

# **Tri-Five Steering Shaft Kit Instructions**

#8050050 & 8050060

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### 8050050 Kit Contents:

#	Part Number	Description	Quantity	Inspected By
1	542950	DD Shaft w/ Spline	1	
2	8020490	Column Bushing	1	
3	8050260	DD x ¾-DD U-Joint	1	
4	8050360	3/4 x 9/16-30 U-Joint	1	
5	620640	Shaft install Kit	1	

## 8050060 Kit Contents:

#	Part Number	Description	Quantity	Inspected By
1	542950	DD Shaft w/ Spline	1	
2	543240	DD Shaft w/ 8" Notch	1	
3	8050250	9/16-30 x 3/4-DD U-Joint	1	
4	8050260	DD x ¾-DD U-Joint	1	
5	8050960	3/4"-36 Coupler	1	
6	620640	Shaft Install Kit	1	

Inspected by:	
Date:	

**Note:** The steering shafts for the Tri-Fives require some assembly and some trimming. Please follow these instructions carefully and read completely before starting.

# **Steering Shaft Installation**

This rack and pinion kit should only require two steering joints, and one intermediate shaft. The steering column has to be a specific length, in order for the shaft angle to be correct. If the steering column is too long or too short, the steering joints will bind. The pinion shaft can rotate in the rack mounts to help reduce the shaft angle. The pinion size of our rack is 16 millimeters DD.



When mocking up the shaft, if you need extra clearance, you can rotate the rack & pinion on the bracket about 10°. Loosen the nuts of the two U-Bolts holding the rack & pinion to the bracket, rotate, and then retighten. Torque to 18 ft/lbs. Do not overtighten.

- 1. Measure the distance between the rack and pinion and the steering column to determine shaft lengths. Loosely fit the upper assembly, and determine how much of the shaft will have to be trimmed.
- 2. Trim shaft and machine or grind notch to accommodate u-joint pinch bolt.
- 3. Put the shaft into u-joint, so that the u-joints are 90 degrees out of phase (fig1) this can be done by repositioning the upper joint onto the splined shaft (fig 2).
- 4. Torque the allen-head bolts holding u-joints onto shaft to 30ft/lb.

#### Stock Column (KIT # 8050050):

- 1. Install steering shaft on the column and the rack and pinion. Drill and pin the u-joint to the steering column.
- 2. Tighten the nuts on the u-bolts.

### Aftermarket Column (KIT # 8050060)

- 1. Determine if the column being used has a 1-DD hollow column shaft or a ¾-36 splined shaft. Both these columns need to be extended to get around headers, and is done by using either an 8" DD shaft and a ¾-36 coupler. (Note: 1-DD columns will only need the 8" shaft)
- 2. When using the 1-DD column; slide the 8" shaft into the hollow column shaft (De-burring may be necessary). Adjust the depth so that the lower shaft assembly (see top of the page) has the least amount of angle. Once the set up is turning without binding drill and pin the 8" shaft to the 1-DD shaft.
- 3. When using the ¾-36 column: Install the splined coupling on the column shaft. This is best accomplished by dimpling the shaft with a drill so the setscrew will bite in.
- 4. Insert the 8" DD shaft into the smooth side of the coupler.
- 5. Install the lower shaft assembly and determine how much of the column shaft will need to be trimmed to have the least amount of u-joint angle.
- 6. Trim the 8" DD shaft to the correct length, and re-insert into the coupler. Drill and pin the coupler and shaft, and reinstall lower shaft assembly.





FIG 1 FIG 2