# **Fitting Instructions**



SKU

PRODUCT

## T7T798

### TAG Heavy Duty Towbar to suit Toyota Rav4 (01/2019 - on)





Scan for latest version of these instructions

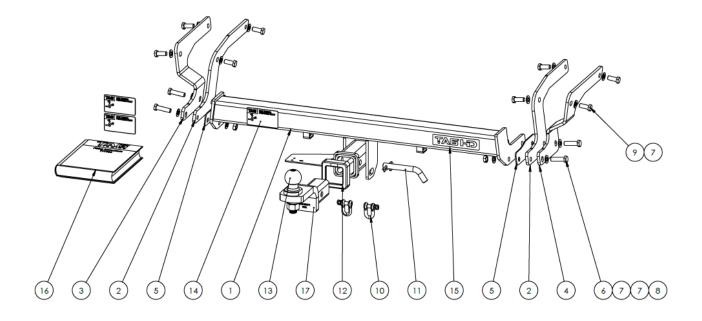
#### SPECIFICATIONS

- Towbar Class: Heavy Duty
- Towing Capacity: 1500kg

#### IN THIS GUIDE

- Fitment Instructions
- Torque Settings
- Warranty Info





Tools Required: Spanners, Sockets, Screwdriver, Torque wrench, Trim Puller or similar, Air saw or similar

ITEM NO.	DESCRIPTION	QTY.	ITEM NO.	DESCRIPTION	QTY.
1	Welded Assembly - T7T798	1	10	D-Shackle - 10mm. 1000kg	2
2	Inner Chassis Plate	2	11	Class 4 Pin & Clip	1
3	Outer Chassis Plate	1	12	TAG Hitch Receiver Cover	1
4	Outer Chassis Plate (DS)	1	13	50mm TAG Tow Ball	1
5	Packer Plate	2	14	TAG Compliance plate	3
6	M12 x 1.25 x 45 Set Screw	4	15	TAG HD Sticker 150 x 33mm	1
7	M12 Flat Washer	16	16	Fitting Instruction	1
8	M12x1.25 Nut	4	17	TAG Tow Ball Mount - L4120	1
9	M12x1.25x30 Bolt	8			



# **Step-By-Step Instructions**

#### Warning:

- This product is for towing purposes only and must only be loaded as shown in your vehicle Owner's Manual.
- This towbar is NOT to be drilled, cut, welded, or modified in any way.
- Check behind chassis rail and body panels before drilling to ensure no hazards are present
- All load ratings shown are under the assumption your trailer has a functional braking system installed
- When installed in positions other than the one depicted in these instructions the Tow Ball Mount may interfere or obstruct certain features of your vehicle (tailgate opening, Chassis clearance, etc.)

#### General:

- Before fitting this towbar read fitting instructions and check installation hardware is correct.
- Check that the towbar is suitable for the vehicle and be wary of any changes to the vehicle design that may conflict with the fitting of this towbar. (Tray, Canopy, Suspension etc.)
- After drilling, blow any filings clear, remove any swarf and treat exposed metal with a rust inhibitor.
- The high tensile fasteners supplied with this product are an integral feature to achieving the specified rating, if replacement is required ensure that fasteners of the same grade (8.8) & quality are used. Contact an authorised TAG distributer or the TAG fitment centre (07) 3208 3022 if further information is required.

#### Towbar Maintenance and Care:

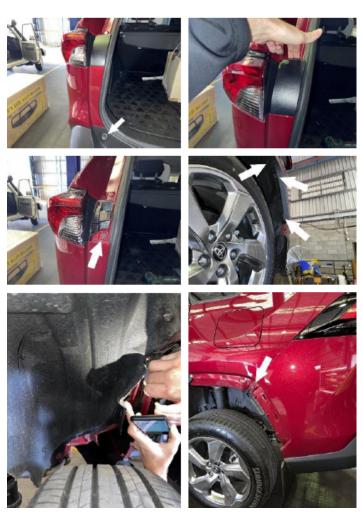
It is recommended, when not in use, the Tow Ball Mount assembly and class 4 Pin and Clip is stored inside the car away from moisture to prevent standing water from forming rust. Inspect to ensure, on regular basis, fasteners are torqued to the specifications below and in good condition.

