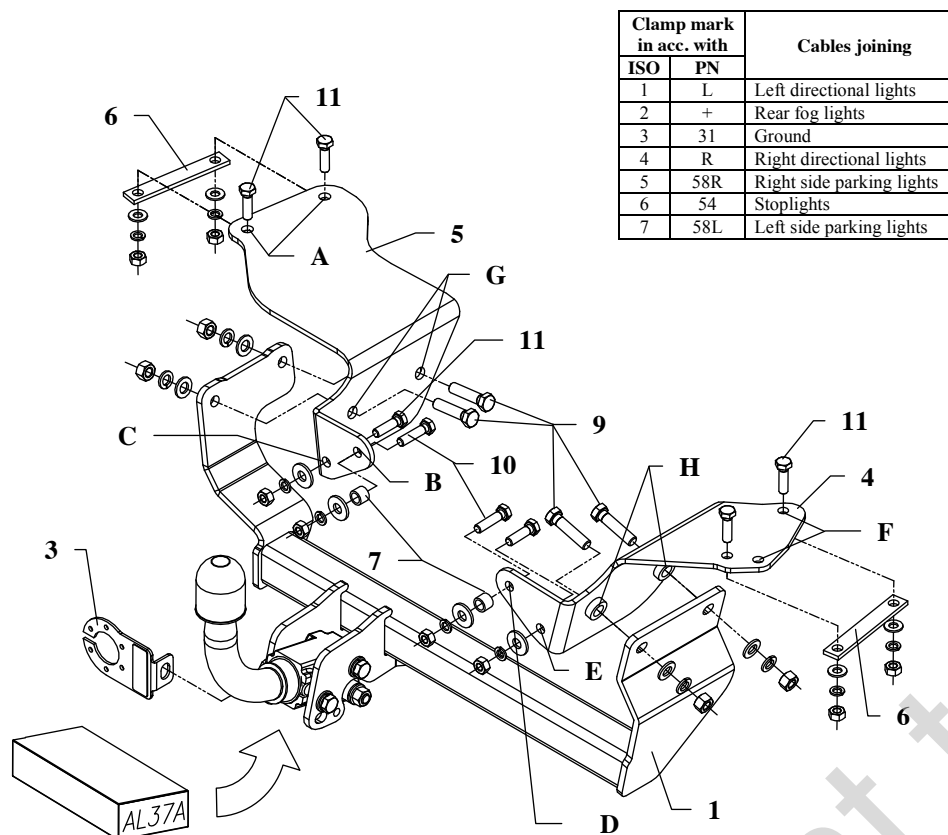


FITTING INSTRUCTION



This towbar is designed to assembly in following cars:
ALFA ROMEO 147, 3/5 doors, except TI-Model, GTA3.2L 184KW
 produced since 2000, catalogue no. **AL37A** and is prepared to tow trailers
 max total weight **1300 kg** and max vertical load **60 kg**.

From manufacturer

Thank you for buying our product. Their reliability has been confirmed in many tests. Reliability of towbar depends also on correct assembly and right operation. For this reasons we kindly ask to read carefully this instruction and apply to hints.

The towbar should be install in points described by a car producer.

The instruction of the assembly

- For mounting the towbar is necessary:
 - disassemble the bumper, the exhaust box, the heat-proof casing, the carpets from the floor and the sides, of the carrier.
- To this prepared places apply the left and right brackets (pos. 4 and 5). See the drawing.
- Through holes pos. A, B, C, D E and F drill $\varnothing 11\text{mm}$ and through pos. G and H) drill $\varnothing 13\text{mm}$.
- Enlarge the holes pos. B and D from the outside of the rear plate of the car, by drill $\varnothing 17\text{mm}$. Put in distance sleeves $\varnothing 17\text{mm}$, $L=13\text{mm}$.
- From the bottom of the car place the main bar of the towbar (pos. 1) and twist the bolts M12x50mm (pos. 9) and all remaining units, look the drawing.
- Mount the heat-proof casing, the exhaust box, the bumper, and the remaining elements previously disassembled.
- 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.
- Tighten all bolts according to the torque shown in the table.
- Connect the kit wires to the electric installation, in accordance with the instructions of the car.
- Complete the possible decreases of the paint cover of towbar, originate during the mounting.

Torque settings for nuts and bolts (8,8):

M6 - 11 Nm	M 8 - 25 Nm	M 10 - 50 Nm
M 12 - 87 Nm	M 14 - 138 Nm	M16 - 210 Nm

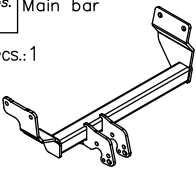
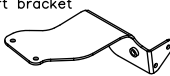















NOTE

After install the towbar 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 towbar must be always kept clear and conserve with a grease.

Towbar accessories:

Poz. 1 Main bar PCS.: 1 	Poz. 5 Left bracket pcs.: 1 	Poz. 10 Bolt 8,8 B M12x40mm SZTUK: 2 	Poz. 15 Spring washer ø10,2mm SZTUK: 8 
	Poz. 6 Flat bar 130x20x5mm SZTUK: 2 	Poz. 11 Bolt 8,8 B M10x35mm SZTUK: 6 	Poz. 16 Nut 8 B M12 SZTUK: 4 
Poz. 2 Tow ball (mountage kit) SZTUK: 1 	Poz. 7 Distane sleeve ø17.2xø2.35mm L=13mm SZTUK: 4 	Poz. 12 Plain washer ø13mm SZTUK: 4 	Poz. 17 Nut 8 B M10 SZTUK: 8 
Poz. 3 Socket plate pcs.: 1 	Poz. 8 Plain washer ø30xø10,5x2,5mm SZTUK: 4 	Poz. 13 Plain washer ø10,5mm SZTUK: 4 	
Poz. 4 Right bracket pcs.: 1 	Poz. 9 Bolt 8,8 B M12x50mm SZTUK: 4 	Poz. 14 Spring washer ø12,2mm SZTUK: 4 	



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. **AL37A**

Designed for:

Manufacturer: **ALFA ROMEO**

Model: **147**

Type: **3/5 doors, except TI-Model, GTA3.2L 184KW**

produced since 2000

Technical data:

D-value: 7,83 kN

maximum trailer weight: **1300 kg**

maximum vertical cup load: **60 kg**

Approval number according to Directive 94/20/EC: **e20*94/20*0804*01**

Foreword

This towbar 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 whereat values for the towing hitch cannot be exceeded.

D-value formula:

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