

SECTION 8-C

MAST JACKET ASSEMBLY

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8-18 REMOVAL AND INSTALLATION OF STEERING MAST JACKET ASSEMBLY

a. Removal

1. Remove the steering shaft lower coupling to steering gear pinch bolt.
2. Remove lock key from each shift rod and pull rods out of shift levers.
3. Remove the screws that retain toe pan cover plate to cowl. See Figure 8-80.
4. Remove the nuts that retain mast jacket bracket to instrument panel.
5. Disconnect Wiring Harness Connectors from mast jacket and disconnect horn wire.
6. Align shift lever or levers with hole in cowl and remove jacket assembly.

b. Installation

1. Align shift lever or levers with hole in cowl and slide end of assembly through hole. Loosely attach jacket to instrument panel.

2. On manual steering cars, line tab on lower coupling with mark on worm shaft and slide coupling on shaft. See Figure 8-12.

On power steering cars, line up flat in coupling with flat on stub shaft and slide coupling on shaft. See Figure 8-30.

3. Install lower coupling pinch bolt and tighten to 30 ft. lbs.

4. Install the two nuts that retain mast jacket to instrument panel. Tighten to 20 ft. lbs. Attach toe pan cover to cowl.

5. Check steering shaft position in end of mast jacket. See Figure 8-81. If shaft is not in center of opening, it will be necessary to relocate the toe pan cover to properly position shaft.

IMPORTANT: There must be at least 1/16" clearance between adjuster plug and lower coupling. Also, the coupling pins must be 1/16" to 1/8" through flange. See Figure 8-35.

6. Plug wiring harness connectors on switches on mast jacket and connect horn wire.

7. Attach each shift rod to shift lever with lock key.

8. Check neutral safety switch adjustment. Adjust if necessary.

8-19 DISASSEMBLY AND ASSEMBLY OF THREE-SPEED SYNCHROMESH TRANSMISSION MAST JACKET AND TRANSMISSION CONTROL SHAFT ASSEMBLY

NOTE: Refer to Figure 8-83 for disassembly and assembly.

a. Disassembly

1. Remove mast jacket assembly from car. Paragraph 8-18.
2. Remove steering wheel. Paragraph 8-5.
3. Remove back-up light switch and operating lever from mast jacket.
4. Slide horn wire grommet retainer from mast jacket.
5. Remove horn contact ring and wire assembly.

