

TOW BAR V-132 FOR VOLKSWAGEN TOURAN FITTING AND OPERATION MANUAL. (03/2003 - r.)

Cat. No.V-132

DESTINATION

Tow bar **V-132** for a **Volkswagen Touran** 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 **V-132** 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-132** has a rating plate describing correct and safe loads of the hook :

Typ: V-132 A50-X e20 0043-00 D = 9,9 kN S = 75 kg R = 1800 kg	The tow bar for Volkswagen Touran 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 **V-132** for **Volkswagen Touran** is made up of the following elements :

1. Tow bar's body	- 1 piece	6. Bolt M12x65	- 2 pieces
2. Ball hook	- 1 piece	7. Spring washer 10,2	- 4 pieces
3. Electrical socket holder	- 1 piece	8. Spring washer 12,2	- 2 pieces
4. Special washer 40/ 10,5x2,5	- 4 pieces	9. Flat washer 13,0	- 2 pieces
5. Bolt M10x35	- 4 pieces	10.Nut M12	- 2 pieces

Follow the general directions in order to fit **V-132** tow bar properly

- 1.Rear bumper cutting is required.
- 2.Dismantle rear bumper.

17.05.2006.

Cat. No. V-132

- 3.Dismantle the strenghtening of a rear bumper.
- 4.Dismantle a tow bar into kit-form elements.
- 5.Place (1) into chassis frames and screw it down using (5), (7) and (4).
- 6.Mount (1) into (2) using (6), (8), (9), and (10) screwing (3) on the left side of (2).
- 7.Place rear bumper to the car, mark place and size of a cut-out in the lower part of bumper and cut it out, mount bumper then. Size of cut-out 50x70(mm).
- 8.Check if all fixing bolts and nuts are screwed hard enough.

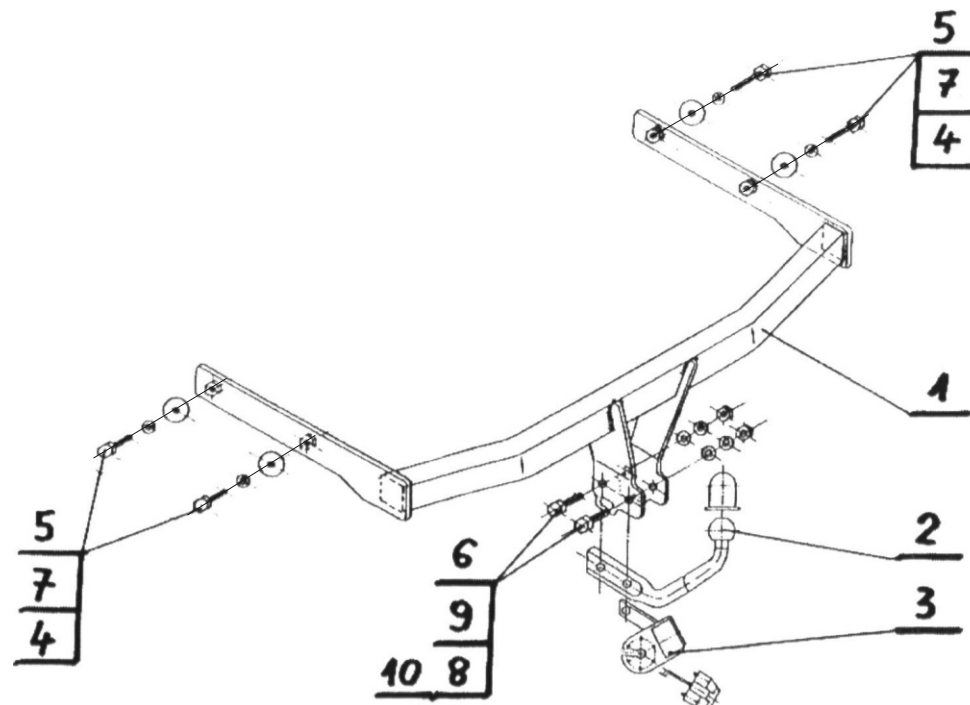
Obeying this instruction assures correct montage and the tow bar operating in a Volkswagen Touran.

After assembling of the tow bar **V-132** 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).

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