FITTING INSTRUCTION

Clamp mark in acc. with		Cables joining	
	L L	T - G - d' 1 11 - 1-4 -	8 — ,
	+	Left directional lights Rear fog lights	12 —
	31	Ground	
	R	Right directional lights	7
	8R	Right side parking lights	
	54	Stoplights	
	58L	Left side parking lights	10
8	- 12		- 14 - 16 - 18 - 6 - 11 - 20 - 5

This towbar is designed to assembly in following cars: **VOLVO XC 90,** produced since 2003, catalogue no. **L18A** and is prepared to tow trailers max total weight **2250 kg** and max vertical load **90 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. Disassemble a spare wheel and rear light unit.
- 2. Get lower the muffler from last handle.
- 3. Find original holes in chassis members and open it.
- 4. To opened holes put distance sleeves (pos. 7)
- 5. To chassis members fix side brackets (pos. 4 and 5) using bolts M12x100mm (pos. 8) and big washers ø32xø13x3mm (pos. 12).
- 6. Between installed side brackets put main bar of the towbar (pos. 1) and fix using bolts M12x35mm (pos. 10) as shown on the figure.
- 7. Cut out fragment of the bumper in axis: width 80mm and depth 95mm.
- 8. Fix body of the automat (pos. 20) and handle of socket plate using bolts M12x25mm (pos. 9) from accessories. Place towball (pos. 2) according to supplied instruction.
- 9. Fix socket plate (pos. 3) according to the figure.
- 10. Tighten all bolts according to the torque shown in the table.
- 11. Reassemble elements disassembled in points 1 and 2.
- 12. Connect electric wires of 7-poles socket according to the instruction of the car. (Recommend to make at authorized service station).
- 13. Complete paint layer damaged during installation.

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

M 8 - 25 Nm

M 10 - 55 Nm

M 12 - 85 Nm

M 14 - 135 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 check all bolts. The ball of towbar must be always kept clear and conserve with a grease.

Towbar accessories:

Pos.	Name: Main bar Quantity: 1	Pos. Name: Left bracket Ovantity: 1	Pos. Name: Bolt 8,8 B Ouantity: 6 Dim.: M12x35mm	Pos. 16 Name: Plain washer Quantity: 2 Dim.: \$\theta\$ 8,5 mm
<i>(</i> :		Pos. Name: Handle of socket plate Quantity: 1	Pos. Name: Bolt 8,8 B Quantity: 1 Dim.: M8x30mm	Pos. Name: Spring washer Quantity: 16 Dim.: \$\theta\$ 12,2 mm
Pos. 2	Name: Tow ball quantity: 1	Pos. Name: Distance sleeve Quantity: 6 Dim.: 921x2,65mm L=68mm	Pos. Name: Washer 1 2 Quantity: 6 Dim.: \$\phi 32x\phi 13x3mm\$	Pos. Name: Spring auantity: 1
Pos. 3	Name: Socket plate	Pos. Name: Bolt 8,8 B Quantity 6 Dim.: M12x100mm	Pos. Name: Nut 8 B Quantity: 4 M12	Pos. 19 Name: Ball cover ouantity: 1
Pos.	Name: Right bracket Quantity: 1	Pos. Name: Bolt 8,8 B Quantity: 4 Dim.: M12x25mm	Pos. 14 Name: Nut 8 B Quantity: 1 M8	Pos. Name: Body of the automat Ovantity: 1
			Pos. Name: Plain washer Quentity: 10 Dim.: Ø 13 mm	Pos. Name: Body plug 21 Ovantity: 1



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Towing hitch (without electrical set)

Class: A50-X Cat. no. L18A

Designed for:

Manufacturer: **VOLVO**

Model: XC 90

produced since 2003

Technical data: **D**-value: **12,2 kN**

maximum trailer weight: 2250 kg maximum vertical cup load: 90 kg

Approval number according to Directive 94/20/EC: e20*94/20*0202*00

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:

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