



TOWBAR INSTALLATION INSTRUCTIONS

PART NUMBER 03278RW

FORD EVEREST UA CN CL4



PRODUCT DETAILS:

Part Number:	03278RW	Maximum Towing Braked:	3100	kg
ECU Number:	WLE70003	Maximum Towing Unbraked:	750	kg
Tail Harness Length Required:	1200 mm	Maximum Static Ball Load:	310	kg
TBM/Lug Part Number:	21325			
Wiring Part Number:	WLL90008			

FITTING DETAILS:

Towbar Installation Time:	70 Mins.	Hayman Reese SmartCODE Solution Required:	YES
Wiring Installation Time:	30 Mins.	RPA Disable/Other:	YES
Total Installation Time:	100 Mins.		
Bumper Cut Required:	Yes		

Note:

- Please refer vehicles owner's manual for proper operation and understanding of towing features enabled when coded.
- Electric brake location: BLUE wire near ECU



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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).

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.

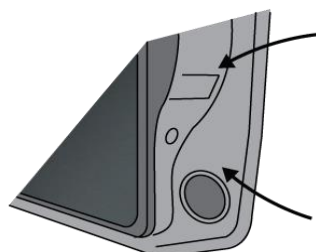
Bolts/Fasteners

- 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

- Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door.
- 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

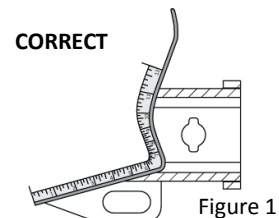
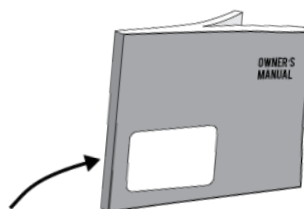


Figure 1

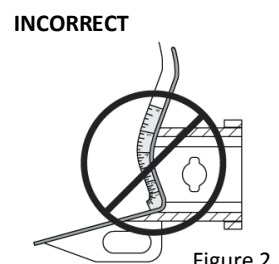


Figure 2

! 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.

