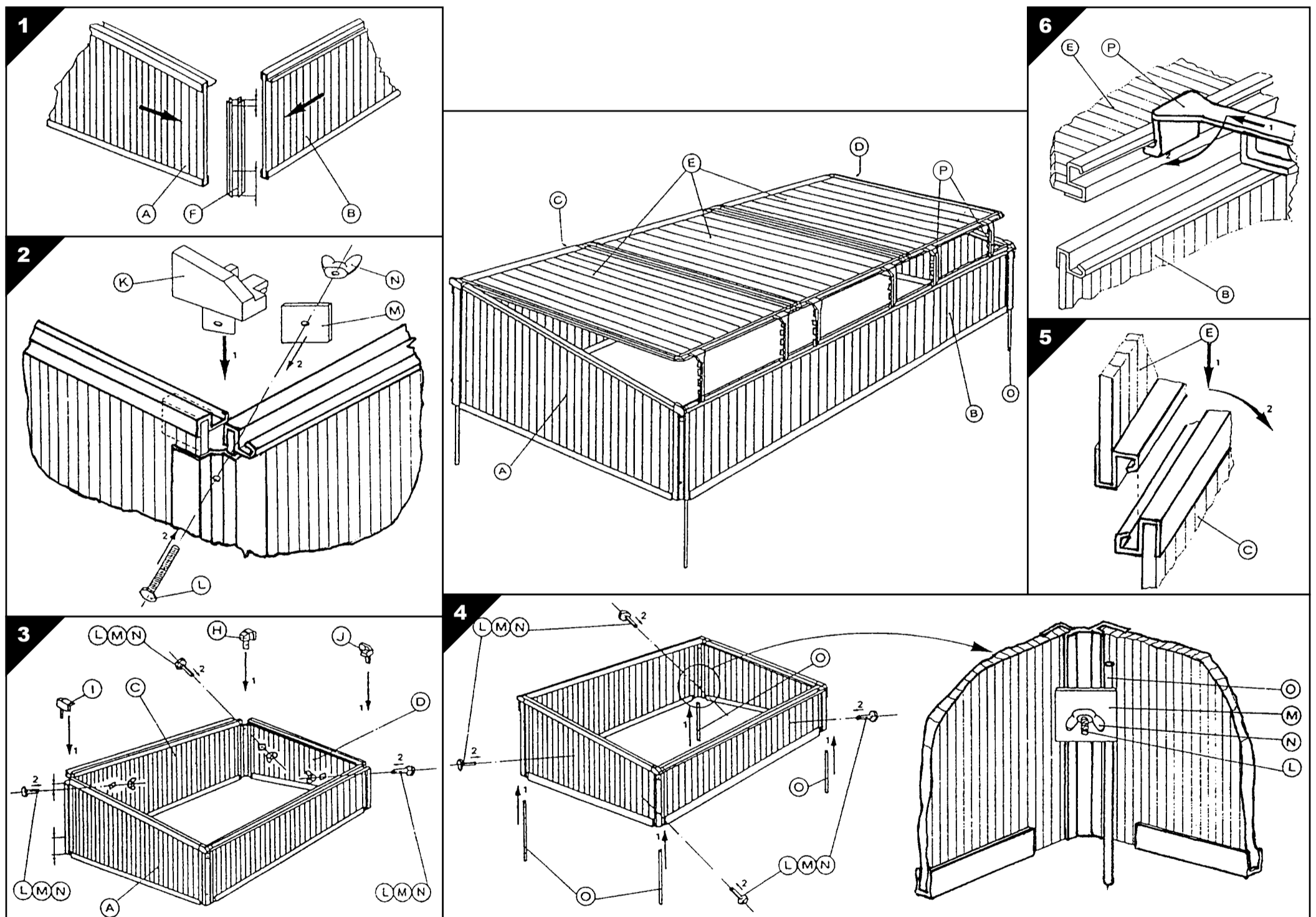


		Description	pcs.
<b>A</b>		Side panel left	1
<b>B</b>		Front panel	1
<b>C</b>		Rear panel	1
<b>D</b>		Side panel right	1
<b>E</b>		Window	3
<b>F</b>		Aluminium corner pieces short	2
<b>G</b>		Aluminium corner pieces long	2

<b>H</b>		Plastic cap I	1
<b>I</b>		Plastic cap II	1
<b>J</b>		Plastic cap III	1
<b>K</b>		Plastic cap IIII	1
<b>L</b>		Hex-head-bolt	8
<b>M</b>		Clamping washer	8
<b>N</b>		Wing nut	8
<b>O</b>		Ground anchor	4
<b>P</b>		Plastic fastener	6
<b>Q</b>		Automatic window opener	1



### MOUNTING INSTRUCTIONS

Cold frame Biostar 1500 • Ref. 20150

We are glad that you have decided in favour of a JUWEL quality product. We have manufactured this cold frame most carefully. Should however, one of the components mentioned not be contained in the kit please contact your local dealer submitting the enclosed end control number.

