

TOW BAR FOR Mitsubishi Lancer (4D) (12/2007 - 2012)/ (2012 -) Mitsubishi Lancer (Sportback) (2008 - 2012) FITTING AND OPERATION MANUAL

Cat. No.M-342

DESTINATION

Tow bar **M-342** 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-342** 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 **M-342** has a rating plate describing correct and safe loads of the hook:

Typ: M-342	Tow bar catalogue number.
A50-X	Tow bar class (compressing device)
E20 55R-01 4028	Tow bar certification of approval number
D = 8,4 kN	Theoretical related force working on a ball hook
S = 75 kg	Max permissible vertical load of the hook ball
R = 1400 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 **M-342** is made up of the following elements :

1. Towbar mainframe	- 1 piece	11. Bolt M10x1,25x40	- 4 pieces
2. Tow ball	- 1 piece	12. Bolt M10x100	- 4 pieces
3. Electrical socket	- 1 piece	13. Bolt M12x35	- 4 pieces
4. Right support	- 1 piece	14. Bolt M12x65	- 2 pieces
5. Left support	- 1 piece	15. Spring washer Ø10,2	-12 pieces
6. Flat bar	- 1 piece	16. Spring washer Ø12,2	- 6 pieces
7. Angle bar	- 2 pieces	17. Round washer Ø13,0	- 6 pieces
8. Holder	- 2 pieces	18. Nut M10	- 4 pieces
9. Special washer Ø30/Ø10,5x3	-16 pieces	19. Nut M12	- 6 pieces
10. Bolt M10x1,25x35	- 4 pieces		

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

1. Installation does not require cutting of the rear bumper of the car nor its removal.

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2. Remove the bottom part of the bumper
3. Attach the right support (4) with flat bar (6) to the right stringers and screw loosely in the points A using bolts M10x1,25x40 (11) with spring washers Ø10,2 (15), special washers Ø30/Ø10,5x3 (9).
4. Attach holder (8) and angle bar (7) to the right chassis and right support (4), screw loosely from the bottom using bolts M10x1,25x40 (11) with spring washers Ø10,2 (15), special washers Ø30/Ø10,5x3 (9) and screw loosely using bolts M10x100 (12) with spring washers Ø10,2 (15), special washers Ø30/Ø10,5x3 (9) and nuts M10 (18).
5. Attach the left support (5) to the left stringers and screw loosely in the points B using bolt M10x1,25x40 (10) with spring washer Ø10,2 (15) and special washer Ø30/Ø10,5x3 (9).
6. Attach holder (8) and angle bar (7) to the left chassis and left support (5), screw loosely from the bottom using bolts M10x1,25x35 (10) with spring washers Ø10,2 (15), special washers Ø30/Ø10,5x3 (9) and screw loosely using bolts M10x100 (12) with spring washers Ø10,2 (15), special washers Ø30/Ø10,5x3 (9) and nuts M10 (18).
7. Between supports (4, 5) slide the towbar mainframe (1) and screw using bolts M12x35 (13) with spring washers Ø12,2 (16) with round washers Ø13,0 (17) and nuts M12 (19).
8. Tighten all screws.
9. Install the lower part of the bumper.
10. Attach the tow ball (2) and electrical plate (3) to the towbar mainframe (1) using bolts M12x65 (14) with spring washers Ø12,2 (16), round washers Ø13,0 (17), and nuts M12 (19).

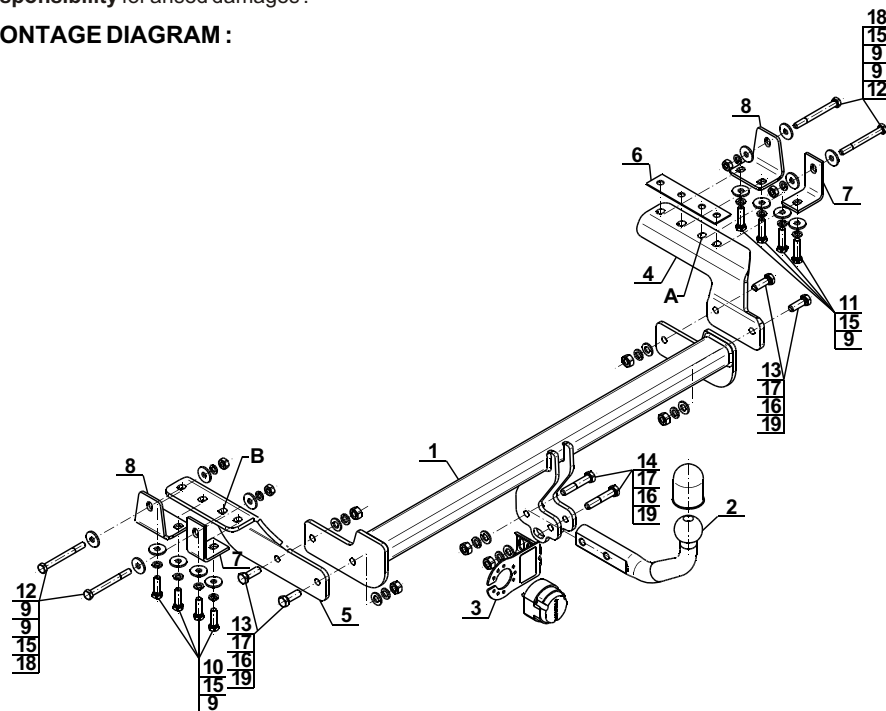
Obeying this instruction assures correct montage and the M-342 tow bar operating.

After assembling of the tow bar **M-342** 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).

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