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FLB COE  
FLD Conventional  
Business Class  
FLC 112 Conventional

> Century Class Conventional  
Argosy COE  
Cargo  
> Columbia  
> Coronado

Business Class M2  
> Cascadia  
108SD/114SD  
> New Cascadia

**Freightliner  
Service Bulletin**

**Description of Revisions:** *This bulletin replaces the version dated June 2012. An adjustment procedure for New Cascadia steering columns and an illustration showing the location of the friction plates are added.*

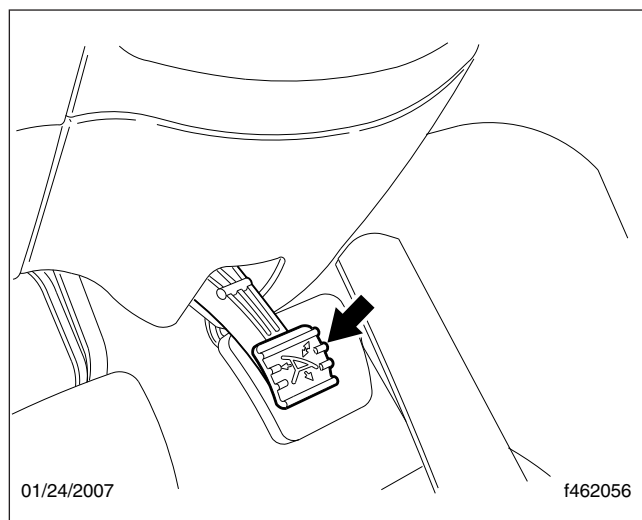
## General Information

The tilt lock force on TRW tilt/telescope steering columns can be adjusted by tightening the castle nut.

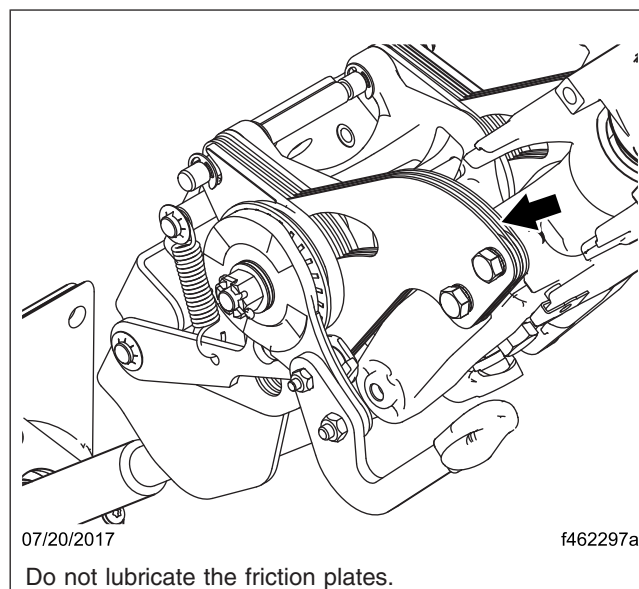
NOTE: TRW steering columns on truck models other than the New Cascadia have a tilt-adjust foot pedal (see **Fig. 1**). New Cascadia vehicles have TRW steering columns with a tilt-adjust hand lever.

## NOTICE

**Do not lubricate the steering column friction plates (see **Fig. 2**). Lubrication of the plates may result in improper function of the column lock system and damage to the column.**



**Fig. 1, Foot Pedal on TRW Adjustable Steering Columns**



**Fig. 2, Friction Plates (New Cascadia steering column shown)**

## Adjustment Procedure

NOTE: For New Cascadia adjustment procedure, see "Adjustment Procedure, New Cascadia" following.

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Remove the shrouds from the steering column by removing four T30 Torx® screws on the upper driver side and two T30 Torx screws on the upper dash side.
3. Remove the turn signal wiring harness bracket by removing the T30 Torx screw that holds it to the aluminum column housing.

