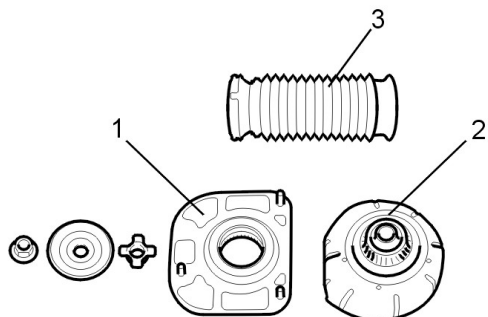


Shock absorber front, replacing

Special tools: [999 5407](#)

Removing the shock absorber

- Remove and disassemble the spring strut. See [Spring front, replacing](#)
- Check that the spring strut mounting (1), spring seat (2) and rubber bump stop with boot (3) and spring are free of damage. Replace if necessary
- Remove the ABS line holder from the old shock absorber and transfer it to the new one.



Installing the shock absorber

- Install the holder for the ABS line. Tighten to 10 Nm
- Assemble and install the spring strut. See [Spring front, replacing](#).

Note! When replacing with a new shock absorber the wheel alignment must be set. See [Wheel alignment, checking / adjusting](#).

Spring/shock absorber rear, replacing

Special tools: [951 2911](#) , [951 2912](#) , [951 2913](#) , [999 5500](#)

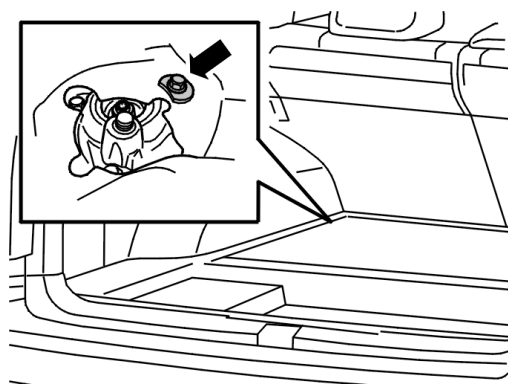
Note! The illustrations in this service information are used for different model years and/or models. Some variation may occur. However, the essential information in the illustrations is always correct.

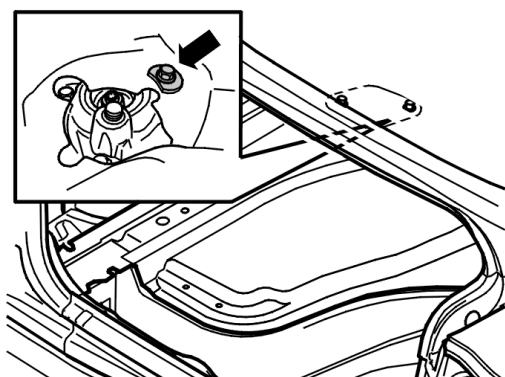
Preparatory work

Removing components

Only V70

- Remove the front floor hatch from the cargo compartment
- Angle up the insulation panel
- Remove the screw and washer
- Raise the vehicle.





Only S60/S80

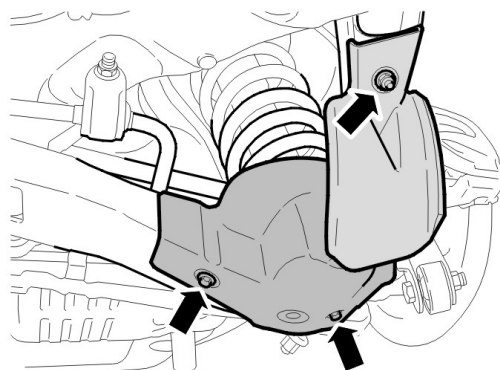
- Fold the rear seat forward
- Remove the clip for the rear side panel
- Push the rear side panel to one side
- Angle up the insulation panel
- Remove the screw and washer
- Raise the vehicle.

Removal

Removing the mud guard

Remove:

- the wheel
- the mudguard on the lateral link
- the mudguard under the control arm.