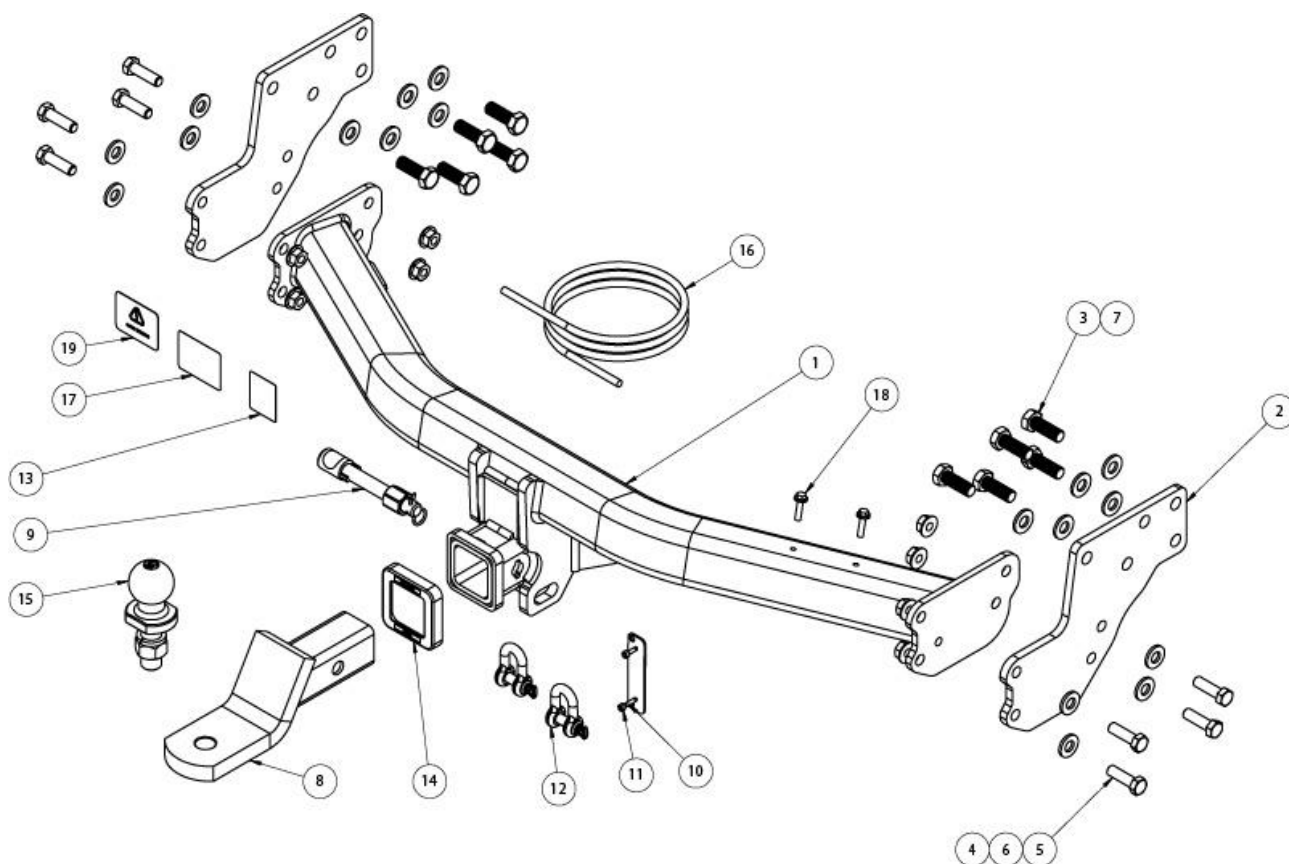


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i TOWBAR ASSEMBLY DIAGRAM



ITEM	DESCRIPTION	QTY
1	FORD EVEREST WELDED ASSEMBLY	1
2	SIDEARM	2
3	SET SCREW HEX HD M14x40	10
4	NUT HEX FLANGE M12x1.75P	8
5	SET SCREW M12x40x1.75P	8
6	WASHER PLAIN 1/2"	8
7	WASHER PLAIN M14x28x3	10
8	TRAILER BALL MOUNT	1
9	SMART PIN GOLD	1
10	PLUG BRACKET	1

ITEM	DESCRIPTION	QTY
11	NUT NYLOC HEX M4x0.7P	2
12	"D" SHACKLE 10mm	2
13	HAYMAN REESE LOGO STICKER	1
14	HITCH BOX COLLAR COVER	1
15	TOWBALL 50mm	1
16	WIRING LOOM	1
17	COMPLIANCE LABEL	1
18	TEK SCREW 14-20 HEX HD 22mm	2
19	CAN TRAILER WARNING LABEL	2



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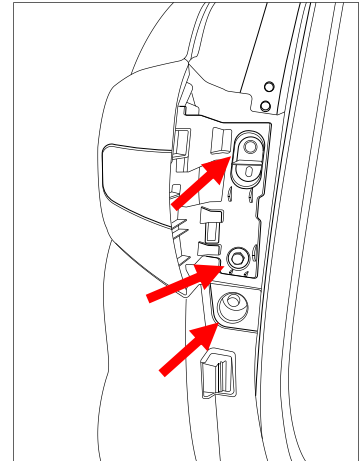
FORD EVEREST UA CN CL4

1. Open Tailgate and remove plastic trim to expose the taillight and bumper mount screws.

Remove 3 x screws.

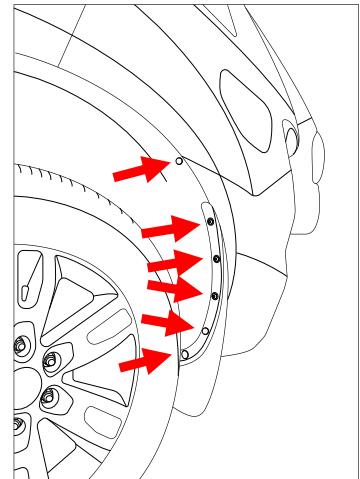
2. Remove and disconnect the taillight assembly.

