



Detroit Speed
Steering Coupler Kit
1993-99 V6 & 1993-97 LT1 Camaro/Firebird
P/N: 092537DS

The Detroit Speed steering coupler kits are designed to be used with the Detroit Speed front suspension systems. The steering coupler u-joints utilize the latest in CNC machining technology. The U-joints are made out of the highest quality steel and have been thoroughly tested. Similar to OEM automotive U-joints, the staked needle bearing caps prevent loosening and adjustment malfunction.



Item	Description	Quantity
1	U-joint: 1"-DD x 3/4"-36	1
2	Steering Shaft: 3/4"-36 x 7-1/2" Long	1
3	U-joint: Steering Rack to 3/4"-36	1
4	Instructions	1

Installation:

1. Begin by disconnecting the battery. Make sure the steering wheel is straight and lock it in place so it can turn.
2. Install the DSE steering rack (P/N: 092224DS), follow those instructions to install your new rack and pinion. Before the rack and pinion is installed into the crossmember, you will need to install your DSE steering coupler kit.

3. Remove the pinch bolts from the painted U-joint. Carefully slide the provided painted U-joint onto the input shaft of the rack and pinion. The input on the rack and pinion has a flat spot for the U-joint as well as a notch for the pinch bolt, so the U-joint can only go on in one orientation.
4. With the rack and pinion centered, the provided U-joint should be lined up with the center mark on the rack housing (Figure 1).



Figure 1 - Steering Rack Coupler

5. Remove the factory steering coupler from the end of the steering column by removing the flanged head bolt in the coupler (Figure 2).

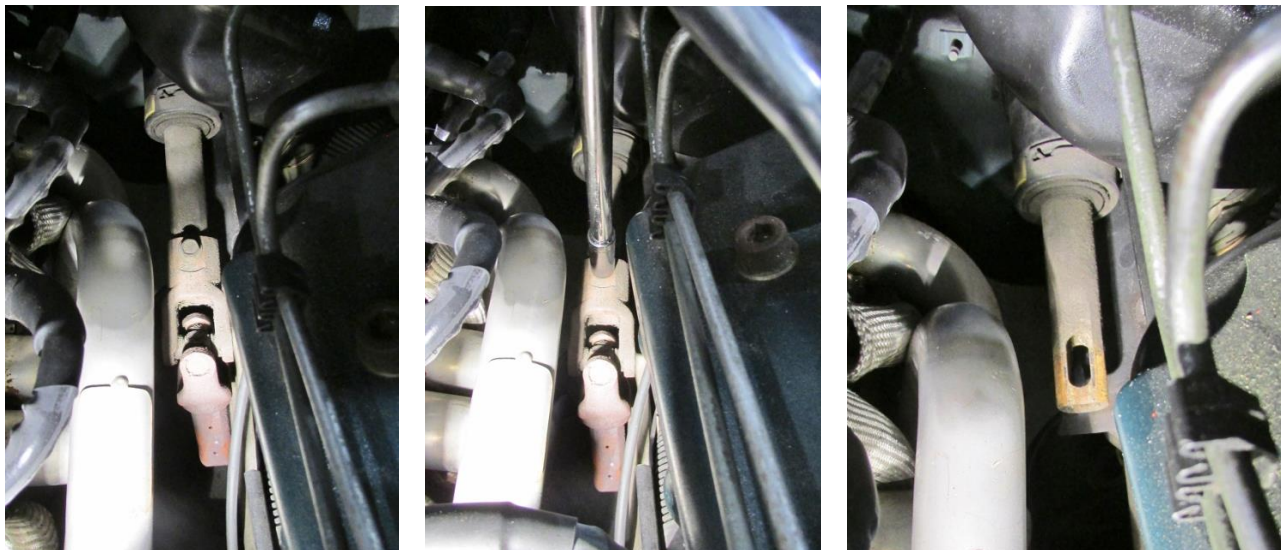


Figure 2 - Remove Steering Column Coupler

6. Next, loosen all three set screws and install the remaining U-joint onto the end of the steering column. The long set screw will go through the slotted hole in the output shaft of the steering column. Leave the smaller set screw loose so the U-joint can slide on the steering column.
7. Slide one end of the splined shaft into the splined side of the painted U-joint so that the end of the shaft is flush with the end of the splined hole on the U-joint.

