

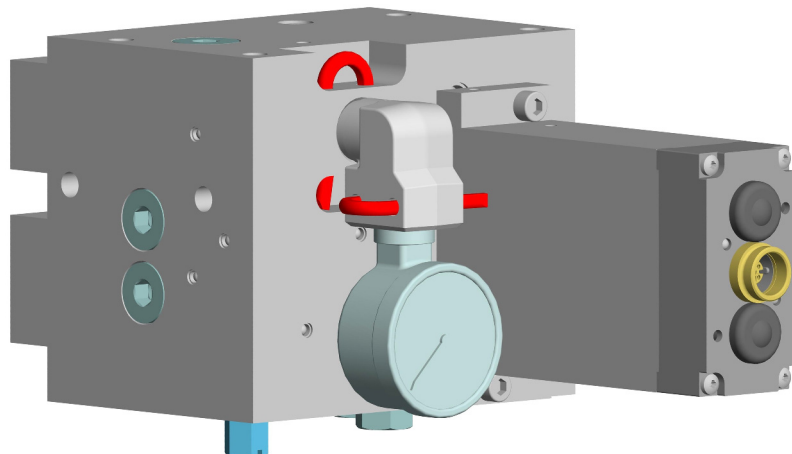


Operating Manual

Electrohydraulic control unit, 2 functions

Doc. no.: 8154 166 000 BA 00

Translation of the original operating manual



Caterpillar Global Mining Europe GmbH

Industriestraße 1 Phone: +49 (0) 23 06 / 709 - 0

Email: info@cat.com

D-44534 Lünen

Fax: +49 (0) 23 06 / 709 - 1421

Web: www.mining.cat.com

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL



Repair and maintenance

In general, repair work may only be performed by persons who have the knowledge and skills to meet the special requirements and have been adequately trained in the repair of the equipment. Repair work on and overhaul of:

- control units,
- working valves,
- pilot valves,
- safety components such as pressure relief valves etc.

shall be performed only by Caterpillar service engineers or by specially trained personnel of the mining company.



Transport

Transport boxes

The control units are packed in several transport boxes. They should stay in these boxes until they reach their final place of operation. This protects them from external damage.

Make sure that the boxes are not damaged during transport. During transport, make sure that they are not:

- dropped, or
- broken open.

Protect the transport boxes from moisture.

avoid frost damage

Before transporting the equipment at temperatures below freezing, all of the hydraulic components must be completely emptied and then completely filled with a corrosion inhibitor (e.g. HYDROCOR® CV50).

If, during transport, the control unit is exposed to temperatures below -20°C, then special measures may have to be taken. In this case, before starting transport, contact Caterpillar's Service Department to clarify the necessary measures.

Dimensions and weight

Depth:	259.5 mm
Width:	143 mm
Height:	134 mm
Weight:	16.4 kg

Plugs

The connections for the individual control units are closed off with plastic plugs. This protects them from moisture, dirt and damage.



Notice!

Impurities in the hydraulic system can lead to the failure of the entire system, making expensive repairs necessary.

For this reason, you should only remove the plugs just before the control unit is connected.



Operation

There are two pushbuttons on the cover of each pilot valve. If you push one of these buttons, the corresponding valve is immediately operated.

As soon as you release the button, the function is ended.



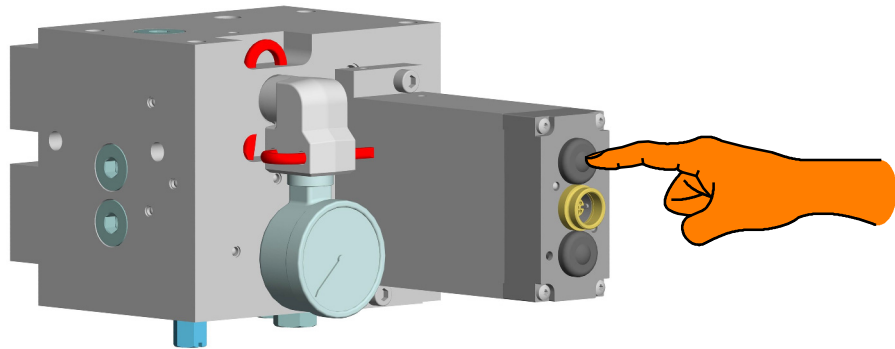
Danger!
Jammed buttons can cause uncontrolled movements.
This could seriously injure or kill you.
Never lock the buttons in position.

Function

variable functions

The function of each pilot valve is variable and depends on the external circuitry of the control unit.

Fig. 9: Pushbutton



Replacing the pilot valve

Preparatory work



Warning!
The pilot valve is permanently pressurized. You could be seriously injured or even killed by pressurized components and escaping hydraulic fluid. Therefore, before starting work, make absolutely certain that the hydraulic system is depressurized.

- ☞ Close the shut-off valve in the pressure supply line.
- ☞ Alternately actuate the opposing pushbuttons of the control unit 10 times to relieve the remaining pressure in the hydraulic system.
- ☞ Check if there is any residual pressure in the control unit. Consider the hydraulic lines and the hydraulic diagram when doing this.

Once the hydraulic system is depressurized, you can continue with the next step.



Filter

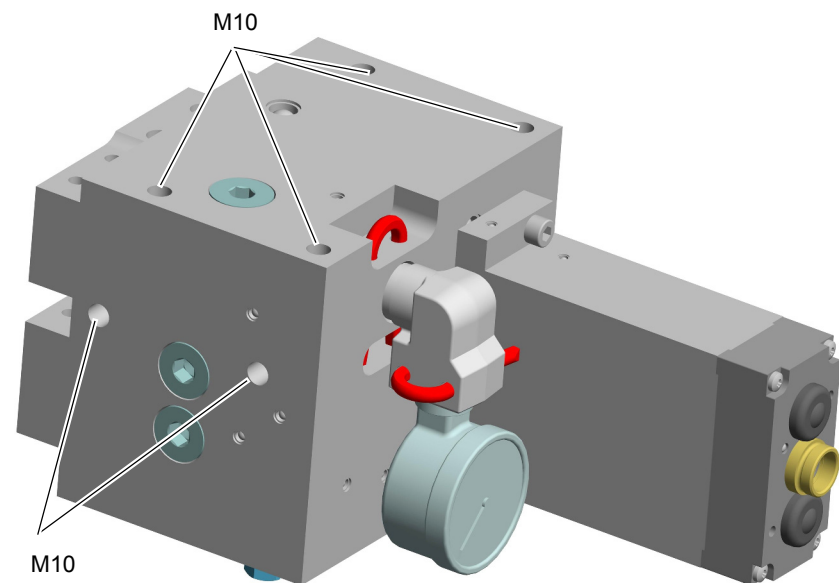
The filter cartridge protects the pilot control circuit from contamination. Only use new cartridges. Do not use any “cleaned” filter cartridges.

Only with new filter cartridges are the required filter characteristics guaranteed (fineness = 25 µm).
See also chapter 5, section “Changing the filter cartridge”

Fixings

There are 4 tapped holes (M 10) located on the upper side of the distributor block of the control unit and 2 holes (M 10) each on each side.

Fig. 16: Tapped holes



Valves

Working valves:

- 2 x 3/2 directional control valves (NG 13)

They are driven via pilot valves.

Pilot valves:

- 1 x double 3/2 way valves (NG 0.5)

The pilot valves are actuated directly. Two pushbuttons are fitted in each valve cover for this purpose.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL