



TOWBAR INSTALLATION INSTRUCTIONS

PART NUMBER 03436RW

AUDI Q7 4M CL4 SC



PRODUCT DETAILS:

Part Number:	03436RW	Maximum Towing Braked:	3500	kg
ECU Number:	WLE70024	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1800 mm	Maximum Static Ball Load:	350	kg
TBM/Lug Part Number:	21161			
Wiring Part Number:	WLL90024			

FITTING DETAILS:

Towbar Installation Time:	90 Mins.	Hayman Reese SmartCODE Solution Required:	YES
Wiring Installation Time:	40 Mins.	RPA Disable/Other:	YES
Total Installation Time:	130 Mins.		
Bumper Cut Required:	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.

i 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).
 - Do not measure from visible bumper front of corner, upwards (Figure 2).

CORRECT

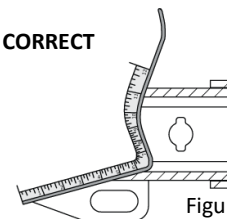


Figure 1

INCORRECT

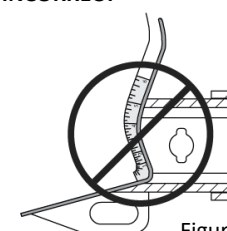


Figure 2

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

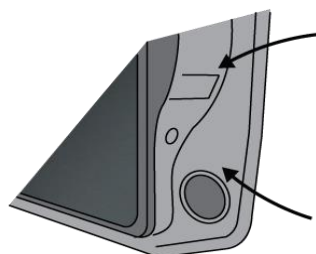
- Ensure that all hardware is fastened to correct torque as specified in this fitting instruction.
- All fasteners supplied with this product are used to achieve a specified clamp loading. If replacement is required ensure that fasteners of the same grade and class are used.



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.

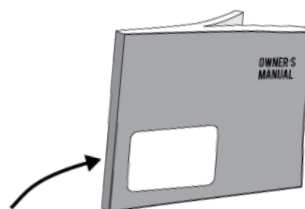
Product Labels

- 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

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



WARNING:

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.

