

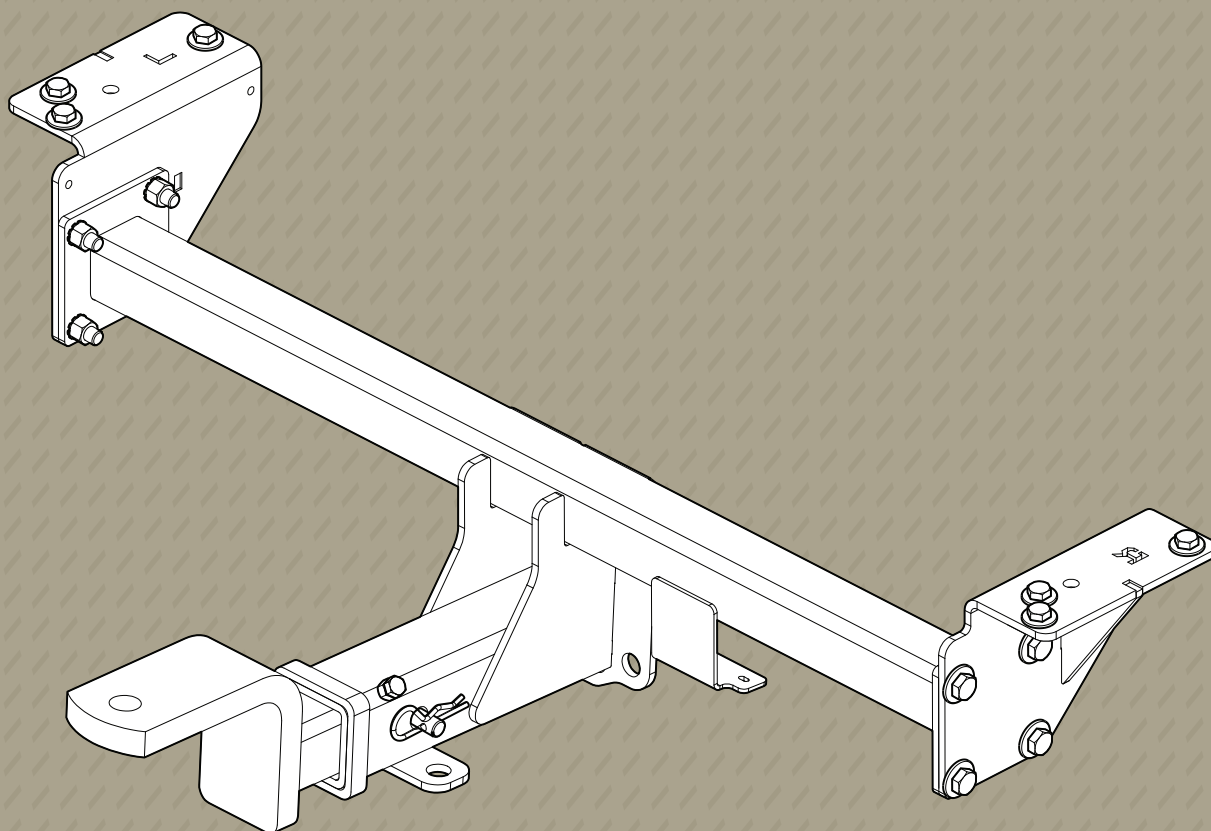


EST 1956
CARASEL®

**FITTING
INSTRUCTIONS**

BYD — ATTO 3

P/N — BYD1G2
CONTROLLED



ISSUE #: 04
ISSUE DATE: 20/12/2024

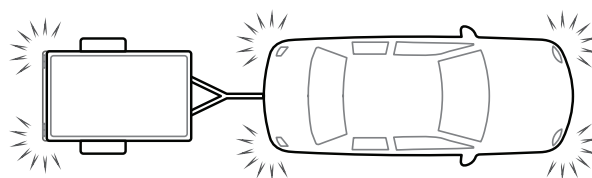
CONTENTS

2	IMPORTANT INFORMATION
4	PARTS LIST
5	VEHICLE PREPARATION
6	TOWBAR INSTALLATION
10	WIRING STEPS
14	FINALISE FITMENT
14	TOWBALL USAGE

IMPORTANT INFORMATION

- CHECK THE MAXIMUM TOWING CAPACITY OF YOUR VEHICLE AS STATED BY THE VEHICLE MANUFACTURER.
- DO NOT EXCEED THE MAXIMUM TOWING CAPACITY OF YOUR VEHICLE OR OF THIS TOWBAR. COMPLY WITH THE LOWEST OF THESE TWO VALUES.
- THIS PRODUCT IS FOR TOWING PURPOSES ONLY AND MUST ONLY BE LOADED AS STATED IN YOUR VEHICLE OWNER'S MANUAL.

CHECK:



0km



+1000km



+1000km




+1000km



GENERAL:

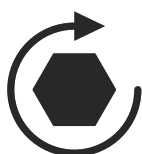
- Read these instructions thoroughly and check all components are correct before installation.
- These instructions must be followed for warranty to be upheld.
- Check that the towbar is suitable for the vehicle and be wary of any aftermarket changes to the vehicle design that may conflict with the fitting of this towbar. (Tray, Canopy, Suspension etc.)
- Load ratings specified are under the assumption that your trailer has suitable braking systems for its weight.
- After installation is completed, store these instructions in the vehicle's glovebox with vehicle's manual.
- When towing a load behind your vehicle, the handling characteristics of your vehicle will be affected. Be cautious when cornering, braking and accelerating, especially when towing wind-resistant loads, and when travelling in off-road conditions.

WARNING:

- Always inspect towbar and towbar accessories before use.
- Do not use towbar if any signs of damage, rust corrosion or fractures are present.
- Do not alter or modify this towbar in any way.
- Do not install / use towbar if there is any damage near the towbar mounting area, or if your vehicle is involved in a collision.
- If vehicle drilling is required, check behind chassis rail and body panels before drilling to ensure no hazards are present. After drilling, remove swarf and treat exposed metal with a rust inhibitor.
- Ensure that your vehicle is on level ground and securely parked before beginning installation / maintenance work.
- Always wear appropriate protective gear before beginning installation / maintenance work. 

TOWBAR MAINTENANCE AND CARE:

- Regularly inspect all bolted connections, ensuring they are torqued to the specifications below and are in good condition.
- Clean tow ball and hitch with brake cleaner to avoid abrasion.
- When not in use, store the Tow Ball Mount assembly and CLASS 4 Pin and Clip inside the car away from moisture.
- Before driving with a trailer, attach the trailer to the towbar and check that all electrical wiring is fully functional.