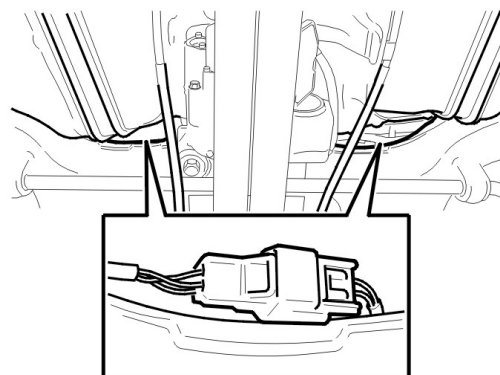
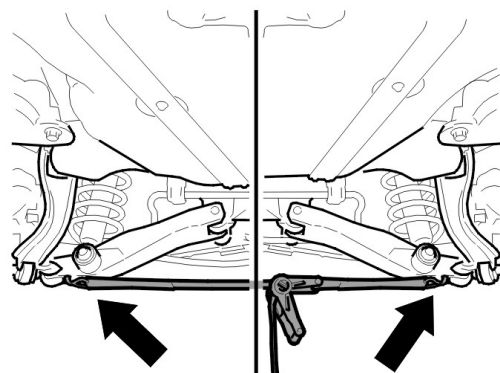


Removing the shock absorber

Note! The shock absorbers are slightly compressed. Secure the control arms down. Use retaining straps.

Remove:

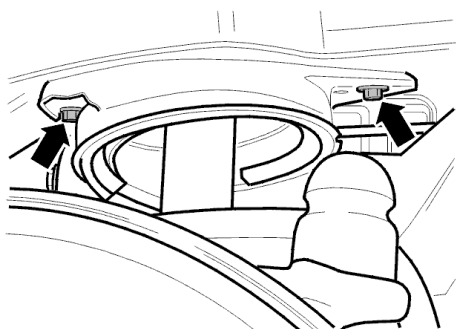
- the 2 screws for the shock absorbers on both sides
- the shock absorbers from both the control arms.



For vehicles equipped with Four-C.
Disconnect the connectors on top of the sub-frame. (Pull the connector off the rail on the sub-frame and out to the side.)
Pull up and open the connector.
Disconnect the cable harness from the sub-frame for the shock absorbers.

Remove:

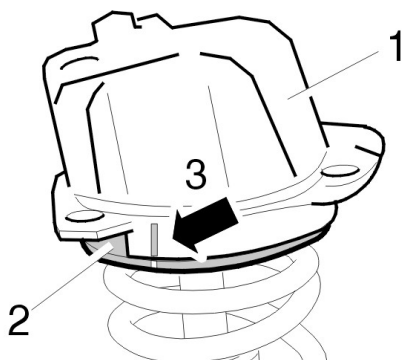
the 2 screws from the spring seat



- the 2 screws from the spring seat
- the spring strut.

Disassembling the spring strut

Mark the rubber shim (1) and the spring seat (2).
Use a chalk mark (3) to facilitate installation.



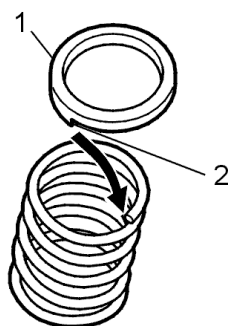
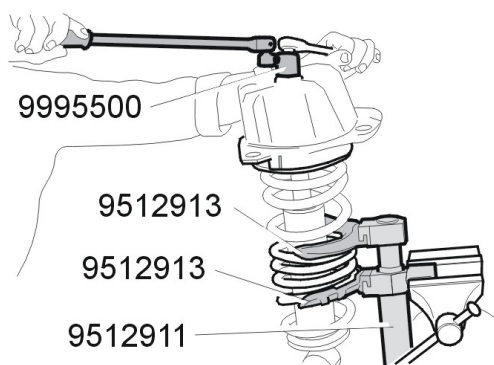
Removing the spring

Fasten the hydraulic tool in a vise. Take the load off the springs. Use the hydraulic tool: [951 2911](#) together with claw: [951 2913](#).

Remove the nut from the spring strut mounting. Use socket: [999 5500](#) and Torx wrench TX40 as a counterhold.

Remove:

- the spring seat
- the shock absorber.

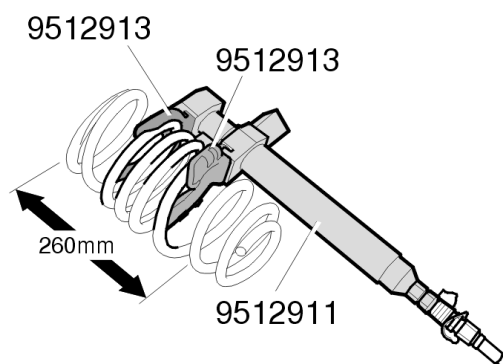


Remove the rubber shim (1) for the spring. Position the rubber shim on the new spring. Replace the rubber liner if it is damaged.