**1+2)** Slide front panel **B** and side panel **A** into the grooves of the aluminium corner piece **F**. Attach green plastic cap **K** to aluminium corner piece **F** and bolt on with hex-head-bolt **L**, clamping washer **M** and wing nut **N**.

**3)** Mount rear panel **C** by means of aluminium corner piece **G**, affix together with plastic cap **I**, tightening the screw **L**, clamping washer **M** and wing nut **N** connection. Connect the second side panel with rear and front as described above.

**4)** Put a hex-head-screw **L** in each of the lower boreholes of the aluminium corner piece **F**, **G**, tighten with clamping washer **M** and wing nut **N**, affixing one ground anchor **O** with each of the clamping

washers. The ground anchors are later pressed into the soil to protect the cold frame from displacement.

**5)** Put windows **E** on their hinges in vertical position either on the rear **C** or on the front **B** panel, then swing downwards.

**6)** Press two of the green plastic fasteners **P** into the groove of the front aluminium channel of each window, swing downward and snap in.

The cold frame should be located in East-West direction, if possible in a place without shadow which is exposed to full light from morning to evening. Press the cold frame into the loose earth with the ground anchors downward so that the side panels penetrate some 20 mm (1") into the earth. This insures perfect sealing against cold air.

**Care instructions:** This JUWEL quality product was produced with weatherproof materials and may be washed down with a garden hose. Do not clean with sharp or rough objects or with aggressive detergents.

**Warning:** A cold frame torn away by the wind may cause damage. Therefore close the cold frame when the wind is strong. Additional ground anchoring may be required in places exposed to particularly strong winds.

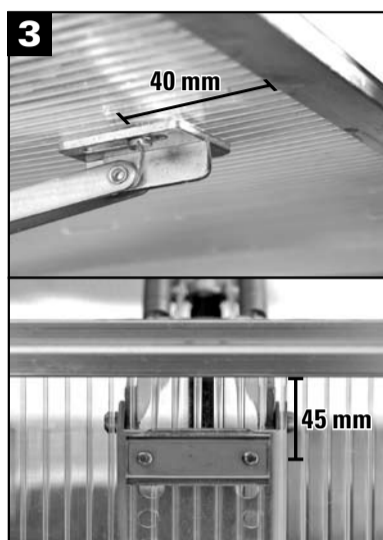
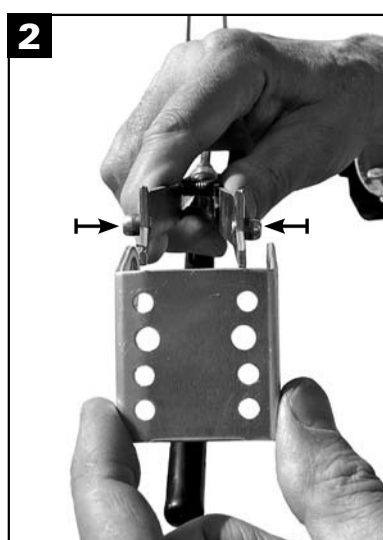
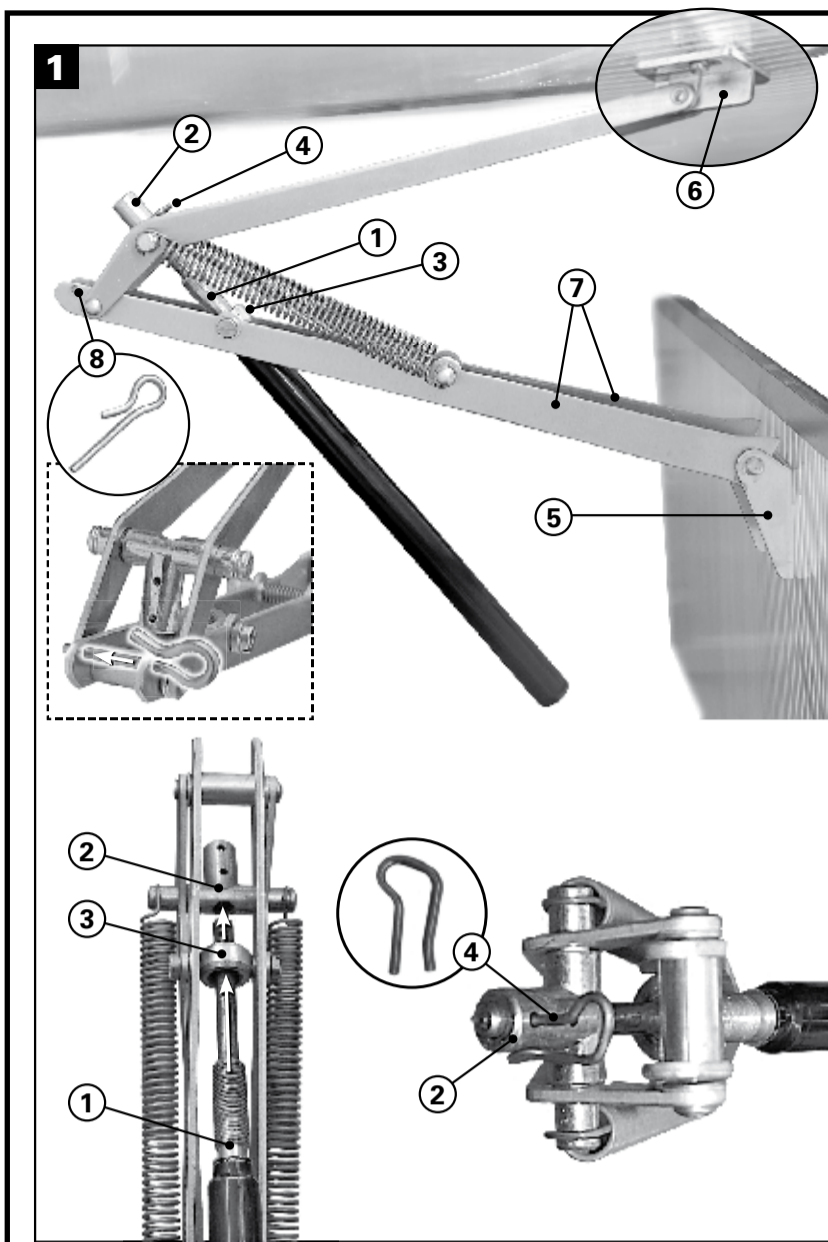
We wish you much pleasure with your new JUWEL product and a good harvest.

