Fahrzeugtechnik GmbH

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Instructions for assembly and operation of towbar frame, type: WUB 751
ECE-Type Approval No. E4-55R-010671

Assembly for the designs A and B:

Mount the two lateral sheets of the towbar frame on the exterior vehicle frame using a minimum of 12 bolts per side. Make the drilled holes in the vehicle frame so, that the result is 2 rows of holes of at least 6 holes each. The horizontal spacing of the rows of holes must be at least 45mm, the vertical spacing of individual holes 120mm minimum. A third row of holes can be optionally made.
The vertical distance between the rows of holes must be at least 40mm. The lowest distance between the first hole of each row of holes from the edge must be 30mm minimum from the upper edge, and 35mm minimum from the lateral edges.
If there is not enough space to provide 6 holes in the lower row of holes, the upper row should have at least 7 and the lower row at least 5 holes.
If there is not enough space to provide the first hole of a row with a distance of 35mm from the lateral edge there must be used special washers from WAP for bolting.

Assembly for designs C though F:

In these designs, the drill pattern is defined in the lateral sheets.

Assembly for design G:

Mount the two lateral sheets of the towbar frame on the exterior vehicle frame using a minimum of 12 bolts per side. Make the drilled holes in the vehicle frame so that the result is at least 3 rows of holes of at least 4 holes each. The horizontal spacing of the rows of holes must be at least 50mm, the vertical spacing of individual rows of holes 60mm minimum. The lowest distance between the first hole of each row of holes from the edge must be 30mm minimum from the upper edge, and 40mm minimum from the lateral edges. The horizontal spacing between the centre of the clutch and the first row of holes may only be 360mm maximum.

Use the following junction pieces for assembly:

Hexagonal dowel screws M 14 DIN 610 - 8.8, optional 10.9 Hexagon nuts M 14 DIN 980 -8, optional 10
The tightening torque is 125Nm for property class 8.8 and 185Nm for property class 10.9

Optional junction pieces:

Hexagonal screws M 16 DIN 933 - 8.8, optional 10.9 Hexagonal nuts M 16 DIN 980 -8, optional 10
The tightening torque is 195Nm for property class 8.8 and 290Nm for property class 10.9

Optional WAP set of bolts:
Flange screws M 14 x 1,5 - 10.9 Flange nuts M 14 x1,5 - 10
The tightening torque is 160Nm +10/0Nm

Optional WAP set of bolts:
Flange screws M 16 x 1,5 - 10.9 Flange nuts M 16 x1,5 - 10
The tightening torque is 250 +10/0Nm

Make the drilled holes in the vehicle frame exactly in accordance with DIN standards.

Attention! No weldings on the cross-head!

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Technical Data WUB 751	
central-axle trailer	trailer
admissible Dc-Value: 130 kN admissible V-Value: 50,5 kN to 75 kN admissible vertical load: 1000 kg to 2500 kg, depending on the V-Value (see list on Page 6/6)	admissible D-Value: 190 kN

$$Dc = \frac{T \times R}{T + R} \times 9{,}81 \qquad Dc = \text{admissible thrust on drawbar in kN}$$

$$T = \frac{D \times R}{(R \times 9{,}81) - D} \qquad T = \text{Total mass of towing vehicle in metric tons}$$

$$R = \frac{D \times T}{(T \times 9{,}81) - D} \qquad R = \text{Total mass of trailer in metric tons}$$

You may mount a towbar appropriate for assembly into the towbar frame.
Assembly must comply with the mounting instructions of the clutch manufacturers.
You may bolt a WAP cable remote control to the towbar frame (see Page 5)

In any case, you should comply the mounting directives of the vehicle manufacturer.

