

Part list:

Pos. 1 Main bar PCS.: 1	Pos. 7 Left fish-plate PCS.: 1	Pos. 14 Bolt 8,8 B M12x75mm PCS.: 1	Pos. 22 Plain washer ø44xø15x3mm PCS.: 4
Pos. 2 Tow ball PCS.: 1	Pos. 8 Fish-plate with nuts PCS.: 2	Pos. 15 Bolt 8,8 B M12x70mm PCS.: 1	Pos. 23 Plain washer ø15mm PCS.: 10
Pos. 3 Socket plate PCS.: 1	Pos. 9 Square washer PCS.: 2	Pos. 16 Bolt 8,8 B M12x1,25x40mm PCS.: 6	Pos. 24 Plain washer ø13mm PCS.: 14
Pos. 4 Right bracket PCS.: 1	Pos. 10 Washer with nut PCS.: 2	Pos. 17 Bolt 8,8 B M12x35mm PCS.: 6	Pos. 25 Plain washer ø10,5mm PCS.: 6
Pos. 5 Left bracket PCS.: 1	Pos. 11 Bolt 8,8 B M14x1,5x70mm PCS.: 4	Pos. 18 Bolt 8,8 B M10x35mm PCS.: 6	Pos. 26 Spring washer ø12,2mm PCS.: 14
Pos. 6 Right fish-plate PCS.: 1	Pos. 12 Bolt 8,8 B M14x1,5x50mm PCS.: 6	Pos. 19 Nut 8 B M14 PCS.: 2	Pos. 27 Spring washer ø12,2mm PCS.: 14
	Pos. 13 Bolt 8,8 B M14x35mm PCS.: 4	Pos. 20 Nut 8 B M12 PCS.: 2	Pos. 28 Spring washer ø10,2mm PCS.: 6
		Pos. 21 Nut 8 B M10 PCS.: 6	Pos. 29 Ball cover PCS.: 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. **035**

Designed for:

Manufacturer: **TOYOTA**

Model: **LANDCRUISER**

Type: **5 doors, J100**

produced since 01.1998 till 08.2002

and since 09.2002

Technical data:

D-value: 16,6 kN

maximum trailer weight: **3500 kg**

maximum vertical cup load: **120 kg**

Approval number according to Directive 94/20/EC: **e20*94/20*0266*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.

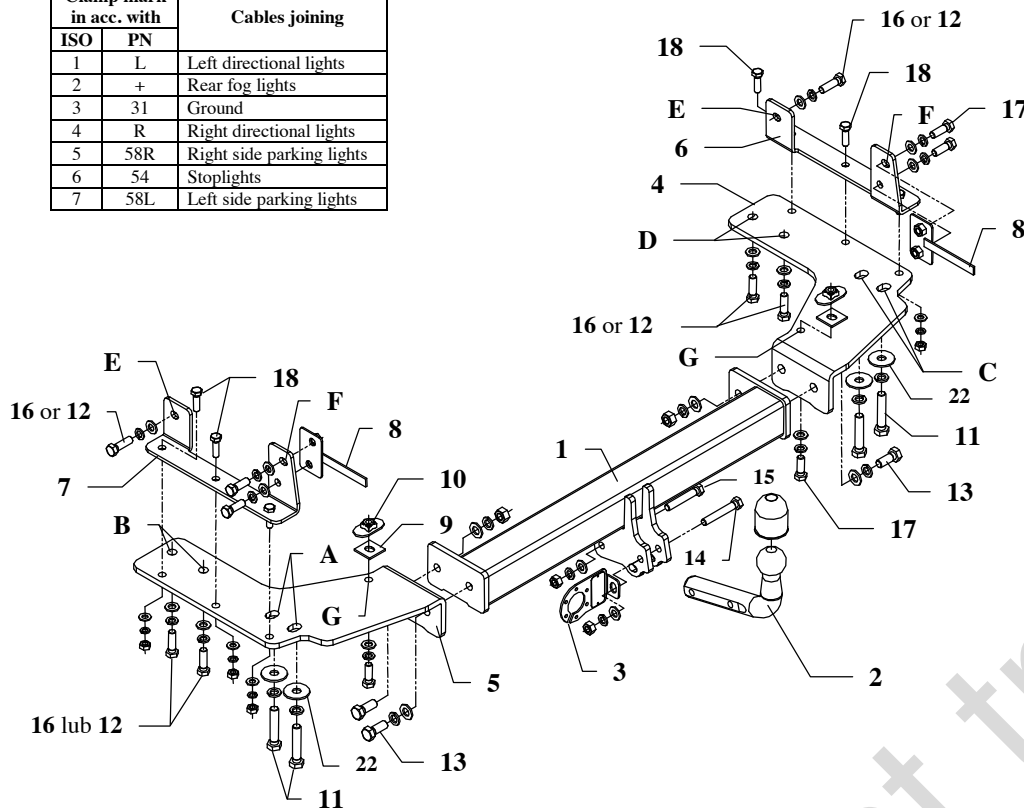
The vehicle manufacturer's specifications regarding trailer load and max. vertical cup load are decisive for driving whereat values for the towing hitch cannot be exceeded.

D-value formula:

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

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:
TOYOTA LANDCRUISER, 5 doors, J100, produced since 01.1998 till 08.2002 and since 09.2002, catalogue no. **O35** and is prepared to tow trailers max total weight **3500 kg** and max vertical load **120 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. Disassemble original towing handles. Disassemble metal part of the bumper (reinforcement), it will be not used any more.
2. To the left chassis member put left bracket (pos. 5) and fix it together with disassembled towing eye through holes A using bolts M14x1,5x70mm (pos. 11) and through holes B using bolts M12x1,25x40mm (pos. 16)-loosely.
NOTE !!! In some models it could be bolts M14x1,5x50mm (pos. 12).
3. To the right chassis members put right bracket (pos. 4) and fix it together with disassembled towing eye through holes C using bolts M14x1,5x70mm (pos. 11) and through holes D using bolts M12x1,25x40mm (pos. 16)-loosely.
NOTE !!! In some models it could be bolts M14x1,5x50mm (pos. 12).
4. To the prepared side brackets put left fish-plate pos. 7 (to the left member) and right fish-plate pos. 6 (to the right member) as shown in the drawing and fix using bolts M10x35mm (pos. 18). Next through holes E fix all using bolts M12x1,25x40mm (pos. 16) or in some models M14x1,5x50mm (pos. 12).
5. To fix side brackets through holes F use jibs with nuts pos. 8 and bolts M12x35mm (pos. 17).
6. Through holes G (in brackets 4 and 5) drill holes in only one side of the car frame using bit $\phi 12,5\text{mm}$. Next fix using bolts M12x35mm (pos. 17) and square washers pos. 9 (put between frame and side brackets) and washers with nuts pos. 10.
7. Between installed side brackets put main bar of the towbar (pos. 1) and fix it using bolts M14x35mm (pos. 13)
8. Fix tow-ball (pos. 2) with socket plate (pos. 3) using bolts M12x75mm (pos. 14) and M12x70mm (pos. 15) from accessories.
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):

M6 - 11 Nm	M8 - 25 Nm	M10 - 50 Nm
M12 - 87 Nm	M14 - 138 Nm	M16 - 210 Nm

NOTE

After installation of 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 and nuts. The ball of towing hitch must be always kept clear and conserve with a grease.