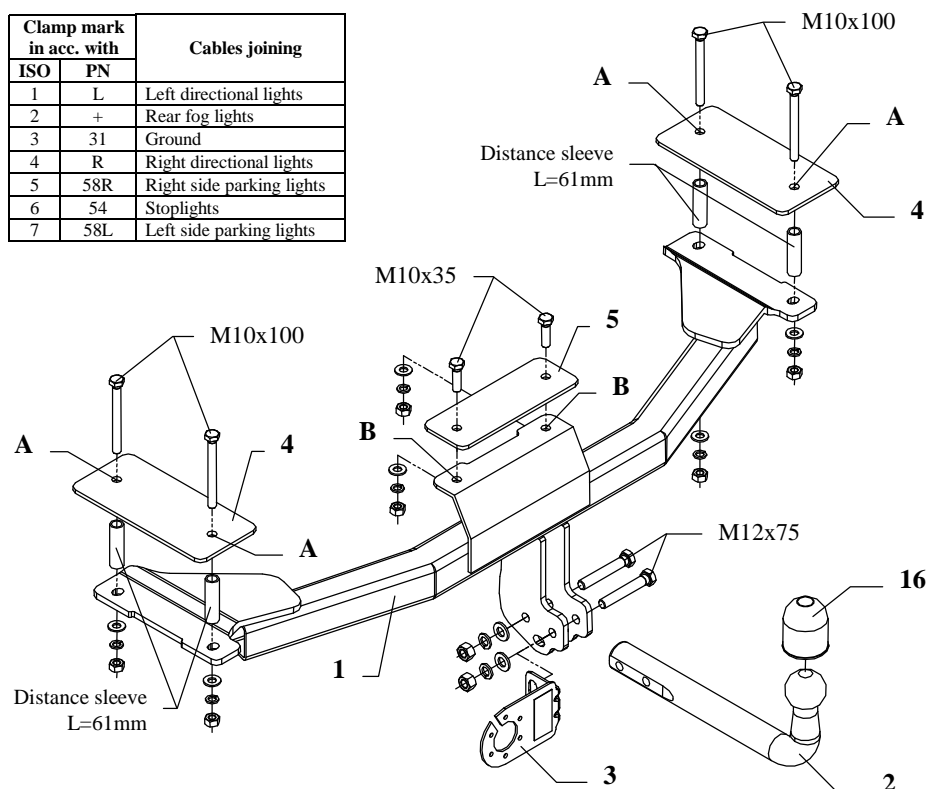


## FITTING INSTRUCTION

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 towbar is designed to assembly in following cars:  
**OPEL COMBO 'B', delivery van**, produced since 1994 till 08.1995,  
 catalogue no. **E24** and is prepared to tow trailers max total weight **1200 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 towbar depends also on correct assembly and right operation. For this reasons we kindly ask to read carefully this instruction and apply to hints.

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

## The instruction of the assembly

1. Remove the spare wheel and take out the facing from the trunk-space of the car.
2. Find for three clearly noted points from the right and left side of the trunk and then in extreme points make for two holes with the bit  $\varnothing 13\text{mm}$ .
3. Holes which are made in trunk (in the head of chassis members) drill with the bit  $\varnothing 17\text{mm}$ .
4. Put distance sleeves (pos. 6) into made holes (pos. A) and apply fish-plates (pos. 4) and bolts M10x100mm (pos. 8).
5. Apply the main bar of the towbar (pos. 1) from the bottom of the car on protruding bolts and fix.
6. Through holes of the towbar (pos. B) drill  $\varnothing 11\text{mm}$ , then fix through fish-plate (pos. 5) using bolts M10x35mm (pos. 9).
7. Fix tow-ball (pos. 2) and socket plate (pos. 3) by bolts M12x75mm (pos. 7) from accessories.
8. Tighten all bolts according to the torque shown in the table.
9. Connect electric wires of 7-poles socket according to the instruction of the car. (Recommend to make at authorized service station).
10. Complete paint layer damaged during installation.

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

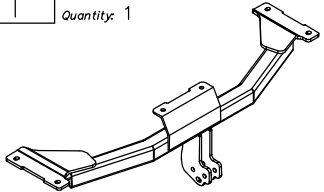
### NOTE

After install the towbar you should get adequate note in registration book (at authorised service station).The car should be equipped with:

- Indicators
- Tow mirrors

After 1000km check all bolts and nuts. The ball of towbar must be always kept clear and conserve with a grease.

## Towbar accessories:

Pos. 1	Name: Main bar Quantity: 1	Pos. 5	Name: Fish-plate Quantity: 1 Dim. : 200x70x5mm	Pos. 11	Name: Nut 8 B Quantity: 6 Dim. : M10
		Pos. 6	Name: Distance sleeve Quantity: 4 Dim. : Ø17.2x2.35mm L=61mm	Pos. 12	Name: Plain washer Quantity: 2 Dim. : Ø 13 mm
Pos. 2	Name: Tow ball Quantity: 1	Pos. 7	Name: Bolt 8,8 B Quantity: 2 Dim. : M12x75mm	Pos. 13	Name: Plain washer Quantity: 6 Dim. : Ø 10,5 mm
Pos. 3	Name: Socket plate Quantity: 1	Pos. 8	Name: Bolt 8,8 B Quantity: 4 Dim. : M10x100mm	Pos. 14	Name: Spring washer Quantity: 2 Dim. : Ø 12,2 mm
Pos. 4	Name: Plate Quantity: 2 Dim. : 220x100x5mm	Pos. 9	Name: Bolt 8,8 B Quantity: 2 Dim. : M10x35mm	Pos. 15	Name: Spring washer Quantity: 6 Dim. : Ø 10,2 mm
		Pos. 10	Name: Nut 8 B Quantity: 2 Dim. : M12	Pos. 16	Name: Ball cover Quantity: 1



## PPUH AUTO-HAK S.J.

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[www.autohak.com.pl](http://www.autohak.com.pl)

## Towing hitch (without electrical set)

Class: **A50-X** Cat. no. **E24**

Designed for:

Manufacturer: **OPEL**

Model: **COMBO 'B'**

Type: **delivery van**

produced since 1994 till 08.1995

Technical data:

**D-value: 7,1 kN**

maximum trailer weight: **1200 kg**

maximum vertical cup load: **50 kg**

**Approval number acc. to regulations EKG/ONZ 55.01:**

## Foreword

This towbar 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:*

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