

1938-1953 Buick

JW Rod Garage Mustang II IFS Installation Instructions

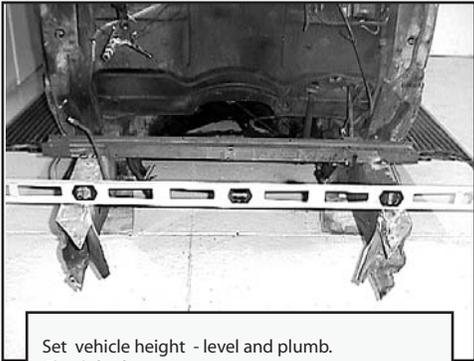
WARNING!

INSTALLATION OF THIS KIT REQUIRES WELDING AND BASIC FABRICATION SKILLS.

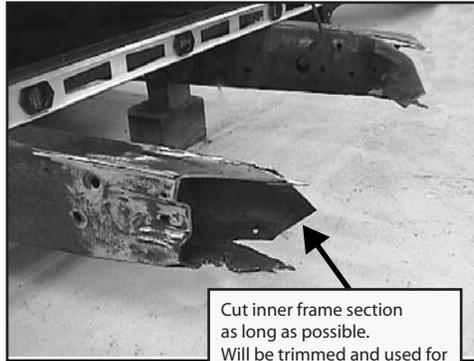
ALL CHASSIS WORK AND WELDING MUST BE DONE BY QUALIFIED PERSONNEL AND/OR A CERTIFIED WELDER. READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

1. Support the car/chassis on four sturdy jackstands. Make sure the chassis is level side-to-side, and is at the fore-aft rake you intend to run the car at. (Hint: 12" linoleum floor tiles placed under the jackstands make good shims to level out uneven floors.)
2. Remove any bodywork, inner fenders, engine and transmission, and any other front end components as necessary.
3. ****IMPORTANT**** The following steps and measurements must be written down as you will be referring to these dimensions several times while reinstalling your new JWRG Mustang II front end.
4. ****IMPORTANT**** While assembling your Mustang II IFS front end components, be sure to tack weld all parts prior to final welding, as some adjustment may be necessary. Remember that adjustment after final welding is not fun.
5. Measure and note the distance from the garage floor to the base of the radiator support (usually two large slotted holes). Example: Car pictured is a 1938 Buick, and was 11.25" from the floor, although your height may vary depending on where you have your ride height/vehicle height set.
6. Locate the two body mount bolts that will be used for frame measurement reference throughout your project (see frame diagram A). Create a lateral reference line perpendicular (across) the car frame from bolt center to bolt center. This line will act as your base measurement line to determine frame component location.
7. Measure and note the distance from the bolt center line to the centerline of the existing axle/spindles. Car pictured is a 1938 Buick, and this measurement was 28.75"
8. Measure and note the distance from the bolt center line to the center of the radiator support bolthole. Car pictured is a 1938 Buick, and this measurement was 37".
9. Cut off the existing frame front and crossmember using the frame diagram and photos as a reference.
10. Assemble the 2 sets of frame halves. These are the angular bent U channels. Note that one section fits snugly inside of the other. The finished dimension of these channels should be 2" x 4.375" Tack weld together.
11. Insert new frame sections into the existing frame stubs on vehicle until they contact and stop on the sway bar nut that is welded on the inside of the existing frame channels of the vehicle. These rails should be centered from side to side, with the inside dimension being 25.25". Also check these rails making sure they are square across, and level from front to back. Tack weld floor supports on the front of the new rails after establishing the previous proper measurements. Tack weld new frame sections onto existing vehicle frame.
12. Tack weld radiator support assembly (1" x 2" rectangular tube) onto new frame rail assembly using the measurements from steps 5 and 8. Note: center line of cross member should be approximately 8.25" from centerline of radiator support mounting slots.
13. Transfer measurement from step 7 onto tops of your new frame rails.
14. Install Mustang II cross member from bottom onto your frame rails. Centerline of cross member should match with your axle/spindle centerline marks on frame rails. **IMPORTANT!** The steering rack mounts go toward the **FRONT** of the car. Tack weld into position.
15. Bend inner pointed frame flaps from existing frame to meet with new frame rail inserts. C clamp, heat and/or bend these flaps to ensure tight fit.
16. Check all measurements again and finish weld the new frame rails to the existing vehicle frame rails.
17. Install upper spring mounts (hats) on new frame rail tops. These spring mounts must also be centered with the axle/spindle and new cross member center line. (see photo). Note that there are specific drivers and passenger side spring mounts. Tack weld.
18. Tack weld outer boxing/support plates to the frame sections. C clamp, heat and bend these plates into position to meet existing frame as needed.
19. At this point, you may wish to mockup the front suspension and fenders to check wheel and fender location. If the wheel isn't where you want it, now is the time to make adjustments! Car photographed was a 1938 Buick and had dimensions as follows: Top of wheel arches to floor - Front: 27", Back: 28". Running board to floor: Front: 8.375", Back: 10.5". Your dimensions may vary depending on your established ride height.
20. Once satisfied with wheel location and fit, remove suspension components and finish-weld all mounts and braces to chassis. Weld in support gussets for lower A-arm mounts at this time as well.
21. If using drag-strut lower A-arms, install lower A-arms with struts, mark location of drag strut mounts, trim mounts to fit, and tack weld in place. Remove drag strut, and complete mount welding.
22. Install upper and lower A-arms, along with steering components. Double check clearances to chassis and mounts throughout entire range of travel. Check droop, bump, and turning lock-to-lock. Install springs, and check clearances on mounts. This is especially important for Air-Ride suspension installations!

