

Volvo Car Corporation Gothenburg, Sweden

Instruction No Version Part. No.

31454806 1.1 31454570, 31454571, 31650295, 31650296, 31650297, 31650298

Polestar chassis kit

© Volvo Car Corporation Polestar chassis kit- 31454806 - V1.1

Page 1 / 20



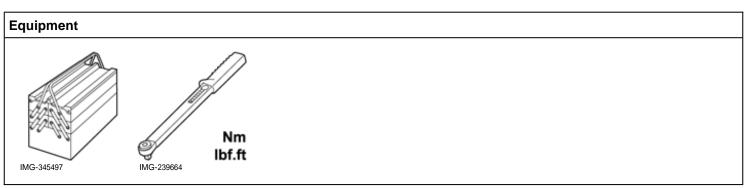
Volvo Car Corporation Gothenburg, Sweden

Special tools		
	951 2945 Puller	
	Tool number:951 2945	
	Tool description:Puller	
	Tool boards:61	
	999 7310 Press tool	
	Tool number:999 7310	
	Tool description:Press tool	
	Tool boards:61	
	999 7076 Lever	
	Tool number:999 7076	
	Tool description:Lever	
	Tool boards:46	
	999 7088 Expander	
	Tool number:999 7088	
	Tool description:Expander	
	Tool boards:61	
	951 2911 Hydraulic piston	
	Tool number:951 2911	
	Tool description:Hydraulic piston	
	Tool boards:70	
	951 2914 Claw (size 2, for hydraulic piston 9512911)	
	Tool number:951 2914	
	Tool description:Claw (size 2, for hydraulic piston 9512911)	
	Tool boards:70	
	999 7477 Wire	
	Tool number:999 7477	
	Tool description:Wire	
	Tool boards:70	
I		



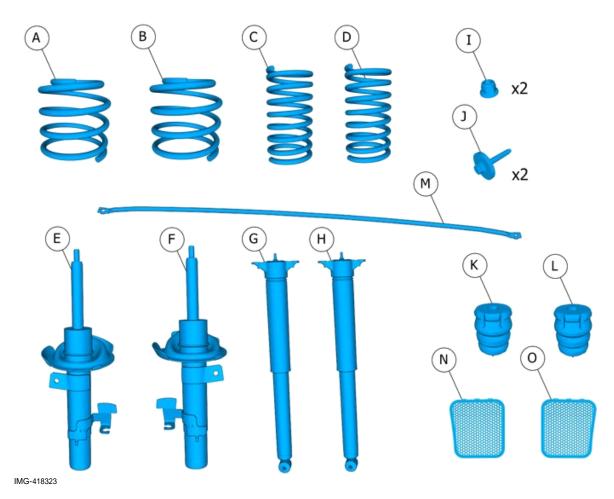
Volvo Car Corporation Gothenburg, Sweden

999 5500 SOCKET UPPER NUT REAR SHOCK ABSORBER
Tool number:999 5500
Tool description:SOCKET UPPER NUT REAR SHOCK ABSORBER
Tool boards:70
951 2913 Claw (size 1, for hydraulic piston 9512911)
Tool number:951 2913
Tool description:Claw (size 1, for hydraulic piston 9512911)
Tool boards:70





Volvo Car Corporation Gothenburg, Sweden





Volvo Car Corporation Gothenburg, Sweden

Information

1

Read through all of the instructions before starting installation.

Notifications and warning texts are for your safety and to minimise the risk of something breaking during installation.

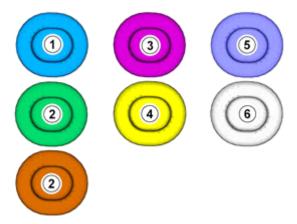
Ensure that all tools stated in the instructions are available before starting installation.

Certain steps in the instructions are only presented in the form of images. Explanatory text is also given for more complicated steps.

In the event of any problems with the instructions or the accessory, contact your local Volvo dealer.

Color symbols

2



IMG-363036

Note!

This colour chart displays (in colour print and electronic version) the importance of the different colours used in the images of the method steps.

- Used for focused component, the component with which you will do something.
- Used as extra colors when you need to show or differentiate additional parts.
- Used for attachments that are to be removed/installed. May be screws, clips, connectors, etc.
- Used when the component is not fully removed from the vehicle but only hung to the side.
- Used for standard tools and special tools.
- Used as background color for vehicle components.

