

# TOW BAR V-032 FOR \* VW Crafter / Mercedes Sprinter II (Van, Station wagon)

(2006 - r.)

## FITTING AND OPERATION MANUAL.

Cat. No. V-032

### DESTINATION

Tow bar **V-032** for a **VW Crafter / Mercedes Sprinter II** is designed for towing a trailer. This ball hook has a current certification of approval authorizing the product with **e4** certification sign.

### FITTING CONDITIONS

Tow bar **V-032** 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 **V-032** has a rating plate describing correct and safe loads of the hook:

Typ: <b>V-032</b>	The tow bar for <b>VW Crafter / Mercedes Sprinter II</b>
<b>A50-X</b>	Tow bar class (compressing device)
<b>e4</b> <b>00-3547</b>	Tow bar certification of approval number
<b>D = 17,2 kN</b>	Teoretical related force working on a ball hook
<b>S = 140 kg</b>	Max permissible vertical load of the hook ball
<b>R = 3500 kg</b>	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/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 **V-032** for **VW Crafter / Mercedes Sprinter II** is made up of elements as follows:

1. Towbar mainframe	- 1 piece	6. Spring washer 16,3	- 2 pieces
2. Forged towball	- 1 piece	7. Flat washer 13,0	- 8 pieces
3. Bolt M12x100	- 8 pieces	8. Flat washer 17,0	- 2 pieces
4. Bolt M16x50	- 2 pieces	9. Nut M12	- 8 pieces
5. Spring washer 12,2	- 8 pieces	10. Nut M16	- 2 pieces

Follow the general directions in order to fit **V-032** tow bar properly:

1. Rear bumper cutting or dismantling **is not required**.
2. Take towbar to pieces.
3. Dismantle the towing lug which is screwed on 3 bolts M12 (will not be reassemble).

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Cat. No. V-032

4. Put (1) to chassis rails (from inside) and screw using (3) along with (7), (5) and (9).
5. Screw (2) to (1) using (4) along with (8), (6) and (10).
6. Check if all fixing bolts and nuts are correctly tightened.

**Obeying this instruction assures correct montage and the tow bar  
Operating in a VW Crafter / Mercedes Sprinter II.**

After assembling of the tow bar **V-032** you have to get entry in cars **registration book** in a quality control station.

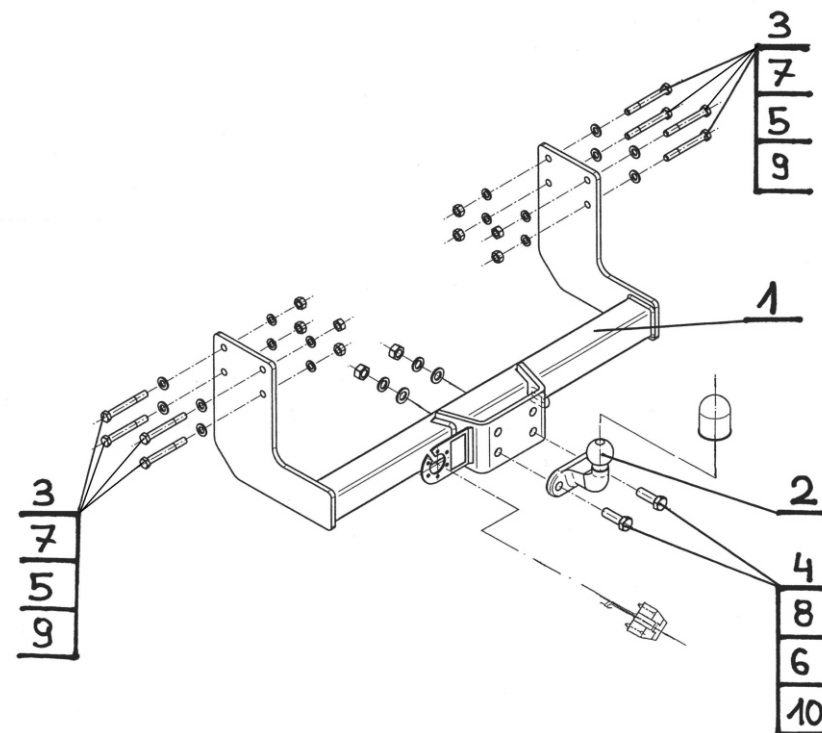
### CAUTION:

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

### \* Tow Bar V-032 used to the following models:

- Volkswagen Crafter Van, Station wagon 3,5T (axis distance 4,325m, without stepbumper),
- Mercedes Sprinter II Van, Station wagon 3,5T (axis distance 4,325m, without stepbumper).

### MONTAGE DIAGRAM:



### NOTE:

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

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