

TRW Automotive  
Steering & Suspension Systems

## Service Bulletin #COL-103

### Tilt/Telescope Column Tilt Mechanism Cleaning Procedure for columns TC34017 - TC34025, TC34027-TC34030, TC34032-TC34035, TC34037, TC34040 & TC34041

Released July, 1992  
Electronic Version April, 1998

**NOTE**

Do not remove column from vehicle.  
Photos taken on bench for clarity only.

*This TRW Commercial Steering Division service bulletin has been written to help you repair commercial vehicles more efficiently. This bulletin 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.*



Remove handle

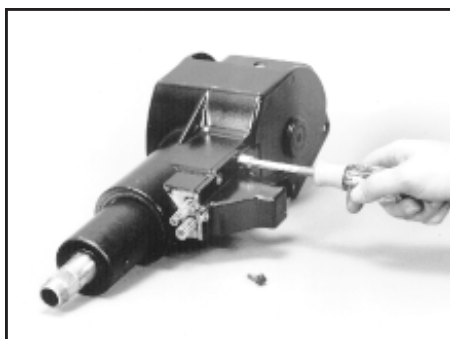
1. Extend column to full telescope out, and raise column into full tilt up position to minimize spring loads. Remove tilt handle.



Remove spring cover plate

**CAUTION** The enclosed springs will push the spring cover plate out; hold it tightly during this procedure.

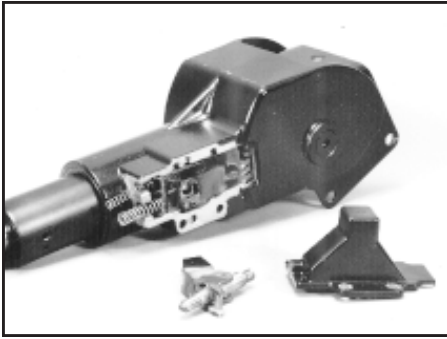
2. Locate the tilt/telescope actuator housing and remove the spring cover plate screw. Remove the spring cover plate.



Remove screws

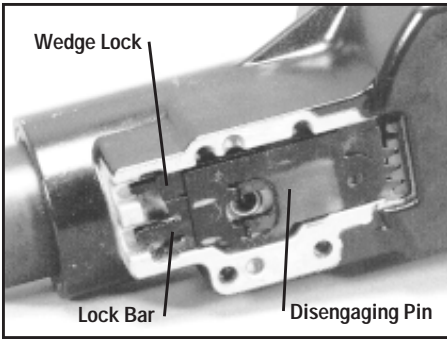
**CAUTION** Enclosed are two (2) springs that will push the actuator housing away from the column housing. Hold it tightly while removing.

3. Remove the four (4) screws that hold the tilt/telescope lever actuator housing to the tilt column.



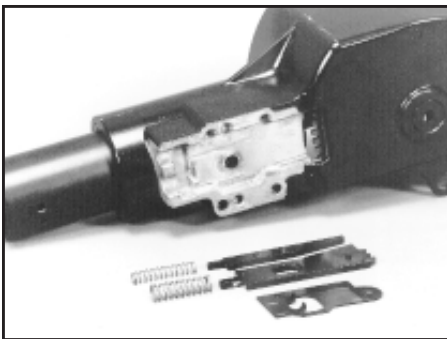
**Remove actuator housing, cam and pin assembly**

4. Remove the actuator housing and tilt/telescope cam & pin assembly. Do not lose the two springs attached to the cam & pin assembly.



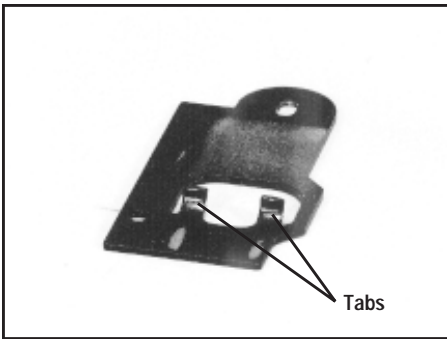
**Study component positions**

5. Study the location of the lock bar, wedge lock and disengaging plate prior to removal. These components will be installed in the same location later in the procedure.



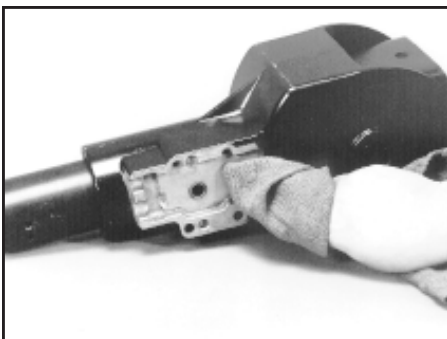
**Remove plate, lock bar, wedge lock and springs**

6. Remove the disengaging plate, lock bar, wedge lock and springs. Replace any component that is damaged or broken.



**Inspect disengaging plate tabs**

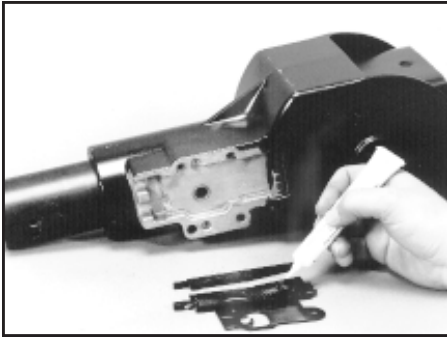
7. Carefully inspect the disengaging plate for broken, cracked or otherwise damaged tabs. Replace if damaged or broken.



