



1964-67 PONTIAC GTO, LEMANS, & TEMPEST POWER RACK & PINION KIT INSTALLATION MANUAL

8012170-01

Unisteer offers a limited warranty against all manufacturer defects of their kits and supplied parts. Unisteer will not honor any warranty on any parts that have been modified or improperly installed. Full refund will NOT be granted to any kits that are damaged, scratched, or altered in any fashion. Unisteer will not reimburse any labor money to the customer to change out the part even under a warranty repair.



***USE ONLY POWER STEERING FLUID IN SYSTEM. DO NOT USE ATF.**

***ALTHOUGH THIS KIT IS FAIRLY SIMPLE TO INSTALL SOME MODIFICATIONS ARE NECESSARY TO INSTALL.**

***BEFORE STARTING BE AWARE OF THE MODIFICATIONS NEEDED.**

***ALSO BE AWARE THAT THERE ARE APPLICATION/PROVISIONS NEEDED IN ORDER TO INSTALL. PLEASE READ ALL INSTRUCTIONS FIRST.**

***DUE TO VARIABLES OUTSIDE OUR CONTROL THESE KITS MAY NOT FIT ALL APPLICATIONS. ALSO, PLEASE VERIFY THAT KIT WILL FIT YOUR APPLICATION BEFORE ALTERING VEHICLE.**



Kit Contents:

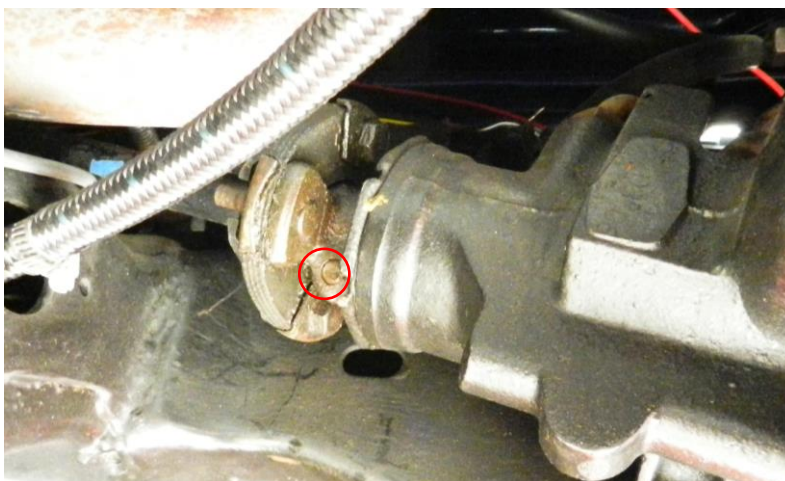
#	Part Number	Description	Qty	Inspected By
1	8012160	Rack & Pinion	1	
	--8020940	- Outer Ends	2	
	--117200	- Inner Ends	2	
	--622770	- Rack Install Kit	1	
	----120410	--- 7/16"-14 Lock Nut	2	
	----120490	--- 3/8"-16 Lock Nut	2	
	----200850	--- 5/16" Flat Washer	4	
	----200860	--- 7/16" Flat Washer	4	
	----201000	--- 1/4" Flat Washer	4	
	----231490	--- 3/8"-16 x 1 1/2" Hex Bolt	2	
	----231530	--- 7/16"-14 x 4 1/2" Hex Bolt	2	
	----231870	--- 5/16"-18 x 5/8" Screw	4	
	----233660	--- 5/16"-18 x 1" Screw	4	
	----271640	--- Stabilizer Bracket	2	
	----621710	--- 16mm & 18mm Fittings	1ea	
2	8061300	Pump Kit	1	
	--8060470	- C-5 Pump w/ Reservoir	1	
	--8020630	- V-Belt Pulley	1	
	--8027420	- Pump Mounting Bracket	1	
	--8027470	- Pump Stabilizer Bracket	1	
	--622780	- Pump Install Kit	1	
	----120490	--- 3/8"-16 Lock Nut	1	
	----200990	--- 3/8" Flat Washer	4	
	----205800	--- Frame Stand Off	1	
	----205810	--- Support Stand Off	1	
	----231500	--- 3/8"-16 x 2" Hex Bolt	1	
	----232610	--- 3/8"-16 x 1 1/4" Bolt	2	
3	8022140	Line Kit	1	
4	8052720	Shaft Kit	1	
	--8052730	- U-Joint 1"- Smooth x 3/4"-DD (Column)	1	
	--8050500	- U-Joint 3/4"-36 x 9/16"-30 (Pinion)	1	
	--5410330	- 4.875" DD Shaft	1	
	--620630	- Shaft Install Kit	1	
	----220060	--- 1/4"-1 1/2" Roll Pin	1	
	----220070	--- 5/32"-1 1/2" Roll Pin	1	
	----230600	--- 1/4" Drill Bit	1	