6. Remove direction signal switch spring pin and spring. Then pull actuator rod out of actuator housing.

7. Remove bearing retainer and spring from steering shaft. See

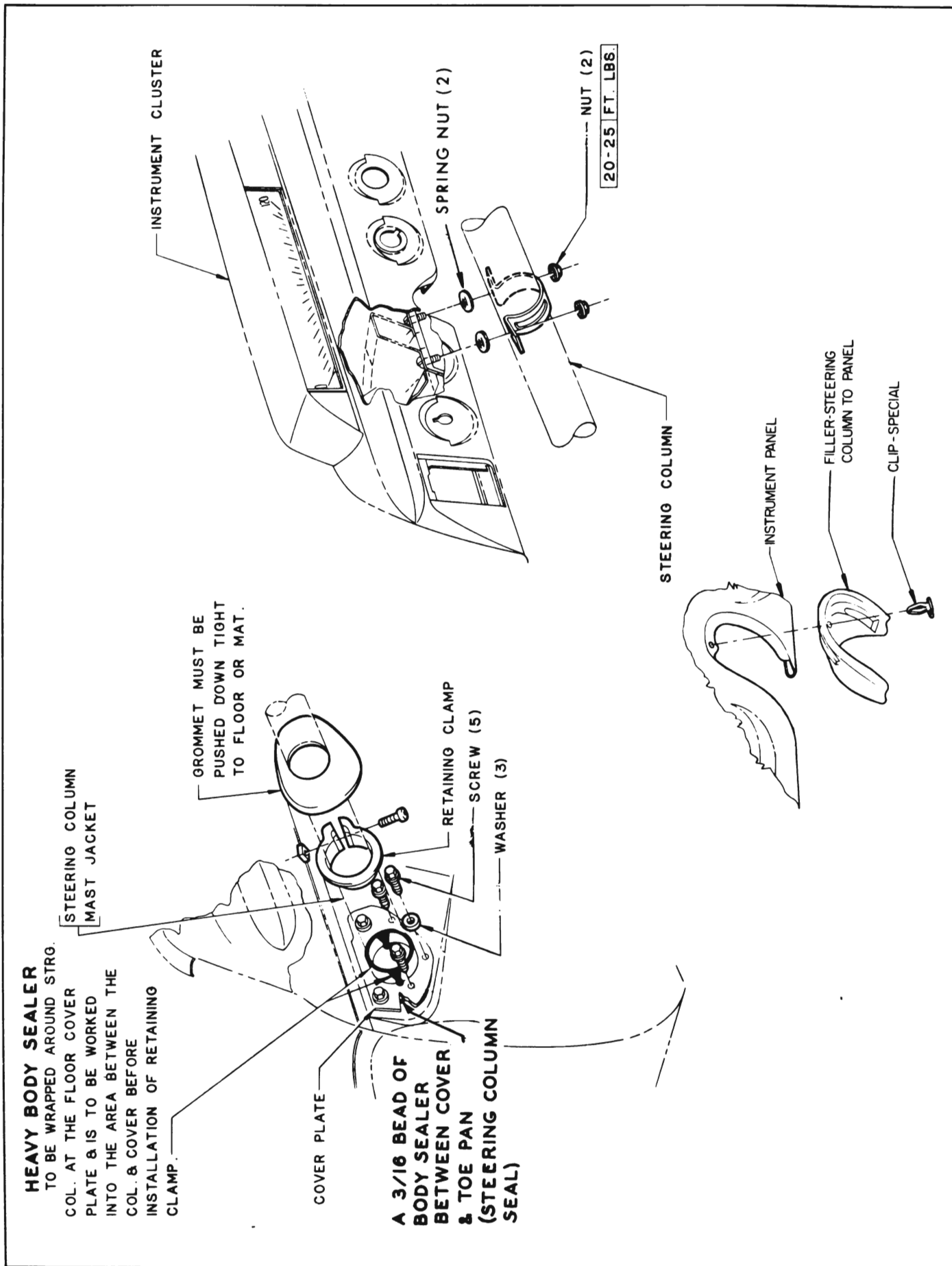


Figure 8-80—Mast Jacket Installation

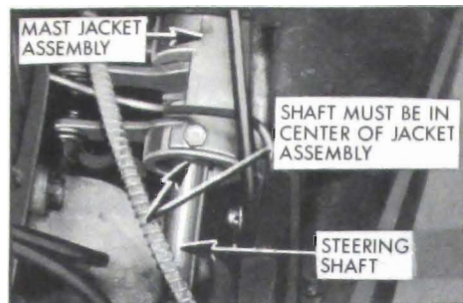


Figure 8-81—Steering Shaft to Mast Jacket Alignment

Figure 8-90. Slide steering shaft out of mast jacket assembly.

8. Remove bearing retainer ring from actuator housing and lift bearing out of housing.

9. Remove the three actuator housing retaining screws and lift actuator from jacket.

10. Remove thrust washer and actuator lock plate.

11. Drive out shift lever pivot pin with a suitable drift. Support shift housing to prevent damage.

12. Remove shift lever and anti-rattle spring.

13. Slide shift housing off from mast jacket. It may be necessary to use a wood block and tap it off.

14. Remove nylon washer, wave washer and spacer washer from upper end of the shift control shaft.

15. Remove the three screws that retain the control shaft retainer ring to lower end of mast jacket. See Figure 8-84.

16. Slide control shaft out of mast jacket.

17. Remove lower shift lever from control shaft.

18. Push the nylon bearing onto the control shaft far enough to

clear the second lug and rotate the bearing so that it holds the spring in compression. See Figure 8-85.

19. Remove the two nylon washers and the upper shift lever by guiding them over the locating lugs on control shaft. See Figure 8-85.

