

ZF Aftermarket Service Information

Replacing air spring
Mercedes-Benz
W212 | C218 | X218

Manufacturer Mercedes-Benz

Product

Document number 40937 EN



AFTERMARKET

LEMFÖRDER  SACHS  TRW



1 Replacing air spring

Vehicle manufacturer	Model range	Model
Mercedes-Benz	W212	E-Class
	C218 X218	CLS-Class

Tab. 1

 Vehicle identification: Check OE item number.

Storing air springs	
Temperature	-15°C (min.) / +50°C (max.)
UV radiation	Avoid direct sunlight.
Storage environment	Ensure a clean storage environment. Avoid contamination.

Tab. 2 Storing air springs

CAUTION

**Risk of injury due to flying parts.
Slight to moderate injury possible.**

- ⇒ Wear protective goggles.
- ⇒ Wear hearing protection.
- ⇒ Wear protective gloves.

1.1 Removing air spring, rear axle

Requirements:

- Vehicle has been raised safely. Observe the vehicle manufacturer specifications.
- Air suspension has been emptied using suitable diagnostic unit. Observe the vehicle manufacturer specifications.
- Plastic cover has been removed from control arm.
- Wheel has been removed.



Loosening air line

1. Carefully loosen air line nipple.

→ Air pressure escapes.

