PART NUMBER 03374RW VOLKSWAGEN T-CROSS C1 CL4 SC





PRODUCT DETAILS:

Part Number:	03374RW
ECU Number:	WLE70024
Tail Harness Length Required:	1200 mm
TBM/Lug Part Number:	21126
Wiring Part Number:	WLL90024

Maximum Towing Braked:	1100	kg
Maximum Towing Unbraked:	630	kg
Maximum Static Ball Load:	55	kg

FITTING DETAILS:

Towbar Installation Time:	90 Mins.
Wiring Installation Time:	30 Mins.
Total Installation Time:	120 Mins.
Bumper Cut Required:	Yes

Hayman Reese SmartCODE Solution Required:	YES
RPA Disable/Other:	YES

Note:

• Please refer vehicles owner's manual for proper operation and understanding of towing features enabled when coded.



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ENSURE THAT INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT.

BEFORE YOU START:

Hayman Reese recommends that instructions are read completely prior to fitment. Check all hardware items have been included refer to assembly diagram. Please ensure this towbar is only fitted to vehicle models as per Hayman Reese application guide

(www.haymanreese.com.au).

Bumper Cuts



Vehicle and bumper variations can and do occur during vehicle manufacture after initial towbar design. Fitment of towbar to vehicle and accuracy of bumper cut must be assessed prior to any bumper modifications made. Incorrect bumper cuts are not covered under Hayman Reese warranty.

NOTE: Bumper cuts need to be approached with care, refer to notes below.

- Bumper centreline where the centreline of the bumper needs to be determined, the installer must assess centre point by measurement of bumper width or determining two symmetrical reference points to give centreline.
- Bumper edge To assist with accurate bumper cut measurement, reference to the start of the bumper edge is now being commonly used.
 - Measure from bottom edge along bumper and around corner to the 70 mm point (Figure 1).
 - \circ \quad Do not measure from visible bumper front of corner, upwards (Figure 2).

Drilling

- For any required drilling during installation, ensure that the area is clear of fuel, electrical & other components that may be damaged.
- All holes drilled into the body panels shall have all burrs & swarf removed then coated with a suitable rust preventative paint. **Bolts/Fasteners**
- Ensure that all hardware is fastened to correct torque as specified in this fitting instruction.
- All fasteners supplied with this product are used to achieve a specified clamp loading. If replacement is required ensure that fasteners of the same grade and class are used.

NOTE: Achieving correct torque is critical to proper installation and responsibility of the installer. Towbar failures attributed to tension issues from over tightening or under tightening are not covered by Hayman Reese warranty.

Product Labels

- a. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.
- b. Powertrain Control Module (PCM)/Body Control Module (BCM) upgrade warning label will be provided in towbar kit for vehicles as required. Affix warning label in door and owner's handbook.



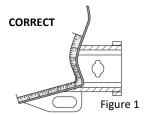
Place Load Rating sticker inside driver's door here OWNER'S MANUAL

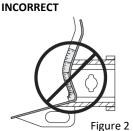
Place Vehicle PCM/ BCM upgrade warning label in door AND on front cover of owner's service handbook



Do not, drill, cut, weld or otherwise modify the towbar.

FOR TOWING PURPOSES ONLY - This towbar is designed and tested by Hayman Reese to adhere to ADR 62/02 which provides only for the expected load demands of towing.





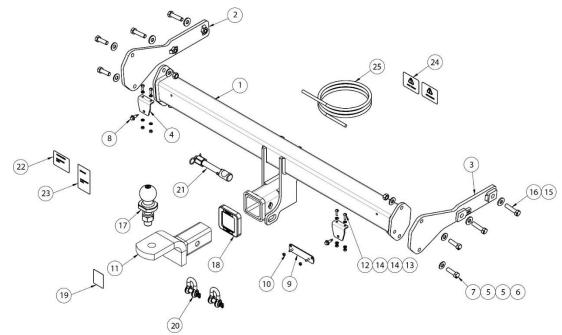


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TOWBAR INSTALLATION INSTRUCTIONS

PART NUMBER 03374RW VOLKSWAGEN T-CROSS C1 CL4 SC

TOWBAR ASSEMBLY DIAGRAM



ITFM

ITEM	DESCRIPTION	QTY
1	T-CROSS WELDED ASSEMBLY	1
2	SIDE ARM ASSY LH	1
3	SIDE ARM ASSY RH	1
4	KEY ANTENNA BRACKET RH & LH	2
5	WASHER FLAT M10x23x2	8
6	NUT HEX HD M10x1.5P	4
7	BOLT HEX HD M10x35x1.5P9	4
8	TEK SCREW 14-20 HEX HD 22mm	2
9	PLUG BRACKET	1
10	NUT NYLOC HEX HD M4x0.7P	2
11	TRAILER BALL MOUNT	1
12	SCREW PAN HD M5x16x0.8P	4
13	NUT NYLOC HEX HD M5x0.8P	4

