

Titanium Roll Cage Shroud Mounting Instructions

Step 1: Mark centers of each 7/16" hole for 5/16" weld bung.

To do this, place the edge of a strait rule or piece of angle against the front and mid roll cage tubes. Then apply medium pressure and push and pull the edge along the contours of the tubes creating a line on the middle roll cage tube as shown in *Figure 1*. Next you will need to lay your angle across the top of the right hand and left hand upper frame rails just ahead of the middle roll cage tube as shown in *Figure 2*. Using a tape measure, measure from the bottom side of your angle up 1" and mark the center of the lower weld bung. The center of the second weld bung is 4 1/2" up from the first weld bung, and the center of the top weld bung is 4 1/2" up from the middle weld bung. There should now be center marks for three 5/16" weld bungs on the center of the middle roll cage tubes on both sides of the roll cage. Before you drill any holes in the middle roll cage tubes place shroud on roll cage to make sure the top holes will not miss the top portion of the shroud.

Step 2: Drill 7/16" holes for weld bungs. After hole placement has been checked center punch the centers of the holes you just marked. Now drill a 1/16" pilot hole, and then drill the hole out to 7/16" using either a 7/16" Rota broach or a 7/16" drill bit.

Step 3: Weld 5/16" weld bungs into place as shown in *Figure 3*. Find a piece of aluminum and create the drill pattern that you have on the car, Make sure to place the pattern near the edge of the piece of aluminum so that you have room to tack the bungs to the tubes. Drill the holes in the aluminum 5/16" then bolt the weld bungs to the aluminum. This is done so that you can weld all three on the weld bungs in the same plane. Next, place the weld bungs in the holes that you drilled for them with the aluminum jig you just made. Shim the bungs out to allow for zip ties to fit between the shroud and the tube. With another persons help securely tack the weld bungs into position, then unbolt the aluminum jig and weld around the rest of the weld bungs.

Figure 1



Figure 2



Figure 3



Figure 4

Step 4: Transfer the weld bung holes to the titanium shroud so shroud looks like *Figure 4*. To do this you will need a set of 5/16"-24 transfer punches and a dead blow hammer. First screw two of the transfer punches into the back two existing weld bungs that are used for mounting the deflector plate. Hold the shroud in position by clamping the sides to the side roll cage tubes. Then make sure that all of the weld bung holes will transfer into the titanium shroud. After everything has been double checked, take your dead blow hammer and strike the area of the shroud where the transfer punches are located. Take the shroud off of the car and drill the two holes out to 5/16". Next you need to put two transfer punches in the weld bungs that are in the middle roll cage tubes, do this on both sides. Bolt the shroud on using the two holes that are drilled in the back of the shroud, and clamp the sides of the shroud to the roll cage. Using your dead blow hammer strike the areas of the shroud where your transfer punches are located. After you have transferred all the holes, unbolt the shroud and drill the holes out to 5/16". Now move your transfer punches to the final holes located on either side of the roll cage, and bolt the shroud on the car using all available holes. Transfer the final two holes to shroud, then unbolt and drill 5/16", completing the hole transferring process.



Step 5: Trim the bottom of shroud to fit the car. To do this you will need a jigsaw with a medium coarse blade installed or you can also use a cut off wheel. Bolt the shroud back on the car, and mark a line slightly below the centerline of the top rail. Do not trim shroud shorter than to the centerline on the top rail. After the line has been marked, use your cutting tool and cut off excess material, and file and debur the part.

Figure 5

Step 6: Installing the shroud to your roll cage. To install the shroud you will need to use 5/16"-24 steel or titanium hex head bolts with flat washers. Proper installation should have the shroud bolted onto the roll cage with the deflector plate bolted onto the outside of the shroud, as shown in *Figure 5*.