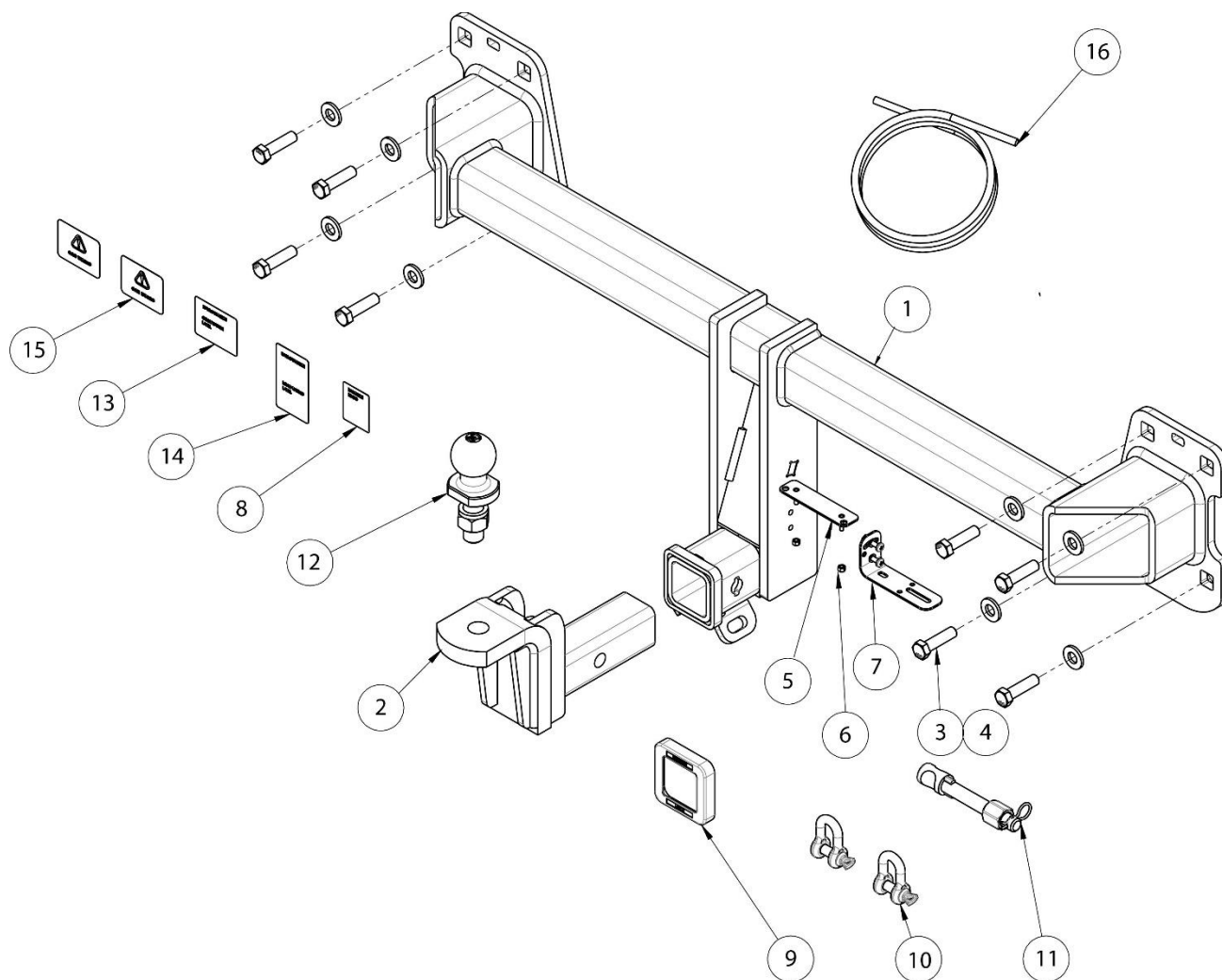


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i TOWBAR ASSEMBLY DIAGRAM



ITEM	DESCRIPTION	QTY
1	AUDI Q7 QUATTRO 4M CL4	1
2	TRAILER BALL MOUNT	1
3	WASHER PLAIN 1/2"	8
4	SET SCREW HEX HD M12x45x1.5P	8
5	PLUG BRACKET	1
6	NUT NYLOC HEX HD M4x0.7P	2
7	UNIVERSAL PLUG BRACKET KIT	1
8	HAYMAN REESE LOGO STICKER	1

ITEM	DESCRIPTION	QTY
9	HITCH BOX COLLAR COVER	1
10	"D" SHACKLE 10mm	2
11	SMART PIN GOLD	1
12	TOWBALL 50mm	1
13	COMPLIANCE LABEL	1
14	LOAD RATING LABEL	1
15	CAN MODULE WARNING LABEL	2
16	WIRE LOOM	1

