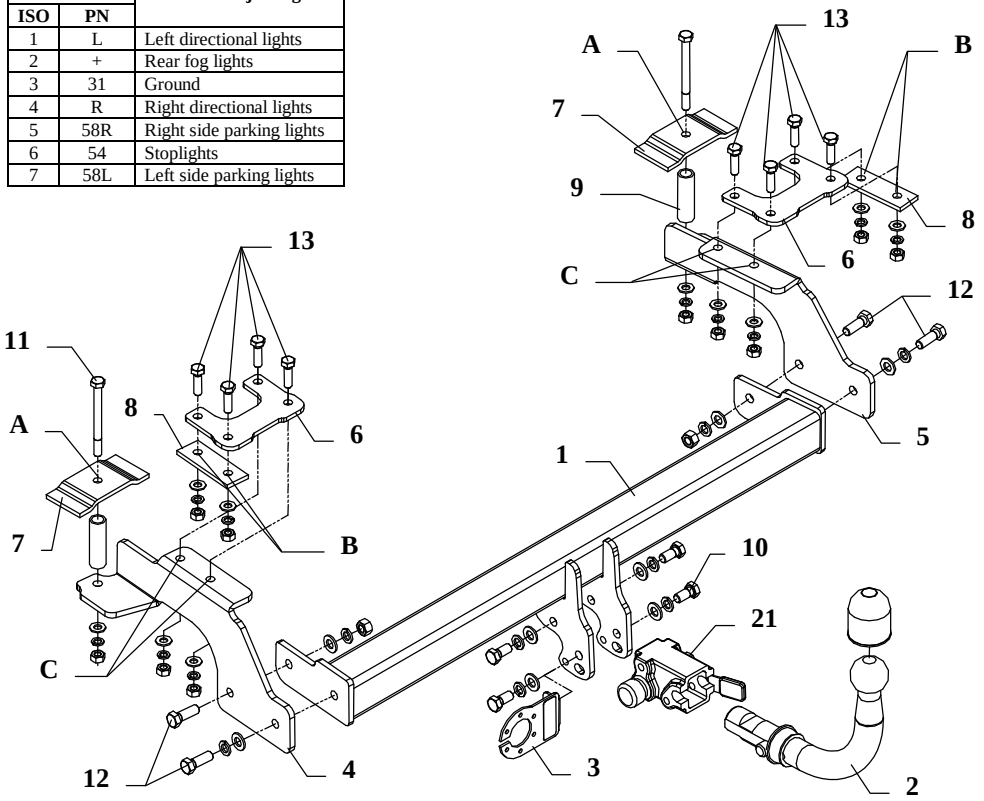
FITTING INSTRUCTION

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: **VOLVO 460, 4 door**, produced since 1988 till 08.1993 and produced since 09.1993 till 1997, catalogue no. **L12A** and is prepared to tow trailers max total weight **1200 kg** and max vertical load **75 kg**.

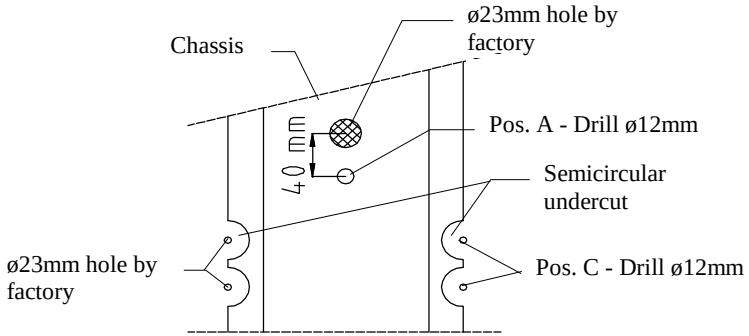
From manufacturer

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 ø12mm (pos. A), and then from inside the carrier bore to ø22mm.
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. 13) and by holes (pos. A) with bolts M10x110mm (pos. 11).
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. 12) from the accessories.
8. To the installed towing hitch fix body of the automat (pos. 21) and the socket plate (pos. 3) using bolts M12x25mm (pos. 10) from accessories. Place tow-ball (pos. 2) according to supplied instruction.
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):	
M 8 - 25 Nm	**M 10 -** 55 Nm
M 12 - 85 Nm	**M 14 -** 135 Nm

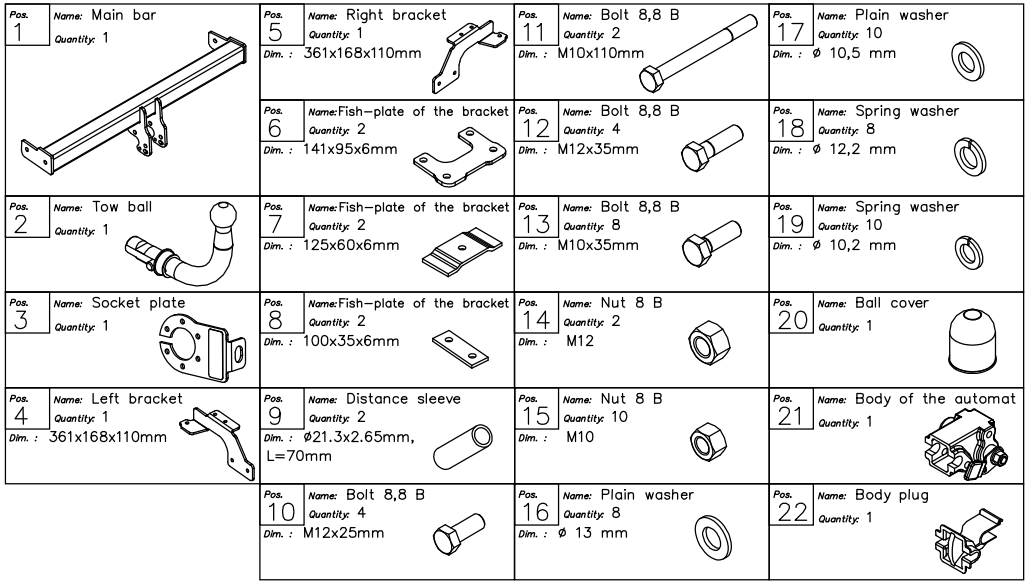
NOTE

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:



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 1988 till 08.1993
and since 09.1993 till 1997

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-value formula:

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