



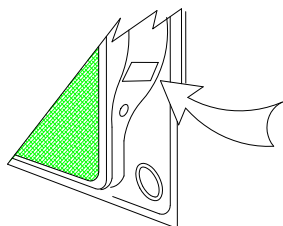
Towbar Fitting Instructions
To Suit **VOLKSWAGEN CRAFTER 2EF1/2EF2 CL4** on
MID WHEEL & LONG WHEEL BASE (3.5 AND 4.49-5 TONNES WITH STEP)
Part Number **QTVW230L**
Rating **2000/200 kg**

WARNING:

1. Do not, drill, cut, weld or otherwise modify the tow bar.
2. If you are using electric welding on a motor vehicle, **always** check that the vehicle is not equipped with electronic engine or instrument management equipment. Failure to do so could **destroy** any onboard computers. If in doubt, check with the vehicle's manufacturer.

General:

1. Ensure all hardware items have been included refer to assembly diagram.
2. It is recommended that the instructions are read through and completely understood before making any attempt to fit this product.
3. Be wary of any changes to vehicle designs or other accessories that may conflict with the installation of this product.
4. Before drilling ensure that the area is clear of fuel, electrical & other components.
5. All holes drilled into the body panels shall have all burrs & swarf removed then coated with a suitable rust preventative paint.
6. For vehicles that require the bumper to be cut. Ensure cut out area is in correct position on the vehicle prior to cutting the bumper.
7. The high tensile fasteners supplied with this product were used to achieve the specified rating. If replacement is required ensure that fasteners of the same rating & quality are used. Contact an authorized **Trailboss** dealer if further information is required.
8. Ensure that all hardware is fastened to torque list below check fasteners on regular basis.
9. Tow bar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door. **(See diagram below).**
10. Trailboss recommends that you check your tow ball to ensure that it complies with the Australian standards **AS 4177.2**.
11. **PLEASE NOTE:** It is advised to remove your lug or tbn when not actually towing so as to produce a clear view of the vehicles registration plate if obscured, and to also provide maximum available departure angle



Place load rating sticker
inside driver's door here

FOR TOWING PURPOSES ONLY

For towing capacity details please refer to vehicle owner's manual or to the manufacturer. Overloading can void your warranties.

RECOMMENDED ASSEMBLY TORQUE LISTING

Diameter Grade 8.8 Bolt

M6	9.5 Nm
M8	21.7 Nm
M10	43.4 Nm
M12	77.3Nm
M14	146 Nm
M16	189.8 Nm

Tow bar Maintenance and Care.

Trailboss recommends that bolt torque's, as listed below, are routinely and regularly inspected and checked for correct tension. Replace any worn or defective parts.

We recommended to remove Tow Ball Mounts (TBM's, tongues or lugs) when not being used for any considerable length of time.

So as to avoid injury, when not towing it is suggested that the tongue, Pull Pin and R-clip are removed then stored in a safe, clean and dry place, away from excessive moisture.

Hitch Pull Pins and spring "R" clips are regularly checked for proper installation. Replace any worn or defective parts.