Note! The notch (2) in the rubber shim.

Only replacing the spring

Compress the new spring to a length of



approximately 260 mm. Use hydraulic tool: [951 2911](#) together with claws: [951 2913](#).

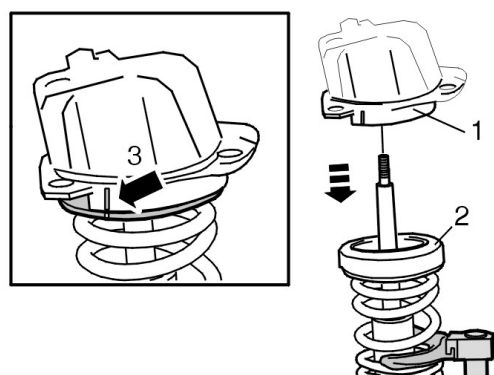
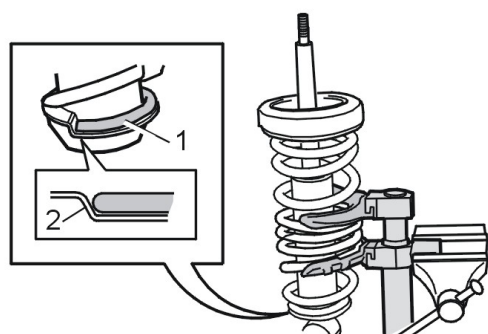
Installation

Installing the spring

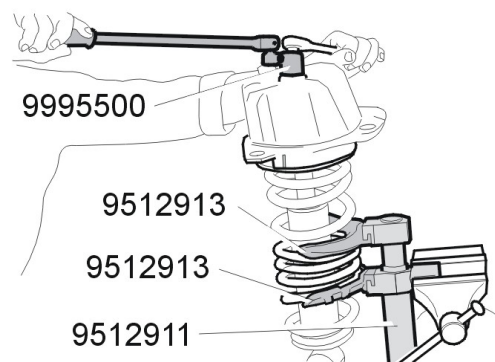
Note! For tightening torques, see: [Tightening torque](#).

Install:

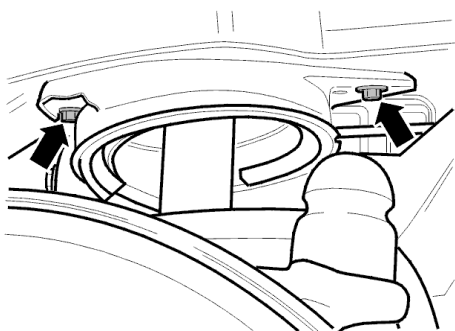
- install the shock absorber in the spring
- ensure that the end of the spring (1) is correctly seated (2) on the shock absorber.



- Reinstall the spring seat (1) on the rubber shim for the spring (2). Check that the mark (3) on the spring seat is in line with the mark (3) on the rubber shim.



- Install a new nut on the shock absorber mounting. Use socket: [999 5500](#) and Torx wrench TX40 as a counterhold. Tighten. See: [Tightening torque](#)
- Remove the spring strut from the hydraulic tool.



Installing the spring strut

Install:

- the spring strut
- the 2 x M10 screws for the spring seat.

Note! The lower end of the spring must be turned in towards the center of the car. This applies to both sides.

For vehicles equipped with Four-C
Install the cable harness for the shock absorbers on the sub-frame.