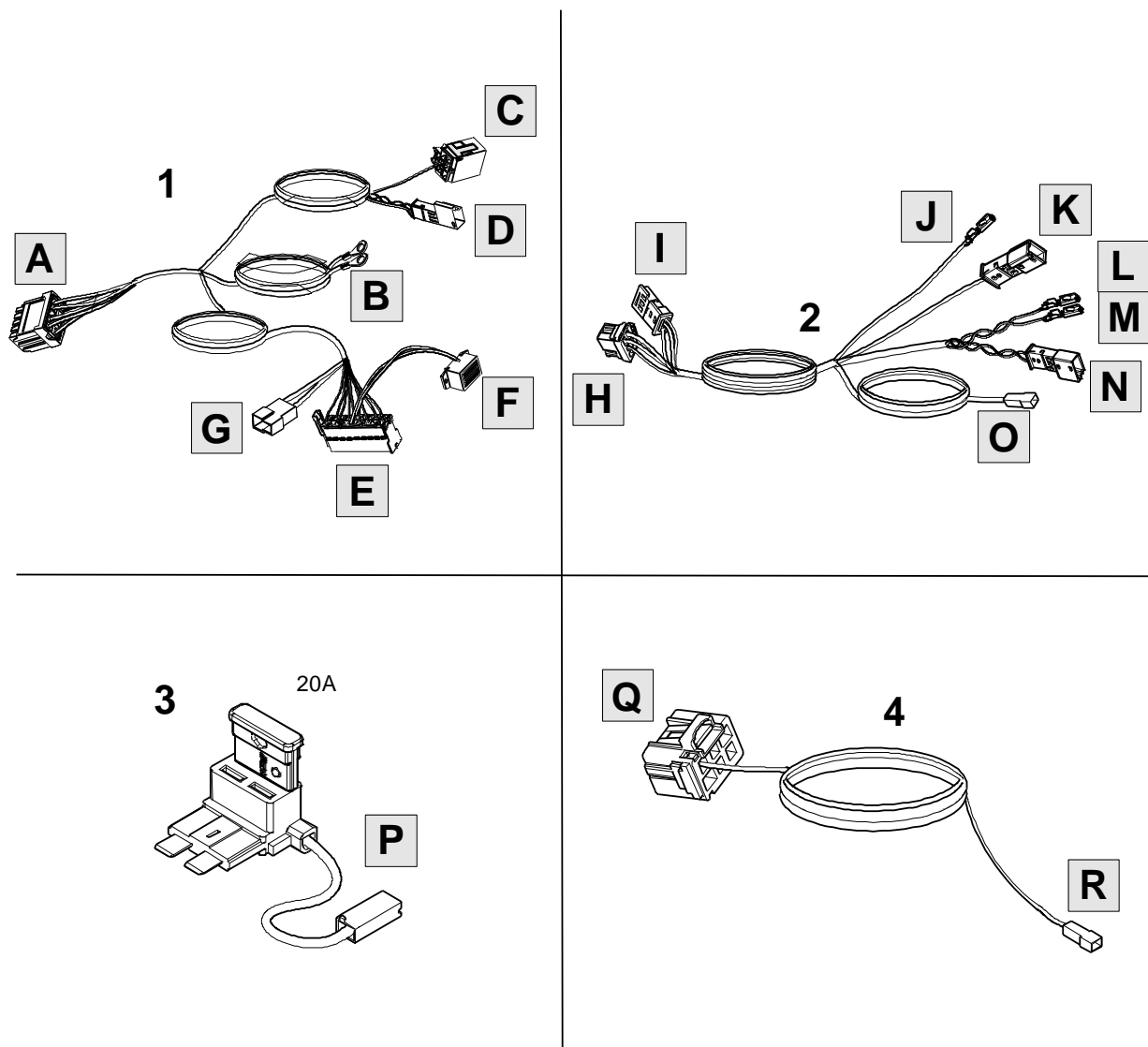


TOWBAR INSTALLATION INSTRUCTIONS

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AUDI Q7 4M CL4 SC

i WIRING ASSEMBLY DIAGRAM



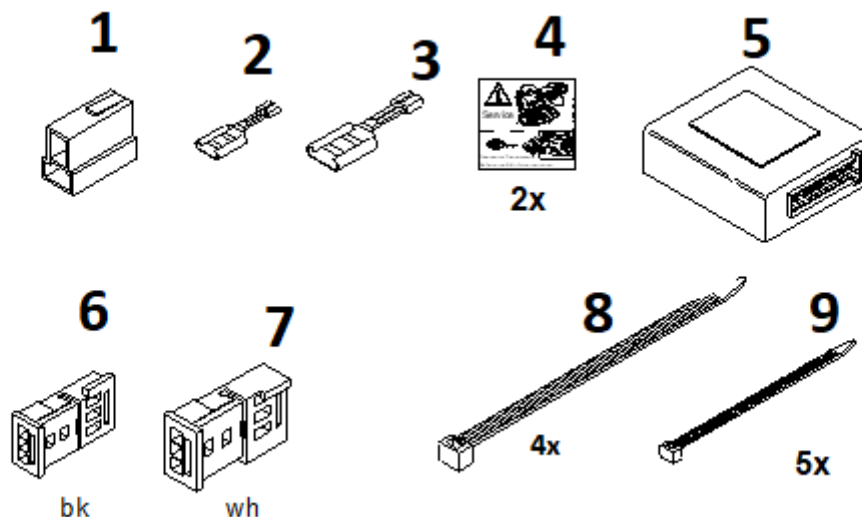
ITEM	DESCRIPTION	QTY
1	MAIN HARNESS	1
2	CAN EXTENSION HARNESS (NOT REQUIRED)	1
3	ADD-A FUSE (NOT REQUIRED)	1
4	POWER INPUT HARNESS (NOT REQUIRED)	1



