

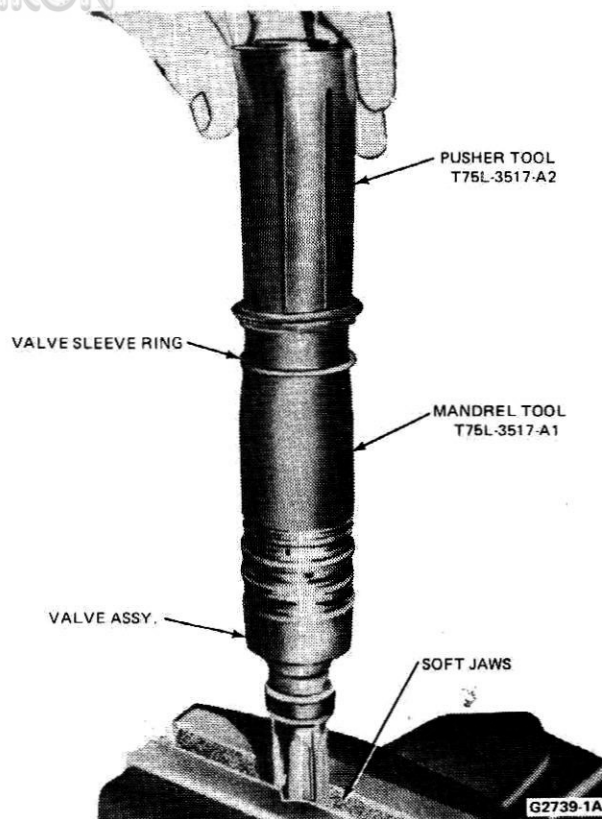


FIG. 24 Installing Valve Sleeve Rings

7. Install one spacer over the input shaft as a pilot for installing the sizing tube. Slowly install the sizing tube, Tool T75L-3517-A4, over the sleeve valve end of the input shaft onto the valve sleeve rings. Make sure that the rings are not being bent over as the tube is slid over them (Figs. 25 and 26).
8. Remove the sizing tube and check the condition of the rings. Make sure that the rings turn freely in the grooves.
9. Fig. 27 shows the complete set of tools needed to perform the above operations. The tool kit number for the complete set is T75L-3517-A.

NOTE: If only the valve was serviced and the rack was not moved while the valve was out, Step No. 10 may be omitted.

10. If rack was removed and marked with paint, position rack so that paint mark is centered in valve bore. If rack was not removed, position rack in the housing so that the right end protrudes 1/4 inch more than the left end.
11. Line up the blocked tooth on the input shaft with the yoke plug hole center and insert valve assembly into the bore (Fig. 28). The blocked tooth must point straight up when the gear is installed in the vehicle with the gear on center (straight ahead position). Rotate input shaft slightly side to side if necessary to mesh the pinion to the rack teeth. Push valve assembly in by hand until seated properly.

