

## KIT CONTENTS:

#	Part Number	Description	Qty	Inspected By
1	<b>8011950</b>	<b>Rack &amp; Pinion</b>	1	
	--114930	- Inner Ends	2	
	--8021320	- 67'-69' Outer Ends	2	
	--8021330	- 70' Outer Ends	2	
	--620810	- Rack Install Kit	1	
	-----200150	--- 1/2" Star Washer	2	
	-----200860	--- 7/16" Flat Washer	2	
	-----231120	--- 1/2"-13 x 1 1/2" Bolt	2	
2	<b>8061410</b>	<b>Pump Kit</b>	1	
	--8061390	- TC Pump w/ Reservoir	1	
	--8020630	- V-Belt Pulley	1	
	--8022490	- Pump Mounting Bracket	1	
	--8022480	- Pump Stabilizer Bracket	1	
	--620910	- Pump Install Kit	1	
	-----200850	--- 5/16" Flat Washer	2	
	-----201090	--- 5/16" Lock Washer	2	
	-----206070	--- 1 5/8" Stand Off	1	
	-----206270	--- 1.365" Stand Off	1	
	-----231780	--- 5/16"-18 x 5 1/2" Hex Bolt	2	
3	<b>8021310</b>	<b>Line Kit</b>	1	
4	<b>8050640</b>	<b>U-Joint 17mm-DD x 3/4"-DD (Pinion)</b>	1	
5	<b>8051410</b>	<b>U-Joint 1" Smooth x 9/16"-30 (Column)</b>	1	
6	<b>545310</b>	<b>U-Joint Bushing</b>	1	
7	<b>549210</b>	<b>9 1/2" DD Shaft</b>	1	
8	<b>620830</b>	<b>Shaft Install Kit</b>	1	
	--130330	- Column Clamp	1	
	--205720	- Column Gasket	1	
	--205780	- Column Bushing	1	
	--231130	- 1/4"-14 x 3/4" Screw	3	
	--480260	- Thrust Bearing	1	
	--545030	- Column Insert	1	
	--620630	- Install Kit	1	
	-----220060	--- 1/4"-1 1/2" Roll Pin	1	
	-----220070	--- 5/32" x 1 1/2" Roll Pin	1	
	-----230600	--- 1/4" Drill Bit	1	
	--8021270	- Column Bracket	1	

## Disassembly:

*The first step is to disassemble and remove the stock steering linkage, steering box and column.*

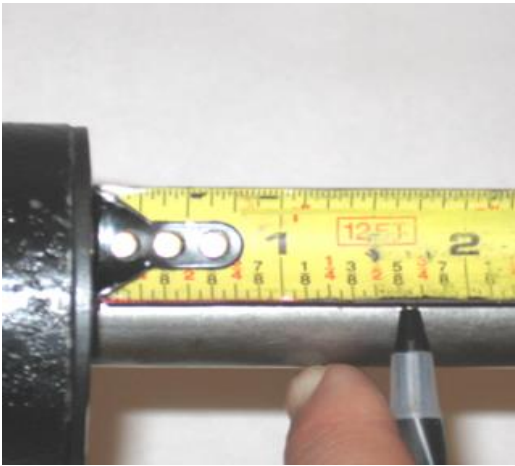
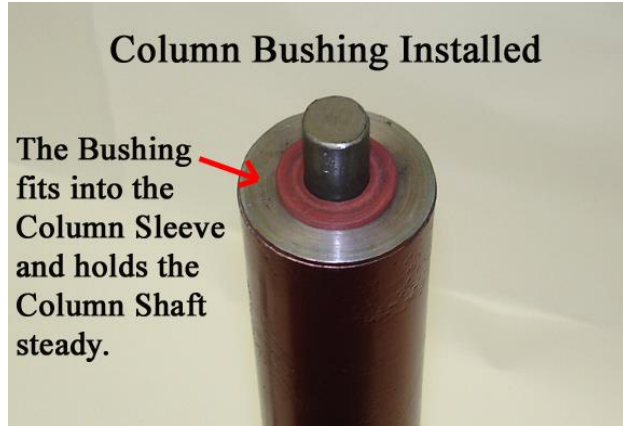
1. Disconnect steering shaft from steering box. Raise vehicle and support it on stands. Note be sure not to put the stand in a location by the stock round cross member.
2. Remove the cotter pins and nuts from outer tie rod ends and remove tie rods from spindles. Disconnect the center link and idler arm assembly from the frame and remove the entire steering linkage.



