

## Important information for correct assembly of concentric slave cylinder (CSC) 510 0073 10

### Vehicle

**manufacturer:** Alfa Romeo, Fiat, Opel, Saab, Vauxhall

### Models:

- Alfa Romeo:** 159
- Fiat:** Croma (194)
- Opel:** Astra G, Astra H, Combo, Corsa C, Corsa D, Meriva, Signum, Tigra, Vectra B, Vectra C, Zafira
- Saab:** 9-3
- Vauxhall:** Astra Mk IV, Astra Mk V, Combo, Corsa Mk II, Meriva, Tigra, Vectra, Vectra Mk II, Zafira, Zafira Mk II

**Item no.:** 510 0073 10

The concentric slave cylinder (CSC) is subjected to just as much natural wear as the clutch or flywheel and should be replaced every time the clutch is changed.

There are a few important things to consider during installation in order to preserve the functionality and service life of the components.

Please note that the current design of the LuK CSC may differ to the previous design CSC item no. 510 0073 10.

If so, the release system will require "conversion".



Image 1: Remove and dispose of components



Image 2: LuK CSC 510 0073 10 Current Design

**Image 1:** Remove the following and ensure they are disposed of correctly: The old CSC (1), the gasket on the transmission housing flange (2), the connected tube (3) and the plastic sleeve (4) used to route the tube through the transmission housing.

**Image 2:** Replace the gasket (2) and the CSC (1), then tighten **by hand** to begin with. Make sure the bolts are tightened evenly to prevent the cylinder from tilting. Now insert the adaptor (3) into the CSC via the opening in the transmission housing. There will be an audible click when the adaptor is correctly engaged. Tighten the three fixing bolts on the CSC to 10 (+1) Nm.

To finish, attach the connection piece (image 3) to the open end of the tube on the CSC. You will again hear when this has correctly engaged.

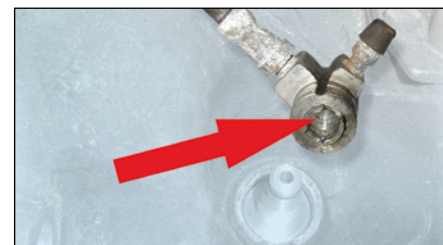


Image 3: Check the connection piece

### Attention:

Check that the connection piece is in precisely the right position on the tube before connection. The old gasket or part thereof is often still present within this component.

If this is not removed, this old gasket can end up inside of the CSC when the clutch is actuated (see image 4) and prevent fluid from returning. In the worst case scenario, this may cause the new CSC to crack or break (image 5). This would result in leaking brake fluid and failure of the clutch, and both the CSC and the clutch would need to be replaced.

## Important information for correct assembly of concentric slave cylinder (CSC) 510 0073 10



**Image 4:** If the old seal is not removed, it can get pressed into the CSC and block the tube.



**Image 5:** CSC damaged by improper installation

The system must be bled when the CSC is replaced. The procedure for doing so is split into two separate steps: bleeding the clutch and bleeding the CSC.

### Step 1:

The clutch must be bled from the bottom upwards (i.e. from the bleed nipple to the brake fluid reservoir) as follows:

1. Top up the brake fluid reservoir to Maximum.
2. Remove the cover from the bleed nipple.
3. Use an adaptor to connect the brake bleeding device to the bleed nipple.
4. Switch on the device. The pressure must not exceed 2 bar.
5. Open the bleed nipple by two or three turns. Make sure the brake fluid in the reservoir does not drop below the minimum level.
6. The component is fully bled once brake fluid emerges from the collection container without any bubbles.

### Note:

The clutch pedal must not be depressed while the brake bleeding device is connected.

7. Close the bleed nipple and switch off the device.
8. Remove the brake bleeding device and the adaptor.

### Step 2:

Two people are then required to bleed the CSC. It is important to ensure that there is sufficient brake fluid in the compensation tank when performing this bleed:

1. Connect the collection container to the bleed nipple.
2. Slowly depress the clutch pedal and hold it there.
3. Open the bleed nipple until air or brake fluid escapes.
4. Tighten the nipple by hand.
5. Slowly release the clutch pedal fully (do not allow it to jerk up!).
6. Wait for 2–3 seconds.
7. Repeat this process several times (at least 10).
8. Once there is no more air escaping, close the bleed nipple (5 Nm) and remove the collection container.
9. Place the cover back on the bleed nipple.
10. Fill the fluid reservoir up to the MAX level.

11. Seal the fluid reservoir.
12. Depress the pedal around 10 times. Check the clutch pedal pressure.
13. Perform a test drive and check the clutch and brake pressures.

### Correct procedure for the CSC:

- Never actuate the new cylinder by hand. The internal gasket can be damaged if pressed together.
- Do not depress the pedal several times in succession when bleeding; depress just once as described.
- Do not use any lubricants or cleaning agents as they may damage the gaskets and therefore the entire cylinder.
- Maintain the utmost level of cleanliness.
- Only use brake fluid approved by the manufacturer.
- Remove old gaskets and remnants thereof from the connection piece.
- Ensure the adaptor has audibly engaged before finally tightening the three fixing bolts on the CSC.
- Make sure the CSC does not tilt during installation. Failure to do so may lead to damage at the lugs from the very beginning.



Note the specifications of the vehicle manufacturer!

Appropriate spare parts can be found in our on-line catalogue at [www.Schaeffler-Aftermarket.com](http://www.Schaeffler-Aftermarket.com) or in RepXpert at [www.RepXpert.com](http://www.RepXpert.com).

Issued 11.2009

**LuK 0018**

Technical subject to change

© 2009 Schaeffler Automotive Aftermarket oHG

### For further information:

Phone: +44 (0) 14 32 264 264\*

Fax: +44 (0) 14 32 375 760

Info@LuK-AS.co.uk

[www.Schaeffler-Aftermarket.com](http://www.Schaeffler-Aftermarket.com)

\* Calls from within the UK 08457 001100

