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## Technical Service Bulletin

GROUP <b>CAMPAIGN</b>	NUMBER <b>16-01-010</b>
DATE <b>MARCH 2016</b>	MODEL(S) <b>Sonata (YF) Elantra (MD)</b>

**SUBJECT:** INSTALLATION OF URETHANE PROTECTOR OVER FRONT COIL SPRINGS  
(RECALL CAMPAIGN 133)

*This bulletin supersedes TSB 15-01-049-2 to include additional information regarding:*

- a) warranty submission for replacement springs,*
- b) Sonata (YF) coil springs with brown urethane tubes.*

### \* IMPORTANT

#### \*\*\* Retail Vehicles \*\*\*

Dealers must perform this Recall Campaign whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the service department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

### Description:

On certain 2011 Sonatas (YF) and Elantras (MD), corrosion can build up at the front coil springs, resulting in possible fracture near the base. A fractured spring can make contact with the tire, potentially resulting in a tire puncture and increasing the risk of a crash. This bulletin describes the procedure to install urethane tubes over the front coil springs to prevent a tire puncture.



### Applicable Vehicles:

- 2011 model year Sonatas (YF), produced from DEC 11, 2009 to FEB 28, 2010
- 2011 model year Elantras (MD), produced from NOV 12, 2010 to MAR 31, 2011
- Area: Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, Wisconsin, and the District of Columbia

**\* IMPORTANT**

There are circumstances under which vehicles not currently or never registered in a “salt belt” state may be eligible for this Campaign. These circumstances include:

1. Vehicles that have relocated into a “salt belt” area and/or vehicles registered in a “non-salt belt” state and driven in a “salt belt” area. If it is determined that an owner of a vehicle within the affected VIN production date range relocates or has operated their vehicle in a “salt belt” area, the dealer should perform the campaign procedure. The dealer should perform this procedure at no cost to the customer, and Hyundai’s Warranty PA Center must be contacted prior to repair and submission of the Warranty Claim.
2. Vehicles in “non-salt belt” states that exhibit corrosion damage. In the event that a vehicle in a “non-salt belt” state exhibits corrosion damage, the dealer should perform the recall procedure. This applies to both “salt-belt” and “non-salt belt” state dealers. The dealer should perform this procedure at no cost to the customer, and Hyundai’s Warranty PA Center must be contacted prior to repair and submission of the Warranty Claim.

**\* NOTE**

If the owner of a vehicle within the affected VIN production date range requests an inspection of their vehicle to check for a fractured spring, the inspection should be performed at no charge to the customer.

**Part Information:**

Part Name	Model	Part Number	Remark
URETHANE TUBE	Elantra (MD)	54631-3X000QQH	(2) Blue Tubes
	Sonata (YF)	54631-3Q000QQH	(2) Yellow Tubes




**NOTE:** Each foil package contains a clear pouch with (2) urethane tubes.

**CAUTION**

Urethane tube use;

- Wear gloves and eye protection.
- The tubes can only be used if each length is over 330mm (13.0 inches).
- Install the tubes in a well ventilated area.
- The tubes will begin to contract after opening the packaging.
  - Only remove one tube at a time before installation.
  - Install the tubes immediately after opening the pouch.
- Keep unopened packages in a dark, cool place away from direct sunlight.

**Tool Information:**

Name	Part Number	Remark
Coil Spring Compressor (Jig) Set	0K546-1H100QQH 	Hyundai will provide one (1) set to all dealers.*
Henkel Teroson MS930 Sealant	HKL-MS930QQH 	Hyundai will provide one (1) tube to all dealers.* One (1) tube for 7 cars.
Caulking Gun		Dealer's responsibility

\*Additional product can be ordered from your facing PDC.

**CAUTION**

Sealant use:

- Wear gloves and eye protection.
- Discard by the “best before” date printed on the tube.
- Store in a cool, dark place.

