PART No: 03170RW VOLVO XC90 L SERIES

INSTALLATION INSTRUCTIONS

PLEASE ENSURE THAT INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED



Installation Time: Approx 60 Mins

Towbar Installation Instructions Towbar capacity

VOLVO XC90 L SERIES

Part Number 03170RW Max Towing Braked 2250 kg

Max Towing Unbraked 750 kg Max Static Ball Load 225 kg

Hayman Reese (Cequent)
PO Box 4050, Dandenong South VIC 3164
Phone 1800 812 017 Email info@haymanreese.com.au



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Warning:

- 1. Do not, drill, cut, weld or otherwise modify the towbar.
- 2. If you are using electric welding on a motor vehicle, <u>always</u> check that the vehicle is not equipped with electronic engine or instrument management equipment. Failure to do so could <u>destroy</u> any on board computers. If in doubt, check with the vehicle's manufacturer.
- 3. If TBM is used in inverted position tow ball may make contact with rear tailgate when lowered, which could cause damage.

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. 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 authorised **Hayman Reese** dealer if further information is required.
- 7. Towbar load rating sticker provided with this product shall be conspicuously located on inside rear end of the driver's door. (See diagram below).
- 8. Hayman Reese recommends that you check your tow ball to ensure that it complies with the Australian standards **AS 4177.2.**
- 9. **PLEASE NOTE**: It is advised to remove your LUG or TBM 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.

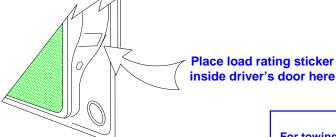
Tow bar Maintenance and Care.

Hayman Reese 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.



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

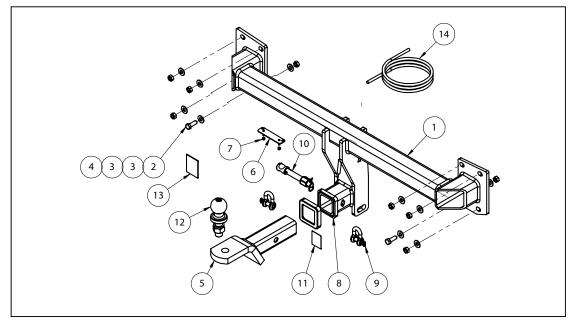
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HAYMAN

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ITEM NO.	DESCRIPTION	QTY.
1	VOLVO XC90L SERIES WELDED ASSY	1
2	M10x30 1.5P BOLT 10.9 GRADE	2
3	WASHER FLAT M10x23x2 Z/P	10
4	HEX NUT M10x1.5	8
5	CLASS 4 TBM	1
6	PLUG BRACKET	1
7	NUT NYLOC M4-0.7 Z/P	2
8	HITCH BOX COLLAR COVER	1
9	10mm "D" SHACKLE	2
10	ANTI-RATTLE PULL PIN ASSY GOLD	1
11	H.R STICKER	1
12	HR TOWBALL	1
13	ACRYLIC COMPLIANCE PLATE	1
14	WIRING LOOM	1

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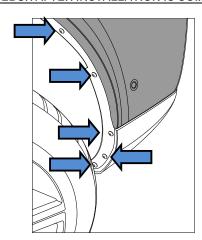
PART No: 03170RW VOLVO XC90 L SERIES

INSTALLATION INSTRUCTIONS

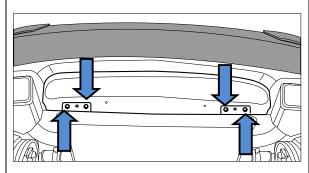
PLEASE ENSURE THAT INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT PLACE THESE INSTRUCTIONS IN THE VEHICLE'S GLOVEBOX AFTER INSTALLATION IS COMPLETED

1. Remove the 5 x Torx screws in the rear wheel arch

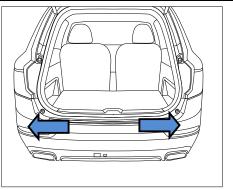
Repeat for the opposite side of the vehicle.



2. Remove the 4 x Torx screws securing the bumper and heat shield to the vehicle.



3. Remove the 2 x plastic stoppers in the boot cavity.



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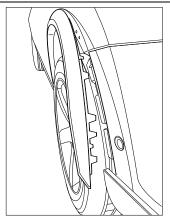
INSTALLATION INSTRUCTIONS

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4. Partially peel back the rear wheel arch trim.

