

1955-57 RACK & PINION STEERING THIRD U-JOINT SHAFT SUPPORT



Randy Irwin - Technical Writer

Randy has been involved in the Chevy parts business for over 25 years. He is a wizard at creating, making and modifying custom parts for Chevys.

When installing a rack & pinion on a 1955-57, the original steering box and steering linkage are removed and the rack & pinion unit is installed behind the front engine crossmember. The rack & pinion is mounted to the frame with a tubular crossmember and locates the rack & pinion unit in the same location as the factory drag link. A coupler shaft with two U-joints is used to connect the steering column to the rack and pinion. By eliminating the steering box, a fair amount of room is gained in the engine compartment, but by adding the coupler shaft and two U-joint system, header clearance is greatly reduced. Most header designs for a Tri-Five drop the #1 and #3 header tubes down low to clear the steering box but many times these tubes will interfere with the coupler shaft and U-joints for the rack & pinion. Classic Chevy has now designed a support bracket that bolts to the frame and allows use of a third U-joint allowing the shaft to be routed around most any header design. This is a great way to add rack and pinion steering to your Tri-Five without having to purchase a special set of headers. This third joint system can also help with various cast iron exhaust manifolds.

Parts List:

- 53-156 1955-57 Rack & Pinion Coupler Shaft Column Shift
- 53-157 1955-57 Rack & Pinion Coupler Shaft Floor Shift
- 53-317 Rack & Pinion Third Joint & Support Bracket

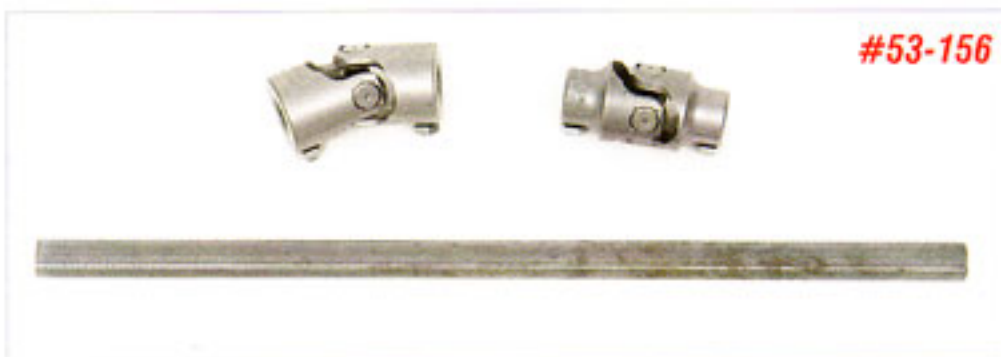
To order parts call 1-800-456-1957 or visit ClassicChevy.com

Tools Needed:

- 5/32" Allen Wrench
- 1/2" Wrench
- Hack Saw
- 9/16" Wrench
- 9/16" Socket & Ratchet

Time Frame:

3 hours

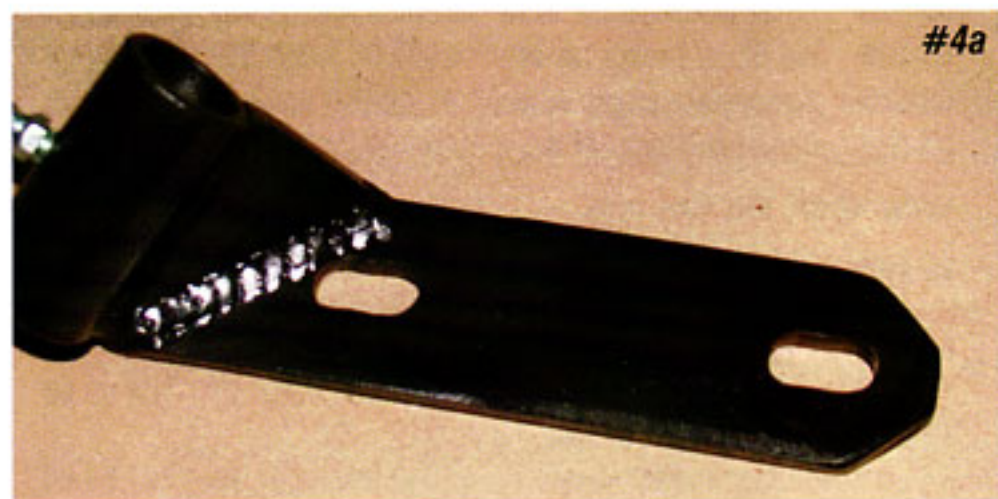
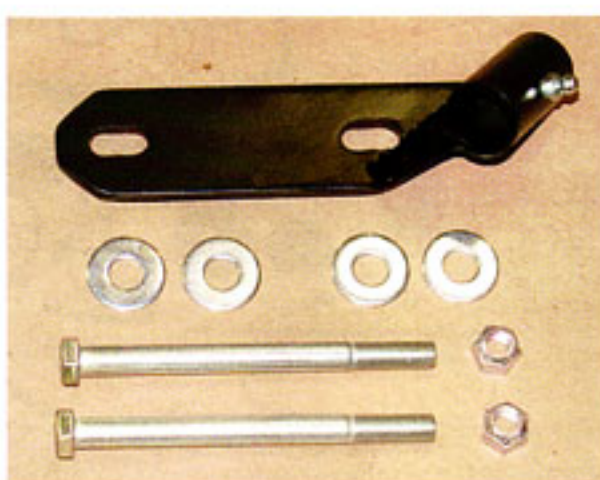