**Warranty Information:**

Op Code	Operation	Op Time
51C079R0	Urethane tube installation [Both sides]	0.5 M/H

**NOTE 1: Submit Claim on Campaign Claim Entry Screen.**

**NOTE 2: Reimbursement of sealer on each claim in sublet.**

**NOTE 3: If a part is found in need of replacement while performing Recall 133 and the affected part is still under warranty, submit a separate claim using the same Repair Order. If the affected part is out of warranty, submit a Prior Approval Request for goodwill consideration prior to performing the work.**

**Service Procedure:****Installation of Urethane Tubes for Both the Sonata (YF) and Elantra (MD)**

- 1a. Lift up the vehicle and then remove the front wheels & tires (A).

**Tightening torque:**

88.2 ~ 107.8 Nm (9.0 ~ 11.0 kgf.m, 65.0 ~ 79.5 lb-ft)

**CAUTION**

Wear eye protection while performing spring compression work.

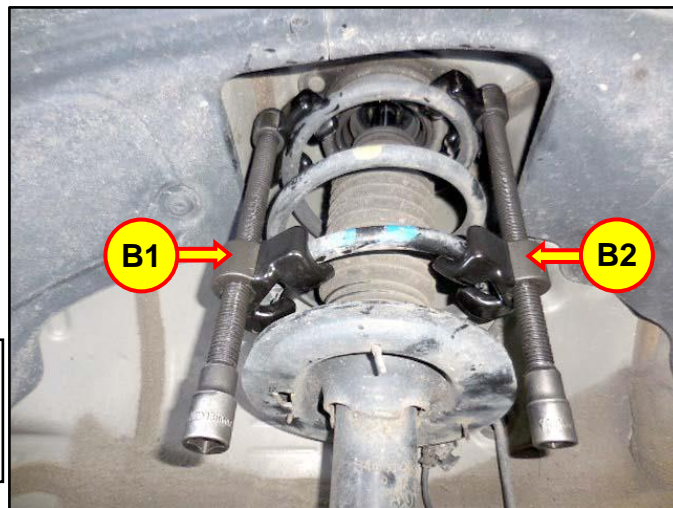


- 1b. Some Sonatas might have a brown urethane tube installed on the spring.
- Carefully remove the tube without damaging the black coating.
  - Then perform the procedures in this TSB.



2. On one side of the vehicle, install the coil spring compressor jig (B1, B2) on opposite sides of the spring as shown in the picture.

Compress the coil one side at a time. Do not compress each side more than 25 mm (1.0 in.) at a time.

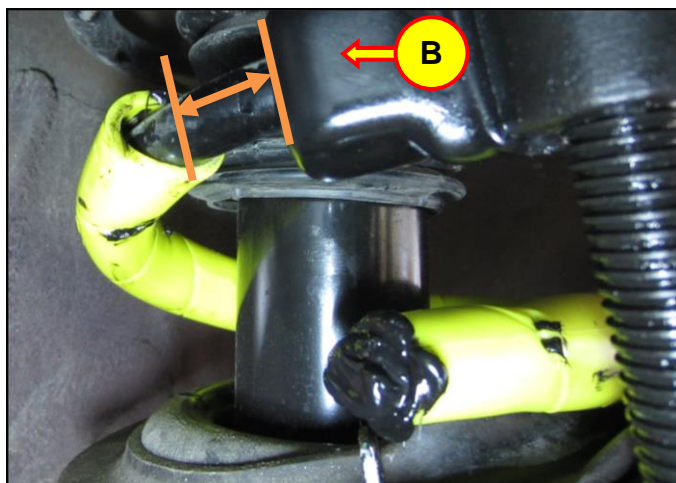
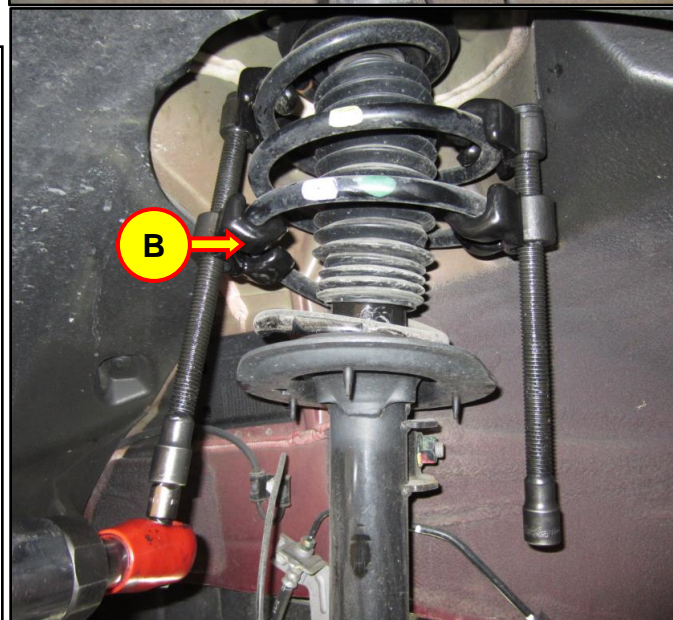


