

Fiero Chassis Stretch by B and B Customs

You will need the following tools:

MIG welder, min 110A output
"Saws-all" with 5" steel blades
3/8" power drill and drill bits
Grinder: 4" hand type
Metric socket and wrench set
Screwdriver set (Large and small)
Tape measure
Marker pen
Jack stands
Hydraulic floor jack
2' Level
6' framing square
2" masking tape

The preferred order of stretching the 1984-1988 Fiero chassis is to remove rear body panels, drop the cradle, do the cradle stretch, remount the cradle, and do the upper chassis stretch. With the cradle done first, there is a self correcting method of symmetry and squaring of the chassis stretch. It is recommended to manufacture a cradle jig to keep alignment of the cradle proper, since the alignment of the upper frame will be based on this alignment.

Manufacture of the Cradle Jig

The cradle jig is a tool manufactured for keeping the proper alignment of the cradle during cutting, assembly, welding and remounting of the cradle to the upper engine frame. It can be manufactured from wood or metal (depending on what is available and how often it will be used).

In our example we used wood. The transverse piece was cut 48" in length from 1½" x 1½" x 48" stock. We then cut (4) upright posts 5" long from the same 1½" x 1½" stock left. The 48" transverse piece is centered under the pivot points of the cradle.

The (4) upright blocks are set on the transverse piece, against each side of the pivot bushings and then marked for their positions with a line on each side of their base (note that the blocks should be numbered and the same number below them to get them back to proper orientation when assembling).

Now remove the upright blocks and transverse piece and one at a time drill thru the bottom side of the transverse piece into the upright blocks. Make sure of proper order, orientation and alignment for each block before drilling. Use (4) #12 x 3½” wood screws for securing the (4) upright blocks.

Measure from the flat surface the cradle is setting on to the center of the pivot bushing (4¼” in our case). Accounting for the transverse piece (1½”) measure up the upright block and mark the location for the center of the pivot bushing (2¾”). Mark all 4 blocks and drill a hole (approx. 7/16”) thru each block keeping alignment of the holes. Next put the bolts or threaded shaft thru the blocks and pivot bushings to secure the cradle for proper alignment before cutting.