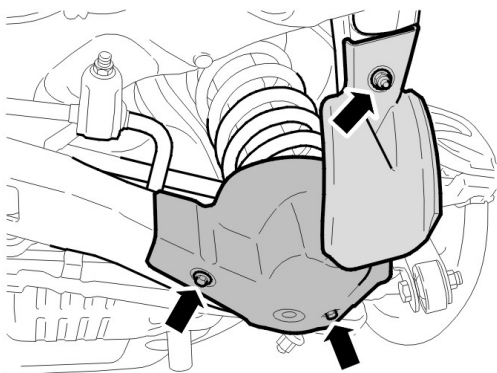
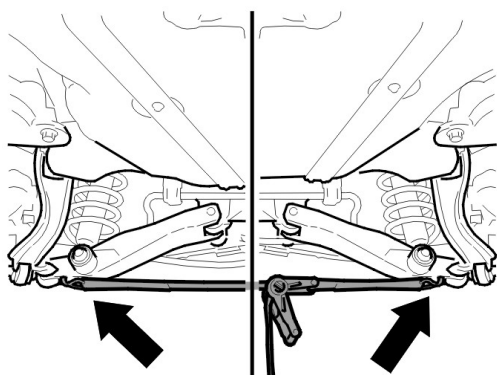
The connector on top of the sub-frame.

Installing the shock absorber

Install:

- the shock absorbers on the control arms, M12
- the screw for the shock absorber.

Remove the tensioner strap.



Installing the mudguards

Install:

- the mudguard on the lateral link, 1 x M8
- the mudguard under the control arm using the 2 screws
- the wheel. See: [Installing wheels](#) .

Lower the vehicle.

Finishing

Only V70

Install:

- screw and washer, 1 x M8
- fold the insulation back into place
- the front floor hatch.

Only S60/S80

Install:

- screw and washer, 1 x M8

- screw and washer, 1 x M8
- fold the insulation back into place
- fold back the rear side panel
- the clip to the rear side panel
- fold the rear seat back into place.

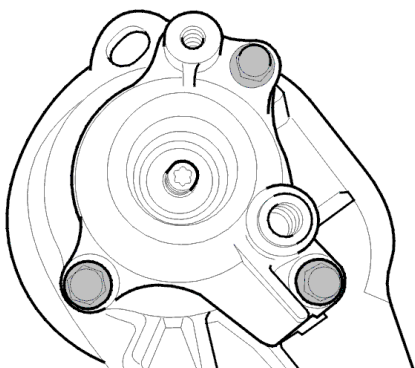
Check and adjust the headlamps in accordance with: [Headlamps, aligning](#) .

Shock absorber bearing upper rear, replacing

Removing the rear shock absorber upper bearing

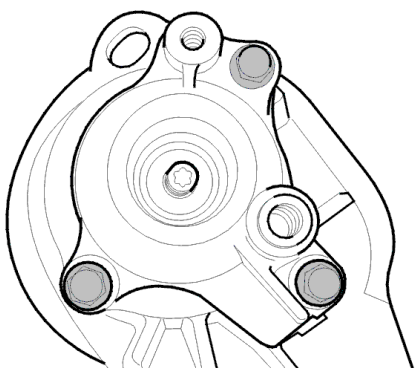
Remove the spring strut. See [Spring strut rear, replacing](#) .

Remove the spring. See [Spring/shock absorber rear, replacing](#) .



Remove

- the three screws for the cover over the bearing
- the upper bearing from the spring seat.



Installing the rear shock absorber upper bearing

Install

- the new bearing
- the cover for the bearing. Tighten to 25 Nm
- the spring. See [Spring/shock absorber rear, replacing](#)
- the spring strut. See [Spring strut rear, replacing](#) .

Spring strut rear, replacing

Note! As the illustrations in this service information are used for different model years and / or models, some variation may occur. However, the essential information in the illustrations is always correct.

Removal

Preparatory work

Only V70

Remove the front floor hatch from the cargo compartment.

Only S60

Fold the rear seat forward.

Remove the clip for the rear side panel.

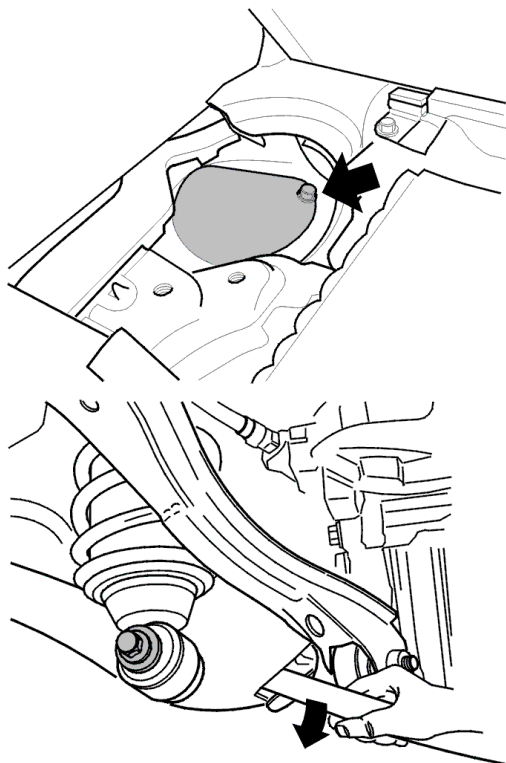
Push the rear side panel to one side.