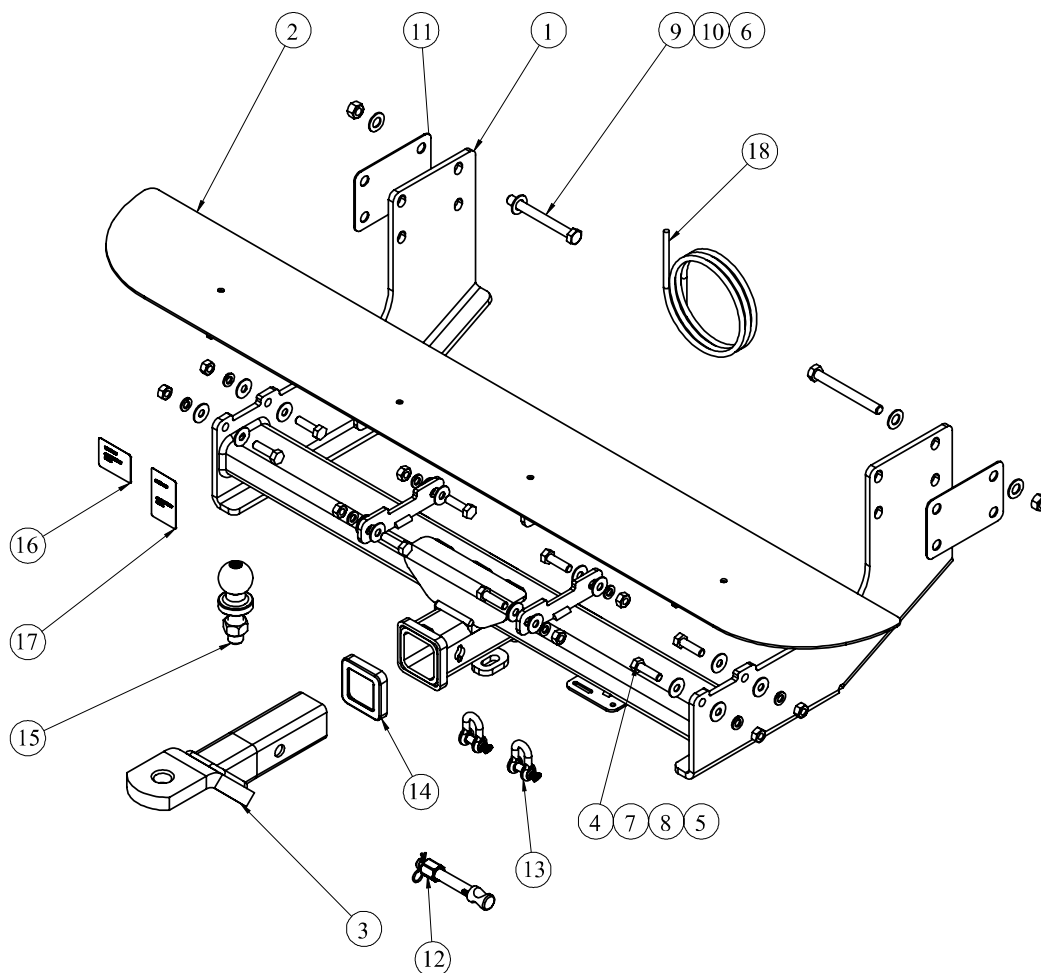


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ITEM	DESCRIPTION	QTY
1	MERCEDES SPRINTER ASSEMBLY	1
2	WELDED STEP	1
3	TRAILER BALL MOUNT	1
4	SCREW HEX M10 X 35 X 1.5P	8
5	SPACER, NUT HEX M10 X 1.5P	8
6	NUT HEX M12 X 1.25P	2
7	WASHER PLAIN 3/8 X 1 X 16G	16
8	WASHER SPRING M10 X 3.5 X 2.2	8
9	BOLT HEX M12 X 110 X 1.25P	2

ITEM	DESCRIPTION	QTY
10	WASHER PLAIN 1/2 X 1-1/8 X 16	4
11	SPACER	2
12	SMART PIN SILVER	1
13	"D" SHACKLE 10mm	2
14	HITCH BOX COLLAR COVER	1
15	TOWBALL 50mm	1
16	COMPLIANCE LABEL	1
17	LOAD RATING LABEL	1
18	WIRING LOOM	1



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STEPS TO FIT TOWBAR



Position the vehicle on to a safe working height on the hoist before commencing fitment.

1. Unbolt the shipping hook from the chassis on both sides.
2. Remove the torx screws x 3 and scriveners x 4 from the bumper and remove the whole shipping hook assembly.
3. Locate the towbar on the vehicle, using the relevant fasteners, as shown in Figure 1.
4. Fit the step, under the plastic cover, using the scriveners x 4 and fit the torx screws back on.
5. Torque the M12 and M10 bolts to the torque requirements mentioned on page 1.
6. Affix the load rating label, as shown on page 1.



Wiring Loom Fitting Instructions
To Suit Mercedes Sprinter / VW Crafter
Part Number 100513-WL

Wiring Loom Installation Instructions

Mercedes Sprinter / VW Crafter
Part No: 100513-WL

Tail Length Required: 1200mm

Kit Part Includes Power Harness: 04825
ECU Required Part No: 04826
RPA Override Switch Part No: 04848 (If Fitted)

Wiring Loom Installation Time: Approx 40 Mins



Wiring Loom Fitting Instructions
To Suit Mercedes Sprinter / VW Crafter
Part Number 100513-WL

Note: This trailer patch harness is designed to fit the Mercedes Sprinter and the Volkswagen Crafter. Please ensure the correct trailer patch tail light connectors are used. Always refer to labels on the trailer patch tail light connector when fitting this kit.