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HARNES ACCESSORIES		
ITEM	DESCRIPTION	QTY
1	2-WAY F. CONNECTOR 6.3MM (BRAKE PREP CONNECTOR)	1
2	F. CONTACT 6,30MM/1,00mm ² (BRAKE PREP CONNECTOR)	1
3	F. CONTACT 6,30MM/2,50mm ² (BRAKE PREP CONNECTOR)	1
4	LABEL DIAGNOSTICS CAN- MODULE	2
5	TRAILER ECU (WLE70024)	1
6	3-WAY F. CONNECTOR (BLACK)	1
7	3-WAY F. CONNECTOR (WHITE) (NOT REQUIRED)	1
8	300mm CABLE TIE	4
9	150mm CABLE TIE	5



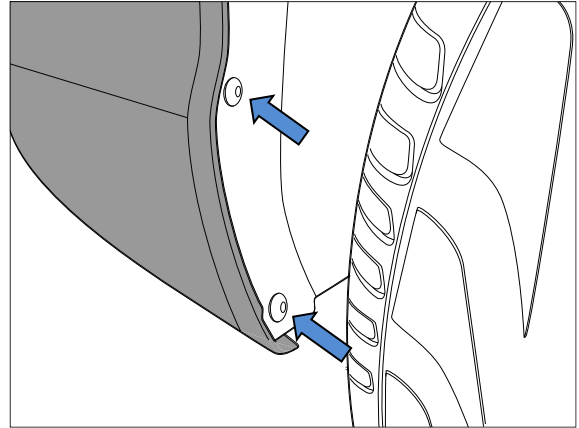
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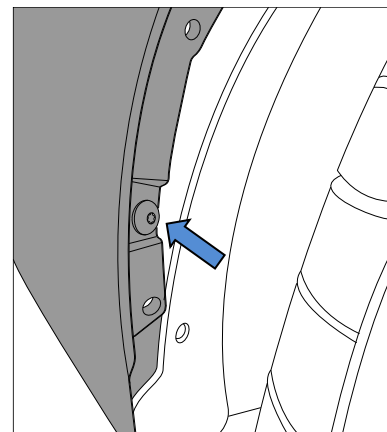
1. Remove 2 x Torx screws from inside the rear wheel arch.

Repeat for other side of vehicle.



2. In rear wheel arch, lift felt and remove 1 x Torx screw securing bumper.

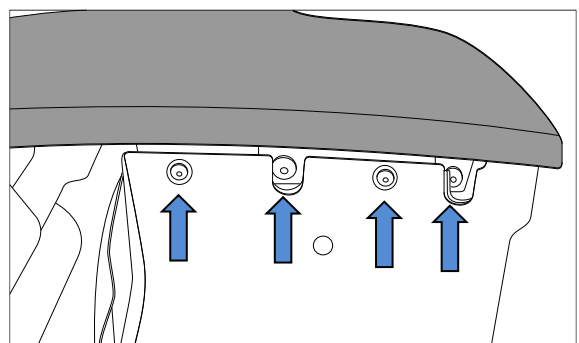
Repeat for other side of vehicle.



3. Under side of bumper rear of the arch, remove 4 x Torx screws:

- 2 x securing protector to bumper.
- 2 x securing bumper to vehicle mounts.

Repeat for other side of vehicle.



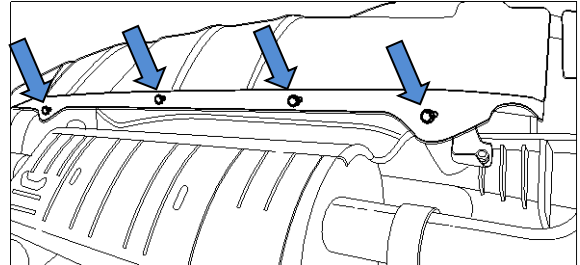


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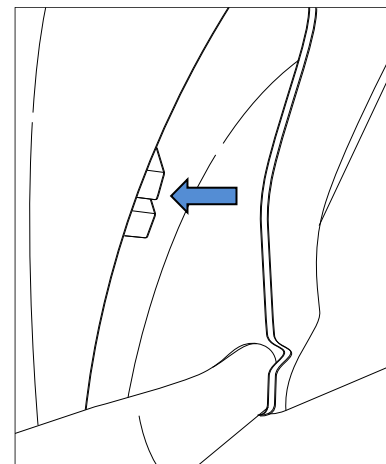
AUDI Q7 4M CL4 SC

4. Remove 4 x Torx screws at underside of rear of bumper.



5. Inside wheel arch, remove 1 x nut securing wheel arch trim.

Repeat for other side of vehicle.



