# INSTRUCTIONS

910-34443

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# '35-'40 Ford Car or '35-'41 Ford 1/2 Ton pickup Mustang II Crossmember

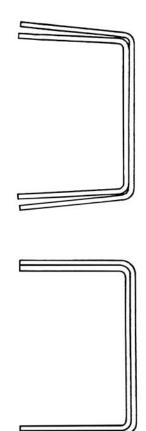
Please Read Instructions Completely Before Starting Your Installation

This kit installs the '74-'78 Mustang II or '74-'80 Pinto Bobcat suspension into the 1935 thru 1940 Ford cars or 1935-41 Ford 1/2 ton pickups.

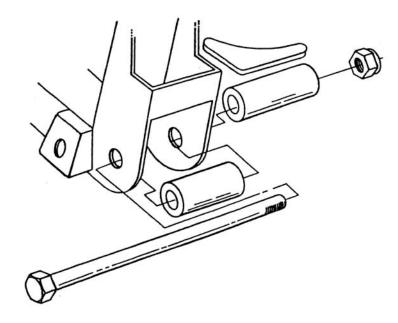
**NOTE:** A qualified welder should do all the welding using the proper techniques.

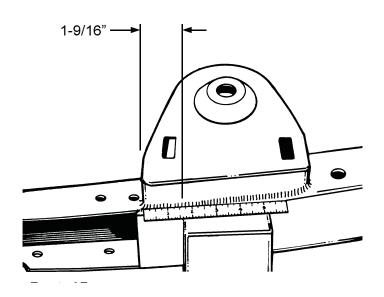
MOTOR

- 1. Mark the front axle centerline on the top of frame rail and remove the old suspension and steering components. If the front suspension has already been removed, measure 112" from the rear axle centerline, and mark the top of the frame.
- 2. Tack weld a brace onto the top and bottom of the frame rail about 6" in front of the crossmember. This will keep the frame rails from moving and keep them in the original location.
- 3. Drill out the rivets and remove the old crossmember. The front gussets, which are also the radiator mounts, can be trimmed in the frame or removed to be cut and then reinstalled. Also remove the old steering box mount.
- 4. The front area of the original C-channel frame rails are made of two layers of steel. Over the years, rust forms between the two layers and causes the frame rails to swell. The frame rails will have to be clamped or bent so the top and bottom of the rails are square again. Box the frame rails; the boxing plates should run from the X-member to 5" in front of the axle centerline. The overall width of the frame rail after boxing should be 2%".
- 5. Mock your frame up so the frame is sitting at the same angle as it will when it's on the ground. Use a plumb line to mark the axle centerline around the frame rails.



- 6. 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 5/8". Position the short spacer inside the crossmember and the longer spacer to rear side of the crossmember, using the 5/8" mounting bolt 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.
- 7. Slide the crossmember up in between the frame rails, centering it on the axle centerline. 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.
- 8. 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 1-9/16" forward of the front of the crossmember as shown in the illustration. 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.
- 9. Double check all dimensions and weld in place all around the crossmember and spring towers. If you are using the full type lower control arms, you are finished. If you are using the stock type strut rods, you will need to install the strut rod brackets. The strut brackets can be purchased separately under part number 910-34358.





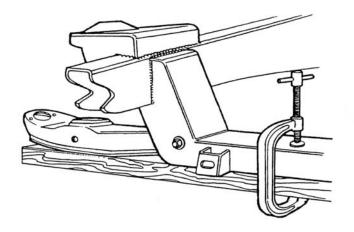
FRONT OF FRAME

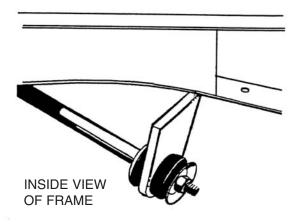
10. Strut rod bracket installation: Install the stock type lower control arm into the crossmember, then clamp a 2 x 4 to the bottom of the crossmember long enough to support the control arm in a horizontal position. Install the strut rods on the control arms. The strut rods angle toward the rear of the vehicle. Install the two 7/16-20 x 1 1/2" 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"







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Speedway Motors Inc., P.O. Box 81906 Lincoln, NE 68501 402-323-3200 www.SpeedwayMotors.com