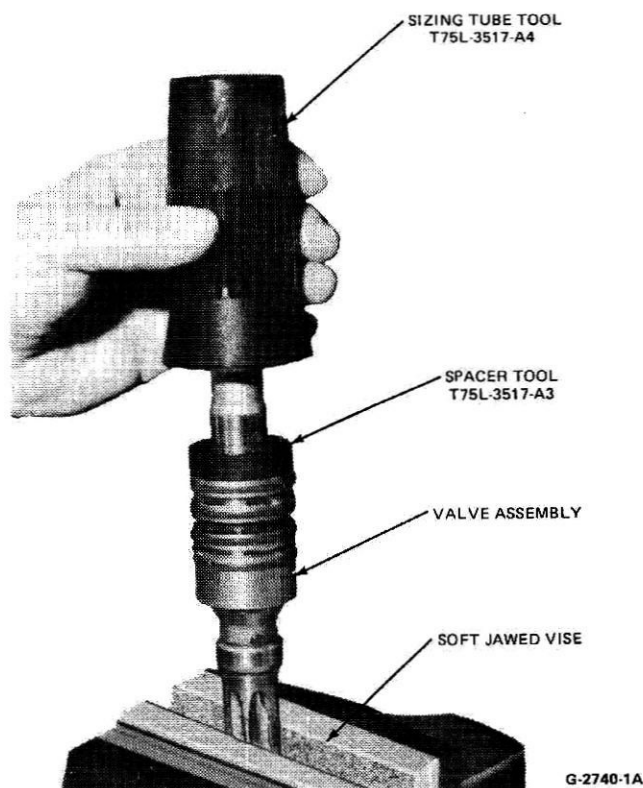


FIG. 25 Sizing the Plastic Valve Sleeve Rings

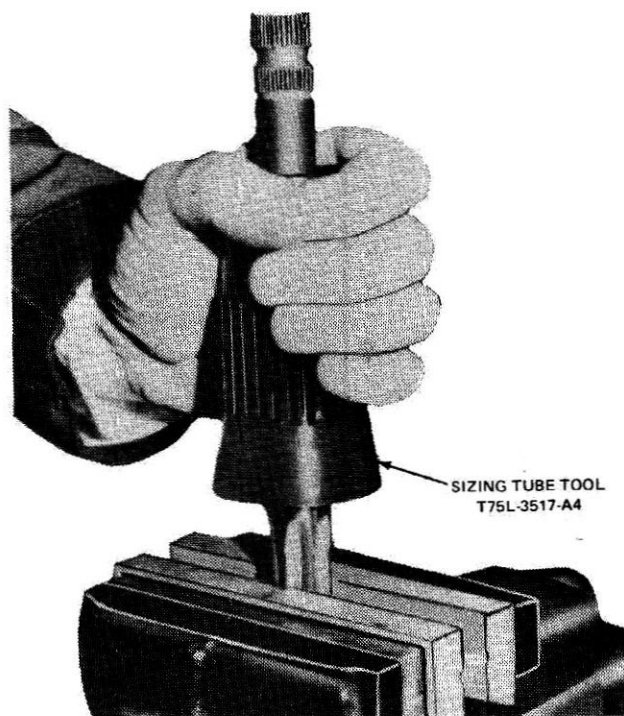


FIG. 26 Sizing the Plastic Valve Sleeve Rings

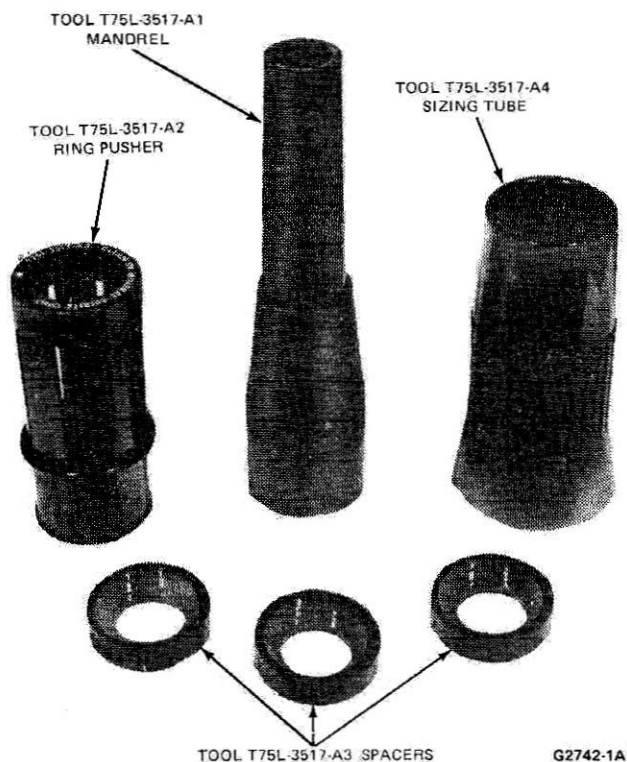


FIG. 27 Rotary Valve Tool Kit T75L-3517-A

BLOCKED TOOTH ON INPUT
SHAFT POINTING STRAIGHT DOWN
(6 O'CLOCK) WITH GEAR IN POSITION SHOWN

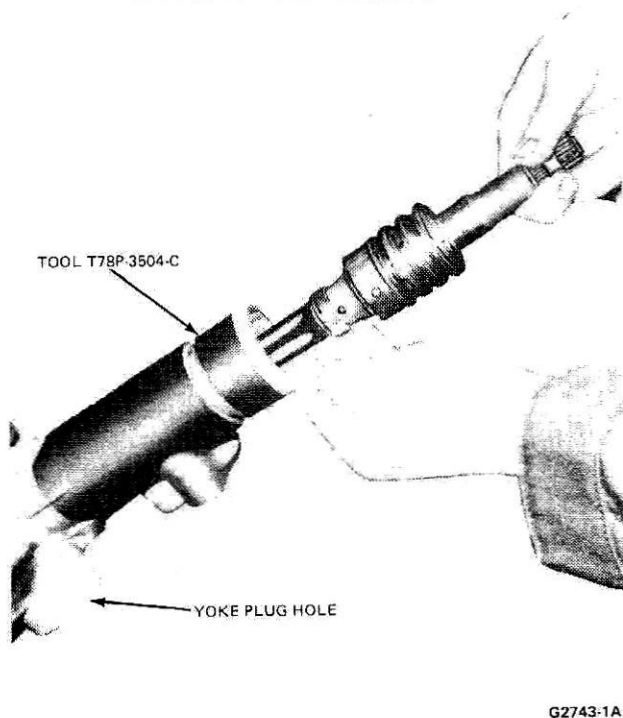


FIG. 28 Installing Valve Assembly

12. Using Tool, T74P-3504-R, to turn input shaft, check if pinion is centered by counting the number of turns from center to each stop (approximately 1 1/2

turns). If the number of turns is unequal, pull the valve assembly out far enough to free the pinion teeth. Rotate input shaft 60 degrees (one tooth) in direction which required less turns. Reinsert valve assembly and check if on center. Repeat procedure if necessary.

13. Install nut on pinion end of valve assembly. Holding the input shaft with Tool, T74P-3504-R, torque the nut to specification (Fig. 13). The rack must be away from the stops during this operation.
14. Apply gear lube to the input shaft bearing assembly. Install bearing in valve bore and seat with Tool, T78P-3504-D (Figs. 29 and 30).
15. Apply a film of gear lube to the input shaft seal and install with lip toward valve. Seat seal with Tool, T78P-3504-D (refer to Fig. 31 for illustration).
16. Install retaining snap ring in valve bore (Fig. 15).
17. Coat input shaft with lubriplate or equivalent in the dust seal area install input shaft dust seal and seat with Tool, T78P-3504-D (Figs. 32 and 33).
18. Install steering gear housing cap and torque to spec. (Fig. 34).
19. Fill yoke housing with a 2 oz. of gear lube. Install plastic yoke. Yoke must seat against the rack with finger pressure. If yoke hangs up, check for burrs in yoke housing (Fig. 35).
20. Install yoke thrust spring (Fig. 35).
21. Install yoke plug. Refer to adjustment section for yoke bearing preload adjustment.
22. Install yoke plug lock nut. Prior to torquing the lock nut, set the rack yoke bearing preload as outlined under Adjustments in this Part.