20. Align the nylon bearing with the lugs on the control shaft and remove the bearing, spring and washer from shaft.

b. Assembly

NOTE: Lubricate areas indicated with L on Figure 8-83 with front wheel bearing lube during assembly of parts.

1. Position spring stop washer on shift control shaft so that it seats against the shoulder on the shaft.

2. Install spring and nylon bearing on control shaft. Position bearing so that the second location lug holds the bearing and spring in place. See Figure 8-86.

3. Install the upper shift lever on the control shaft so that the flange on lever is toward lower end of shaft. See Figure 8-85.

4. Install a nylon washer onto the control shaft so that its locating tab engages the opening in the upper lever flange. See Figure 8-85.

5. Position the second nylon washer on the shaft so that its locating tab is pointing toward lower end of shaft.

6. Install the lower shift lever on control shaft so that the opening in lever engages the lug on the control shaft. Position lower nylon washer so that its tab engages the opening in the lower shift lever. See Figure 8-87.

7. Rotate nylon bearing until the groove in bearing is over the upper lug on shaft and allow spring to seat bearing against the upper shift lever.

8. Insert control shaft into the bottom end of mast jacket. The three slots in the nylon bearing must align with the tangs in the mast jacket. See Figure 8-83.

9. Insert control shaft retainer ring in mast jacket and install the three retaining screws. See Figure 8-84.

10. Slide the spacer washer over upper end of control shaft and insert it in mast jacket as shown. See Figure 8-88.

11. Install wave washer and nylon washer on control shaft. See Figure 8-83.

12. Slide shift housing on control shaft, aligning slot in housing with raised lug on shaft.

13. Position anti-rattle spring on end of shift lever and insert lever into shift control shaft. Support shift housing and install shift lever pivot pin.

14. Install turn signal actuator lockplate over control shaft and inside mast jacket as shown. See Figure 8-89.

15. Position thrust washer around control shaft and on shift housing.

16. Install actuator housing, using the three screws to retain it to lock plate.

17. Install a new bearing lower snap ring or retainer on steering shaft, being sure it is properly seated in groove on shaft. See Figure 8-90.

18. Insert steering shaft in shift control shaft. Dust seal must be on shaft so that it will be located as shown in Figure 8-83 when shaft is installed.

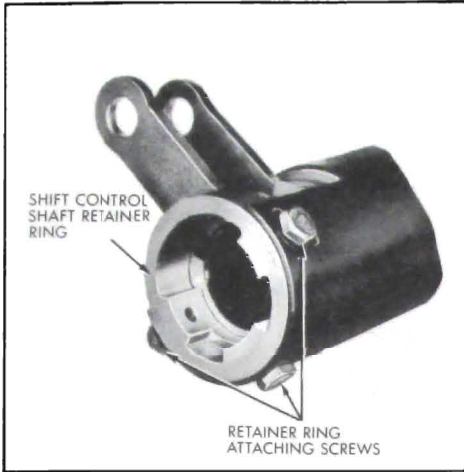


Figure 8-84—Shift Control Shaft Retainer Ring

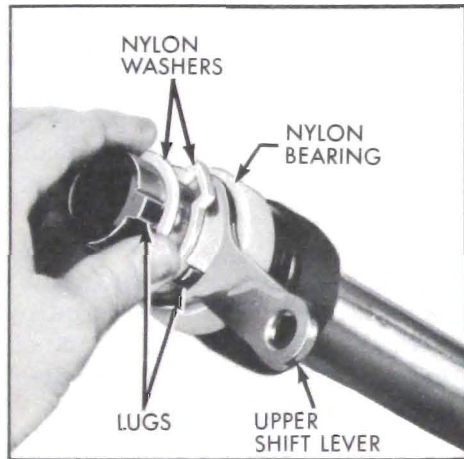


Figure 8-85—Removing Nylon Washers from Shift Control Shaft

19. Place bearing in actuator housing so that it is located as shown in Figure 8-91. Install bearing retainer so that it engages slots in actuator. See Figure 8-91.