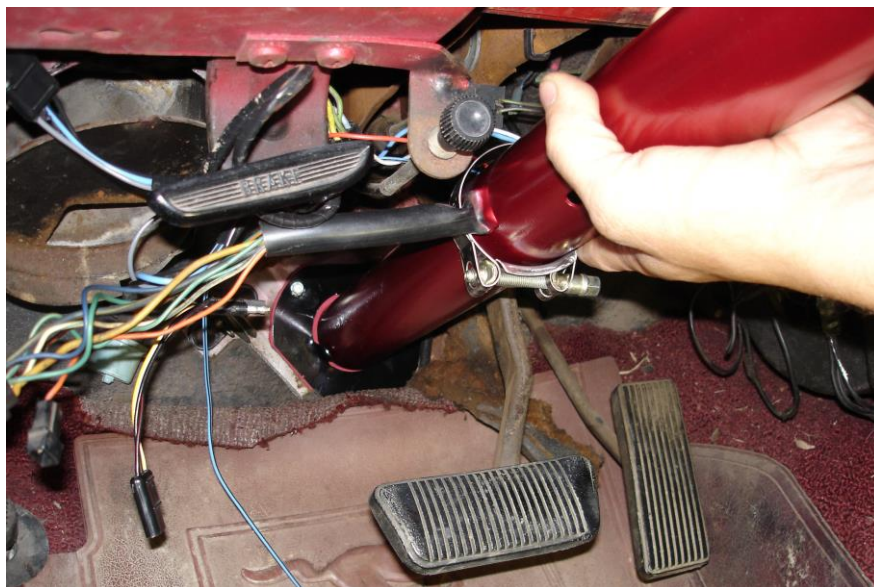
3. Remove bolts retaining the gearbox to the frame and remove the box. If equipped remove the power steering pump, brackets and lines. All the pieces removed will not be used.

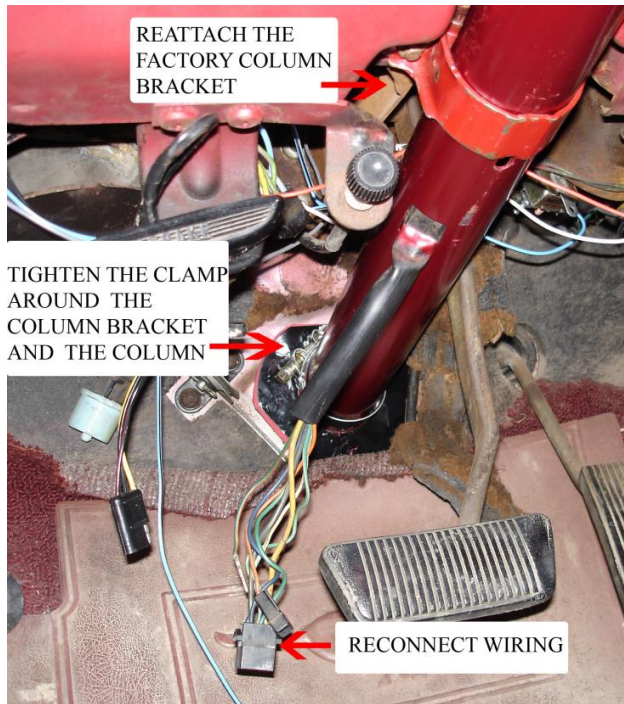


4. You need to modify your stock column slightly. If you have an Early 1967 or 1970 refer to the appropriate section at the end of the instruction sheet. Remove the steering column and tube assembly in one piece. Do not remove the steering wheel. Cut off the rag joint assembly at the end closest to the joint itself. Next install the supplied column tube bearing by sliding it over the steering shaft and up to the column tube and tap it in with a hammer. Once the bearing is seated measure from the flat of the bearing down 1-3/4" and cut off the excess shaft. Next slide on the brass washer and install the supplied U-joint so that the shaft is flush to the inside of the new joint. Drill and pin the joint in place with the provided bit and roll pins. That is all that is needed for modification to the column.

