

INSTRUCTIONS

910-34422

©Speedway Motors, Inc. December 2007

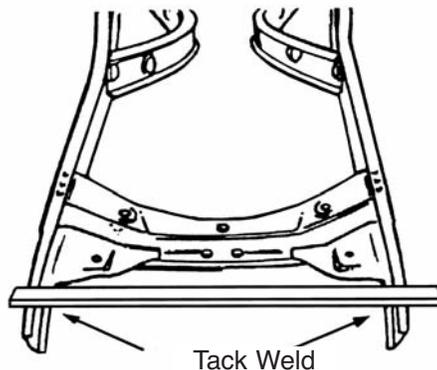
'33-'34 FORD CAR MUSTANG II CROSSMEMBER

**PLEASE READ INSTRUCTIONS COMPLETELY
BEFORE STARTING YOUR INSTALLATION**

This kit installs a '74-'78 Mustang II or '74-'80 Pinto/Bobcat suspension into 1933-34 Ford cars.

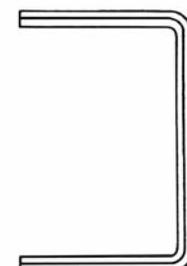
NOTE: A qualified welder should do all the welding using proper techniques. This crossmember is designed for use with manual steering only. The power rack interferes with the radiator and the radiator support. The fender braces will need to be modified; they will not fit in the original location

1. Mark the front axle centerline on the top of frame rail. The axle centerline should line up with the center rivet hole from your crossmember. Remove all the old suspension and steering components.
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 or twisting during installation..

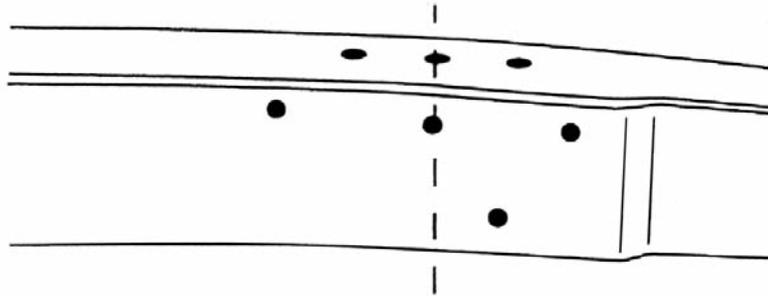


3. Drill out the rivets and remove the old crossmember.

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 tops and bottoms are square again. The frame rails need to be boxed using plates that run from the X-member to 5" in front of the axle centerline. The overall thickness of the frame rail after boxing should be $1\frac{7}{8}$ ".

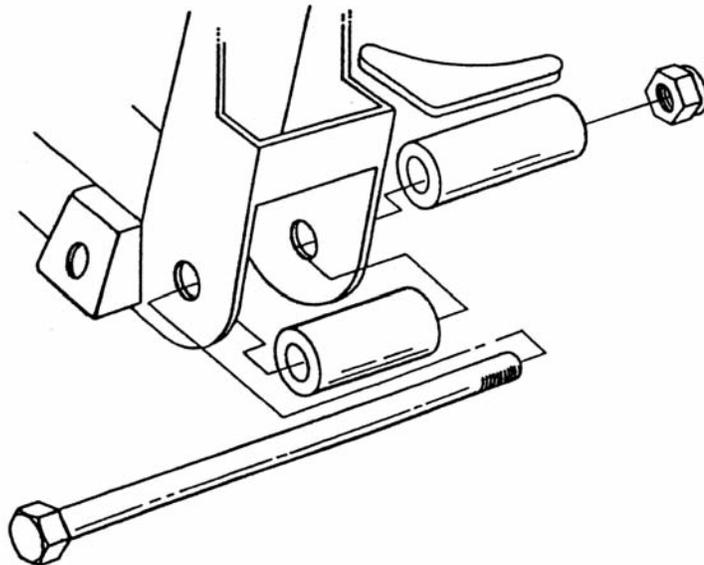


5. Mock your frame up so it is sitting at the same angle as it will when it's on the wheels. Use a plum line to mark the axle centerline around the frame rails.

