

Bleeding Hydraulic Central Release Systems

Complaint:

Hydraulic concentric slave cylinder cannot be bled completely using the brake bleeding device.

Remedy:

Bleed concentric slave cylinder “manually”.

! When selecting the hydraulic fluid to be used, it is essential to comply with the manufacturer’s specification.

If the wrong hydraulic fluid is used, the seals in the system will be damaged. In systems which are combined with the brake system, faults may arise in the brake system.

Potential for accidents!

Manual bleeding:

Important!

A brake bleeding device should not be connected and switched on during manual bleeding.

If the clutch pedal is actuated with a brake bleeding device connected, the concentric slave cylinder can be “over-pressurised”. An “over-pressurised” concentric slave cylinder is no longer able to function and must be replaced!



Fig. 1: Concentric slave cylinder with separate bleed port

Manual bleeding should be carried out using the following process:

1. Depress clutch pedal
2. Open bleed valve
3. Keep clutch pedal depressed until fluid appears – **Do not release!**
4. Close bleed valve
5. Release clutch pedal slowly

The clutch bleeding cycle must be repeated 20 to 25 times to guarantee complete bleeding. Top up the level of the fluid in the reservoir between the cycles. The level of the fluid must not drop below the minimum mark on the reservoir during bleeding!



Fig. 2: Concentric slave cylinder with bleed valve in the hydraulic line

Problems with bleeding mainly occur in concentric slave cylinders with bleed valves in the hydraulic line. LuK AS Service recommends only bleeding these systems manually.

! Hydraulic fluids must not contaminate the environment. Disposal must take place via the supplier of the materials or a special refuse collection point. Comply with national regulations and legislation when disposing of used fluid!