

Cat. No.H-273

DESTINATION

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

Towbar H-273 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-273 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-273 has a rating plate describing correct and safe loads of the hook :

Typ: H-273	Towbar catalogue number
A50-X	Towbar class (compressing device)
E20 55R-01 4487	Towbar certification of approval number
D = 12,0 kN	Theoretical related force working on a towbar
S = 95 kg	Max permissible vertical load of the hook ball
R = 2300 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-273 is made up of the following elements :

- | | | | |
|----------------------------|------------|-------------------------|------------|
| 1. Towbar mainframe | - 1 piece | 9. Bolt M12x25 | - 4 pieces |
| 2. Tow ball (ACS-2036) | - 1 piece | 10. Bolt M12x120 | - 4 pieces |
| 3. Tow ball socket (ACS) | - 1 piece | 11. Spring washer Ø10,2 | - 8 pieces |
| 4. Electrical socket plate | - 1 piece | 12. Spring washer Ø12,2 | - 8 pieces |
| 5. Right strengthening | - 1 piece | 13. Round washer Ø10,5 | - 8 pieces |
| 6. Left strengthening | - 1 piece | 14. Round washer Ø13,0 | - 8 pieces |
| 7. Bolt M10x30 | - 4 pieces | 15. Nut M10 | - 4 pieces |
| 8. Bolt M10x1,25x30 | - 4 pieces | 16. 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. Lower the spare wheel.

3. Remove the towing eye on the right side (it will not be reused).
4. Remove the rear bumper with the metal reinforcement.
5. In metal reinforcement:
 - drill new hole for wire clamp (according to the drawing 1).
 - make a cutting of the part of handles (according to the drawing 2) and in the middle of the bottom part of the reinforcement (according to the drawing 3).
6. Make an undercut in the bumper to dimension ~85x70 [mm] (according to the figure 5).
7. Lower the silencer set from the handles.
8. Remove the heat shields of the silencer and make an undercut in it (according to the drawing 4).
9. Attach the strengthenings (5, 6) to the stringers and screw to the bottom using bolts M10x1,25x30 (8) with spring washers Ø10,2 (11) and round washers Ø10,5 (13).
10. Slide the towbar mainframe (1) between stringers and the strengthenings (5, 6) and screw using bolts M12x120 (10) with round washers Ø13,0 (14), spring washers Ø12,2 (12) and nuts M12 (16) and using bolts M10x30 (7) with round washers Ø10,5 (13), spring washers Ø10,2 (11) and nuts M10 (15).
11. Tighten all bolts.
12. Install the heat shields and hang the silencer set.
13. 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 (14).
14. Install the rear bumper with metal reinforcement.
15. Plug the tow ball (2) into the socket (3) following the attached instructions.
16. Suspend the spare wheel.

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.

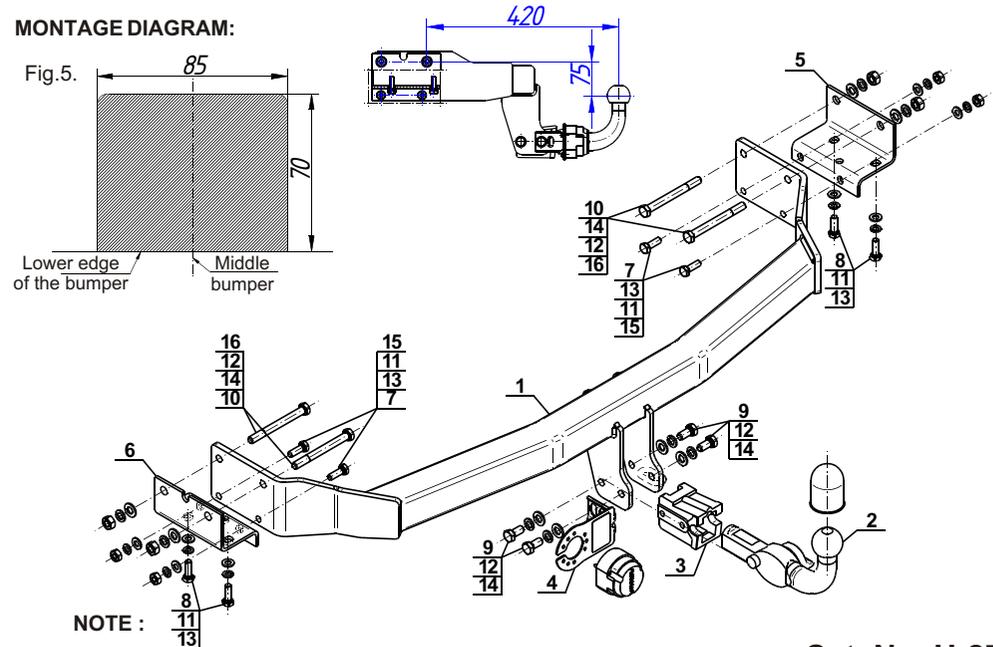
Obeying this instruction assures correct montage and the H-273 towbar operating.

After assembling of the towbar H-273 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:



NOTE :

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