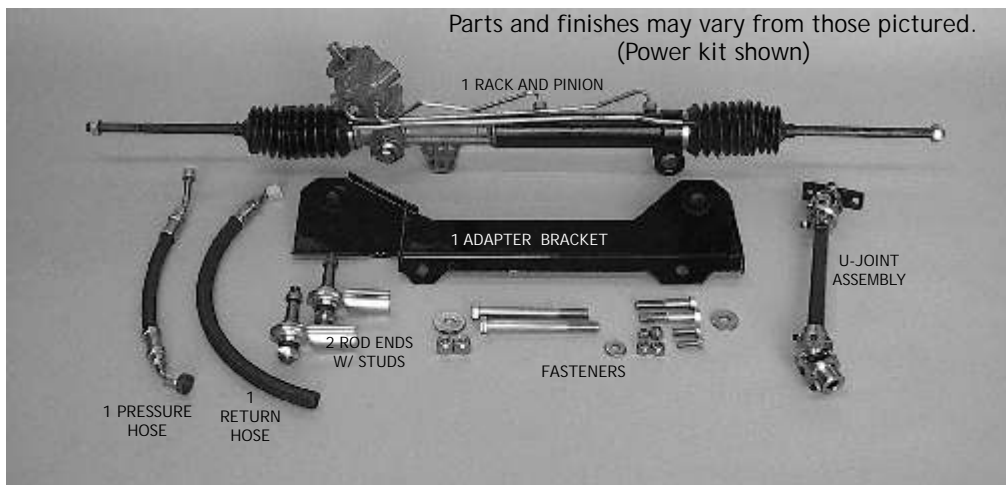


Steeroids™ INSTALLATION INSTRUCTIONS

1967-1969 Camaro, 1968-1974 Nova



Verify Kit Contents:

- 1 RACK AND PINION
- 2 ROD ENDS
- 1 U-JOINT ASSEMBLY
- 1 ADAPTER BRACKET
- 2 ½- 13 x 5 GRADE 8 BOLTS
- 2 ½- 13 ELASTIC NUTS
- 2 ½ WASHERS
- 2 7/16-14 x 2.5 GRADE 8 BOLTS
- 2 7/16-14 ELASTIC NUTS
- 2 7/16 WASHER
- 1 5/16-24 x 1 GRADE 8 BOLT
- 1 5/16-24 ELASTIC NUT
- 1 3/8-24 X 1 GRADE 8 BOLT
- 1 3/8-24 ELASTIC NUT
- 2 M14 X 1.5 JAM NUTS

Power Kit Only:

- 2 PUMP HOSES (1 PRESSURE, 1 RETURN)

BEFORE BEGINNING: Please note each steering rack is bench tested prior to shipping therefore some of the fluid from the test occasionally leaks out and may stain the box. This does not mean the rack has been damaged if fluid has leaked out.

You may also find two small rubber o-rings attached to your rack with a twist tie, these are merely extras that are sometimes supplied with our steering racks. The power steering hose adapters supplied with your kit should already have o-rings attached, so the extras can be discarded.

1. Begin by performing an inventory of all the components in the kit. Installing the Steeroids kit requires simple hand tools. A pickle fork will be useful when disassembling the old tie rod ends.

2. Begin by supporting the car securely on jack stands. Never support the car using only a jack.

3. Removing the entire steering system as a unit is the most effective way. The outer tie rods require removal of a cotter pin and nut before separating from the steering knuckle using a pickle fork. Once both tie rods are separated from their respective steering knuckles, remove the two bolts attaching the steering column to the steering box. The steering box is attached with 3 bolts that extend through the frame from the driver's side wheel well. Remove two of the bolts. Leave the last bolt installed until you are ready to remove the entire system.

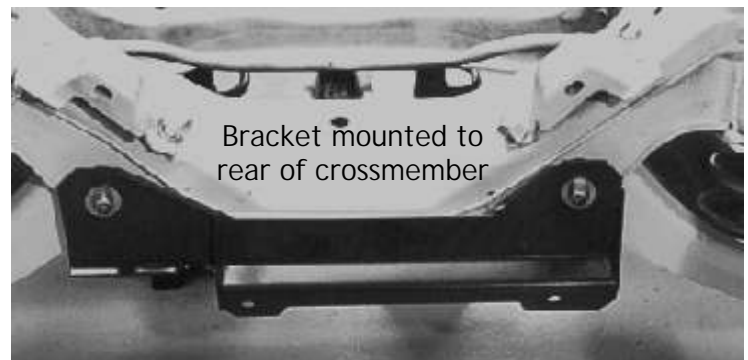
4. Now remove the two bolts and nuts that attach the idler arm to the passenger side frame rail. The final bolt holding the steering box can be removed now, but **BE PREPARED TO SUPPORT THE STEERING BOX WHEN IT COMES LOOSE**. Lower the steering system out of the car. You might have to work the bolts and rag joint loose from the steering column. If your headers interfere with removing the steering box you can loosen the bolts at the cylinder head flange. This will allow the headers to swing out of the way to remove the box, yet you can re-tighten the bolts without having to replace the gasket.

