

## Electric Shift Unit Retrofit Procedure



The following procedure applies to electric shift unit retrofit kit number 113743. Kit number 113743 is for use on all vehicles equipped with shift unit numbers 41058, 41059, 62125, 62126, except for Ford chassis with shock absorbers. Ford chassis equipped with shock absorbers must be serviced with the same shift unit that is on the vehicle, which will be either shift unit number 41058 or 41059. Refer to the illustration for location of shift unit part numbers.

1. Verify that shift unit electrical system on the vehicle is in proper working order. Consult Spicer/Eaton shift system trouble-shooting guide EA-29.
2. Park vehicle in low axle range and turn ignition switch to "off" position.
3. Remove shift unit from axle.
4. Disconnect ground lead and cable clip at top of motor, and two power leads at back of shift unit.
5. When servicing vehicles with kit no. 113743, replace shift fork seal with new seal.

**NOTE: Use 119855 shift fork seal only with Spicer/Eaton Axles, for non-Spicer/Eaton axles, obtain new OEM replacement shift fork seal. Thicknesses vary by manufacturer.**

6. Plug new harness and connector assembly into new shift unit.
7. Ground the green (ground) lead and apply 12 volts to the black (low range) lead to run shift unit to low range. Use caution to avoid shorting wires.
8. Attach new shift unit and harness to axle with new flat washers included in kit and locknuts. Torque locknuts to 35-45 ft.-lbs.

**NOTE: The previous level washers (.062" thick) and installation torque of 55-60 ft.-lbs. should not be used.**

9. Attach cable clip to harness near top of motor, and secure to stud extending from top of motor. Torque cable clip nut to 25-30 in.-lbs. while preventing stud from rotating by holding head of stud with a 5/16 open end wrench.
10. Cut old chassis harness and ground lead to appropriate length and strip wires .30".

**NOTE: On vehicles with 14 gauge or smaller chassis harnesses (GMC), strip wires to .60" and fold over to .30", as is done on the new shift unit harness.**

11. Splice chassis harness to shift unit harness with insulated butt connectors using a pre-insulated terminal crimping tool.

**NOTE: The shift unit harness leads are labeled for correct polarity. Connect the low range shift unit harness lead to the low range chassis harness lead which is identified as "Black" in the wiring schematic contained in Spicer/Eaton troubleshooting guide EA-29.**

**Likewise, connect the high range shift unit harness lead to the high range chassis harness lead which is identified as "Red" in the wiring schematic. Then connect the shift unit harness ground lead to the chassis ground lead or directly to a chassis ground.**

12. Apply heat to the insulated butt connectors until the sleeve completely shrinks onto the lead and the adhesive within the sleeve melts to effect an environmentally sealed connection. The preferred source of heat is a hot air gun, but an open flame can be used if care is taken to avoid damaging harness insulation.
13. Secure the harness to the chassis with tie wraps. Leave enough slack between the shift unit and chassis to allow axle/suspension movement.