



# TOW BAR F-239 FOR Ford Focus II Estate (03/2005 - 04/2011) FITTING AND OPERATION MANUAL

Cat. No.F-239

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## **DESTINATION**

Tow bar **F-239** for a **Ford Focus II Estate** 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-239 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  $(M_0)$ . Torque values are given below :

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

## **OPERATION CONDITIONS**

The tow bar **F-239** has a rating plate describing correct and safe loads of the hook:

Typ: <b>F-239 A50-X e20 0946-00 D</b> = 8,5 kN <b>S</b> = 75 kg <b>R</b> = 1500 kg	The tow bar for <b>Ford Focus II Estate</b> 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:



T-technically permissible maximum mass in tonnes of the towing vehicale (also towning tractors) including, if neccessary, 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 .lt 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-239 for Ford Focus II Estate is made up of the following elements:

1. Towbar mainframe	- 1 piece	7. Bolt M10x40	- 4 pieces
2. Tow ball (ACS-2040)	- 1 piece	8. Bolt M12x25	- 3 pieces
3. Tow ball holder (ACS)	- 1 piece	9. Bolt M12x30	- 1 piece
4. Electrical plate	- 1 piece	10. Flat washer Ø10,5	- 2 pieces
<ol><li>Conecting link</li></ol>	<ul> <li>2 pieces</li> </ul>	11. Flat washer Ø13,0	<ul> <li>4 pieces</li> </ul>
<ol><li>Special washer</li></ol>		12. Spring washer Ø10,2	- 4 pieces
Ø30/Ø10,5x3	- 2 pieces	13. Spring washer Ø12.2	- 4 pieces

Follow the general directions in order to fit **F-239** towbar properly:

1.Rear bumper cutting and removing is required (undercutting require only models 03/2005 - 02/2008).

- 2. Remove rear bumper and its strengthening (the strengthening would be refited again).
- 3.Attach (5) inward chassis side members.
- 4.Attach (1) to external chassis side members and tight using (7) according to drawing.
- 5. For models 03/2005 02/2008: perform undercut from the bottom to size ( around 25x85 mm).
- 6.Refit the strengthening with rear bumper.
- 7.Tight (3) to the (1), then attach (4), using 3 bolts (8) and one bolt (9) according to the schema. 8.Attach (2) to the (3) according to the instruction.

## Caution:

- To different types of (2) may be attached to the (towing bracket) (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) value.
- 3. Tow ball centre-point is in accordance with the drawing

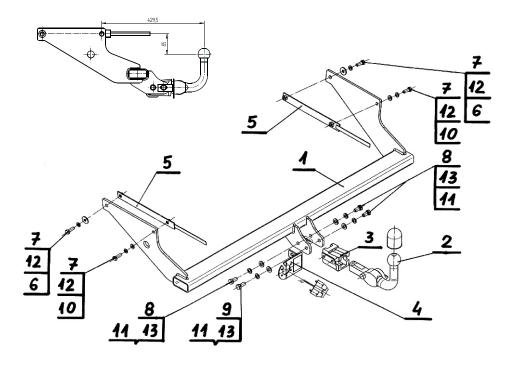
Obeying this instruction assures correct montage and the tow bar operating in a Ford Focus II Estate.

After assembling of the tow bar **F-239** 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 unproper usage manufacturer do not take responsibility for arised damages.

## **MONTAGE DIAGRAM:**



### NOTE:

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

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