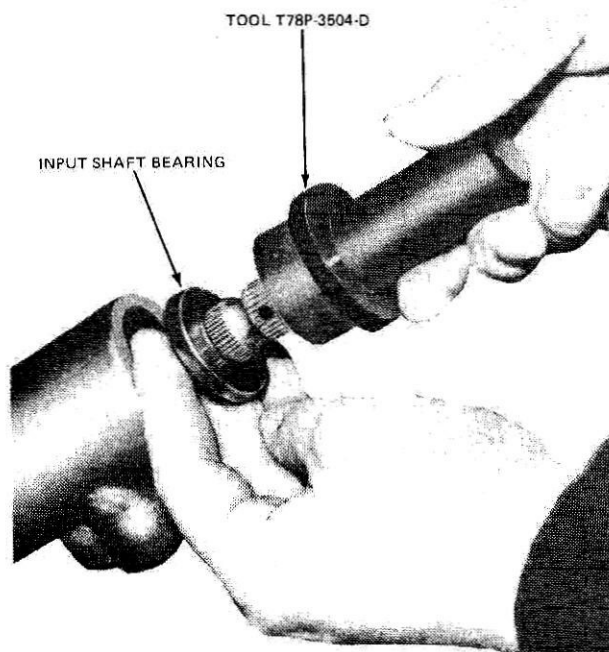
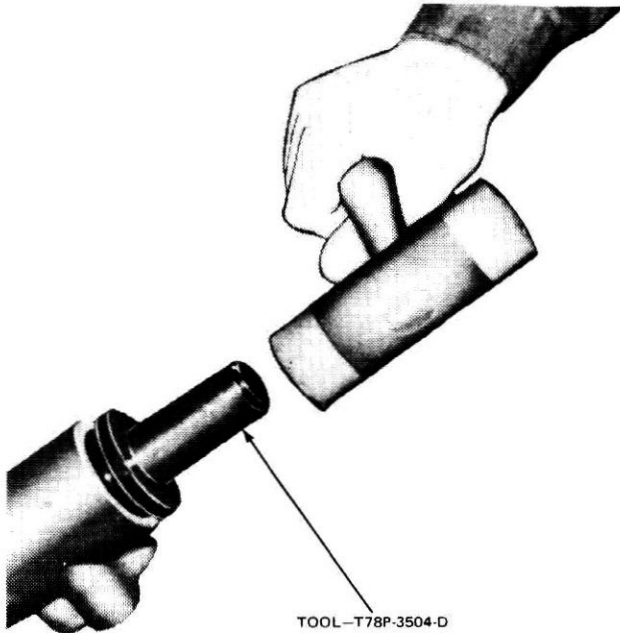


