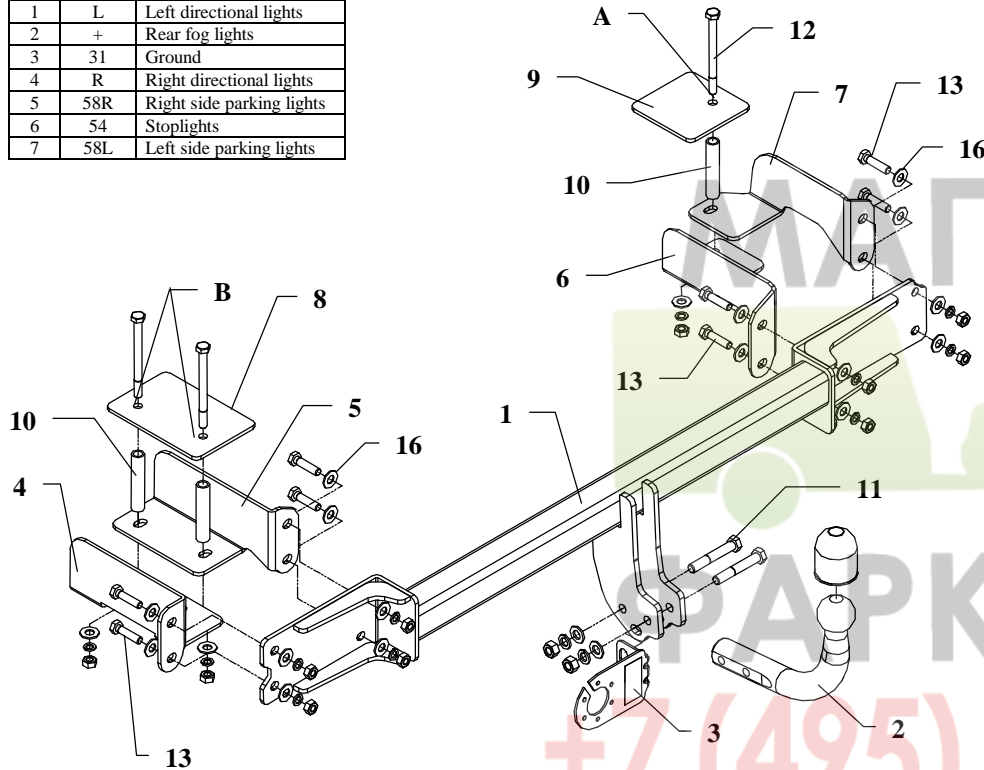


## FITTING INSTRUCTION

Clamp mark in acc. with		Cables joining
ISO	PN	
1	L	Left directional lights
2	+	Rear fog lights
3	31	Ground
4	R	Right directional lights
5	58R	Right side parking lights
6	54	Stoplights
7	58L	Left side parking lights



This towing hitch is designed to assembly in following car: **OPEL MERIVA** produced since 2003 till 2010, catalogue number **E42** and is prepared to tow trailers max total weight **1250 kg** and max vertical load **50 kg**.

### From manufacturer

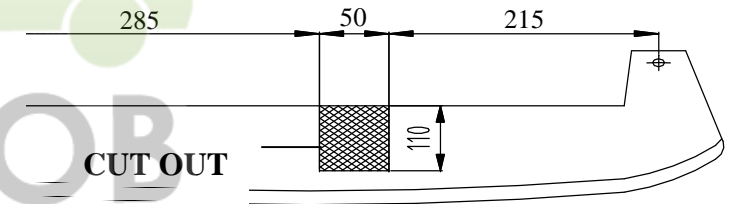
Thank you for buying our product. Their reliability has been confirmed in many tests. Reliability of towing hitch depends also on correct assembly and right operation. For this reasons we kindly ask to read carefully this instruction and apply to hints.

*The towing hitch should be install in points described by a car producer.*

## The instruction of the assembly

1. Disassemble the bumper and metal fulfilment (not used any more).
2. Remove side nets and fitted carpet from the trunk.
3. To rear piece put bar of the towing hitch (pos. 1) - towing hitch holes according to original holes, side brackets (pos. 4, 5, 6, 7) put to the chassis members and rear piece of the car. Fix all using bolts M10x40mm (pos. 13). See fig. 1. All elements fix loosely.
4. In the trunk are factory marked points (on the right side one-pos. A and on the left side two-pos. B), drill this points using bit  $\varnothing 17$  mm, and next:
  - put distance sleeves L=85mm (pos. 10),
  - put suitable fish-plates 8 and 9,
  - insert bolts M10x120mm (pos. 12),
  - join with elements 4, 5, 6, 7.
5. Fix all bolts according to the torque shown in the table..
6. Cut out a fragment of the bumper (fig. 2) and mount it.

