

## TOW BAR R-022 RENAULT CLIO III (3/5D) (09/2005 - r.) FITTING AND OPERATION MANUAL.

Cat. No.R-022

### DESTINATION

Tow bar **R-022** for a **Renault Clio III (3/5D)** 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 **R-022** 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 **R-022** has a rating plate describing correct and safe loads of the hook:

Typ: <b>R-022</b>	The tow bar for <b>Renault Clio III (3/5D)</b>
<b>A50-X</b>	Tow bar class (compressing device)
<b>e20</b> <b>0396-00</b>	Tow bar certification of approval number
<b>D = 7,0 kN</b>	Teoretical related force working on a ball hook
<b>S = 75 kg</b>	Max permissible vertical load of the hook ball
<b>R = 1200 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 **R-022** for **Renault Clio III (3/5D)** is made up of the following elements:

1. Tow bar mainframe	- 1 szt.	8. Bolt M10x30	- 4 szt.
2. Tow ball	- 1 szt.	9. Bolt M10x90	- 4 szt.
3. Electric socket plate	- 1 szt.	10. Bolt M12x65	- 2 szt.
4. Right support	- 1 szt.	11. Spring washer 10,2	- 8 szt.
5. Left support	- 1 szt.	12. Spring washer 12,2	- 2 szt.
6. Distance sleeve 19,0/ 10,5x58	- 4 szt.	13. Flat washer 10,5	- 8 szt.
7. Special washer 40/ 10,5x2,5	- 6 szt.	14. Flat washer 13,0	- 2 szt.
		15. Nut M10	- 6 szt.
		16. Nut M12	- 2 szt.

Follow the general directions in order to fit **R-022** tow bar properly:

1. Rear bumper cutting is not required.
2. Take the tow bar to pieces.
3. Remove the spare wheel.
4. Remove the silencer and the thermal shield
5. Remove plugs from the openings.
6. Put (6), (7) and (9) to the chassis rail.
7. Put (4) and (5) to the chassis rail and screw using (15), (7), (13) and (11).
8. Attach (1) to (4) and (5) using (8), (13), (11) and (15).
9. Refit all removed parts.
10. Attach (2) and (3) to (1) using (10), (14), (12) and (16).
11. Check if all bolts and nuts are correctly tightened.

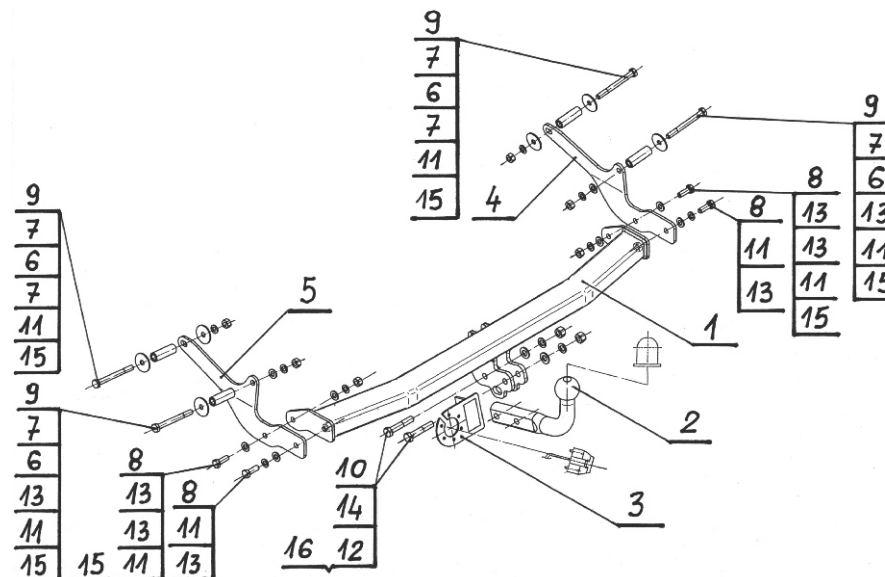
**Obeying this instruction assures correct montage and the tow bar operating in a Renault Clio III (3/5D).**

After assembling of the tow bar **R-022** 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).