Removal

3

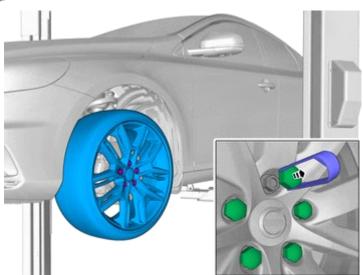
Raise the car.



IMG-417390

Installation instructions, accessories

Volvo Car Corporation Gothenburg, Sweden

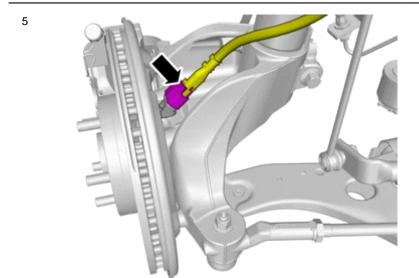


Remove the nuts.

Remove the marked part.

Tightening torque: Wheel to wheel hub

Stage 1: 20 Nm Stage 2: 140 Nm

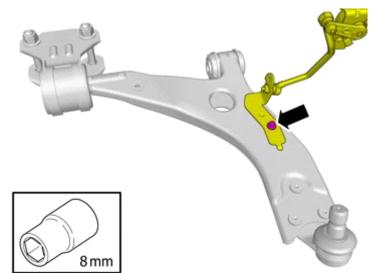


Disconnect the connector.

Applies to the right-hand side

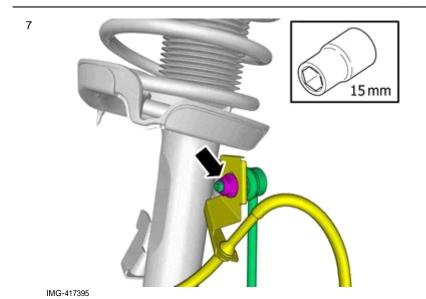


Volvo Car Corporation Gothenburg, Sweden



Remove the screw.

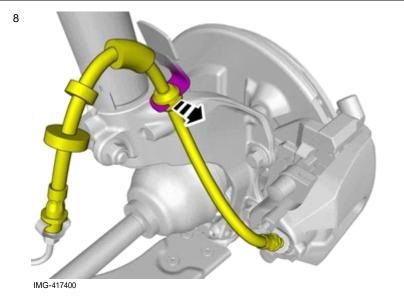
Tightening torque: Headlamp levelling position sensor to control arm , 6 Nm



Remove the nut.

Fold marked part to one side.

Tightening torque: Front stabilizer bar link to strut and spring assembly , 55 Nm



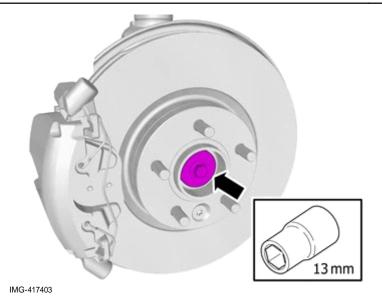
Remove the part carefully

© Volvo Car Corporation



Volvo Car Corporation Gothenburg, Sweden

9



Warning!

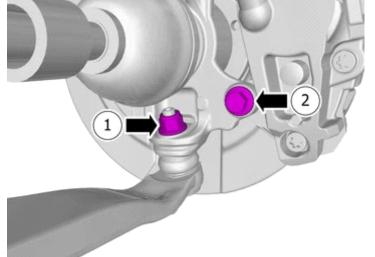
Make sure that a new bolt is installed.

Remove the screw.

Tightening torque: Driveshaft to wheel hub (front)

Stage 1: 35 Nm Stage 2: 90 degree

10



Remove the nut.

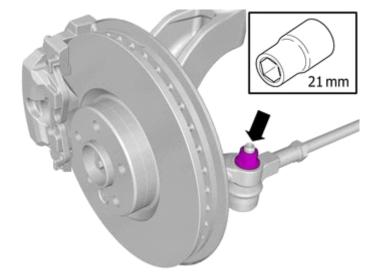
Remove the screw.

