

TOWBAR R-020 FOR RENAULT CLIO II (3D/5D) (03/1998 - r.) FITTING AND OPERATION MANUAL

Nr kat. R-020

DESTINATION

Tow bar **R-020** for a **Renault Clio II (3D/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-020** 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-020** has a rating plate describing correct and safe loads of the hook:

Typ: R-020 A50-X e20 0001-00 D = 6,4 kN S = 75 kg R = 1200 kg	The tow bar for Renault Clio II (3D/5D) Tow bar class (compressing device) Tow bar certification of approval number Theoretical 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 **R-020** for **Renault Clio II (3D/5D)** is made up of the following elements:

1. Towbar mainframe	- 1 piece	8. Bolt M12x65	- 2 pieces
2. Tow ball	- 1 piece	9. Flat washer 10,5	-24 pieces
3. Electrical plate	- 1 piece	10. Flat washer 13,0	- 2 pieces
4. Right support - set	- 1 piece	11 Spring washer 10,2	-12 pieces
5. Support right - set	- 1 piece	12. Spring washer 12,2	- 2 pieces
6. Left support - set	- 1 piece	13. Nut M10	-12 pieces
7. Bolt M10x40	-12 pieces	14. Nut M12	- 2 pieces

In order to mount the ball hook **R-020** you have to obey the instruction below:

1. Rear bumper cutting is not required.
2. Dismantle the rear bumper of the car.
3. Dismantle the tow bar into kit-form elements.
4. Put the supports to the chassis frame members, from the left side of the car to the factory-made holes:
 - put (4) from the right side
 - put (5) from the left side
 Then attach them using (7), (9), (11), (13).
5. Put (6) to the left chassis frame member to factory-made holes and attach through the holes using (7) with (9), (11), (13).
6. Put (1) to the back strip and attach through the factory-made holes with previously attached supports (4,5,6) using (7), (9), (11) and (13).
7. Attach the rear bumper of the car.
8. Attach (2) to (1) using (8), (10), (12), (14), adding (3) from the left side of (2) at the same time.
9. Check if all fixing bolts and nuts are screwed hard enough.

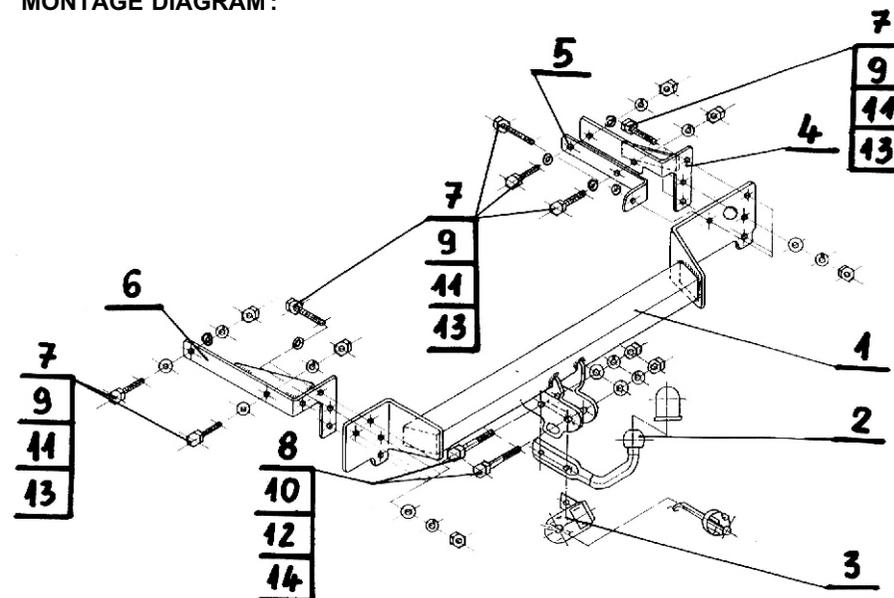
Obeying this instruction assures correct montage and the tow bar operating in a Renault Clio II (3D/5D)

After assembling of the tow bar **R-020** 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).