

Assembly Instructions Mercedes S-Class DC W220 Airmatic (not models with ABC)

Replacing the front spring strut

General information:

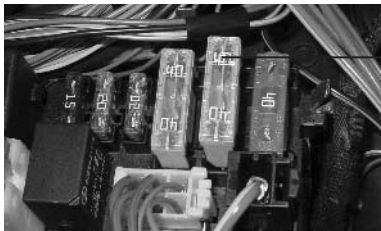
- Do not store the spring struts at temperatures below -15 °C or over 50 °C.
- The spring strut may only be installed or removed by trained mechanics in a professional repair shop.
- Replace the self-locking nuts.
- Avoid damaging the wires and cables.
- Attention: Replacing the spring struts in a manner other than described in the instructions may damage the vehicle and the pneumatic shock module!

Procedure:

- Straighten the steering wheel.



The ignition must remain switched off while work is conducted on the pneumatic shock absorber module.



- There are three large fuses in the right fuse box (under the hood), remove the middle one ①.

- Raise the vehicle.



Make sure to lift the vehicle on the hoisting points specified by the manufacturer of the vehicle.

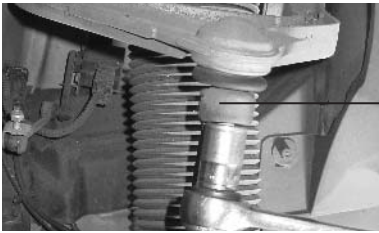
Risk of fatal injury if the vehicle slides off the hoist.

- Disassemble the wheel.

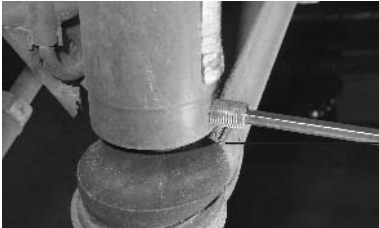


- Disassemble the level control sensor rod ②.

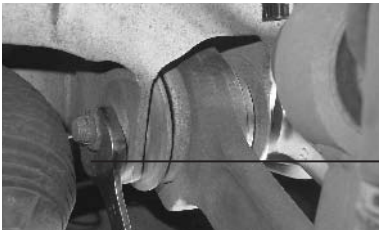
- Pull of the plug (absorber valve unit ABS) on the spring strut you are replacing.



- Detach the upper steering triangle ⑨.



- Unscrew 2 stub screws on the bottom of the spring strut ③.



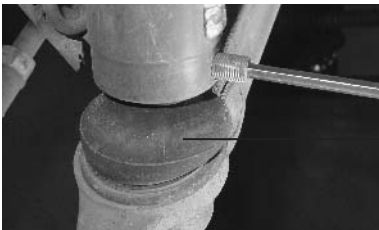
- Detach the inside suspension arm ⑦.



- Unscrew the pressure line connector on the spring strut ④.



Air pressure! Release slowly and allow air to escape.



- Use the right tool to detach the spring strut from the steering triangle at the ball joint ⑥.



- Unscrew 3 nuts on top of the chassis ⑤.
- Pull out the spring strut downward on the side.



- Install the new spring strut upward and screw on the top nuts ⑤.



Do not tighten the nuts completely until the vehicle is ready to drive.



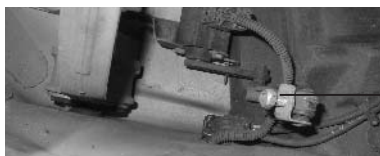
- Use the stub screws to assemble the spring strut to the ball joint of the lower suspension arm (20 Nm) ⑧.



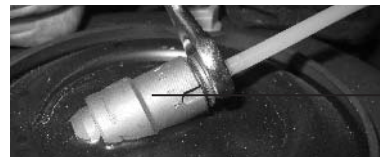
Stub screws must be at least flush with the spring strut.



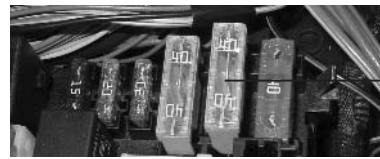
- Assemble the upper steering triangle ⑨.
- Insert the front axle distributor plug (absorber valve, ABS) on the spring strut you are installing.



- Assemble the level control sensor rod ②.
- Assemble the wheel.



- Screw on the pressure line (5 Nm) ④.
Check the O-ring – replace if necessary.



- Insert the fuse ①.



- Lower the vehicle approx. 400mm (axle centre – lower edge of the fender) from the lifting platform ⑩.



Never completely lower the vehicle from the lifting platform if the air shocks are not pressurized!



- Start the motor, wait for at least 2 minutes, and actuate the pressurizing function from the cockpit ⑪.
- Lower the lifting platform slowly at first and then completely after the vehicle supports itself.
- Check the AIRmatic for density.
- Tighten the bolts according to the specifications of the manufacturer after the vehicle is ready to drive.



3 nuts chassis ⑤: 20 Nm (Comply with the recommendations of the vehicle manufacturer!)