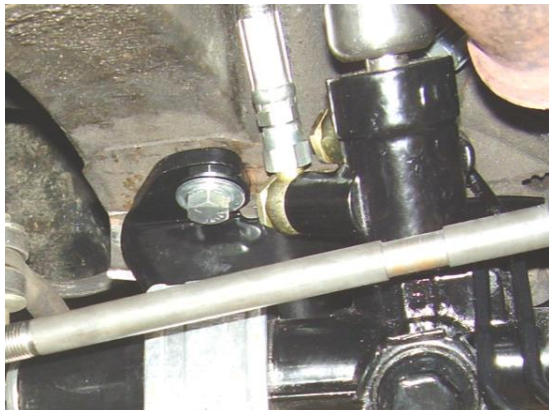


5. Once you have this done install the appropriate floor plate provided in your kit using the hardware provided. Slide the floor plate over the column tube with the clamp and install the column through the firewall and bolt back in place. Attach the new floor plate with supplied hardware and complete the installation.



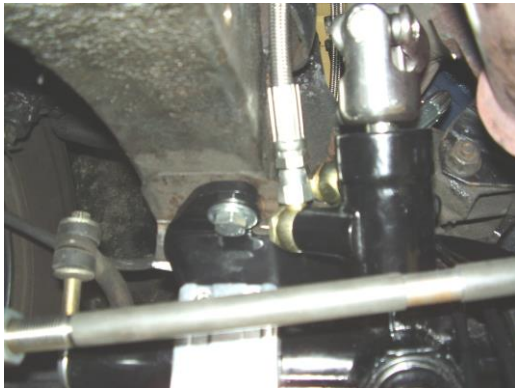
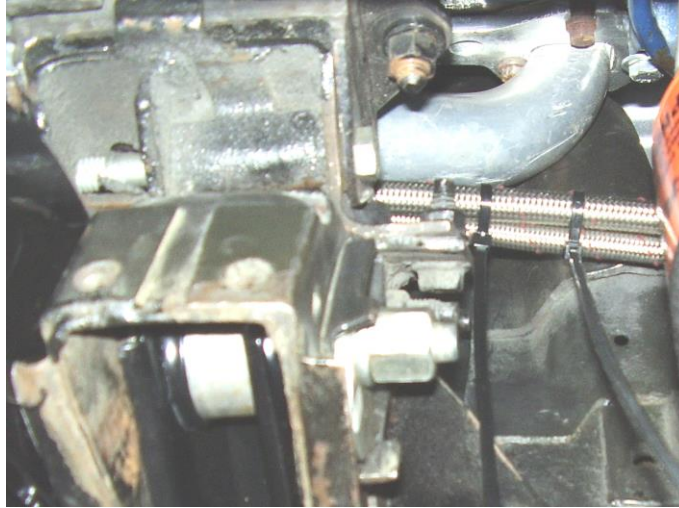


- From under the car remove the stock round cross member from the frame rail to frame rail. Install the new power rack and bracket in place using the stock holes where the cross member was and install new hardware provided. Note: Always check to make sure that your bracket is clear of the control arms and the lip of the frame around the camber adjusting bolts. If the bracket rubs or hits anywhere it is necessary to grind a little of the edge of the rolled lips of the metal on these parts. **DO NOT GRIND ON THE SUPPLIED BRACKET.**





7. Your rack has been shipped with the pressure and return line ports connected to it. You will need to install the pressure and return line to the ports and install the rack with them connected. The lower larger port on the rack is the pressure port and the higher smaller port is the return. As you are going up into place with the bracket you will need to position the lines around the motor mounts and header. This may take some time to find the angle you need but position the lines where you need so that clearance is provided. Your rack and pinion is also centered before shipping and is marked make sure not to move it off center or loosen the mounting blocks on the gear itself.

