1964 Corvette: Service Bulletin: 4-Speed Shift Lever Revision

Subject: 1964 Corvette 4-Speed Shift Lever Revision
Model and Year: 1964 Corvette
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TO: ALL CHEVROLET DEALERS

Early production 1964 Corvette 4-speed shift mechanisms may experience the following problems:

- Shifter knob thread damage - stripped or damaged threads in the chrome finished plastic knob due to burrs on the shift lever or "cross threading" the knob at time of installation.
- Cable breakage caused by bending of reverse inhibitor mechanism. This condition may result from the inhibitor pin being bent by heavy contact with the reverse blocker pin.
- Weld failures on reverse blocker pin. The pin may break away from the shift lever flange and allow undesired reverse engagement.

The possible occurrence of these problems has been eliminated in production by using a new design shift mechanism and knob. The new mechanism design includes, (1) a larger diameter inhibitor cable with revised material and heat treat, (2) additional metal on the shift arm to support the lower end of the inhibitor pin, (3) revised thread finish on lever assembly, (4) a new knob that includes a threaded brass insert sleeve, and (5) a revised weld procedure for the reverse blocker pin.

Service correction procedures for the above problems are listed on the following pages of this bulletin.

DAMAGED KNOB THREADS

Two shifter knob designs and two shift lever thread designs have been used in 1964 production. The early design all plastic knob, part number 3846842, may be used on either lever. The late design knob, which as a threaded brass insert sleeve, can be used only on the late design lever. Refer to Figures 2 and 3 for details.

Regardless of lever or knob design, the threads must be free of burrs. The slot edges of the threads should be chamfered and smooth. When installing a knob, use extreme care to avoid cross-threading.