**Clean housing cavity and removed components**

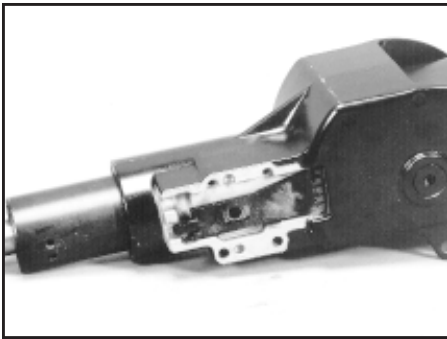
8. Remove all grease and dirt from the lock bar/wedge lock cavity in the main housing by wiping the cavity with a clean shop towel. Clean all components in a clean, petroleum-based solvent and air-blow them dry.

**⚠ WARNING** Since they are flammable, be extremely careful when using any solvent. Even a small explosion or fire could cause injury or death.



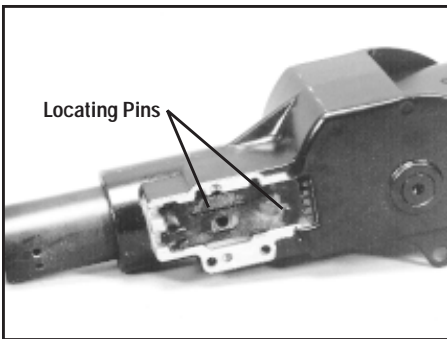
**Prepare for assembly**

- 9. Apply dry lubricant to the cavity in the tilt column housing, the lock bar, wedge lock and the disengaging plate. These components will be either silver or black.



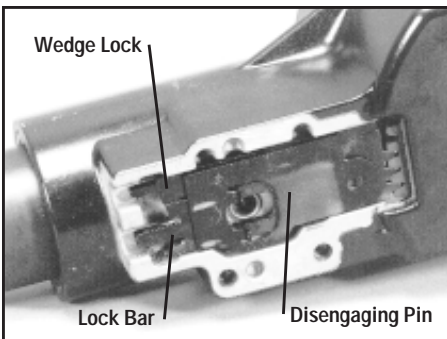
**Install lock bar**

- 10. Assemble lock bar into main housing with locating pin out. Engage the lock bar teeth with the support bracket teeth.



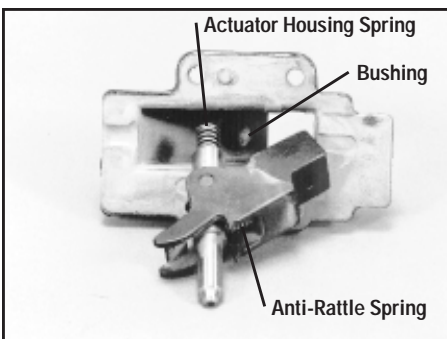
**Install wedge lock**

- 11. Assemble wedge lock next to lock bar with tapered end toward the support bracket teeth and the locating pin out.



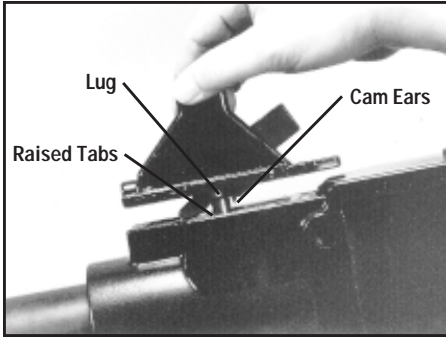
**Install disengaging plate**

- 12. Assemble disengaging plate (with tabs out) onto the lock bar and wedge lock locating pins.



**Assemble actuator cam assembly into actuator housing**

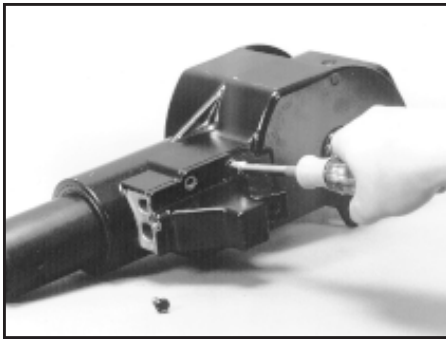
- 13. Install the actuator cam and lock pin assembly, with springs, into actuator housing and bushing assembly. Make sure the actuator housing spring (large) goes into the bushing in the actuator housing. The anti-rattle spring should remain as shown.



**Install actuator housing assembly**

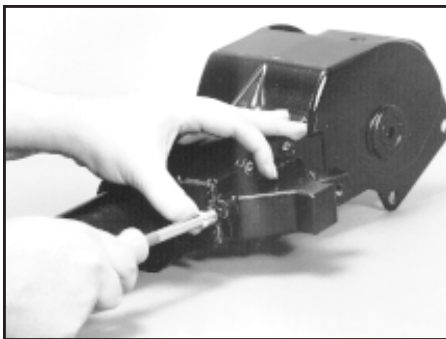
- Assemble the actuator housing assembly on the main housing. The lock pin must be inserted into the bushing in the main housing. Actuator cam ears must be assembled under the disengaging plate's raised tabs; and actuator housing alignment lugs must be engaged in main housing.

**CAUTION** The springs will push the actuator housing away from the column housing. Hold it tightly until screws are installed.



**Install screws**

- While holding actuator housing firmly down on main housing, tighten four self-tapping screws into the actuator housing and main housing. Torque screws to **40-50 in. lbs.** (4.5-6.8 Nm) using a 5/16" hex socket.



**Install springs and spring cover plate**

- Assemble lock bar spring on the end of the lock bar and wedge spring on the end of the wedge lock. Hold spring cover plate firmly down over the ends of the two springs while turning self-tapping screw into actuator housing and bushing assembly. Torque screw to **40-50 in. lbs.** (4.5-6.8 Nm) using a 5/16" hex socket.



**Reinstall tilt lever**

- Reinstall tilt lever.