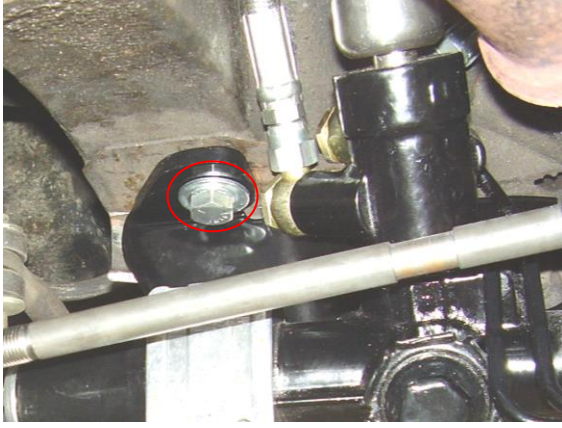


8. Once the rack is in place leave the bolts loose and install the shaft and joint from the rack and pinion to the steering column. Slide the shaft onto the u-joint on the column and snug the pinch bolt. Run the shaft down to the pinion, with the pinion joint on the shaft, raise the rack into place to spline the lower joint to the pinion. NOTE: It is important that you phase the u-joint 90 degrees out or opposite of each other before you install and tighten. Also make sure that you center your steering wheel before sliding the u-joints together. Torque the u-joint bolts to 40ft. lbs.

**Note:** MAKE SURE YOUR RACK AND PINION IS CENTERED AND YOUR STEERING WHEEL IS REASONABLY STRAIGHT.



9. You can now torque the mounting bolts for your rack to 65 ft. lbs.



10. Install the outer tie rod ends and tighten to 45 ft. lbs. Adjust the toe by eye so you can drive to an alignment shop. Align cotter pin hole and install provided cotter pin and crimp.

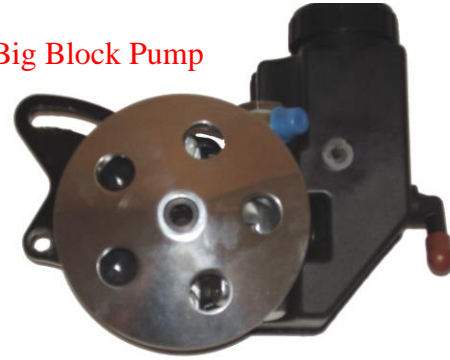




11. The power steering pump is an easy install and comes with the pump brackets attached to it. If your car was equipped with power steering you will need to remove the stock pump and brackets that held it on the motor.



**Big Block Pump**



**Small Block Pump**



12. Once removed, install the new pump and bracket in place and attach it with supplied hardware and standoffs provided in kit.

**Big Block Pump**



**Small Block Pump**



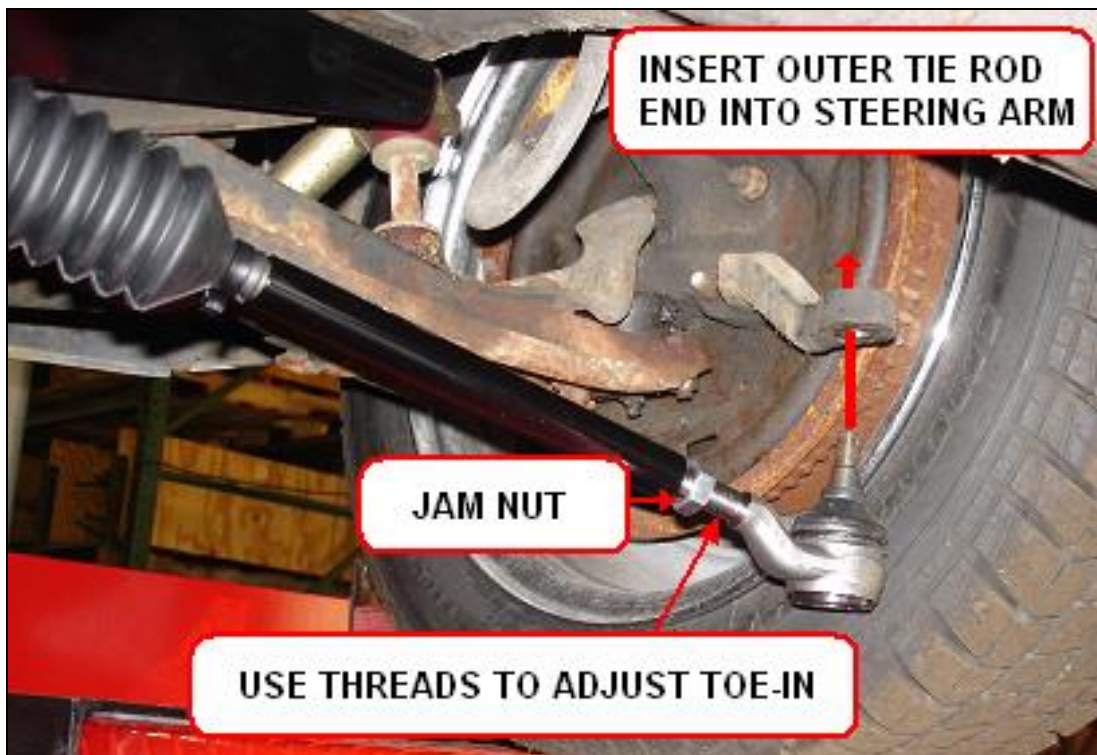
13. The power steering lines have fittings on them that can only be installed one way at the pump. If you are unclear at all you can trace the lower port on the rack and pinion following the lineup to the pump. This is the pressure line. The top port at that rack is the return port, which goes to the plastic reservoir. Be sure to tighten the clamp.



