WILLIAMS CLASSIC CHASSIS WORKS

INSTRUCTION SHEETS

Danchuk 12183

MINI TUBS

Remove all carpet, padding, rear seat, etc. in area of rear fender wells.

Disconnect battery ground cable.

Using a sawsall or similar tool, cut out the sheet metal between the package tray and the floorboard on both sides next to inner fenders. Use the bottom edge of the package tray as a guide while cutting out completely flush to side panel above fender panel. Flush to side panel above fender panel.

Cut material between hinge wells and inner fenders. Finish flush with bottom of hinge wells.

Layout removal of stock inner fenders as follows:

A. Measure at top of inner fender well from side panel inboard 1 1⁄4” to 1 1⁄2” and mark. This flange that you will cut to size is where the new tub fits up to from underneath and overlaps.

B. Layout a cut line forward that intersects the floorboard at 90 degrees and about 4 1⁄2” inboard from vertical body inside panel. We use 1" masking tape as a guide.

C. Layout cut line towards trunk area starting at center/top reference point of 1 1⁄4” to 1 1⁄2” and taper gradually inboard to where it meets trunk floor surface about 23" from lower trunk seal flange and 4" inboard to start with. I highly recommend pulling trunk lid off, it makes the job that much easier. You’ll final fit the tub later, you just want to rough out the shape for now. You’ll have to be very careful not to cut too much away, especially in the trunk area at first.

D. We use a combination of a sawsall, 4" Makita cutting blade, air chisel, and plasma cutter to do the cutting. Take your time!

E. To establish the front floorboard cut, use a flexible straight edge spanning the front leading edges of original inner fender at floor and draw cut lines inboard towards and flush with frame rail.

F. Read all instructions before you decide to guess.

WELDING TUBS:

After you’re happy with the fit, you’ll need:

A number of clamps and small pieces of scrap metal.

An old hammer handle to apply pressure from inside the tub during the welding process to keep fit tight.

A patient friend to man the hammer handle or similar device while you’re in the trunk welding.

A TIG or MIG welder is recommended.

Use straightedges, squares, angle finders, and any straight or parallel surfaces to reference tub surfaces off of.

We use the clamps and scrap metal pieces to position the tub side panel surface above the frame rail and help hold up against the floorboard.

Look at the sketches and photos once more before starting your tacking. Begin at the top and work your way towards the front of the car in 3/4" increments.

Do the same towards the rear of the car.

Be sure your friend underneath is holding the tub as high as possible to ensure a tight fit and better weld.

Weld along the floor line the same way, starting in the middle.

NOTE: If using a wood or other flammable devise for step 6, be sure to keep it as close as possible but be very cautious of starting fires.

You can now tie the hinge wells for the trunk into the tub at the inside edge with a strip of 1/8" steel.

Prep all welded joints and use a good quality chalking sealer to finish off. A chalking gun works great if you have access to one.

NOTE: It’s not necessary to weld up 100% and could cause warping.

001- Rough, Very rough first fit.

Tub 001.jpg

002- Rough

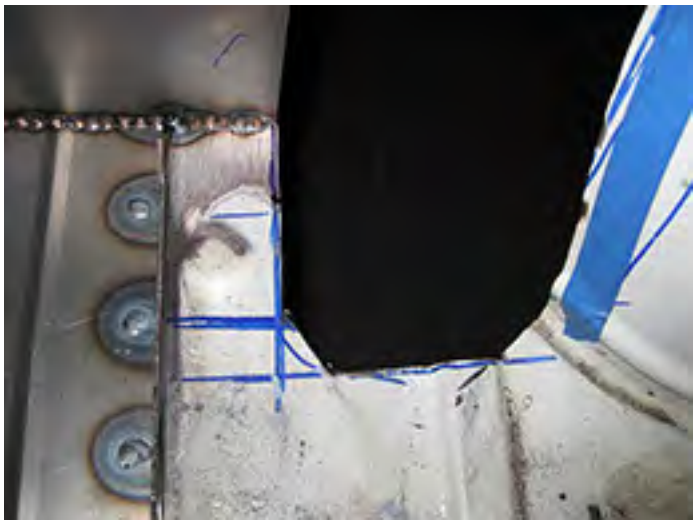
Tub 002.jpg

003- Area to remove. Saving the upper area for welding.