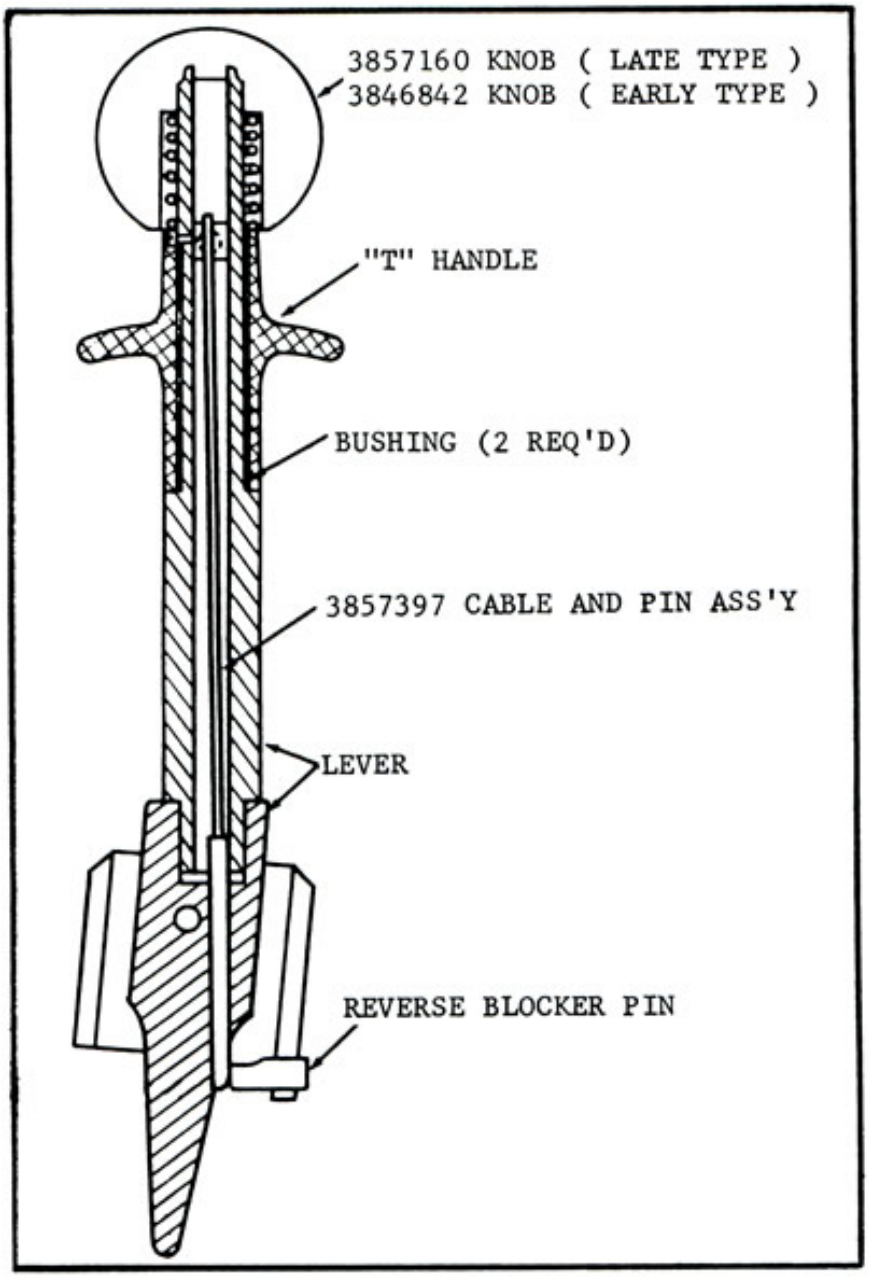


FIG. 1 - SHIFT LEVER CROSS SECTION

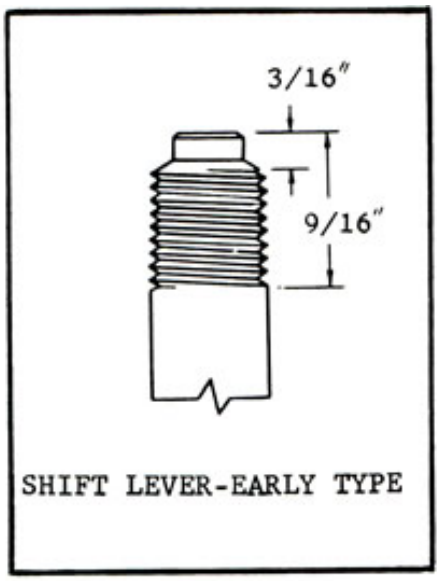


FIG. 2 - EARLY THREAD

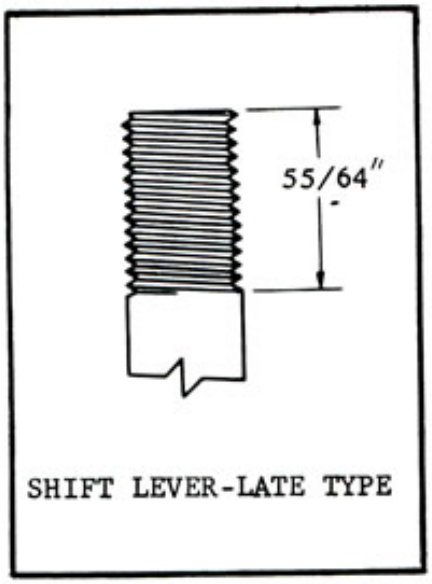


FIG. 3 - LATE THREAD

SHIFT LEVER REMOVAL FOR SERVICE

To correct reverse inhibitor bind or blocker pin weld failure, remove the shift lever assembly from the vehicles as outlined in the January, 1964, issue of Chevrolet Service News, page 5, last paragraph.

REVERSE INHIBITOR BINDS

1. Disassemble the shifter mechanism.

2. Add a heavy weld or brass bead to the shift lever as shown by the shaded section of Figure 4.

3. File the bead flat and parallel to the reverse inhibitor pin with .005" to .010" clearance to the pin.

4. Remove and discard the pin and wire assembly from the "T" handle and enlarge the "T" handle hole to .082" with a 5/64" drill. Reassemble using the new pin and wire assembly, part number 3857397.