14. When your lines are connected and the top bolt on the pressure port is torque to 20 ft. lbs. You may top off the fluid in the reservoir and start the car.



15. Let the car idle and turn the wheels back and fourth slowly to remove air from the system.
16. Shut the car off and make sure you have no leaks and the level is full.
17. When your install is complete it will be necessary to have an alignment done.



### Alignment Instructions

**Toe In: 0 - 0.125**  
**Camber: O.E. Specs**  
**Caster: O.E. Specs**

**UNISTEER®** *Performance Products*

No part of these materials can be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from Maval Manufacturing Corporation.

## WARNING, for Early 1967 model year ONLY

### Early 1967 Cougar Column Modification

1. The steering column tube needs to be modified by first removing the steering wheel and the column tube bolts. Then disconnect the wiring, making note of their location to ease reinstallation.



2. Remove the column tube assembly.

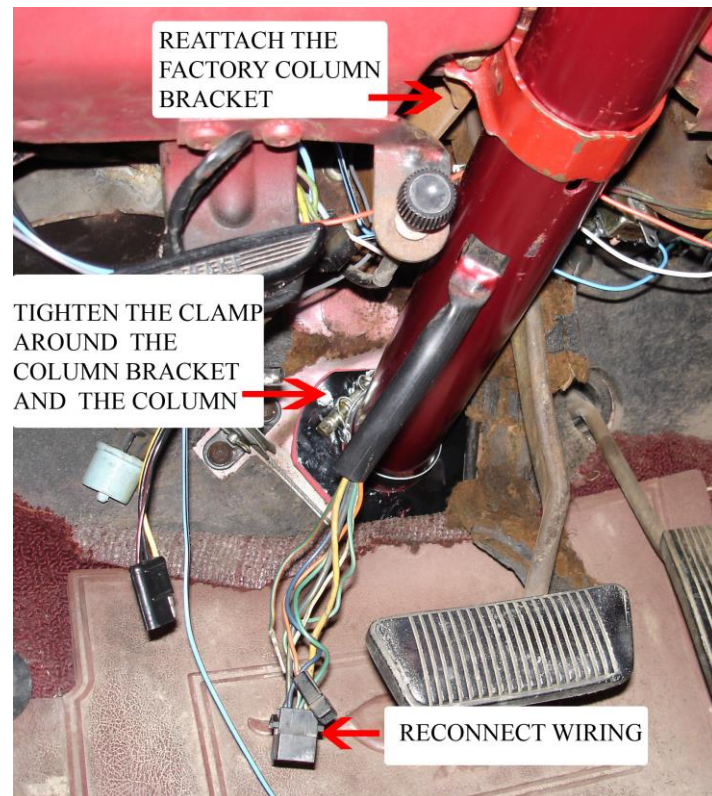
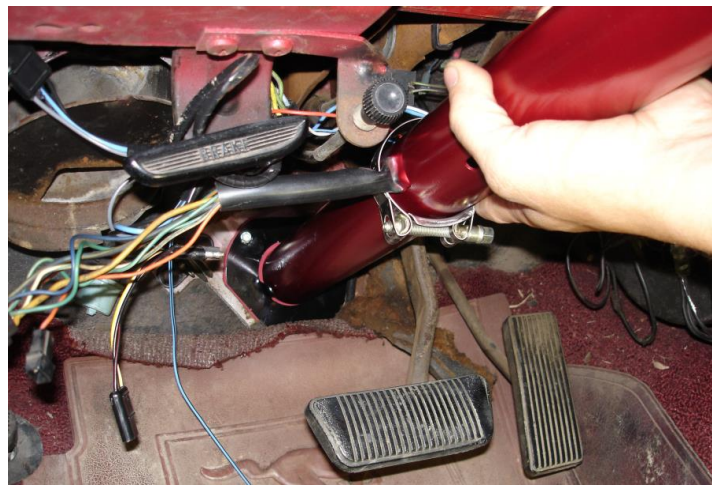




