

TOW BAR N-087 FOR NISSAN Navara (D40) (with stepbumper) (05/2005 - r.)

FITTING AND OPERATION MANUAL.

Cat. No. N-087

DESTINATION

Tow bar **N-087** for a **Nissan Navara (D40)** 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 **N-087** 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 **N-087** has a rating plate describing correct and safe loads of the hook :

Typ: N-087	The tow bar for Nissan Navara (D40)
A50-X	Tow bar class (compressing device)
e4 00-3530	Tow bar certification of approval number
D = 15,0 kN	Teoretical related force working on a ball hook
S = 120 kg	Max permissible vertical load of the hook ball
R = 3000 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 **N-087** for **Nissan Navara (D40)** is made up of elements as follows :

1. Towbar mainframe	- 1 piece	8.Spring washer	12,2	- 14pieces
2. Forged towball	- 1 piece	9.Spring washer	16,3	- 2 pieces
3. Right strenghtening	- 1 piece	10.Flat washer	13,0	- 14pieces
4. Left strenghtening	- 1 piece	11.Flat washer	17,0	- 2 pieces
5. Bolt M12x40	- 4 pieces	12.Nut M12		- 4 pieces
6. Bolt M12(1,25)x40	- 10pieces	13.Nut M16		- 2 pieces
7. Bolt M16x50	- 2 pieces			

Follow the general directions in order to fit **N-087** tow bar properly:

1.Rear bumper cutting or dismantling **is not required**.

- 2.Take towbar to pieces.
- 3.Dismantle the towing lug (will not be reassemble).
- 4.Put (1) to chassis rails and screw using bolts (6) along with (8) and (10).
- 5.Put (3) and (4) from below of chassis rails and screw using (6) along with (8) and (10) then screw with (1) using (5) along with (10), (8) and (12).
- 6.Screw (2) to (1) using (7) along with (11), (9) and (13).
- 7.Check if all fixing bolts and nuts are correctly tightened.

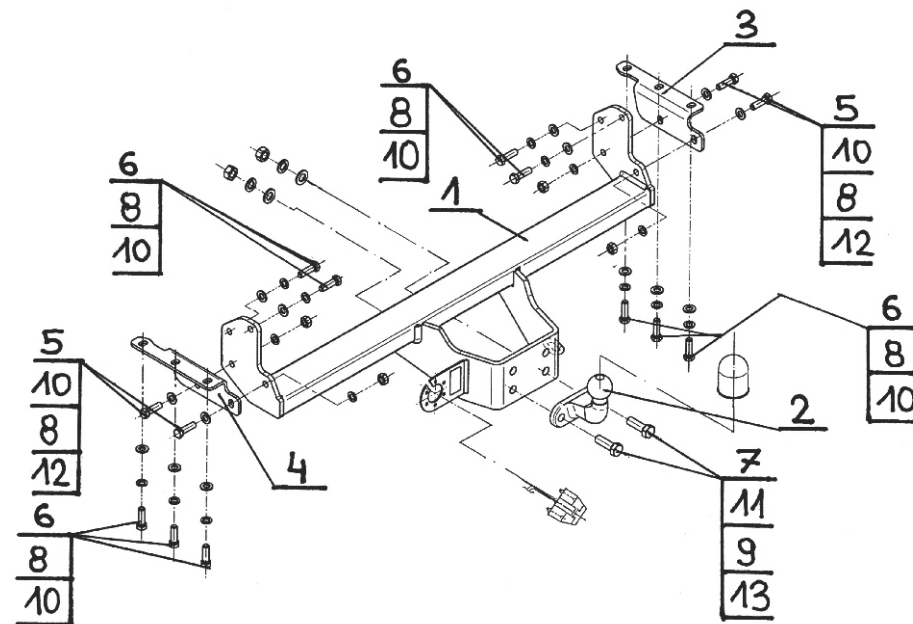
**Obeying this instruction assures correct montage and the tow bar
Operating in a Nissan Navara (D40).**

After assembling of the tow bar **N-087** 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).