Repeat for other side.



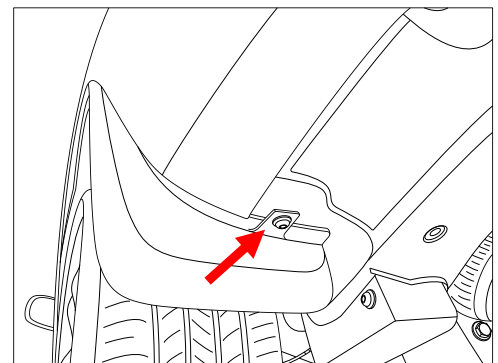
3. In wheel arch, remove 3 x scrivets and 3 x screws.

Repeat for other side.

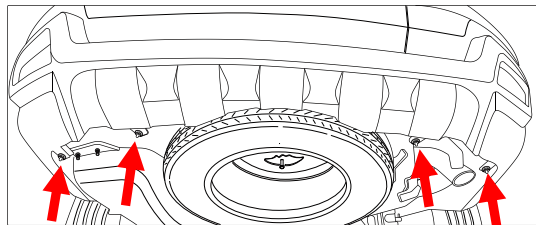


4. Remove 1 x screw from under the mudflap and remove mudflap.

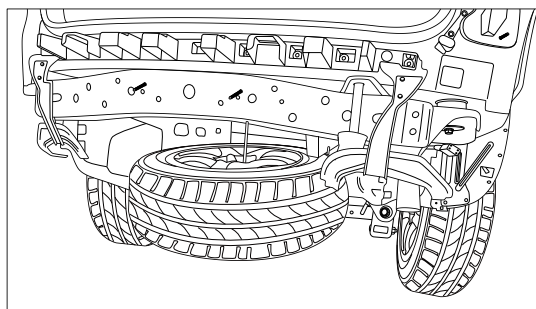
Repeat for other side.



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5. Remove the 4 x flanged screws along the bottom of the bumper.

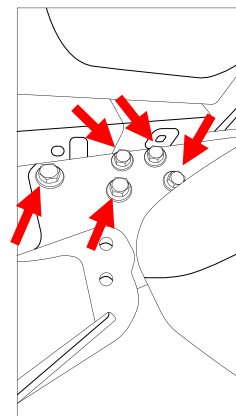


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6. Peel away from the sides and remove bumper.
Ensure to disconnect any wiring looms.
7. Lower spare wheel to assist with fitment.



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8. Position side arm to the inside of the chassis rail and loosely secure with 5 x M14 bolts complete with 1 x washer per bolt.

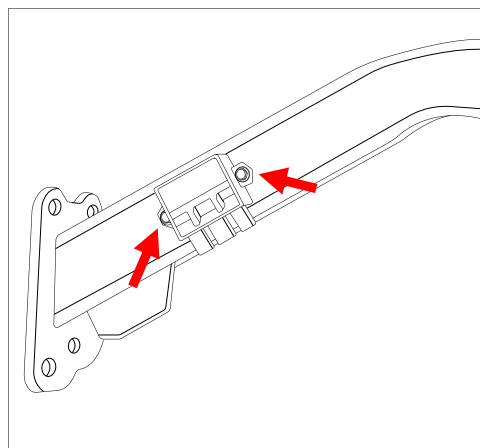
Repeat for other side



9. Inside the bumper, disconnect and relocate the footswipe control module from the bumper and secure it onto the top of the crosstube with the supplied 2 x tek screws.