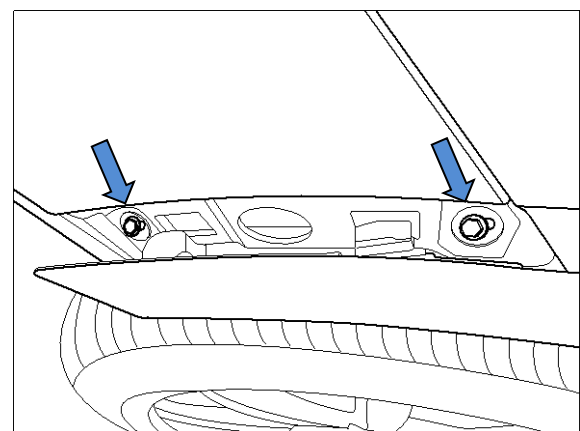
6. Partially remove wheel arch trim and remove 2 x Torx screws securing the bumper to the vehicle.

NOTE: The 2 x wheel arch trim clips need to be squeezed and pushed out of the retainers.

Repeat for other side of vehicle.

7. Carefully peel off and remove bumper.

NOTE: It is not necessary to disconnect the wiring harness from the bumper (lead on the LH side), **however**, have a suitable area next to vehicle to support the bumper once removed.





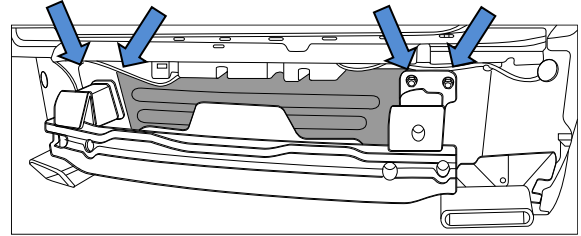
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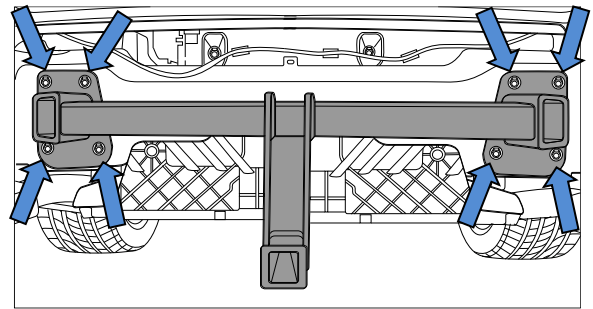
8. Remove and discard the 8 x bolts securing the impact bar.

Remove and discard the impact bar.



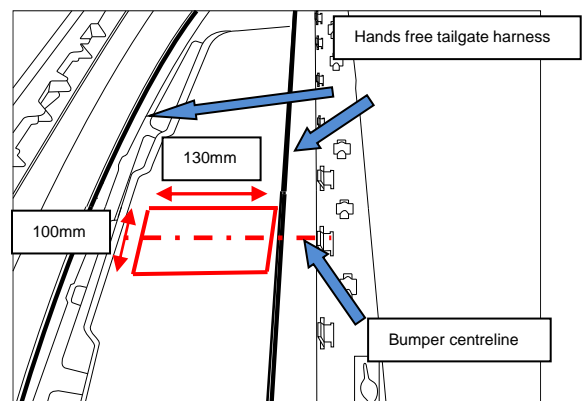
9. Secure towbar to vehicle using 8 x M12 x 1.5 x 45 bolts G10.9, complete with 1 washer per bolt.

Tighten all fasteners to a torque of 125Nm.



10. Identify centre of bumper and using the hands free tailgate harness as a bottom reference, create bumper cut 100mm wide and 130mm long as specified.

CAUTION: Ensure that the hands free tailgate harnesses are not damaged during the bumper cut.