Disassembly:

1. Disconnect negative battery cable before installation.
2. Raise front of vehicle off ground & center & lock steering wheel.
3. Remove front wheels & remove power-steering lines at pump or gearbox.



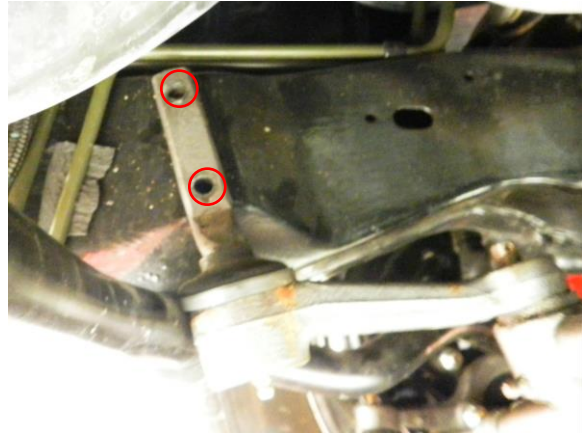
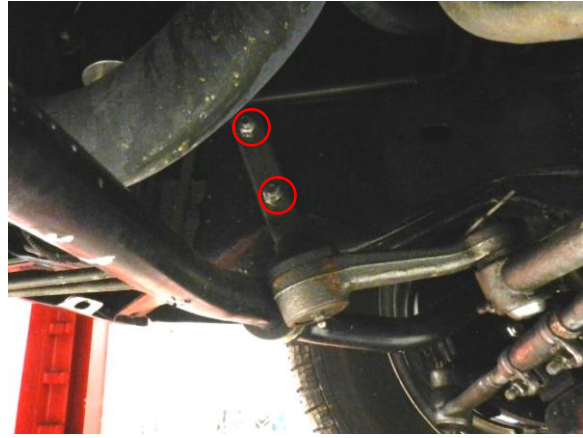
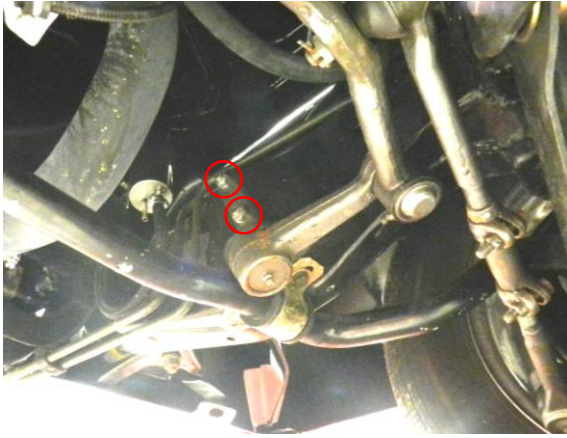
4. Drain fluid.
5. From under hood, remove pinch bolt at gearbox & shaft union & separate.



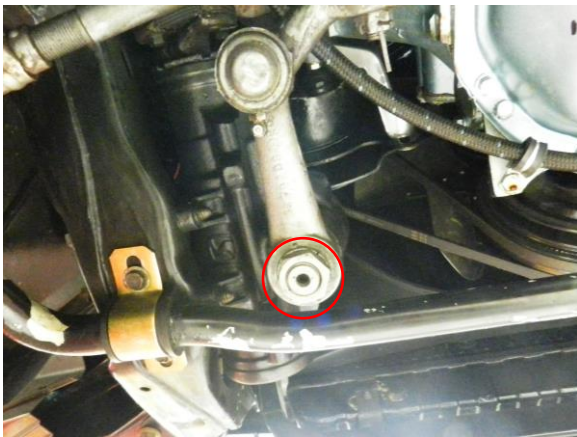
6. Remove cotter pins & nuts at outer tie rod ends.



