

Section C75-LA-2 Main Gear Installation



This manual has been prepared for assembly of the main gear. This photo assembly manual is intended as a supplement to the drawings. If there is any discrepancy between this manual and the drawings, the drawings supersede this manual. For more information on building standards and allowable tolerances see "Construction Standards for Zenair Light Aircraft" available from Zenith Aircraft Co.



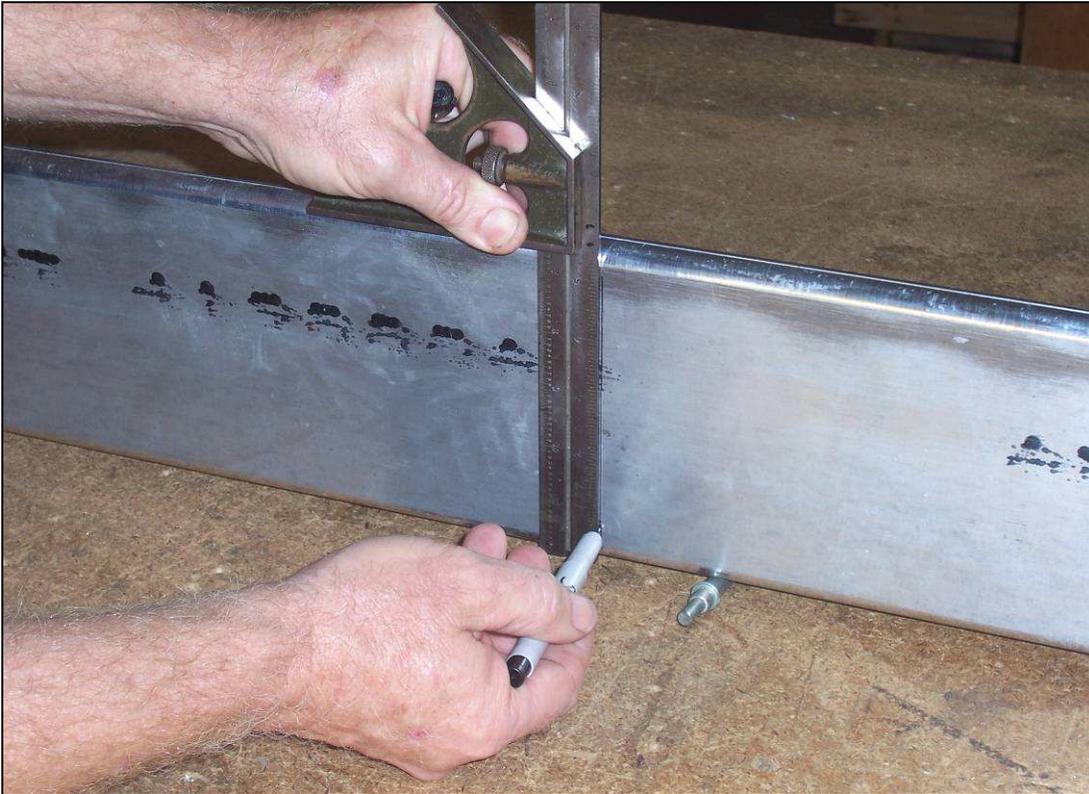
P/N: 75L2-1
Tundra Main Gear
Spring

Orientation: The 'flat' side of the Gear Spring is the aft side.

Set the **BOTTOM AFT CORNERS** flush with the edge of the work bench. Measure the distance between the legs of the Gear Spring to find the center. Mark the center on the work bench.



Set a square flush with the edge of the work bench on the center mark. Mark the center line on the aft side on the bottom of the Gear Spring.



Use a smaller square to draw the center line across the Gear Spring.



Measure the distance between the studs on the Gear Strut Fittings.

Note: Measure the distance from the center of the stud to center of stud.



Divide the distance between the studs on the Gear Strut Fittings by two. Mark a line on the Gear Spring for the studs on the Gear Strut Fittings.

Note: Remember the distance between the Front studs is different than the Rear studs on the Gear Strut Fittings. **Be sure the Gear Spring is oriented correctly to match the Gear Strut Fitting's Studs.**



With a die grinder or rotary tool, sand an 1/8" notch into the Gear Spring for each Stud location.

Note: Check the fit of the Gear Spring on the Gear Strut Fittings. Sand the notches to the depth necessary to fit between the Studs. Try to keep the depth of the notches approximately the same.