Repeat for the opposite side of the vehicle.

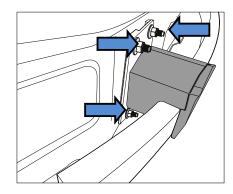
Carefully unclip and remove bumper and disconnect wiring harness at connector.



6. Remove and discard the 3 x flanged nuts securing the rear impact beam to the vehicle.

Repeat for the opposite side of the vehicle.

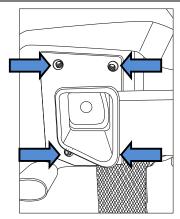
7. Remove and discard the rear impact beam.



 Offer towbar to rear panel of vehicle.
 Secure towbar with 6 x M10 nuts complete with 1x washer per stud.

Also fit the 2 x M10 bolts complete with 2 x washers and 1 x M10 Nut per bolt.

Tighten all fasteners to 70Nm.



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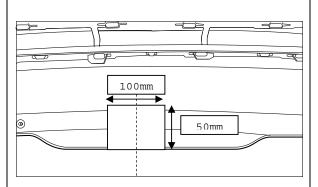


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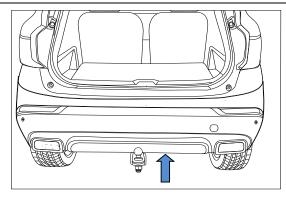
INSTALLATION INSTRUCTIONS

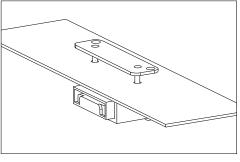
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9. Identify centreline of bumper and create cut, 100mm wide and 50 mm long, as measured on the inside of the bumper.



- 10. Find a suitable position on the bumper for the plug bracket.
 - Mark out and drill 2x ø5mm holes 69mm apart on bumper skin to support plug bracket. Feed bracket threads through drilled holes prior to reinstalling bumper.
- 11. Reinstall bumper bar by following steps 1 to 5 in reverse order.





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PART No: 101443-WL VOLVO XC90 L SERIES

INSTALLATION INSTRUCTIONS

PLEASE ENSURE THAT INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT

Wiring Loom Installation Instructions

VOLVO XC90 L SERIES

Part No: 101443-WL

Tail Harness Length Required: 1800mm ECU Required: 04826

Wiring Loom Installation Time: Approx. 30 minutes

Issue Date 11-01-16 Page 1 Part No: 101443-WL



PART No: 101443-WL VOLVO XC90 L SERIES

INSTALLATION INSTRUCTIONS

PLEASE ENSURE THAT INSTRUCTIONS ARE UNDERSTOOD PRIOR TO FITMENT

1. In the luggage compartment area of the vehicle, fold down the rear passenger seats (1) and remove the floor carpet (2).



- 2. Remove the spare wheel cover (1).
- **3.** Remove the rear trim (2) by unscrewing the two bolts.



4. Remove the RHS tool tray (1).



Issue Date 11-01-16 Page 2 Part No: 101443-WL

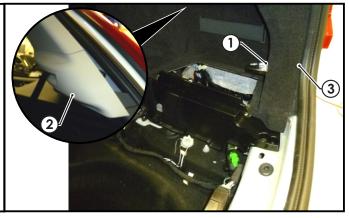


PART No: 101443-WL VOLVO XC90 L SERIES

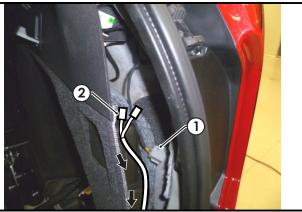
INSTALLATION INSTRUCTIONS

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- **5.** Remove the RHS lower luggage compartment latch bolt (1).
- **6.** Dislodge the 'D' pillar white seat belt trim (2) and the lower RHS luggage compartment trim (3).



- 7. Dislodge the upper section of the lower trim and then disconnect the RHS tail light connector (1) and then patch the trailer patch (P/No: 101443-WL)(2) in between.
- 8. Route the trailer patch down and across the rear of the vehicle, towards the LHS.



- **9.** Remove the LHS luggage compartment access panel (1).
- **10.** Continue routing the trailer patch harness (2) across the rear of the vehicle and into the LHS luggage compartment cavity.



