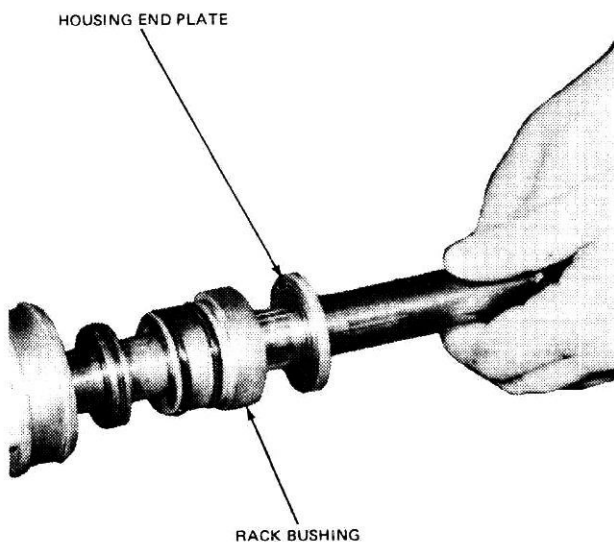
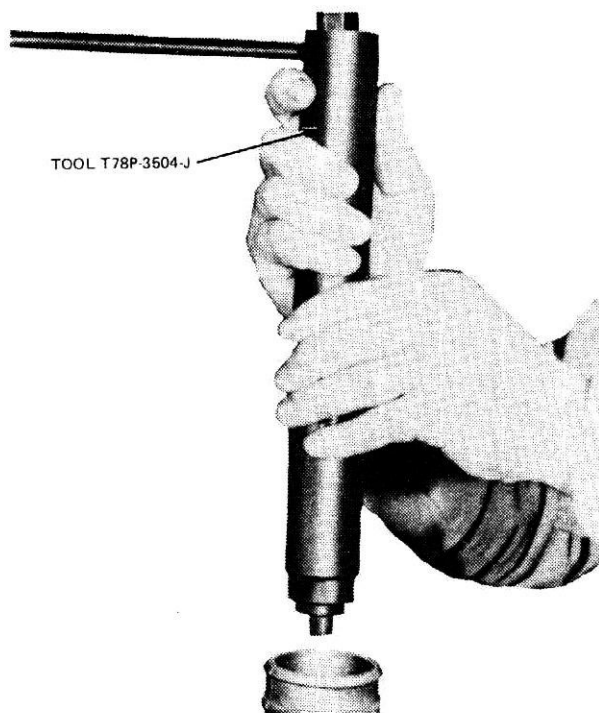