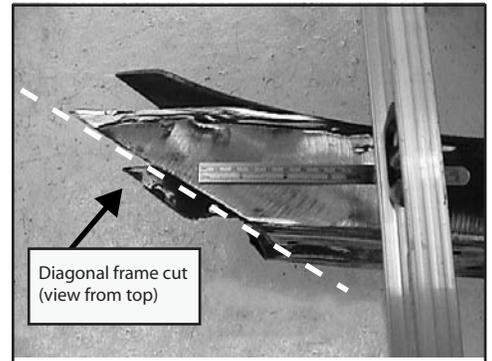
1938 () Buick - Mustang II Crossmember Instruction Sheet



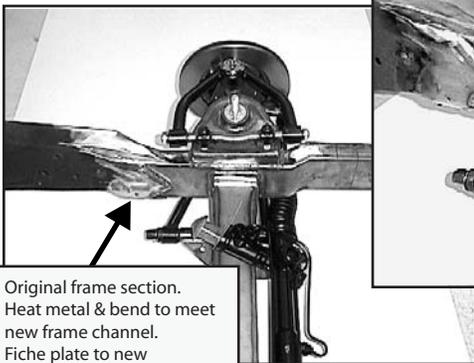
Set vehicle height - level and plumb.
Check for frame square



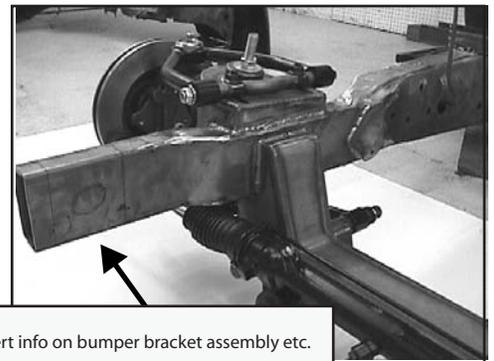
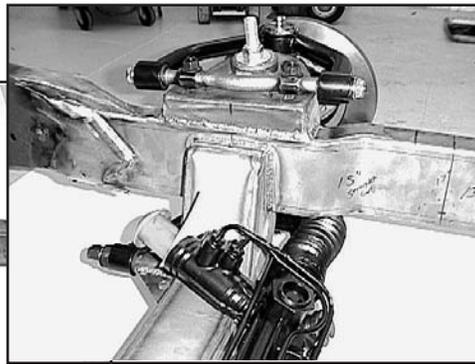
Cut inner frame section
as long as possible.
Will be trimmed and used for
fiche plate attachment to
new frame section



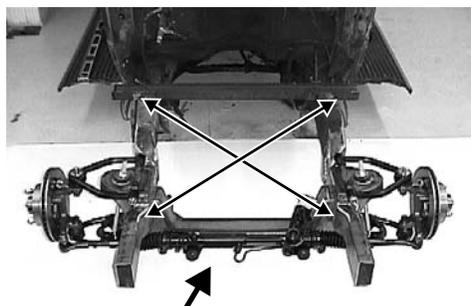
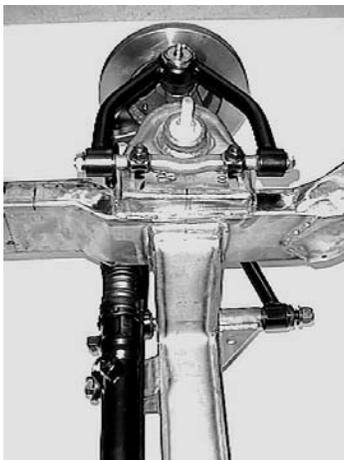
Diagonal frame cut
(view from top)



Original frame section.
Heat metal & bend to meet
new frame channel.
Fiche plate to new
frame section.



Insert info on bumper bracket assembly etc.



Continually check for frame square and level.
Use several reference points to ensure accuracy

