

Cat. No.C-279

DESTINATION

Before the towbar assembly please refer to the manual and vehicle registration document whether car is adjusted for towing a trailer.

Towbar **C-279** is designed for towing a trailer. This towbar has a current certification of approval authorizing the product with **E20** certification sign.

FITTING CONDITIONS

Towbar **C-279** can be used and operated in a car with proper technical conditions of body elements. Those parts cannot be mechanically damaged. Remove the insulating mass of the sealing from surface mounting. The towbar has to be installed and operated in a car according to this instruction. All bolts and nuts in towbar have to be screwed down with proper torque (Mo). Torque values are given below :

M6	-	10	(Nm)	M10	-	50	(Nm)
M8	-	25	(Nm)	M12	-	85	(Nm)

OPERATION CONDITIONS

The towbar **C-279** has a rating plate describing correct and safe loads of the hook :

Typ: C-279	Towbar catalogue number
A50-X	Towbar class (compressing device)
E20 55R-01 4566	Towbar certification of approval number
D = 11,4 kN	Teoretical related force working on a towbar
S = 80 kg	Max permissible vertical load of the tow ball
R = 2000 kg	Max permissible load of towing trailer

D - force is calculated using the following formula:

$$D = g \times \frac{T \times R}{T + R} \text{ kN}$$

T-technically permissible maximum mass in tonnes of the towing vehicle (also towing tractors) including, if necessary, the vertical load of a centrale axle trailer.
R-technically permissible maximum mass in tonnes of the full trailer with drawgal free to move in the vertical plane or of the semi-trailer.
g-acceleration due to gravity(assumed as 9,81 m/s²)

During operating individual elements of towbar should be kept in a proper technical condition and protected from corrosion. The trailer must be linked with an elastic joint with proper durability (cord, chain) while towing. It is necessary to check periodically bolt joints during operating the towbar. If screws are eased, it is necessary to screw them down .

FITTING

The tow bar **C-279** is made up of the following elements :

1. Towbar mainframe	- 1 piece	11. Bolt M10x35	- 4 pieces
2. Tow ball (ACS-6023 / TERWA 30762)	- 1 piece	12. Bolt M12x25	- 3 pieces
3. Tow ball socket	- 1 piece	13. Bolt M12x30	- 1 piece
4. Electrical socket plate	- 1 piece	14. Bolt M12x40	- 8 pieces
5. Right support	- 1 piece	15. Spring washer Ø10,2	- 4 pieces
6. Left support	- 1 piece	16. Spring washer Ø12,2	- 12 pieces
7. Right angle bar	- 1 piece	17. Round washer Ø10,5	- 8 pieces
8. Left angle bar	- 1 piece	18. Round washer Ø13,0	- 8 pieces
9. Special washer Ø30/Ø12,5x3	- 4 pieces	19. Nut M10	- 4 pieces
10. Special washer Ø40/Ø12,5x3	- 2 pieces		

Please follow the installation fitting instruction below in order to ensure correct installation of the towbar:

1. Installation **requires removing and cutting of the rear bumper**.
2. Remove the rear bumper.
3. Remove the strengthening (the strengthening will be not reused).
4. Lower the silencers to facilitate access to the stringers.
5. Remove the towing eye (it will be not reused).
6. Attach the supports (5, 6) to the inner sides of the stringers and screw in points A using bolts M12x40 (14) with spring washers Ø12,2 (16) and round washers Ø13,0 (18).
7. Between supports (5, 6) slide the towbar mainframe (1) and screw in points B using bolts M10x35 (11) with round washers Ø10,5 (17), spring washers Ø10,2 (15) and nuts M10 (19), then screw in points C and D using bolts M12x40 (14) with spring washers Ø12,2 (16) and special washers Ø30/Ø12,5x3 (9) (In points D between stringers and supports (5, 6) place special washers Ø40/Ø12,5x3 (10)).
8. To the stringers screw the angle bars (7, 8), which mount the bumper, using bolts that were unscrewed from the strengthening of the bumper.
9. Tighten the tow ball socket (3) and electrical socket plate (4) to the towbar mainframe (1) using bolts M12x30 (13) - 1 pc. and M12x25 (12) - 3 pcs. with spring washers Ø12,2 (16) and round washers Ø13,0 (18).
10. Determine and make a cutting in the rear bumper.
11. Install the silencers and the bumper using holes E and F.
12. Plug the tow ball (2) into the socket (3) following the attached instructions.

Caution:

Different types of (2) may be attached to the (1) only if:

1. The adapted tow has its own information label with homologation number.
2. D and S values are equal or higher than (1) values.
3. Tow ball centre-point is in accordance with the drawing.

Obeying this instruction assures correct montage and the C-279 towbar operating.

After assembling of the towbar **C-279** you have to get entry in cars **registration book**.

CAUTION :

Check if all bolts and nuts are correctly tightened after 1000km. Keep tow ball clean, grease and cased. All mechanical damages of towbar excludes its further exploitation. Damaged towbar **cannot be repaired**. In case of braking the rules of montage or improper usage manufacturer **do not take responsibility** for arised damages .

MONTAGE DIAGRAM:

