

DESTINATION

Tow bar **F-096** is designed for towing a trailer. This ball hook has a current certification of approval authorizing the product with **E20** certification sign.

FITTING CONDITIONS

Tow bar **F-096** can be used and operated in a car with proper technical conditions of body elements. Those parts cannot be mechanically damaged. The ball hook has to be installed and operated in a car according to this instruction. All bolts and nuts in ball hook have to be screwed down with proper torque (Mo). Torque values are given below:

M8	-	25 (Nm)	M12	-	85 (Nm)
M10	-	50 (Nm)	M16	-	200 (Nm)

OPERATION CONDITIONS

The tow bar **F-096** has a rating plate describing correct and safe loads of the hook:

Typ: F-096	Tow bar catalogue number.
A50-X	Tow bar class (compressing device)
E20 55R-01 3164	Tow bar certification of approval number
D = 7,3 kN	Theoretical related force working on a ball hook
S = 75 kg	Max permissible vertical load of the hook ball
R = 1200 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 ball hook 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 ball hook. If screws are eased, it is necessary to screw them down.

FITTING

The tow bar **F-096** is made up of the following elements:

1. Towbar mainframe	- 1 piece	10. Screw M10x35	- 6 pieces
2. Tow ball (ACS-3008)	- 1 piece	11. Screw M12x25	- 3 pieces
3. Tow ball socket (ACS)	- 1 piece	12. Screw M12x30	- 1 piece
4. Right angle bar	- 1 piece	13. Spring washer Ø10,2	- 6 pieces
5. Left angle bar	- 1 piece	14. Spring washer Ø12,2	- 4 pieces
6. Electrical socket plate	- 1 piece	15. Flat washer Ø10,5	- 4 pieces
7. Special washer Ø24/Ø8,5x2	- 6 pieces	16. Flat washer Ø13,0	- 4 pieces
8. Special washer Ø30/Ø10,5x3	- 6 pieces	17. Self-locking nut M8	- 6 pieces
9. Distance sleeve Ø21,3/Ø16,7x6	- 2 pieces	18. Nut M10	- 4 pieces

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

1. Rear bumper cutting and removing is required.
2. Remove the rear bumper with it reinforcement (reinforcement will not be reused).

3. Perform the undercut of square holes in rear belt to facility the entrance to the stringers according to the template.
4. Slide the angle bars (4, 5) to the inside of stringers and screw on loosely using bolts M10x35 (10) with spring washers Ø10,2 (13), washer Ø30/Ø10,5x3 (8) and sleeves (9).
5. Attach the towbar mainframe (1) to the rear belt on protruding pins and screw on using self-locking nuts M8 (17) with washers Ø24/Ø8,5x2 (7).
6. Screw the towbar mainframe (1) with angle bars (4, 5) using bolts M10x35 (10) with round washers Ø10,5 (15), washers Ø30/Ø10,5x3 (8), spring washers Ø10,2 (13) and nuts M10 (18).
7. Attach the tow ball socket (3) and electrical plate (6) to the towbar mainframe (1) using bolts: M12x30 (12)-1 piece, M12x25 (11)-3 pieces with spring washers Ø12,2 (14) and round washers Ø13,0 (16), (according to the schema).
8. Tighten all bolts.
9. Perform undercut in the rear bumper from the bottom according to the fig. 1.
10. Install the rear bumper.
11. Attach the tow ball (2) to the socket (3) according to the scheme.

Caution: After install the tow bar emergency towing of another vehicle is not possible.

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

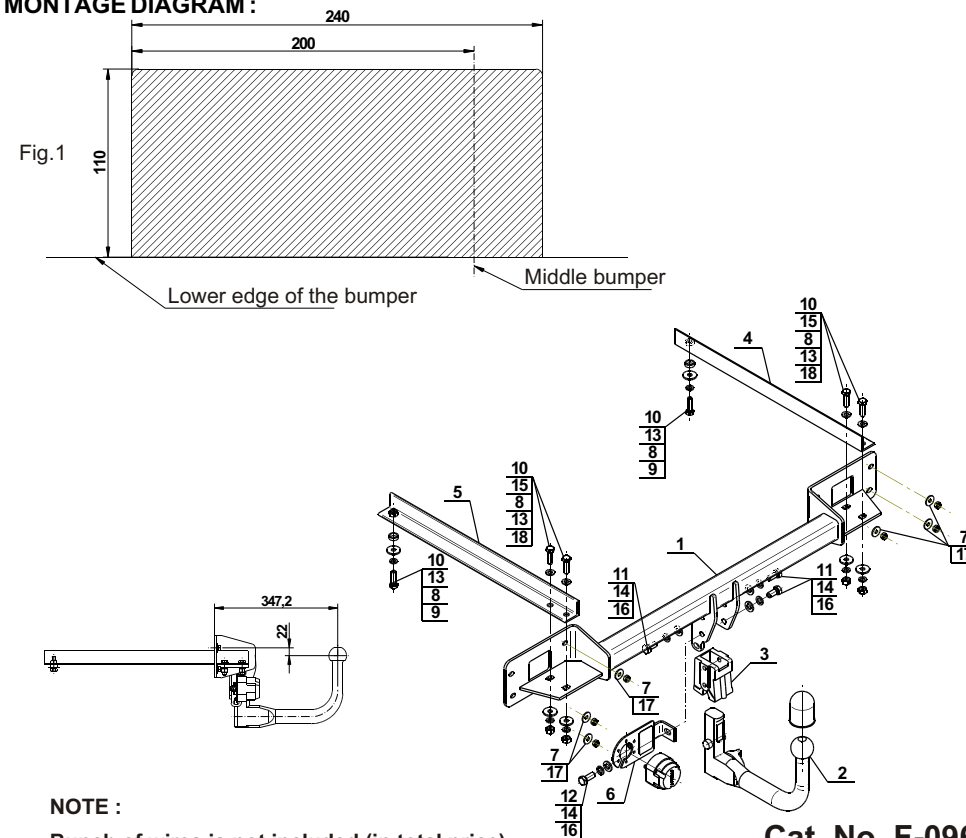
Obeying this instruction assures correct montage and the F-096 tow bar operating.

After assembling of the tow bar **F-096** 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 tow bar excludes its further exploitation. Damaged ball hook **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).