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14	WASHER PLAIN M5x10x1	8
15	WASHER PLAIN M10x25x3	4
16	BOLT HEX HD M10x45x1.5P	4
17	TOWBALL 50mm	1
18	HITCH BOX COLLAR COVER	1
19	H.R STICKER	1
20	"D" SHACKLE 10mm	2
21	SMART PIN GOLD	1
22	COMPLIANCE LABEL	1
23	DOOR RATING LABEL	1
24	CAN MODULE WARNING LABEL	2
25	WIRING LOOM	1

DESCRIPTION

WIRING PARTS LIST

ITEM	DESCRIPTION	QTY
1	Main Harness	1
2	Prewire Harness (Not Required)	1
3	Trailer Module -> WLE70024	1
4	CAN 3-way F. Connector	1
5	Brake Control 2 way- F. Connector	1

ITEM DESCRIPTION QTY 6 Brake Control plug pin – small 1 7 Brake Control plug pin – large 1 8 Cable tie 300mm 4 Cable tie 150MM 15 9 10 Can warning label 2

49-75 Pacific Drive Keysborough, VIC 3173 Phone: 1800 812 017 Email: info@haymanreese.com.au

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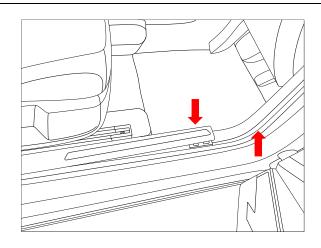
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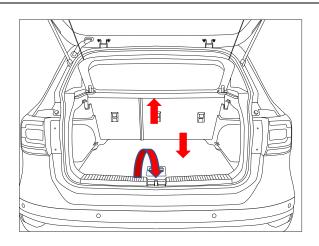
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- 1. In the drivers footwell dislodge the sill trim.
- 2. Remove the drivers kick trim.

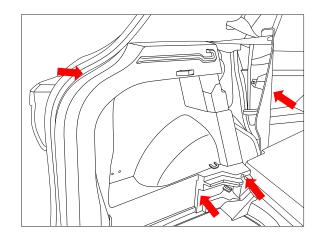


- 3. Open tailgate.
- 4. Remove the rear sunshade and boot floor cover.
- 5. Dislodge and remove the boot sill trim.



- 6. Remove the 2 screws securing the lower RHS plastic trim. Then remove the trim.
- 7. Dislodge C-pillar lower trim.
- 8. Remove the RHS back trim.

Note: Dislodge and move the C-pillar lower trim enough to clear the back trim.





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9. Disconnect taillight harness, unscrew the plastic spring loaded screw and remove the taillight from the vehicle.

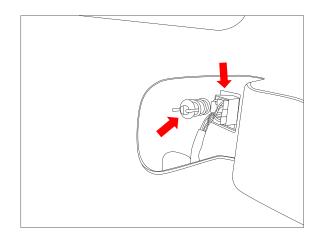
10. Open the LHS trim panel to gain access to the taillight

mounting screw.

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11. Disconnect taillight harness, unscrew the plastic spring loaded screw and remove the taillight from the vehicle.



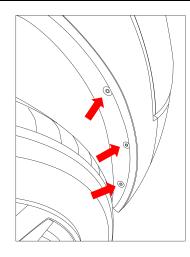


PART NUMBER 03374RW

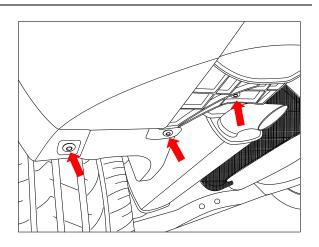
VOLKSWAGEN T-CROSS C1 CL4 SC

12. In wheel arch, remove 3 x torx screws.

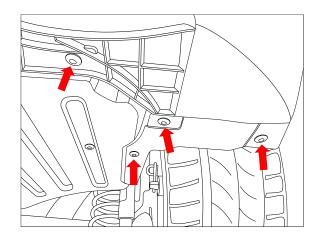
Repeat for other side.