If you have questions please write to:

JUWEL H. Wüster GmbH, D-82467 Garmisch-Partenkirchen, Bahnhofstr. 31 or A-6460 Imst, Industriezone 19, www.juwel.com

USA Distributor:

Exaco Trading · Customerservice@Exaco.com  
1-877-760-8500 ext 701  
10203 Metropolitan Dr · Austin, TX 78758



**Automatic window opener  
for JUWEL cold frames and  
greenhouses  
Art. no. 20047**

**Components:**

- A) Cylinder
- B) Lever assembly with two springs
- C) Hardware kit

The cylinder contains a liquid expanding contracting in consequence of the temperature and thus moving the piston rod. **ATTENTION:** The inside of the cylinder is under pressure – do not block the opening of the piston rod, do not try to open the cylinder and do not expose the opener to heat. **Maximum opening weight 7 kg!**

**Warranty:** A correctly fitted and used opener is guaranteed one full year, based on date of purchase as per dealer's receipt.

**Maintenance:** All moving parts should be lubricated from time to time by smearing the cylinder threads and piston shaft with a little vaseline.

**Installation:** As per Fig. 1 please install spring (8) to limit opening. Take the cylinder and insert the piston rod (1) through the threaded cylinder housing (3) into the receptacle in part (2). Screw the

cylinder into the cylinder housing (3), adjust the hole of the piston rod to the first borehole of the receptacle in part (2) and secure with the smaller of the 2 pins (4). Remove the frame bracket (5) by squeezing the forks together (fig. 2) and mount it from inside on the panel of the frame, 45 mm below the aluminium edging on top of the panel, near to the mid-point of one of the top covers. With the bracket held in place, pierce two holes through the polycarbonate by means of an ice-pick or spike, then insert two screws from inside a screw them into the threaded metal fittings held on the outside. The swivelling cover bracket (6) has to be mounted to the underside of the cold frame top cover with a distance of 40 mm from the edge and near the mid-point (fig. 3). Now attach the bottom of the Opener to the lower bracket by squeezing the lower forks (7) together. Make sure the top cover does not stick and can be easily moved.

**Adjustment:** Turn the cylinder CLOCKWISE for the Opener to begin opening at a lower temperature, turn the cylinder COUNTER-clockwise for it to begin opening at a higher temperature and result in a narrower full-opening. Each full turn accounts for about half a centigrade.