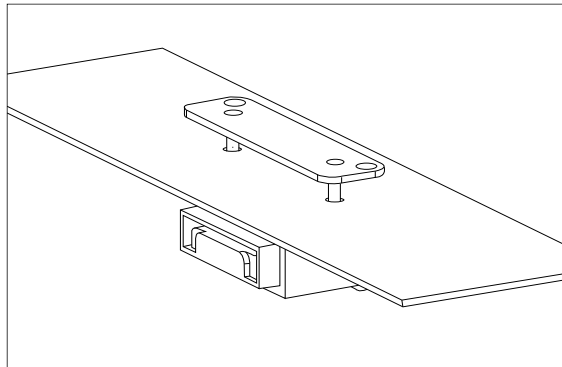


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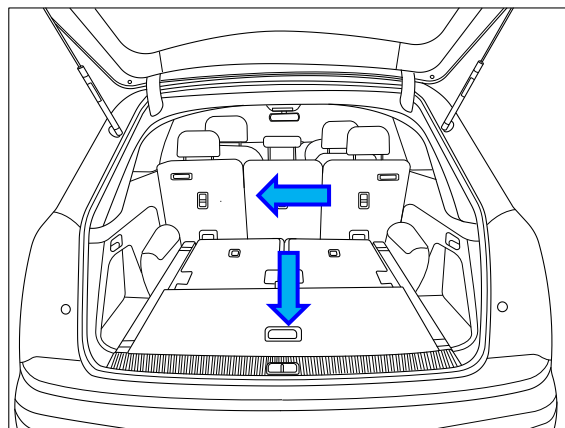
11. At an appropriate position on the bumper, mark out and drill 2x \varnothing 5mm holes 69mm apart on bumper skin to support plug bracket. Feed bracket threads through drilled holes prior to reinstalling bumper.
12. Manipulate the bumper to accept the towbar and follow steps 1 to 7 in reverse order to reinstall the bumper.



IMPORTANT

Due to possible vehicle variations, always confirm any noted vehicle colour wires with a multi-meter to ensure the correct function is identified before soldering or scotch locking. For vehicle wires denoted with two colours (example; RED/GREEN) the first colour will always be the main wire colour while the second colour is the thinner trace colour on the wire.

13. Remove the rear sun shade and carpet floor panel.
14. Fold down the LHS middle row seat.



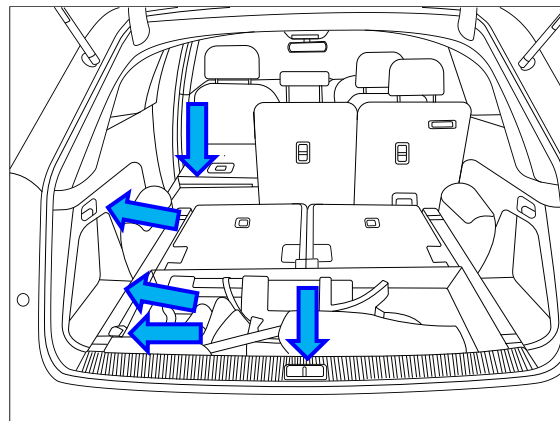


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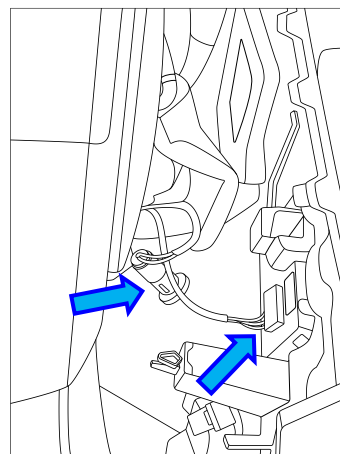
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15. Remove the rear sill trim by removing 2x torx screws.
16. Remove the LHS lower fuse access panel
17. Remove the torx screw that secures the folding seat switch panel by lifting the screw cover in the cargo net holder.
18. Remove the 2x LHS cargo anchor points.