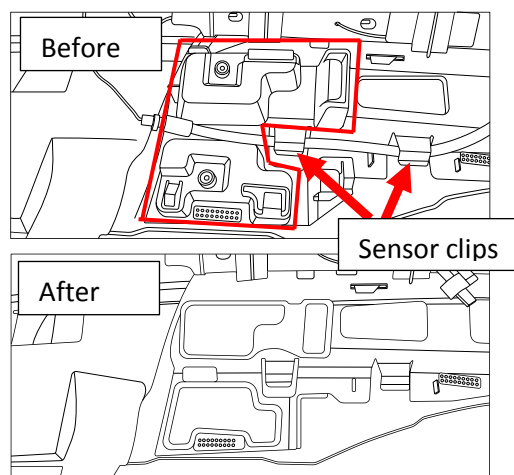
The Tek screw flanges may require some modification to fit neatly.

Ensure to not damage wiring.



10. On inside of bumper, cut away or grind down the Foot Swipe sensor module seating area to make clearance for the towbars crosstube. Ensure that the sensors wiring clip remains intact.

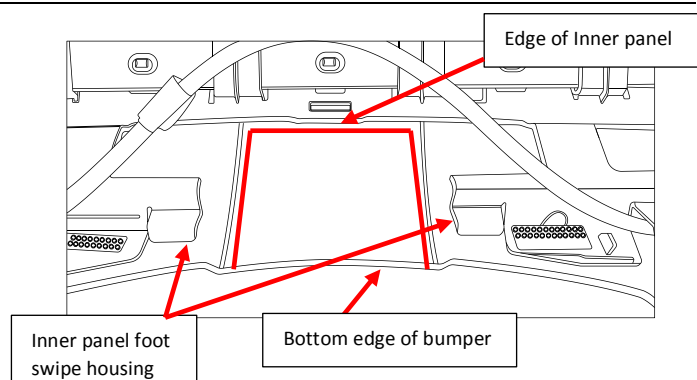
Ensure to not damage wiring or the bumper.



11. For bumper cut determine the centre of the bumper, measure, mark off as per image and cut out a section 100 mm wide and length as depicted in the image (just below edge of inner panel).

Cut a clearance section from the bumpers inner panel, foot swipe wire housing.

Ensure to not damage wiring.





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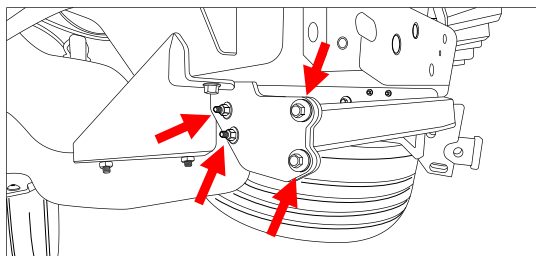
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12. Raise the crosstube to the side arms and loosely secure each side with 4 x M12 bolts complete with 1 x washer and 1 x flange nut per bolt.

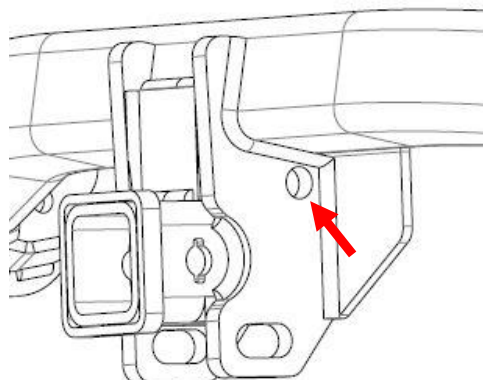
Position the towbar and tighten all fasteners to the following Torques:

M12 : 109Nm

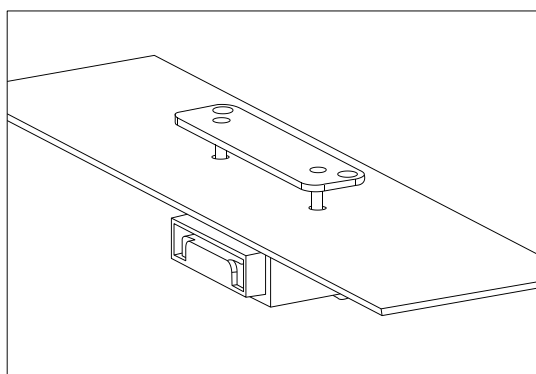
M14 : 140Nm



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13. Partially remove the foot swipe sensor (cable) from the LH side of the bumper and refit the bumper to the vehicle.
14. From the RH side, feed the foot swipe sensor (cable) through the towbar droppers and reseal the sensor into the bumper.
15. Reconnect the removed harnesses to the foot swipe control module.