TIGHTEN BOLTED CONNECTIONS TO THE FOLLOWING TORQUE SETTINGS,
UNLESS OTHERWISE SPECIFIED IN INSTRUCTION STEPS:

M16: 210 - 240 Nm

M12: 100 - 120 Nm

M6: 12 - 15 Nm

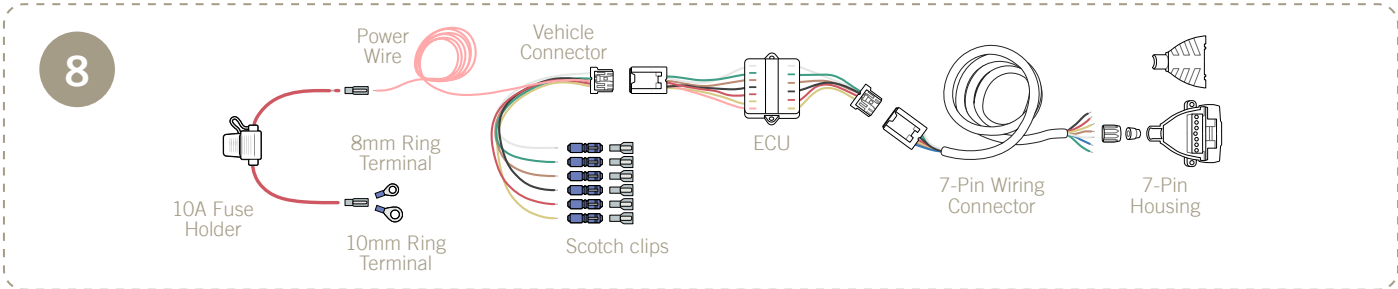
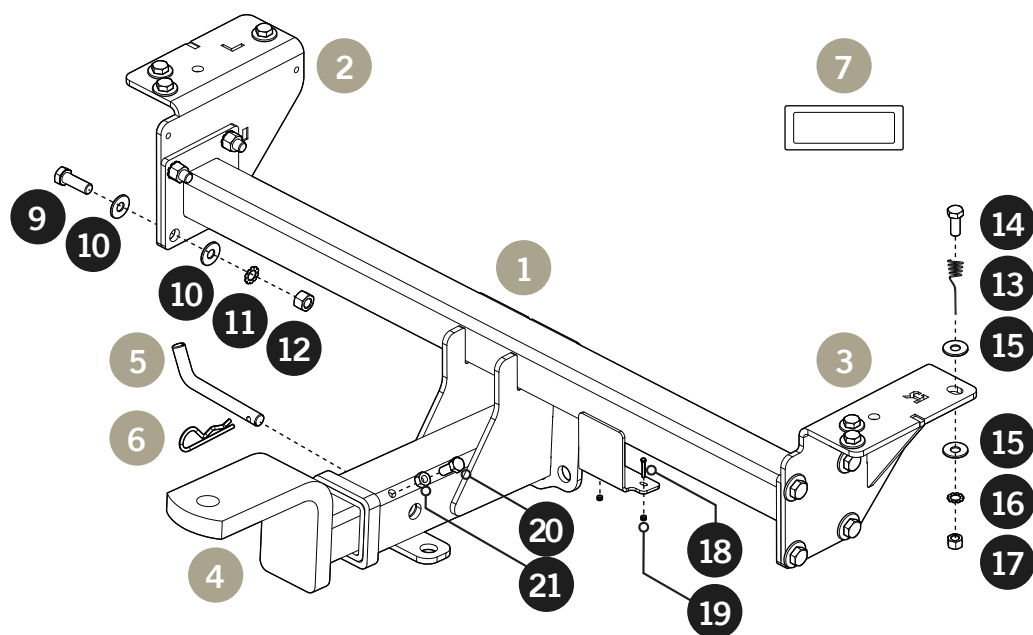
M14: 150 - 170 Nm

M10: 60 - 70 Nm

M4: 4 - 5 Nm

These fitting instructions are the property of Carasel Pty. Ltd. and may not be altered for any other purpose than intended.

PARTS LIST



#	PART	QTY
1	CROSS-BEAM	x1
2	LEFT SIDE BRACKET	x1
3	RIGHT SIDE BRACKET	x1
4	TOWBAR HITCH	x1
5	PIN	x1
6	R-CLIP	x1
7	LOAD RATING STICKER	x1
8	TOWBAR BYPASS KIT	x1

#	HARDWARE	QTY
9	M12 x 35mm x 1.25p BOLT	x8
10	M12 FLAT WASHER	x16
11	M12 TOOTHED WASHER	x8
12	M12 x 1.25p NUT	x8
13	SPRING FISHING WIRE	x1
14	M10 x 17mm x 1.25p BOLT	x6
15	M10 FLAT WASHER	x12
16	M10 TOOTHED WASHER	x6
17	M10 x 1.25p NUT	x6
18	M4 x 20mm BOLT	x2
19	M4 x HEX NUT	x2
20	3/8" ANTI RATTLE BOLT	x1
21	3/8" NUT	x1



TOOLS REQUIRED

- 10.5mm Drill Bit

- Power Drill

- Cold Gal Paint

- 19mm Socket Wrench

- 17mm Socket Wrench

- Torque Wrench

- Marker

- Trim removal tool

- Soldering Iron

- Electrical Tape

- Electrical Wire 1.5mm (7 meters)

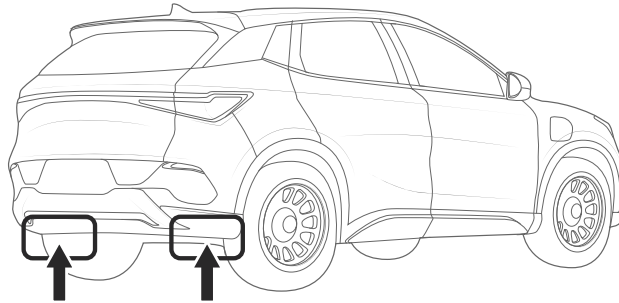
- Split Wire Loom (5 meters)

- Zip ties x5

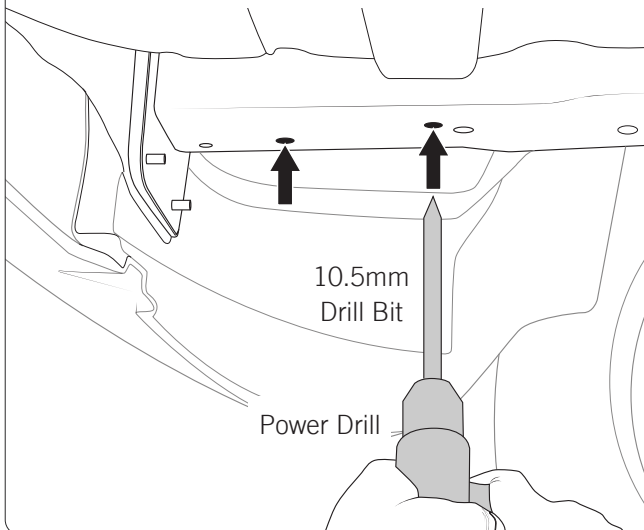


VEHICLE PREPARATION

STEP 01

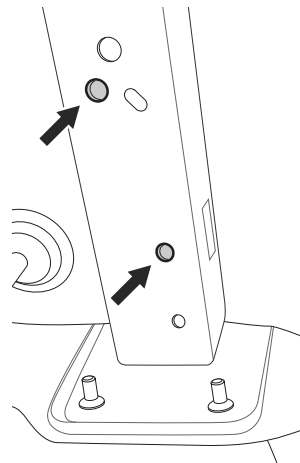


- A.** Drill out 2 holes in the vehicle chassis to remove the body sound deadener.