19. Dislodge the LHS rear trim disconnect the aux power socket connector and the seat folding switch connector.

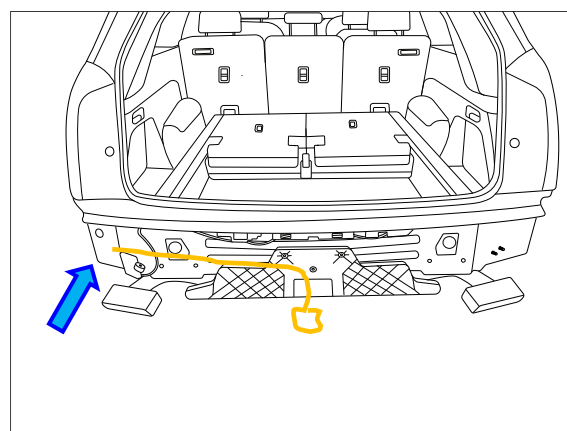
Remove the trim



20. From outside the vehicle drill a $\varnothing 30\text{mm}$ hole below the blanking grommet.

Note: Remove all sharp edges and spray rust inhibitor.

21. From outside the vehicle route and secure the tail harness (1800mm) to the towbar allowing enough length to later secure the trailer socket to plug bracket.
22. Slide the grommet to desired location, secure the grommet to the tail harness and feed through the previously drilled hole **ensure the grommet is seated properly.**



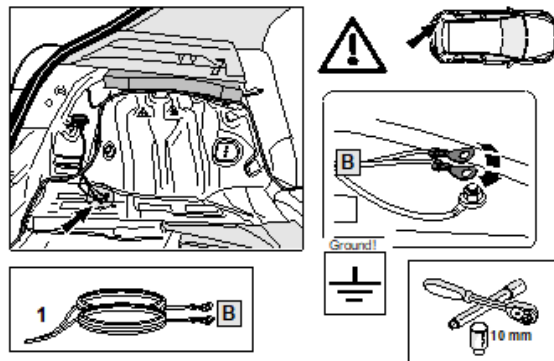


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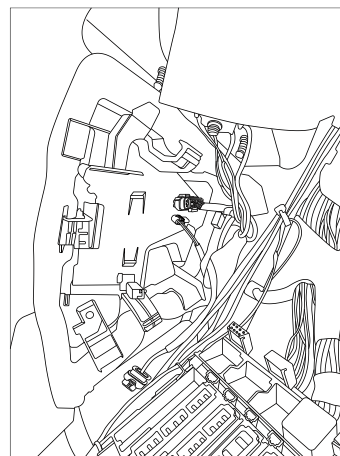
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23. Connect the trailer patch ring terminals (B) to the factory ground point.

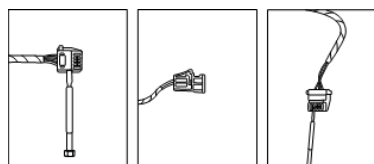


24. From inside the LHS rear of the vehicle locate the vehicle trailer prewire 6-way and 10-way connectors. These connectors are plugged into the plastic ecu housing holder.



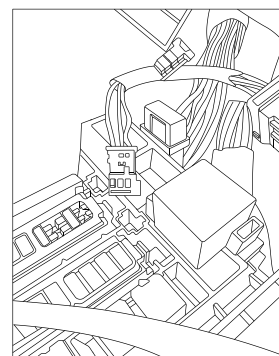
25. Locate the 10-way connector, using a jeweller's screw driver release the secondary lock.

26. Remove the following wires, place them into the 3-way black supplied female connector (6) by pressing down on the terminal tang to release.



Vehicle 10 pin	Colour	Harness 3 pin	Function
Pin 2	Black/Red	Pin 2	Brake
Pin 3	Green	Pin 1	Can hi
Pin 4	Orange/brown	Pin 3	Can low

Note: Ensure the terminals do not make contact.