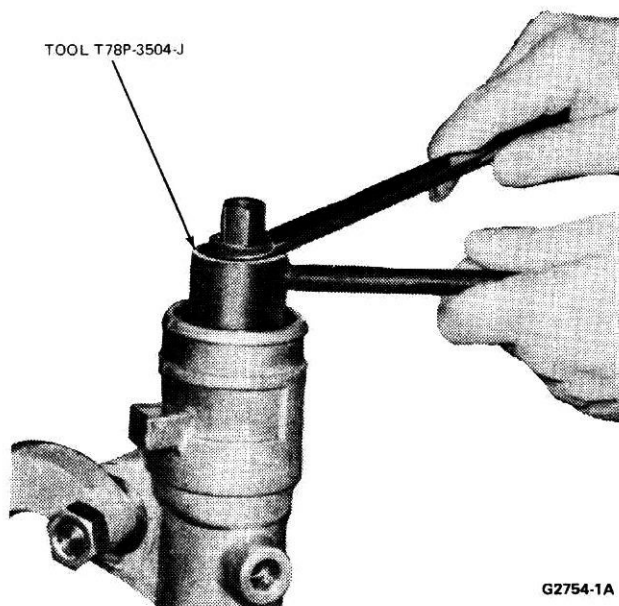
G2752-1A

FIG. 37 Removing Rack And Rack Bushing From Gear Housing



G2753-1A

FIG. 38 Inserting Rack Oil Seal Remover Into Gear Housing



G2754-1A

FIG. 39 Activating Expander On Rack Oil Seal Remover

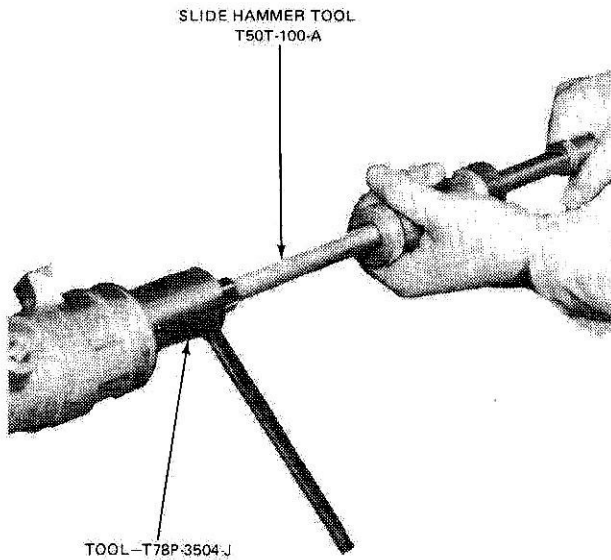
with slide hammer T50T-100-A threaded into the expander end (Fig. 40). Discard the seal. **Note:** On the first attempt, the nylon ring may pull out of the seal, leaving the seal in the gear. Repeat the procedure and the seal will come out.

8. Remove the plastic O-ring and the rubber O-ring from the rack piston with Tool, T71P-19703-C.
9. Insert the rack bushing into the rack bushing holding Tool, T78P-3504-L, seal end first. Place the tool and bushing in vise. With Tool, T78P-3504-J, and slide hammer, T50T-100A, remove the seal (Fig. 41).
10. Remove the rubber O-rings from the bushing with Tool, T71P-19703-C (Fig. 42).

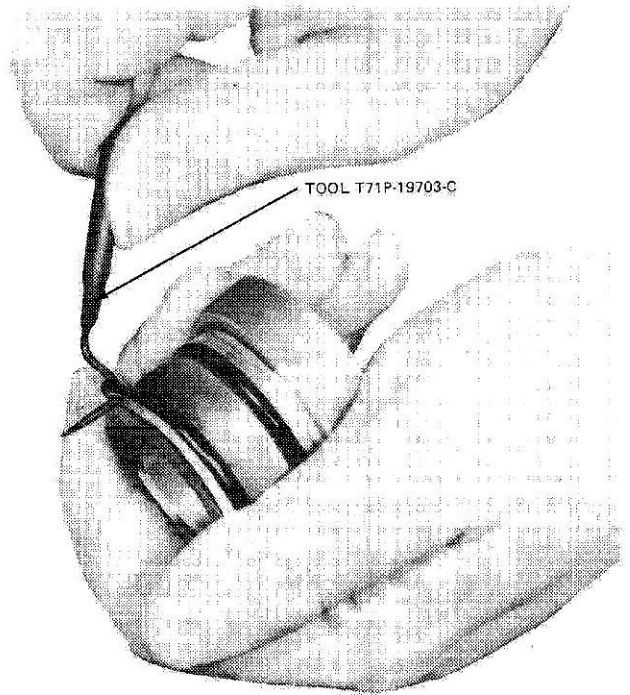
Assembly

Be sure that the pilot nose of Tool, T78P-3504-K, is completely free of nicks or burrs before placing a seal on the tool. If necessary, polish the tool as required, finishing with 600 grit wet/dry sandpaper and oil. This is equally important for Tool, T74P-3504-K, used in Step 5.

