

Cat. No.R-030

DESTINATION

Tow bar **R-030** 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-030** 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-030** has a rating plate describing correct and safe loads of the hook:

Typ: R-030	Tow bar catalogue number.
A50-X	Tow bar class (compressing device)
(E20) 55R-01 3541	Tow bar certification of approval number
D = 7,7 kN	Theoretical related force working on a ball hook
S = 75 kg	Max permissible vertical load of the hook ball
R = 1200 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 **R-030** is made up of the following elements:

1. Towbar mainframe	- 1 piece	10. Bolt M12x25	- 4 pieces
2. Tow ball (ACS-2030 / TERWA 30541)	- 1 piece	11. Bolt M12x35	- 4 pieces
3. Tow ball socket	- 1 piece	12. Bolt M10x100	- 4 pieces
4. Electrical socket plate	- 1 piece	13. Spring washer Ø10,2	- 4 pieces
5. Right support	- 1 piece	14. Spring washer Ø12,2	- 8 pieces
6. Left support	- 1 piece	15. Round washer Ø13,0	- 8 pieces
7. Distane sleeve Ø21,3/Ø16,1x63	- 2 pieces	16. Nut M10	- 4 pieces
8. Distane sleeve Ø21,3/Ø16,1x69	- 2 pieces	17. Nut M12	- 2 pieces
9. Special washer Ø30/Ø10,5x3	- 8 pieces		

Please follow the installation fitting instruction below in order to ensure correct installation of the towbar:

1. Rear bumper removing and cutting is not required.

2. Lower the spare wheel, remove the plastic cover, lower the silencer and remove the heat shield
3. On the right and left side of the wheel arch, unscrew the plastic cover.
4. Remove the allowances of the sealing from surface mounting.
5. From external sites of the right stringers slide into the mounting holes sleeves Ø21,3/Ø16,1x63 (7) with bolts M10x100 (12) and washers Ø30/Ø10,5x3 (9).
6. From external sites of the left stringers slide into the mounting holes sleeves Ø21,3/Ø16,1x69 (8) with bolts M10x100 (12) and washers Ø30/Ø10,5x3 (9).
7. Attach supports (5, 6) to the inner sides of the stringers on the protruding bolts and screw using nuts M10 (16), washers Ø30/Ø10,5x3 (9) and spring washers Ø10,2 (13) (seal with silicone in the mounting holes from external sites of the stringers.)
8. Between supports (5, 6) slide the towbar mainframe (1) and screw using bolts M12x35 (11) with round washers Ø13,0 (15), spring washers Ø12,2 (14) and nuts M12 (17).
9. Refit the items listed in paragraphs 2, 3.
10. Tighten the stow ball socket (3) and electrical plate (4) to the towbar mainframe (1) using bolts M12x25 (10) with spring washers Ø12,2 (14), round washers Ø13,0 (15).
11. Put ball (2) to the socket (3) in accordance with attached instruction.

Caution:

Different types of (2) may be attached to the (1) only if:

1. The adapted tow has its own information label with homologation number
2. D and S values are equal or higher than (1) values.
3. Tow ball centre-point is in accordance with the drawing

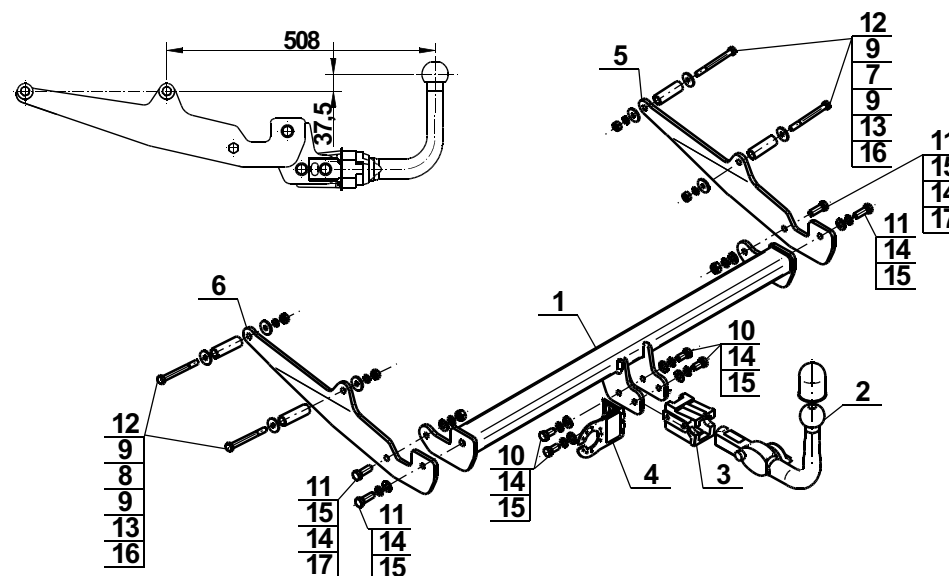
Obeying this instruction assures correct montage and the R-030 tow bar operating.

After assembling of the tow bar you have to get entry in cars registration book.

CAUTION :

Check if all bolts and nuts are correctly tightened after 1000km. Keep tow ball clean, grease and cased. 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.

MONTAGE DIAGRAM



NOTE :

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