13. Under bumper on passenger side, remove 3 x torx screws.



14. Under bumper on drivers' side, remove 4 x torx screws.

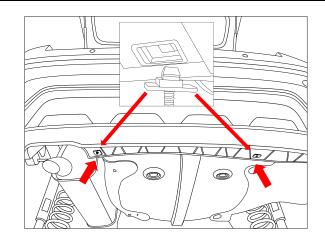




PART NUMBER 03374RW

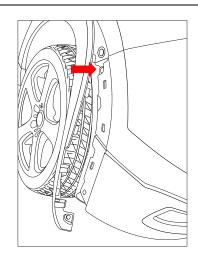
VOLKSWAGEN T-CROSS C1 CL4 SC

15. Under bumper remove remaining 1 x torx screw and 2 x torx screw retaining clips.



- 16. Unclip the wheel arch skirting to reveal the torx screw.
- 17. Remove 1 x tox screw.

Repeat for other side.



18. Peel away bumper from the sides and remove from the vehicle. Ensure to disconnect the wiring harness located on the LH side.

Insert and push the clip downwards, as illustrated, to assist with the release of the bumper (both sides).



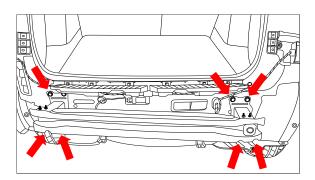
PART NUMBER 03374RW

VOLKSWAGEN T-CROSS C1 CL4 SC

19. Where required, disconnect, and remove the sensors located on the top of the impact beam LHS and RHS.

20. Remove and discard the impact beam secured with 3 x bolts on the passenger side and 4 x bolts on the driver side.

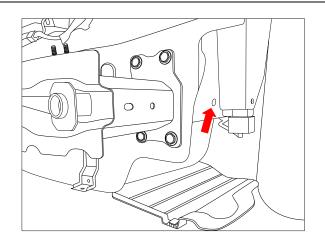
Bottom bolts not shown.



21. For Diesel engine vehicles the Ad-Blue tank may have to be loosened off to gain access to the side arm mounting holes.

You may have to remove the right rear wheel, remove the rear wheel arch lining, disconnect the harnesses from the ad-blue tank and remove the screws supporting the ad-blue tank.

Illustration only indicates the position of the forward mounting hole.





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22. Insert the side arm into the chassis rail and loosely secure with 2 x M10 x 45mm bolts complete with 1 x 3mm washer per bolt.

Repeat for other side.

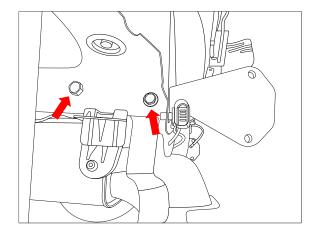
Note:

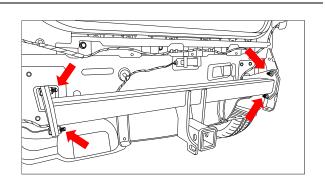
Ensure that the "weld on" spacers on the side arms are positioned against the chassis rail and the weld nuts are positioned towards the centre of the vehicle.

23. Lift crosstube to side arms and loosely secure each side with 2 x M10 x 35mm bolts complete with 2 x washers and 1 x nut per bolt.

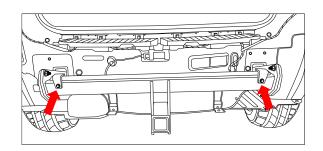
Tighten all fasteners to the following torque:

M10 x 1.5 : 62Nm





- 24. If required, fit the 2 x sensor brackets to the crosstube assembly with 1 x Tek screw.
- 25. Refit the sensors (removed in step 19) to each bracket with 2 x M5 screws complete with 2 x washers and 1 x nyloc per screw.





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26. For Bumper cut.

For the upper position, determine the centre of the bumper, measure, and mark off 10mm below the upper style line and 90mm wide.

For the lower position, determine the centre of the bumper, measure, and mark off 30mm from the bottom edge of the bumper and 90mm wide. (You are not cutting through the reinforcement section of the bumper)

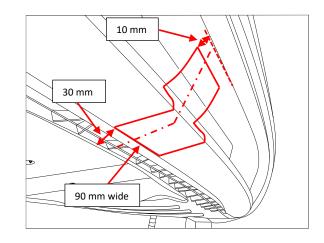
Proceed to cut out the bumper following the bumper profile

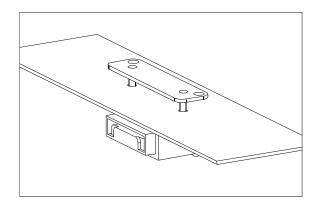
Note: This is the minimum size cut. Depending on model, the upper cut position may be increased and stop just below the styleline.