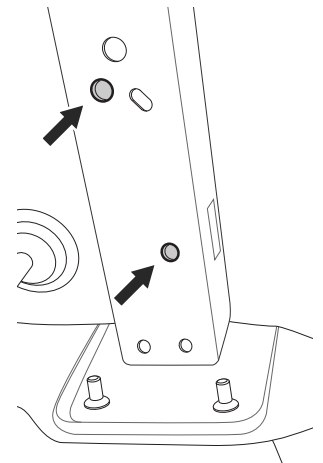


Note location of holes:

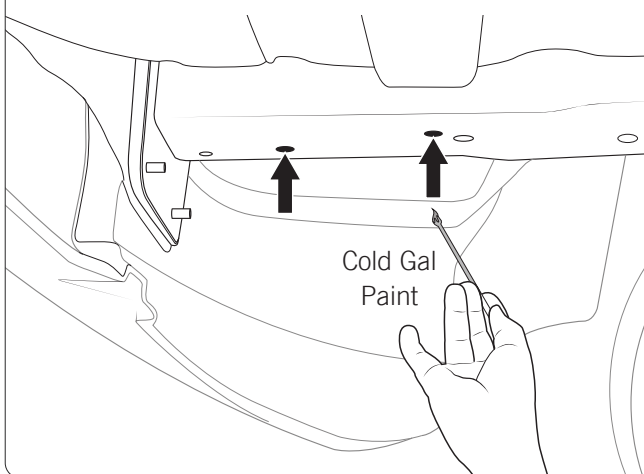
**MODELS BEFORE
JULY 2024:**



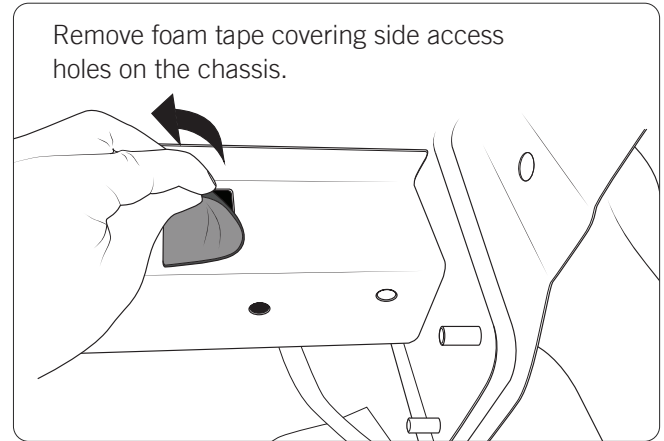
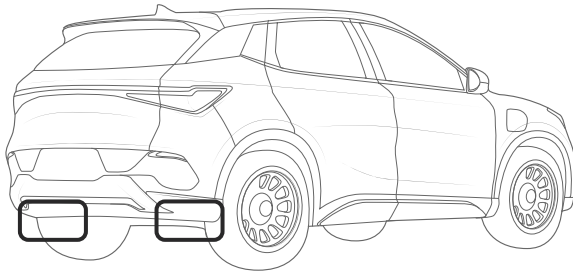
**MODELS AFTER
JULY 2024:**



- B.** Rust proof bare material. Allow dry time.



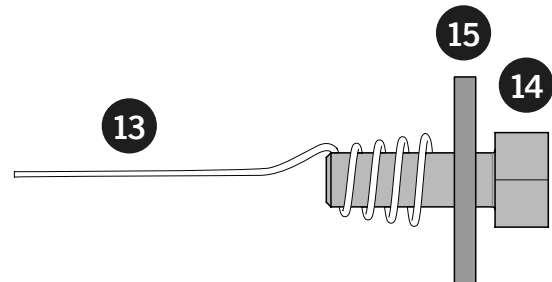
STEP 02



TOWBAR INSTALLATION

STEP 03

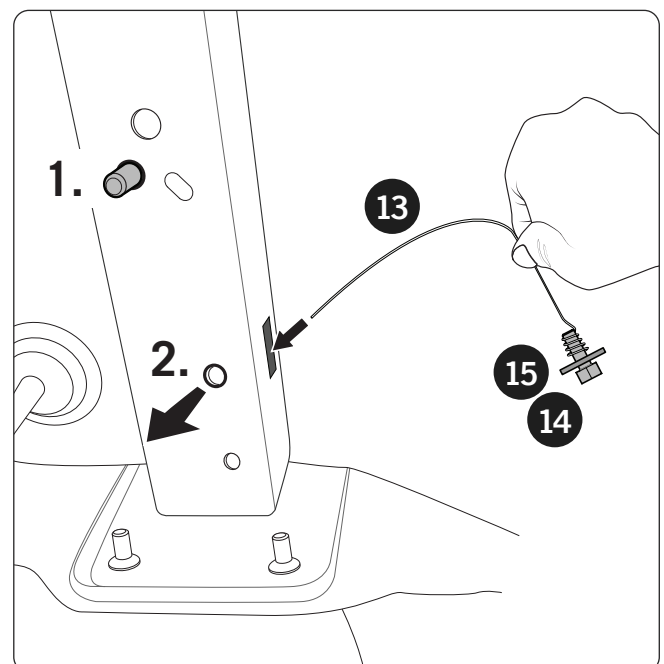
- A.** Thread Spring Wire onto x1 M10 BOLT with M10 FLAT WASHER.



- B.** Insert wired bolts into previously drilled holes.

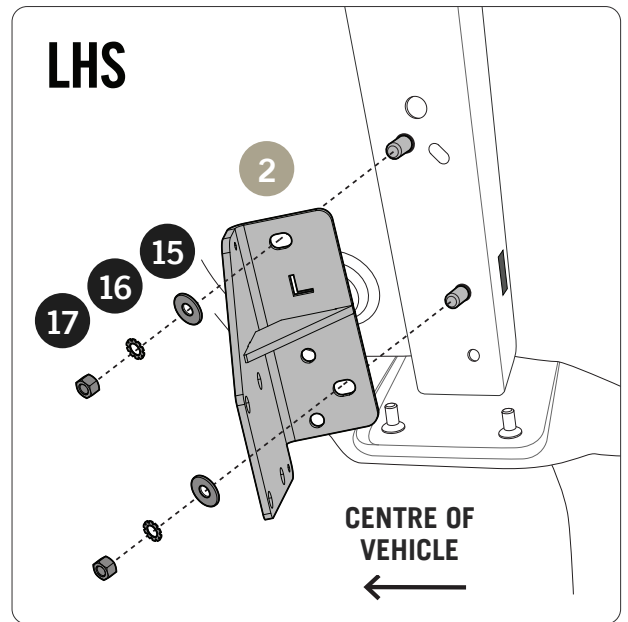
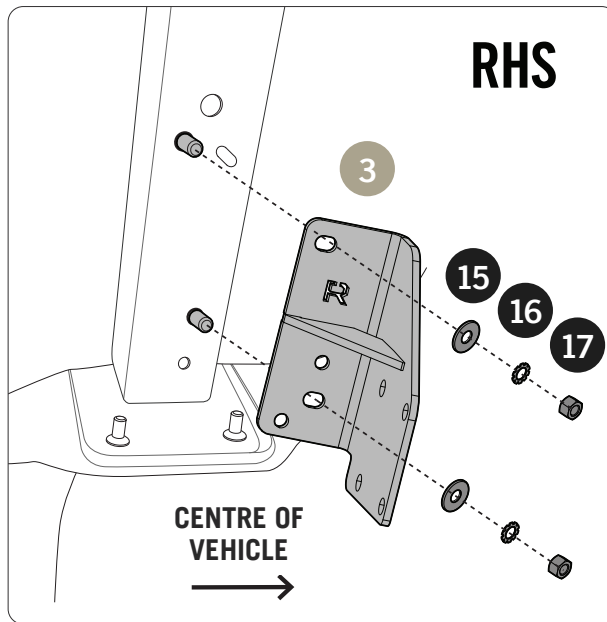
Once bolt is in place, unscrew the spring wire leaving the bolt and washer in place.