1. Underneath the rear LHS of the vehicle, drill out a Ø31mm hole in the area indicated.



2. File down any rough or sharp edges and spray on rust inhibitor.
3. Inside the LHS of the cargo area, remove the LHS trim cover and the rear pillar caps.
4. Remove the LHS lower rear pillar caps.
5. Inside the LHS rear pillar cavity, disconnect the LHS tail light connector and patch the trailer patch harness (P/No: 100513-WL) in between.

Ensure the correct trailer patch tail light 12-way female connectors are used.

6. Connect the trailer patch harness ECU connector to the ECU (P/No: 04826). Secure the ECU into the rear pillar cavity using double sided tape.
7. Inside the LHS pillar cavity, feed in a guide wire and tape it to the trailer patch harness wires and pull the trailer patch harness through the drilled out grommet hole.
8. From underneath the vehicle, ensure the trailer patch harness grommet is adjusted and seated correctly and secure it in place using a cable tie (not supplied).
9. Route the trailer patch harness up the rear pillar and out the highest pillar cavity opening, towards the top LHS corner vehicle ring terminal and the vehicle harness wire.
10. Secure the trailer patch harness earth terminal to the vehicle grounding point.
11. Following the table below, secure the supplied ezy tap onto the vehicle harness right indicator 'GREEN/BLACK' wire.
12. Insert the trailer patch harness 'GREEN/BLACK' terminal wire onto the ezy tap.

Function	Trailer Patch	Vehicle Connector
R.IND	GREEN / BLACK	GREEN / BLACK



Wiring Loom Fitting Instructions
To Suit Mercedes Sprinter / VW Crafter
Part Number 100513-WL

13. In the vehicle cabin on the passenger side, gain access to the battery by removing the jack and floor covers.
14. Remove the tool tray and remove the battery cover.
15. Remove the black starter power cable.
16. Underneath the vehicle, locate the battery box and dislodge the battery box grommet.
17. Route the power harness ring terminals up into the battery box cavity.
18. Route the other end of the power harness down through the battery box grommet.
19. Following the existing vehicle harness, route the power harness along the LHS of the vehicle and towards the rear.
20. Continue routing the harness towards the rear of the vehicle.
21. Underneath the rear of the vehicle, secure the tail harness (tail length 1200mm) trailer socket to the towbar mounting bracket using M4 fasteners (not supplied).
22. Using electrical grease or silicone, water proof the back of the tail harness and trailer patch harness 8-way connectors.
23. Connect the tail harness connector to the trailer patch harness mating connector.
24. Connect the trailer patch harness 1-way connector to the power harness.
25. Inside the passenger cabin, retrieve the power harness terminal. Secure the 'ORANGE' wire terminal to the positive battery terminal.
26. Test the Trailer socket using a light board or multi-meter.
27. Secure all harnesses using cables ties (not supplied).
28. Re-fit all removed parts and secure all fasteners.
29. Place instructions in glove box after fitment.



FITTING INSTRUCTIONS

Silent Anti-Rattle Hitch Pin (PRO001)

• These fitting instructions are supplied to ensure understanding of how the HITCH PIN should be fitted and used correctly.

• Once installed, we recommend **ALL** instructions are kept and placed in the vehicle glove box.

NOTE: Routine maintenance and inspection of the towbar & HITCH PIN is required. Regularly inspect for wear and check the tightness of the Hitch Pin. Follow instructions below to retighten the nut when necessary.