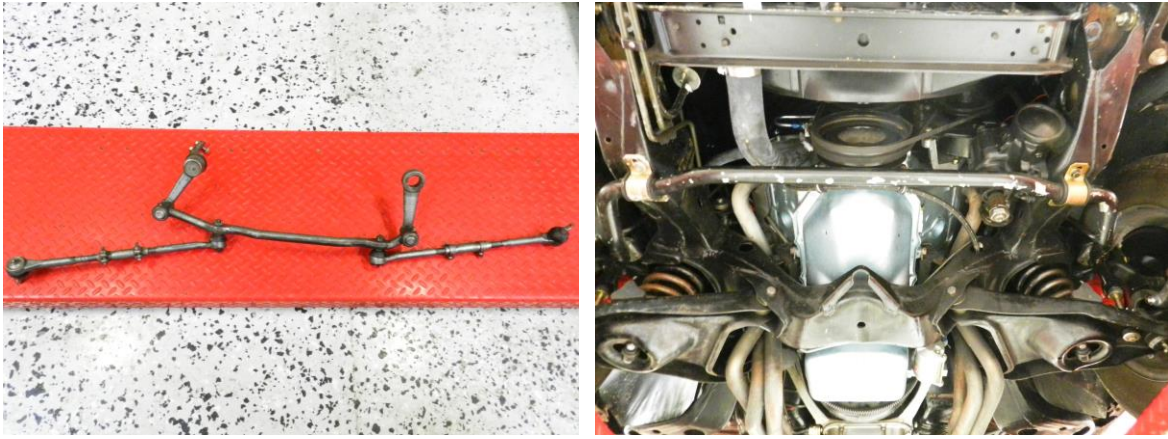
7. Remove two bolts & nuts at passenger side of vehicle attaching idler arm to frame.



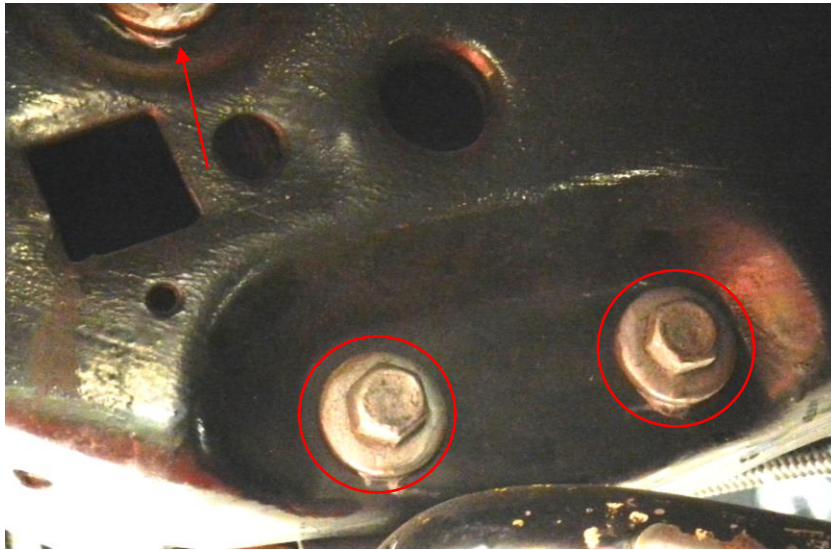
8. Remove center link nut from pitman arm at driver side.



9. Separate tie rod ends from spindles & center link from pitman arm & remove steering linkage from car.



10. Remove three bolts on driver side frame rail that secure gearbox and remove.



11. Remove four bolts retaining stabilizer bar mount bushing & let stabilizer hang free from links.

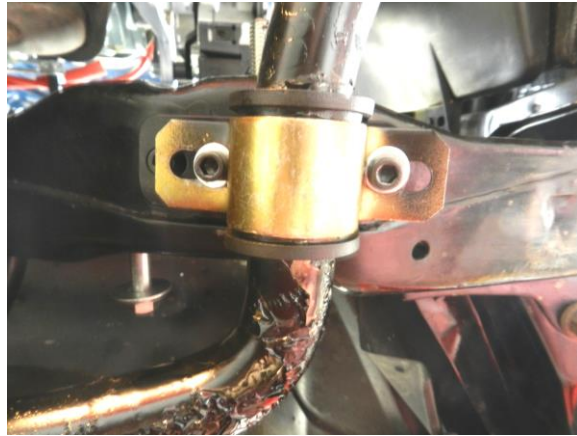


Installation:

