## Towing hitch accessories:

Pos.	Name: Main bar Quantity: 1	Pos. 5 Dim. :	Name: Right bracket Quantity: 1 361x168x110mm		Name: Bolt 8,8 B Quantity: 2 M10x110mm	//	Pos. 15 Dim. :	Name: Plain washe Quantity: 4 Ø 13 mm	er O
[**		Pos. 6 Dim. :	Nama:Fish-plate of the bracket Quantity: 2 141x95x6mm	11	Name: Bolt 8,8 B Quantitie 4 M12x35mm	$\wedge$	Pos. 16 Dim. :	Name: Plain washe Quantity: 10 Ø 10,5 mm	er ()
Pos. 2	Name: Tow ball Quantity: 1	Pos. 7 Dim. :	Nama:Fish-plate of the bracket Quantity: 2 125x60x6mm	12	Name: Bolt 8,8 B Quantitie 8 M10x35mm	$\sim$ $\lfloor$	Pos. 17 Dim. :	Name: Spring wash Quantity: 4 Ø 12,2 mm	ner 💍
Pos. 3	Name: Socket plate Quantity: 1	Pos. 8 Dim. :	Name:Fish-plate of the bracket Quantity: 2 100x35x6mm	Pos. 13 Dim. :	Name: Nut 8 B Quantity: 2 M12	$\overline{}$	Pos. 18 Dim. :	Name: Spring wash Quantity: 10 Ø 10,2 mm	ner 🖔
Pos. 4 Dim. :	Name: Left bracket Quantity: 1 361x168x110mm	Pos. 9 Dim. : L=70	Name: Distance sleeve Quantity: 2 Ø21.3x2.65mm,	Pos. 14 Dim. :	Name: Nut 8 B Quantity: 10 M10		19	Name: Ball cover Quantity: 1	0



## 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. L12A

Designed for:

Manufacturer: **VOLVO** 

Model: **460**Type: **4 door** 

produced since 08.1988 till 07.1993 and since 08.1993 till 07.1996

Technical data: **D**-value: **6,76 kN** 

maximum trailer weight: **1200 kg** maximum vertical cup load: **75 kg** 

Approval number according to Directive 94/20/EC: : e20\*94/20\*0558\*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, and values for the towing hitch cannot be exceeded.

 $D ext{-}value\ formula:$ 

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

#### FITTING INSTRUCTION

			1						
Clamp mark			<b>_ 10</b>						
	in acc. with Cables joining		√ 10 <u> </u>						
ISO	PN								
1	L	Left directional lights	$\mathbf{A} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$						
2	+	Rear fog lights	\						
3	31	Ground							
4	R	Right directional lights	7 _ /   - / - / - / - / - / - / - / - / - /						
5	58R	Right side parking lights							
6	54	Stoplights							
7	58L	Left side parking lights							
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This towing hitch is designed to assembly in following cars: **VOLVO 460, 4 door**, produced since 08.1988 till 07.1993 and produced since 08.1993 till 07.1996, catalogue no. **L12A** and is prepared to tow trailers max total weight **1200 kg** and max vertical load **75 kg**.

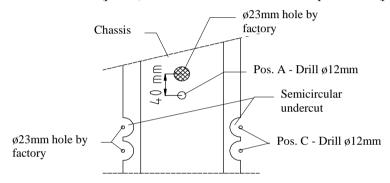
# From manufacturer

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. From the left and right side of the car drill to inside the carrier, holes to \$\phi12\text{mm}\$ (pos. A), and then from inside the carrier bore to \$\phi22\text{mm}\$.
- 2. Mark on the sides the points, and then drill to inside the carrier the holes (pos. B and C).
- 3. Inside the holes (pos. A) from the carrier put the distance sleeves L=70mm (pos. 9) and apply two fish-plates (pos. 7).
- 4. Apply from the carrier two "U" fish-plates (pos. 6) on the holes (pos. B and C).
- 5. From the inside the chassis on the left and right side, apply the brackets (pos. 4 and 5) and twist across the holes (pos. C) with bolts M10x35mm (pos. 12) and by holes (pos. A) with bolts M10x110mm (pos. 10).
- 6. From the inside the chassis on the left and right side apply the side fish-plates (pos. 8) and twist across the holes (pos. B) with bolts M10x35mm and fish-plates "U" (pos. 6).



- 7. Between the mounted brackets (pos. 4 and 5) apply the main bar of the towing hitch (pos. 1) and twist with bolts M12x35mm (pos. 11) from the accessories.
- 8. Fix body of the automat and place tow-ball according to supplied instruction. Note! Remember to place socket plate (pos. 3) as shown on the drawing 1.
- 9. Tighten 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):
<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 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.