# 46-41

## Adjusting Tilt Lock Force on TRW Steering Columns

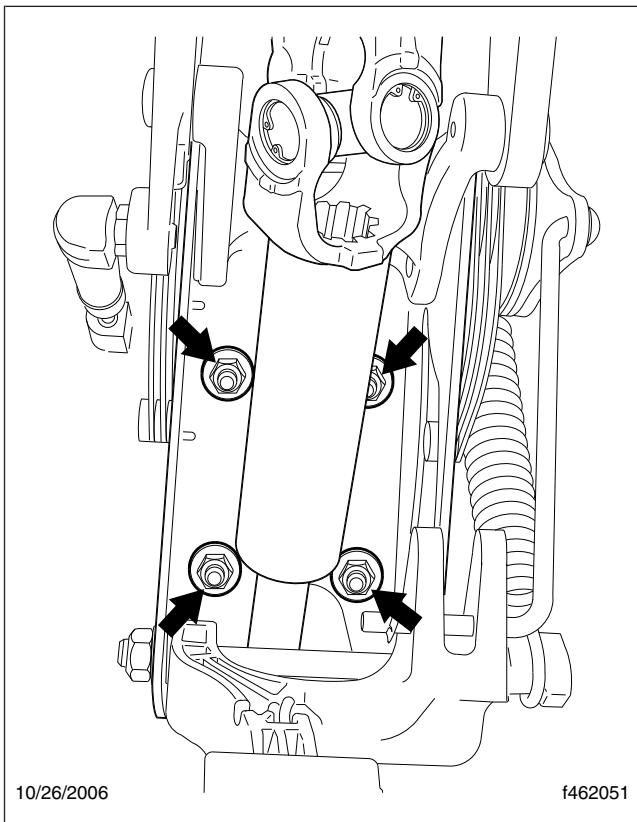
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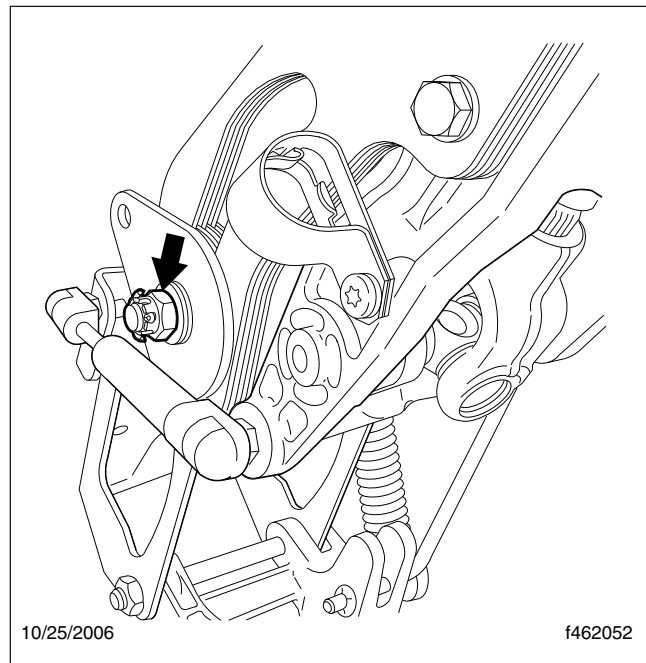
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4. Disconnect the turn signal harness by depressing the plastic retaining tabs on the connector body while detaching the harness.
5. Remove the four locknuts that attach the steering column to the dash support. See [Fig. 3](#).
6. Lower the steering column out of the dash to gain access to the castle nut and the lock bolt.
7. Locate the castle nut on the left side of the column, and remove the cotter pin. See [Fig. 4](#).



**Fig. 3, Dash Support Locknuts**



**Fig. 4, Castle Nut**

8. Make sure the tilt/telescope adjustment pedal is in the fully locked position, then secure the lock bolt in position using an M8 hex wrench, then tighten the castle nut 85 lbf-in (960 N-cm). See [Fig. 5](#).
  9. Install a new 3/32 x 1-inch steel cotter pin at the tightened position, or, if the pin cannot be inserted, tighten the nut to the nearest position which allows installation of the cotter pin. Bend the ends to retain the pin.
  10. Attach the column to the dash support and tighten the nuts until snug.
  11. Depress the pedal fully and check for easy movement of the steering column. Allow the pedal to return and check for holding force by applying a gradual load through the steering wheel in the fore and aft directions.
- NOTE:** Once the pivot bolt has been properly adjusted, the foot pedal may not return to the upper end of its travel.
12. Tighten the locknuts on the dash support bolts 23 to 29 lbf-ft (31 to 39 N-m).
  13. Install the turn signal connector and verify function, then install the harness bracket.

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14. Install the shrouds.

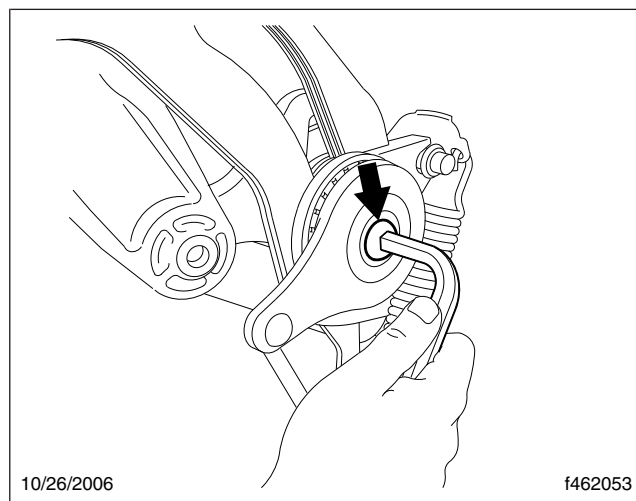


Fig. 5, Securing the Lockbolt

## Adjustment Procedure, New Cascadia

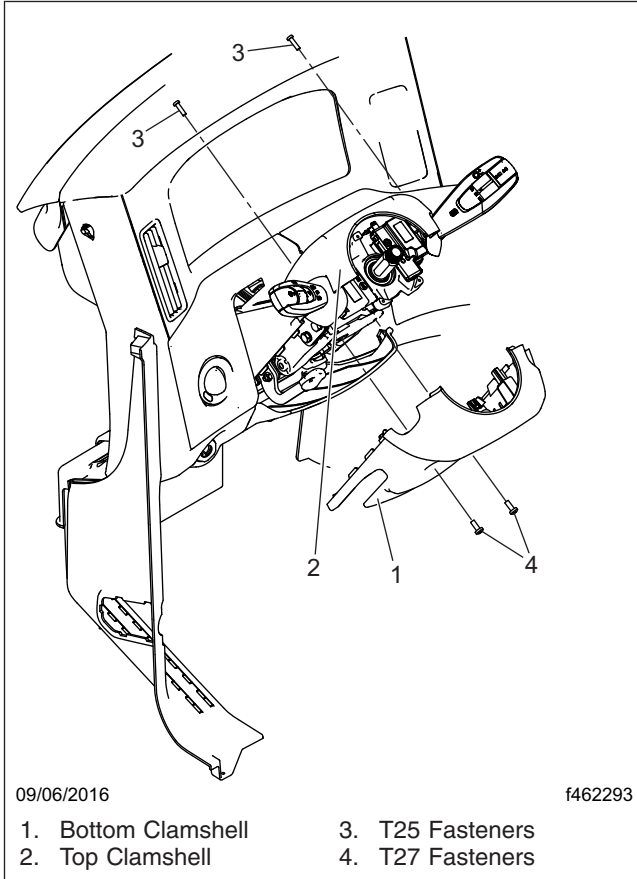
1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Remove the four fasteners attaching the column covers to the column. See [Fig. 6](#).
3. Detach the top from the bottom cover. The top cover has pushclips that insert into the column, and plastic clips that hook into the bottom cover. See [Fig. 7](#).
4. Remove the bottom clamshell.
5. Rotate the handle assembly down (clockwise) to unlock the column. See [Fig. 8](#).
6. Remove the cotter pin from the castle nut.
7. Tighten the castle nut until the next cotter pin slot is aligned with the hole in the bolt.
8. Install a new 1/8 x 1-1/4-inch steel cotter pin, but do not bend the pin tails yet.
9. Return the handle to the locked position.
10. Check the column holding force by applying a gradual load through the steering wheel in the fore and aft directions.
11. If necessary, repeat steps 5 through 10 until the holding force is acceptable and the column telescoping force does not exceed 35 lb. (16 kg).
12. Bend the cotter pin tails.
13. Install the bottom clamshell. Insert the pushclips into the column. See [Fig. 9](#).

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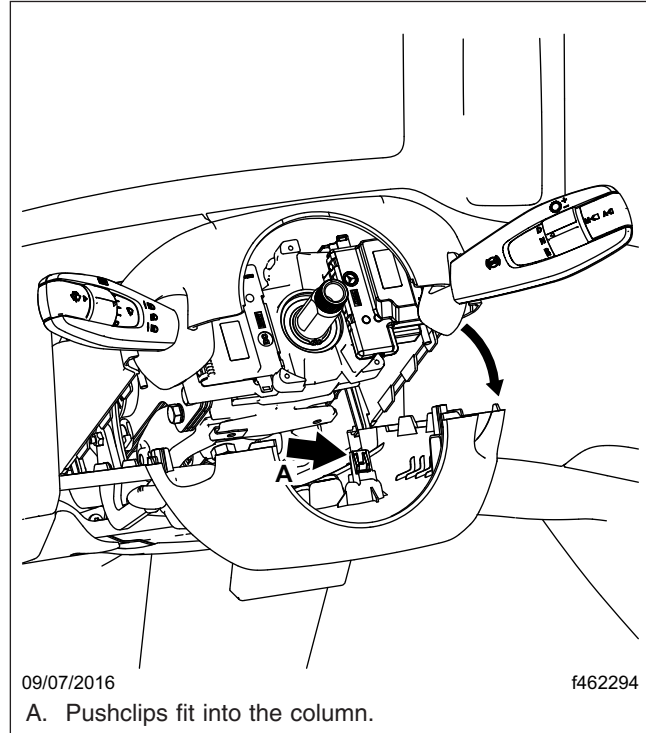
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**Fig. 6, Steering Column Covers, New Cascadia**

14. Install the top clamshell. Align the hook into the hook cavity and insert the pushclips into the column.
15. Install the fasteners. Tighten the top T25 fasteners 15 to 17 lbf-in (170 to 190 N-cm) and the bottom T27 50 to 60 lbf-in (570 to 670 N-cm).