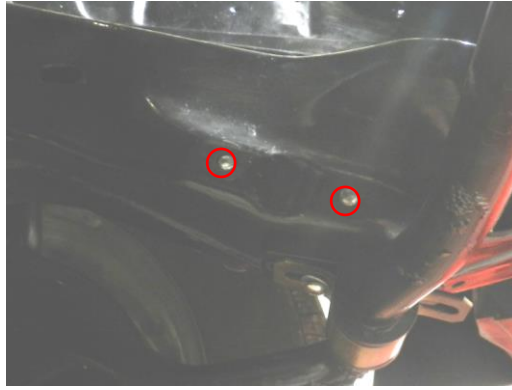
1. Your rack & pinion has been shipped to you assembled & screwed to the mounting bracket. Do Not Remove Rack & Pinion from Bracket.



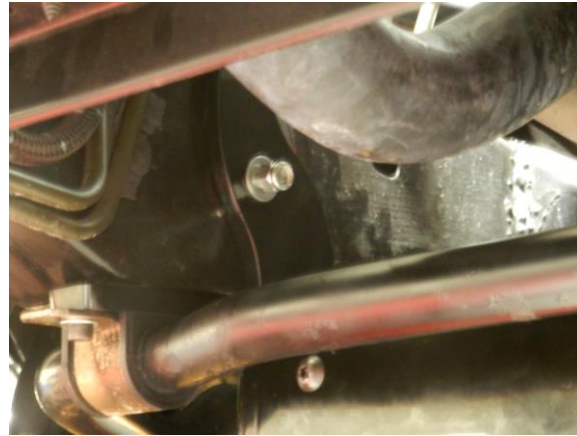
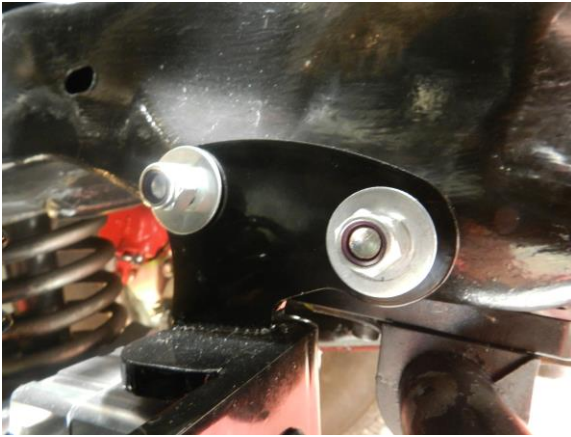
2. Mount the sway bar re-position brackets in the same location that the sway bar originally mounted to. They get positioned so that it pulls the sway bar farther forward in the car. Now mount the sway bar in its new position. Use red thread-locker on all these bolts.



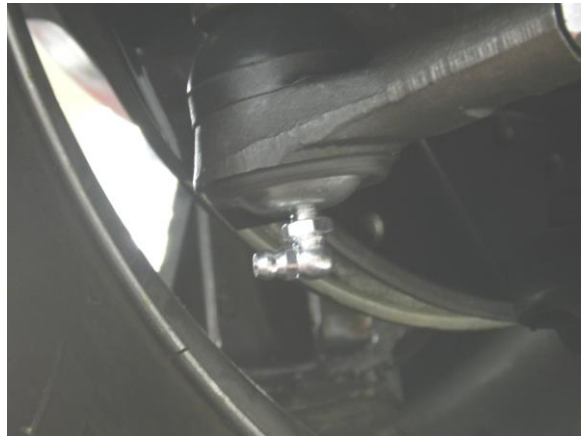
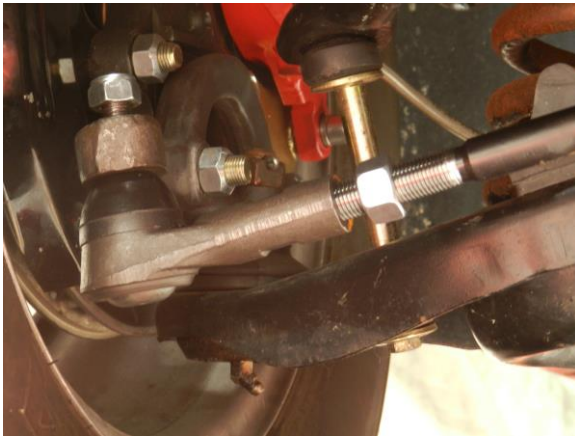
- Slide the 4 total mounting bolts with washers from the outside in on both sides of the frame rails just before they stick out on the inside of the frame. This step prepares the car to have the rack with bracket mounted.



