



## LuK Service Info



# Concentric Slave Cylinder (CSC) 510 0290 11

## Installation instructions

Manufacturer: Opel  
Vauxhall

Models: Astra K  
Adam  
Corsa E

See parts catalog for current assignment

The concentric slave cylinder (abbreviated to CSC) is subject to wear during operation. It should therefore be replaced whenever the clutch is changed.

Some points should be noted during installation to ensure the functionality and long service life of the components. It should be noted that the design of the installed CSC may differ from the LuK CSC with item no.: 510 0290 11. In this case, the clutch release system must be "converted".

**Figure 1:** Remove old concentric slave cylinder (1), connecting line (2), plastic sleeve (3) for feeding the line through the gearbox housing, and adapter (4) and dispose of correctly.

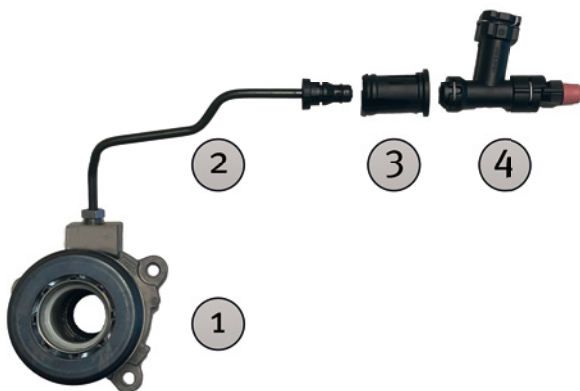


Figure 1: Remove and dispose of components correctly

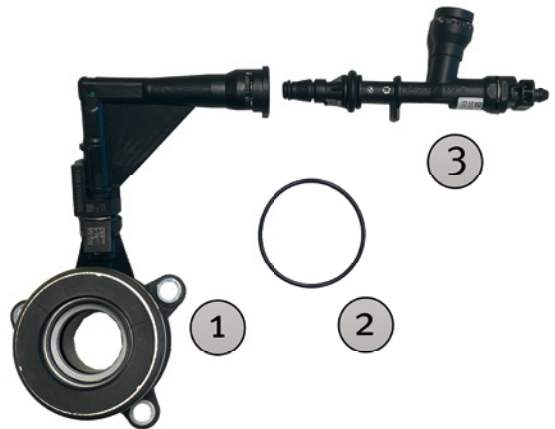


Figure 2: LuK CSC 510 0290 11

**Figure 2:** After replacing the sealing ring (2), first mount the new concentric slave cylinder (1) with finger tightness. Screw in the screws evenly so that the cylinder is not titled! Then insert the adapter (3) into the concentric slave cylinder through the opening in the gearbox housing. There will be an audible click when the adapter is correctly engaged. Tighten the three fixing bolts on the CSC to 10 (+1) Nm. After installing the gearbox, the connector of the vehicle's hydraulic line must be mounted on the open pipe end of the CSC adapter. It must engage with an audible click.

After replacing the concentric slave cylinder, it is necessary to bleed the system. The bleeding procedure is divided into two steps. The clutch control system must be bled in a first step and the concentric slave cylinder is bled separately in a second step.

#### **Step 1:**

The clutch control system must be bled from bottom to top, i.e. from the bleeding valve to the reservoir, as follows:

1. Connect collection container to brake fluid reservoir using adapter
2. Remove protective cap from bleeding valve
3. Connect brake bleeder to bleeding valve using adapter
4. Switch on brake bleeder. The pressure must not exceed 2 bar.
5. Open bleeding valve 2-3 turns
6. The bleeding procedure for this part of the system is completed when the brake fluid escaping from the collection container is bubble-free
7. Close the bleeding valve, switch off the device, Remove brake bleeder device and adapter

#### **Note:**

The clutch pedal must not be pressed when the brake bleeder is connected.

#### **Step 2:**

Two people are then required to bleed the concentric slave cylinder. Care must be taken to ensure that there is always sufficient brake fluid in the fluid reservoir during this bleeding procedure:

1. Connect collection container to bleeder valve
2. Slowly press clutch pedal until fully depressed and hold in this position
3. Open bleeder valve until air or brake fluid emerges
4. Close valve finger tight
5. Slowly pull clutch pedal back to the stop (Do not pull it back abruptly!)
6. Wait 2-3 seconds
7. Repeat procedure a number of times (at least another 10 times)
8. If no more air emerges, close bleeder valve, tighten to 5 Nm, and then remove collection container
9. Fit protective cap on bleeder valve
10. Fill fluid reservoir up to the MAX mark
11. Close fluid reservoir
12. Slowly press pedal approx. 10 times. Check pedal pressure of clutch pedal
13. Carry out a test drive and check clutch and braking pressure

Correct procedure for the CSC:

- Never actuate the new cylinder by hand. If the CSC is compressed, the seal inside can be damaged
- Do not press the pedal repeatedly during the bleeding procedure but only once as described.
- Do not use any lubricants or cleaning agents. Agents of this type can damage the seals and thus the entire CSC.
- Maintain the utmost level of cleanliness
- Only use brake fluid approved by the manufacturer
- Remove old seals and seal residues from the connector
- Ensure the adapter has audibly engaged before definitively tightening the three fixing bolts on the CSC
- Make sure the CSC does not tilt during installation. This could damage the lugs of the CSC during installation.

Please observe the vehicle manufacturer specifications!

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