20. Install spring and a new upper retainer on steering shaft. Be sure retainer is seated in groove on shaft.

21. Install horn contact and wire assembly as shown, feeding wire inside mast jacket and out through opening provided for wire in jacket. See Figure 8-83 and 8-92.

22. Install direction signal actuator rod in actuator housing.

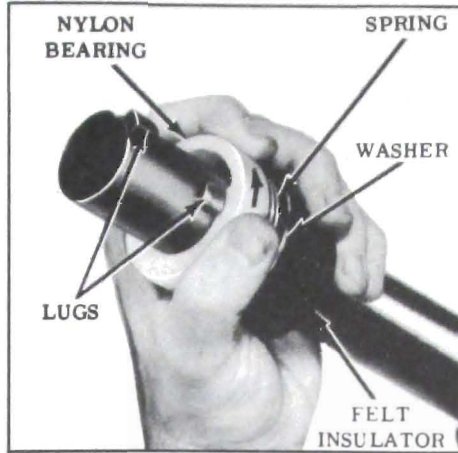


Figure 8-86—Installing Nylon Bearing

Install spring and spring pin on lower end of rod.

23. Install direction signal switch.

24. Install back-up light switch and operating lever.

25. Install mast jacket assembly in car.

26. Install steering wheel.

8-20 DISASSEMBLY AND ASSEMBLY OF AUTOMATIC TRANSMISSION MAST JACKET ASSEMBLY

NOTE: Refer to Figure 8-93 for disassembly and assembly.

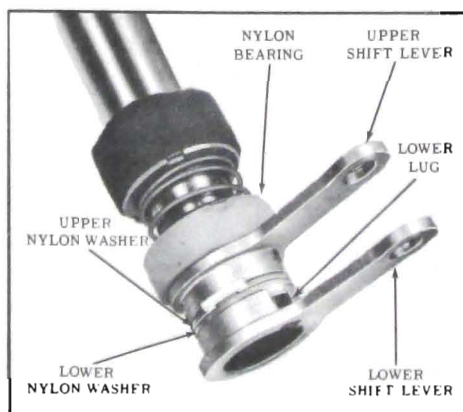


Figure 8-87—Control Shaft Assembly Ready to be Installed in Mast Jacket

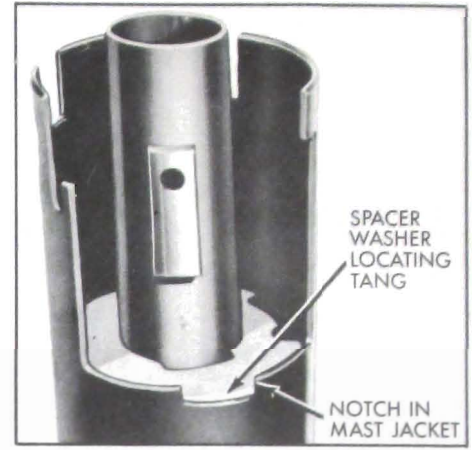


Figure 8-88—Shift Control Shaft Spacer Washer Installation

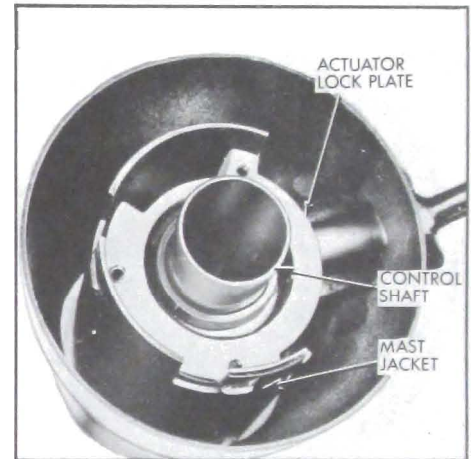


Figure 8-89—Installation of Actuator Lock Plate

a. Disassembly

1. The disassembly of the automatic transmission mast jacket is the same as steps 1 through 16 of the three-speed transmission mast jacket disassembly, paragraph 8-19, sub-paragraph a. except for the following.

(a) It is necessary to remove neutral safety and operating lever.

