FITTING INSTRUCTION

Clamp mark			
	cc. with	Cables joining	
ISO 1	PN L	Left directional lights	
2	+	Rear fog lights	M10-25
3	31	Ground	M10x35
4	R	Right directional lights	
5	58R	Right side parking lights	
6	54	Stoplights	
7	58L	Left side parking lights	
			B 1 7
		M10>	M12x1,25x70
A -		M12x1 25x70	M12x75
		M12x1,25x70	\sim 2 \sim

This towbar is designed to assembly in following car: **LAND ROVER FREELANDER**, (**LN**), produced since 03.1998 till 09.2006, catalogue no. **LN01** and is prepared to tow trailers max total weight **2000 kg** and max vertical load **140 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

- 1. From the right side of the frame disassemble original tow eye (not used any more).
- 2. Put the main bar of the towbar (pos. 1) to the frame that way, so holes (pos. A) agree to threaded holes and fix using bolts M10x35mm (pos. 6), and next through holes (pos. B) fix using bolts M12x1,25x70mm (pos. 5).
- 3. Fix tow-ball (pos. 2) and socket plate (pos. 3) using bolts M12x75mm (pos. 4a) and M12x70mm (pos. 4b) from accessories.
- 4. Tighten all bolts according to the torque shown in the table.
- 5. Connect electric wires of 7-poles socket according to the instruction of the car. (Recommend to make at authorized service station).
- 6. Complete the paint coating damaged during instalment.

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:

Townar accessories.		
Pos. Name: Main bar quantity: 1	Pos. Adme: Bolt 8,8 B Quantity: 1 Dim.: M12x75mm	Pos. Name: Plain washer Quantity: 4 Dim. : Ø 13 mm
	Pos. Name: Bolt 8,8 B Quantity: 1 Dim. : M12x70mm	Pos. Name: Plain washer 9 auantity: 6 Dim. : Ø 10,5 mm
Pos. 2 Name: Tow ball Quantity: 1	Pos. Name: Bolt 8,8 B	Pos. Name: Spring washer 1 O auantity: 4 Dim.: Ø 12,2 mm
Pos. 3 Name: Socket plate Quantity: 1	Pos. Name: Bolt 8,8 B Quantity: 6 Dim. : M10x35mm	Pos. Name: Spring washer 11 auantity: 6 Dim.: Ø 10,2 mm
	Pos. 7 Name: Nut 8 B Quantity: 2 Dim.: M12	Pos. Name: Ball cover Quantity: 1



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. LN01

Designed for:

Manufacturer: LAND ROVER Model: FREELANDER

Type: (LN)

produced since 03.1998 till.09.2006

Technical data: **D**-value: **10.0 kN**

maximum trailer weight: 2000 kg maximum vertical cup load: 140 kg

Approval number acc. to regulations EKG/ONZ 55.01: <u>E20-55R-01 1105</u>

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:

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