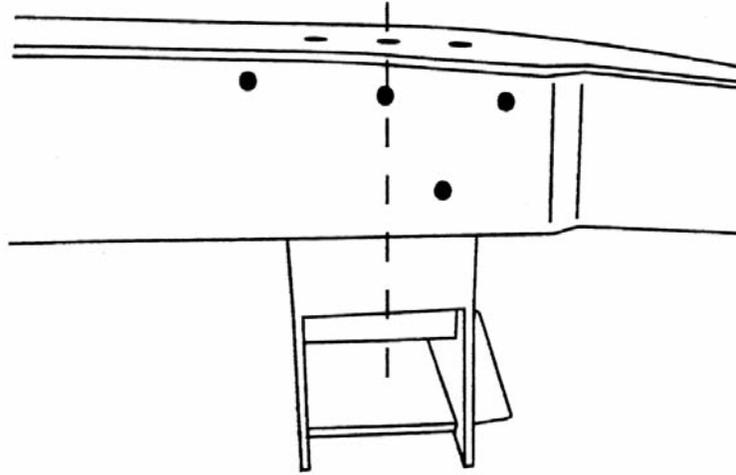


6. If you are installing the wide lower control arms that eliminate the strut rods, it will be necessary to drill out the lower pivot holes to 5/8". Position the short spacer inside the crossmember and the long spacer to the rear of the crossmember, using the 5/8" mounting bolts through the crossmember as a guide. Install the gusset horizontally toward the engine between the rear spacer and the crossmember.

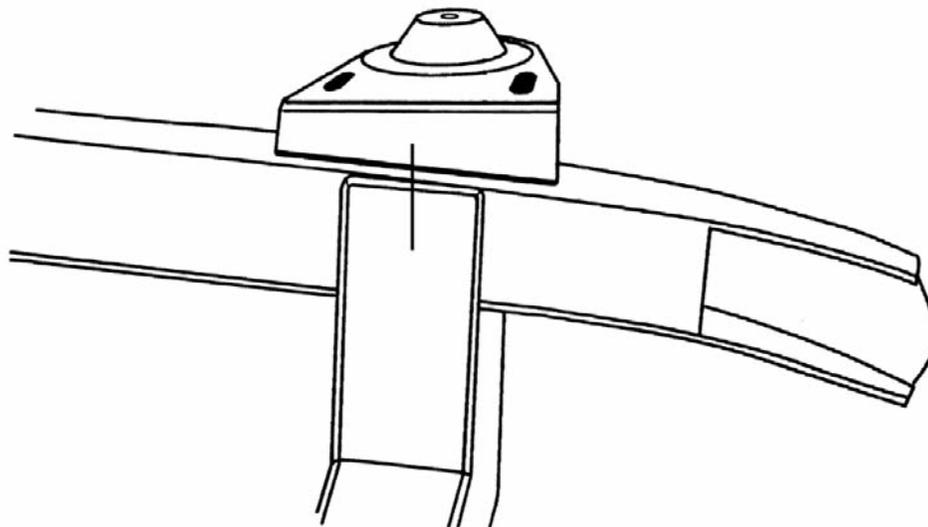
The rack mounts on the crossmember go toward the front. Weld the rear spacers and gussets all around. Weld the crossmember spacer in as far as possible inside the crossmember on both sides.



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 it until you can get it in place. Make sure the crossmember is fully seated against the bottom of the frame rails, then tack weld the crossmember in place.



8. Measure the width of the spring tower and mark a line on center. Position the spring tower on top of the frame rail. The centerline of the spring tower is centered on the crossmember centerline. The left and right spring towers are slightly different. The front side of the spring tower is taller than the rear; they slope down toward the back to maintain proper anti-dive geometry. Once in position, tack weld in place. 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. Double check all dimensions and weld in place all around the crossmember and spring towers.