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16. 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





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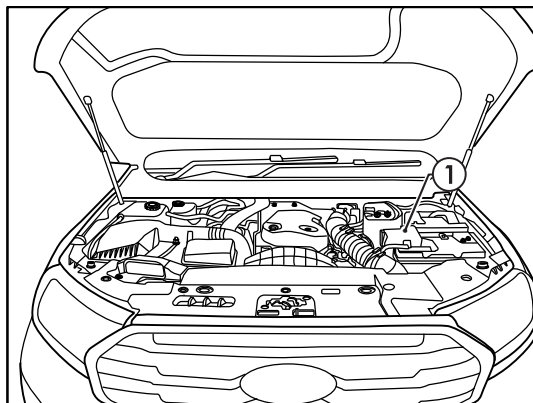
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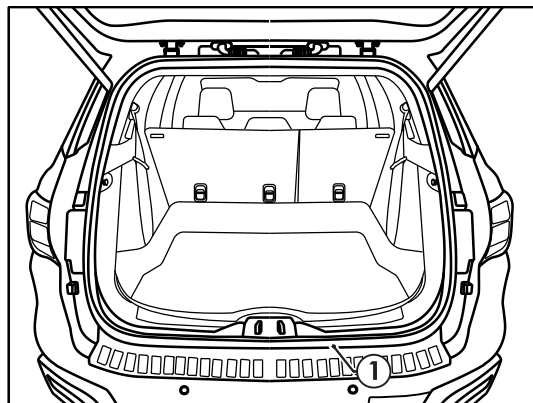
IMPORTANT

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.

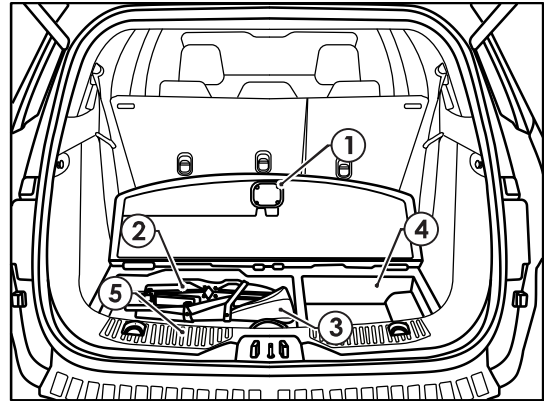
17. In the engine bay, disconnect the vehicle battery negative terminal (1).



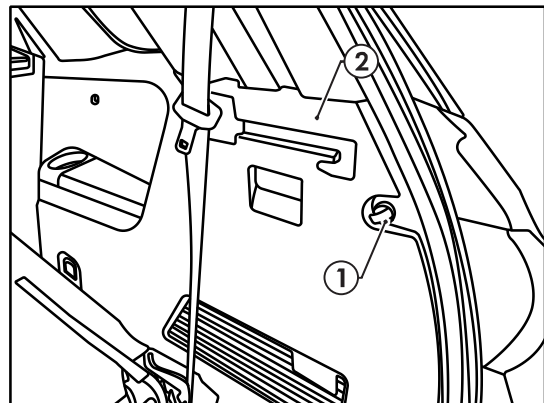
18. In the boot remove the rubber liner (1).