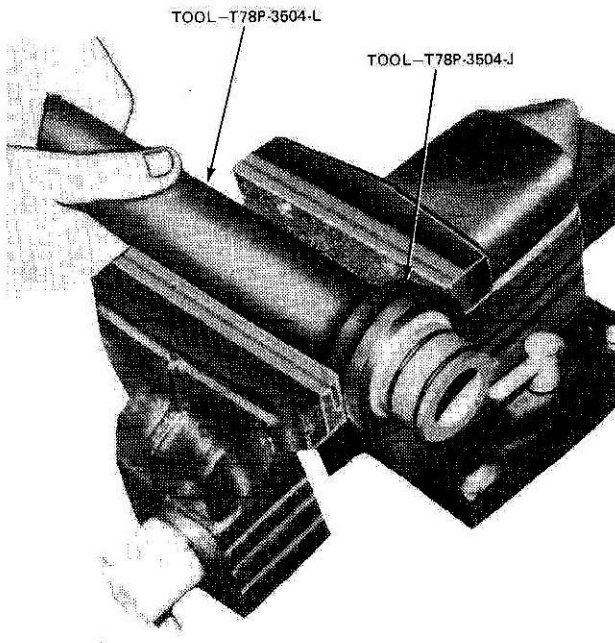
1. Apply grease to the high pressure oil seal and place on the inner rack oil seal replacer, Tool T78P-3504-K, with the lip spring facing the tool (Fig. 43). With the gear housing in a vertical position, insert the replacer into the right side bore of housing. Tap on the handle of the tool until the seal bottoms. **Do not cock the handle during this operation.**



