

B+V Drill Pipe Elevator Hydraulically Operated VES-CL-1000-H Rev-004

Read before first use!

Microsoft Word - B+V Manual - Drill Pipe Elevator, hydraulic op. VES-CL 1000-H REV 004.doc



VES-CL-1000

Elevator Hydraulically Operated

Part No. 611000-Y-H

4. Start-up

4.1 Installation of the elevator into the elevator links

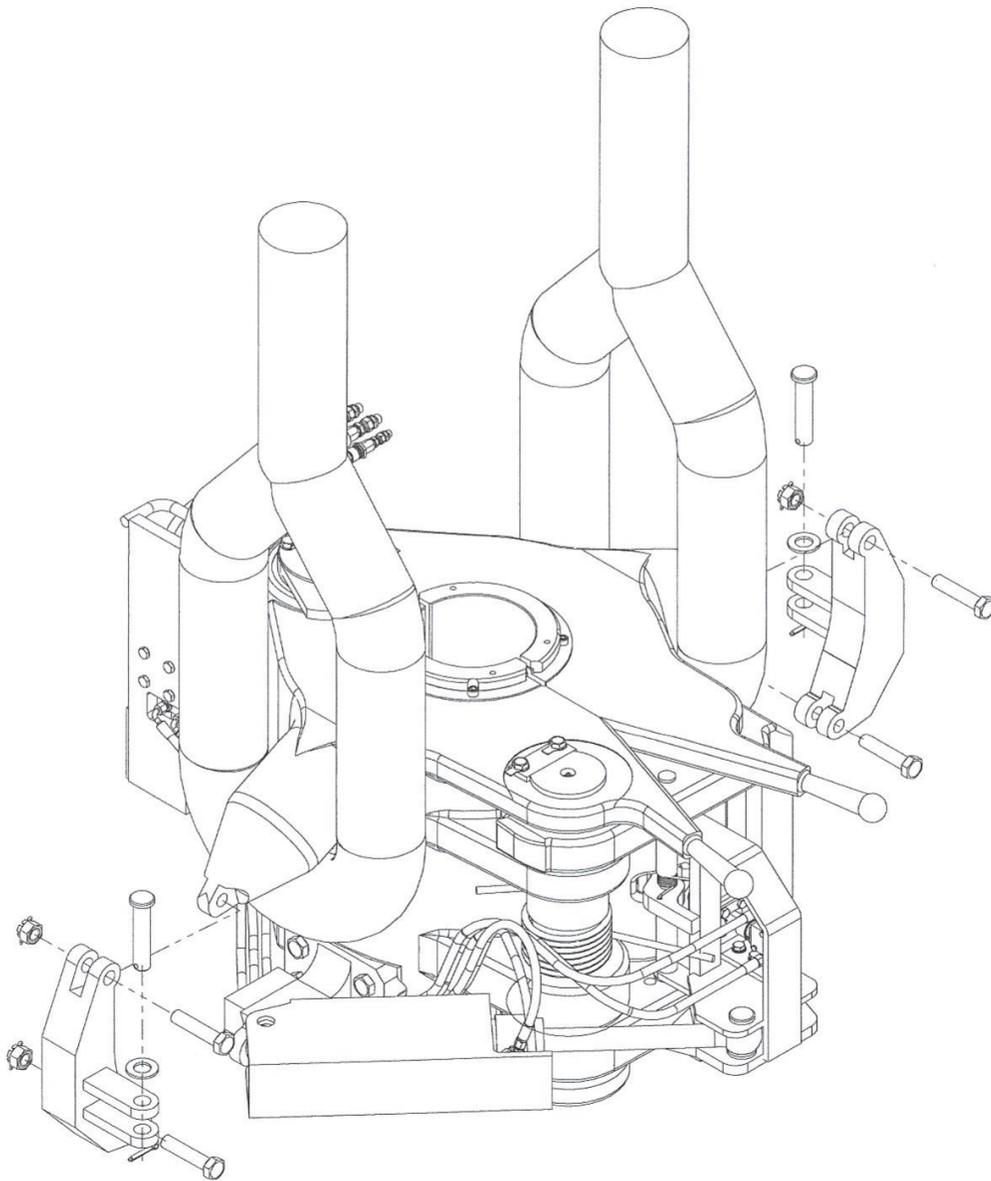
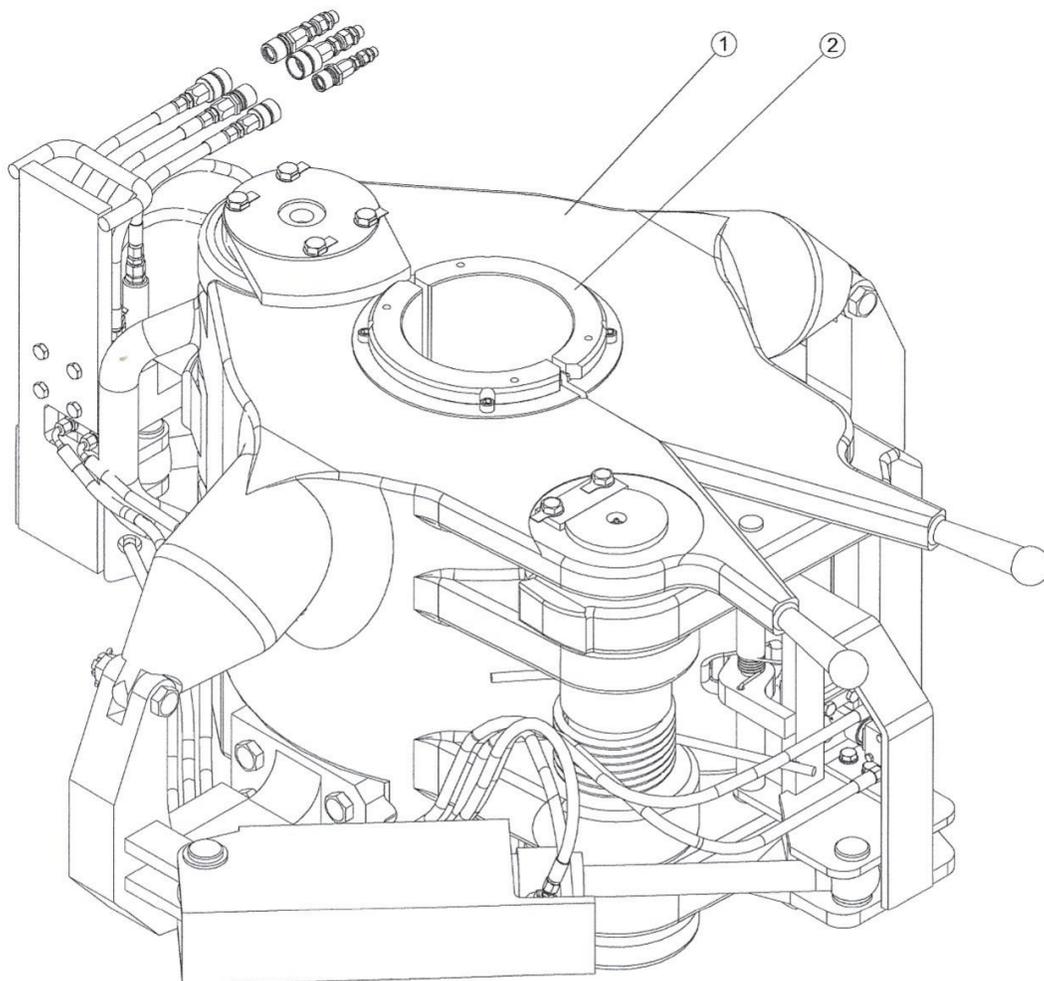