**⚠ CAUTION**

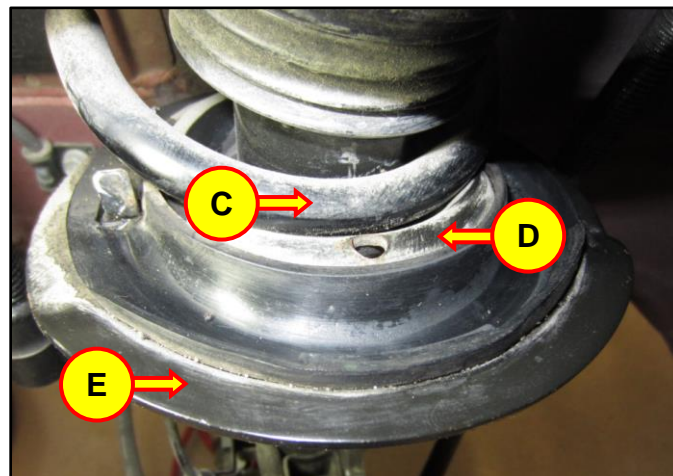
Do not compress the spring more than 50 mm (2.0 in.).

**★ NOTE**

Place the jig (B) on the spring to allow enough clearance to completely slide on the tube.



3. Move the bottom of the spring (C) over the inside hump (D) of the lower spring seat (E).



- 4a. Use an air nozzle to remove any debris from around the lower spring seat.

-Clean the lower portion of the spring where the urethane tube will be installed.

-Inspect the lower coils of the spring for damage or corrosion. Replace as necessary. If the spring is still under warranty, submit a separate claim using the same Repair Order. If the spring is out of warranty, submit a Prior Approval Request for goodwill consideration prior to performing the work.



- 4b. If a Sonata is in need of a replacement spring, P/N 54630-3Q010, the spring might have a brown urethane tube installed.

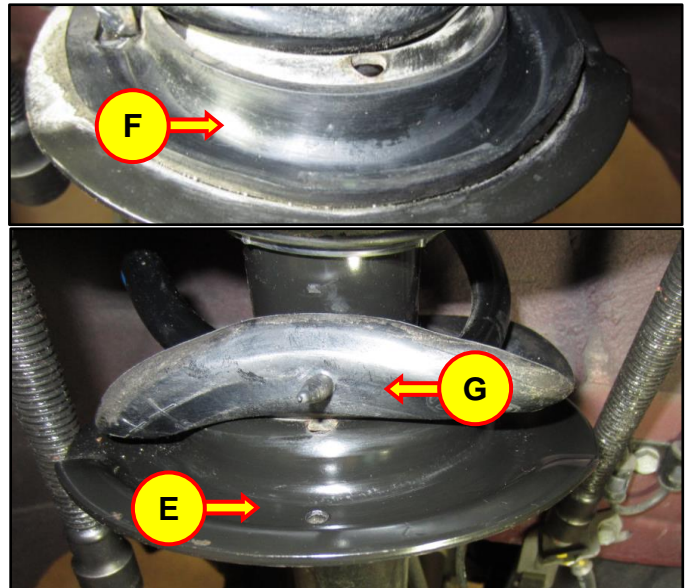
- Carefully remove the brown urethane tube without damaging the black coating.
- Install the yellow urethane tube, P/N 54631-3Q000QQH, onto the replacement spring as described in this TSB.
- Remove the spring from the vehicle according to the applicable workshop manual.
- Install the replacement spring into the vehicle according to the applicable workshop manual.



