

TOW BAR O-216

Opel Vectra B (4/5D)

(09/1998 - 05/2002 r.)

FITTING AND OPERATION MANUAL.

Cat. No.O-216

DESTINATION

Tow bar **O-216** for a **Opel Vectra B (4/5D)** 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 **O-216** 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 (M₀). Torque values are given below:

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

OPERATION CONDITIONS

The tow bar **O-216** has a rating plate describing correct and safe loads of the hook:

Typ: O-216 A50-X e20 0152-00 D = 7,6 kN S = 75 kg R = 1300 kg	The tow bar for Opel Vectra B (4/5D) Tow bar class (compressing device) Tow bar certification of approval number Teoretical related force working on a ball hook Max permissible vertical load of the hook ball Max permissible load of towing trailer
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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 **O-216** for **Opel Vectra B (4/5D)** is made up of the following elements:

1. Towbar mainframe	- 1 piece	8. Bolt M12x30	- 4 pieces
2. Tow ball with support	- 1 piece	9. Bolt M12x100	- 3 pieces
3. Electrical socket plate	- 1 piece	10. Bolt M12x110	- 1 piece
4. Distance sleeve 17,3/ 12,5x65	- 4 pieces	11. Bolt M12x120	- 1 piece
5. Distance sleeve 17,3/ 12,5x75	- 1 piece	12.Spring washer 12,2	- 9 pieces
6. Special washer 40/ 12,5x2,5	- 3 pieces	13.Nut M12	- 5 pieces
7. Special washer 60/ 12,5x2,5	- 2 pieces		

Follow the general directions in order to fit **O-216** tow bar properly:

- 1.Rear bumper cutting or dismantling is **not required**.

2. From the inside of trunk drill through 3 holes Ø12,5 from the left and 2 holes Ø12,5 from the right side at factory-made marked (points).
3. Drill previously drilled holes Ø12,5 to size Ø17,5 (also from the inside of trunk on one wall only) under the distance sleeves Ø17,3/Ø12,5 x 65 (4) i Ø17,3/Ø12,5 x 75 (5).
4. Into drilled holes Ø17,5 insert from the left side 3 distance sleeves Ø17,3/Ø12,5 x 65 (4) and from the right side one distance sleeve Ø17,3/Ø12,5 x 65 (4) then from the rear belt side one distance sleeve Ø17,3/Ø12,5 x 75 (5).
5. Then insert in distance sleeves bolts M12x100 (9), M12x110 (10), M12x120 (11) with special washers Ø40/Ø12,5x2,5 (6) i Ø 60/Ø12,5x2,5 (7) according to the scheme.
6. Attach from the bottom corps (1) to the bolts M12x100 (9), M12x110 (10), M12x120 (11) and turn him using nuts M12 (13) with spring washers Ø12,2 (12).
7. Attach (2) to the (1) screwing at the same time (3) from the left side of (2) using bolts M12x30 (8) with spring washers Ø12,2 (12).
8. Check that all screw connections have been tightened properly.

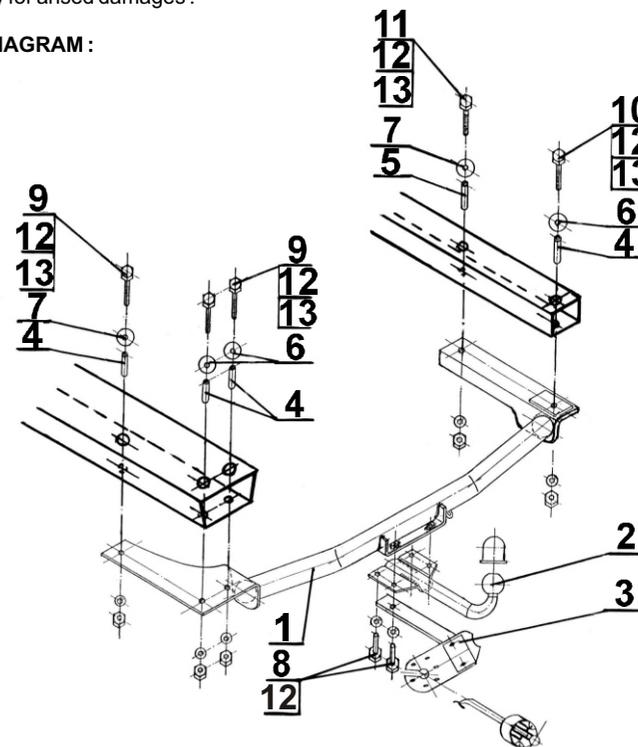
Obeying this instruction assures correct montage and the tow bar operating in a Opel Vectra B (4/5D).

After assembling of the tow bar **O-216** you have to get entry in cars **registration book** in a quality control station.

CAUTION:

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 unproper usage manufacturer **do not take responsibility** for arised damages.

MONTAGE DIAGRAM:



NOTE:

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