Fig. 5: Link assembly

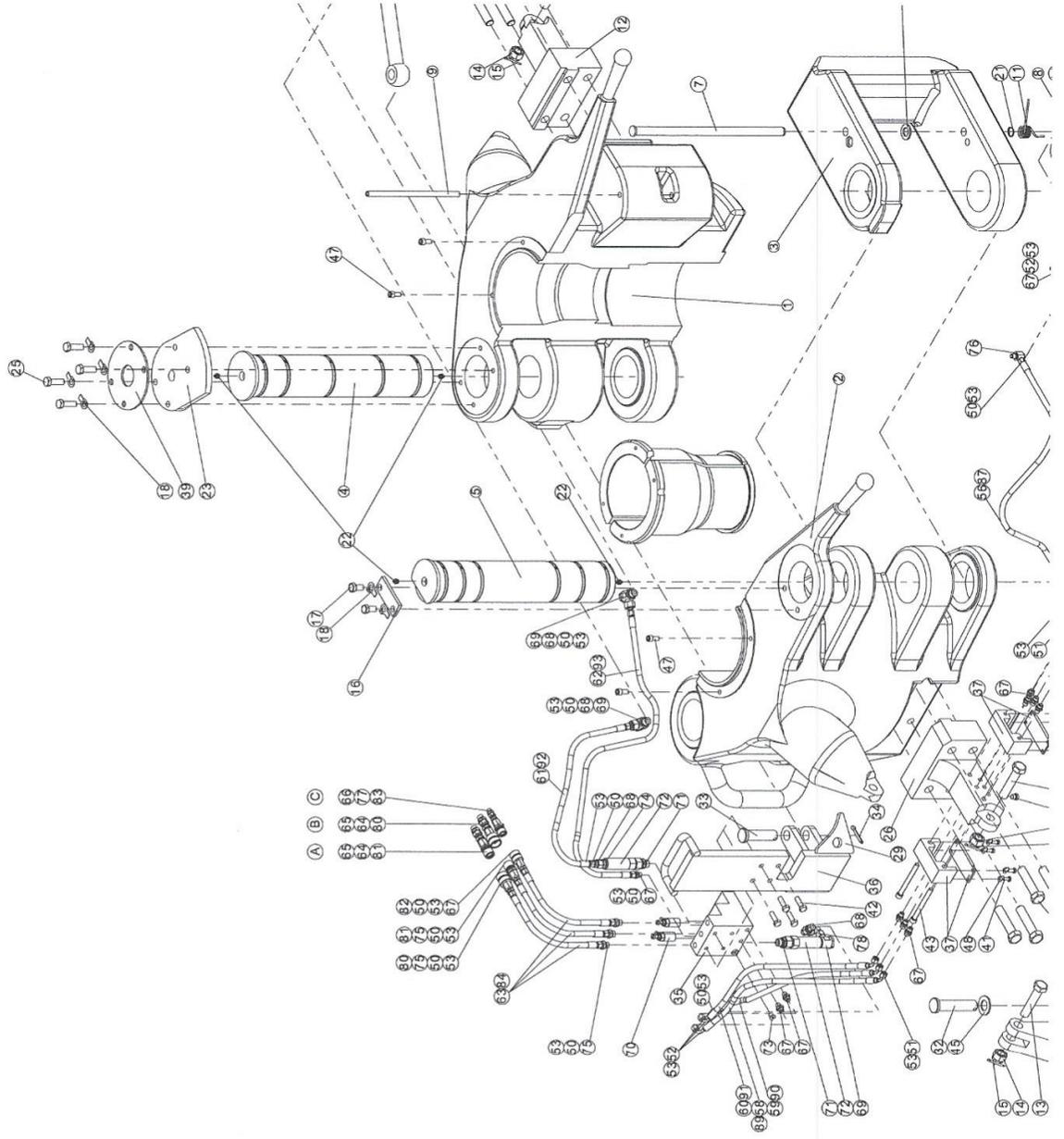
Remove the cylinder bolts from the cylinder covers and cylinder bodies. Install the elevator into the elevator links. Make sure that cylinder connections, screws, castle nuts and cotter pins are assembled correctly.

**Elevator assembly**

Pos.	Quantity	Part no.	Description
1	1	611000-Y-H	Elevator VES-CL-1000
2	1	611030-BC	Bushing assembly

TECHNICAL DOCUMENTATION

PN: 611000-Y-H Elevator VES-CL-1000



Important:

Before working on the bushings, make sure that no hydraulic pressure exists on the elevator and that the connecting lines are uncoupled !

The elevator must never be used without a bushing !

Removal of the bushing

The screws on the top have to be removed.
Screw handles into the bushing segments (see Fig. 7).

