

# TOW BAR FOR Suzuki Splash (only 1,2) (2008 - ) Opel Agila (only 1,2) (04/2008 - ) FITTING AND OPERATION MANUAL

Cat. No.S-375

## DESTINATION

Tow bar **S-375** 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 **S-375** 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 **S-375** has a rating plate describing correct and safe loads of the hook:

Typ: <b>S-375</b>	Tow bar catalogue number.
<b>A50-X</b>	Tow bar class (compressing device)
<b>E20 55R-01 3099</b>	Tow bar certification of approval number
<b>D = 4,3 kN</b>	Theoretical related force working on a ball hook
<b>S = 50 kg</b>	Max permissible vertical load of the hook ball
<b>R = 600 kg</b>	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/s<sup>2</sup>)

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 **S-375** is made up of the following elements:

- |                                   |            |                         |            |
|-----------------------------------|------------|-------------------------|------------|
| 1. Towbar mainframe               | - 1 piece  | 9. Screw M10x30         | - 8 pieces |
| 2. Tow ball (ACS-2031)            | - 1 piece  | 10. Screw M10x90        | - 2 pieces |
| 3. Tow ball socket (ACS)          | - 1 piece  | 11. Screw M12x25        | - 4 pieces |
| 4. Plate                          | - 1 piece  | 12. Spring washer Ø10,2 | -10 pieces |
| 5. Angle bar                      | - 1 piece  | 13. Spring washer Ø12,2 | - 4 pieces |
| 6. Electrical socket plate        | - 1 piece  | 14. Flat washer Ø10,5   | - 8 pieces |
| 7. Distance sleeve Ø17,3xØ12,5x52 | - 2 pieces | 15. Flat washer Ø13,0   | - 4 pieces |
| 8. Special washer Ø30xØ10,5x3     | - 4 pieces | 16. Nut M10             | -10 pieces |

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

1. Rear bumper cutting and removing is required.
2. Remove the rear and side panels from trunk then loose the rear wheel arch cover.

3. Remove the plastic caps from the bottom of the bumper.
  4. Leave the last silencer from the holder, remove the thermal shield then loose the holder of the fuel lines from the bottom of left stringer.
  5. Find the A,B,C,D hollows from the trunk side and drill using Ø11. Enlarge the A,B holes from trunk side to the dimension Ø18 mm through one wall.
  6. From the bottom of chassis at the A point drill the hole Ø11 as shown on Fig. 1.
  7. From trunk side in drilled holes A,B put the distance sleeves (7) then put the plate (4) and angle bar (5).
  8. From trunk side drill the holes E,F,G,H using the drill Ø11.
  9. Attach the towbar mainframe (1) from the bottom and screw on using bolts M10x90 (10) with round washers Ø10,5 (14), spring washers Ø10,2 (12) and nuts M10 (16) then screw on using bolts M10x30 (9) with washers Ø30/Ø10,5x3 (8), spring washers Ø10,2 (12) and nuts M10 (16).
  10. Drill holes I and J using Ø11mm drill then screw on using bolts M10x30 (9) with washers Ø30/Ø10,5x3 (8), spring washers Ø10,2 (12) and nuts M10 (16).
- Note: During the drilling be careful not to damage the fuel lines.**
11. Perform the undercut in the rear panel (Fig. 1) and thermal shield (Fig. 3).
  12. Install again the elements listed in points 2, 3, 4.
  13. To the towbar mainframe (1) attach tow ball socket (3) and electrical plate (6) using bolts M12x25 (11) with spring washers Ø12,2 (13) and flat washers Ø13,0 (15).
  14. Attach the tow ball (2) to the socket (3) according to the scheme.

