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Instructions for assembly and operation of towbar frame, type: WUB 601
EC-Type Approval No. e1*94/20*1209*00

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 100mm 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.

Optional assembly for the design B:

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.

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 125 Nm for property class 8.8 and 185 Nm 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 195 Nm for property class 8.8 and 290 Nm 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 160 Nm +10/0 Nm.

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 +10/0 Nm.

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

Attention! No weldings on the cross-head!

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 3)

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

Maintenance:

Check once a month, but at least every 20.000 km if fastening bolts of the towbar frame are firmly tightened.

The tightening torque of the bolts connecting the crossmember and the lateral sheets is 395 Nm.

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

Subjet to revision.

Number	Date
MA-017-E	01-02-2012

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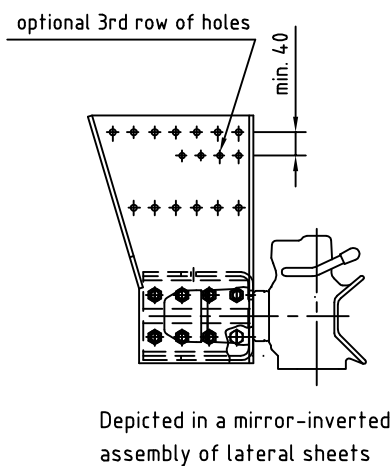
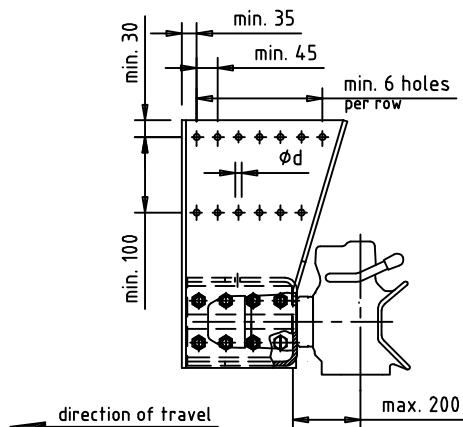
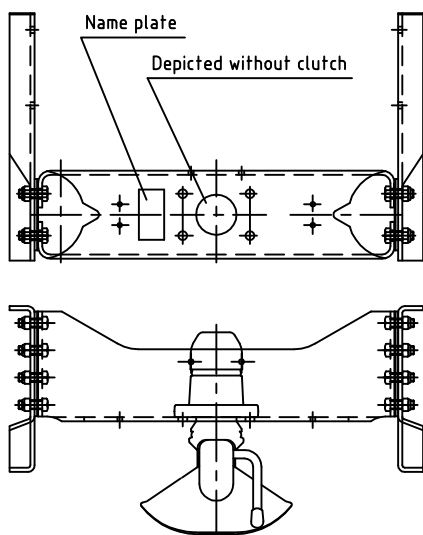
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Technical Data WUB 601	
central-axle trailer	trailer
admissible Dc-Value: 110 kN	admissible D-Value: 140 kN
admissible V-Value: 51,8 kN to 60 kN	
admissible vertical load: 1000 kg to 1500 kg, depending on the V-Value (see list on Page 4)	

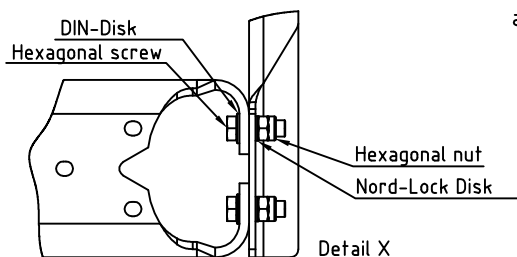
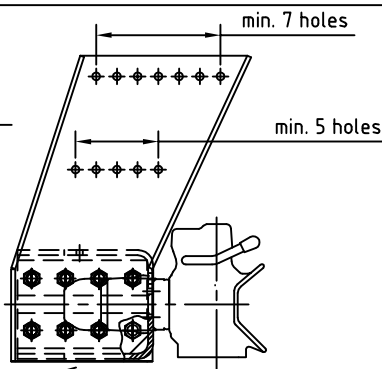
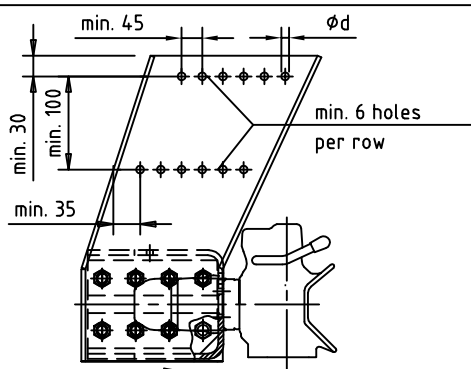
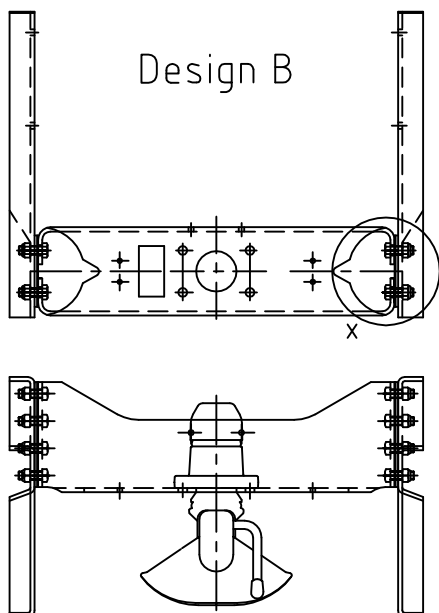
$D_c = \frac{T \times R}{T + R} \times 9,81$	Dc = admissible thrust on drawbar in kN
$T = \frac{D \times R}{(R \times 9,81) - D}$	T = Total mass of the towing vehicle in metric tons
$R = \frac{D \times T}{(T \times 9,81) - D}$	R = Total mass of the trailer in metric tons