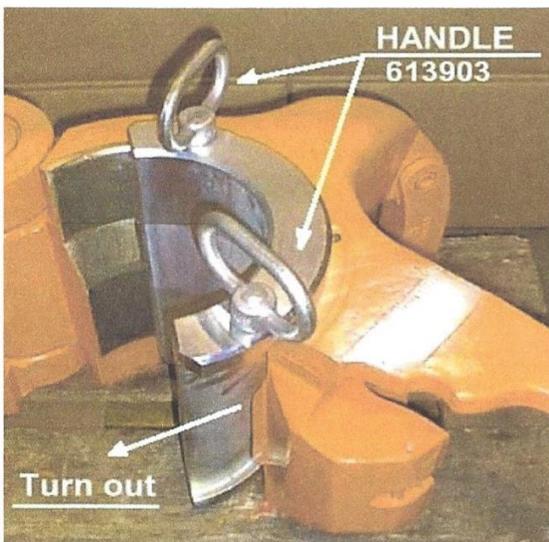


Fig. 7: Handling of bushings

Installation of the bushing

Before installing a new bushing, the seating area in the elevator must be cleaned and lubricated.
Fix the segments with the screws on top of the elevator. Install the safety wire to secure the screws.

3. Components and Description

The elevator consists of the following main assemblies:

1. Elevator body with a latch
2. Bushing system
3. Opening and closing mechanism
4. Closing signal-unit (also see Fig. 4)