Tightening torque: Ball joint to wheel knuckle, 100 Nm

Tightening torque: Mount front brake caliper, 200 Nm

11

IMG-418185



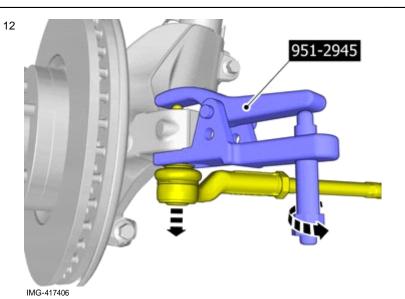
Remove the nut.

Tightening torque: Tie rod end to wheel knuckle, 80 Nm

IMG-418169 © Volvo Car Corporation

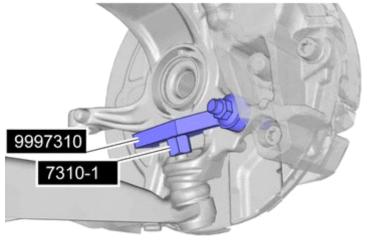


Volvo Car Corporation Gothenburg, Sweden



Use special tool: T9512945, Puller





Use special tool: T9997310, Press tool

IMG-418214

© Volvo Car Corporation

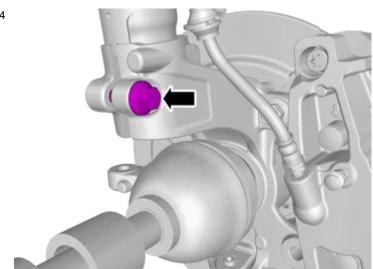


IMG-418221

IMG-418235

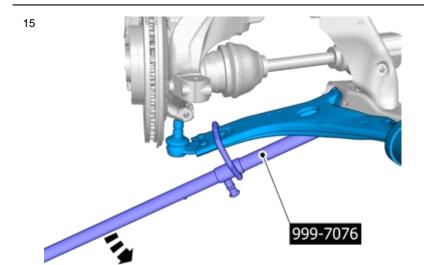
Installation instructions, accessories

Volvo Car Corporation Gothenburg, Sweden

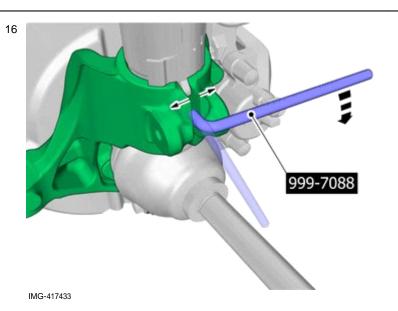


Remove the screw.

Tightening torque: Wheel knuckle to strut and spring assembly , 110 Nm



Use special tool: T9997076, Lever



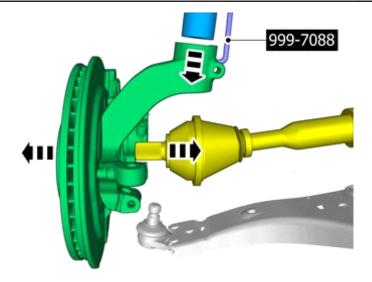
Use special tool: T9997088, Expander

© Volvo Car Corporation



Volvo Car Corporation Gothenburg, Sweden

17



Warning!

Make sure that no load is placed on the brake hose.

Caution!

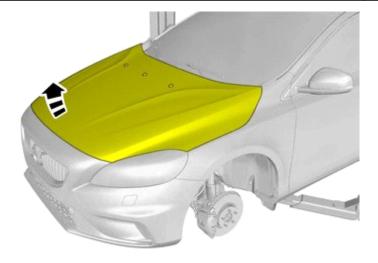
Make sure that the inner constant velocity (CV) joint does not separate.

IMG-418244

18

Repeat the steps when removing on opposite side.

19



Open the hood.

IMG-417486

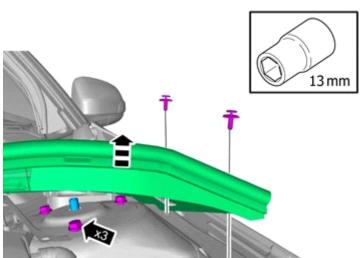
© Volvo Car Corporation



20

Installation instructions, accessories

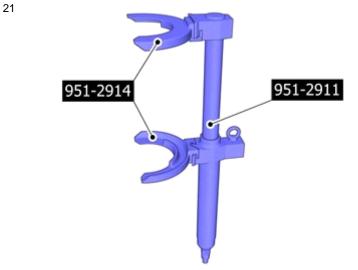
Volvo Car Corporation Gothenburg, Sweden



Loosen the clips.