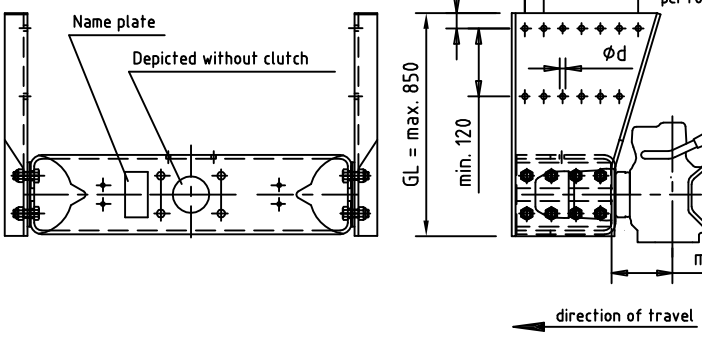
Maintenance:

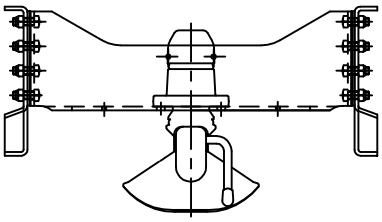
Check once a month, but at most every 20,000 kilometres if fastening bolts of the towbar frame are firmly tightened.
The tigthening torque of the bolts connecting the crossmember and the lateral sheets is 395Nm.

Any other instructions for assembly require the prior consent of WAR Fahrzeugtechnik GmbH or an officially recognized expert.

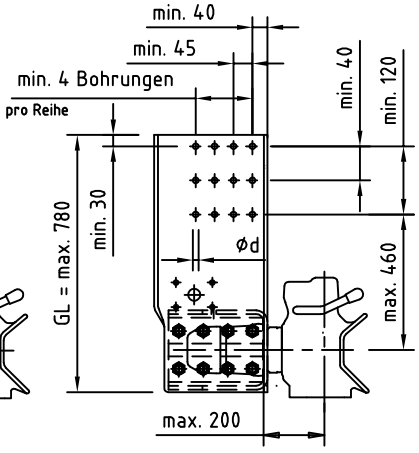
Subject to revision.

Design A





Design G



Depicted in a mirror-inverted assembly of lateral sheets.

d = 15 H12 für Hexagonal dowel screwsM 14 DIN 610
d = 17 für Hexagonal screws M 16 DIN 933

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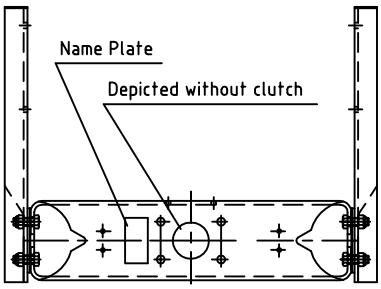
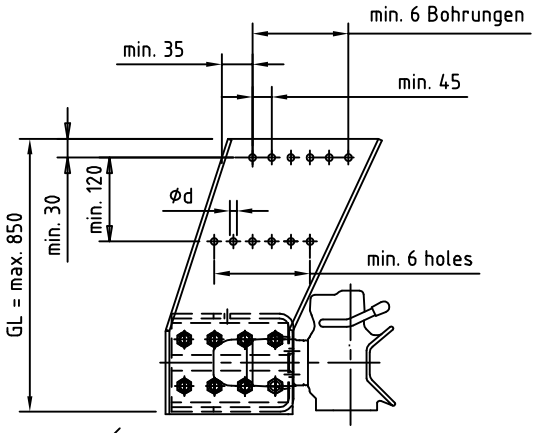
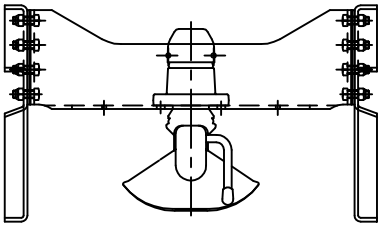
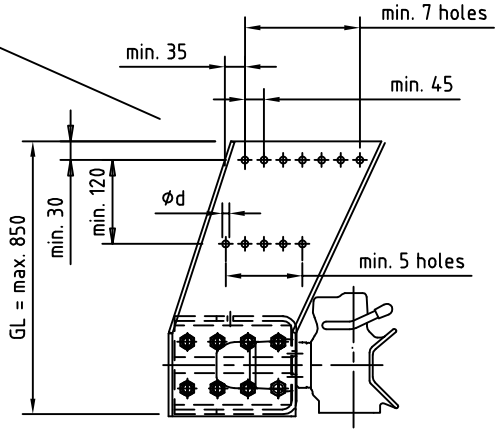
Design B







optional



Assembly of lateral sheets as shown only!

