

# TOW BAR FOR

Mitsubishi Galant (4/5D), (E5) (11/1992 - 12/1996)
Mitsubishi Galant (4/5D), (EA,2/5/6W) (1997 - 2004)
FITTING AND OPERATION MANUAL

Cat. No.M-318

## **DESTINATION**

Tow bar **M-318** 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 M-318 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  $(M_0)$ . Torque values are given below:

| M8  | - | 25 | (Nm) | M12 | - | 85  | (Nm) |
|-----|---|----|------|-----|---|-----|------|
| M10 | - | 50 | (Nm) | M16 | - | 200 | (Nm) |

#### **OPERATION CONDITIONS**

The tow bar M-318 has a rating plate describing correct and safe loads of the hook:

| <b>D</b> = 9,02 kN<br><b>S</b> = 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 |
|--|---|
| <b>R</b> = 1800 kg                     | Max permissible load of towing trailer  |

# 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 **M-318** is made up of the following elements:

| 1. Towbar mainframe 2. Tow ball (ACS-6001) 3. Tow ball socket (ACS) 4. Electrical socket 5. Special washer Ø35/Ø10,5x3 6. Bolt M10x35 | - 1 piece<br>- 1 piece<br>- 1 piece<br>- 1 piece<br>- 4 pieces<br>- 8 pieces | 8. Bolt M12x30 9. Spring washer Ø10,2 10. Spring washer Ø12,2 11. Round washer Ø10,5 12. Round washer Ø13,0 | <ul><li>1 piece</li><li>8 pieces</li><li>4 pieces</li><li>4 pieces</li><li>4 pieces</li></ul> |
|---|--|---|---|
| 6. Bolt M10x35<br>7. Bolt M12x25  | - 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 and the heat shield.
- 3. If necessary remove the plugs from the mounting holes.

- 4. Slide the towbar mainframe (1) into internal part of the stringers and screw loosely in factory holes using bolts M10x35 (6) with spring washers Ø10,2 (9), round washers Ø10,5 (11) and washers Ø35xØ10,5x3 (5).
- 5. Attach the tow ball socket (3) and electrical plate (4) to the towbar mainframe (1) using bolts M12x30 (8)-1 pc. and M12x25 (7)-3 pcs. with round washers Ø13,0 (12), spring washers Ø12,2 (10).
- 6. Make an undercut in the bumper according to the fig.1.
- 7. Instal the rear bumper and the heat shield.
- 8. 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.

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

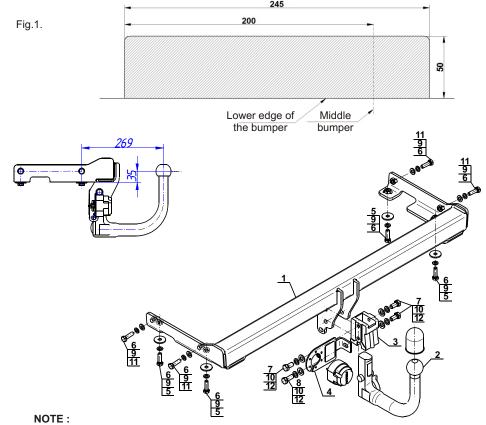
Obeying this instruction assures correct montage and the M-318 tow bar operating.

After assembling of the tow bar M-318 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:**



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