(b) There is a shift lever return spring located under the end of the shift lever. This spring may pop out when lever is removed.

(c) The shift control shaft, nylon bearing and shaft lever are

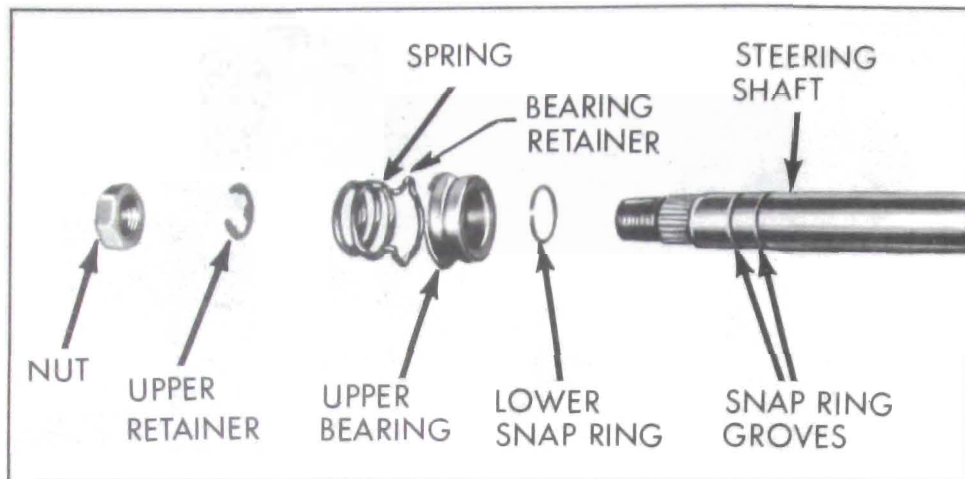


Figure 8-90—Steering Shaft Upper and Lower Snap Rings

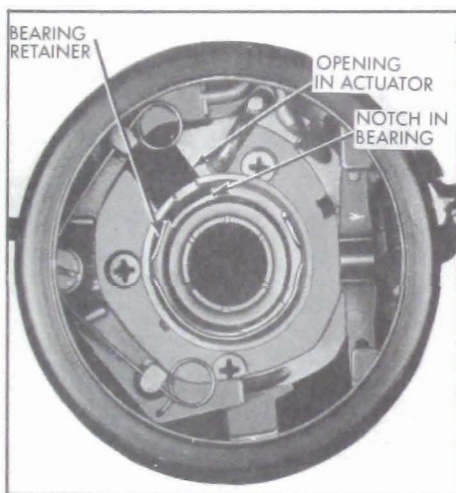


Figure 8-91—Bearing and Retainer Installation

serviced as an assembly and are not to be disassembled.

b. Assembly

1. Slide shift control shaft assembly into mast jacket so that the slots in nylon bearing engage tangs in jacket.

2. Install control shaft spring and retainer ring in mast jacket.

3. To complete assembly, use steps 10 through 25 of paragraph 8-19, sub-paragraph b, as the as-

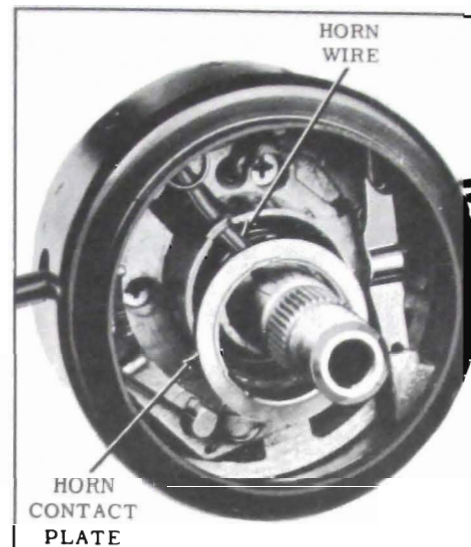


Figure 8-92—Horn Contact and Wire Installation

sembly procedure is the same except for the following:

(a) Shift lever return spring must be assembled under end of shift lever.

