

INSTRUCTIONS

098-9013

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Weld-In Mustang II Cross Member for 1947-1954 Chevy ½ Ton Pickups

PLEASE READ INSTRUCTIONS COMPLETELY BEFORE STARTING YOUR INSTALLATION

This kit installs the '74-'78 Mustang II or '74-'80 Pinto/Bobcat suspension into the 1947 thru 1954 Chevy 1/2 ton pickups.

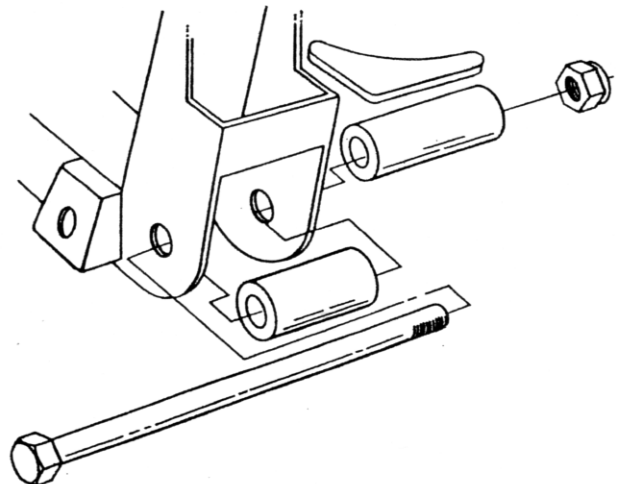
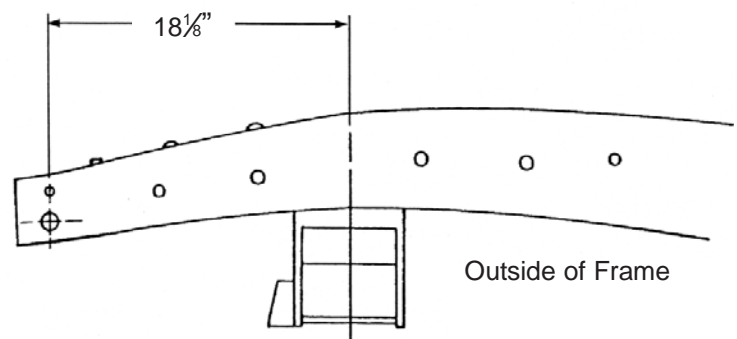
NOTE: A qualified welder should do all the welding using the proper techniques.

1. Mark the front axle centerline on the top of frame rail and remove the old suspension and steering components. The front spring shackle mounts riveted to the frame are used for a measuring point. The area on the top of the frame rail that is turned up for the old steering box needs to be flattened.

2. Box the frame rails. The boxing plates should run from the back of the radiator support to the firewall. The lower flanges should be trimmed flush with the upper flanges.

3. Mock your frame up so the frame is sitting at the same angle as it will when it's on the ground. Measure back $18\frac{1}{8}$ " from the center of the front spring shackle hole, this should line up with the axle centerline mark on the frame from step one. Using a plumb line, mark the axle centerline around the frame rails.

4. If you are installing the full type lower control arms that eliminate the strut rods, it will be necessary to drill out the lower pivot holes to $\frac{5}{8}$ ". Position the short spacer inside the crossmember and the longer spacer to the rear of the crossmember, using the $\frac{5}{8}$ " mounting bolts through the crossmember as a guide. Install the gusset horizontally toward the



engine between the rear spacer and the crossmember. The rack mounts on the crossmember go toward the front. Weld the rear spacers and gussets all around. Weld the crossmember spacer in as far as possible inside the crossmember on both sides.

5. Slide the crossmember between the frame rails, centering it on the axle center-line. If the crossmember doesn't fit, grind the sides of the crossmember until you can get it in place, then tack weld the crossmember in.

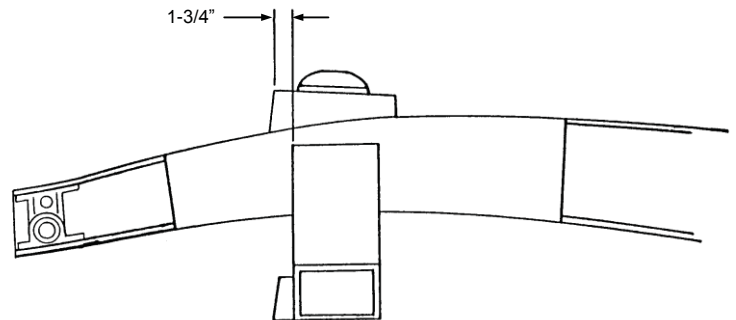
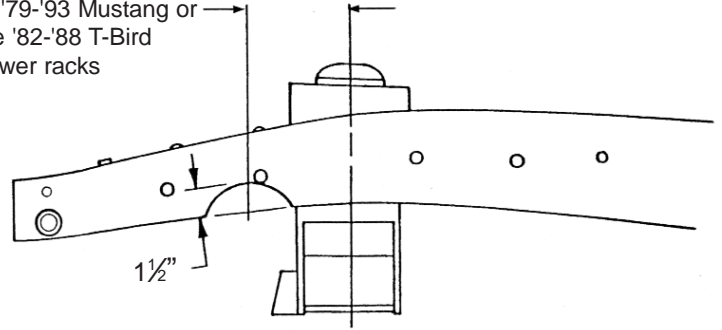
6. The left and right spring towers are slightly different. The front side of the spring tower is taller than the rear; they slope down towards the back to maintain the proper anti-dive geometry. Place the spring towers on top of the frame rails and locate them $1\frac{3}{4}$ " forward of the front of the crossmember as shown in the illustration. A little grinding may be required to fit the spring towers flush against the frame rails. Clamp in place then tack weld. If you are unsure of the axle centerline location it's a good idea to mount a fender and one side of the suspension to make sure the tire is centered in the fender opening.

