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INSTALLATION INSTRUCTIONS

Vehicle information:

Make (manufacturer): **TOYOTA**
Model(s): **Avensis Wagon 2009 -**
Type(s): **T27**

Towbar information:

Product No (Version): **53604L**
EC type: **KL028**
EC approval No: **e11*94/20*7635*00**
Vertical mass on coupling S: **max. 75 kg** (See vehicle data)
D-value D: **max. 10.1 kN**
Weight of towbar: **20 kg**

D-value equals e.g. C = 1800 kg and T = 2405 kg.

Follow also vehicle specified restrictions (see registration document and other data of vehicle).

D-value of towbar must not be exceeded.

D= D-value [kN]

T= Maximum mass of vehicle [kg]

C= Maximum mass of centre axle trailer -
Vertical mass (S) on coupling [kg]

$$D = T \times C \times 9.81 / ((T + C) \times 1000)$$

$$T = C \times D \times 1000 / ((C \times 9.81) - (1000 \times D))$$

$$C = T \times D \times 1000 / ((T \times 9.81) - (1000 \times D))$$

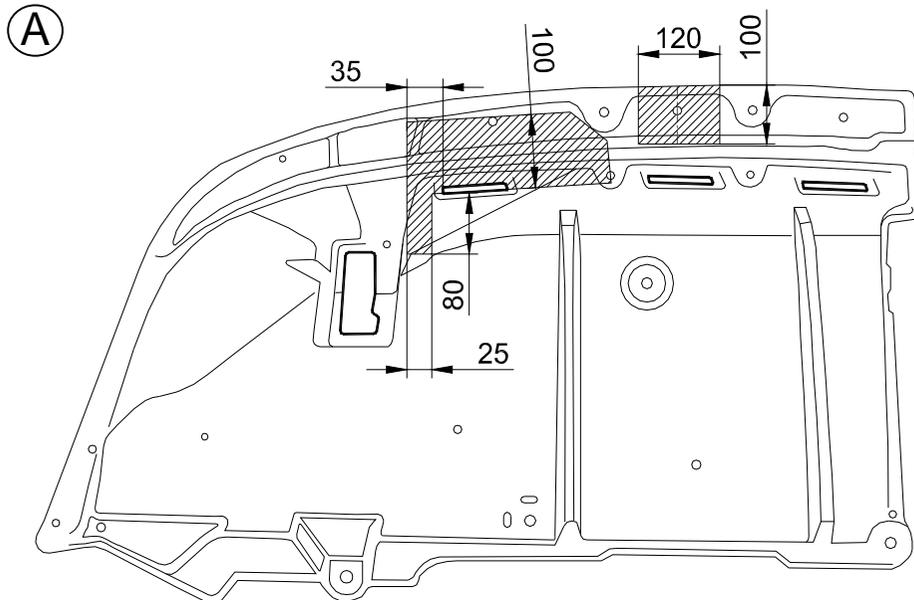
General instructions:

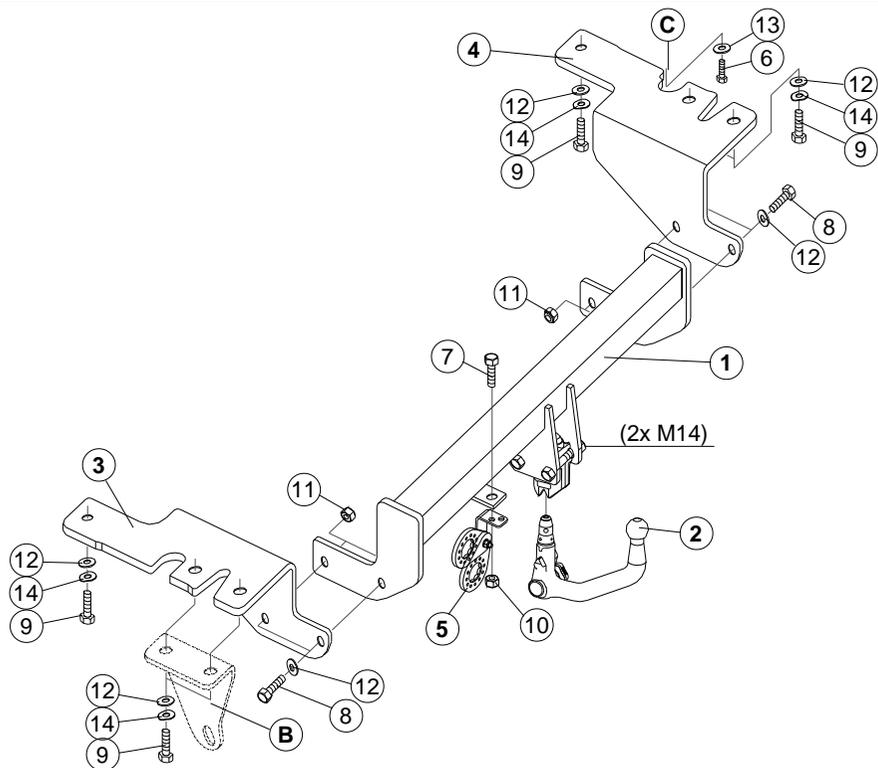
READ INSTALLATION INSTRUCTIONS BEFORE INSTALLING THE TOWBAR!