Removing the spring strut

Angle up the insulation panel.

Remove the screw holding the cover and shock absorber.

Raise the car.



Remove:

- * the wheel
- * the spring strut from the lower control arm.

Note! The spring struts are slightly compressed.

Lowering the rear suspension

Remove the parking brake cable mounting in the sub-frame on both sides.

Remove:

- * the exhaust system from the three-way catalytic converter (TWC) and rearward. See [Exhaust system, replacing](#)
- * the wheels.

Remove the propeller shaft from the viscous coupling/Active on Demand Coupling. See [Final drive, replacing](#).

Position a lifting table under the front section of the rear suspension.

Remove:

- * the two mountings for the front sub-frame
- * the sub-frame brackets screws
- * the brake hose mounting stays from mountings on the brackets
- * the brake pipes from the clips
- * the mounting for the fuel filter on the right bracket.

Lower the rear suspension.

Note! The propeller shaft will detach from the flange when lowering.

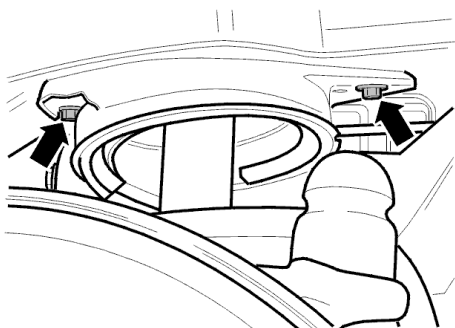
Disconnecting the shock absorber connectors

Disconnect the connectors for the shock absorbers on top of the sub-frame.

Removing the spring strut

Remove:

- * the screws from the spring seat
- * the spring strut.



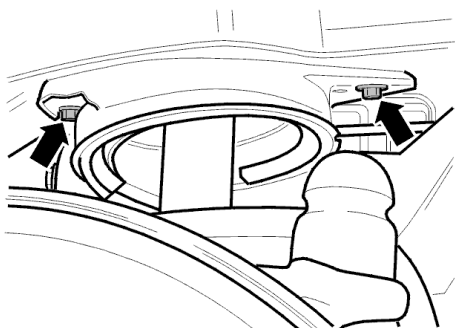
Installation

Note! For tightening torques, see [Tightening torque](#) .

Installing the spring strut

Install:

- * the spring strut
- * the screw for the spring strut. Tighten the spring seat. See [Tightening torque](#) .



Installing the shock absorber connectors

Connect the connectors for the shock absorbers on the top of the sub-frame.

Installing the rear suspension

Carefully raise the rear suspension.

Warning! Check that the vehicle does not lift out of the car jack arms when working with the lifting table.

Note! Guide in the propeller shaft when lifting operation.

Note! Ensure that the brake pipes or cable harnesses are not trapped.

Install the screws for the front mountings on the sub-frame (install the screws through the brackets).

Tighten the front mountings using M12 screws.

Install:

- * the brake pipes in the plastic clips on the brackets
- * the M8 screw for the bracket for the fuel filter
- * the M8 screw for the brake line mounting stay.

Remove the lifting table.

Install:

- * the exhaust system. See [Exhaust system, replacing](#)
- * the propeller shaft in the viscous coupling/Active on Demand Coupling. See [Final drive, replacing](#).

Installing the rear suspension

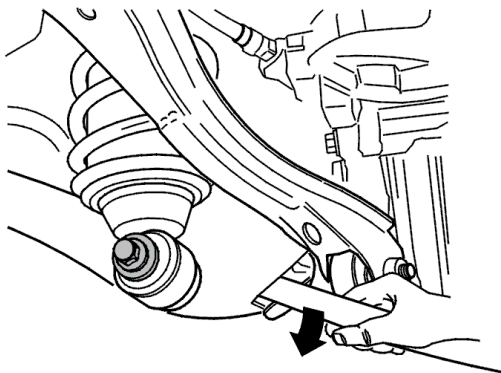
Install the spring strut on the lower control arm. Use a larger jimmy bar to bend the control arm down and align the spring strut against the control arm. Install the screw.

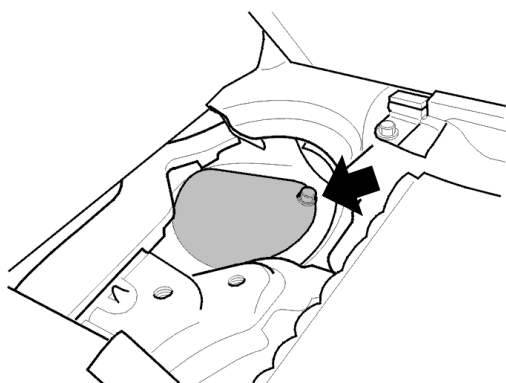
Note! The spring struts are slightly compressed.

Tighten the spring strut screw to the control arm. See [Tightening torque](#).

Install the wheel. See [Installing wheels](#). Lower the car.

Install the 1 M8 screw holding the cover and the shock absorber.





Finishing

Only V70

Install the front floor hatch.

Only S60

Fold back the rear side panel.

Install the clip for the rear side panel.

Fold the rear seat back into place.

Applies to all models

After replacing shock absorbers, the Suspension Module (SUM) must be calibrated. See VIDA vehicle communication, function group 7.

Suspension module (SUM), replacing

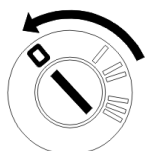
Removal

Note! As the illustrations in this service information are used for different model years and / or models, some variation may occur. However, the essential information in the illustrations is always correct.

Preparatory work

Ignition off.

Move the left-hand front seat to its rearmost position.



Remove the left-hand panel from the center console (turn the clip 1/4 turn). See the

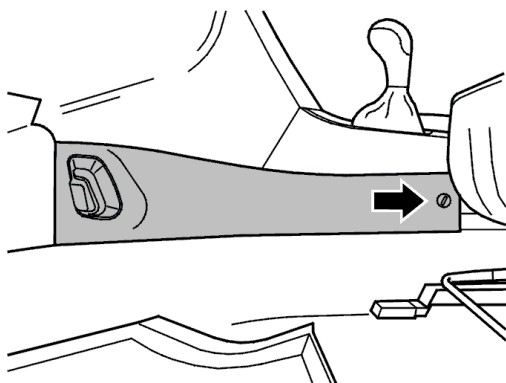
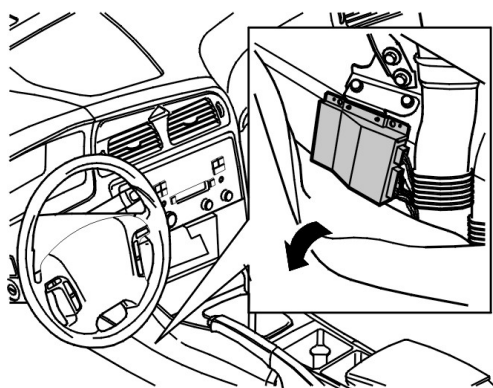


illustration.

Fold the floor carpet out of the way.



Removing the suspension module (SUM)

Remove the 2x M8 screws.

Disconnect the 2x connectors.

Remove the control module and the bracket.

Installation

Note! For tightening torques, see [Tightening torque](#) .

Installing the suspension module (SUM)

Connect the 2x connectors.

Install the 2x screws. (M8). Tighten.

Finishing work

Fold the carpet back into position.

Install the panel for the center console.

The Suspension Module (SUM) must be programmed after replacement.

Ordering software

Order software according to the table below.

S80	Order SW
S60	Order SW
V70 2000-, V70 XC 2001-/XC70	Order SW

Programming the control module

Program the new control module. See the table

below.

S80	Load SW
S60	Load SW
V70 2000-, V70 XC 2001-/XC70	Load SW

Finishing

Note! After replacing the Suspension Module (SUM), the position sensors and the resistance of the shock absorbers must be calibrated. See VIDA vehicle communication function group 7.

Read off and erase any diagnostic trouble codes (DTCs) stored during the replacement.
Test the function.