

DESTINATION

Tow bar **T-129** 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 **T-129** 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 **T-129** has a rating plate describing correct and safe loads of the hook:

Typ: T-129	Tow bar catalogue number.
A50-X	Tow bar class (compressing device)
(E20) 55R-01 3789	Tow bar certification of approval number
D = 10,0 kN	Theoretical related force working on a ball hook
S = 80 kg	Max permissible vertical load of the hook ball
R = 1800 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 **T-129** is made up of the following elements:

- | | | | |
|--------------------------------------|------------|-------------------------|-------------|
| 1. Towbar mainframe | - 1 piece | 10. Screw M12x25 | - 3 pieces |
| 2. Tow ball (ACS-6003 / TERWA 30664) | - 1 piece | 11. Screw M12x30 | - 1 piece |
| 3. Tow ball socket | - 1 piece | 12. Screw M12x35 | - 4 pieces |
| 4. Right support | - 1 piece | 13. Screw M12x1,25x50 | - 6 pieces |
| 5. Left support | - 1 piece | 14. Spring washer Ø6,2 | - 1 piece |
| 6. Electrical socket plate | - 1 piece | 15. Spring washer Ø12,2 | - 14 pieces |
| 7. Special washer Ø24/Ø8,5x2,5 | - 1 piece | 16. Round washer Ø13,0 | - 8 pieces |
| 8. Special washer Ø34/Ø12,5x5 | - 6 pieces | 17. Nut M12 | - 4 pieces |
| 9. Screw M6x25 | - 1 piece | | |

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

- Installation requires removing and cutting rear bumper. The plastic bottom cover requires cutting.
- Remove the bumper and the plastic bottom cover.

- Unscrew the beam from the strengthen of the bumper.
- Dismantle the towing eye of the stringer.
- Lower the silencer with hanger and remove the heat shield (if there is a heat shield in the mounting places of the bumper).
- Make an undercut in the beam bumper according to the fig. 1. and make an undercut in the support of the strengthen of the bumper according to the fig. 2.
- Attach to the right side of the stringers the right support (4) and screw loosely with bolts M12x1,25x50 (13), spring washers Ø12,2 (15) and special washers Ø34/Ø12,5x5 (8).
- Attach to the left side of the stringers with towing eye the left support (5) and screw loosely with bolts M12x1,25x50 (13), spring washers Ø12,2 (15) and special washers Ø34/Ø12,5x5 (8).
- Between supports (4, 5) slide the tow bar mainframe (1) and screw with bolts M12x35 (12), spring washers Ø12,2 (15), round washers Ø13,0 (16) and nuts M12 (17).
- Attach the tow ball socket (3) and electrical plate (6) to the tow bar mainframe (1) with bolts M12x30 (11)- 1 pc, M12x25 (10)- 3 pcs, round washers Ø13,0 (16), spring washers Ø12,2 (15).
- Tighten all screws.
- Install the heat shield with factory bolts and bolts M6x25 (9) with spring washer Ø6,2 (14), special washer Ø24/Ø8,5x2,5 (7). Put the silencer on.
- Reinstall the beam of the strengthen.
- Make an undercut in the bumper according to the fig. 3 and make an undercut in the bottom cover according to the fig. 4.
- Install the bumper and the bottom cover.
- Plug the tow ball (2) into the socket (3) following the attached instructions.

Caution:

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

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

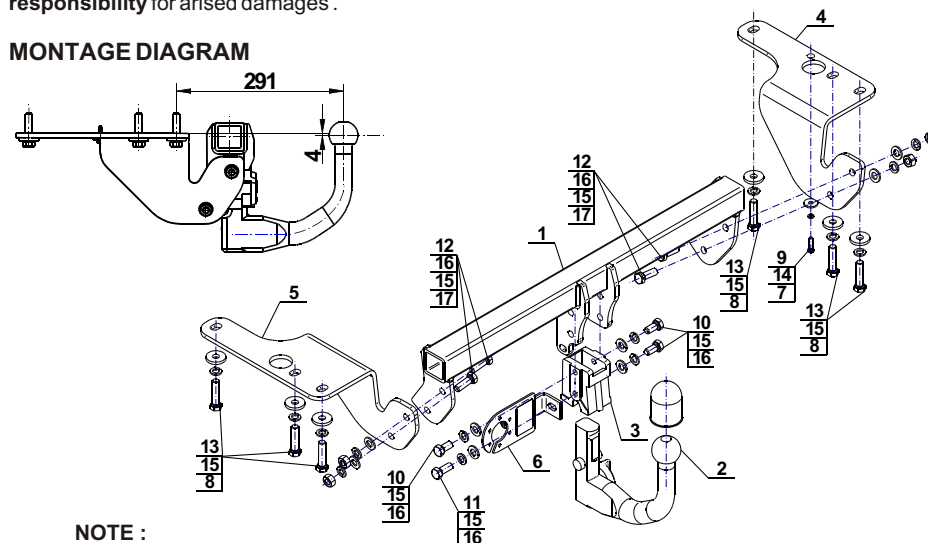
Obeying this instruction assures correct montage and the T-129 tow bar operating.