Ensure to not cut through or damage any cables on the inside of the bumper.

27. For plug bracket.

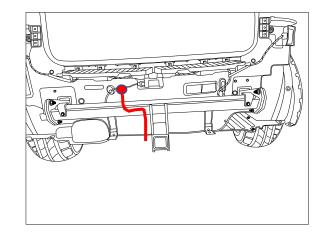
At an appropriate position on the bumper, mark out and drill 2x ø5mm holes 69mm apart on bumper skin to support plug bracket.





- 28. Using a step drill out a Ø30mm hole next to the vehicle factory grommet.
- 29. Feed the 1200 tail connector through the previously drilled hole and slide the grommet to desired position allowing enough length to mount the trailer plug.
- 30. Secure the grommet in place using a cable tie.

Note: File any rough or shape edges and spray rust inhibitor.



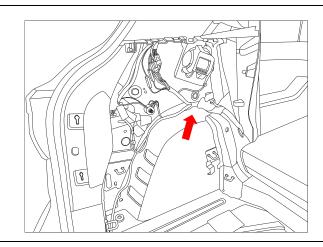


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31. Locate the vehicle trailer prep 6-way and 10-way connectors.

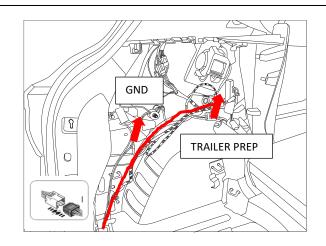
Note: The connectors are wrapped in foam.



- 32. Peel back the foam of the 10-way connector, using a jeweller's screw driver release the secondary lock.
- Remove the following wires and place them into the 3-way black supplied female connector by pressing down on the terminal tang to release.

Vehicle 10 pin	Colour	Harness 3 pin	Function
Pin 2	Black	Pin 2	Brake
Pin 3	Green	Pin 1	CAN Hi
Pin 4	Orange/Brown	Pin 3	CAN Lo

- 34. Connect the 3-way connector into its mating connector on the trailer harness.
- 35. Connect in the 6-way connector.
- 36. Route the trailer patch over the wheel arch towards the rear of the vehicle. Connect the trailer patch ring terminal to factory ground stud.
- 37. Connect the trailer module WLE70024 to trailer patch 18-way connector.
- 38. Peel the backing tape from the trailer module, slide it into the slot and apply pressure ensuring good adhesion.
- 39. Connect the trailer patch 8-way blue connector to the tail mating connector.



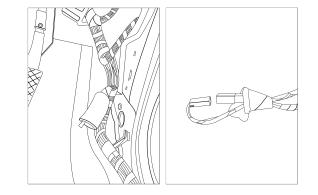


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40. In the drivers footwell locate the 2-way CAN Bridge connectors and connect them together.

Note: The connectors are wrapped in foam.



- 41. Feed the hitch box through the bumper cut out and refit the bumper and removed component following steps 1 to 19 in reverse.
- 42. The next step is coding of the vehicle. Pay attention to the "SmartCODE" instruction page.
- 43. Once vehicle is coded test the functionality using a test board.
- 44. Place fitting instructions in glovebox after fitment.



CUSTOMER INFORMATION

PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION

THANK YOU FOR PURCHASING HAYMAN REESE. WITH CORRECT MAINTENANCE AND CARE THIS PRODUCT WILL PROVIDE A LIFETIME OF TROUBLE-FREE OPERATION.



TOWBAR MAINTENANCE AND CARE:

- 1. Hayman Reese recommend that the towbar LUG or TBM (tow ball Mount) Pull Pin and R-clip are removed and stored when not in use. Removal of LUG or TBM (tow ball mount) is advisable when not in use to assist with any of the following.
 - Ensure rear number plate is not obscured.
 - Allow maximum available departure angle and prevent any potential interference.
 - Prevent possible interference with vehicles reverse sensors or camera detecting a tow ball mount as an obstruction during reversing.
 - Removes towball mount as an obstruction for when moving around the rear of the vehicle.
- 2. Hayman Reese recommends routine inspection of your towbar to ensure trouble free towing.
 - Bolt security and tension should be regularly inspected and checked for correct tension. Replace any worn or defective parts with suitable grade & class fasteners. Inspection should be requested to coincide with vehicle major services.
- 3. It is the owner's responsibility to ensure towing and down ball weight capacities of the towing vehicle are not exceeded.
 - Towing and down ball weights allowable may differ according to model variations. Please refer to owner's manual or vehicle dealer to confirm exact rating for your vehicle model variant.
 - It is not uncommon for the vehicle tow rating to differ from the towbar rating. When this occurs, the lesser rating must be adhered to.
 - For vehicles fitted with enhanced vehicle functions that may be altered/changed when towing i.e Trailer sway mitigation, blind spot detection, adaptive cruise control etc. Please consult owner's manual to understand changes enabled when towing and after towing.