5. Carefully pull the rubber spring pad (F) off the lower spring seat.

-Clean the top (F) and bottom (G) surfaces of the rubber spring pad.

-Clean the lower spring seat (E).

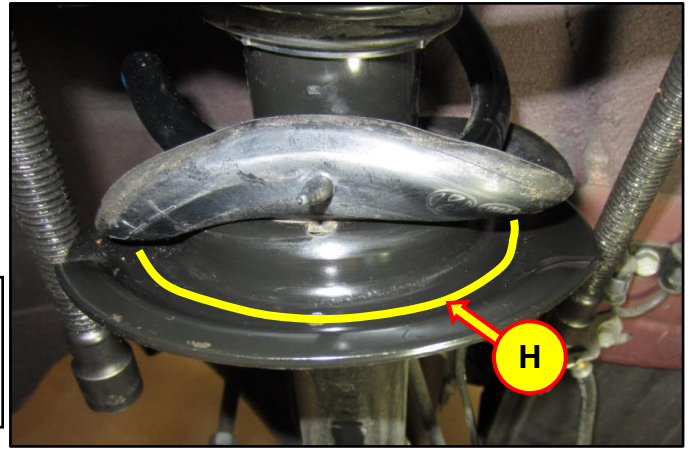


6. Apply a bead of sealant in between the pad and the lower spring seat as shown by line. (H).

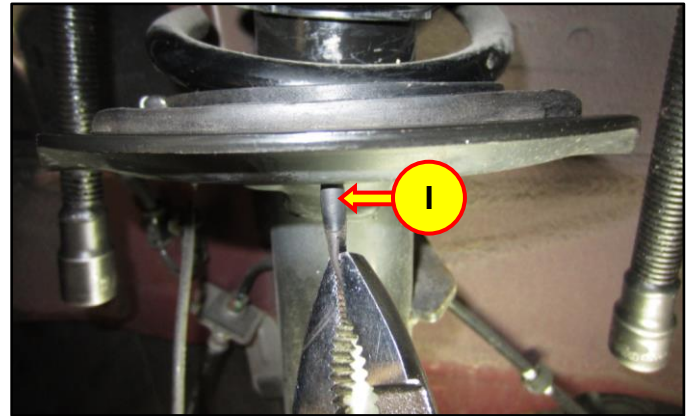


### \* NOTE

Sealant must be discarded by the “best before” date printed on the tube.



7. Return the rubber spring pad to its original position. Carefully pull rubber pins (I) back through their respective holes in the lower spring seat.

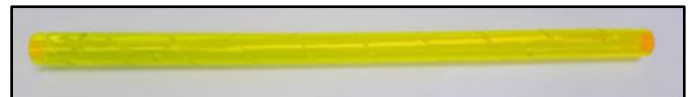


8. Select the appropriate tube for the model.

\*BLUE: Elantra (MD)

\*YELLOW: Sonata (YF)

Unpack the urethane tube.



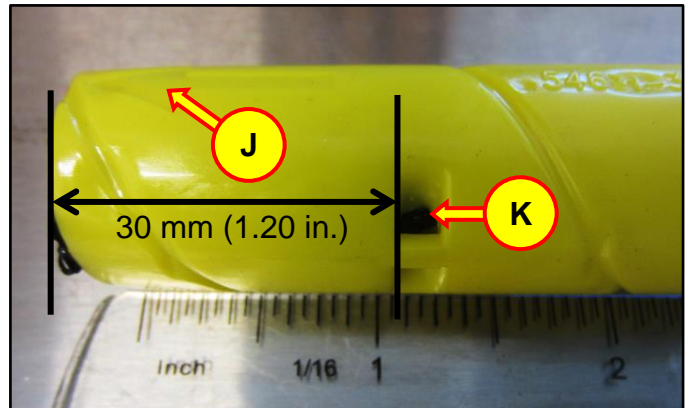
### ⚠ CAUTION

Urethane tube use;