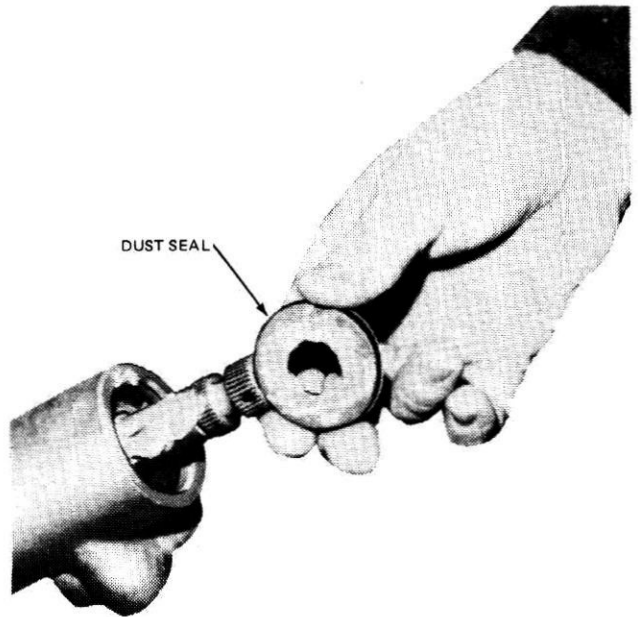
FIG. 29 Installing Input Shaft Bearing

23. Install the external pressure lines, making sure the O-rings are good and torqued to specification.



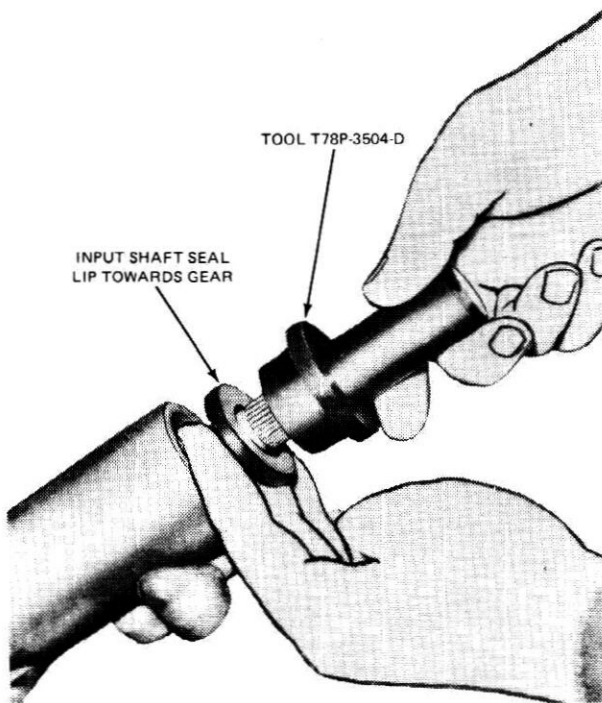
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FIG. 30 Seating Input Shaft Bearing



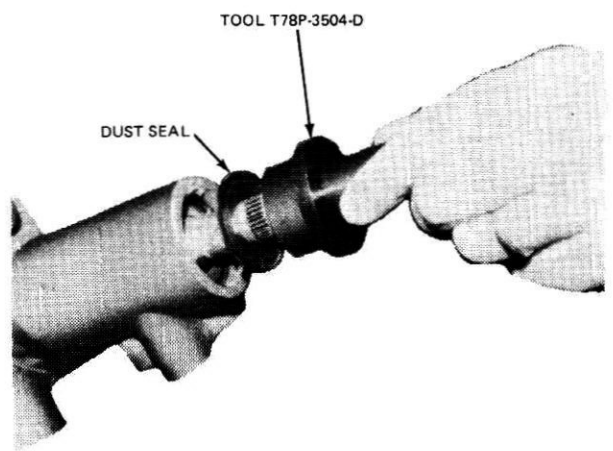
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FIG. 32 Applying Lubriplate Or Equivalent To Shaft And Dust Seal



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FIG. 31 Installing Input Shaft Seal



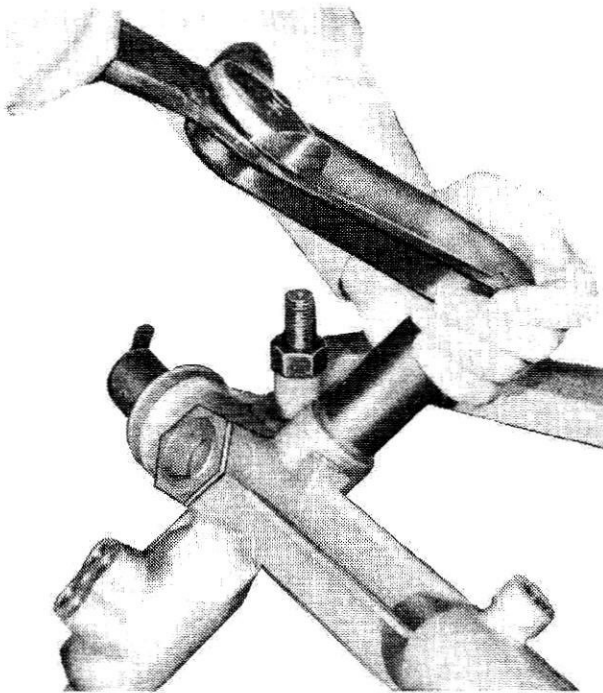
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FIG. 33 Installing Input Shaft Dust Seal