Reuse spring wire so there are **x2 bolts per vehicle side.**



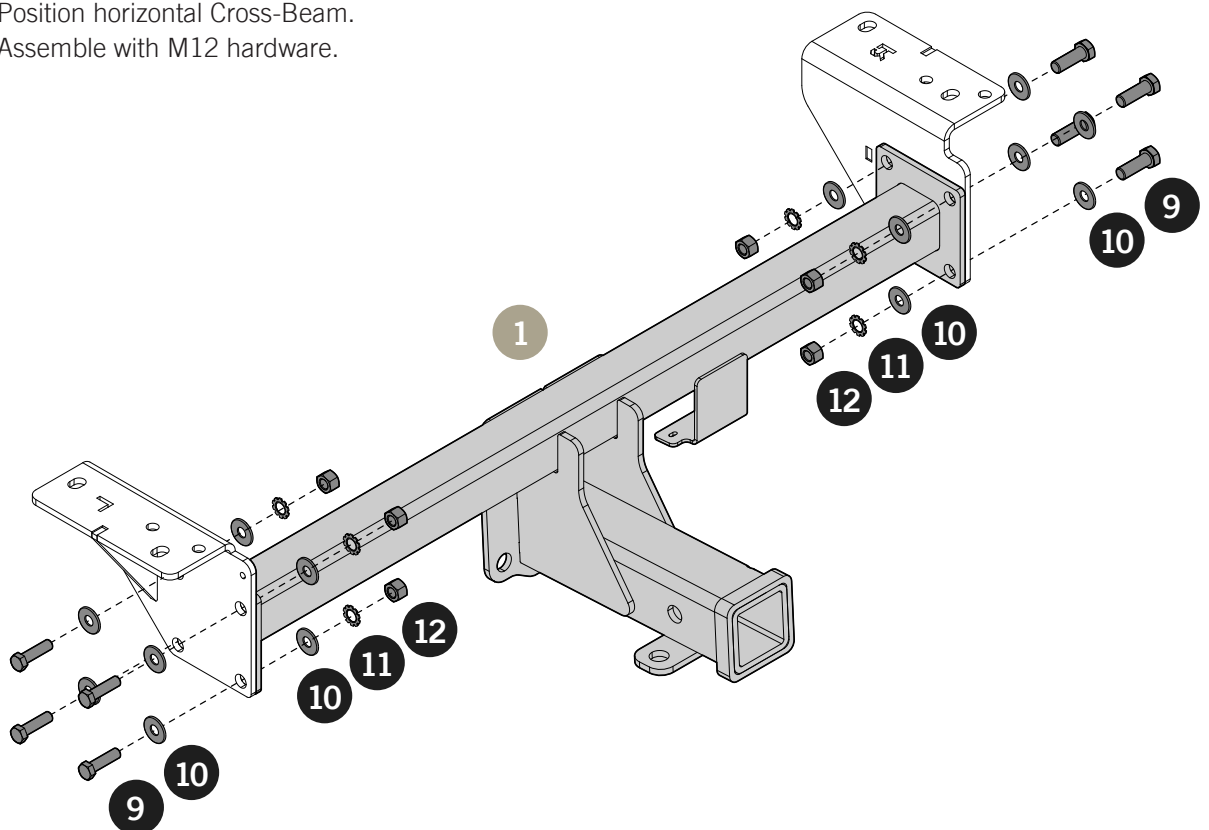
STEP 04

Assemble side brackets over the bolts and finger tighten with **x2 sets of M10 hardware**.





STEP 05

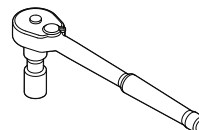
Position horizontal Cross-Beam.
Assemble with M12 hardware.



STEP 06

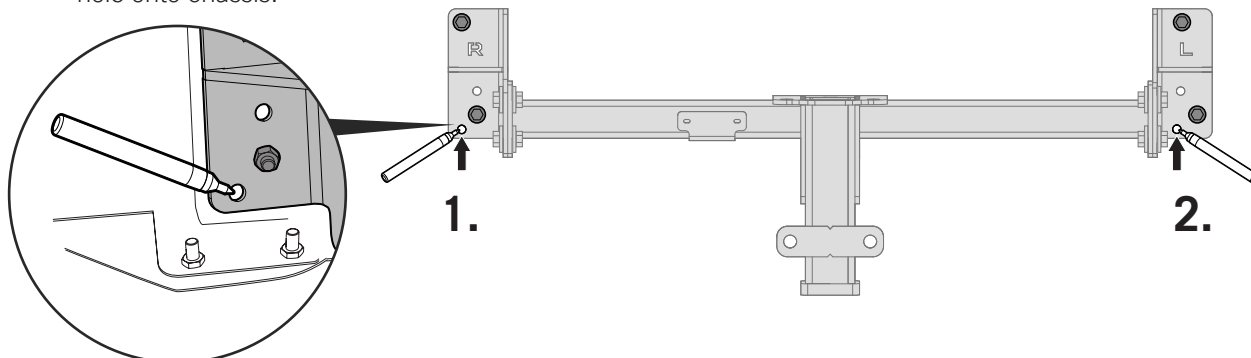
Tighten all hardware so that Cross-Beam and Side brackets sit correctly in place on the vehicle chassis.
Ensure Cross-Beam is centred.

M12:  19mm Socket Wrench
M10:  17mm Socket Wrench



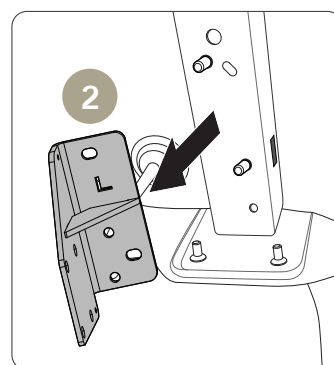
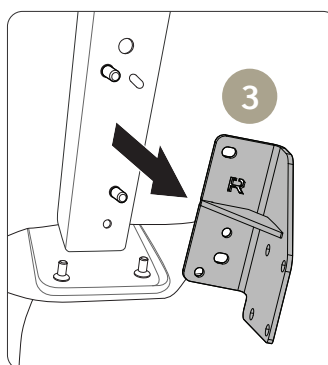
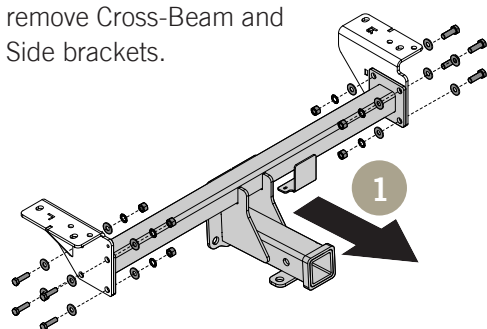
STEP 07

Mark out 3rd mounting hole onto chassis:



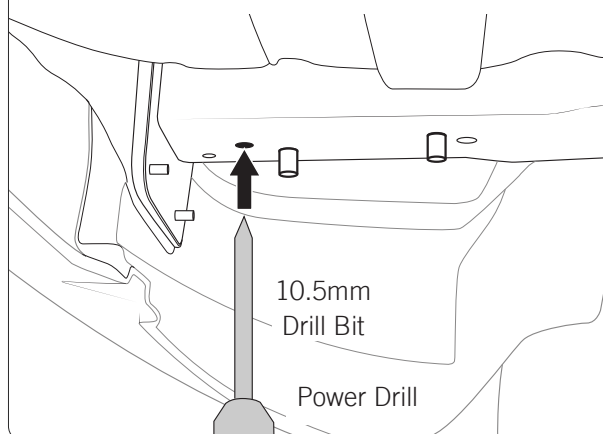
STEP 08

Undo all hardware and remove Cross-Beam and Side brackets.