Issue Date 11-01-16 Page 3 Part No: 101443-WL

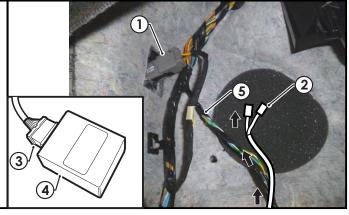


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INSTALLATION INSTRUCTIONS

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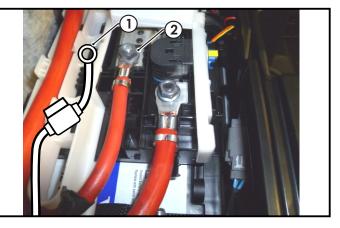
- **11.** Disconnect the LHS tail light connector (1) and patch the trailer patch connectors (2) in between.
- 12. Connect the trailer patch ECU connector (3) to the ECU (4) and then secure the ECU (4) to the vehicle harness (5) using a cable tie (not supplied). Ensure the ECU (4) is mounted with the connector (3) facing downwards.



13. Secure the trailer patch ground ring terminal (1) to the vehicle battery terminal (2) ground location.



14. Remove the battery white plastic lid and secure the trailer patch power ring terminal (1) to the indicated vehicle positive terminal (2).



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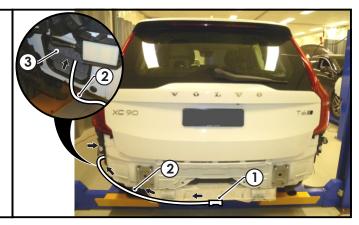


PART No: 101443-WL VOLVO XC90 L SERIES

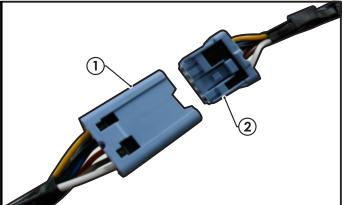
INSTALLATION INSTRUCTIONS

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- **14.** Secure the tail harness socket head (1) to the towbar mounting bracket (not shown) using M4 fasteners (not supplied).
- **15.** Route the tail harness (2) along the LHS of the vehicle and up into the LHS vent (3).



16. Connect the tail harness 8-way connector (1) to the trailer patch 8-way mating connector (2).



- Test the trailer harness function using a light board or multi-meter.
- **18.** Secure all harnesses using cable ties (not supplied).
- **19.** Re-fit all removed parts and secure all fasteners, ensure there are no squeaks or rattles.
- 20. Place instructions in glove box after fitment.

Issue Date 11-01-16 Page 5 Part No: 101443-WL





FITTING INSTRUCTIONS Smart Pin (55070BL)

- These fitting instructions are supplied to ensure understanding of how the SMART PIN should be fitted and used correctly.
- Once installed, we recommend <u>ALL</u> instructions are kept and placed in the vehicle glove box.

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

*Do not tow with your vehicle if the R CLIP or the SMART PIN NUT is loose or missing. Replacement parts are available from your Hayman Reese Distributor.

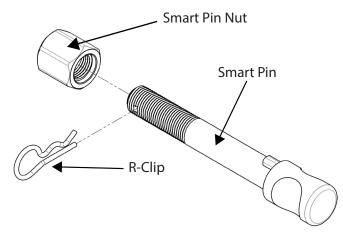
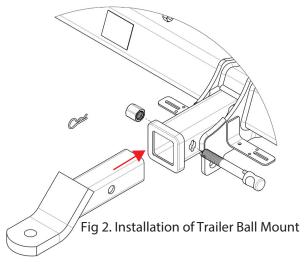
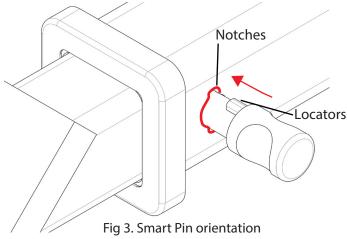


Fig 1. Smart Pin assembly

STEP 1

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





STEP 2

Insert SMART 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 SMART PIN NUT onto SMART PIN; tighten SMART PIN NUT until finger tight, ensuring TBM is restrained from 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).



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

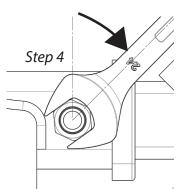


Fig 4. Tightening of Smart Pin Nut

