

1964-67 CHEVELLE POWER RACK AND PINION KIT INSTALLATION INSTRUCTION MANUAL

8010780-01, 8010780-02, 8010790-01, & 8010790-02

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.



Please note that this installation used Hooker 2-1/8" Super Comp Headers.

*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.

pg. 1 655680



Kit Contents:

#	Part Number	Description	Kit Included	Qty	Inspected By
1	8010770	Rack & Pinion	All	1	
	8020940	- Outer Ends		2	
	114040	- Inner Ends		2	
	620760	- 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	
	231490	3/8"-16 x 1 ½" Hex Bolt		2	
	231530	7/16"-14 x 4 1/2" Hex Bolt		2	
	621710	16mm & 18mm Banjo Fittings		1 ea	
2a	8060700	BB Pump Kit	8010780	1	
	8020630	- V-Belt Pulley		1	
	8020790	- Remote Reservoir		1	
	8060500	- C-5 Pump		1	
	8022370	- BB Pump Mounting Bracket		1	
	8022360	- BB Pump Stabilizer Bracket		1	
	620840	- Pump Install Kit		1	
	200840	3/8" Lock Washer		2	
	200850	5/16" Flat Washer		2	
	206170	1 5/16" Stand Off		1	
	206180	1 9/16" Stand Off		1	
	231210	3/8"-16 x 4 ½" Hex Bolt		2	
2b	8060550	SB Pump Kit	8010790	1	
	8020630	- V Belt Pulley		1	
	8060470	- C-5 Pump w/ Clip on Reservoir		1	
	8022450	- SB 4 Hole Bracket		1	
	8022440	- SB 3 Hole Bracket		1	
	8022430	- SB 2 Hole Bracket		1	
	621230	- Pump Install Kit		1	
	200850	5/16" Flat Washer		2	
	206190	5/8" Stand Off		2	
	231270	3/8"-16 x 3" Hex Bolt		2	
3a	8021580	BB 3 Line Kit	8010780	1	
3b	8022140	SB 2 Line Kit	8010790	1	
4	8050250	U-Joint 9/16"-30 x 3/4"-DD (Middle)	All	1	
5	8050760	Shaft Support w/ Nut	All	1	
6	8050880	U-Joint ¾"-36 x ¾"-DD (Pinion)	All	1	
7	8051410	U-Joint 1"-Smooth x 9/16"-30 (Column)	All	1	
8	543790	Upper Shaft	All	1	
9	543800	Lower Shaft	All	1	
10	620630	Shaft Install Kit	All	1	
	220060	- 1/4" x 1 1/2" Roll Pin		1	
	220070	- 5/32" x 1 ½" Roll Pin		1	
	230600	- 1/4" Drill Bit		1	

pg. 2 655680

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.

pg. 3 655680

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.



pg. 4 655680

2. Pull down on stabilizer bar & install racket bracket from over top of the bar. Note: Make sure you install the assembly with tie rods on underside of stabilizer.



- 3. Slide bolts through drive-side frame & through bracket.
- 4. Slide bolts through passenger side frame into bracket & start nuts. Leave loose.
- 5. Connect outer tie rods to steering knuckle & adjust the rods by eye to keep front wheels straight.
- 6. Tighten outer tie rod ends to 35 ft. lbs.
- 7. Install power steering pressure line smaller line to lower port on rack assembly and tighten.
- 8. Install return line to upper port larger line to rack assembly & tighten.
- 9. 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 1" from the bottom support bearing (see pic below).



- 2. Install column joint end onto stock steering shaft & tighten. **Note**: On big block cars it is necessary to slide shaft under header tube to clear & attach to column shaft.
- 3. Tighten the allen style screw in place in order to hold the u-joint to the column. Rotate the column shaft joint to access the thru-hole (see pic below).



pg. 5 655680

- 4. Use supplied drill bit to drill through column shaft and blank side of u-joint. Install the larger roll pin provided by tapping it into place until flush with the side of the u-joint. Next tap the smaller pin into the larger pin already installed until it is flush as well. This will ensure a positive lock.
 - a. If the u-joint has two thru holes, drill half way thru the column shaft. Then rotate the joint 180 degrees and use thru hole to finish drilling the column shaft.
- 5. Remove the allen set screw and apply "RED" locktite thread lock to threads and reinstall & tighten.
- 6. Install heim joint into threaded hole of column support bracket so about five threads are showing. Install jam nut on bracket. Do Not Tighten.



- 7. Slide lower shaft through heim joint & install bracket over the driver side from bolts & mounting bracket.
- 8. Install u-joint on pinion of rack & slide lower shaft into u-joint. Note: It may be necessary to slide out diver side bolts & lower rack assembly to enable clearance of u-joint to shaft.
- 9. Tighten passenger side bolts and driver side bolts to 40 lbs.
- 10. Check clearance between header tube & u-joints of shafts. Note: It may be necessary to adjust heim joint in or out of bracket (up or down) to clear. To do so, perform steps 2-4 again until adjustment is made.
- 11. Also, make sure you phase your u-joints. The lower u-joints at the pinion & at the heim must work opposite of each other. Set them up so that they are 90 degrees apart as they turn.
- 12. If you rotate your steering wheel and it bumps or binds your phasing is wrong. Continue to adjust by rotating u-joints.
- 13. After installation make sure mounting bracket bolts to frame are torqued to 40 lbs.
- 14. Make sure u-joint bolts are installed & torqued to 25lbs.
- 15. Tighten jam nuts on u-joints & heim joint.
- 16. Install front wheels & lower car.

Power Steering Pump Installation:

- 1. After removing stock power steering pump and bracket, install new pump and bracket assembly to your upper bolt hole on water pump for big block application and your larger hole in pump will be your adjuster hole.
- 2. Use standoffs provided in kit to move bracket away from pump.



- 3. It may be necessary to measure & purchase a new belt for pump assembly.
- 4. Both pump brackets attach to water pump bolts. Adjust your belt tension & tighten to 25lbsft.

pg. 6 655680

REMOTE RESERVOIR INSTALLATION:

1. Mount remote reservoir in an upright position & place it in a location in which it is close enough to the power steering pump to route the lines.





 Next, route your lines from the remote reservoir to the return side of the pump and then out the pressure side of the pump to the LOWER pressure port on the rack & from the UPPER return port on the rack to the reservoir.





- 3. Top off power steering fluid and start car.
- 4. 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.
- 5. After air is bled, top off fluid & install cap.

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

Alignment Specs:

Toe: 1/8 TOTAL (1/16 EACH SIDE)
Camber: ½ DEGREE NEGATIVE
Caster: 1 DEGREE POSITIVE +/- 1/2

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, with permission in writing from Maval Manufacturing Corporation.

pg. 7 655680