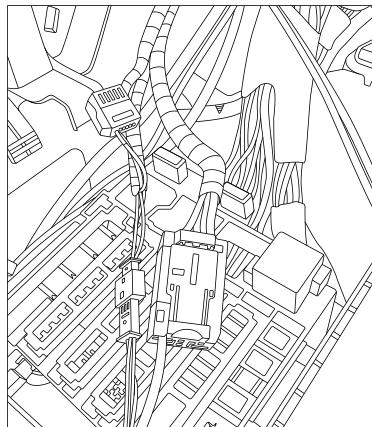


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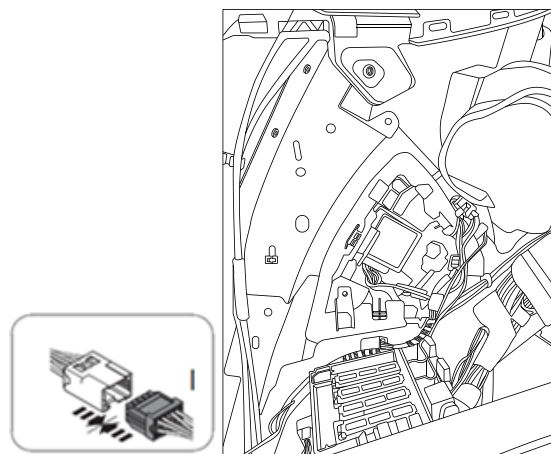
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27. From inside the vehicle locate the vehicle trailer prewire 6-way and 10-way connectors these connectors are plugged into the plastic ecu housing holder.
28. Plug the trailer patch 6-way power connector (C) into the vehicle mating connector.
29. Plug the trailer patch 3-way black connector (D) into the 3-way mating connector.



30. Peel the backing tape from the trailer module (5), place module to vehicle plastic ECU bracket and apply pressure ensuring good adhesion.
31. Plug the trailer patch blue connector (A) to mating 1800mm tail connector.



32. Secure all harnesses using cable ties.
33. Refit the rear bumper fascia.
Note: Ensure that all connections are reconnected before reconnecting the battery.
34. Reconnect the battery.
35. Next step is coding of vehicle. Pay attention to the "SmartCODE" instruction page.
36. Once the vehicle is coded test the trailer functionality with a test board.
37. Refit all removed interior parts.
38. Place fitting instructions in the glovebox when finished.



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.**

i 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.

i 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.

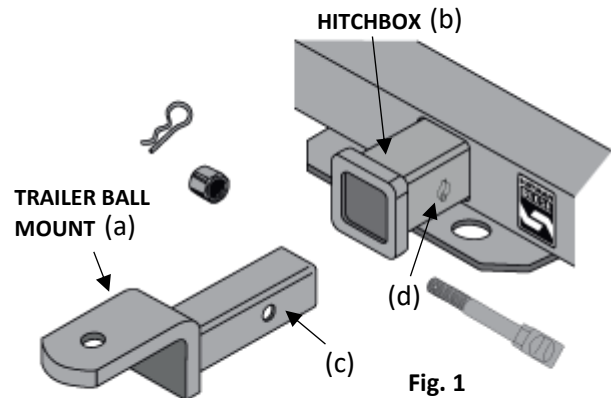
i Regularly inspect for wear and check the tightness of the Smart Pin Nut. Follow instructions below to re-tighten the nut as necessary when movement and noise in the tow ball mount is noted.

- 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

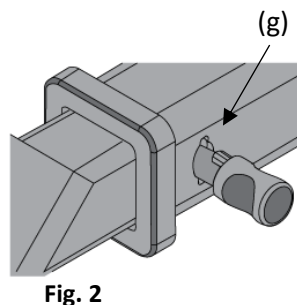
STEP 1

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



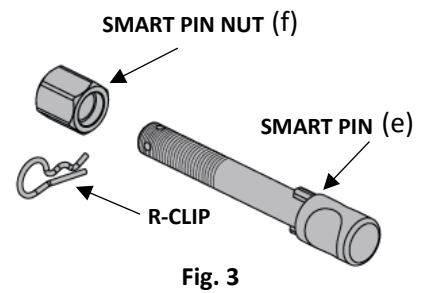
STEP 2

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)



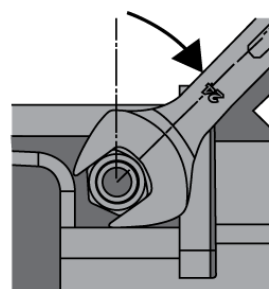
STEP 3

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.



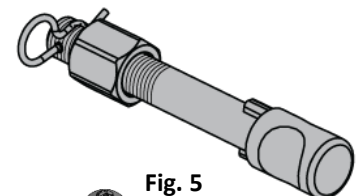
STEP 4

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



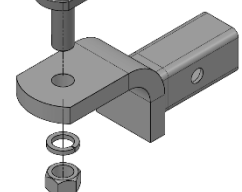
STEP 5

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 **350 Nm** using a calibrated torque wrench (Fig. 6).



Appendix



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