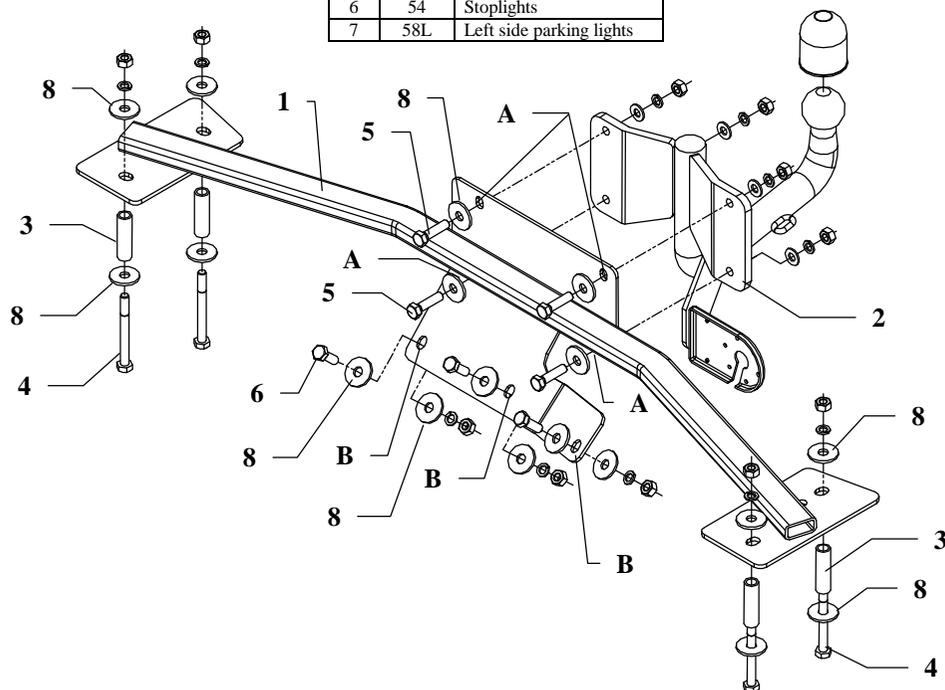


FITTING INSTRUCTION

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 cars:
OPEL ASTRA "A", 3/5 doors, (F), produced since 1991 till 2002,
 catalogue no. **E07** and is prepared to tow trailers max total weight **1500 kg**
 and max vertical load **75 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 our towing hitch disassemble the bumper, from trunk take out a carpet and a spare wheel.
2. Inside the trunk (on the left and right side) find marked points on the left and right side of the floor and then drill per two holes using bit $\varnothing 10,5\text{mm}$. Apply the main bar of the towing hitch (pos. 1) to find this points easier.
3. Put the main bar of the towing hitch (pos. 1) to the trunk and through previously made holes, distance sleeves $L=58\text{mm}$ (pos. 3) and big washers $\varnothing 35 \times \varnothing 12 \times 3\text{mm}$ (pos. 8) fix using bolts $M10 \times 95\text{mm}$ (pos. 4). Distance sleeves put underneath the car into existing holes.
4. From inside of the trunk through holes (pos. A) of main bar (pos. 1) drill holes in the back piece of the car using bit $\varnothing 10,5\text{mm}$
5. Apply the ball unit (pos. 2) to the piece of the car and through previously made holes fix with the main bar of the towing hitch (pos. 1) using bolts $M10 \times 40\text{mm}$ (pos. 5) from accessories.
6. From inside the trunk through holes (pos. B) of main bar (pos. 1) drill holes in the back piece of the car using bit $\varnothing 10,5\text{mm}$ and fix using bolts $M10 \times 30\text{mm}$ (pos. 6).
7. In the cover of the back piece make cosmetic undercuts and then install it.
8. In the central point the bumper cut out by machinery noted place (clear semicircular incision) and then install the bumper to the car.
9. Fix tight all bolts according to the torque shown in the table.
10. Connect electric wires of 7-poles socket according to the instruction of the car. (Recommend to make at authorized service station)
11. 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

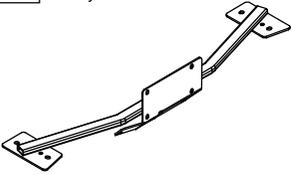
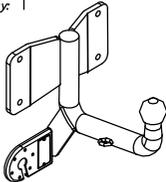
NOTE

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** 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. 4	Name: Bolt 8,8 B Quantity: 4 Dim.: M10x90mm	Pos. 9	Name: Plain washer Quantity: 4 Dim.: ϕ 10,5 mm
	Pos. 5	Name: Bolt 8,8 B Quantity: 4 Dim.: M10x40mm	Pos. 10	Name: Spring washer Quantity: 11 Dim.: ϕ 10,2 mm	
	Pos. 2	Name: Ball unit Quantity: 1	Pos. 6	Name: Bolt 8,8 B Quantity: 3 Dim.: M10x30mm	
	Pos. 7	Name: Nut 8 B Quantity: 11 Dim.: M10			
	Pos. 3	Name: Distance sleeve Quantity: 4 Dim.: ϕ 17x2mm L=58mm			
					



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. **E07**

Designed for:

Manufacturer: **OPEL**

Model: **ASTRA "A"**

Type: **3/5 doors (F)**

produced since 1991 till 2002

Technical data:

D-value: 7,6 kN

maximum trailer weight: **1500 kg**

maximum vertical cup load: **75 kg**

Approval number according to Directive 94/20/EC: **e20*94/20*0288*00**

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:

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