7. The frame must be C-notched for clearance of the rack and pinion. Measure forward from the crossmember centerline $4\frac{5}{8}$ " for the '74-'78 Mustang II manual and power racks or 5" for the newer '79-'93 Mustang or '82-'88 T-bird power racks. Measure up $1\frac{1}{2}$ " and make a mark. Now draw a $2\frac{1}{8}$ " radius using your mark as the top of the radius. Trim out the material marked. Make a C-notch filler piece using $\frac{1}{8}$ " or $\frac{3}{16}$ " steel plate bending it to fit the C-notch in the frame and tack welding in place. Mount your rack and check for clearance.

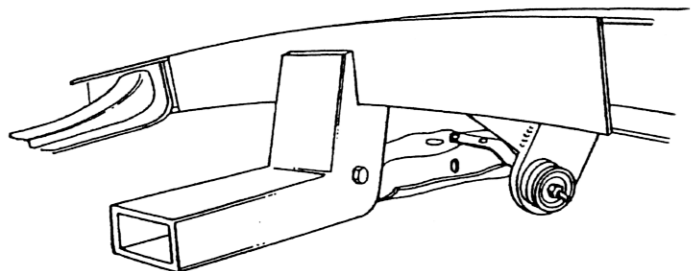
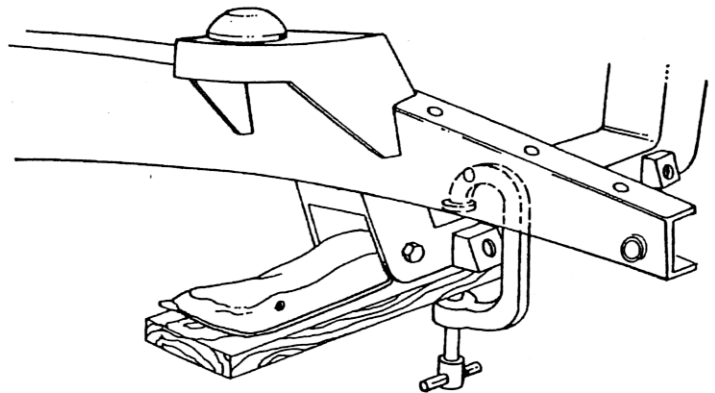
8. Double check all dimensions and finish welding the crossmember, spring towers and C-notches all around.

9. If you are using the full type lower control arms you are finished. If you are using the stock type strut rods you will have to install the strut rod brackets.

$4\frac{5}{8}$ " for '74-'78
Mustang manual and
power racks and
5" '79-'93 Mustang or
the '82-'88 T-Bird
power racks



INSIDE OF FRAME



Inside of Frame

Strut rod bracket installation: Install the stock type lower control arm into the crossmember, then clamp a 2 x 4 to the bottom of the crossmember long enough to support the control arm in a horizontal position. Install the strut rods on the control arms. The strut rods angle toward the rear of the vehicle. Install the two 7/16-20 x 1½" studs and nuts and tighten. Heat and bend the strut rod at the ball joint end where the bend is; bend the strut rod so it lines up with the bottom of your frame or slightly to the inside. Make a cardboard template of the flat strut rod mounting bracket. With the control arm and strut rod supported in the horizontal position, install a cupped washer and one of the large strut rod bushings onto the strut rod. Trim the cardboard template so it lines up with the strut rod bushing and the bottom of your frame rail. Trim the bracket to fit your template. Install the large rubber strut rod bushings including the cupped washers and the flat strut rod mounting plate to the strut rod and tighten the 9/16-18 locking nut to its fully seated position. Tack weld the strut rod bracket to the bottom of the frame rail. Tack weld the triangular gusset in place - the gusset mounts between the strut rod bracket and the bottom of your frame rail and angles toward the front of the vehicle. Remove the strut rods and bushings and final weld the strut rod brackets and gussets in place.

After the suspension is re-assembled and back on the ground you can do the alignment. The wheel alignment should be done by a qualified alignment shop.

ALIGNMENT SPECIFICATIONS:

CAMBER	1/2 Degree positive
CASTER	1 Degree positive (manual steering)
CASTER	3 Degrees positive (power steering)
TOE IN	1/8" plus or minus 1/8"