(b) When installing actuator housing, dial light wire must be fed down through mast jacket and out through hole provided for it in jacket. See Figure 8-93.

(c) Neutral safety switch must be adjusted after it has been installed.

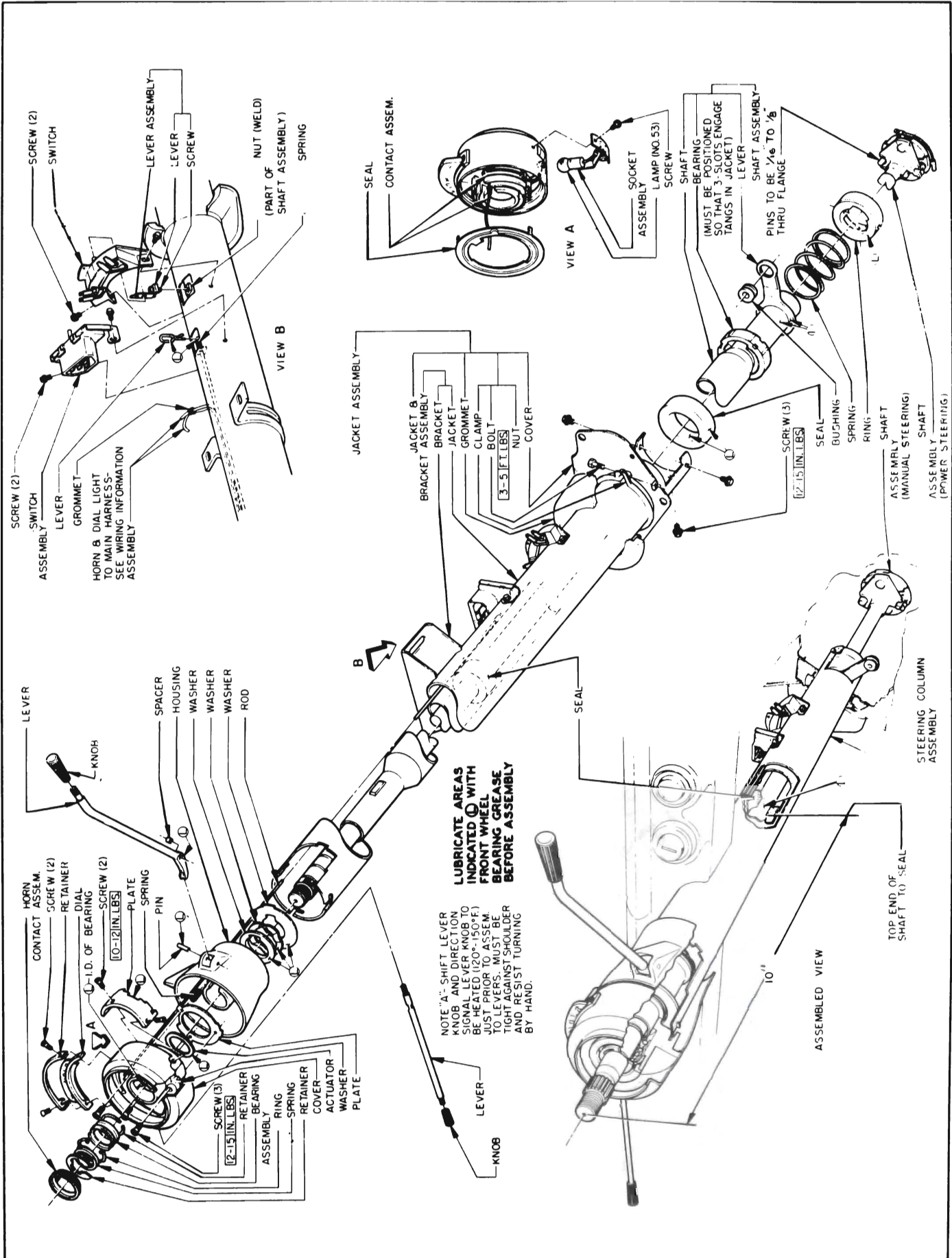


Figure 8-93—Mast Jacket and Transmission Shaft Assembly - Automatic Transmission

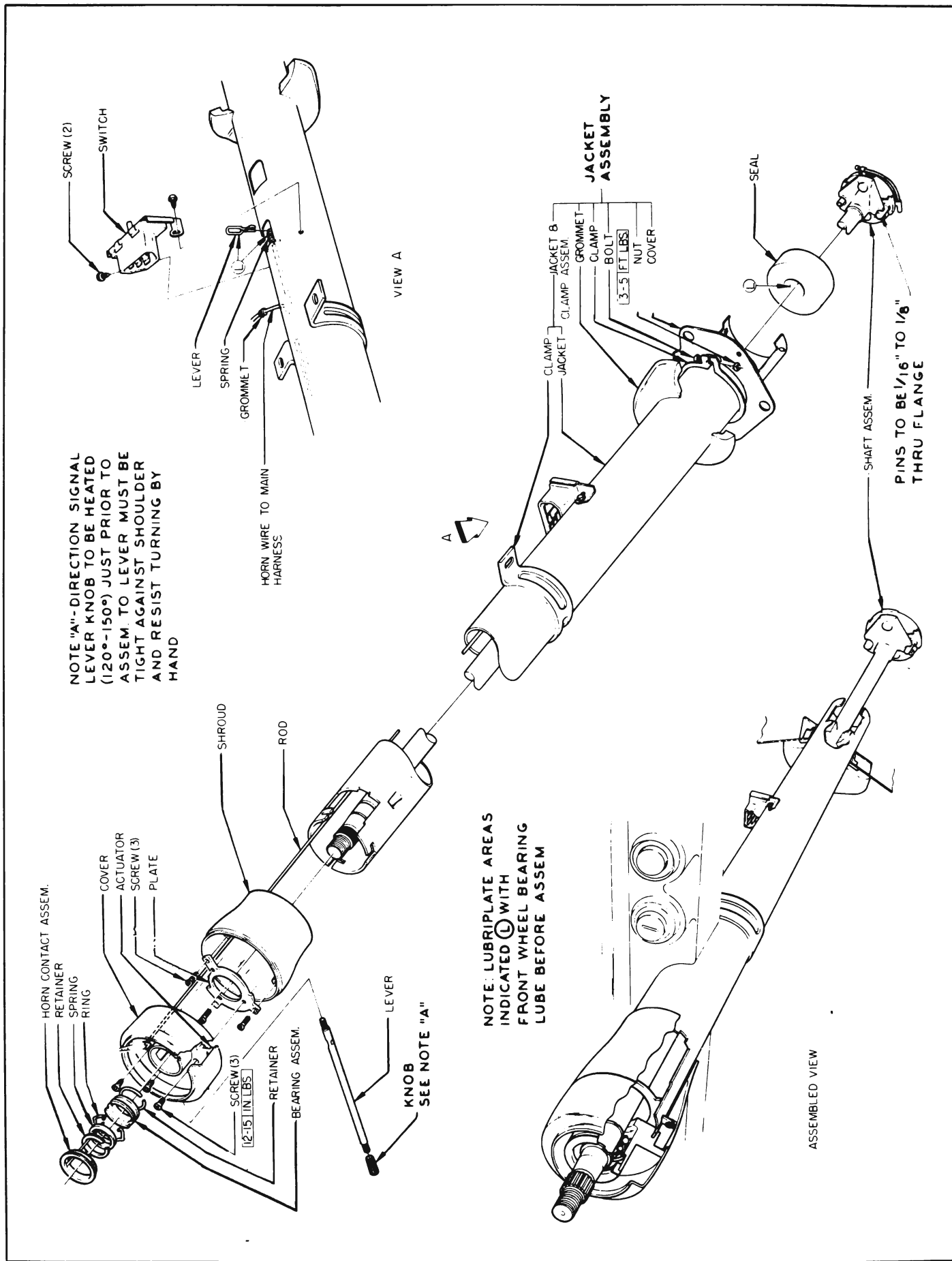


Figure 8-94—Mast Jacket Assembly - 4 Speed Transmission