Photos #1a & #1b: Notice the header clearance problem when using headers and the 2-joint and shaft system. When a third U-joint is added to the coupler shaft to snake around the header, the coupler shaft must now be supported. Many times car builders weld a bracket to the frame and use a heim joint to support the steering shaft. This generally looks sloppy and if the frame is already painted, this is not an option.

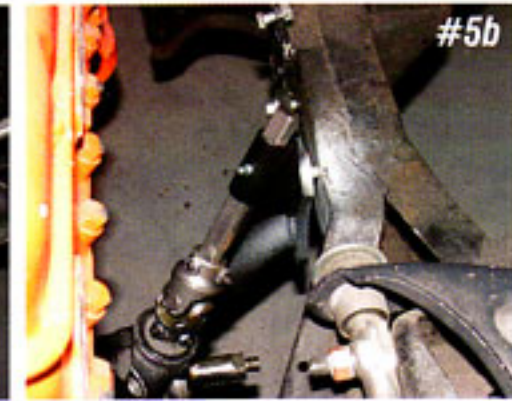


Photos #2a & #2b: The Classic Chevy rack & pinion crossmember bolts to the frame on the driver's side using the three bolt holes that held the stock steering box and to the passenger side of the frame using the two bolt holes that held the idler arm. The bolts on the driver's side of the crossmember make a perfect location for a bolt-on support bracket when using the 3-joint system.

Photo #3: A clean and simple bolt-on bracket included with P/N 53-317 has been developed that utilizes two of the crossmember mounting holes. This bracket supports the lower steering shaft so the third U-joint can be added.



Photos #4a, #4b & #4c: The bracket and joint kit includes two 3/8" x 4" mounting bolts, washers and lock nuts. These bolts replace the original two bolts that were supplied with the rack and pinion crossmember. The bracket bolts to the inside of the rack and pinion crossmember using the forward and lower holes.



Photos #5a & #5b: There are two U-joint and coupler shaft kits available for the rack and pinion system. P/N 53-156 is used with a steering column that has 3/4"-16 splines at the bottom of the column (ididit column shift), P/N 53-157 is used with a steering column that has a 1" double-D (DD) shaft at the bottom (ididit floor shift). With the bracket bolted in place, install the lower U-joint on the rack and pinion. Next install the 18" long DD shaft through the support bracket and into the top of the lower U-joint and lock it into place with the set screws. Mark the lower shaft 1" above the support bracket and cut the shaft.



Photo #6: The center U-joint that is included in kit P/N 53-317 is a double female 3/4" DD U-joint. The top of the lower shaft should protrude into the U-joint 7/8" leaving a 1/8" gap between the support bracket and the U-joint.