- Remove underseal or other thick coating on contact area between bodywork and towbar. Treat bare sections (and drilled holes) with thin anti-corrosive coating.
- Clean threads of welded nuts and screws before assembly.
- Installation instructions and other operating and maintenance instructions, if enclosed, shall be kept with vehicle documents.
- Coupling ball must be kept clean and greased.

Notice!

- Constructional changes to towbar or to its assembly are forbidden. Defective towbar must be replaced with a new one together with complete assembly set.
- Smallest diameter of coupling ball must not be less than 49 mm to any direction.
- **Manufacturer's responsibility shall not concern any damage caused by incorrect installation or use of towbar.**





Installation set:

Pos Qty Part

1	.....1	Cross beam	
2	.....1	Ball part (AL-KO, 3KS2-K1)	
3	.....1	Side part left	
4	.....1	Side part right	
5	.....1	Socket holder (#77100)	
6	.....1	Screw	M6 x 25
7	.....1	Screw	M10 x 25
8	.....4	Screw	M12 x 35
9	.....6	Screw	M12 x 1,25 x 40
10	.....1	Lock nut	M10
11	.....4	Lock nut	M12
12	.....10	Washer	13 x 24
13	.....1	Washer	7 x 22
14	.....6	Spring washer	M12

(B1 Original towing bracket)

Tightening torque:

M6 - 8.8	.....	10 Nm
M8 - 8.8	.....	30 Nm
M10 - 8.8	.....	47 Nm
M12 - 8.8	.....	90 Nm
M14 - 8.8	.....	130 Nm
M16 - 8.8	.....	195 Nm
M10 x 1,25 - 8.8	...	40 Nm
M12 x 1,25 - 8.8	...	70 Nm
M12 x 1,5 - 8.8	.....	80 Nm
M14 x 1,5 - 8.8	...	135 Nm

Appendices:

---1 Mounting manual (3KS)

Notice! Unpack the installation set and check before assembly that all parts are included.

For removing parts from vehicle see detailed instructions in workshop manual!

Hint: Follow installation instructions for electric wiring kit and install wires while mounting the towbar.

1. Demount protective shield (see sketch **A**) from under the vehicle.
Demount towing bracket **B** from left side frame.
Demount silencer from rearmost supports.
Demount silencer heat protection plate.
2. Mount side part left (3) and towing bracket **B** loosely to nuts on vehicle side frame bottom with washers (12), spring washers (14) and screws (9).
Mount side part right (4) loosely to nuts on side frame bottom with washers (12), spring washers (14) and screws (9).
3. Mount cross beam (1) to side parts (3) and (4) with screws (8), washers (12) and nuts (11).
4. Mount socket holder (5) to cross beam (1) with screw (7) and nut (10).
5. Align parts and tighten all screws/nuts carefully to the right torque, see table.
6. Mount silencer heat protection plate back to vehicle (use washer (13) and screw (6) at point **C**).
Mount silencer back to vehicle.
7. Cut holes to protective shield according to sketch **A**, and mount shield back to vehicle.
(Mount electric wiring kit, check operation of turnable socket plate with socket.)
8. Mount other demounted parts back to vehicle.
9. Ball part (2) will be installed and maintained according to enclosed manual. Follow the instructions frequently.