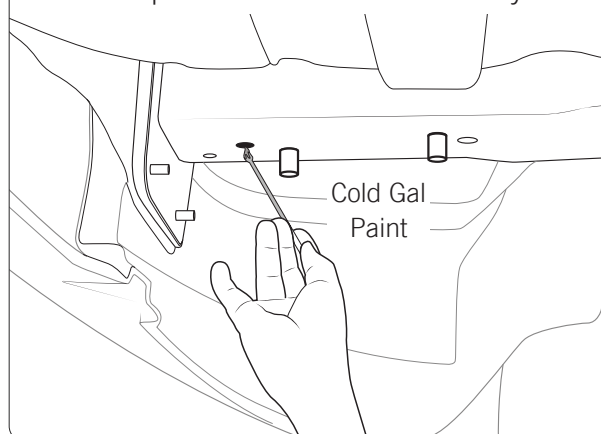


STEP 09

A. Drill out marked hole in vehicle chassis.

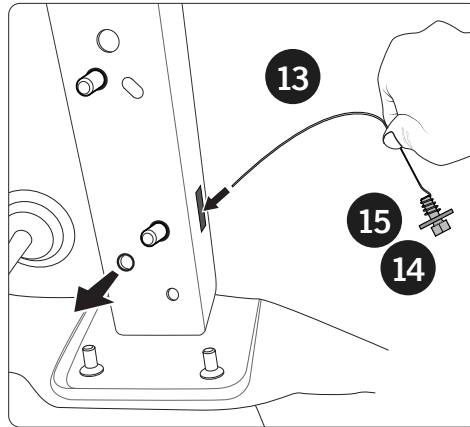
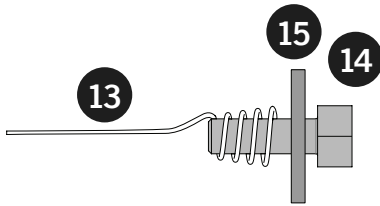


B. Rust proof bare material. Allow dry time.



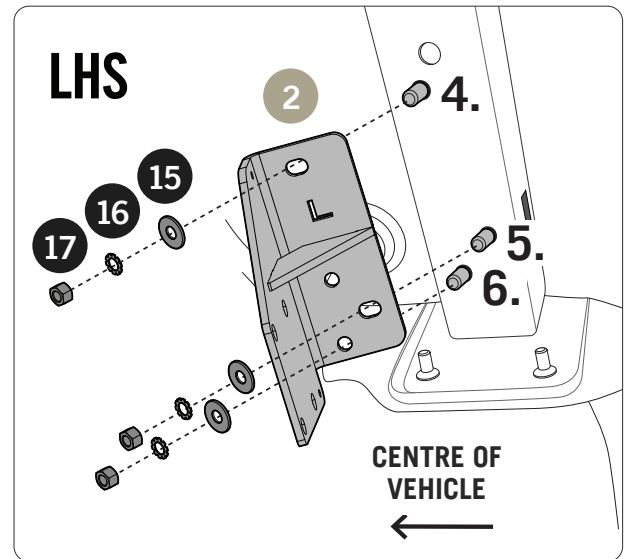
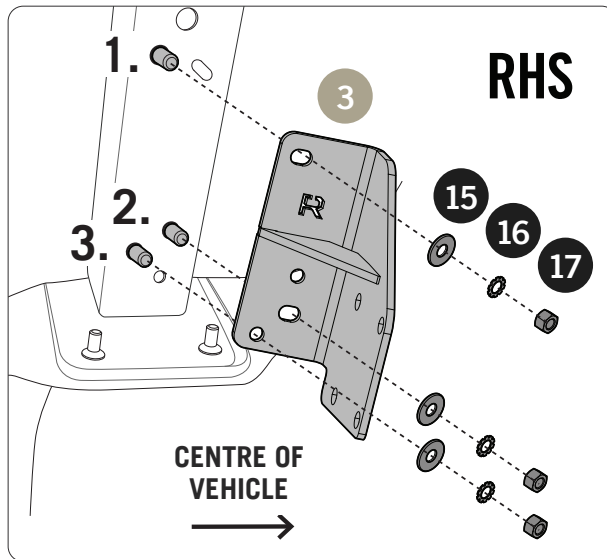
STEP 10

Reuse spring wire to insert 3rd bolt onto each vehicle side.



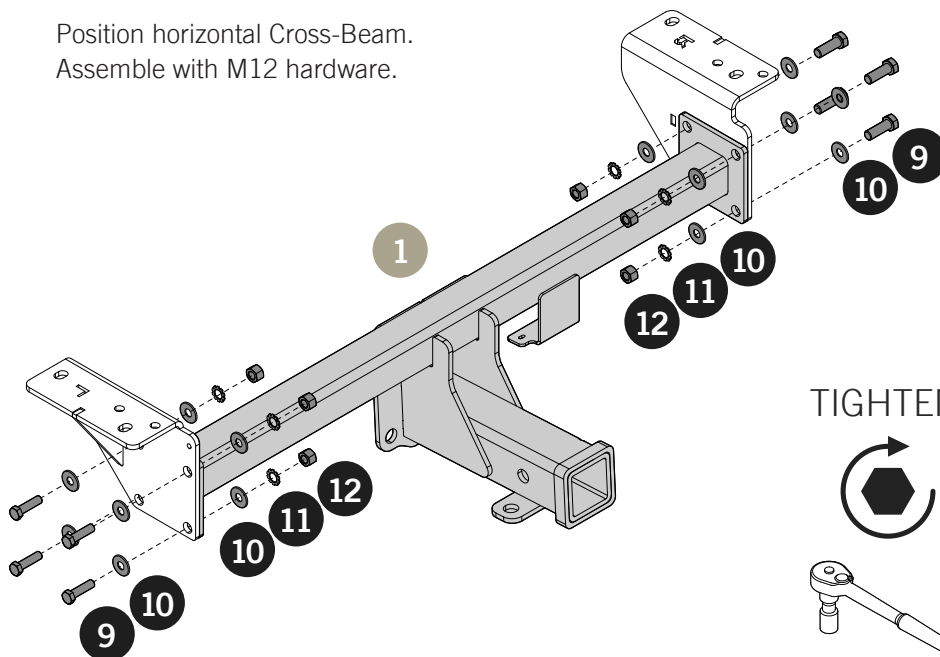
STEP 11

Assemble side brackets over the bolts and finger tighten with x3 sets of M10 hardware.



