

DESTINATION

Tow bar **S-345** for a **Skoda Superb (4D)** 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 **S-345** 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 **S-345** has a rating plate describing correct and safe loads of the hook:

Typ: S-345	The tow bar for Skoda Superb (4D)
A50-X	Tow bar class (compressing device)
e20 0050-00	Tow bar certification of approval number
D = 8,8 kN	Theoretical related force working on a ball hook
S = 75 kg	Max permissible vertical load of the hook ball
R = 1600 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 **S-345** for **Skoda Superb (4D)** is made up of the following elements:

- | | | | |
|--------------------------------|------------|-----------------------|------------|
| 1. Tow bar's body | - 1 piece | 7. Spring washer 10,2 | - 2 pieces |
| 2. Hook ball | - 1 piece | 8. Spring washer 12,2 | - 2 pieces |
| 3. Socket holder | - 1 piece | 9. Simple washer 13,0 | - 2 pieces |
| 4. Special washer 40/ 10,5x2,5 | - 8 pieces | 10. Nut M10 | - 2 pieces |
| 5. Bolt M12x70 | - 2 pieces | 11. Nut M12 | - 2 pieces |
| 6. Bolt M12x100 | - 6 pieces | | |

Follow the general directions in order to fit **S-345** tow bar properly

1. Tow bar installing operation does not require car's rear bumper cutting.
2. Dismantle car's rear bumper then unscrew bumpers strengthening.
3. Take apart separate assembling pieces of tow bar.

4. Remove plugs from the holes located inside of the bumper where the tow bar installing bolts will be assembled.
5. Insert the tow bar's body (1) to inside of longitudinals, next put the bolts M10x100 (6) with special washers 40 (4) into holes from inside of bumper.
6. Screw down the bolts (the farthest from rear belt in each side) both with: nuts M10 (10), special washers 40 (4), spring washers 10,2(7).
7. Screw the remaining bolts M10x100 (6) with the rest of the nuts.
8. Mount rear bumper to the car.
9. Screw hook ball (2) down to the tow bar's body (1) both with: bolts M12x65 (5), simple washers 13,0 (9), spring washers 12,2(8), nut M12 (11).
10. Check if all bolted joints are screwed hard enough.

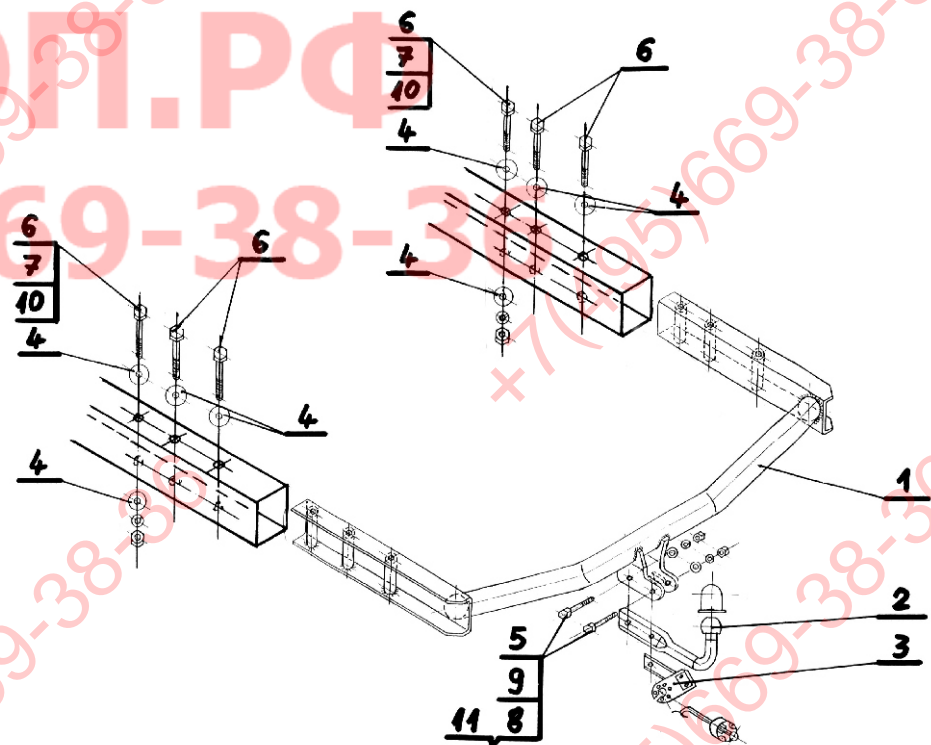
Obeying this instruction assures correct montage and the tow bar operating in a Skoda Superb (4D).

After assembling of the tow bar **S-345** 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).