#### FITTING INSTRUCTION

Clamp mark in acc. with		Cables joining	
ISO	PN	Cables Johning	
1	L	Left directional lights	44
2	+	Rear fog lights	11 — 6
3	31	Ground	
4	R	Right directional lights	10 —
5	58R	Right side parking lights	B B
6	54	Stoplights	D —
7	58L	Left side parking lights	
	D -	10	10 10 9 4 10 8 - 5

This towing hitch is designed to assembly in following cars: **OPEL ANTARA** (C105), produced since 11.2006 till 05.2011 and since 06.2011, catalogue number **E51** and is prepared to tow trailers max total weight up to 2000 kg and max vertical mass 80 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 installed in points described by a car producer.

### The instruction of the assembly

- 1. Disassemble muffler and last part of exhaust pipe.
- 2. Disassemble original tow eye (not used any more).
- 3. Underneath a car find original prepared holes in chassis members and fix loosely (through holes A) angle bars (pos. 6 and 7) using bolts M12x40mm (pos. 10).
- 4. To installed elements fix loosely through holes B side brackets (pos. 4 and 5) by bolts M10x30mm (pos. 11). Next side brackets fix to the chassis at points C and D by bolts M12x40mm (pos. 10) as shown on the drawing.
- 5. Between installed side brackets put main bar of the towbar (pos. 1) and fix using bolts M12x40mm (pos. 10) from equipment.
- 6. Fix tow-ball (pos. 2) with socket plate (pos. 3) using bolts M12x75mm (pos. 8) and M12x70mm (pos. 9) from equipment.
- 7. Tighten all bolts according to the torque shown in the table.
- 8. Reassemble muffler together with last part of exhaust pipe.
- 9. Connect electric wires of 7-poles socket according to the instruction of the car. (Recommend to do 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 installation of the towing hitch you should get adequate note in registration book (at authorised service station). The car should be equipped with:

- Indicators
- Tow mirrors

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

### Towing hitch accessories:

Towning inten accessories.							
Pos. Main bar Pcs.:1	Pos. Right angle bar 6	Pos. Plain washer 12 ø13mm					
	Pos. 2 Left angle bar 7 PCS.: 1	Pos. Plain washer 910,5mm					
Pos. Tow ball Pcs.: 1	Pos. Bolt 8,8 B M12x75mm	Pos. Spring washer 14 ø12,2mm					
Pos. 3 Socket plate	Pos. 9 M12x70mm PCS.:1	Pos. Spring washer 910,2mm					
Pos. Right bracket Pcs.: 1	Pos. Bolt 8,8 B M12x40mm	Pos. Nut 8 B 16 M12					
Pos. Left bracket  Pcs.: 1	Pos. Bolt 8,8 B M10x30mm	Pos. 1 Ball cover					



# PPUH AUTO-HAK Sp.J.

Produkcja Zaczepów Kulowych Henryk i 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

maximum trailer weight: 2000 kg

maximum vertical cup mass: 80 kg

Technical data: **D**-value: **11,0 kN** 

## **Towing hitch (without electrical set)**

Class: **A50-X** Cat. no. **E51** 

Designed for:

Manufacturer: OPEL Model: ANTARA

Type: (C105)

produced since 11.2006 till 05.2011

and since 06.2011

Approval number according to Directive 94/20/EC: e20\*94/20\*0523\*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 areas of the matting surfaces of the towing hitch. The vehicle manufacturer's specifications regarding trailer load and max. vertical cup mass are decisive for driving whereat values for the towing hitch cannot be exceeded.

*D-value formula:* 

Max trailer weight [kg] x Max vehicle weight [kg] 
$$\times Max$$
 vehicle weight [kg]  $\times Max$  vehicle weight [kg]  $\times Max$