- Hold rack and bracket up in place and slide the bolts on each side through the mounting bracket. Now you can use the washers and locknuts to secure it. Leave loose at this time.



5. Thread the tie rod jam nut on each side first. Then after threading on outer tie rod ends connect outer tie rods to steering knuckle. Tighten Outer end to 35 ft lbs. Adjust the rods by eye to keep front wheels straight by turning the inner tie rod end. The toe adjustment is made with everything connected. Once toe is set tighten jam nut.



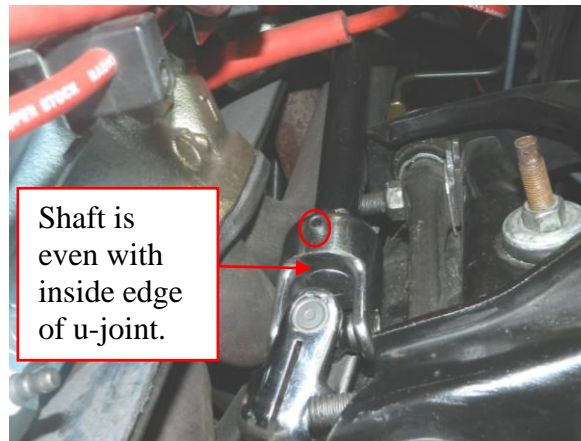
6. Install power steering pressure line, smaller line, to lower port on rack assembly and tighten.
7. Install return line to upper port larger line to rack assembly & tighten.
8. Make sure lines are pointing toward front of car & route lines upward towards pump. **Note:** Make sure lines do not interfere with pulleys, belts, etc.

Shaft Installation:

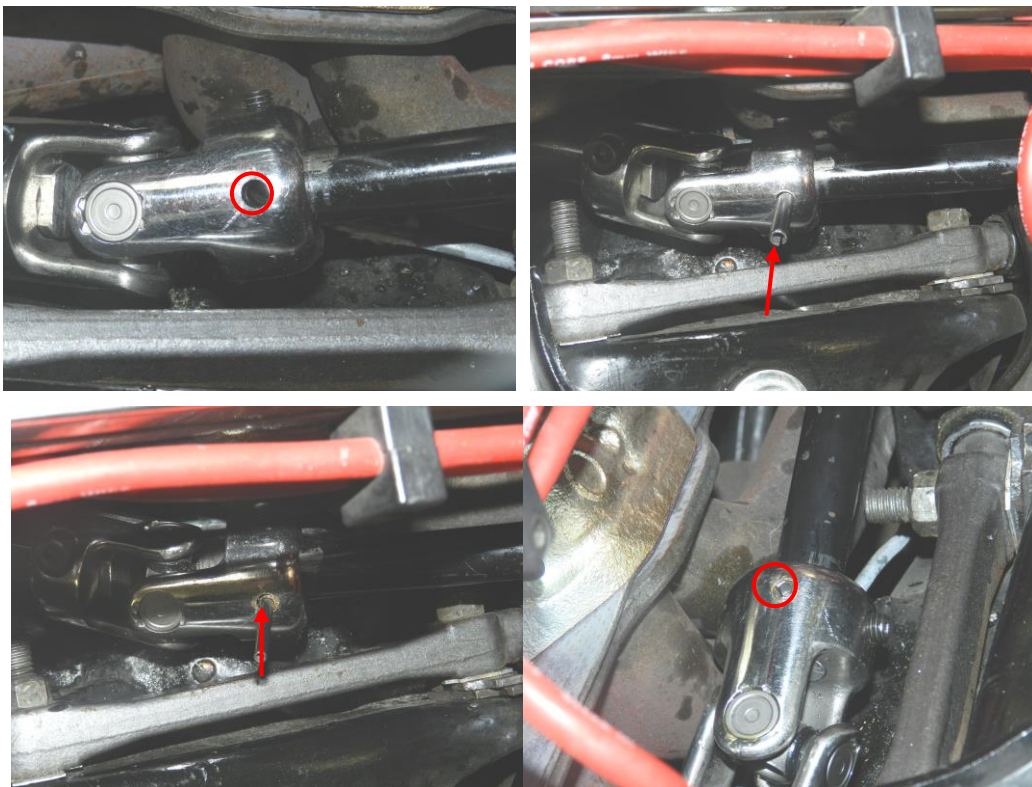
1. Cut the steering column shaft 7 1/4" from the furthest point on the bell of the rag joint as pictured below.