Ensure that the fitting instructions are read and understood prior to fitment Place these instructions in the vehicle's glovebox after installation is completed



#### Step 1. Remove Taillights, Bumper Skin, Tow Hook & Crash Beam

- a. Open Tailgate and remove 2 x bumper mounting screws (Pic 1 pg.3)
- b. Remove the plastic cover beside the taillight to expose the three mounting screws. Remove the lower most mount screw only (Pic 2 & 3 pg.3). Repeat for the other side
- c. Inside the rear wheel well towards the back of the car remove the screw and with a trim puller or similar pop out the centre of the 2x black plastic scrivets to release (Pic 4 pg.3). Repeat for the other side
- d. After removing the screws and scrivets peel the carpet wheel well liner away from the car to reveal the inside of the bumper. Using a finger to push from the inside, push the wheel flair tabs out and remove flair. Remove scrivet under the flair (Pic 5 & 6 pg.3).
- e. Remove the 2 x Screws securing the mudflap to the underside of the bumper. Repeat for the other side
- f. On the underside of the car below the tailgate remove the 2 x black plastic scrivet securing the bumper to the car
- g. Disconnect the white clip on the wiring harness located on the PS underneath the rear of the car then, starting from



the wheel arches carefully peel the bumper away from the car. (Simultaneously pull up and out sharply and firmly to release the bumper from the car)

- h. Remove 6 x bolts securing the impact beam and set it to the side
- i. Under the Vehicle on the DS remove the two bolts securing the tow hook and discard. Refit 2 x bolts and torque to 60Nm
- j. Remove the 4 x stickers from the inside and outside of the chassis rail covering the M12 Captive nuts. Repeat for the other side.



#### Step 2. Fit Towbar & Reinstall Impact Beam

- a. Mate the outer chassis mounting plate with the outside of the chassis rail and loosely secure with 2 x M12 x 1.25 x 35 Bolts. Repeat for the other side (Pic 1 pg.5)
- Mate the inner chassis mounting plate with the inside of the chassis rail and loosely secure with 2 x M12 x 1.25 x 35 bolts. Repeat for the other side (Pic 2 pg.5)

#### Note: a razor blade might be needed to cut out immoderate seam filler to completely fit Chassis plates (Pic 1 pg.5)

c. After finger tightening the mounting plates mate crossmember to the plates and secure with 2 x
M12 x 50 bolts coupled with 2 x flat washers and a nut per bolt. Repeat on the other side.

Note: provided 3mm spacer plates can be used where immoderate clearance between the cross member and mount plates is present (Pic 3 pg.5)

- d. Torque all fasteners to 125Nm
- e. Replace the impact beam in a way that does not interfere with the towbar, torque 6 x impact beam bolts to 60Nm.

# Note: If clearance is not possible between the impact beam and towbar discard the beam and mounting bolts







- f. Determine the centre of the bumper and mark 45mm either side of the centreline and mm up from the bottom of the bumper ensuring that the measurement is made with a flexible ruler pressed against the contours of the bumper
- g. Refit all components by repeating steps 1 & 2 in the reverse order making sure all parts are correctly refit where they were taken off and all fasteners are torqued to the correct specifications.
- h. Connect the tabs on the rear of the towbar to the tabs on the bumper skin with the factory scrivets.



#### Step 3. Fit Ball Mount and Apply Door Sticker

- a. Attach plastic hitch surround to receiver.
- b. Insert ball mount into hitch receiver and secure with the pull pin and R-clip.
- c. Apply one of the compliance labels to the pillar of the driver's door.
- d. Leave the remaining label & the fitting instructions in the vehicle handbook.





Diameter	Pitch	Grade	Torque	Unit					
M8	1.25	8.8	29	Nm					
M10	1.25	8.8	57	Nm					
M10	1.50	8.8	44	Nm					
M12	1.25	8.8	101	Nm					
M12	1.50	8.8	97	Nm					
M12	1.75	8.8	77	Nm					
M14	2.00	8.8	122	Nm					
M16	2.00	8.8	190	Nm					
Imperial Bolt Torque Settings									
3/ <sub>8</sub> "	UNC	8	44.75	Nm					
1/2"	UNC	8	108.5	Nm					

### Torque table for bolt tightening

#### **TAG Warranty Statement**

SWD warrants your TAG Towbar for its full product life under the following conditions:

- You can show proof of purchase.
- The towbar has been correctly installed by a suitably qualified installer.
- The towbar has not been modified or abused in any way and has only been used for the purpose intended.
- The towbar was not fitted second hand to your vehicle.

The extent of this warranty includes materials and workmanship used in the manufacture of the towbar and is to the equivalent value of current, full replacement cost.

Nothing stated or implied in this warranty limits in any way, the statutory rights that you may have.

To make a claim visit the original installer in the first instance or, if you are unable to or are not satisfied with their help, then contact us direct by phone on 1300 669122 or visit www.swd.com.au