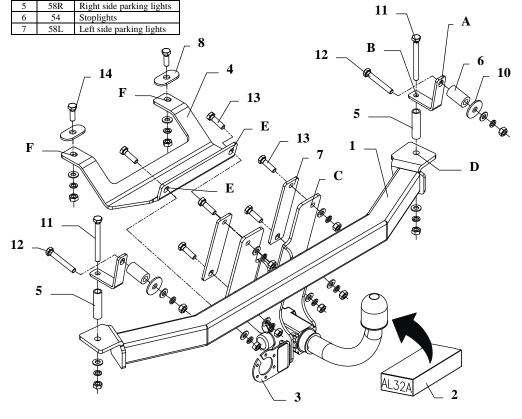
Clamp mark in acc. with Cables joining Left directional lights Ground Right directional lights

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ITTING INSTRUCTION



This towing hitch is designed to assembly in following car: ALFA ROMEO 146, 5 doors, produced since 1995 till 2001, catalogue no. AL32A and is prepared to tow trailers max total weight 1300 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 correct exploitation. 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 a spare wheel, carpet, rear panel cover and side carpets.
- 2. In rear panel (inside), under sound proof layer are four factory marked points. Find them and drill holes ø10,5 mm.
- 3. From below the car (in left and right chassis member) are holes ø18 mm. Through this holes drill another holes to trunk interior using bit ø10,5 mm (make very carefully).
- To made holes put angle fish-plates (pos. 9), and next through hole (pos. A) in angle fish-plate (pos. 9) mark point on rear panel. In this point drill hole ø25mm. In made holes slip distance sleeves ø25xø15x43mm (pos. 6) and put angle fish-plate (pos. 9) again. Put bolt M10x100mm (pos. 11) through hole (pos. B) and through hole (pos. A) bolt M10x70mm (pos. 12). Fix loosely with distance sleeve (pos. 6) as shown in the drawing.
- Put the main bar of towing hitch (pos. 1) between bumper and rear panel, fix through hole (pos. C) and fish plates (pos. 7) using bolts M10x35mm (pos. 13). Through holes (pos. D) slip distance sleeves ø17x2,35mm, L=64mm (pos. 5) below the car. Fix with bolts M10x100mm (pos. 11).
- 6. To the main bar of towing hitch (pos. 1), through hole (pos. E) fix bracket (pos. 4) using bolts M10x35mm (pos. 13), next through holes (pos. F) drill to trunk interior holes using bit ø10,5mm and fix all using bolts M10x30mm (pos. 14) -use washers (pos. 8).
- 7. Fix body of the automat and the socket plate (pos. 3) according to supplied instruction.
- 8. Tighten all bolts according to the torque shown in the table.
- 9. Connect electric wires of 7-poles socket according to the instruction of the car. (Recommend to make at authorized service station)
- 10. Complete paint layer damaged during installation.

Torque settings for nuts and bolts (8,8):			
M6 - 11 Nm	M8 - 25 Nm	M10 - 50 Nm	
M12 - 87 Nm	M14 - 138 Nm	M16 - 210 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 of exploitation check all bolts. The ball of towing hitch must be always kept clear and conserve with a grease.

Towing hitch accessories:

10 wing inten accessories.			
Pcs.: 1	Pos. Distance sleeve #25x#15mm L=43mm PCS:: 2	Pos. Bolt 8,8 B 12 M10x70mm PCS.: 2	
O SOLO	Pos. Fish-plate 180x40x5mm	Pos. Bolt 8,8 B M10x35mm	
Pos. Tow ball Pcs.: 1	Pos. Ovate washer 60x30x4mm	Pos. Bolt 8,8 B 1 4 M10x30mm	
Pos. Socket plate	Pos. Angle fish-plate 86x83x25mm PCS: 2	Pos. Nut 8 B	
Pos. 1	Pos. Washer 10 Ø30xØ10,5x2,5mm PCS.: 2	Pos. Plain washer 910mm	
Distance sleeve 917.2x2.35mm L=64mm PCS.: 2	Pos. Bolt 8,8 B M10x100mm	Pos. Spring washer	



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

Towing hitch (without electrical set)

Class: A50-X Cat. no. AL32A

Designed for:

Manufacturer: **ALFA ROMEO**

Model: **146** Type: **5 doors**

produced since 1995 till 2001

Technical data:

D-value: **7,80 kg**

maximum trailer weight: 1300 kg maximum vertical cup load: 75 kg

Approval number according to Directive 94/20/EC: e20*94/20*0336*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.

 $D ext{-}value\ formula:$

 $\frac{\text{Max trailer weight [kg]}}{\text{Max trailer weight [kg]}} \times \frac{\text{Max vehicle weight [kg]}}{\text{Max vehicle weight [kg]}} \times \frac{9.81}{1000} = D [kN]$