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d = 17 für Hexagonal screws M 16 DIN 933

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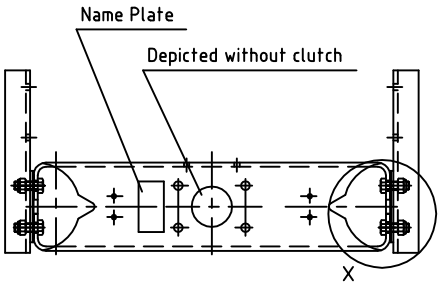
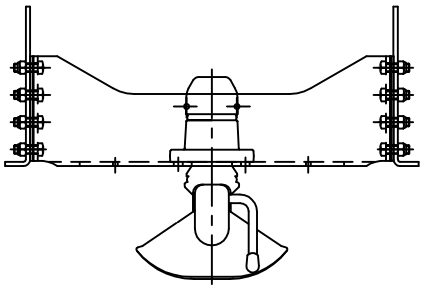
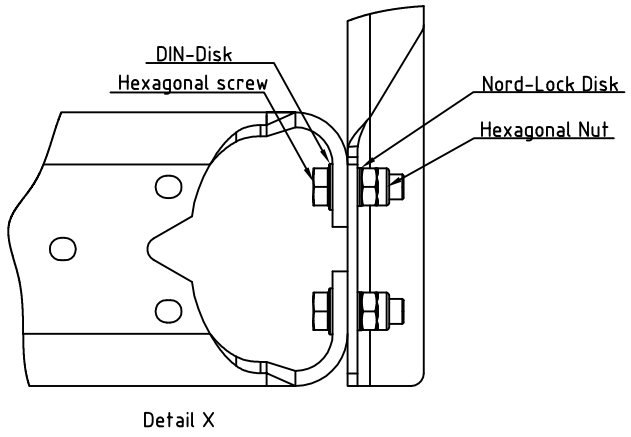
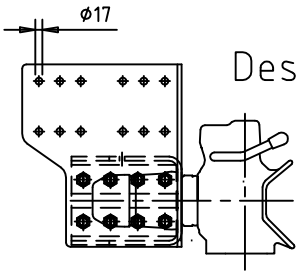