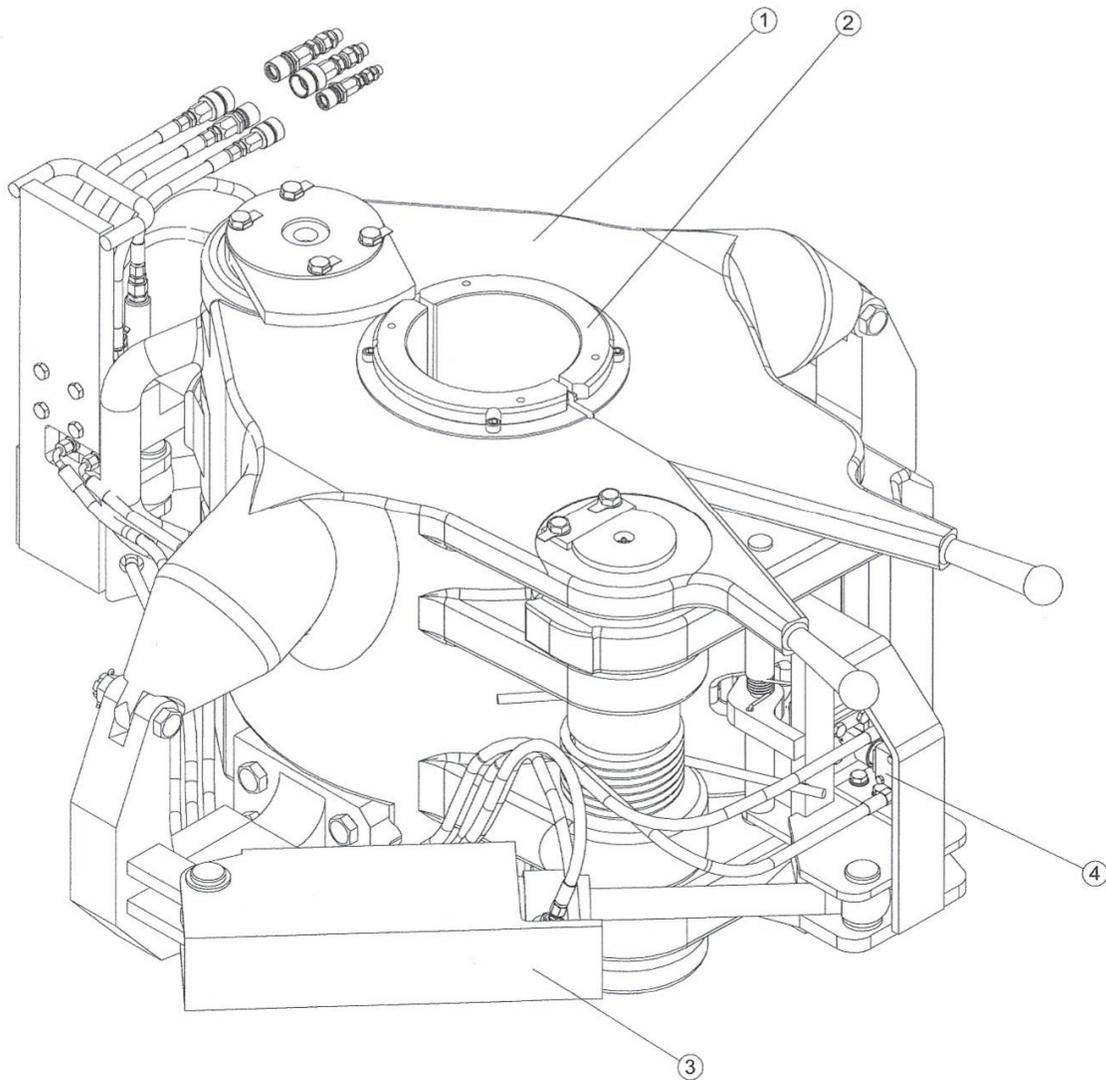


Fig. 3: Main assemblies

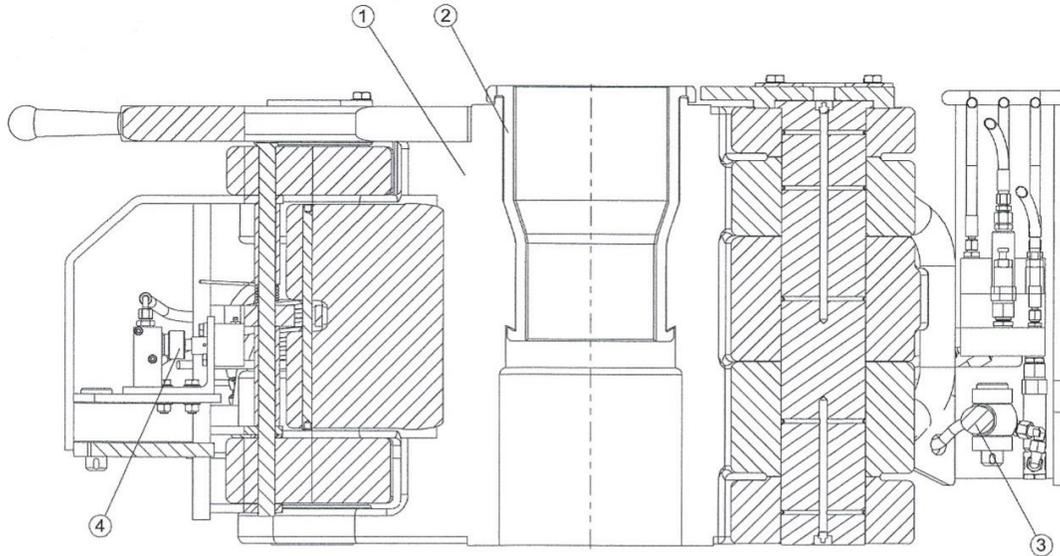


Fig. 4: Side view on elevator, half-cut

3.1 Elevator body and hydraulic closing system

When the latch is open, the drill pipe can be placed in the elevator.
 When the elevator is closed, the elevator sends a hydraulically signal.
 The bodies take the load through the bushing system and transfer it to the elevator links.

3.2 Bushing system

The exchangeable bushings allow you to run the elevator with different types of pipe diameters.

DP-Size	Bore Code
3.1/2" IU	104
3.1/2" EU	105
4" IU	106
4" EU	107

DP-Size	Bore Code
4.1/2" EU	107
4.1/2" EU	109
5" IEU	109
5.1/2" IEU	111
6.5/8" IEU	113
6.5/8" IEU *	114
5.7/8" IEU	115
6.906"	116
6.5/8" XT69 Tool Joint (Grant Prideco)	121

Other BC – sizes are available.

