Bygging-Uddemann

P-22019

CLIMBER TYPE 2510-65-UD

Web version manual

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No: W0001

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1. BRIEF SPECIFICATION

1.1 Lifting/lowering capacity:

Climb-rod jointed by screw dowels	Max. 25 ton
Climb-rod jointed by welds	Max. 42 ton

1.2 Length of stroke: 200 mm

Effective climbing length at lifting	195 mm each stroke
Effective climbing length of lowering	170 mm each stroke

1.3 Piston area:

At cylinder pressure side	245 cm_2 (plus side)
At cylinder return side	145 cm (minus side)

1.4 Cylinder volume:

At cylinder pressure side	5,0 litres (plus side)
At cylinder return side	3,0 litres (minus side)

1.5 Static hydraulic pressure at plus side:

At a load of 25 ton	102 kp/cm^2
At a load of 42 ton	172 kp/cm^2

1.6 The climber to be connected to pump:

GP 2.17.160
GP 2.32.160
GP 2.55.160

See manual for respective pump.

1.7 Climb rod: 65 x 65 mm

At screw-dowel joints E335
At welded joints S355JR
Tolerances: See manual 50-0007

2. APPLICATION FIELD OF THE CLIMBER

2.1 **Lifting and lowering of heavy loads.**

2.2 **Horizontal movement of heavy loads.**

2.3 **The climber can lift or lower a load, which is hanging in a climb-rod. The climber can also climb up a stationary anchored climb-rod and lift or lower a load, which is applied to the climber.**

3. MAIN COMPONENTS OF THE CLIMBER

3.1 **Branch pipes (11-0020)**

3.2 **Two parallel double-acting hydraulic cylinders (11-3861) with pistons (11-3860).**

3.3 **Movable grip-jaw heads (11-3866) fixed to the pistons (11-3860).**

3.4 **Firm grip-jaw head (11-3866) fixed to the cylinder bottoms (11-0658).**

3.5 **Grip-jaw (11-3862)**

3.6 **Switch Mechanism (11-0004)**

3.7 **Top-bottom plate (11-0613)**

3.8 **Catches (11-0608, 11-0599) with operating shafts (11-0594)**

4. DESCRIPTION OF THE CLIMBER

The climber acts step-by-step to a climb rod. The climber is of the open type, which means that it can be applied laterally at any place along the climb-rod.

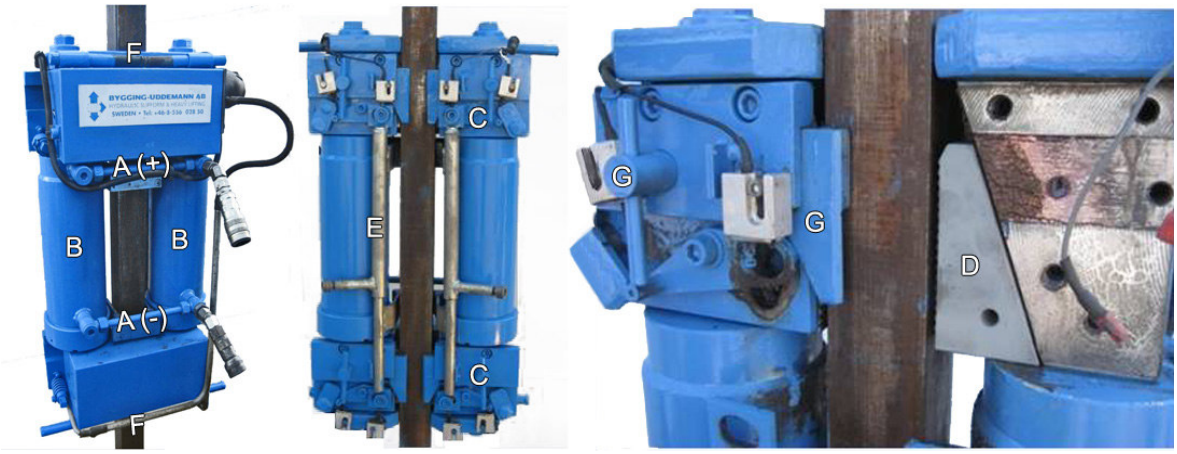

Fig. 1. (A) Branch pipe, (B) Hydraulic cylinders, (C) Grip jaw head, (D) Grip jaws, (E) Switch mechanism, (F) Top-bottom plate, (G) Catches with Operating shafts.

4.1 Branch pipes (11-0020)

The branch pipes are threaded R 1/2".
Branch pipe (+) is joined to the pressure side (plus side) of the cylinders.
Branch pipe (-) is joined to the return side (minus side) of the cylinders.

4.2 Hydraulic cylinders (11-JC65)

The hydraulic cylinders are double-acting. The reciprocating movement of the grip-jaw heads (11-GR16) is achieved by alternately pumping oil to the plus and minus side of the cylinders.

4.3 Grip-jaw heads (11-GR16)

The switch mechanism, the top-bottom plates and the catches with their operating shafts are all mounted to the grip-jaw heads.
The grip-jaws are positioned inside the wedge-shaped slot of the grip-jaw heads.

4.4 Grip-jaws (11-3862)

The grip jaws are by spring-load from the switch mechanism either pressed against the climb-rod or disengaged from the same so that the rod is passing freely through the grip-jaw heads.

The switch rod (11-0010, 11-0011) and the spring yoke (11-0006, 11-0007) of the switch mechanism are screwed to the grip-jaws.

4.5 Switch mechanism (11-0004)

By the switch mechanism the grip-jaws are automatically and alternately disengaged and engaged at the lowering of a load.

4.6 Top-bottom plate (11-0613)

These plates are keeping the climb-rod in a centred position in the longitudinal axis of the climber.

4.7 Catches (11-0608, 11-0599) with operating shafts (11-0594)

The grip-jaws can be disengaged by the operating shafts. The catches are controlled by the operating shafts (11-0594).
The operating shafts are turned by the operating levers (11-0311).