.veracart.com/matco/item\_pdfs/2395/document1.pdf



Matco rim MHE6B1.25Z

Follow the Matco instruction to assemble the wheels.



Matco Main Gear Axle

The bolt holes for the Axles are matched drilled on the Gear Spring. Trial fit the wheel assembly to mark where to cut the landing gear.





Cutout in the landing gear to make room for the calipers.



The calipers does not touch the landing gear. The caliper assembly should still be able to slide in and out without touching the gear.

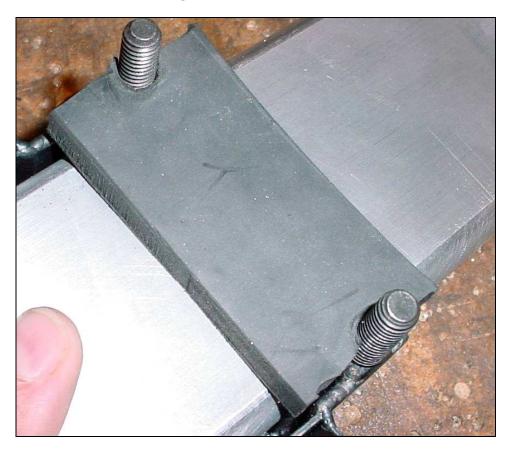




**7L2-2J Gear Plates** 

Drill the two holes in the Gear Plates. On the 20mm flange, the Gear Plate corners will need to be cut off.

Install the Wheels to the Gear. **7L2-1J Main Gear Spring** 



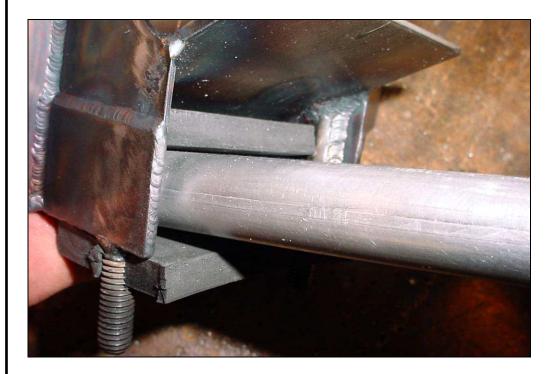


7L2-2A RUBBER SPACER

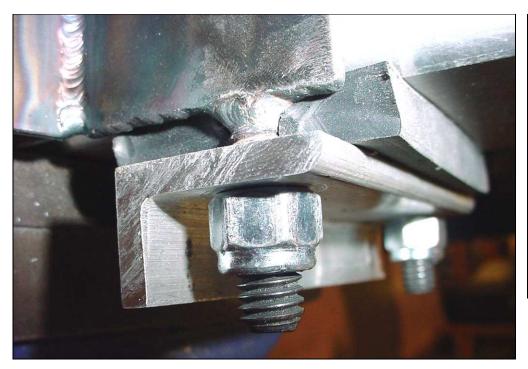
3/8" top and bottom rubber spacer.

Length: approximately 86 to 89mm to fit inside the channel pick up welded on the gear strut fitting assembly 7F17-1SP

Bottom rubber: cutout for the gear bolts (to help keep the rubber spacer from slipping off).



Rubber spacers fit between the channel pick up on the gear strut fitting 7F17-1SP. Gear between upper and lower rudder spacers



Gear plate 7L2-2J and self locking nuts (install a washer underneath the nut). CHECK: No rubber is trapped between the gear plate and the bottom of the gear strut fitting (channel pick up 7F17-1SP)



Check that the Gear Plate does not make contact with the Channel Pick (bottom of gear strut fitting). Do not over torque.





Detail gear strut fitting: The gear is firmly held in place between the top and bottom rubber spacers.

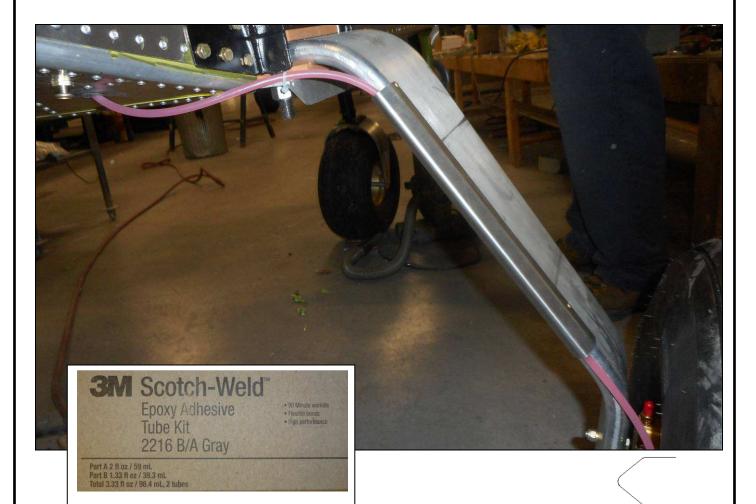
Check the gear is not loose: hold the aircraft by the wing strut, place a foot on the wheel: hold the aircraft from moving as you try to turn the wheel. Check both wheels.



Brake line routing along the aft edge of the landing gear.



Location of grommet in cabin floor, see bottom left diagram on drawing 7-F-9





The BLR is attached to the Gear using 3M Scotch-Weld Epoxy Adhesive. This can be purchase from Aircraft Spruce.

The Expoxy can also be used to seal the fitting on the brakes and fuel connection. To remove the fitting us a heat gun to loosen.

OPTION: Brake line retainer C75-L2-BLR