STEP 12

Position horizontal Cross-Beam.
Assemble with M12 hardware.



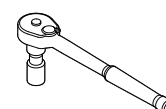
TIGHTEN ALL HARDWARE



M12: 100 NM

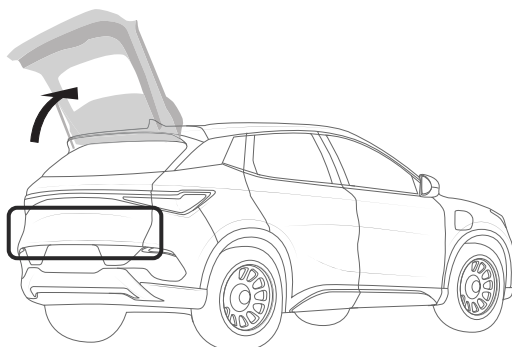
M10: 60-70 NM

19mm Socket Wrench
17mm Socket Wrench
+ Torque Wrench

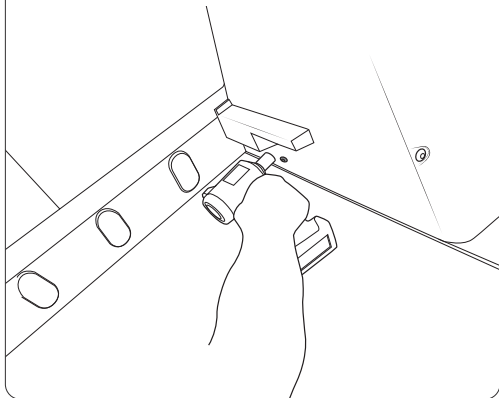


WIRING STEPS

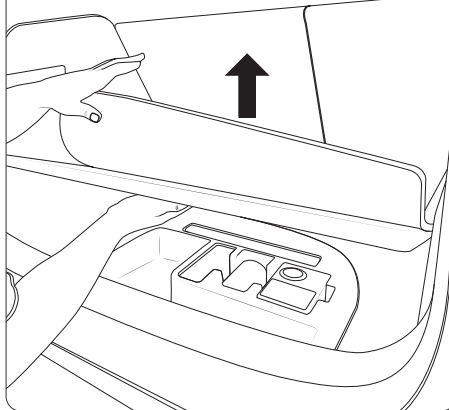
STEP 13



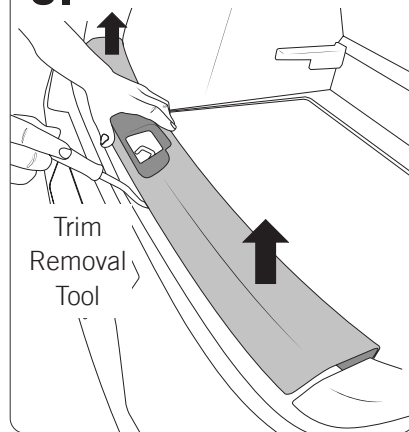
A. Remove both bolts either side in the plastic panel.



B. Carefully lift out the floor cover.



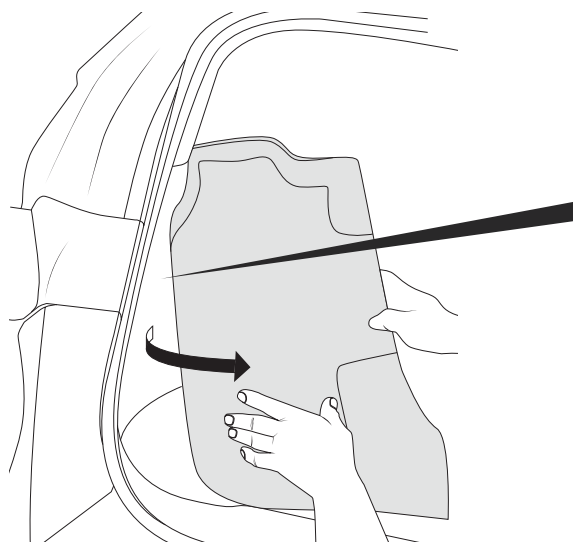
C. Unclip boot protective panel



STEP 14

Pop out the LEFT side panel using trim removal tool, and pull out only far enough to reach the wiring harness inside.

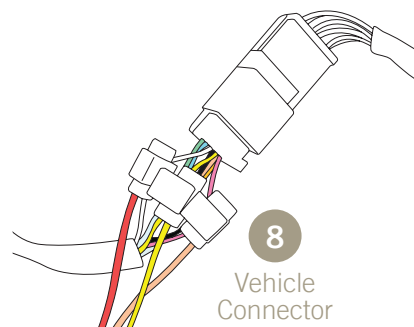
Connect wires as per following guide:



NOTE: WIRE COLOURS MAY VARY ACROSS VEHICLES. ALWAYS TEST YOUR LIGHT CONNECTIONS.

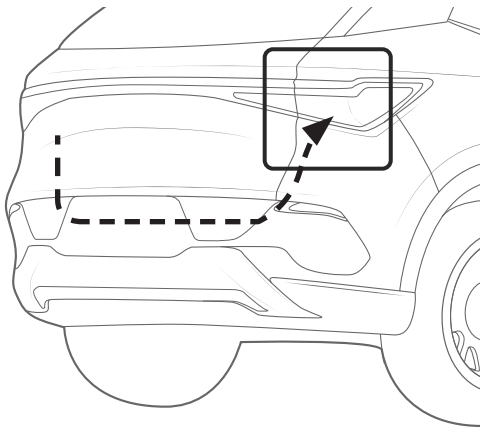
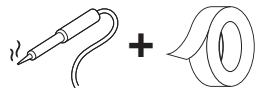
Connect ECU wires to Vehicle wires as follows:

ECU	Vehicle
RED	> WHITE (Brake light)
YELLOW	> YELLOW (Left Indicator)
BROWN	> RED (Tail Light)
WHITE	> *Earth Point on Vehicle Body*

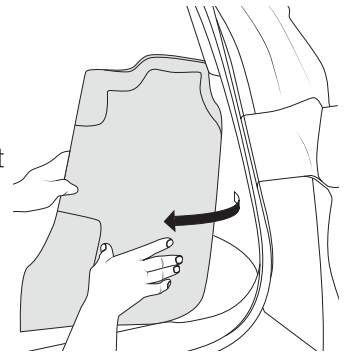


STEP 15

Extend Green wire by 3 meters, and route underneath boot plastic trim to RHS tail light.



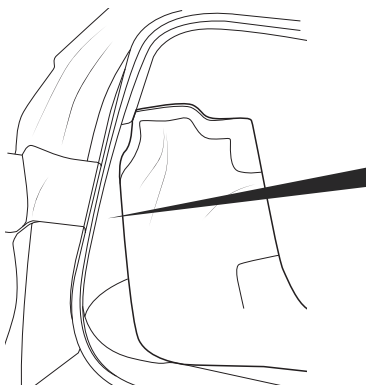
Pop out the RIGHT side pane and connect green wire as follows:



NOTE: WIRE COLOURS MAY VARY ACROSS VEHICLES. ALWAYS TEST YOUR LIGHT CONNECTIONS.