Remove the screws.



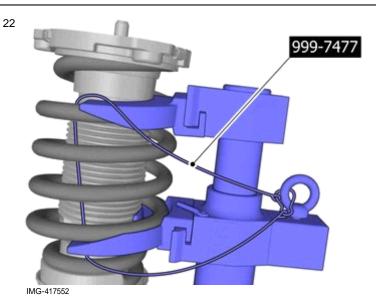


Use special tool: T9512911, Hydraulic piston

Use special tool: T9512914, Claw (size 2, for hydraulic

piston 9512911)

IMG-418282



Warning!

The safety wire must be installed while the spring is compressed.

Use special tool: T9997477, Wire



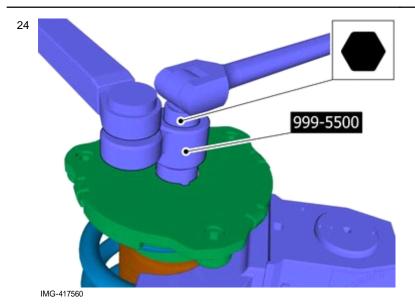
Volvo Car Corporation Gothenburg, Sweden

23



Warning!

Make sure that a new nut is installed.



Remove the nut.

Use special tool: T9995500, SOCKET UPPER NUT REAR SHOCK ABSORBER

Tightening torque: Bearing front shock absorber to shock absorber , 50 Nm

25

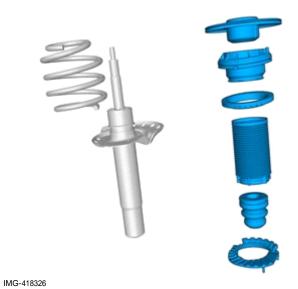
Repeat the steps when removing on opposite side.

© Volvo Car Corporation



Volvo Car Corporation Gothenburg, Sweden

26

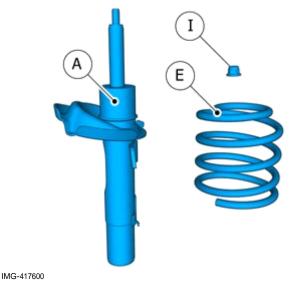


Reuse existing parts.

Reinstall the removed parts in reverse order.

Accessory installation

27

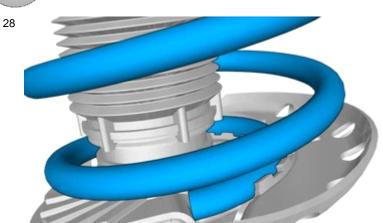


Warning!

Take extra care when handling the compressed spring.



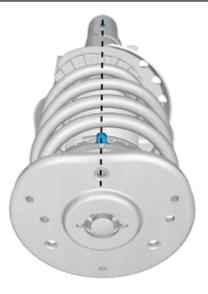
Volvo Car Corporation Gothenburg, Sweden



Place the component where indicated in the graphic.

29

IMG-418284

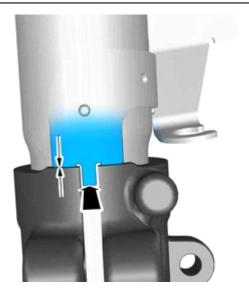


Caution!

Make sure that the components are positioned correctly.

IMG-418370





Caution!

Make sure that the components are positioned correctly.

IMG-418490



Volvo Car Corporation Gothenburg, Sweden

31

32

IMG-418455

Reinstall the removed parts in reverse order.

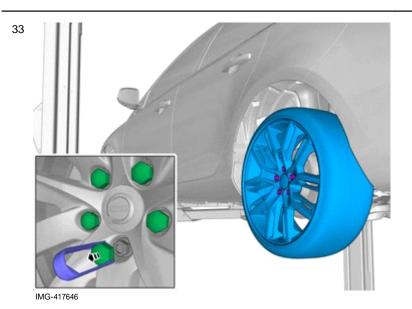
x3

Install component that comes with the accessory kit.

Install the screws.

Tightening torque: Strut and spring assembly to strut and spring assembly turret, 30 Nm

Removal



Remove the nuts.

Remove the marked part.