2. Install column joint end onto stock steering shaft and tighten allen style screw to hold joint in place. Make sure the end of the shaft is lined up with the end of the yoke on the u-joint so that it is in as far as possible without protruding into the middle.

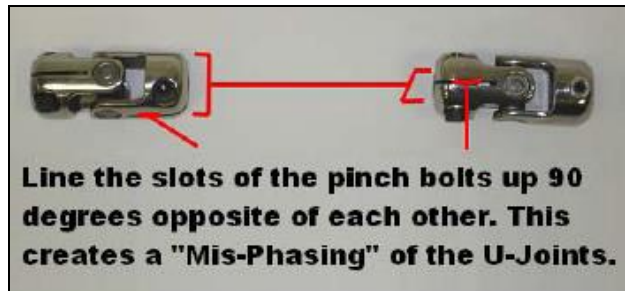
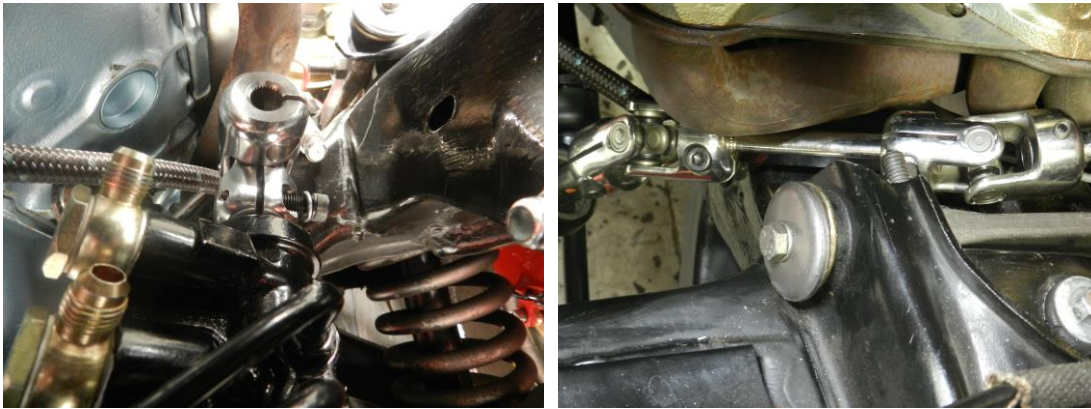


3. Rotate the column shaft joint to access the thru-hole.
4. Use supplied drill bit to drill through column shaft and blank side of u-joint. Start to install the larger roll pin provided by tapping it into the hole. Next tap the smaller pin into the larger pin already started until both pins are flush with the outside of the u-joint. This will ensure a positive lock.