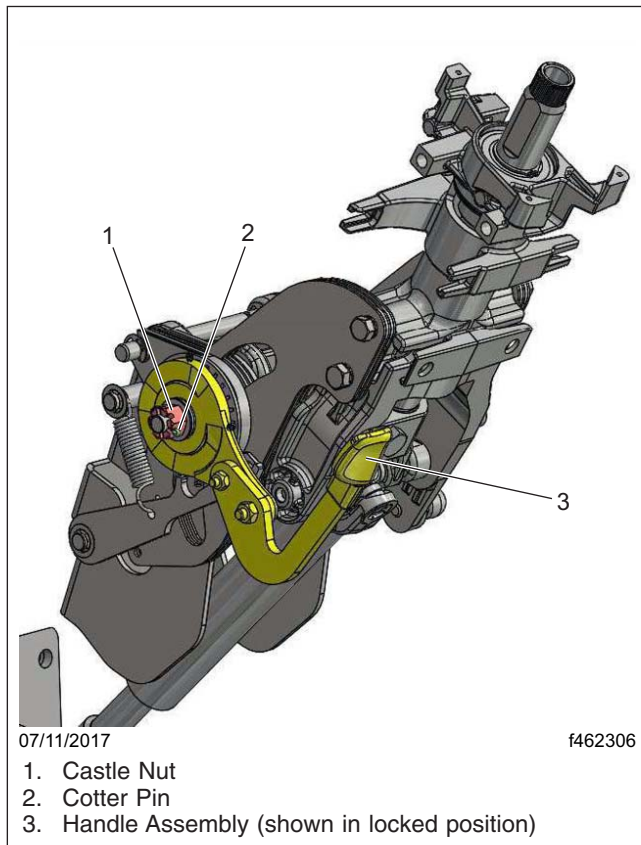


**Fig. 7, Bottom Steering Column Cover, New Cascadia**

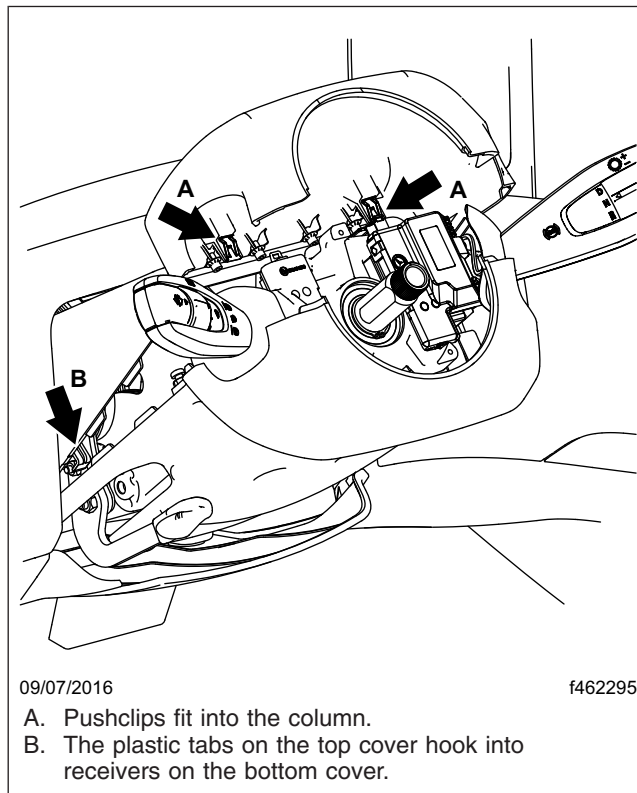
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**Fig. 8, TRW Steering Column, New Cascadia**



**Fig. 9, Bottom Steering Column Cover, New Cascadia**

## Warranty

This procedure is warrantable only if the described condition exists and the repair is performed within the applicable base or extended coverage warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

Normal warranty applies. See [Table 1](#) for OWL VMRS codes and labor allowance information. Enter **46-41** in the *Service Bulletin #*: field.

OWL VMRS Codes and Labor Allowance					
Primary Failed Part	Component Code	Cause Code	SRT Code	Description	Time: Hours
Steering Column Assembly, Other Than New Cascadia	015-002-004	28	532-5014A	Tilt Lock Force, Global Steering Column, Adjust	0.8
Steering Column Assembly, New Cascadia	015-002-004	28	532-5014A	Tilt Lock Force, Global Steering Column, Adjust	0.4

**Table 1, OWL VMRS Codes and Labor Allowance**