GEAR HOUSING, RACK YOKE BEARING, RACK ASSEMBLY, RACK BUSHING AND OIL SEALS

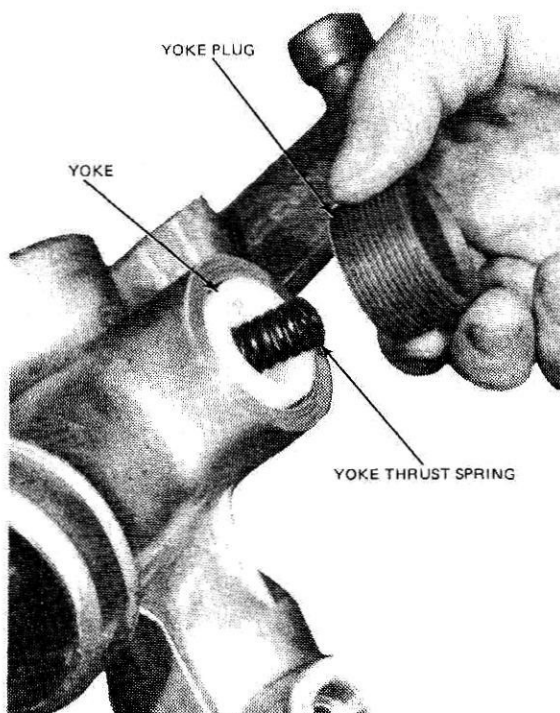
Disassembly

1. Remove the tie rod and socket assemblies from both ends of the rack and the input shaft and valve assembly as previously outlined in this Part.
2. Remove the yoke plug lock nut with Tool, T78P-3504-H. Remove the yoke plug with a 3/4" socket wrench.
3. Remove the yoke spring and the yoke bearing from the gear housing. The yoke bearing may be gripped by the spring guide post with a pair of pliers.
4. Working from the right side of the gear (opposite pinion end), push the rack in until it bottoms.
5. Remove snap ring from right end of housing (Fig. 36).
6. Slowly pull the rack out of the right side of the housing until the rack piston contacts the aluminum rack bushing. Apply pulling effort (**Do Not Hammer**) on the rack until the bushing is withdrawn from the housing. Remove the rack from the housing (Fig. 37).
7. To remove the internal high pressure rack oil seal, insert Tool, T78P-3504-J, into the housing until it bottoms (Fig. 38). Activate the expander with a wrench (Fig. 39) until the expander fully tightens. Remove the tool with the oil seal from the housing



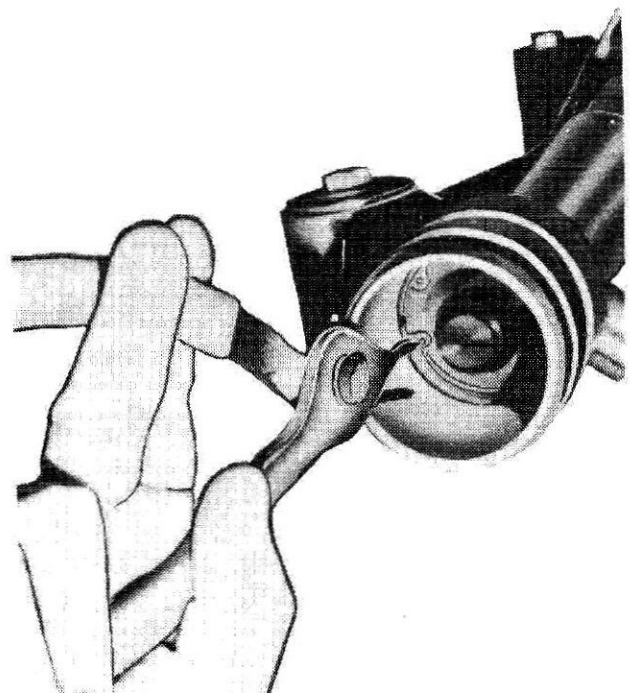
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FIG. 34 Torquing Steering Gear Housing Cap



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FIG. 35 Installing Yoke, Thrust Spring and Yoke Plug



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FIG. 36 Removing/Installing Rack Bushing Retaining Ring