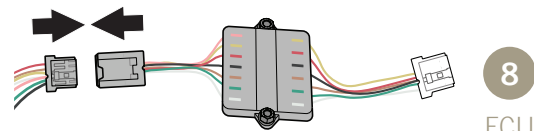
GREEN > YELLOW (Right Indicator)

STEP 16



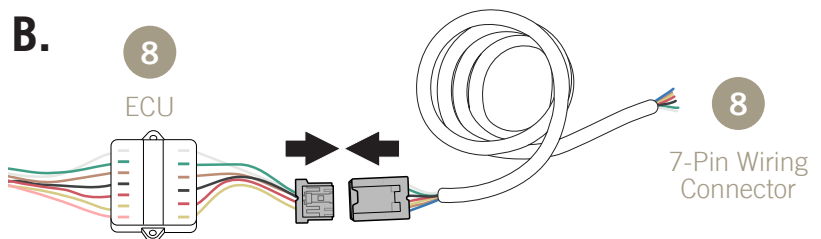
A.

8
Vehicle
Connector



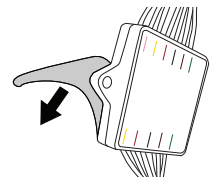
B.

8
ECU

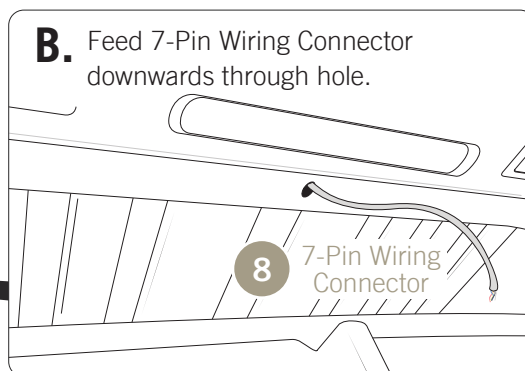
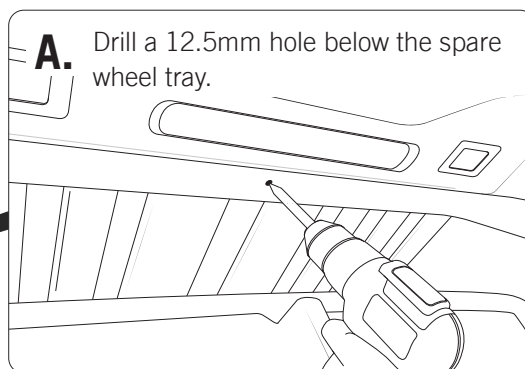
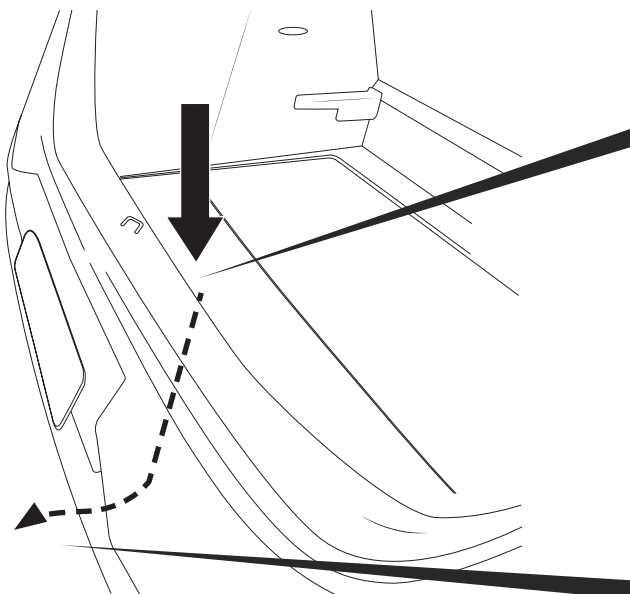


C.

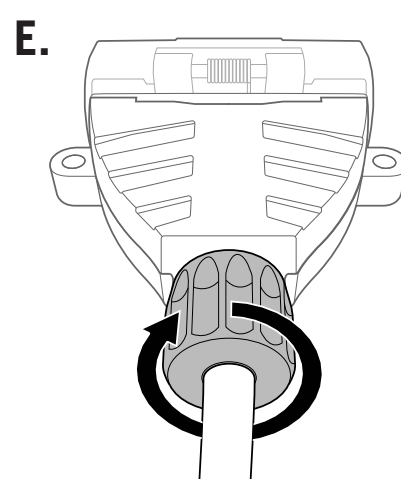
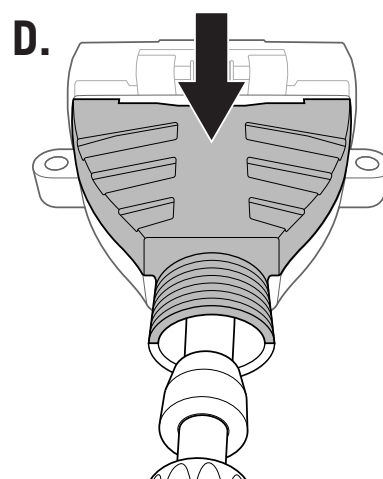
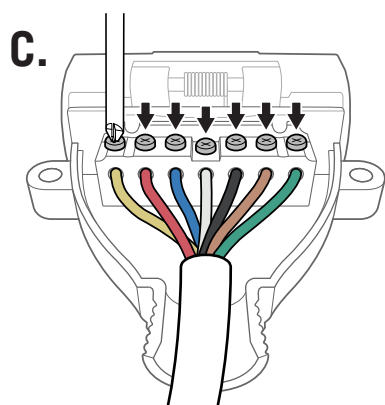
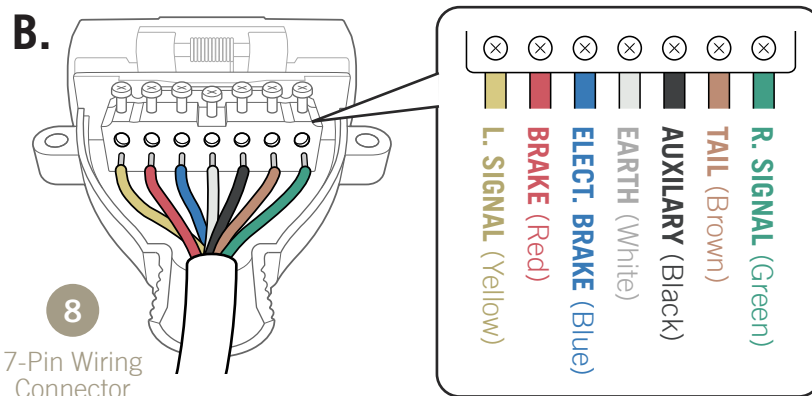
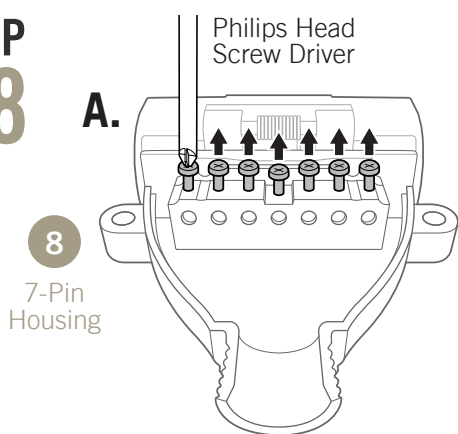
Peel backing off ECU and place ECU in a secure location behind vehicle trimming.



