#### FITTING INSTRUCTION

Clamp mark in acc. with		Cables joining 13	
ISO	PN		
1	L	Left directional lights	<b>D</b> —
2	+	Rear fog lights	
3	31	Ground	
4	R	Right directional lights	6 _ 4
5	58R	Right side parking lights	6 — •
6	54	Stoplights	
7 12	58L	Left side parking lights	18 - 9 - 18
c –		12	13
7 -		8	
18 — F	Fig. 1	A	

This towing hitch is designed to assembly in following cars: CHEVROLET AVEO, 3/5 doors, produced since 2008, catalogue no. X22 and is prepared to tow trailers max total weight 1200 kg and max vertical mass 50 kg.

Torque settings for nuts and bolts (8,8):				
<b>M6</b> - 11 Nm	<b>M 8 -</b> 25 Nm	<b>M 10 -</b> 50 Nm		
<b>M 12 -</b> 87 Nm	<b>M 14 -</b> 138 Nm	<b>M16</b> - 210 Nm		

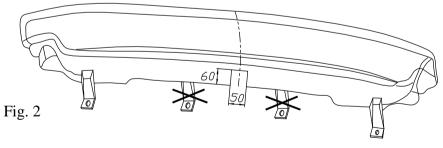
## From manufacturer

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 rear lights unit and bumper. Cut out handles of the bumper and saw off fragment in its axis according to figure 2.
- 2. Inside boot disassemble back panel. Loosen side panels and move them to the center.
- 3. Underneath a car disassemble a canister.
- 4. Underneath the car drill holes A and B into boot using bit ø11mm. Inside boot apply fish-plates (pos. 4 and 5). Mark holes C and D. Remove fish-plates and drill marked points C and D by bit ø11mm.
- 5. Enlarge holes A, C and D to a diameter ø18mm (only inside boot).
- 6. Enlarge hole B to a diameter ø25mm (only inside boot).
- 7. Into drilled holes put suitable distance sleeves (pos. 6, 7, 8 and 9) as shown in the drawing.
- 8. Inside boot apply fish-plates (pos. 4 and 5). Put in bolts M10x110mm (pos. 12) and M10x100mm (pos. 13).
- 9. Underneath the car, on protruding bolts apply main bar of the towbar (pos. 1) and fix as shown in the drawing.
- 10. Reassemble elements dissasembled at point 1-3.
- 11. Fix tow ball (pos. 2) using bolt M12x75mm (pos. 10) and M12x70mm (pos. 11). With bolt M12x75mm fix also a socket plate (pos. 3). See figure 1.
- 12. Tighten all bolts according to the torque shown in the table.
- 13.Connect electric wires of 7-poles socket according to the instruction of the car. (Recommend to make at authorized service station).
- 14. Complete paint layer damaged during installation.



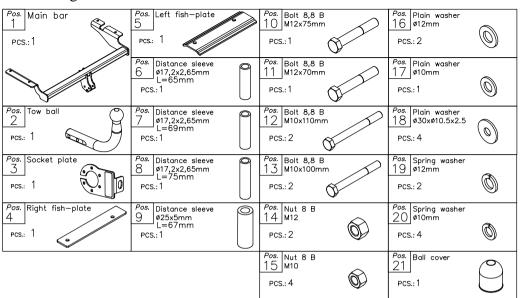
#### **NOTE**

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:





#### 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. X22

Designed for:

Manufacturer: CHEVROLET

Model: **AVEO**Type: **3/5 doors**produced since 2008

Technical data: **D**-value: **6,6 kN** 

maximum trailer weight: 1200 kg maximum vertical cup mass: 50 kg

Approval number according to Directive 94/20/EC: <u>e20\*94/20\*0766\*00</u>

#### **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 mass and max. vertical cup mass are decisive for driving whereat values for the towing hitch cannot be exceeded.

*D-value formula:* 

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