ASSEMBLY AND INSTALLATION

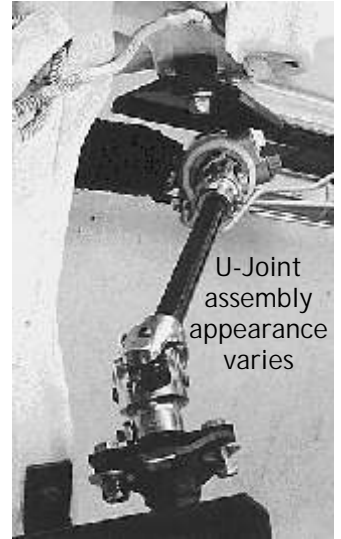
We recommend using high strength thread lock on all threaded applications except for power steering hose fittings.

5. Thread each tie rod onto the steering rack an equal amount. To set an approximate alignment, measure the overall length of the old steering system. Measure from the center of each outer tie rod. Adjust the tie rods on the steering rack to match your measurement and tighten the jam nuts against the rod ends. Using an adjustable wrench, turn the pinion until the rack is at its stop. Now count the turns as you proceed to the opposite stop. Divide the number you get by 2 and turn the pinion this amount. The steering rack is now centered.

6. The adapter bracket attaches to the frame at the aft, lower a-arm mount. The existing bolts must be removed. Installing the new bolts while the old bolts are still half way in will help keep the bushing aligned with the hole. Install the first bolt with washer, through the bracket then about one inch into the bushing. Push the bracket until it contacts the frame and install the second bolt. Completely install both bolts and nuts. Torque to 80 ft-lbs. NOTE: If the bolts are installed with the ends pointing towards the back of the car, it will be easier to remove the bracket if needed. This can increase the difficulty of the initial installation but will be worth the time invested. Be sure to use a washer on the bracket side of the bolt.

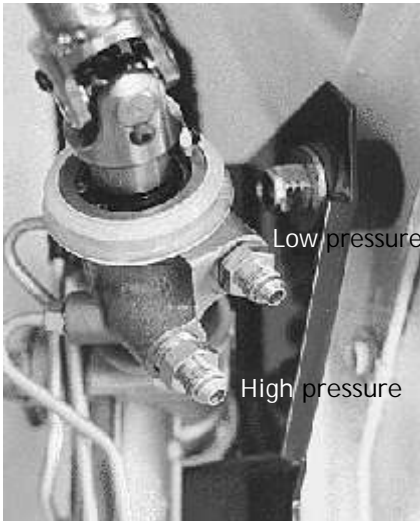


7. Install the U-joint assembly on the steering rack. Use a high strength thread locker on the setscrews. Now install the rack and pinion on the bracket using the supplied bolts, washers and nuts. Torque to 59 ft-lbs. Attach the tie rod ends to the steering knuckles and torque nylock/castle nut(whichever was supplied) to 35 ft-lbs. [If you have castle nuts: Continue to tighten the nut to align castellation with the cotter pin hole. Install cotter pin.] When attaching the tie rod end to the spindle, torque the 15/16" nylock nut to 50 ft lbs. (Note: the flange above the taper may not seat against the spindle - this is not a problem.)



8. Now bolt the other end of the U-joint assembly to the steering column. (See picture on right) Turn the column/steering wheel to align the holes. You will most likely have to re-center the steering wheel by removing it from the column, centering and reinstalling.

9. The steering shaft should be able to be turned by hand (with the wheels off the ground). If you experience binding in the u-joint assembly, the steering column should be moved towards the rear of the car. Adjust the column by loosening the nuts under the dash and pulling it back. You may also need to move the end of the column toward the engine to eliminate binding.



Note: If you are installing a manual kit, skip to step 12

10. Next, attach the power steering hoses. The large hose fitting on the rack is the pressure side. (See picture below) This connects to the threaded fitting on your pump. Tighten to 21 ft-lbs. The return side is torqued to 13 ft-lbs.

It is very important to connect these hoses to their proper locations. Reversing the hoses will destroy seals and cause the rack to operate inconsistently and uncontrollably.

Power steering fluid recommendations: Run standard GM Power Steering Fluid. For those who prefer synthetic fluids you may switch to Royal Purple Synthetic after 1000 miles, but it is not required.

11. Bleed the system by turning the wheels all the way to the left. Add fluid to the "cold" mark on the dipstick. Turn the wheel back and forth 3 or 4 times. Start the car and allow it to idle. Fill to the "cold" mark as needed. (A) Now turn the wheels side to side until there are no more bubbles. Check the fluid level frequently while proceeding. Allow the engine to run for a few minutes. Add fluid as needed. Replace cap and shut off engine. If the fluid level rises after the engine is shut off, there is still air in the system. Repeat (A) until all air is out of the system. "Flushing" the system is not necessary, you are only bleeding it of air.

12. Now re-check every bolt and nut to be sure all are tight. Test-drive the car at low speed for a brief period. Check every bolt for tightness again. If the engine is at operating temperature, check the power steering fluid level. Fill to the "hot" mark as needed.

13. The final step is to have the front end aligned and re-check all bolts for tightness after the first 100 miles.

Alignment recommendations for spirited driving:

<u>Camber</u>	<u>Caster</u>	<u>Toe</u>
0 -.25 negative camber	2.5 - 5 positive	0 to 1/8" toe in

CAUTION: The steering ratio of this kit is significantly faster than the stock steering. Exercise caution when first driving with the new system. The vehicle will respond quicker and turn more from the same amount of steering input. This might take some time to get used to.

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