Fig. 2



7. Fix tow ball (pos. 2) and socket plate (pos. 3) using bolts M12x75mm (pos. 11) from accessories.
8. Connect electric wires according to the instruction of the car. (Recommend to make at authorized service station)
9. Supplement the paint coating damaged during assembly.

Torque settings for nuts and bolts (8,8):

<b>M 8</b>	25 Nm	<b>M 10</b>	55 Nm
<b>M 12</b>	85 Nm	<b>M 14</b>	135 Nm

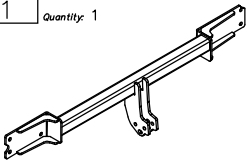
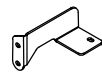
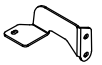




### NOTE

After install the towing hitch you should get adequate registration in registration book (at authorised service station).The car should be equipment with:

- Indicators
- Tow mirrors

After 1000km of exploitation check all bolts and nuts. The ball of towing hitch must be always keep clear and conserve with a grease.

## Towing hitch accessories:

Pos. 1 Name: Main bar Quantity: 1	Pos. 6 Name: Right bracket A Quantity: 1	Pos. 12 Name: Bolt 8,8 B Quantity: 3 Dim.: M10x120mm	Pos. 18 Name: Spring washer Quantity: 2 Dim.: $\phi$ 12,2 mm
	Pos. 7 Name: Right bracket B Quantity: 1	Pos. 13 Name: Bolt 8,8 B Quantity: 8 Dim.: M10x40mm	Pos. 19 Name: Spring washer Quantity: 11 Dim.: $\phi$ 10,2 mm
	Pos. 8 Name: Left fish-plate Quantity: 1	Pos. 14 Name: Nut 8 B Quantity: 2 Dim.: M12	Pos. 20 Name: Ball cover Quantity: 1
	Pos. 9 Name: Right fish-plate Quantity: 1	Pos. 15 Name: Nut 8 B Quantity: 11 Dim.: M10	
Pos. 2 Name: Tow ball Quantity: 1	Pos. 10 Name: Distance sleeve Quantity: 3 Dim.: $\phi$ 17,3x2,35mm L=85mm	Pos. 16 Name: Washer Quantity: 19 Dim.: $\phi$ 25x $\phi$ 12x2mm	
	Pos. 4 Name: Left bracket A Quantity: 1	Pos. 17 Name: Plain washer Quantity: 2 Dim.: $\phi$ 13 mm	
Pos. 3 Name: Socket plate Quantity: 1	Pos. 5 Name: Left bracket B Quantity: 1		
	Pos. 11 Name: Bolt 8,8 B Quantity: 2 Dim.: M12x75mm		
			
Pos. 1 Name: Left bracket B Quantity: 1			



**PPUH AUTO-HAK S.J.**

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www. autohak.com.pl

## Towing hitch (without electrical set)

Class: **A50-X** Cat. no. **E42**

Designed for:

Manufacturer: **OPEL**

Model: **MERIVA**

produced since 2003 till 2010

Technical data:

**D-value: 7,6 kN**

maximum trailer weight: **1250 kg**

maximum vertical cup load: **50 kg**

Approval number acc. to regulations EKG/ONZ 55.01: **E20-55R-01 1057**

## Foreword

This towing hitch is designed according to rules of safety traffic regulations. The towing hitch is a safety component and can be install only by qualified personnel. Any alteration or conversion of the towing hitch is prohibited and would lead to cancellation of design certification. Remove insulating compound and underseal from vehicle (if present) in the area of the matting surfaces of the towing hitch.

The vehicle manufacturer's specifications regarding trailer load and max. vertical cup load are decisive for driving whereat values for the towing hitch cannot be exceeded.

*D-value formula:*

$$\frac{\text{Max trailer weight [kg]} \times \text{Max vehicle weight [kg]}}{\text{Max trailer weight [kg]} + \text{Max vehicle weight [kg]}} \times \frac{9,81}{1000} = D \text{ [kN]}$$