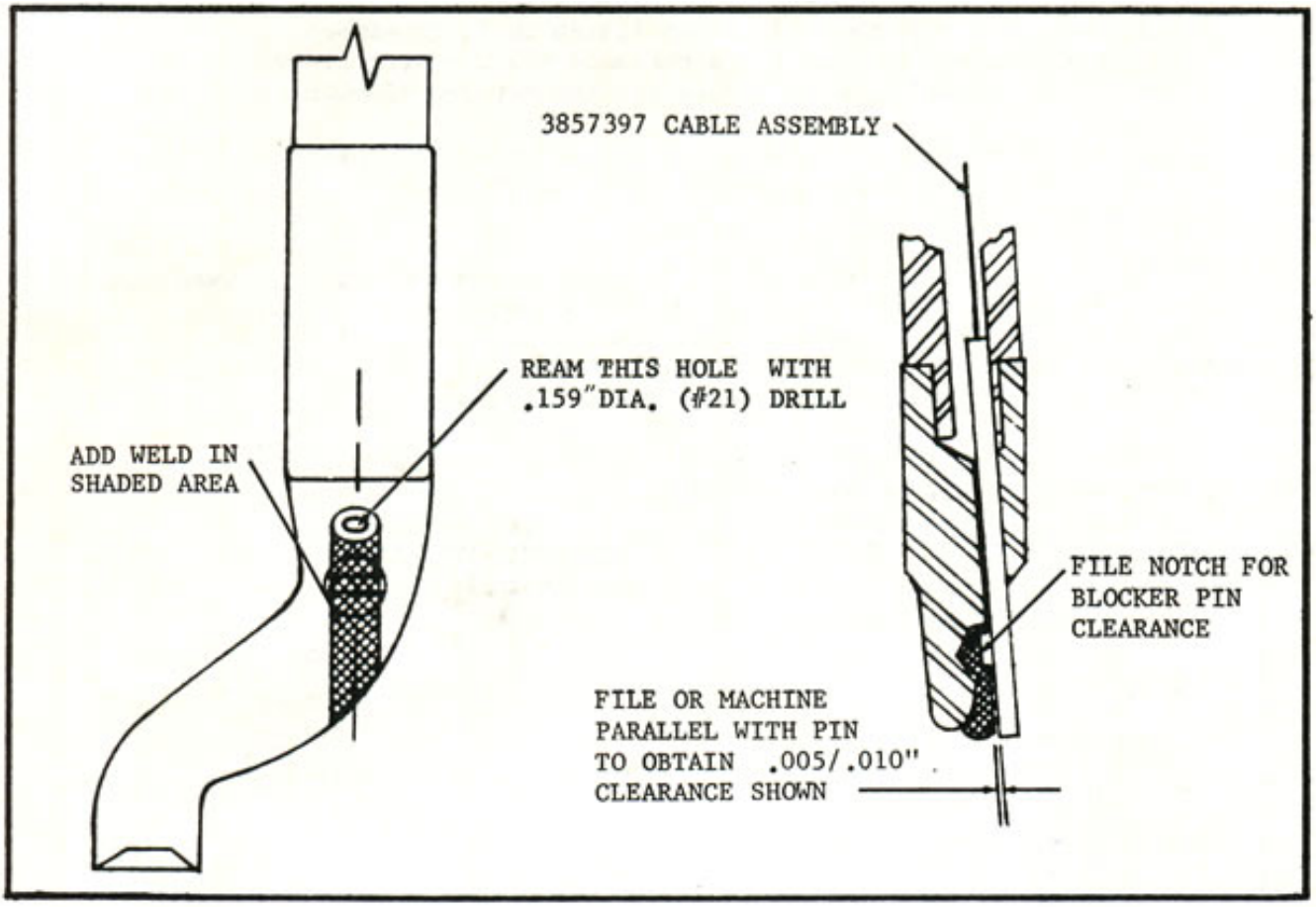
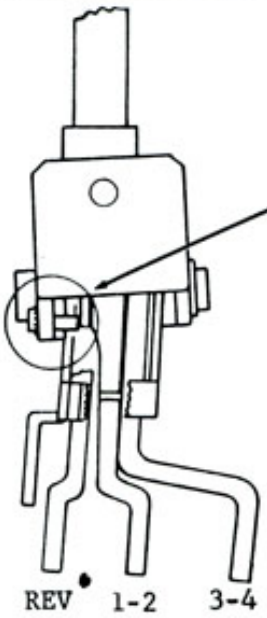


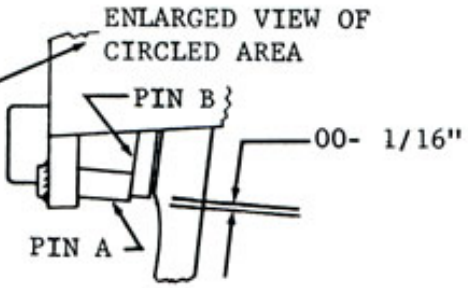
FIG. 4 - MODIFICATION OF SHIFT LEVER LOWER END

REVERSE BLOCKER PIN LOOSE OR MISSING

If the reverse blocker pin weld has broken, Figure 5 describes the proper locating dimensions for rewelding. If the original pin has been lost or damaged, a 1/4 inch by 5/8 inch hardened bolt, such as part no. 9409073, may

be used. The shift mechanism must be fully assembled before welding the pin so that the proper pin location may be achieved.





1. Remove old weld material from surfaces to be welded.
2. Place shift lever in 1-2 position with side play approximately centered.
3. Locate Pin A to just contact Pin B.
4. Weld Pin A all around as shown.
5. Adjust Pin B to 00- 1/16 above the lower edge of Pin A as shown above.
6. Clamp in "T" Handle with the set screw and cut off excess cable.

FIGURE 5 - REVERSE BLOCKER PIN LOCATING DETAILS

Reinstall the gearshift mechanism as outlined in the January, 1964, Service News article.

PARTS DATA

LATE DESIGN	EARLY DESIGN	DESCRIPTION
3857160	(no longer used)	Knob, Shift Lever
3863366	3857397	Pin & Wire Assy., Reverse Inhibitor
3857394	(no longer used)	Shift Lever, Control Upper

FLAT RATE DATA

OPERATION	TIME	DESCRIPTION
07H-3200	1.5 Hr.	Gearshift Control Assy. - Replace Series 800 (4-Speed)
Time Combination	.3 Hr.	Gearshift Control Assy. - Overhaul Series 800 (4-Speed)