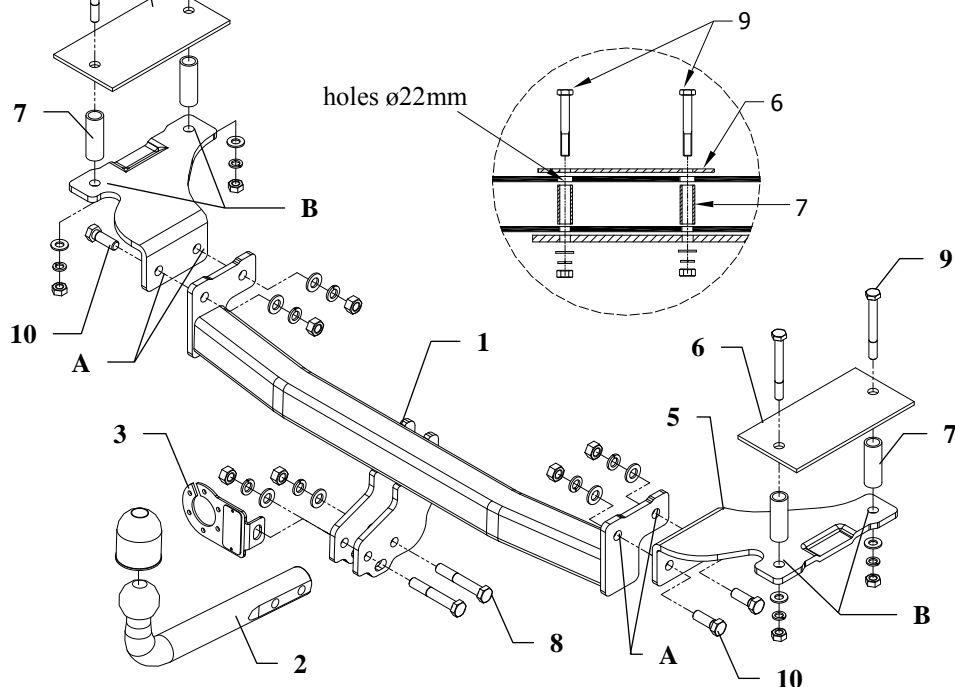


FITTING INSTRUCTION

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 COMBO (B), passenger car, delivery truck, produced since 08.1995 till 02.2002, catalogue number **E20** 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 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. To install this towing hitch disassemble the spare wheel and take out the floor finish.
2. On the left and right side of the trunk find per three original marked points, next drill per two outmost holes on each side using bit $\phi 11\text{mm}$ (through chassis members also).
3. Using bit $\phi 22\text{mm}$ enlarge holes only from trunk side (in upper part of chassis members).
4. To made holes (pos. B) put distance sleeves (pos. 7) and put fish-plates (pos. 6) and insert bolts M10x90mm (pos. 9).
5. Underneath the car on protruding bolts put side brackets (pos. 4 and 5) and fix loosely.
6. Between installed brackets put main bar of the towing hitch (pos. 1) and fix by holes (pos. A) using bolts M12x35mm (pos. 10) from towing hitch accessories.
7. Fix tow-ball (pos. 2) and socket plate (pos. 3) by bolts M12x75mm (pos. 4) from accessories.
8. Fix tight 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):	
M 8 - 25 Nm	M 10 - 55 Nm
M 12 - 85 Nm	M 14 - 135 Nm

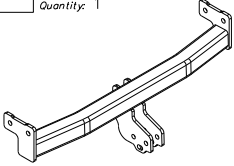


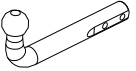
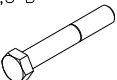

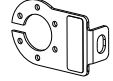
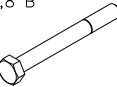




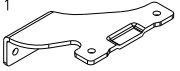


NOTE

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

- Indicators
- Tow mirrors

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

Towing hitch accessories:

Pos. 1	Name: Main bar Quantity: 1	Pos. 6	Name: Fish-plate Quantity: 2	Pos. 12	Name: Nut 8 B Quantity: 4 Dim.: M10
		Pos. 7	Name: Distance sleeve Quantity: 4 Dim.: Ø21.3x2,65mm L=60mm	Pos. 13	Name: Plain washer Quantity: 6 Dim.: Ø 13 mm
					
Pos. 2	Name: Tow ball Quantity: 1	Pos. 8	Name: Bolt 8,8 B Quantity: 2 Dim.: M12x75mm	Pos. 14	Name: Plain washer Quantity: 4 Dim.: Ø 10,5 mm
					
Pos. 3	Name: Socket plate Quantity: 1	Pos. 9	Name: Bolt 8,8 B Quantity: 4 Dim.: M10x90mm	Pos. 15	Name: Spring washer Quantity: 6 Dim.: Ø 12,2 mm
					
Pos. 4	Name: Left bracket Quantity: 1	Pos. 10	Name: Bolt 8,8 B Quantity: 4 Dim.: M12x35	Pos. 16	Name: Spring washer Quantity: 4 Dim.: Ø 10,2 mm
					
Pos. 5	Name: Right bracket Quantity: 1	Pos. 11	Name: Nut 8 B Quantity: 6 Dim.: M12	Pos. 17	Name: Ball cover Quantity: 1
					



PPUH AUTO-HAK S.J.

Produkcja Zaczepów Kulowych
Henryk & Zbigniew Nejman
76-200 SŁUPSK ul. Słoneczna 16K
tel/fax (059) 8-414-414; 8-414-413
e-mail: office@autohak.com.pl
www.autohak.com.pl

Towing hitch (without electrical set)

Class: **A50-X** Cat. no. **E20**

Designed for:

Manufacturer: **OPEL**

Model: **COMBO (B)**

Type: **passenger car, delivery truck**

produced since 08.1995 till 02.2002

Technical data:

D-value: 7,49 kN

maximum trailer weight: **1200 kg**

maximum vertical cup load: **50 kg**

Approval number according to Directive 94/20/EC: e20*94/20*0348*00

Foreword

This towing hitch is designed according to rules of safety traffic regulations. The towing hitch is a safety component and can be installed 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 mating surfaces of the towing hitch.

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

D-value formula:

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