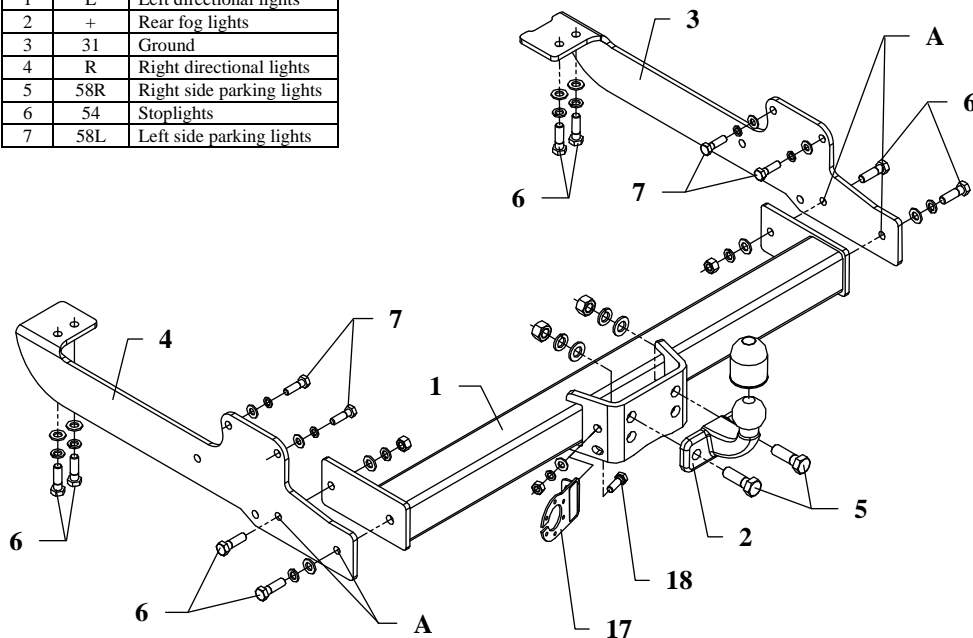


FITTING INSTRUCTION

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 towbar is designed to assembly in following cars: **RENAULT MASTER** and **OPEL MOVANO (both loading platform)** produced since 1998 till 03.2010, catalogue number **G36** and is prepared to tow trailers max total weight **2300 kg** and max vertical load **100 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 installing in points described by a car producer.

The instruction of the assembly

1. Fix brackets (pos. 3 and 4) at original threaded holes in chassis frame using bolts M12x35mm (pos. 6) and M10x35mm (pos. 7). See drawing.
2. Between mounted brackets slip main bar of towbar (pos. 1) and fix it by bolts M12x35mm (pos. 6) through holes A.
3. Fix tow-ball (pos. 2) and using bolts M16x50mm (pos. 5) from accessories.
4. Fix socket plate (pos. 17) using bolt M10x30mm (pos. 18).
5. Tighten all bolts according to the torque shown in the table.
6. Connect electric wires of 7-pole socket according to the instruction of the car. (Recommend to make at authorized service station)
7. 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

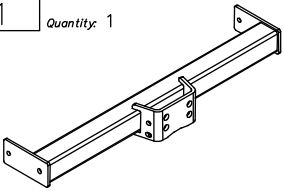
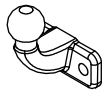
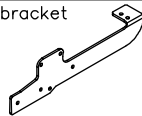
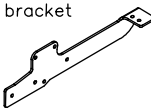
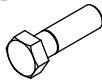
NOTE

After install the 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:

Pos. 1	Name: Main bar Quantity: 1	Pos. 6	Name: Bolt 8,8 B Quantity: 8 Dim.: M12x35	Pos. 13	Name: Spring washer Quantity: 2 Dim.: ϕ 16,3 mm
		Pos. 7	Name: Bolt 8,8 B Quantity: 4 Dim.: M10x35	Pos. 14	Name: Spring washer Quantity: 8 Dim.: ϕ 12,2 mm
		Pos. 8	Name: Nut 8 B Quantity: 2 Dim.: M16	Pos. 15	Name: Spring washer Quantity: 5 Dim.: ϕ 10,2 mm
Pos. 2	Name: Tow ball Quantity: 1	Pos. 9	Name: Nut 8 B Quantity: 2 Dim.: M12	Pos. 16	Name: Ball cover Quantity: 1
		Pos. 10	Name: Plain washer Quantity: 2 Dim.: ϕ 17 mm	Pos. 17	Socket plate PCS: 1
Pos. 3	Name: Right bracket Quantity: 1	Pos. 11	Name: Plain washer Quantity: 8 Dim.: ϕ 13 mm	Pos. 18	Name: Bolt 8,8 B Quantity: 1 Dim.: M10x30
		Pos. 12	Name: Plain washer Quantity: 5 Dim.: ϕ 10,5 mm	Pos. 19	Name: Nut 8 B Quantity: 1 Dim.: M10
Pos. 4	Name: Left bracket Quantity: 1				
					
Pos. 5	Name: Bolt 8,8 B Quantity: 2 Dim.: M16x50mm				
					



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
email: office@autohak.com.pl
www.autohak.com.pl

Towing hitch (without electrical set)

Class: **A50-X** Cat. no. **G36**

Designed for:
RENAULT MASTER
OPEL MOVANO

Type: **loading platform**

produced since 1998 till 03.2010

Technical data:

D-value: **13,62 kN**

Max. trailer weight: **2300 kg**

Max. vertical cup load: **100 kg**

Approval number acc. to regulations EKG/ONZ 55.01: **E20-55R-01 1398**

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:

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