MATCO mfg Wheels & Brakes

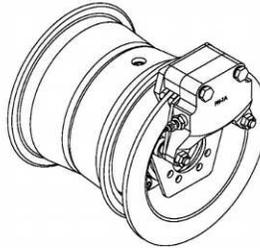
General Information for Wheel & Brake Assemblies



Technical Service Guide

REV D 8/16

MATCO mfg Wheels & Brakes



MHE51B, MHE51B.75, MHE51S, MHE51Z, MHE51CZ & MHE51J 5" E - Series External Caliper Wheel and Brake

Technical Service Bulletin

REV K 10/2014

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<http://www.matcomfg.com/TechnicalSupport-tp2-14.html>

To assemble the wheels refer to the Matco documents included with the wheels.



Matco Main Gear
Axle

The bolt holes for the Axles are matched drilled on the Gear Spring. Install the Axles on the Gear Spring. Then install the Wheels on the Axles.

Main wheel axle safety pin

**CRUZER
CH750**

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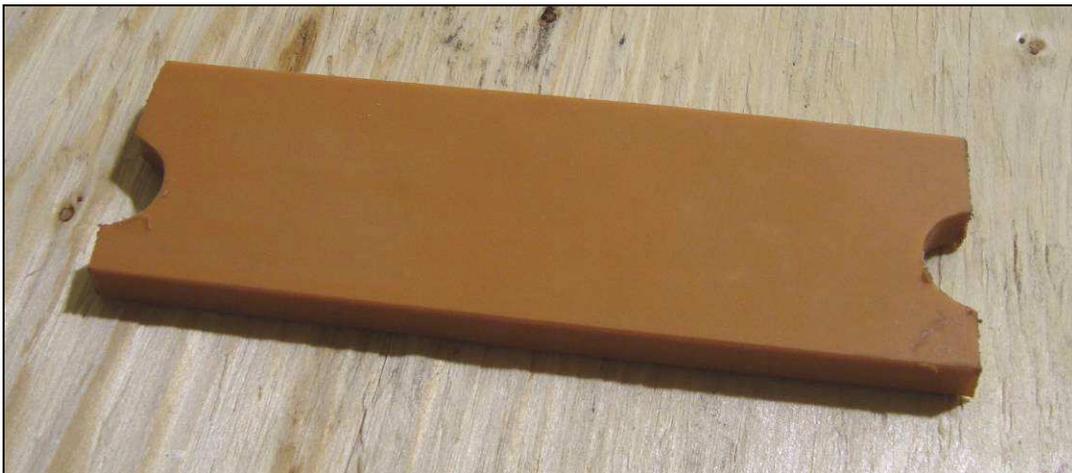
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Matco Main Gear Axle

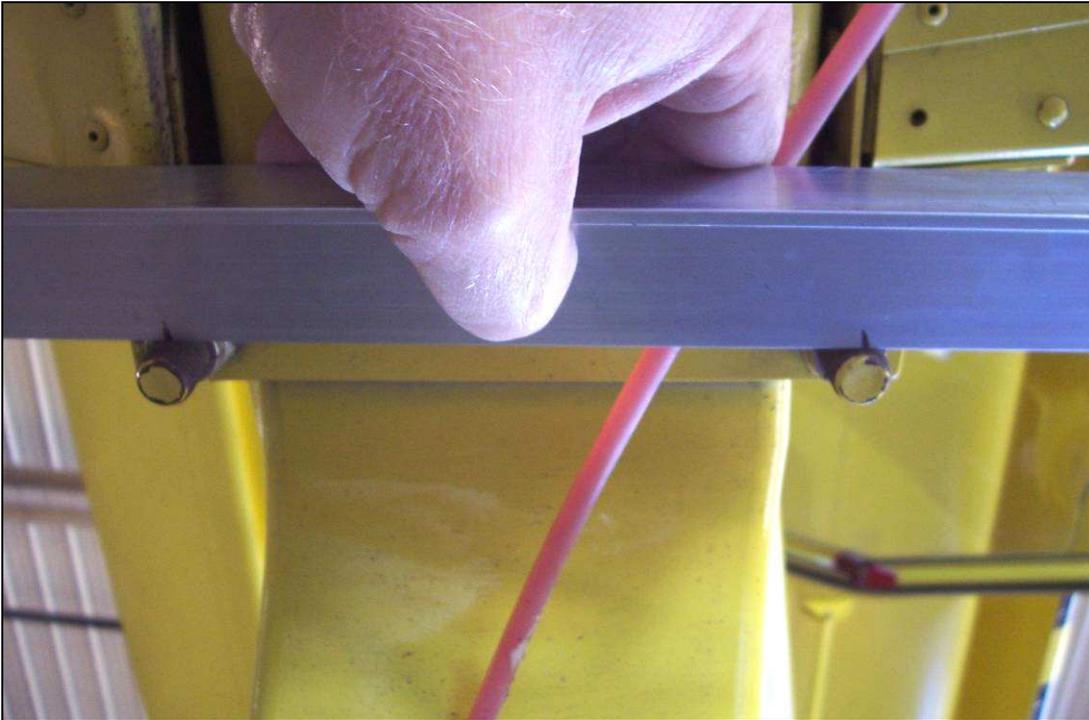
Main wheel calipers



P/N: 75L2-2
Main Gear Support Rubber



Notch the Support Rubber to clear the Studs on the Gear Strut Fittings. The notches will be centered on the bottom Support Rubber. The top Support Rubber notches will be offset to one side, see photo to the right.



