

## TOW BAR A-093 FOR Audi Q7 ( 2006 - r. ) / VW Touareg ( 2002 - r. ) / Porsche Cayenne ( 2002 - r. ) FITTING AND OPERATION MANUAL

Cat. No.A-093

### DESTINATION

Tow bar **A-093** for a **Audi Q7 / VW Touareg / Porsche Cayenne** 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 **A-093** 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 **A-093** has a rating plate describing correct and safe loads of the hook:

Typ: <b>A-093</b>	The tow bar for <b>Audi Q7 / VW Touareg / Porsche Cayenne</b>
<b>F</b>	Tow bar class (compressing device)
<b>e20</b>	Tow bar certification of approval number
<b>0871-00</b>	Teoretical related force working on a ball hook
<b>D = 16,3 kN</b>	Max permissible vertical load of the hook ball
<b>S = 140 kg</b>	Max permissible load of towing trailer
<b>R = 3500 kg</b>	

### 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/s<sup>2</sup>)

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 **A-093** for **Audi Q7 / VW Touareg / Porsche Cayenne** is made up of the following elements:

1. Towbar mainframe	- 1 piece	9. Bolt M12x25 (12,9)	- 4 pieces
2. Tow ball (ACS-4002)	- 1 piece	10. Bolt M12x(1,5)x40	- 8 pieces
3. Tow ball holder	- 1 piece	11. Bolt M14x(1,5)x40	- 8 pieces
4. Electrical plate	- 1 piece	12. Spring washer 10,2	- 1 piece
5. Distance sleeve 17,3/ 12,5x9	- 1 piece	13. Spring washer 12,2	- 8 pieces
6. Special washer 30/ 12,5x3	- 8 pieces	14. Spring washer 14,2	- 8 pieces
7. Special washer	- 2 pieces	15. Flat washer 10,5	- 1 piece
8. Bolt M10x35	- 1 piece	16. Flat washer 15,0	- 8 pieces
		17. Nut M10	- 1 piece

Follow the general directions in order to fit **A-093** towbar properly:

1. Rear bumper cutting and removing is required.
2. Remove rear bumper and its metal-strengthening (the strengthening will not be used anymore).
3. Attach (1) to the factory-made points on back panel, using bolts (11) and spring (14) and flat (16) washers, or using bolts (10), spring (13) and special (6) washers.
4. To towbar mainframe (1) screw (3) using (9) and (7). On the left side of screw (4) using (8), (5), (15), (12), and (17).
5. Make the cutting of the rear bumper according to the schema.
6. Refit rear bumper.
7. Stick (2) to the (3) in accordance with 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) values.
  3. Tow ball centre-point is in accordance with the drawing

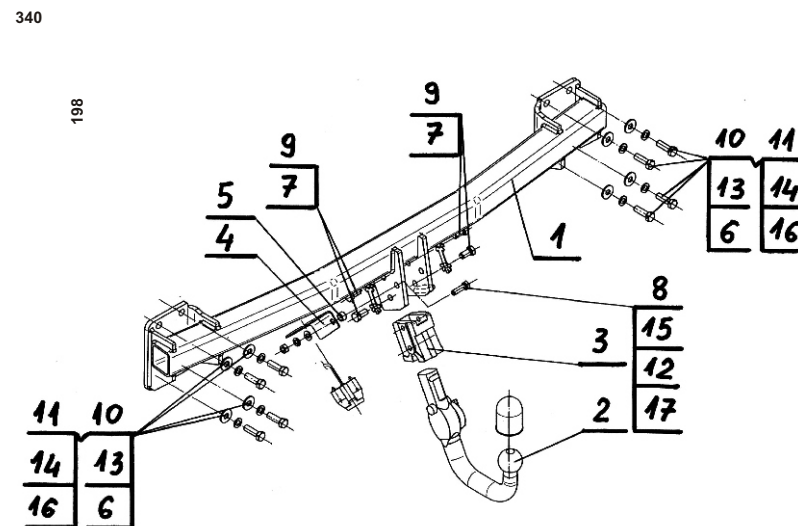
**Obeying this instruction assures correct montage and the tow bar operating in a Audi Q7 / VW Touareg / Porsche Cayenne.**

After assembling of the tow bar **A-093** 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).