Design A



- Ød = 15 H12 for Hexagonal dowel screws M 14 DIN 610
- Ød = 15 for Flange screws M 14 x 1,5
- Ød = 17 for Hexagonal screws M 16 DIN 933
- Ød = 17 for Flange screws M 16 x 1,5

Design B



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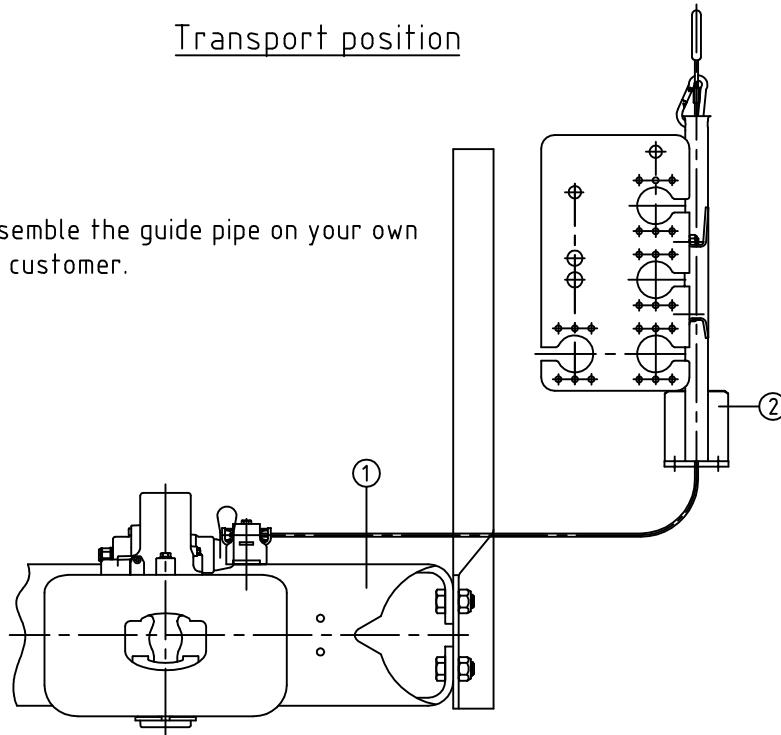
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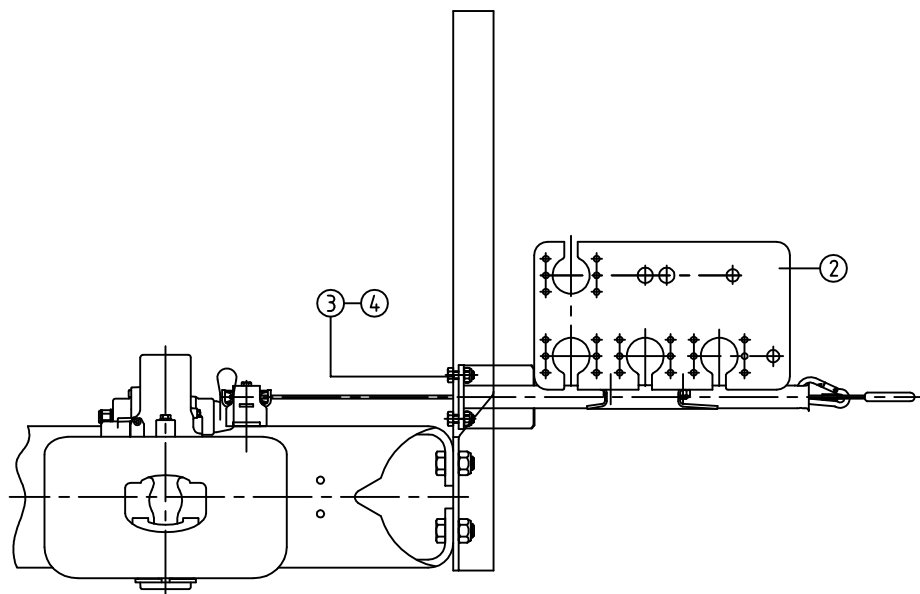
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Transport position

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



Guide pipe assembly



Assemble the guide pipe (Pos.2) to the towbar frame (Pos.1) using 4 bolts M12x35 (Pos.3) and nuts (Pos.4).

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

Number	Date
MA-017-E	01-02-2012



Fahrzeugtechnik GmbH

trailer jack, Type: WUB 601, Design A und B

List of V-Value to static vertical load

vertical load (kg)	max. V-Value (kN)
1000	60,0
1100	58,4
1200	56,7
1300	55,1
1400	53,5
1500	51,8

Nummer	Datum
MA-017-E	09.06.2006