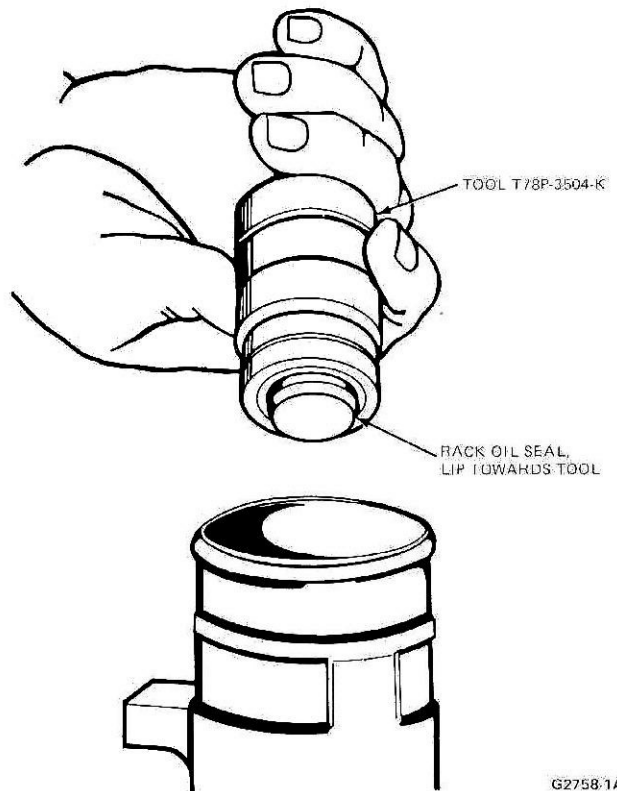
G2755-1A

FIG. 40 Removing Rack Seal From Gear Housing

G2757-1A

FIG. 42 Removing O-Ring Seals From Rack Bushing

G2756-1A

FIG. 41 Removing Rack Seal From Rack Bushing

G2758-1A

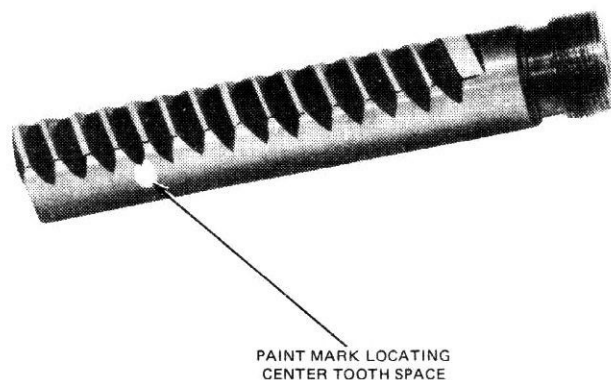
FIG. 43 Installing Inner Rack Oil Seal

2. Mark the center tooth space on the rack where it will be visible through the valve bore to facilitate valve replacement. Use a quick drying paint stick (Fig. 44).
3. Install the rubber O-ring in the groove of the rack piston.
4. Place a plastic O-ring on replacer Tool, T74P-3504-G. Slide the tool and O-ring on the rack until it is adjacent to the piston. Slide the plastic O-ring off the tool into the piston groove over the rubber O-ring (Fig. 45).
5. Pack rack teeth with specified grease. Apply a light coat of specified grease opposite the rack teeth (Yoke Bearing Area). Place the long protective sleeve, Tool T74P-3504-K, over the rack gear teeth (Fig. 46). This is required to protect the internal oil seal from the rack teeth (See note preceeding Step 1).
6. Thread the short protective sleeve, Tool T74P-3504-J, over the threads on the right side of the rack (Fig. 46).
7. Lubricate the plastic O-ring and the protective sleeve with power steering fluid.
8. Install the smaller diameter end of sizing Tool, T78P-3504-M, into the right side opening of the gear housing.
9. Place the rack, gear tooth end first, into the sizing tool. Carefully push the rack into the housing until the leading end engages the internal oil seal properly. Position the sizing tool so that it compresses the plastic O-ring properly, and guides it into the housing bore (Fig. 47). Push the rack in until the long protective sleeve protrudes from the left side of the gear. Remove the sizing tool and the long protecting sleeve from the end of the rack. Install tie rod on the left end of the rack to prevent the rack teeth from damaging the internal oil seal.

Important Note: Do not allow rack to move too far from center until the tie rod end is installed since excessive rack travel can cause the rack teeth to cut the left (inner) oil seal.

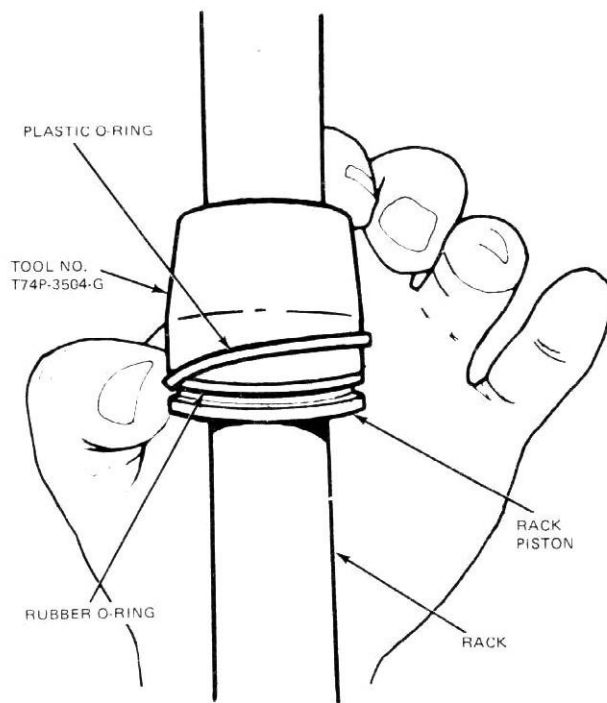
10. Install the two rubber O-rings on the aluminum rack bushing.
11. Apply gear lube to the outer rack oil seal. With outer rack oil seal replacer, Tool T74P-3504-F, install the high pressure oil seal in the rack bushing (Fig. 48). The lip spring must face the inside of the bushing.
12. Lubricate the short protective sleeve on the rack end, and the rubber O-rings on the rack bushing with gear lube.
13. Start the bushing, seal facing out, on the rack. Pass the bushing and seal over the protecting sleeve and into the housing bore. Place end plate against the rack bushing. With sizing Tool T78P-3504-M apply hand pressure to the end plate and rack bushing until the bushing seats in the gear housing. If the rack bushing will not seat with hand pressure, a 1 1/8" deep socket (or larger) and a plastic mallet

may be used to tap bushing in place. Install retaining ring (snap ring) (Fig. 36). Remove protective sleeve.



G2759-1A

FIG. 44 Marking Center Tooth Space On Rack



G2702-1A

FIG. 45 Installing Plastic O-Ring