

# FULL TILT STREET RODS

2944 I-70 BUSINESS LOOP UNIT 313

GRAND JUNCTION, CO 81504

970-255-8890

## READ ALL DIRECTIONS COMPLETELY BEFORE INSTALLATION

'35 to '40 Ford Car

Crossmember Installation Instructions

Installation of Full Tilt Street Rods' Crossmember Kit is easy because we have designed all the correct angles onto our crossmember. You must make a couple of measurements to correctly place the crossmember and spring mounts before welding. Minor adjustments may be needed for some variations in your frame. We recommend all welding be done by a qualified welder using accepted procedures. We also recommend that a professional alignment shop do all wheel alignment. If you have any questions, we will be happy to assist you at 970-255-8890 or by email at [fulltiltrods@MSN.com](mailto:fulltiltrods@MSN.com)

**MAKE SURE YOUR CAR IS SETTING AT THE RIDE HEIGHT YOU WANT BEFORE YOU GET STARTED PUTTING IN THE NEW CROSSMEMBER.**

### 1. GETTING STARTED

- Support car with four jack stands.
- Remove old front suspension components.
- On underside of frame is two rubber axle snubbers (or the holes for them if they are missing) directly above axle. Mark these for latter reference.
- In front of old cross member tack weld or clamp a temporary brace across the frame to help maintain the rail dimension after old crossmember is removed.
- Remove old crossmember. The radiator mounts (front gussets) can be trimmed in the frame or removed to be cut and then reinstalled.
- Remove old steering box mount.

### 2. RECONDITION FRAME RAILS

- Your rail will probably be starting to separate due to rust forming between the layers of the flame rail flanges and swells causing them to separate .
- Squeeze the two layers back together using vice grips or hammer and block.
- Use C-clamp to bend both flanges back together so the rail is square again. ( it doesn't need to be exact but should be close in the areas were new crossmember and spring towers mount, the better you make the rails the easier it will be to weld in new components)

- Grind off and weld in rivets on top of frame rails.

### 3. BOX THE RAILS

- The edges of the two layers of metal probably don't line up on frame flanges. Grind them down so they are straight and flush and the boxing plates fit tight against them. If boxing plates fall into the frame rails they are still too wide.
- Do not grind too much material off flange. Finished boxed rails should be 2-5/8" in new crossmember area.

### 4. MARKING AXLE CENTERLINE

- Use the rubber snubber hole you marked earlier to scribe a line around the frame. This is the axle centerline.
- On some models especially '37-'40 Fords the axle was actually back from the snubbers up to 1". Check that your wheel base (the scribed axle center line) is 112 inches. If not, adjust accordingly.
- As a final check you could temporarily place a fender on frame and stand tire & wheel in place in fender, centering wheel in fender opening and slide a bar through wheel center hole. It should fall on your correct axle centerline.

### 5. FITTING AND INSTALLING NEW COMPONENTS IN FRAME

- Slip new crossmember into the frame, center it on scribed axle centerline. If it doesn't fit check that your frame is correct width it should be 30-5/16" at axle center line. If frame is correct dimension grind crossmember until you can get it in place.
- Tack weld crossmember in place, check location then weld in place welding all around both ends, tops, sides, and bottom. Remove temporary brace you placed earlier.

### 6. SPRING TOWERS

- Spring towers sit on top of frame rails and are located 1-3/4" forward of the crossmember measuring from the front of the crossmember to the front of the spring tower.
- Clamp in place, double check dimensions then weld all around, including gusset flanges on sides of rails.
- For added strength you can also weld inside of gusset flanges.