P/N: 75L2-3
Main Gear Support

Hold the Main Gear Support up to the Studs on the Gear Strut Fitting. Mark the center of the Studs on the Main Gear Support.

Orientation: The 1-1/2" flange should be marked to be drilled.



Mark a center line on the flange of the Main Gear Support. Extend the marks for the Stud locations across the center line. Drill the holes out to 1/2" and deburr the holes. Mark a line 20mm from the center of the hole and trim off the excess material from the Main Gear Support.



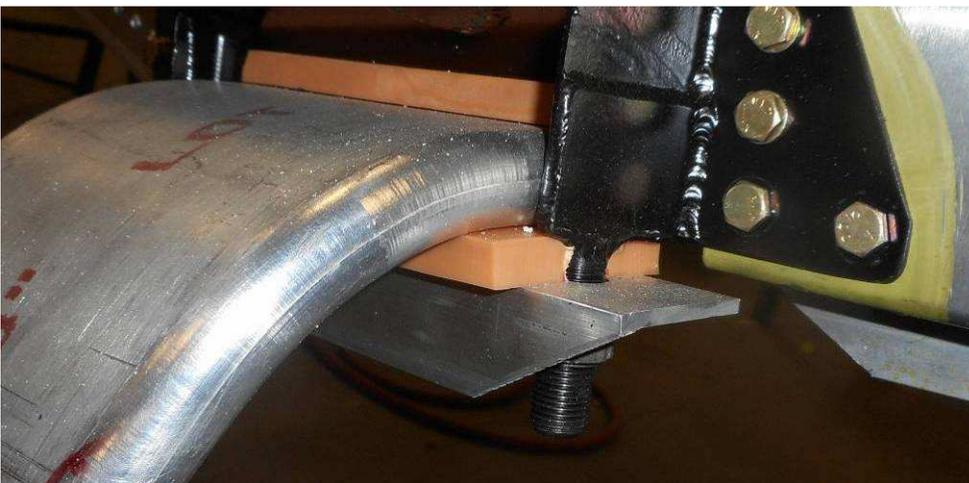
P/N: C75L2-2
Main gear support
rubber
(UPPER)

Install the top Support Rubber on the Gear Strut Fittings between the Studs.
Then slide the Gear into place between the Studs.



P/N: C75L2-2
Main gear support
rubber
(LOWER)

Install the bottom Support Rubber and then slide the Main Gear Support into place.