***Do not tow with your vehicle if the R CLIP or the HITCH PIN is loose or missing. Replacement parts are available from your Pro Series Distributor.**

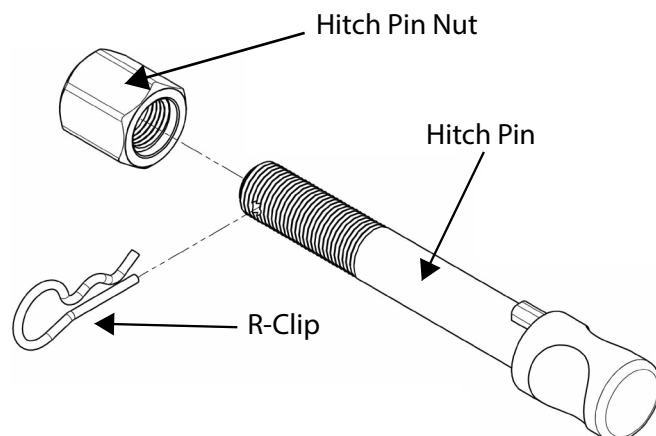


Fig 1. Silent Anti-Rattle Hitch Pin assembly

STEP 1

Insert Trailer Ball Mount (TBM) into towbar HITCHBOX, aligning hole in TBM SHANK with hole in HITCHBOX (Fig 2).

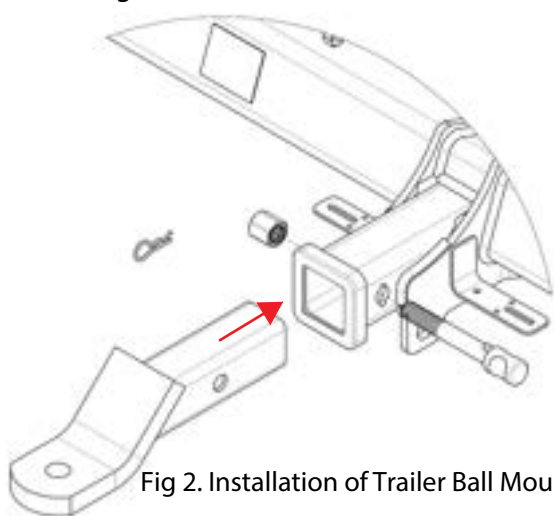


Fig 2. Installation of Trailer Ball Mount

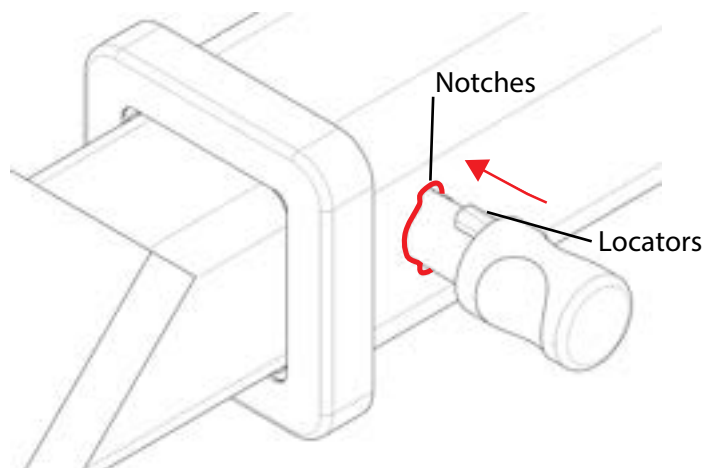


Fig 3. Silent Anti-Rattle Hitch Pin orientation

STEP 2

Insert HITCH PIN through hole in HITCHBOX and hole in TBM SHANK; ensure the LOCATORS are inserted into the NOTCHES in the HITCHBOX (Fig. 3).

STEP 3

Screw HITCH PIN NUT onto HITCH PIN ; tighten HITCH PIN NUT until finger tight, ensuring TBM is restrained from movement.

STEP 4

Tighten HITCH PIN NUT by turning nut a further 1/8th of a turn in the clockwise direction using a 24mm spanner (Fig. 4).

STEP 5

Install HITCH PIN R CLIP through the hole on the HITCH PIN (Fig. 1).

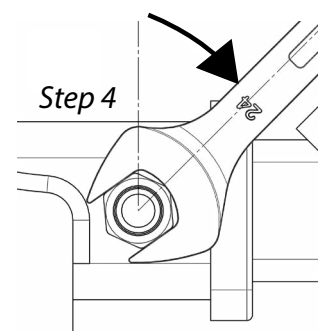


Fig 4. Tightening of Silent Anti-Rattle Hitch Pin Nut

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