8. Position the rack and pinion into the crossmember guiding the splined shaft into the U-joint as the rack and pinion is placed into the crossmember. Make sure the splines on the shaft are lined up with the splines on the steering column U-joint. Slide the steering column U-joint on the steering column as needed to make the connection.
9. Install the steering rack bolts into the crossmember. Do not install the flanged nuts yet as this is just for mock-up to clock the steering shaft coupler.
10. U-Joint Orientation: When two U-joints are used on a shaft, the forks of the yokes closest to each other must be in line with one another or "in-phase". Premature wear or binding can result if the u-joints are not phased properly. Refer to Figure 3 for examples.

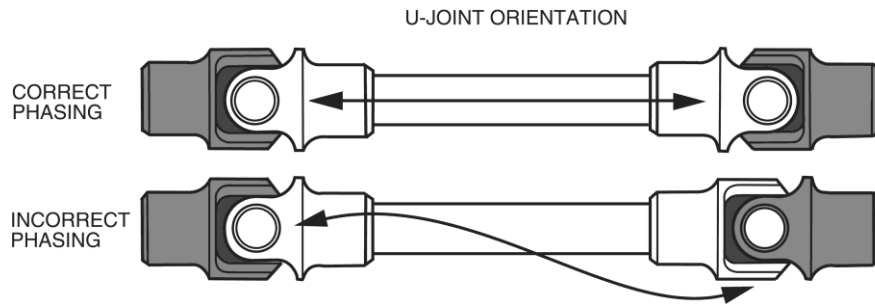


Figure 3

11. Once the splined shaft has been installed into the steering column U-joint, check to verify that the steering wheel and the front wheels are straight. Turn the steering wheel from center to lock in one direction and then center to lock in the opposite direction to make sure you have equal rotations of the steering wheel. If not, you will need to adjust the clocking of the steering coupler kit as you may be off by one spline.
12. Mark the location where the pinch bolt on the painted U-joint will pass through the splined shaft. Remove the U-joint and file or grind a notch in the splined shaft. Place the shaft back into the U-joint to make sure the pinch bolt will pass through and thread the bolt into other side of the U-joint. Repeat this process if you need to remove more material from the splined shaft.
13. Install the U-joint back onto the input shaft of the rack and pinion. Install the splined shaft back into the other U-joint at the steering column (Figure 4).



Figure 4 - Install U-Joint

14. A set screw will be used on the U-joint where it attaches to the shaft. On a splined shaft, a flat area must be filed onto the shaft where the set screw will be located. Remove the set screw and mark the center of the set screw location onto the splined shaft.
15. Remove the splined shaft and file the shaft flat in this location. Re-install and mark the set screw location again. Drill a countersink at this location. Use medium strength blue Loctite 242 on the threads of the set screw and tighten, be sure to tighten the jam nut as well. **NOTE:** Make sure none of the set screws interfere with your exhaust/headers. If they do, you will need to shorten the set screws (Figure 5).



Figure 5 – Shorten Set Screws if Needed

16. Install the pinch bolt through the notch of the splined shaft that you modified earlier. Use medium strength blue Loctite 242 on the threads of both pinch bolts and tighten.
17. Use medium strength blue Loctite on the threads of the set screws at the steering column U-joint and tighten. One set screw bottoms out against the output shaft of the steering column and the long set screw goes through the slot on the flat side of the steering column. Be sure to tighten the jam nuts as well.

If you have any questions before or during the installation of this product, please contact Detroit Speed at tech@detroitsspeed.com or 704.662.3272

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