

TOW BAR FOR

Toyota Avensis Verso (2001 - 2006)

FITTING AND OPERATION MANUAL

Cat. No.T-095

DESTINATION

Tow bar **T-095** 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-095** 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-095** has a rating plate describing correct and safe loads of the hook:

D = 9,7 kN S = 75 kg	Tow bar catalogue number. Tow bar class (compressing device) Tow bar certification of approval number Teoretical 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:



T-technically permissible maximum mass in tonnes of the towing vehicale (also towning tractors) including, if neccessary, 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-095** is made up of the following elements:

1. Towbar mainframe	- 1 piece	9. Bolt M12x25	- 4 pieces
2. Tow ball (ACS-2080)	- 1 piece	10. Bolt M12x1,25x40	- 6 pieces
3. Tow ball socket (ACS)	- 1 piece	11. Bolt M12x40	- 4 pieces
Electrical socket	- 1 piece	12. Bolt M12x60	- 2 pieces
Right support	- 1 piece	13. Spring washer Ø12,2	-16 pieces
6. Left support	- 1 piece	14. Round washer Ø13,0	-10 pieces
7. Distance sleeve Ø21,3/Ø17,3x	k23 - 2 pieces	15. Nut M12	- 4 pieces
8. Special washer Ø30/Ø12.5x3	- 8 pieces		

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

- 1. Installation requires removing and cutting rear bumper.
- 2. Remove the rear bumper.
- 3. Remove the silencer.

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- 4. Unblock the mounting holes in the chassis.
- 5. Attach the supports (5, 6) to the bottom of the chassis and screw loosely using bolts M12x1,25x40 (10) with washers Ø30/Ø12,5x3 (8), and spring washers Ø12,2 (13).
- 6. Screw the supports (5, 6) in points A with mounting holes using bolts M12x60 (12) using sleeves $\varnothing 21,3/\varnothing 17,3x23$ (7), washers $\varnothing 30/\varnothing 12,5x3$ (8),round washers $\varnothing 13,0$ (14), spring washers $\varnothing 12,2$ (13) and nuts M12 (15).
- 7. Screw loosely towbar mainframe (1) with supports (5, 6) using bolts M12x40 (11) with round washers Ø13,0 (14), spring washers Ø12,2 (13) and nuts M12 (15).
- 8. Screw the tow ball socket (3) and electrical plate (4) to the towbar mainframe (1) using bolts M12x25 (9) with round washers Ø13,0 (14) and spring washers Ø12,2 (13).
- 9. Tighten all screws.
- 10. Screw on the silencer
- 11. Make an undercut in the bumper according to the drawing and install the bumper.
- 12. 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:

- 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 aaccordance with the drawing

Obeying this instruction assures correct montage and the T-095 tow bar operating.

After assembling of the tow bar **T-095** 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.