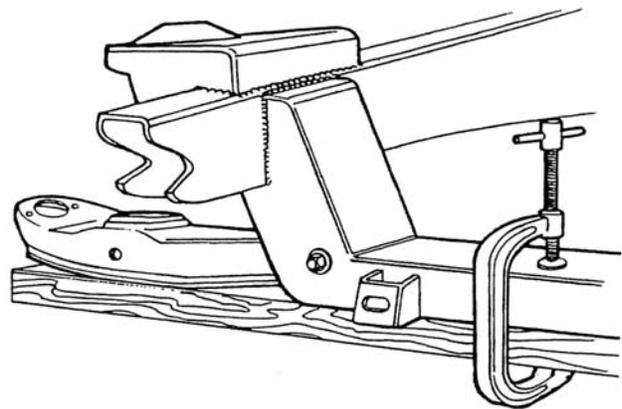
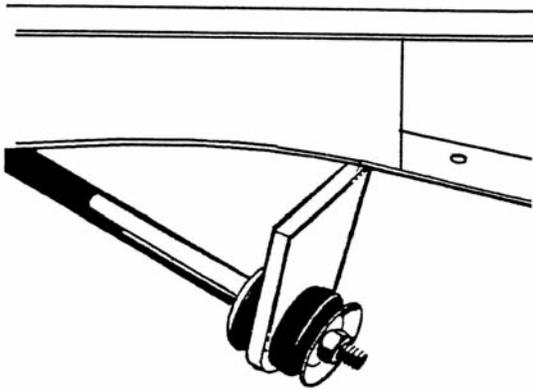


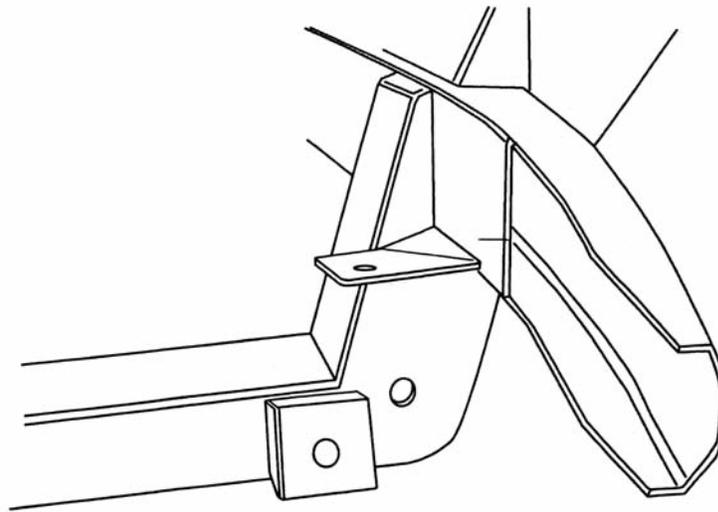
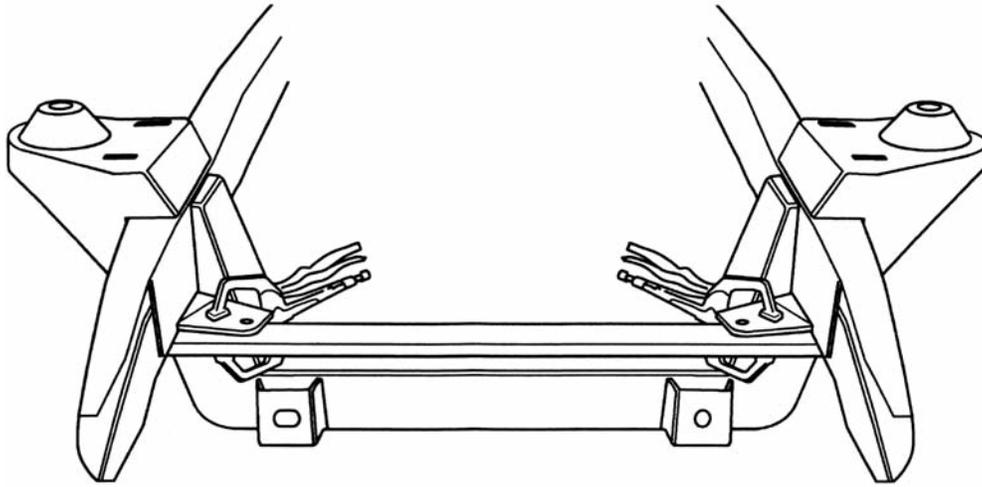
If you are using the stock type strut rods you will have to install the strut rod brackets (brackets can be purchased separately under part number 910-34358). If you are installing the wide lower control arms proceed to step #10.