WARRANTY INFORMATION:

Hayman Reese Towbars are covered by a Lifetime Warranty.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

For further details please visit www.haymanreese.com.au/warranty or contact customer service on 1800 812 017 or info@haymanreese.com.au.



CUSTOMER INFORMATION

PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION

HAYMAN REESE SMART PIN

Your Hayman Reese towbar is equipped with Smart Pin technology to help reduce towbar tongue rattle in most driving conditions. Please ensure below instructions are understood and routine maintenance is carried out to ensure best towing experience.



Regularly inspect for wear and check the tightness of the Smart Pin Nut. Follow instructions below to retighten the nut as necessary when movement and noise in the tow ball mount is noted.

• Before towing, ensure R-Clip is properly installed and Smart pin nut is installed and tensioned. Replacement parts are available from your Hayman Reese Distributor.

TOWBALL MOUNT REMOVAL/INSTALLATION

STEP 1

Insert Trailer Ball Mount (TBM) (a) into towbar hitchbox (b), aligning hole in TBM shank (c) with hole in hitchbox (d) (Fig. 1)

STEP 2

Insert Smart Pin (e) through hole in hitchbox and hole in TBM shank (g); ensure the locators are inserted into the notches in the hitchbox (Fig. 2)

STEP 3

Screw Smart Pin Nut (f) onto Smart Pin (g); tighten Smart Pin Nut until finger tight, ensuring TBM is restrained from up and down movement.

STEP 4

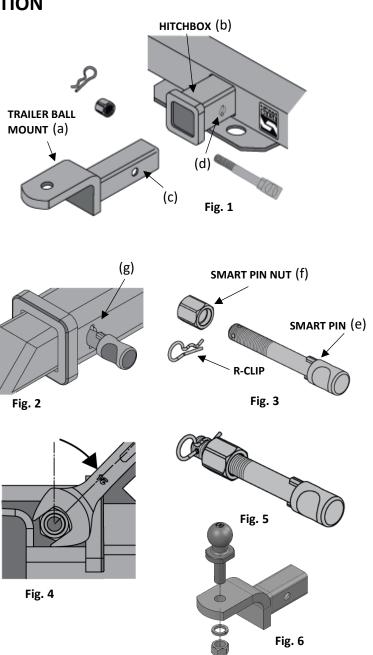
Tighten Smart Pin Nut by turning nut a further 1/8th of a turn in the clockwise direction using a 24mm spanner (Fig. 4).

STEP 5

Install Smart Pin R-Clip through the hole that provides best clearance or easiest access. (Fig. 5)

STEP 6

Install towball onto TBM and tighten to <u>350 Nm</u> using a calibrated torque wrench (Fig. 6).



<u>Appendix</u>



WARNING: This vehicle requires a system setting to ensure the trailer wiring and control module are correctly recognised. This process (referred to as 'coding') must be carried out to enable correct vehicle functionality when trailer is connected. Towing features enabled by correct control module and coding support OE functionality as set by OE manufacturer. Please read the vehicles owner's manual for proper operation and understanding.

Coding can be carried out using the Hayman Reese SmartCODE (HRSC) using the following steps. Note, if HRSC is unavailable, vehicle coding can be carried out by OE manufacturer as needed.

Before you start:

- Ensure the HRSC software is up to date using the HAYMAN REESE SMARTCODE PC APP.
- Ensure the vehicle battery is fully charged
- Use of a battery support unit (BSU) is advised during the coding process.
- Ensure towbar, wiring loom and ECU are correctly installed as per Hayman Reese fitting instructions.
- 1. Locate the OBD2 port under the drivers footwell on the right-hand side and plug in the HRSC.
- 2. Close all doors and turn the ignition on
- 3. Follow the directions on the screen of the HRSC
- 4. Once the vehicle has been coded successfully proceed to the "clear codes" tab
- 5. Remove disconnect HRSC from OBD2 port.
- 6. Check the dash to make sure there are no warning faults.
- 7. Check the operation of trailer lights and ensure the Reverse Park Assist (RPA) is disabled and 'trailer on' icon is active where available.

For technical support and further information on Hayman Reese SmartCODE tool and coding process contact your nearest Hayman Reese stockist.

Australia: 1800 812 017

New Zealand: 0800 237 886