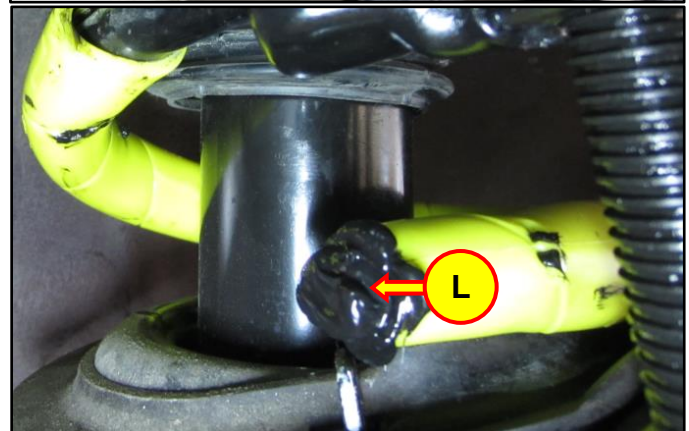
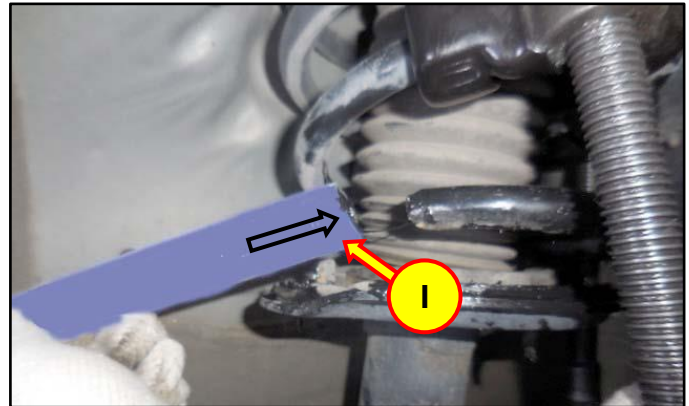
- Wear gloves and eye protection.
- The tubes can only be used if each length is over 330mm (13.0 inches).
- Install the tubes in a well ventilated area.
- The tubes will begin to contract after opening the packaging.
  - Only remove one tube at a time before installation.
  - Install the tubes immediately after opening the pouch.
- Keep unopened packages in a dark, cool place away from direct sunlight.

9. Locate arrow at one end of the tube (J).

Fill the tube with sealant from the end with the arrow, until it reaches approximately 30 mm (1.20 in.) or to the square openings (K).



10. Starting from the end with the arrow (I), slide the urethane tube over the end of the coil spring until the end of the tube (L) aligns with the end of the spring.





11. Carefully decompress the springs, making sure the spring is properly engaged with upper and lower spring seats on the strut. The end of the spring should line up against the lower spring seat guide (M).

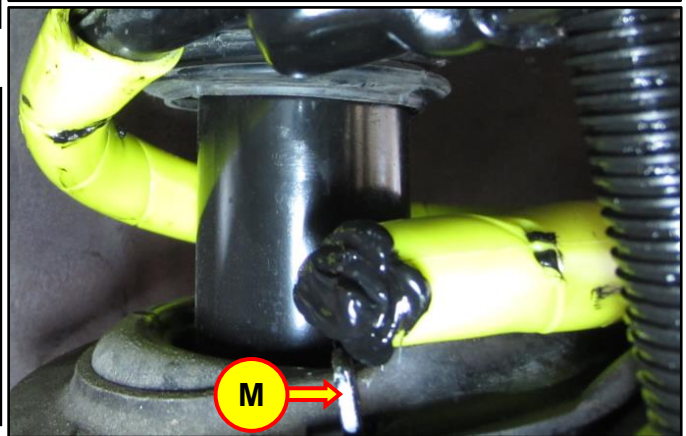
Ensure the tube does not slide out of position while decompressing the springs.

**\* NOTE**

Decompress each side of the spring no more than 25mm (1.0 in.) at a time.

**! CAUTION**

- Confirm the coil spring is properly engaged with the strut at the upper and lower spring seats. If it is out of position, compress the spring again and realign.
- Confirm the tube did not slide out of position. If it is out of position, compress the spring again and realign.



12. Perform the same procedure on the other side.

Reinstall the tires & wheels.