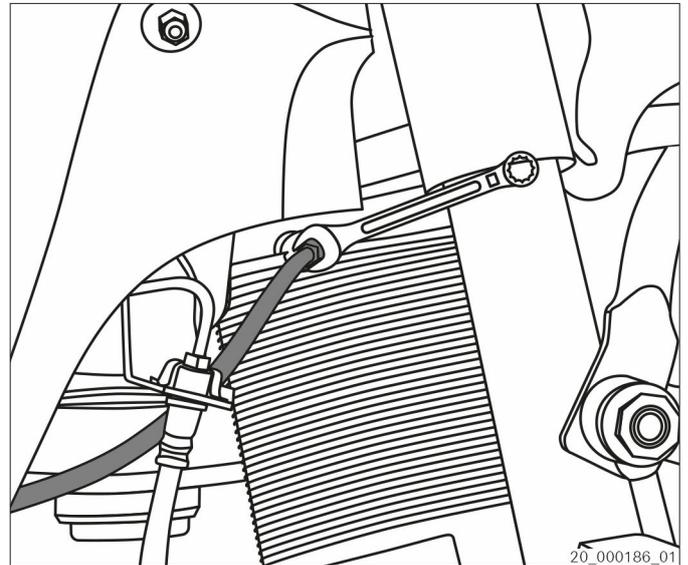


Fig. 1

Loosening air spring at the top

2. Pull air spring down from the upper anchoring to disattach it from the vehicle.

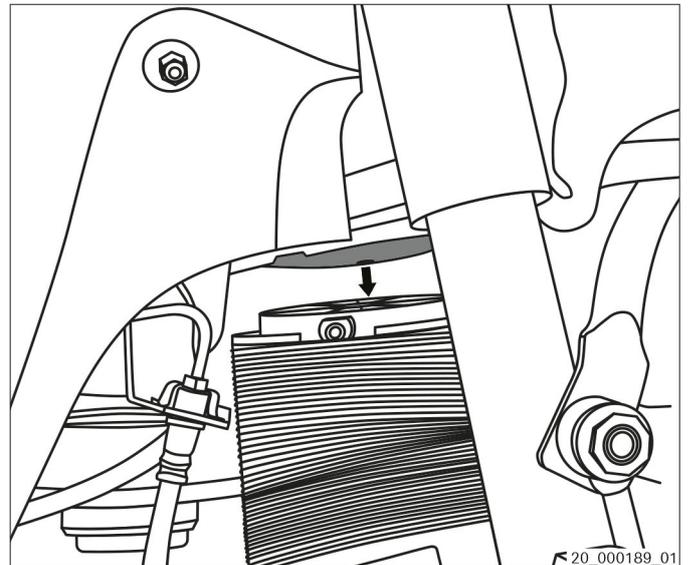


Fig. 2



Loosening air spring at the bottom

3. Push air spring upwards from the lower anchoring to disattach it from the vehicle.

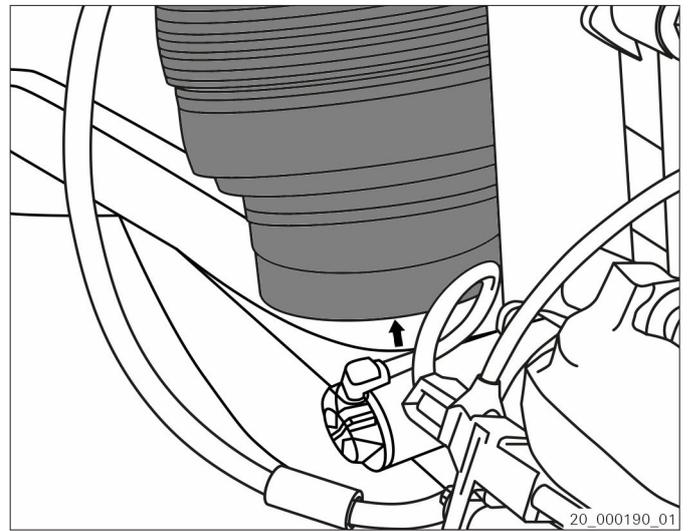


Fig. 3

4. Take out air spring.

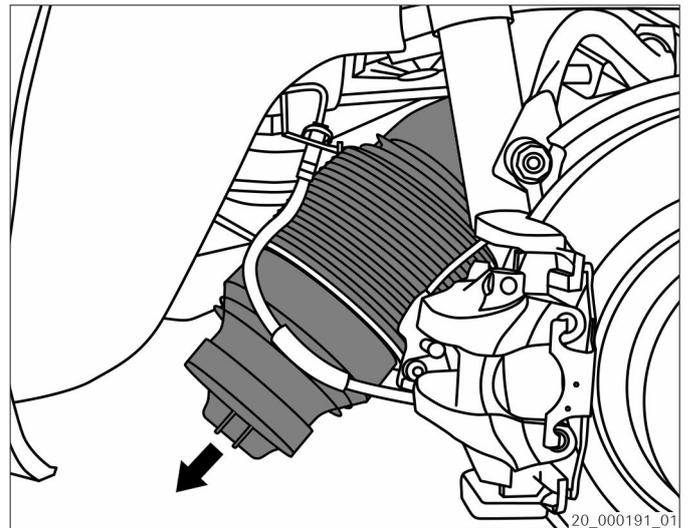


Fig. 4



Removing and disposing of retaining clip

5. Unscrew air spring retaining clip and dispose of it.

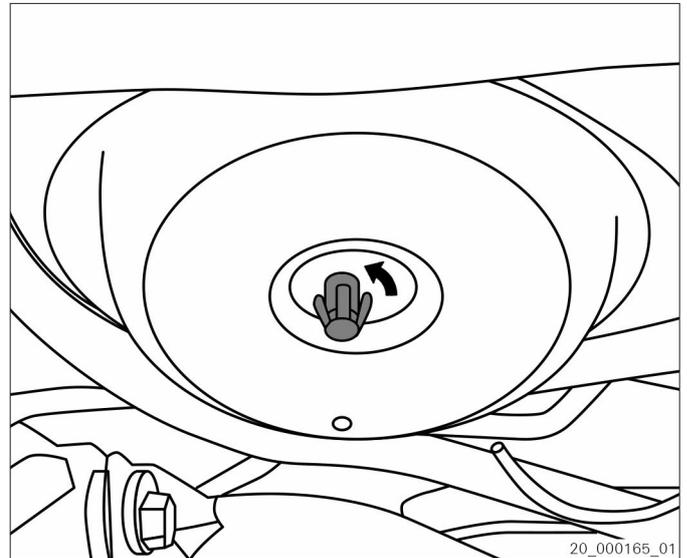


Fig. 5

1.2 Modifying air line

Requirements:

- Connectors are protected against contamination.