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 unproper usage manufacturer **do not take responsibility** for arised damages.

MONTAGE DIAGRAM



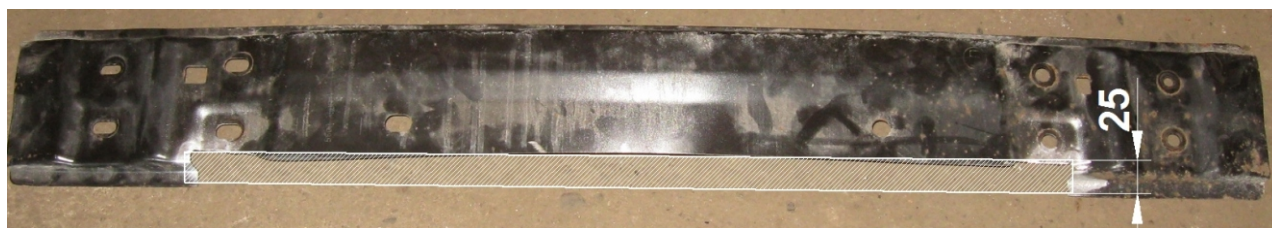
NOTE :

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

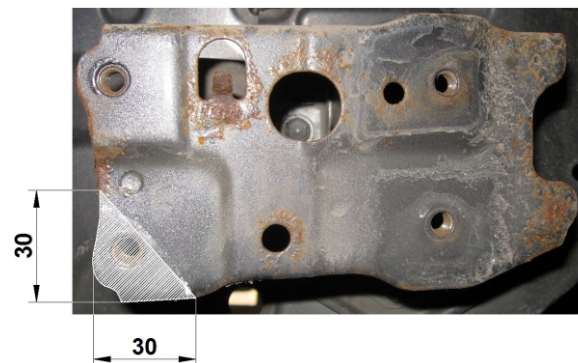
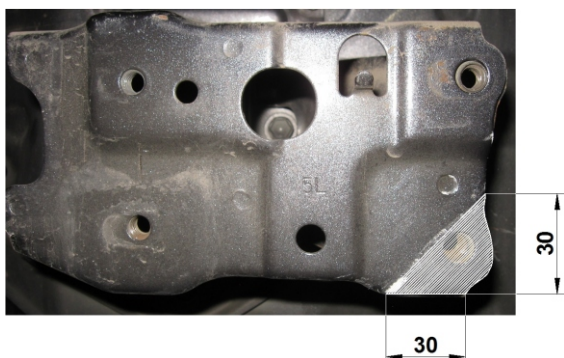
T-129

Toyota Corolla (4D) (E18) (2013 -)

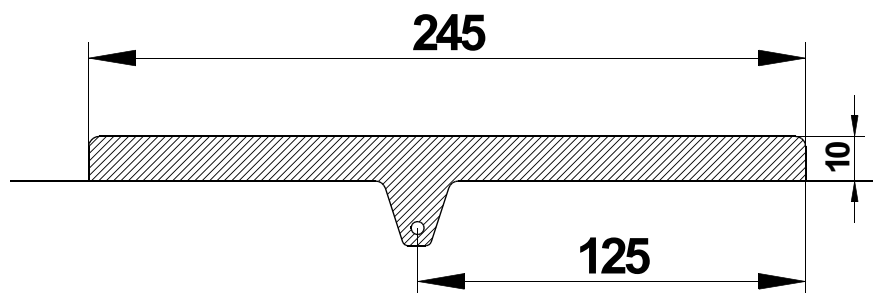
Rys.1
Fig.1



Rys.2
Fig.2



Rys.3
Fig.3



Rys.4
Fig.4

