

## TRW Automotive Commercial Steering Systems

### Service Procedure # COL-166

#### Actuator Motor Replacement (Tilt Location)

April '06

#### NOTE

This procedure applies to TRW Commercial Steering Systems Power Actuated Steering column/s

#### NOTE

Take appropriate safety measures before beginning this procedure.

#### Tools Required

- 5mm Allen wrench/bit
- Torque wrench
- Ratchet
- "C" Clamp
- 13mm Socket

#### Actuator Motor Replacement (Tilt Location)

1. Remove steering column shroud according to vehicle manufacturer's instructions.
2. Unplug actuator from wire harness. **Figure 1**
3. Using a 5mm Allen and a 13mm socket remove bottom shoulder bolt and nut (P/N 023046) **Figure 2**
4. Press out top pivot pin using a C clamp, placing a bolt in the guide hole to press the pin out. On the other side place a socket to allow the pin to pass through. (P/N 040259) **Figure 3**

**CAUTION** DO NOT use pounding force such as a hammer to drive pin out. You may damage the steering column.

5. Remove actuator and mark to prevent re-installation of damaged actuator.
6. Align new actuator (P/N 410028) at top pivot pin hole. **Figure 4**
7. Press in pivot pin using a C clamp.
8. Reinstall shoulder bolt and nut **Figure 5**
9. Using a 5mm Allen and a 13mm socket and torque wrench torque the shoulder bolt and nut to 70-80 in-lbs.

*This TRW Commercial Steering Systems' service procedure has been written to help you repair commercial vehicles more efficiently. This procedure should not replace your manuals; you should use them together. These materials are intended for use by properly trained, professional mechanics, NOT "Do-it-yourselfers". You should not try to diagnose or repair steering problems unless you have been trained, and have the right equipment, tools and know-how to perform the work correctly and safely.*

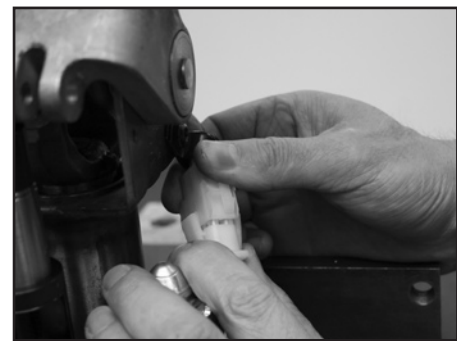


Figure 1

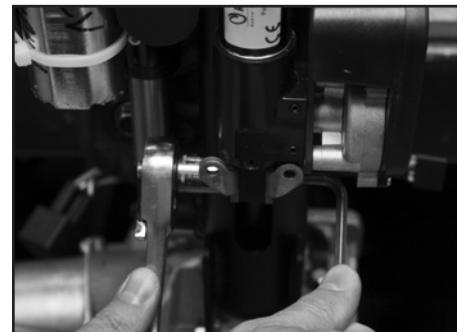


Figure 2

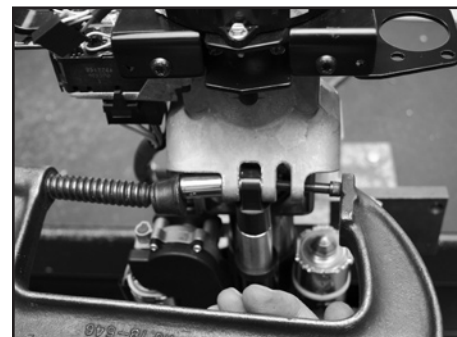


Figure 3

10. Connector the new actuator to the wire harness. **Figure 6**
11. Reinstall steering column shroud according to vehicle manufacturers instructions.

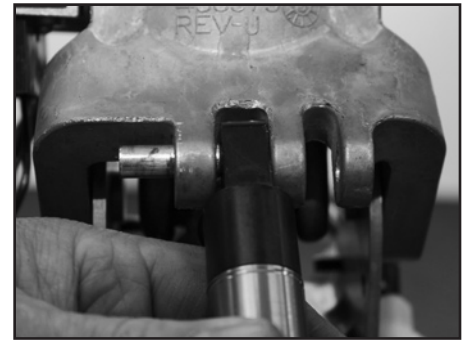


Figure 4

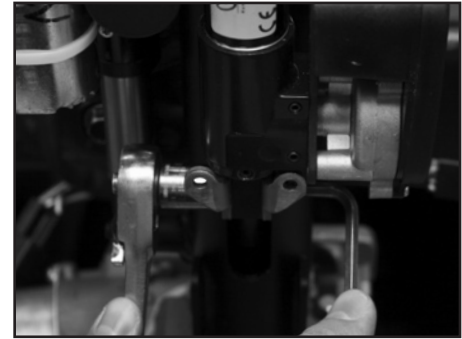


Figure 5



Figure 6

**TRW Commercial Steering Systems**

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