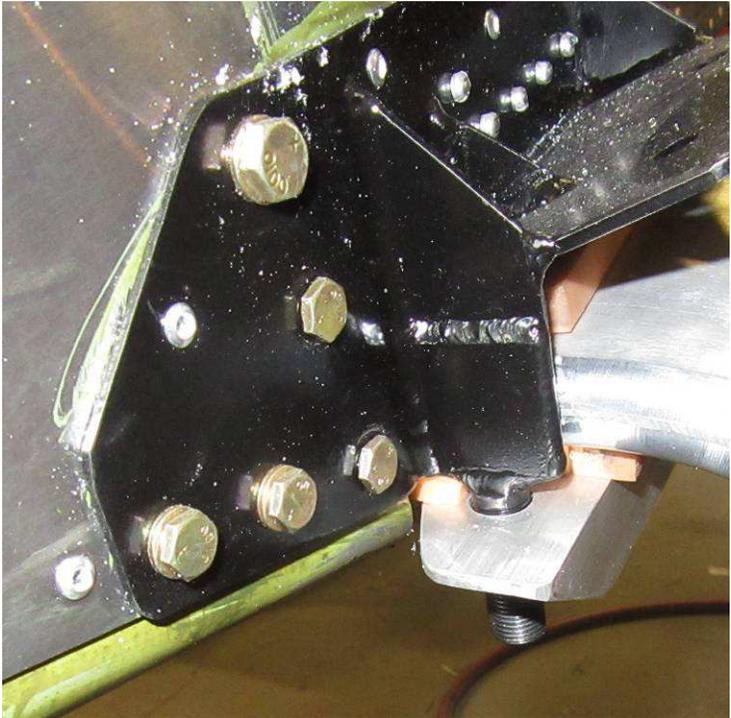


P/N: C75L2-3
Main gear support

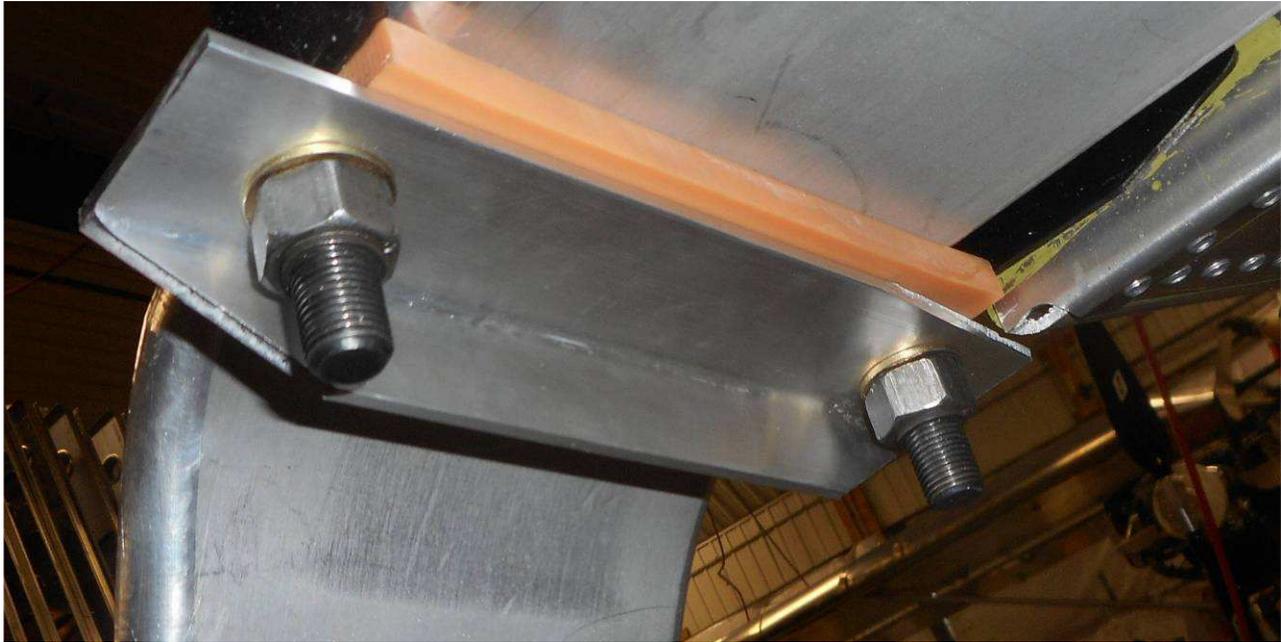
When the holes are drilled in the middle of the 1" flange, it may be necessary to turn the extrusion to position the vertical flange on the outboard side. Cut the aft corner to make room for the longerons



Cut the aft corner to make room for the longerons



Install a washer under the lock nuts on the Studs and tighten the nuts. The nuts should be tight but should not bottom out on the shoulder of the bolt.





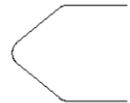
Check to be sure the Gear Spring doesn't rotate after tightening the nuts. If the Gear Spring rotates tighten the nuts further and check again.



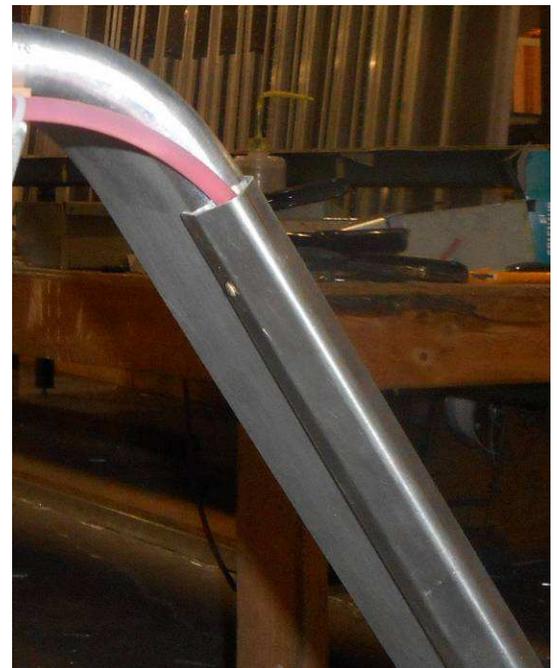


The BLR is attached to the Gear using 3M Scotch-Weld Epoxy Adhesive. This can be purchase from Aircraft Spruce.

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



Brake line retainer C75-L2-BLR





Wheel fairing option

**CRUZER
CH750**

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