Tub 003.jpg

004- Rough, Rough fit.

Tub 004.jpg



005- Doing the corners. This is one of the most critical areas to get fit properly.

Tub 005.jpg

006- First Fit.

Tub 006.jpg

Tub 007.jpg

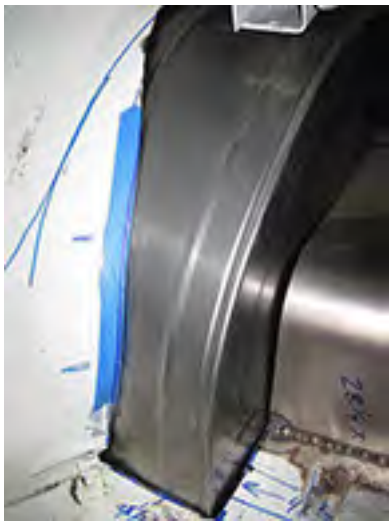
007- Second Fit

008- Saving corners. Near final fit. Almost time to remove those corners

Tub 008.jpg

Tub 009.jpg

009-010- Corners removed. Near final fit.

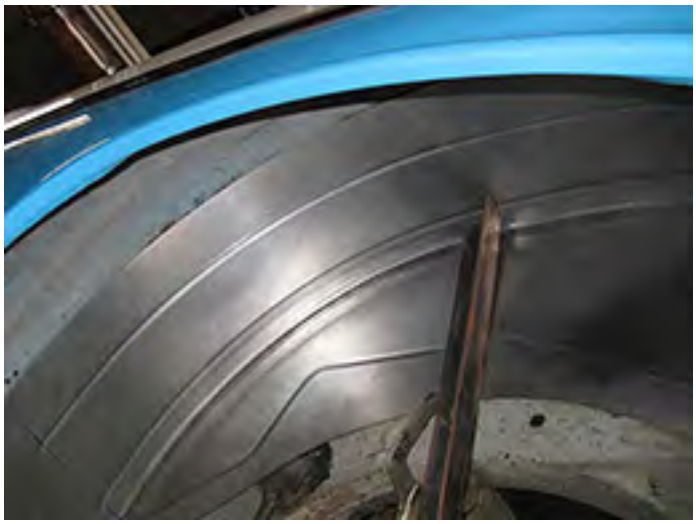


Tub 010.jpg

Tub 011.jpg

011- Final Fit. Final fit and trim. Remove paint for the welding next.

012- Holding Tub. This is helpful if you don't have a friend to sit under the car for you.



Tub 012.jpg

Tub 013.jpg

Tub 014.jpg

Tub 015.jpg

Tub 016.jpg

013- Penitration
This is normal for TIG welding. Slightly less so with MIG welding. Tub is finished at this point.
014- Filler. Filler panel we add.
015- Finished fit.
016- Additional. Add a piece of steel here to connect and reinforce the hinge.

SEAT SPRINGS

Note: With hard top body styles, only the upright seat frame (back rest) needs to be modified. On a post model body style, both frames need to be modified.

Back Rest

Strip the upholstery off the seat frames completely.

Use 1/4" round rod and if available a brake line bending tool to form your bends.

Fabricate two new rods to match the horizontal factory rods on the backside of the frame.

Locate and clamp rods approximately 39" apart. Tubs should be installed 41" apart, the two inches is for clearance.

Weld the 1/4" rods wherever contact points are with the seat frame.

Cut away springs as needed to clear the tubs.

Do NOT cut the front face of the seat frames at all. They fit over the face of the tubs and appear stock

Bottom Frame

Strip the upholstery off the seat frames completely.

Bend 2 rods 90* to fit around front inboard corners of the tubs.

Locate the two rods with their inboard legs approximately 39" apart.

Tack weld the rods in place and trim away the excess seat spring.

Fit check in the car for clearance.

Remove both frames and finish welding in all contact areas.

001 & 002- Backrest

Spring 001.jpg

Spring 002.jpg

Spring 003.jpg

003- Matching angles.

Spring 004.jpg

004- Seat

Spring 005.jpg

005- Seat

Spring 006.jpg

006- Measurement