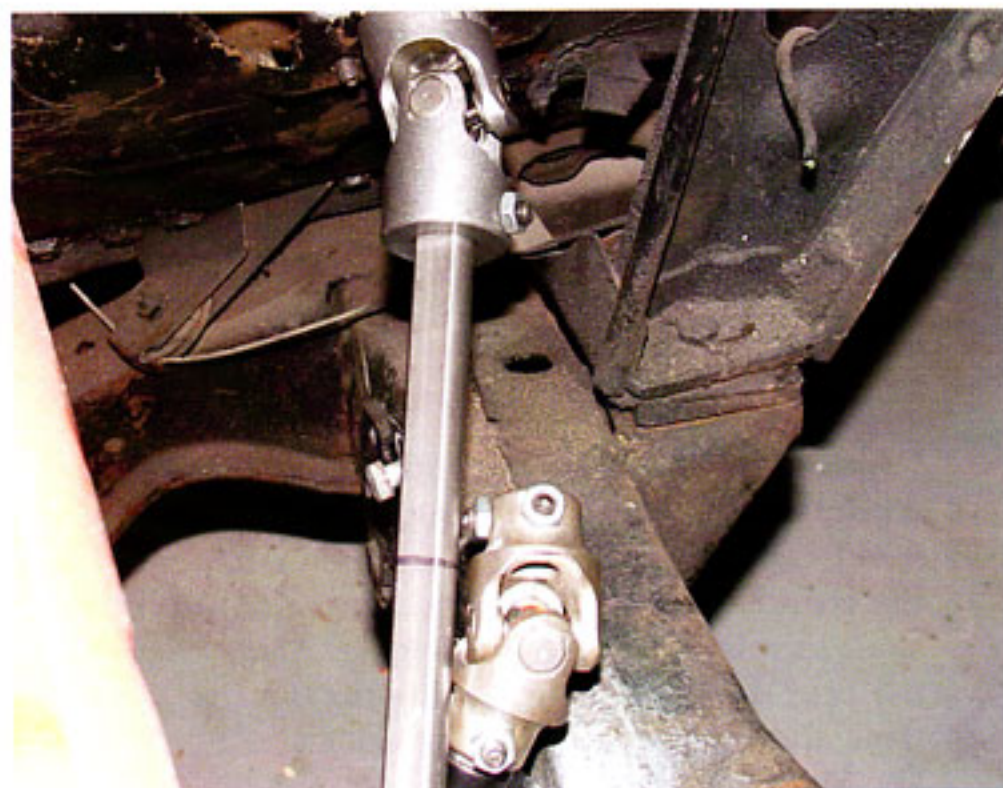


Photo #7: Next install the remainder of the 3/4" DD shaft into the upper U-joint on the bottom of the steering column and lock it into place with the set screws. Place the shaft next to the center U-joint and mark the shaft where it needs to be cut.



Photo #8: With the upper shaft cut to length, install the shaft into the upper U-joint and center U-joint and lock into place with the set screws.

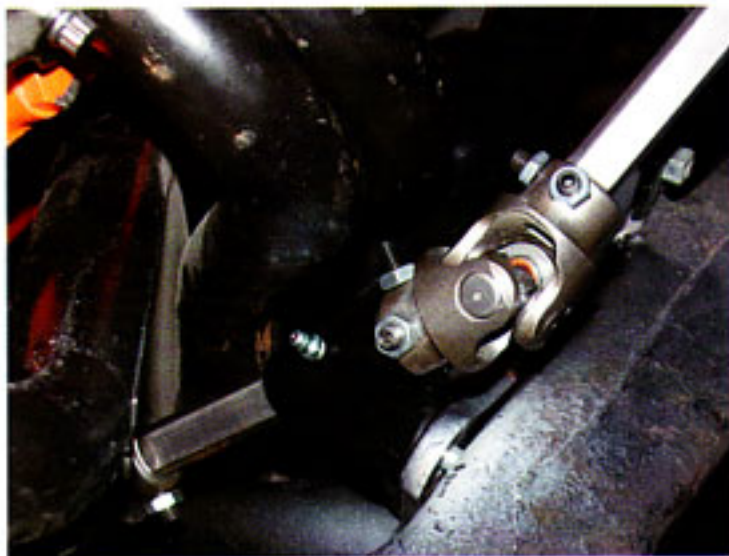


Photo #9: With the third U-joint and support bracket installed, there is plenty of room for the header. This bracket may be used on a 1 or 2-piece frame and with big block or small block engines. Good luck! 