5. Remove the allen set screw and apply **“RED” locktite** thread lock to threads and reinstall & tighten.

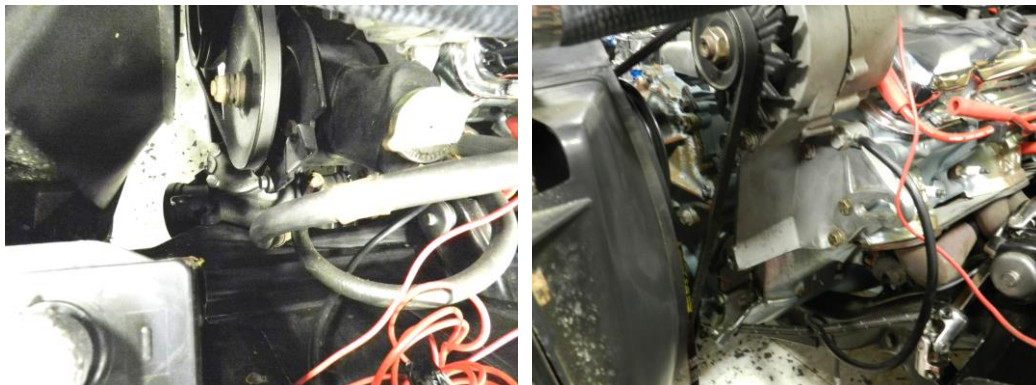
6. Install u-joint on pinion of rack with pinch bolt out. Next install the intermediate DD shaft in both the top and bottom u-joints with the pinch bolts out. Make sure that the top and bottom joint are mis-phased 90° opposite of each other so they do not bind. NEVER MODIFY THE PINION SHAFT. Note: It may be necessary to slide out diver side bolts & lower rack assembly to enable clearance of u-joint to shaft.



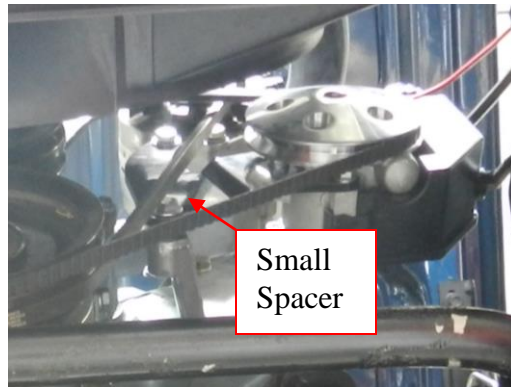
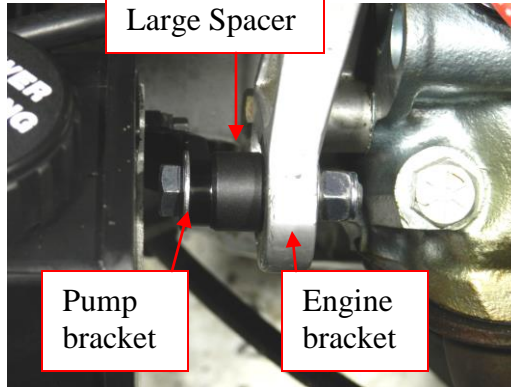
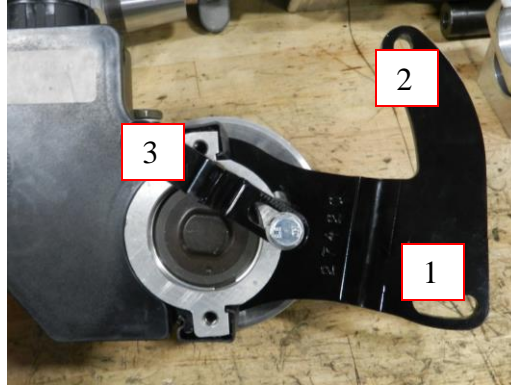
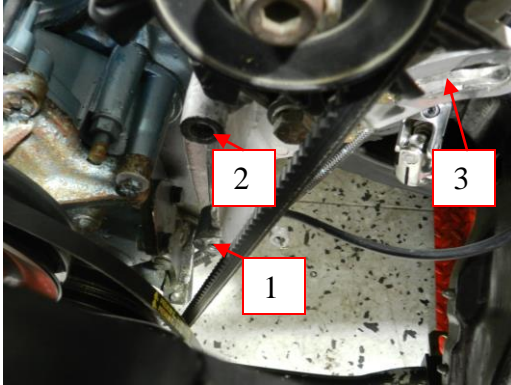
7. Tighten passenger side and driver side mounting bolts to 40 ft lbs.
8. Install all pinch bolts but do not tighten yet. Check clearance between header tube & u-joints of shafts. Rotate your steering wheel and check for smoothness and to ensure that nothing is hitting. Torque all u-joint pinch bolts to a minimum of 25 ft lbs. NOTE: If when you rotate your steering wheel and it bumps or binds your phasing is wrong. Continue to adjust by rotating u-joints.
9. Install front wheels & lower car.