## 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

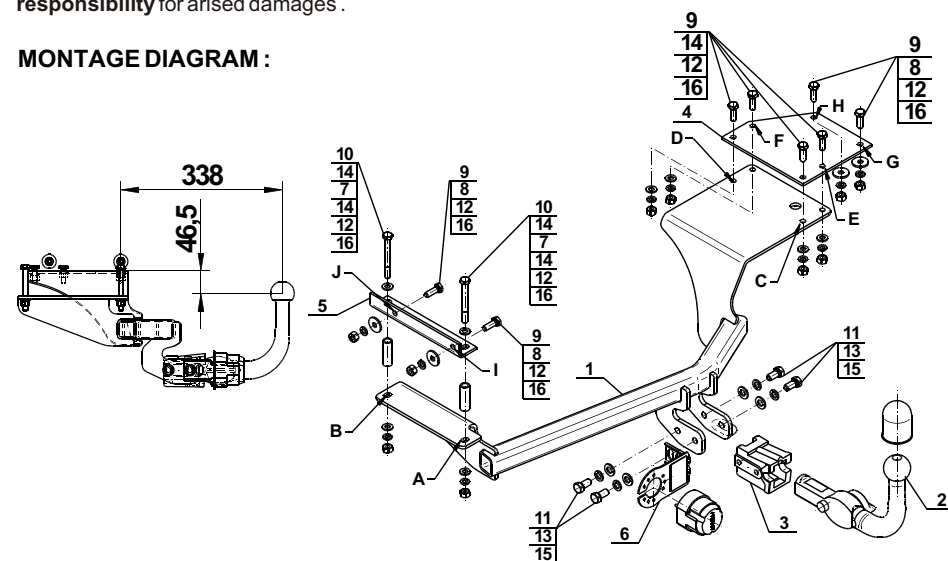
**Obeying this instruction assures correct montage and the S-375 tow bar operating.**

After assembling of the tow bar **S-375** 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 :

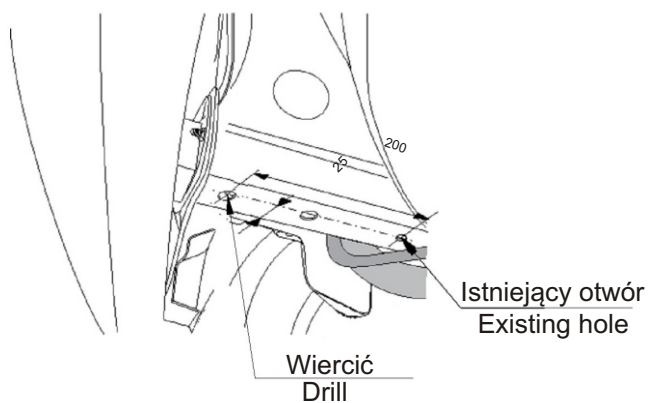
Bunch of wires is not included (in total price).

## S-375

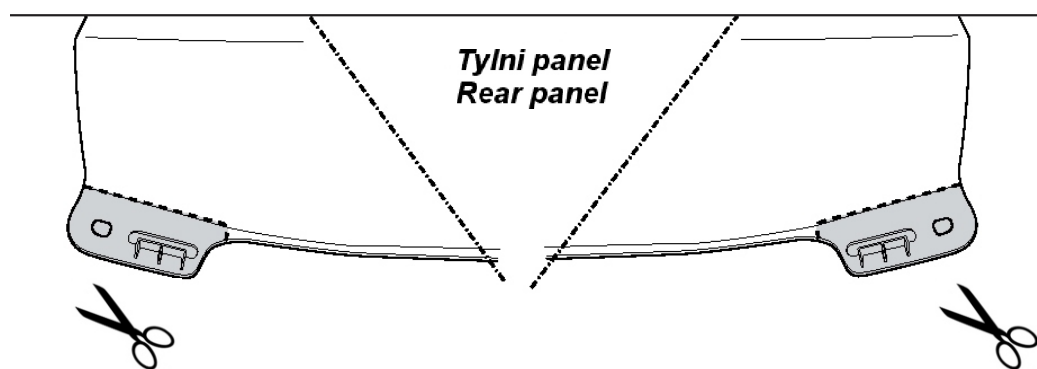
Suzuki Splash (2008 - )

Opel Agila (04/2008 - )

Rys.1.  
Fig.1.



Rys.2.  
Fig.2.



Rys.3.  
Fig.3.