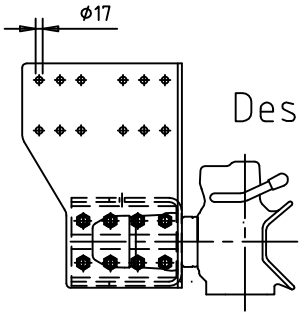


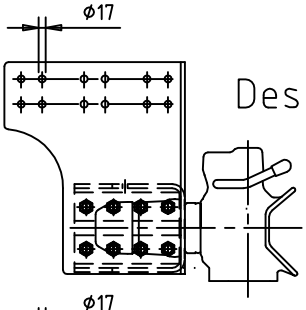


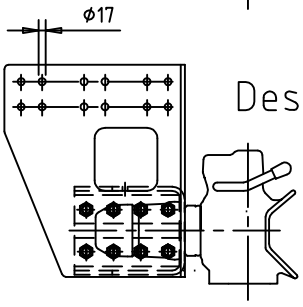
Detail X



direction of travel







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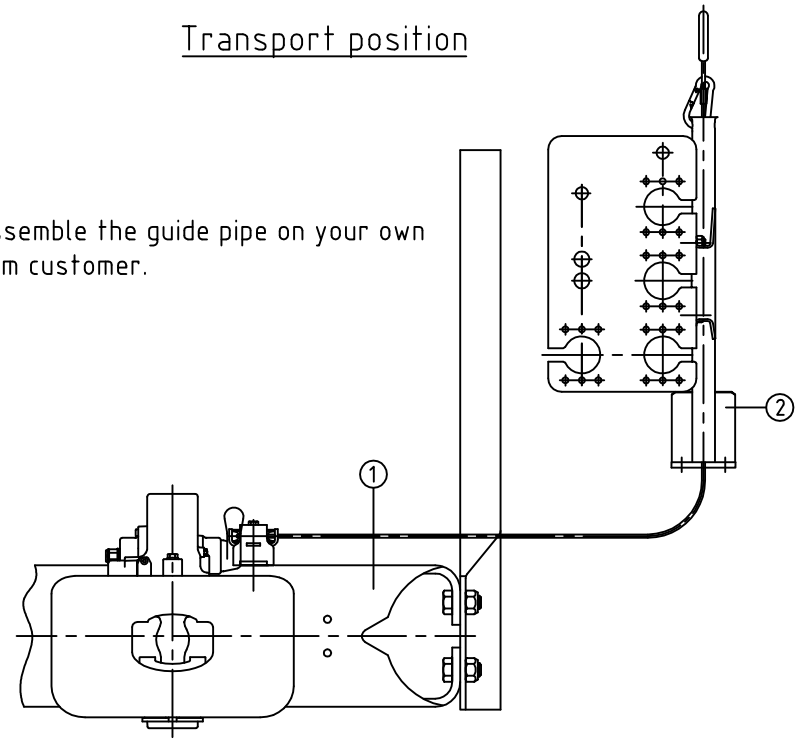
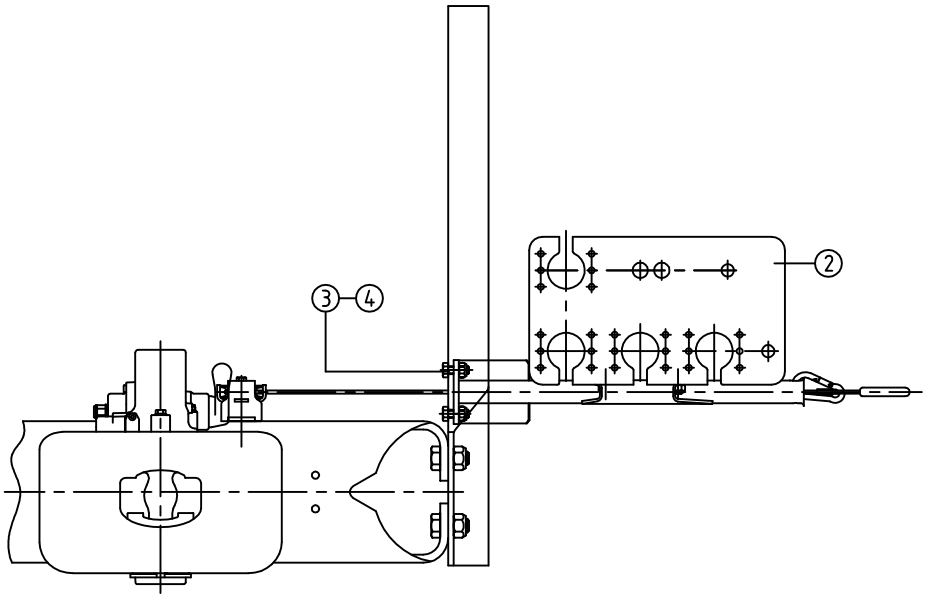
Transport position

You will have to assemble the guide pipe on your own afterr delivery from customer.



Guide pipe assembly



Assemble the guide pipe (Pos.2) to the towbar frame (Pos. 1) using 4 bolts M12×35 (Pos.3) and Nuts (Pos.4).

Tightening torque: 79Nm (M12, 8.8)
width across flats (AF) = 19

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trailer jack, Type: WUB 751

List of V-Value to static vertical load

vertical load (kg)	max. V-Value (kN)
1000	75,0
1100	73,4
1200	71,7
1300	70,0
1400	68,5
1500	66,8
1600	65,2
1700	63,6
1800	61,9
1900	60,3
2000	58,7
2100	57,0
2200	55,4
2300	53,7
2400	52,1
2500	50,5

Nummer	Datum
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