Power Steering Pump Installation:

1. Remove factory pump, bracket, and hoses.

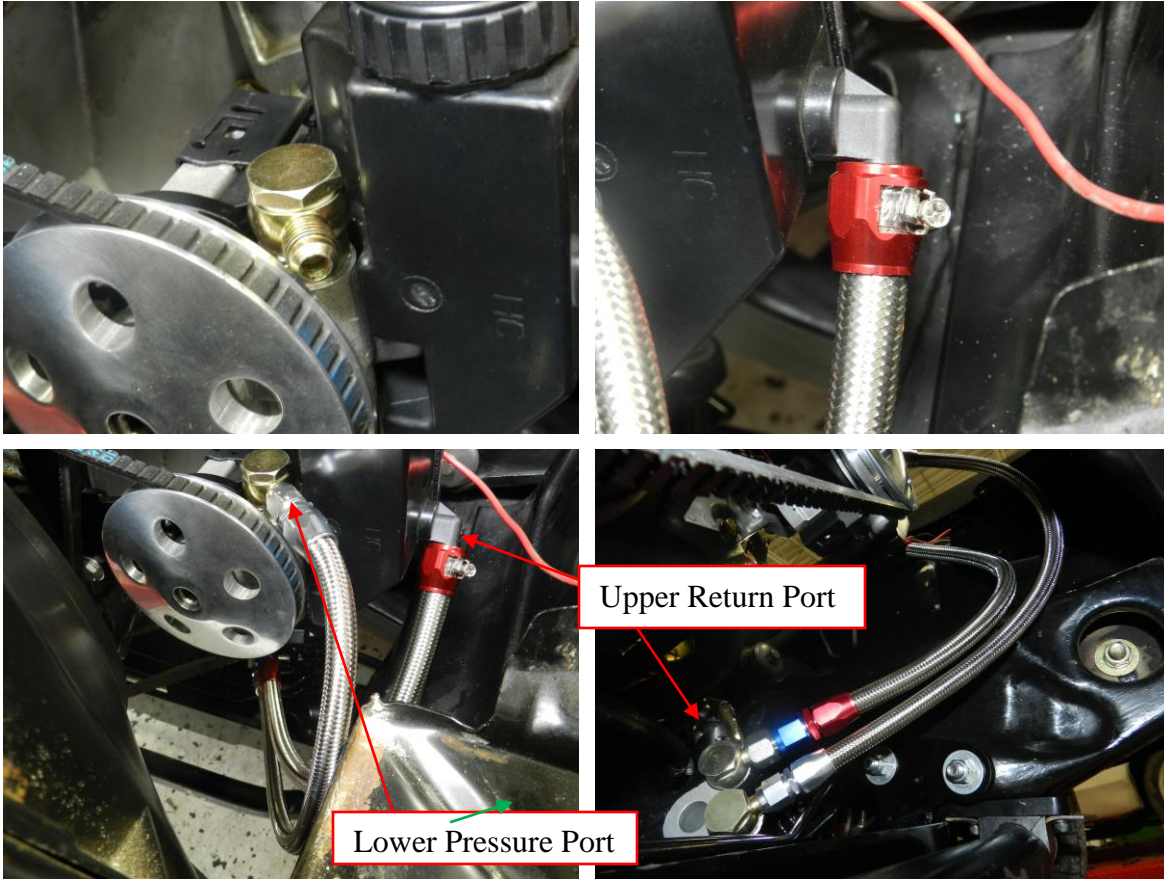


2. The pump will mount as pictured below. Start by mounting the motor slotted hole first, and then move to the two stationary holes. Use the long bolt & nut with large spacer that will go in between the mounting bracket on the pump and the bracket on the motor at the motors slotted hole. The other smaller spacer will go in-between the brackets on the lower pump hole.



3. It will be necessary to measure & purchase a new belt for pump assembly. Install belt, adjust tension, and tighten pump bracket hardware to 25 ft lbs.

- Next, route the smaller diameter pressure line from the top of the pump to the lower port on the rack. Route the larger diameter return line from the reservoir with the hose clamp to the upper return port on the rack.



- Top off power steering fluid and start car. Regular power steering fluid is all that is required. Do NOT use ATF.
- Check for leaks right away. If ok, turn wheels all the way right to left and hold for three seconds in each direction. This will bleed air from the system.
- After air is bled, top off fluid & install cap.

Note: Your vehicle will need an alignment to reset your toe adjustment. It is best to see a pro with the proper aligning equipment.

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