STEP 17



STEP 18

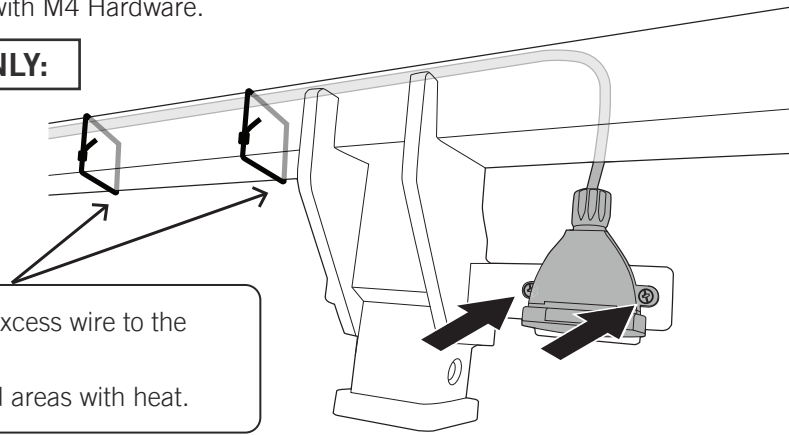


STEP 19

Attach 7-Pin Plug with M4 Hardware.

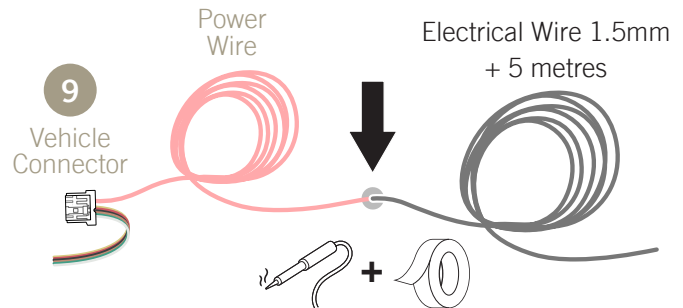
EXAMPLE ONLY:

IMPORTANT: Zip-tie excess wire to the towbar / vehicle body.
Avoid sharp edges and areas with heat.

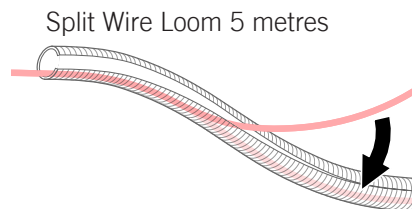


STEP 20

- A.** Solder an Extension wire to **Pink** wire so it will reach the battery terminal. Extend by an additional 5 metres.
Solder and tape connection.



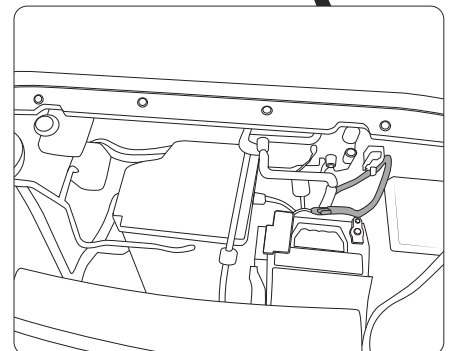
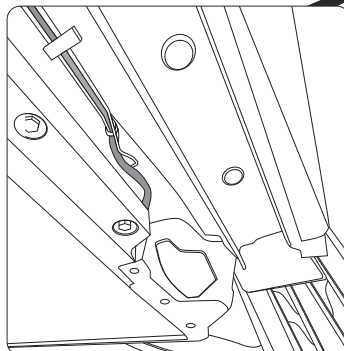
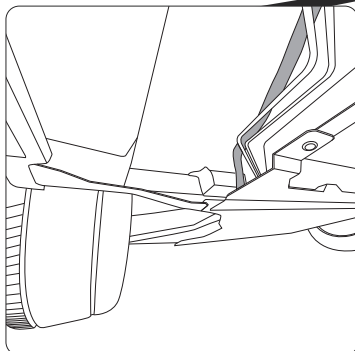
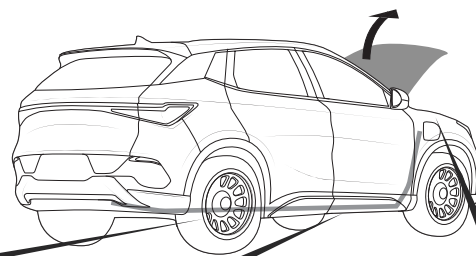
- B.** Insert ALL wire into Split Wire Loom. Trim the Split Wire Loom to match length of wire.



- C.** Route wire with Split Wire loom to battery terminal. Secure with Zip-ties

IMPORTANT: SELECT ROUTE CAREFULLY.

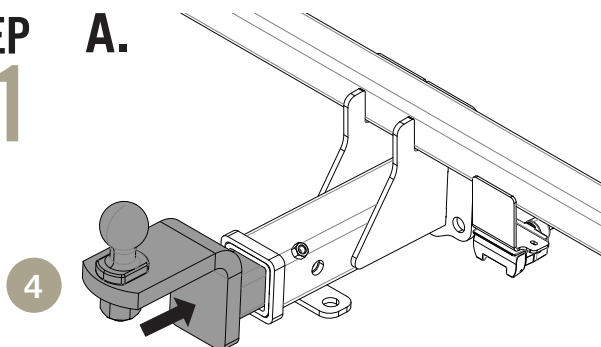
Avoid sharp / abrasive points, moving components and hot areas.



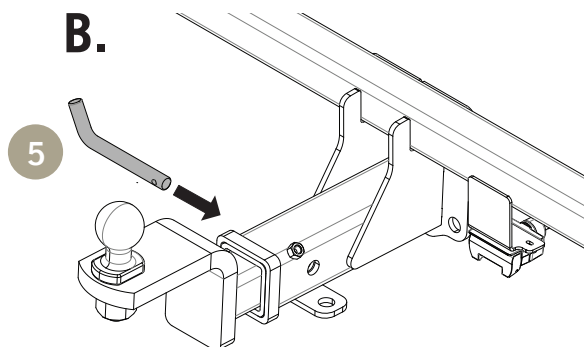
TOWBALL USAGE

STEP 21

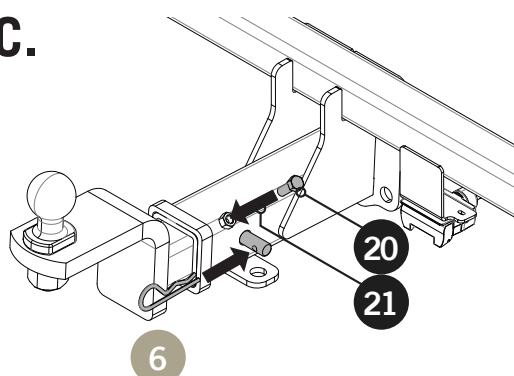
A.



B.



C.



FINALISE FITMENT

STEP 22

Place load rating sticker inside the driver's door.