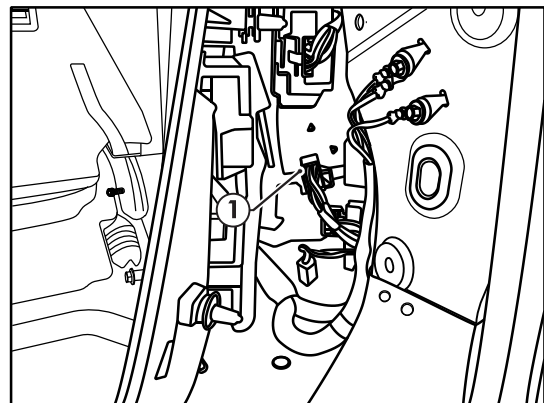
19. Fold up the boot storage lid (1).
20. Remove the jack (2) and tool bag (3).
21. Using a 10mm socket, remove the 5 nuts securing the boot storage tray (4).
22. Remove the boot storage tray.
23. Remove the rear scuff trim (5) by pulling in an upwards direction.



24. Remove the trim screw (1) securing the RHS trim (2).
25. Dislodge the RHS trim enough to gain access to the vehicle connectors.



26. Locate the vehicle CAN connectors (1).
27. Connect the trailer patch harness (WLL90008) to the vehicle can connectors.





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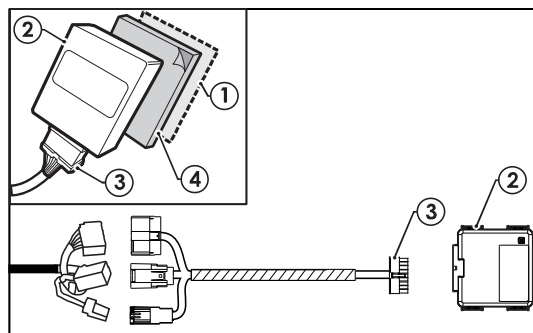
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28. Using an alcohol wipe, clean the RHS inner sheet metal area (1) and the underside of the ECU (WLE70003) (2).

29. Connect the trailer patch 18-way connector (3) to the ECU (2).

30. Apply double sided tape (4) to the ECU (2) and secure it to the vehicle sheet metal (1).

Note: Mount the ECU, ensuring the connector is orientated downwards.

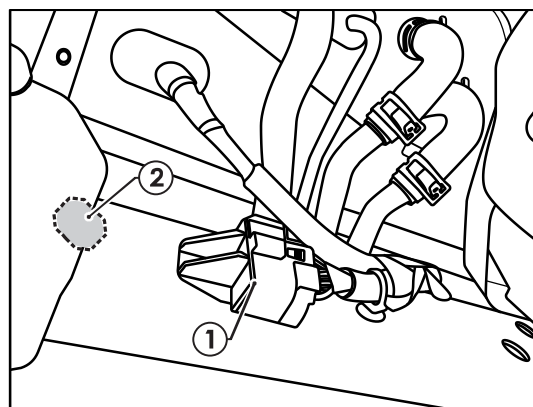


31. Under the vehicle RHS, to the rear of the rear right wheel, locate the trailer wiring pre wire connector (1).

32. Disconnect the blanking plug from the connector.

33. Patch in the short patch harness into the prewire.

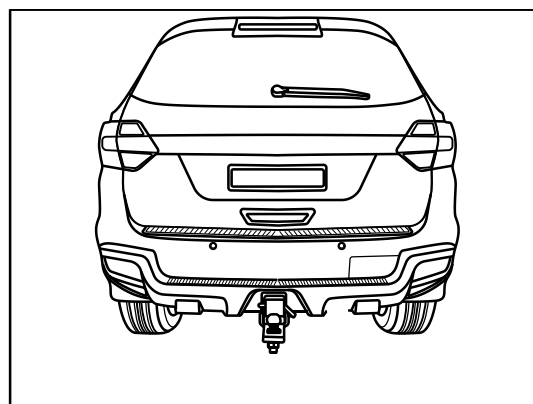
34. Using the supplied M6 Bolt, secure the earth ring terminal to the nearby chassis bolt hole (2).



35. With the rear bumper removed, secure tail harness to towbar.

36. Route tail harness up towards blue connector on the patch harness.

Note: Keep harness routing clear of all sharp edges, moving parts and places of extreme heat.





