Vern Tardel ENTERPRISES

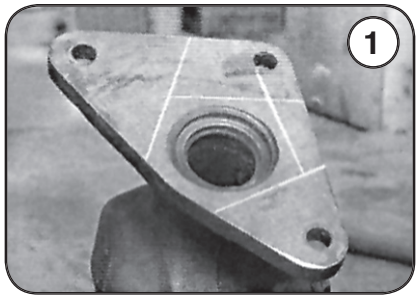
# STEERING BOX FLANGE
## INSTRUCTION SHEET

This is a basic description of how to weld the flange to the steering box, a more detailed description for rebuilding the box and attaching it to the frame properly is available in my “Let Me Help You” Steering book.

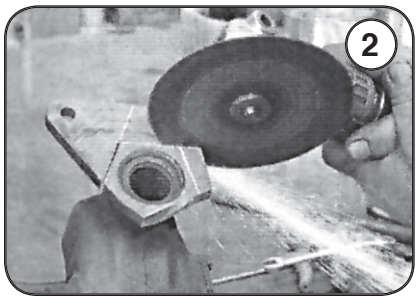
First make a pattern by tracing the bolt and sector-shaft holes in your frame onto cardstock. Then, enlarge the sector-shaft hole to 1 7/8 inch diameter, cut out the pattern, and trace it onto the metal.

The mounting flange must first be cut off. It’s done in a way that retains the full length of the sector shaft bushing, for ease of steering and long service life. This modification can be made to the F-1 box as well. The work is the same on either box, and can be done with hand tools, although if you have access to a lathe it will go much quicker(*This method is described in detail in my Steering Book*)

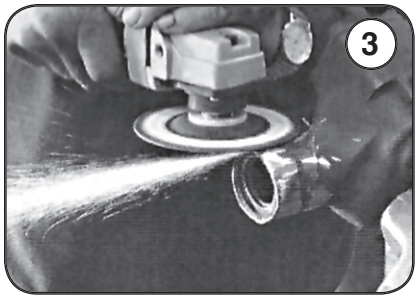
This method results in a particularly strong mount in which the sector sleeve passes through the frame rail. Also, the steering box is moved outward 1/2inch to provide additional room for the exhaust header.



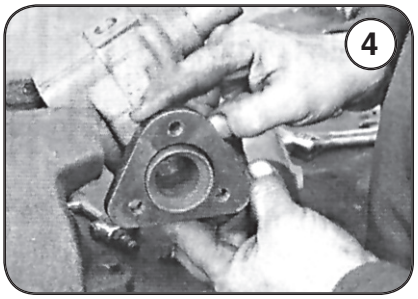

Mark the flange for cutting. This arrangement takes the fewest cuts. The marks should be about 1/8-3/16 inch from the seal bore.




Use a hacksaw or cutoff wheel to remove the segments of the flange. Make the cuts perpendicular to the face of the flange.




Grind the outside of the sleeve to create a round cylinder. Take care to leave a bit of lip for the outer edge of the seal bore.




Periodically check your progress by fitting the flange to the sleeve. It should slip on with enough play that it can be angled a few degrees from perpendicular to the sector shaft bore.

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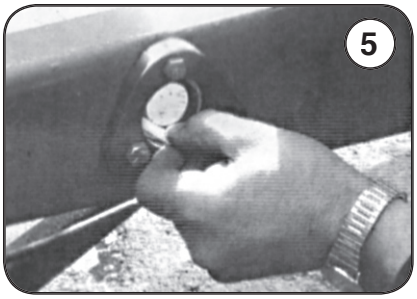
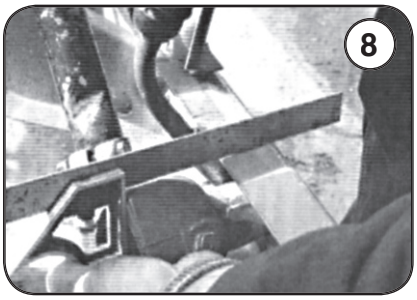


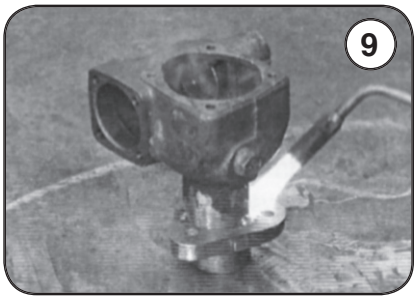

Bolt the flange to the outside of the frame and mark the frame for the enlarged hole.


Enlarge the hole to the new size. Then, bolt the new flange to the inside of the frame.

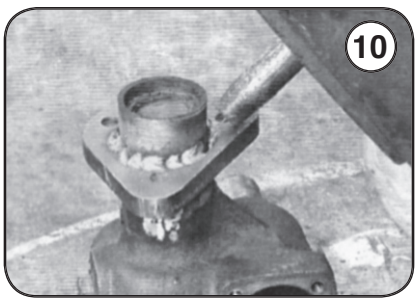

With assistance, position the steering column and wheel in the desired position.




Insert the sleeve of the steering box through the flange and the frame with 1/2-inch protruding to the outside. Square the box with the fram and tack it to the flang in three or four places.




Heat the flange and the sleeve of the box, but not so much that they begin to color. This helps reduce stress on the weld.




Weld the flange to the box all around the sleeve and on both sides of the flange. Dress the out weld to allow the flange to fit flush against the inside of the frame.

**Allow the box to completely cool in still air. Do not quench it with water or an air blast, otherwise the weld may crack.**

**There you have it . . .**