Connecting air line to a new SACHS air spring possible only without OE nipple.

Modifying air line

1. Separate nipple (1) from clamping piece (2).

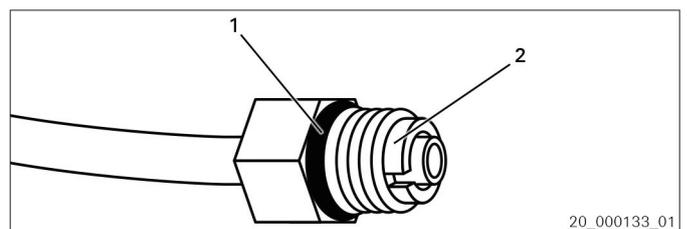


Fig. 6 Nipple with clamping piece

- 1 Nipple
- 2 Clamping piece



- Bend open clamping piece (2).

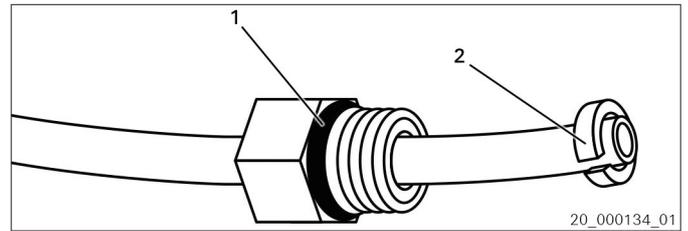


Fig. 7 Bend open clamping piece

- Nipple
- Clamping piece

- Remove clamping piece (2).

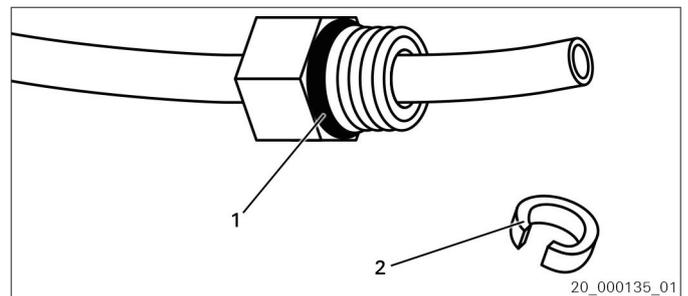


Fig. 8 Remove clamping piece

- Nipple
- Clamping piece

- Remove nipple (1).

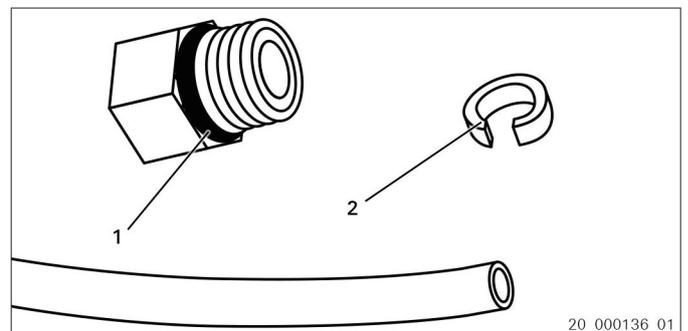


Fig. 9 Remove nipple

- Nipple
- Clamping piece



1.3 Installing air spring, rear axle

Installing retaining clip

1. Screw in **new** air spring retaining clip.

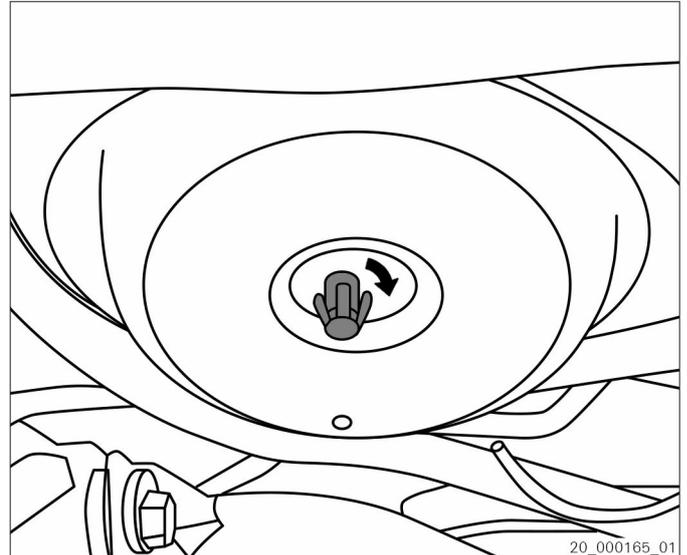


Fig. 10

2. Check whether the spring seat (1) is in the correct position on the upper anchoring.

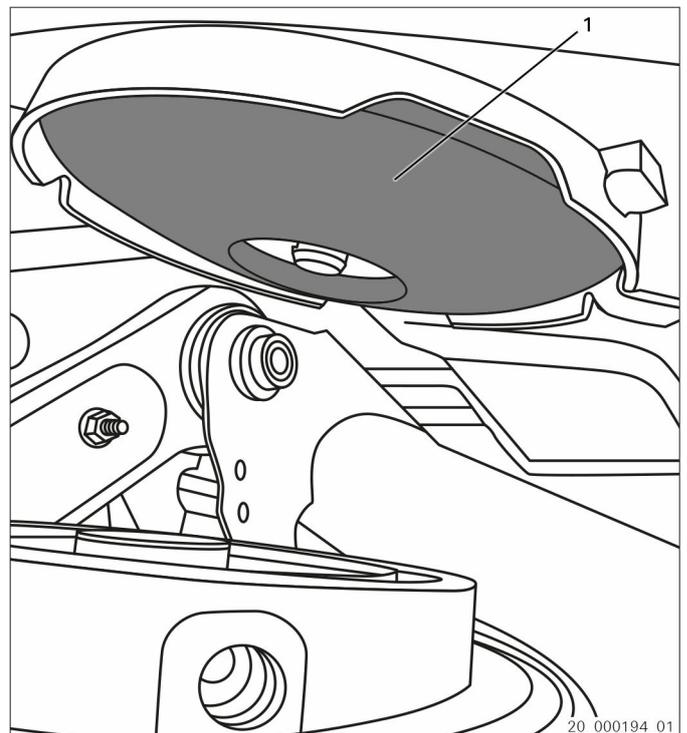


Fig. 11

1 Spring seat



Inserting air spring

3.  Align air spring lug with groove of chassis component.

Compress and insert air spring.

