

Cat. No.H-213

DESTINATION

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

Towbar H-213 is designed for towing a trailer. This towbar has a current certification of approval authorizing the product with E20 certification sign.

FITTING CONDITIONS

Towbar H-213 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 H-213 has a rating plate describing correct and safe loads of the hook :

Typ: H-213	Towbar catalogue number
A50-X	Towbar class (compressing device)
E20 55R-01 4564	Towbar certification of approval number
D = 8,3 kN	Teoretical related force working on a towbar
S = 75 kg	Max permissible vertical load of the tow ball
R = 1500 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 H-213 is made up of the following elements :

1. Towbar mainframe	- 1 piece	8. Bolt M10x1,25x40	- 4 pieces
2. Tow ball (ACS-2030)	- 1 piece	9. Bolt M12x25	- 4 pieces
3. Tow ball socket (ACS)	- 1 piece	10. Bolt M12x40	- 4 pieces
4. Electrical socket plate	- 1 piece	11. Spring washer Ø10,2	- 4 pieces
5. Right support	- 1 piece	12. Spring washer Ø12,2	- 8 pieces
6. Left support	- 1 piece	13. Round washer Ø13,0	- 8 pieces
7. Special washer Ø30/Ø10,5x3	- 4 pieces	14. Nut M12	- 4 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 bumper.
3. Remove the bottom bumper's handles (it will not be reused).

4. Attach the left (5) and right (6) support to the outer sides of the stringers and screw loosely using bolts M10x1,25x40 (8) with spring washers Ø10,2 (11) and special washers Ø30/Ø10,5x3 (7).
5. Between supports (5, 6) slide the towbar mainframe (1) and screw using bolts M12x40 (10) with round washers Ø13,0 (13), spring washers Ø12,2 (12) and nuts M12 (14).
6. Tighten all screws.
7. Make an undercut in the bumper according to the figure 1.
8. Install the rear bumper.
9. Tighten the tow ball socket (3) and electrical socket plate (4) to the towbar mainframe (1) using bolts M12x25 (9) with spring washers Ø12,2 (12) and round washers Ø13,0 (13).
10. 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.

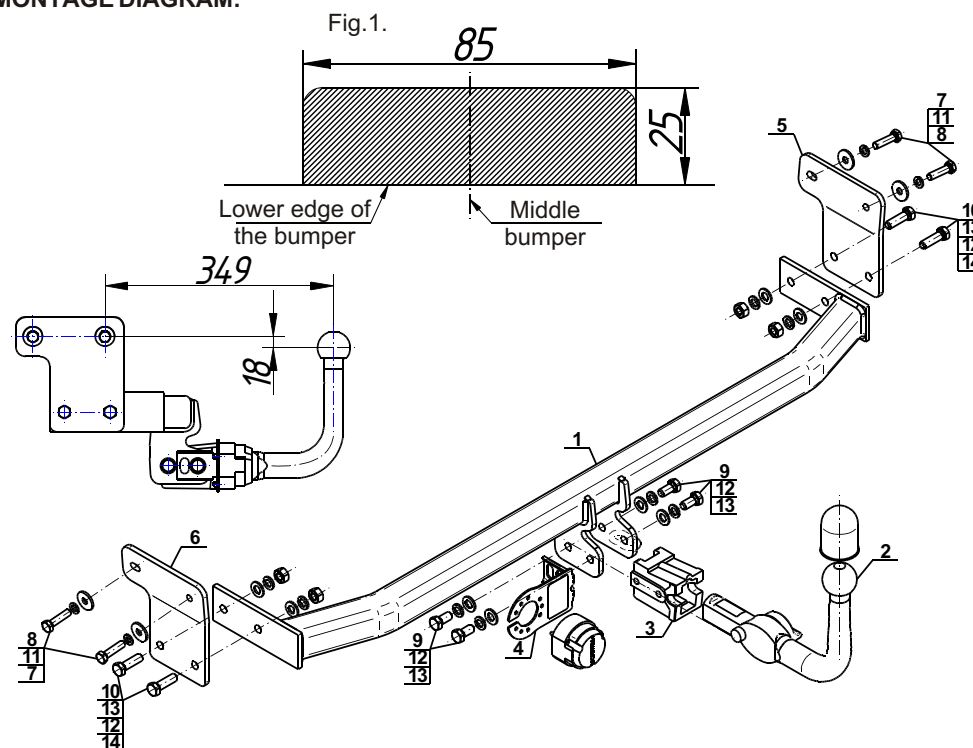
Obeying this instruction assures correct montage and the H-213 towbar operating.

After assembling of the towbar H-213 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 unproper usage manufacturer **do not take responsibility** for arised damages .

MONTAGE DIAGRAM:



NOTE :

Bunch of wires is not included (in total price).