

TOW BAR CITROEN C3 (5D) (05/2002 - 2009) FITTING AND OPERATION MANUAL.

Cat. No.C-031

DESTINATION

Tow bar **C-031** 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 **C-031** 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 **C-031** has a rating plate describing correct and safe loads of the hook:

Typ: C-031	Tow bar catalogue number.
A50-X	Tow bar class (compressing device)
E20 55R-01 3942	Tow bar certification of approval number
D = 6,1 kN	Theoretical related force working on a ball hook
S = 50 kg	Max permissible vertical load of the hook ball
R = 1100 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 **C-031** is made up of the following elements:

1. Tow bar mainframe	- 1 piece	6. Bolt M10x35	- 4 pieces
2. Tow ball (ACS-2030)	- 1 piece	7. Bolt M12x25	- 4 pieces
3. Tow ball socket (ACS)	- 1 piece	8. Spring washer 10,2	- 4 pieces
4. Electrical plate	- 1 piece	9. Spring washer 12,2	- 4 pieces
5. Special washer 30/ 10,5x3	- 4 pieces	10. Round washer 13,0	- 4 pieces

Follow the general directions in order to fit **C-031** tow bar properly

1. Rear bumper cutting is not required. Remove the rear bumper of the car.
2. Dismantle the rear bumper and shields.

3. Unscrew the bumper metal strengthening (it will not be screwing again).
4. Find factory-made openings on chassis side members. Remove the preservative tape.
5. Put (1) to chassis side members and screw them to the factory welded nuts using bolts M10x35 (6) together with spring washers Ø10,2 (8) and special washers 30/ 10,5x3 (5).
6. Attach the tow ball socket (3) and electrical plate (4) to the towbar mainframe (1) using bolts M12x25 (7) together with spring washers Ø12,2 (9) and round washers Ø13,0 (10).
7. Fit the rear bumper and shields up.
8. Put ball (2) to the socket (3) in accordance with attached instruction.

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

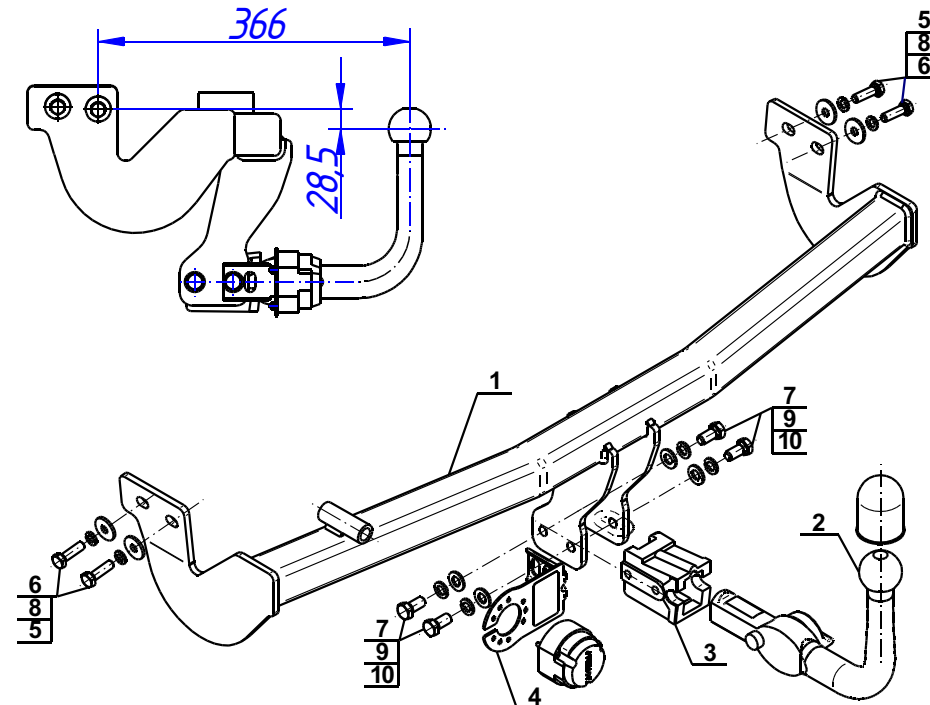
Obeying this instruction assures correct montage and the C-031 tow bar operating.

After assembling of the tow bar **C-031** you have to get entry in cars **registration book** in a quality control station.

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 arising damages.

MONTAGE DIAGRAM:



NOTE:

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