



Installation Instructions

1963-1982 Power Steering Cylinder Rebuild Kit

Every effort has been made to ensure the highest possible quality in regard to the color, fit, texture, appearance and longevity of this CA power steering cylinder rebuild kit. The construction of the cylinder incorporates many improvements over the original cylinder and will significantly add to the appearance of your Corvette for years to come



Tools Required

1. Socket Set
2. Snap Ring Pliers
3. Line Wrenches
4. Jack Stands
5. Power Steering Fluid



Important Notice

This kit contains the seals and repair parts necessary to rebuild a 1963-1982 Corvette power steering cylinder. These instructions are written to be an aid in the installation of this kit, but they are not intended to be a substitute for a factory trained mechanic. If you are not completely confident about performing the steps outlined below, it is advised you seek the services of a qualified repair facility.

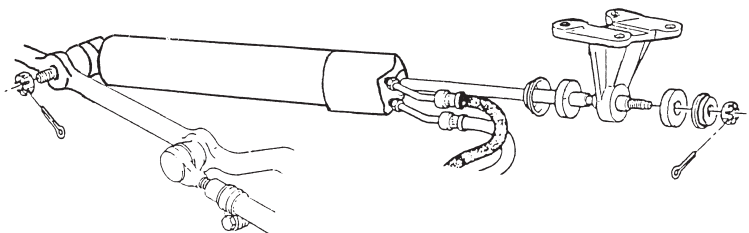


Checklist

1. Piston Rod Locknut
2. Piston Rod Nut
3. Piston Rod Bushings (2)
4. Piston Rod Sleeve
5. Snap Ring
6. Piston Rod Scraper
7. Scraper Element
8. Backup Washer
9. Piston Rod Seal
10. Ball Stud Seal
11. Ball Stud End Plug "O" Ring
12. Piston Rod (2) Bushing Cup Washer
13. Cotter Pin
14. Ball Stud Castle Nut

A. REMOVAL OF CYLINDER

1. Jack up the vehicle according to the manufacturer's instructions and secure with jack stands. Never work under a vehicle supported only by a jack.
2. The power steering cylinder goes between the steering linkage relay rod and a bracket on the frame rail. Disconnect the two hoses that go into the end of the cylinder. Refer to the diagram below..
3. Remove the cotter pin from the castle nut on the end of the piston rod and remove the castle nut.
4. With the castle nut removed, remove the washer and bushing from the piston rod. Slide the piston rod out of the metal sleeve and remove the bushing and washer from the piston rod closest to the cylinder.
5. Remove the cotter pin from the castle nut on the ball stud end of the cylinder and remove the castle nut.
6. Use a tie rod end separator to separate the cylinder from the steering relay rod.



B. OVERHAULING THE CYLINDER

1. Remove the snap ring from the cylinder body at the point where the piston enters the cylinder.
2. With the snap ring removed, pull out on the piston rod. Be careful not to spray power steering fluid.
3. With the piston rod out of the cylinder, remove the piston rod scraper, scraper element, backup washer and piston rod seal from the rod.
4. At the ball stud end of the cylinder, remove the snap ring that secures the end plug and grease fitting.
5. Push on the end of the ball stud and remove the end plug, spring, spring seat, and ball stud.
6. Remove the "O" ring seal from the top lip of the ball stud opening.
7. Clean and inspect all metal parts for wear and distortion. Replace as necessary.
8. Install new "O" ring in the top lip of the ball stud opening. Replace the ball stud, spring seat, spring, end plug and snap ring. Place new ball stud seal in position. Lubricate through fitting.
9. Apply power steering fluid to the new piston rod seal and slide the seal into position on the rod.
10. Apply power steering fluid to the new backup washer, scraper element and piston rod scraper and slide them into position on the piston rod.
11. Install the new snap ring into the end of the cylinder around the piston rod.

C. CYLINDER INSTALLATION

12. Place the new ball stud seal in position over the ball stud. Place the ball stud in the hole on the steering linkage relay rod. Replace the castle nut and tighten securely. Replace the castle nut cotter pin.
13. Place the washer on the piston rod and then a new piston rod bushing.
14. Slide the new piston rod sleeve on to the piston rod. Insert the end of the piston rod into the bracket on the frame rail. Be sure the sleeve goes through the hole in the bracket.
15. Place the remaining new bushing in position on the end of the piston rod and the washer. Install the new piston rod nut and lock nut.
16. Reconnect the hoses from the control valve and your installation is complete.