9. Strut rod bracket installation: Install the stock-type lower control arm into the crossmember, then clamp a 2x4 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.





10. Clamp the two radiator tabs to a flat bar as shown in the illustration. The mounting holes should be spaced $19\frac{3}{16}$ " apart center to center. Slide the bar and radiator tabs up and in between the bottoms of the frame rails. The outside of the radiator tabs should fit flush against the bottom inside edges of the frame rails. If the radiator tabs will not fit between the frame rails, grind the outside edges of the tabs until they fit. The radiator mounting surface is angled back to give the radiator the correct mounting angle. Once in position, weld in the brackets.

After the suspension is 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
TOE IN	1/8" plus or minus 1/8"

IMPORTANT

DISCLAIMER In an effort to offer our customers the low prices, quick service and great value, Speedway Motors reserves the right to change suppliers, specifications, colors, prices, materials. Each of the previous items is subject to change without notice. Speedway is not responsible for any typographical errors or misinterpretations. Quantities are limited on some items.

WARRANTY DISCLAIMER The purchaser understands and recognizes that racing parts, specialized street rod equipment, and all parts and services sold by Speedway Motors, Inc. are exposed to many and varied conditions due to the manner in which they are installed and used. Speedway Motors, Inc. makes no warranties, either express or implied, including any warranty of merchantability or fitness for a particular purpose other than those contained in its current catalog with respect to the goods identified on the face of the invoice. There is no warranty expressed or implied as to whether the goods sold hereby will protect purchaser or ultimate user of such goods from injury or death. Speedway Motors assumes no liability after this period.

DAMAGE CLAIMS Always inspect your package upon delivery. Inspect all packages in the presence of the delivery driver. The driver must note any damage. Ask the driver the Carrier's procedures for handling damage claims. You must hold the original box, packing material and damaged merchandise for inspection or the carrier will not honor the claim. Notify Speedway Motors customer service department for instructions on returning damaged goods. Speedway is not responsible if no notification is given within 5 days of receipt.

SHORTAGES Always check the contents of your delivery to insure all the parts that you ordered were received. Please read the invoice. Double check all packing materials, small items may be wrapped inside with these products. Shortages may occur from damage to the box, so save all packing materials. Inspect the box for holes that would allow parts to fall out. If you are missing any item(s) be sure to check your invoice for back orders or canceled items before calling the customer service department. If Speedway has to split a shipment into multiple boxes, packages may be delivered on different days. You need to contact the customer service department within 5 days of delivery to assure the prompt replacement. Speedway Motors assumes no liability after this period.

REFUSALS All refused COD customers will be billed a 15% restocking charge plus freight to and from the destination! If you have questions please contact Speedway's customer service department.

WARRANTY CLAIMS If an item has a manufacturer's warranty as being free from defects we will exchange only. If the item has been used and you are requesting warranty work, this may take up to 30 days as warranty work is done by the manufacturer NOT Speedway Motors. If you have any questions please contact customer service.

RETURNS Speedway wants you to be satisfied with your purchase. If within 30 days after you receive your shipment you are not satisfied, you may return the item for refund or exchange. All exchanged or returned merchandise must be in original factory condition with no modifications or alterations. Returned merchandise must include all packaging materials, warranty cards, manuals, and accessories. If the items being returned need to be repackaged there will be a re-packing charge. Re-pack the item in a sturdy box and include a copy of your invoice and complete the form on the back of the invoice. You must ship orders back **PRE-PAID. WE DO NOT ACCEPT COD SHIPMENTS.** All exchanges need to have reshipping charges included. Items that are returned after 30 days are subject to 15% restocking charges. All fiberglass returned will have 15% restocking charge. No returns on electrical parts, video tapes, and books. Absolutely no returns on special order or close out merchandise.

FREE CATALOGS Speedway Motors offers FREE catalogs for Race, Street, Sprint and Midget, Sport Compact and Pedal Car restoration.

**Some items are not legal for sale or use in California on pollution controlled motor vehicles. These items are legal in California for racing vehicles only which may never be used upon a highway.

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



©Speedway Motors, Inc. 2007