* for 8.1/4" and 8.1/2" tool joint

Table 1: Bore Codes for 18°-Drill Pipe sizes

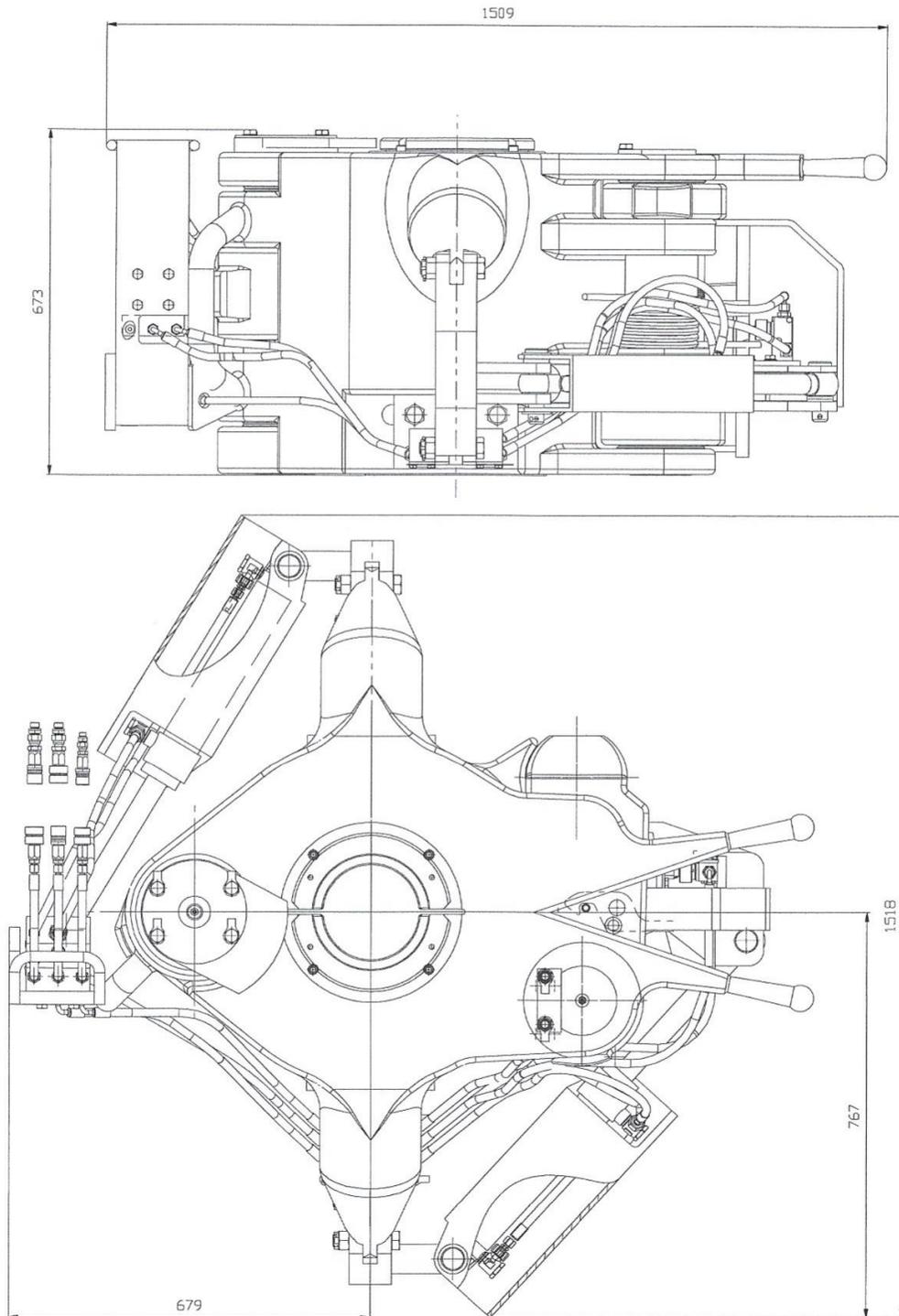
3.3 Opening and closing mechanisms

The bodies and the latch of the elevator are actuated by hydraulic cylinders.
The cylinders are installed in the hydraulic areas of the elevator in a protected way.

3.4 Closing signal unit

When the bodies are completely closed and latched, the closing signal in the elevator is actuated.

8. Drawings and Spare Parts



PN: 611000-Y-H Elevator VES-CL-1000 incl. Bushing System