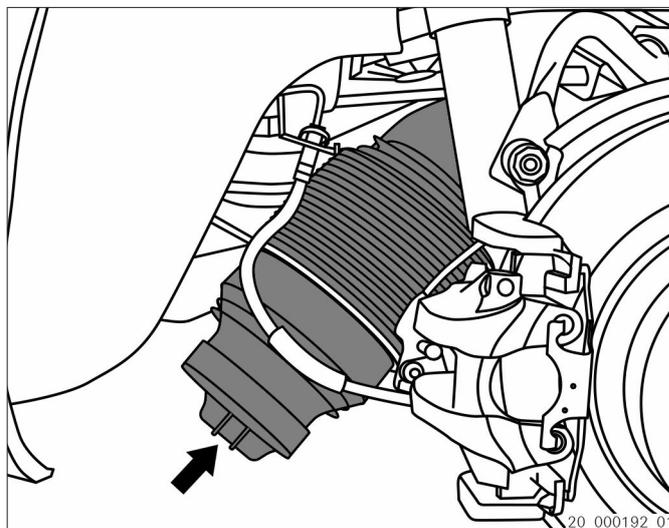


Fig. 12

4. Push air spring upwards until it snaps in place in the retaining clip.

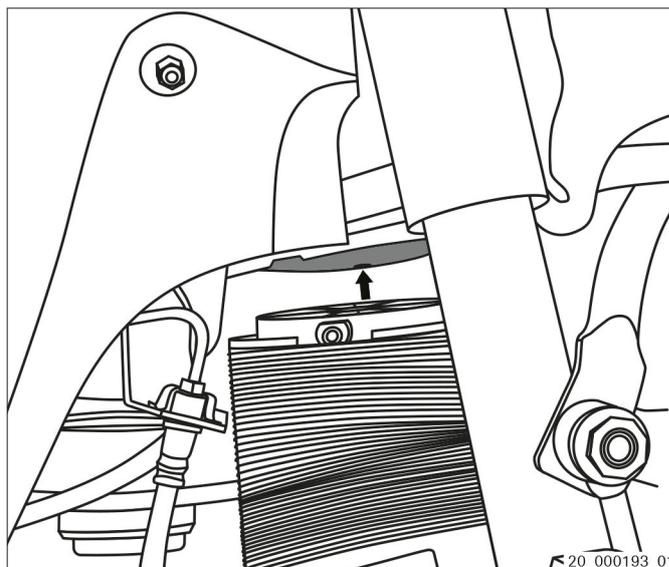


Fig. 13

-  Fit the control arm's plastic cover **after** filling the air suspension.

1.4 Connecting air line

Requirements:

- Connectors are clean.
- Connectors are protected against contamination.
- Air line has been checked for damage.



NOTICE

Material damage of air suspension possible.
Pressure loss due to scratches or cuts on air line possible.

- ⇒ Check air line for damage before connecting it.
- ⇒ Replace damaged air line.

1. Remove and dispose of transport safety device (1).

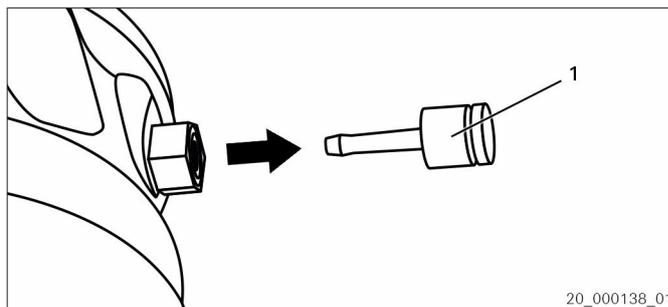


Fig. 14 Removing transport safety device

1 Transport safety device

2. Insert air line (1) into the nipple until it abuts.

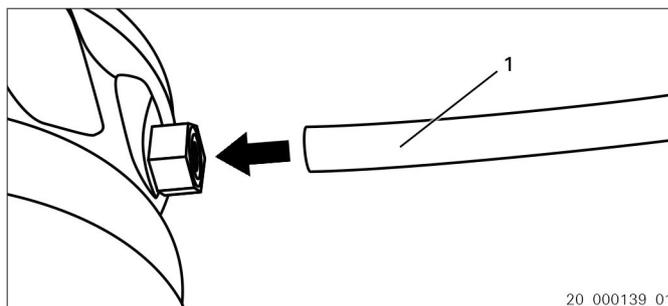


Fig. 15 Insert air line

1 Air line

3. Pull air line to check for secure fit.

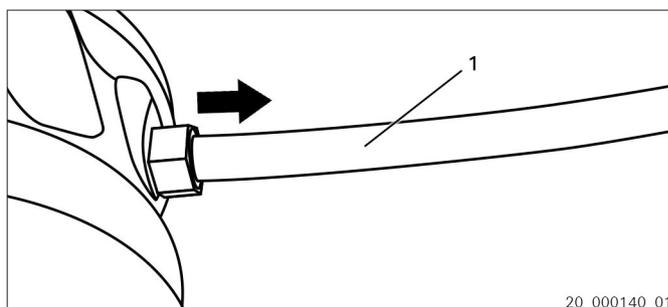


Fig. 16 Check for secure seat

1 Air line

4. Fill air suspension using suitable diagnostic unit. Observe the vehicle manufacturer specifications.



5. Screw on wheel applying the appropriate tightening torque. Observe the vehicle manufacturer specifications.
6. Lower vehicle from lifting platform.