

## 1 Important instructions and safety instructions

The repair may only be carried out by trained personnel.

These instructions describe the procedure for replacing the pedal cover of towing vehicle brake valves or brake signal transmitters.

For a professional repair, the unit must be removed from the vehicle because this is the only way to ensure that the pedal cover has been fitted correctly.

Installed units can only be repaired if certain conditions apply and the procedure requires special instructions.

It is essential that you read these repair instructions carefully and observe the contents in order to avoid personal injury and/or material loss.

Perform the repair by following the specifications and instructions of the vehicle manufacturer. The present WABCO repair instructions apply as an alternative when the manufacturer does not provide relevant instructions.

Always comply with the company and national accident prevention guidelines and Health and Safety regulations.

Observe the safety information for the degreasing agent.

### Additionally recommended documents:

"General Notes on Repair and Test", see [www.wabco-auto.com](http://www.wabco-auto.com) => INFORM => index word "repair".

## 2 Preparations

### WARNING



**Danger of injury due to vehicle rolling!**

Before you perform any installation work on the vehicle, ensure the following:

- Turn off ignition.
- Switch the gearbox to "neutral" and actuate the hand brake.
- Secure the vehicle with brake wedges.
- Attach a clearly marked note on the steering wheel saying that work is being performed on the vehicle and that the brake must not be touched.

- Make the braking system depressurised by actuating the pedal several times.

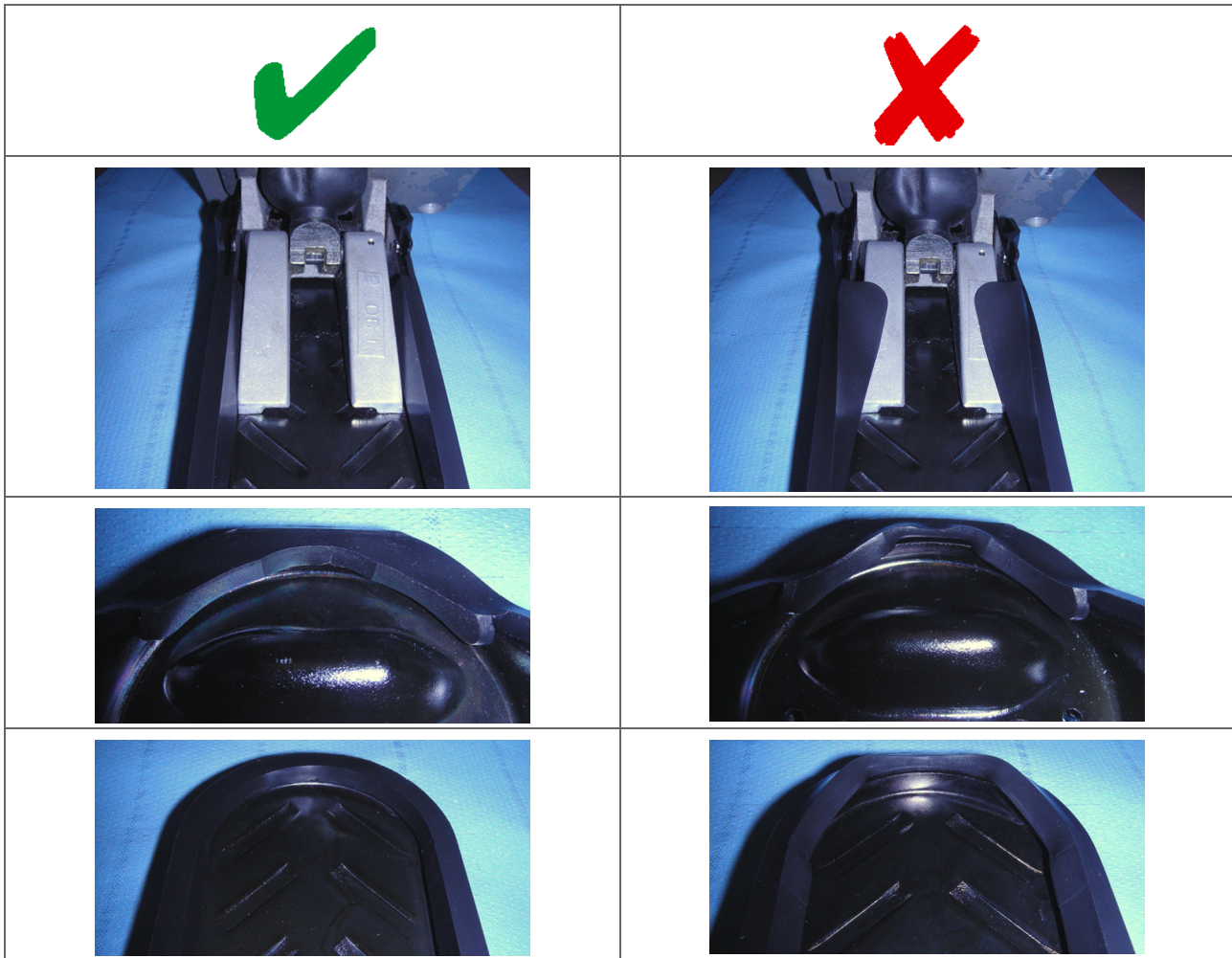
## 3 Removal

- Clean the unit and pipes to prevent contamination during disassembly.
- Mark the pipes with the corresponding connection ID.
- Remove the unit.

## 4 Repair

- If applicable, remove and dispose of the old pedal cover (see chapter 7).
- Examine actuation according to following criteria:
  - A repair is only possible if the pedal is not deformed and sits in the bearing without play.
  - The bellow of the actuation must be free from defects and must seal tightly.
- Seal the connection to prevent contamination with dirt or swarf.
- Locate the unit without damaging the connecting surfaces.
- Clean the pedal.
  - Degrease and dry the unit using brake cleaner or alcohol.
  - When using spray cans, do not spray directly onto the device. Use cloths.
  - Cleaning agents must not reach the area of the actuator joint or the bellow.
- Fit the new pedal cover manually without using any lubricants.
- Place the pedal cover over the tip of the pedal and pull down the tip.
  - => The pedal cover must enclose all side plates of the pedal.

- Check the seat (see photos below with typical mistakes when fitting).



- Open the connections.

## 5 Installation

- Install the unit and tighten the screws / nuts applying the torque specified by the vehicle manufacturer.
- Fit the pipes according to the marks and fasten.  
*Tightening torques for screw-fitting unions:*  
M 12x1.5: max. 21 Nm  
M 16x1.5: max. 34Nm  
M 22x1.5: max. 53Nm  
3/8-14NPTF: max. 30Nm  
3/8-18NPTF: max. 20Nm  
*Threads for VOSS connections:*  
M 16x1.5: max. 34Nm  
M 22x1.5: max. 53Nm

## 6 Functional test

- Build up supply pressure.
- Actuate the pedal for testing before driving.
- Pay attention to the resistance of the pedal and listen for air in the system.
- Test the brake on the brake test stand.

## 7 Disposal

- Dispose of the old pedal cover in accordance with national regulations for PVC. Generally it is permitted to dispose of it together with household refuse.