- From under the car remove the gear box and shaft assembly, (all one piece.)
- Place your column tube on a flat surface and measure from the very bottom of the column towards the steering wheel 3-1/8". Mark the column check the measurement again and cut the tube off squarely at you mark. Next install the supplied column bearing into the bottom of the tube by tapping it into place with a hammer.



- Once you have this done install the appropriate floor plate provided in your kit using the hardware provided. Slide the floor plate over the column tube with the clamp and install the column through the firewall and bolt back in place. Attach the new floor plate with supplied hardware and complete the installation.



6. Install the brass bearing collar from the old steering shaft onto the new steering shaft and slide the new shaft through the column tube and wiggle through the bearing hole. Then install the steering wheel and finger tighten the nut only.
7. From under the hood you can now install the provided brass washer and shaft u-joint to the splined end. Once the brass washer and u-joint are in place and tight, finish securing the steering wheel. This will seat the tapered piece in your column and you should have minimal movement up and down on the steering wheel.

**UNISTEER®** *Performance Products*

No part of these materials can be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from Maval Manufacturing Corporation.





## **WARNING, for 1970 model year ONLY**

### **1970 Cougar Column Modification**

1. Remove 4 bolts at firewall plate.
2. Remove lower plastic trim panel to access dash hardware.
3. Remove the 3 nuts that retain the steering column to the dash.
4. Disconnect the main wire harness off the ignition switch and the turn signal switch.
5. Make sure the steering box is disconnected and remove the steering column from the vehicle.
6. Once the column is out of the car, do the following. In a band saw or using a reciprocating saw cut the steering shaft off as close to the weld of the rag joint as you can.



7. Next you need to cut off the inner tube of the steering column tube. This is the tube that has the lever on it. Cut it off as close to the steering column tube as you can. **DO NOT CUT THE ACTUAL STEERING COLUMN TUBE.** When cutting the inside tube be sure to only cut the tube itself and not the inside steering shaft. You can accomplish this by going around the tube with your saw.



8. Once you have cut the inside piece off remove it from the column by sliding it off the end you cut the rag joint off of.
9. Next take a brass or a drift and tap the inner tube into the steering column tube.

**Note:** This piece is collapsible. Tap it in about 1" This will allow the clearance needed to install the bearing.



10. Once that is complete you need to make sure the steering shaft itself is clean and free of burs. Install the supplied bearing over the steering shaft and tap it into the column tube by walking it in with a small hammer.



11. When that step is done you now need to measure down 1-3/4" from the flat surface of the bearing to the end of the steering shaft and mark it. Cut the steering shaft off at that mark.
12. You now need to install the provided aluminum bushing over the shaft.





13. Next install the solid piece of steel stock into the steering shaft. Make it flush with the steering shaft.



14. Next install the u-joint over the steering shaft. Using the supplied drill bit and the pilot hole in the u-joint drill through the pilot hole and clear through the other side of the u-joint. Note keep your drill as straight as possible. We recommend the use of a drill press.

15. Next install the roll pin provided in the kit. Tap it into place and then install the smaller pin inside of it. This will lock it in place.



16. You can now reinstall your steering column assembly.

**UNISTEER®** *Performance Products*

No part of these materials can be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from Maval Manufacturing Corporation.