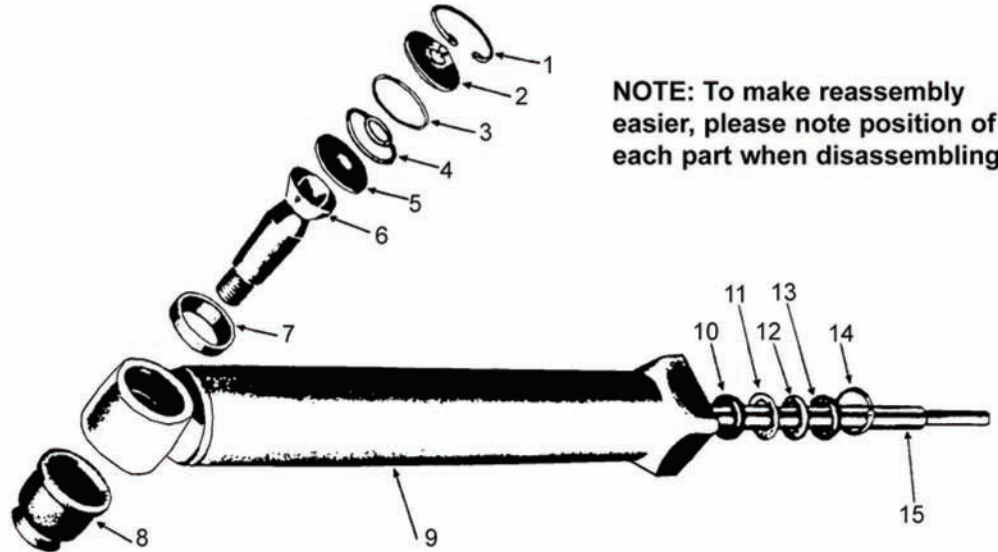




Suggested Installation Instructions for: 602-458, 1963-1982 Power Steering Cylinder Rebuild Kit

1. Snap Ring
2. End Plug & Lube Fitting
3. "O" Ring
4. Spring
5. Spring Seat
6. Ball Stud
7. Ball Seat
8. Ball Stud Seal
9. Piston Body
10. Piston Rod Seal
11. Backup Washer
12. Scraper Element
13. Piston Rod Scraper
14. Snap Ring
15. Piston Rod



NOTE: To make reassembly easier, please note position of each part when disassembling.

OVERHAUL OPERATIONS

DISASSEMBLY

1. If not previously removed, remove the cotter pin, adjuster screw and ball seats from one end of the power cylinder. Use a wide blade screwdriver to turn the adjuster screw out. Repeat these procedures at the opposite end of the cylinder.
2. Loosen the clamp on the outside of the socket and then while holding the piston rod from turning, unthread the socket assembly from the piston rod.
3. Force the piston rod in and out of the power cylinder to drain the remaining fluid.
4. Using Snap Ring Pliers J-4245 (Kent Moore Tools or similar type), remove the scraper retaining snap ring from the groove in the piston rod guide assembly.
5. Apply air pressure to the retraction port in the guide assembly while holding a finger over the extension port. This will dislodge the scraper assembly, scraper assembly "O" ring, and piston rod seal from the guide assembly.

NOTE: If air pressure is not sufficient to dislodge the parts, they can be pried out using a small screwdriver. Be extremely careful not to damage the piston rod or housing bore.

CLEANING & INSPECTION

Clean and inspect the components using solvent and compressed air. Replace scraper assembly, "O" ring, and seal with new parts.

ASSEMBLY

1. Lubricate the tip of the new piston rod seal with transmission fluid and insert it into the guide assembly with the "U" of the cup toward the bottom of the opening in the guide.
2. Lubricate a new "O" ring with transmission fluid and install it onto a new scraper assembly.
3. Install the scraper and "O" ring assembly in the guide ("O" ring towards guide opening), being careful not to damage the "O" ring.
4. Using Snap Ring Pliers J-4245, install the retaining snap ring into the guide groove. Make sure the snap ring is well seated in the guide assembly.
5. Thread the socket end assembly onto the position rod until it shoulders against the rod.
6. Tighten the socket clamp bolt securely.
7. Install the ball seats at both ends of the power cylinder and then thread the adjuster screws into the sockets.

Continued on page 2.

ADJUSTMENT AND BLEEDING PROCEDURES

1. It is recommended to re-balance the power steering control valve after rebuilding the power steering cylinder. Please use caution when starting vehicle for the first time after installation as the steering wheel and steering rack may turn to the left or right prior to balancing.
2. Have an assistant sit in the car and hold the steering wheel with a firm grip and start the car. If steering wheel pulls left or right, remove metal cap on end of control valve (about the size of a quarter, has letter "C" stamped on it). You will now see the balance nut. Adjust nut by turning clockwise or counterclockwise until the wheels are not pulling in either direction and steering is balanced.
3. Turn steering wheel in both directions checking to see if there is any pull in either direction.
4. Turn steering in both directions allowing fluid to flow through complete system. Check fluid level and adjust nut one more time before replacing adjustment nut cover.
5. If there is no pull in either direction, the Control Valve is properly balanced. Replace cap and lower car to ground and test drive.

If steering wheel surges, perform the following operation:

6. Air may become trapped in the power steering cylinder, control valve, or lines, causing surging and requiring bleeding of the system.
7. To bleed the system, first place a drain pan or suitable fluid absorbent directly beneath the control valve.
8. Loosen the two lines that cross on the end of the control valve approximately 1/8-1/4 turn (counterclockwise).
9. Start the vehicle while firmly grasping the steering wheel. Turn the steering completely from left to right, while an assistant verifies that a small amount of fluid is spraying out of both lines.
10. After turning the wheel from left to right 3 or 4 times, hold the wheel to the right while an assistant tightens the two lines on the end of the control valve.
11. Check the power steering fluid level and add as necessary.
12. If necessary repeat the valve balancing procedure. Refer to #1-5 under Adjustment and Bleeding Procedures.