Tightening torque: Wheel to wheel hub

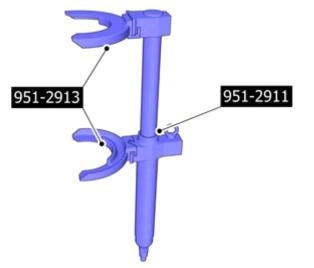
Stage 1: 20 Nm Stage 2: 140 Nm

© Volvo Car Corporation



Volvo Car Corporation Gothenburg, Sweden

34

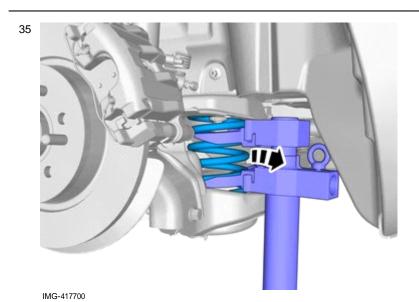


Use special tool: T9512911, Hydraulic piston

Use special tool: T9512913, Claw (size 1, for hydraulic

piston 9512911)

IMG-418371



Warning!

The safety wire must be installed while the spring is compressed.

Remove the marked part.

Use special tool: T9997477, Wire

36



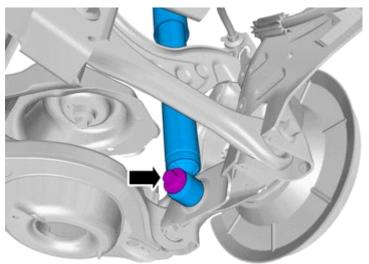
Reuse existing parts.

IMG-418373



Volvo Car Corporation Gothenburg, Sweden

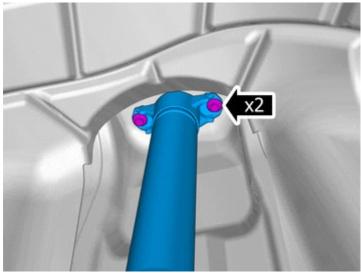
37



Remove the screw.

IMG-417706

38



Remove the screws.

Remove the marked part.

IMG-417707

39

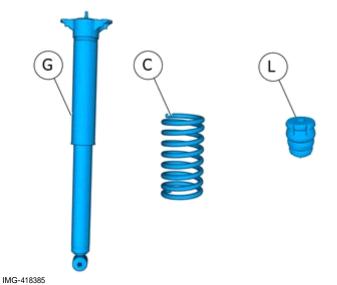
Repeat the steps when removing on opposite side.

Accessory installation



Volvo Car Corporation Gothenburg, Sweden

41



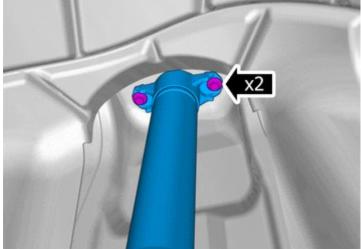
Warning!

Take extra care when handling the compressed spring.

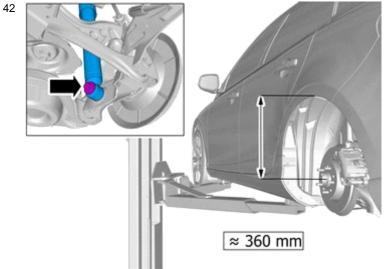


Install component that comes with the accessory kit.

Tightening torque: M8, 24 Nm



IMG-417707



Tighten the screw.

Tightening torque: Rear shock absorber to wheel knuckle, 175 Nm

IMG-418387



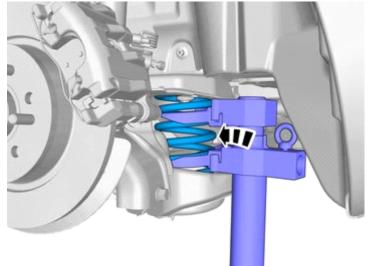
Volvo Car Corporation Gothenburg, Sweden

43

Repeat the steps when installing accessories on opposite side.

44

IMG-417711



Install component that comes with the accessory kit.

Repeat the steps when installing accessories on opposite side.

45	Carry out wheel alignment.
46	Calibrate according to: DIAGNOSTICS/CAR COMMUNICATION/Advanced/HCM/Calibrating position sensor
47	In the event of any problems with the instructions or the accessory, contact your local Volvo dealer.