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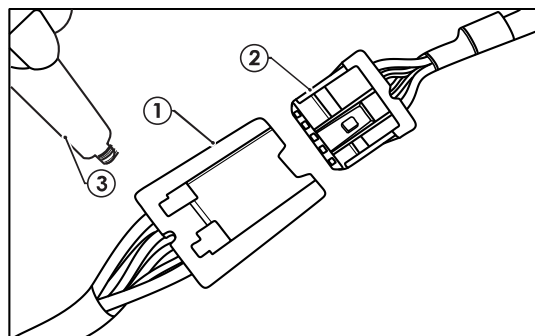
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37. Connect the tail harness (tail length 1800mm) 8-way connector (1) to the trailer patch mating 8-way connector (2).

38. Apply silicone grease (not supplied) (3) to waterproof connector.

39. Secure all harness using supplied Cable Ties.



40. Re-fit all removed parts and secure all fasteners, ensuring there are no squeaks or rattles.

Note: Ensure that all connections are reconnected before reconnecting the battery.

41. Reconnect battery.

42. Next step is coding of vehicle. Locate the OBD plug located driver side foot well by removing the fuse panel cover, Pay attention to the "SmartCODE" instruction page.

43. Once the vehicle is coded test the trailer functionality with a test board.

44. Place fitting instructions in 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.**

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.

Appendix

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

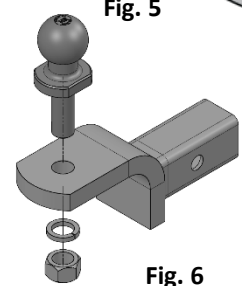
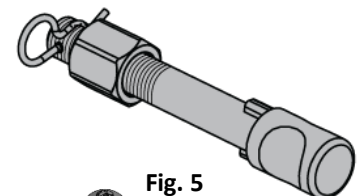
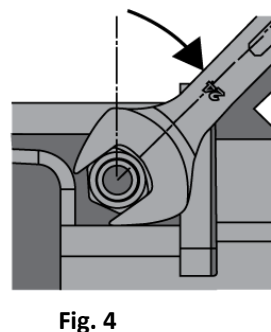
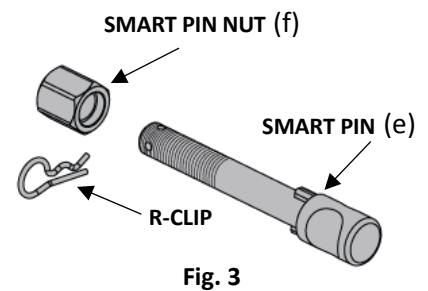
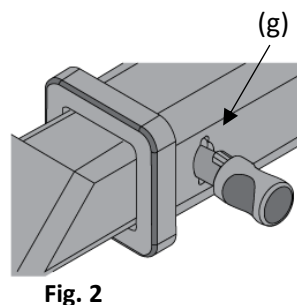
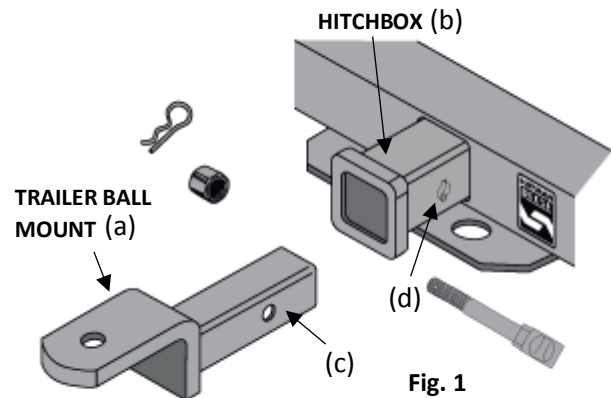
Tighten Smart Pin Nut by turning nut a further 1/8th of a turn in the clockwise direction using a 24mm spanner (Fig. 4).

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