

# Fitting Instructions



SKU

**UNT361**

PRODUCT

**Towbar Wiring Harness  
for Mitsubishi Outlander (ZM)  
(08/2021 – on)**

SPECIFICATIONS

- Approx. Fitment Time: 60 Minutes
- Dealer Coding Required: No
- RPA override: Yes
- Plug & Play: Yes



TOOLS REQUIRED

- Drill
- 3mm Drill Bit
- 20mm Hole Saw
- Rust preventer / Touch-up paint
- Spanners
- Sockets
- Pliers.
- Trim Removal Tool
- Screw Drivers

IN THIS GUIDE

- Fitment Instructions
- Warnings
- Warranty Info

# Important Information



## Warning:

- This unit is designed to bypass the electronic control module in the vehicle.
- This unit will not require dealer coding.
- This vehicle has a dedicated trailer fuse for the trailer harness which is located in the engine bay fuse box.
- The fuse included in the fuse box will most likely be a 30A fuse. **This must be changed to a 10A fuse.**
- **The 10amp fuse must never be removed or changed for a higher rated fuse.**
- Make sure to inform the customer that there is a 10-amp blade micro fuse in the engine bay fuse box. Kindly show the customer of the fuse location.
- Please give this copy of the instructions to your customer.
- Contact an authorised TAG distributor or the TAG fitment center – (07) 3208 3022 – if further information is required.
- Before towing with your vehicle, please refer to the vehicle Owner's Manual for trailer towing information



## PRECAUTIONS:

- Make sure to read and understand these instructions before commencing installation.
- Refer to the vehicles' workshop manual when removing and refitting vehicle components.
- Disconnect the negative terminal cable from the battery before installation.
- Before disconnecting the negative terminal, ensure that the engine switch and the lighting switches are OFF
- Disconnection of the negative battery terminal will result in the loss of memory of the radio and other devices. Ensure to make a back-up the memory before disconnecting the negative terminal and restore the memory after installation (refer to Owner's Manual for memory restoration procedure).
- Take care not to damage the vehicle during installation.
- Make sure to wipe off any stains, oils & fats completely from the area if installation prior to installation.
- When disconnecting the connectors, first unlock them, then separate the connectors by pulling on the connectors themselves rather than the cables.
- When connecting connectors, push them against each other until the lock clicks.
- Never pull on the harness with great force.
- Always route the harness away from hot components such as the engine, radiator or exhaust pipes and mufflers.
- When reinstalling vehicle parts, make sure that the harness does not interfere or get pinched between parts.
- Never fasten the harness to high pressure pipes such as brake pipes and air conditioner pipes.
- Fasten the harness with vinyl tape or cable ties at locations where they contact vehicle parts. This will prevent the harness from damage and dangling loose.
- Cut off excess cable tie as close to the head as possible and avoid cutting at acute angles.
- Cut the cable ties in a way that the cut edges point downwards.
- Tighten each bolt/nut securely and retighten them if they come loose after test-driving.

# Installation Instructions



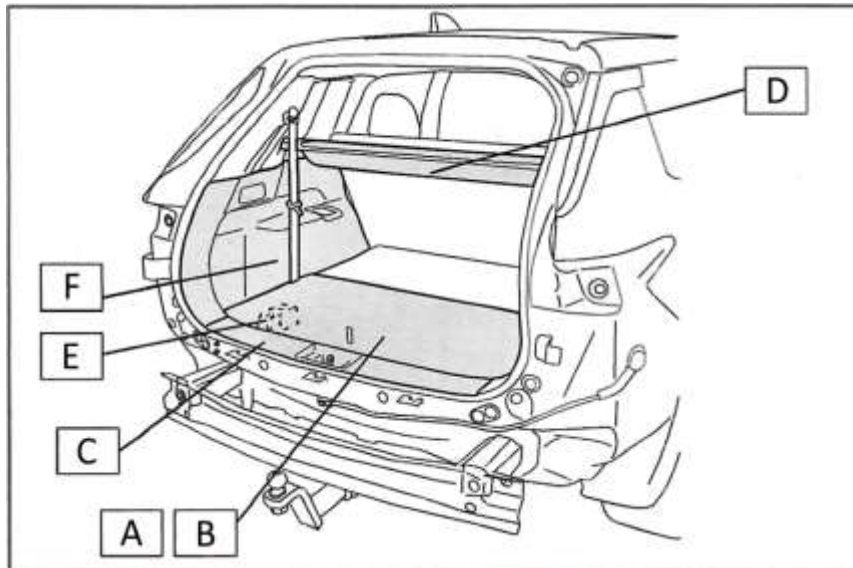
## Step 1: Removal of vehicle parts



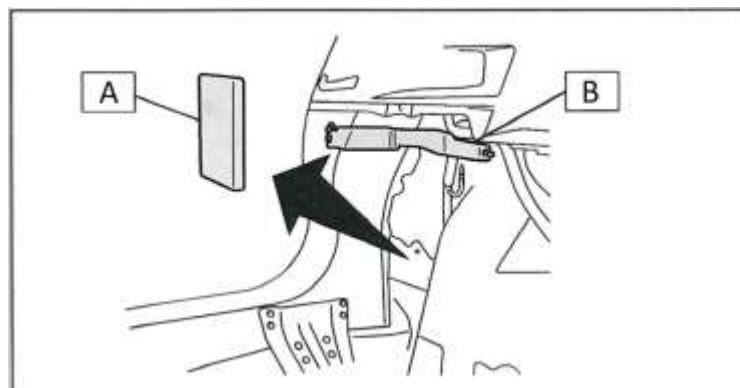
### NOTE:

- Refer to vehicle workshop manual for how to remove vehicles parts.
- The removed vehicle parts will be reused therefore, keep them aside and do not lose.

1. Open the tailgate.
2. Disconnect the negative terminal from the battery in the Engine Bay.
3. Remove the cargo floor box lid (A).
4. Remove the cargo floor box (B).
5. Remove the rear end trim (C).
6. Remove the cargo floor cover (equipped vehicles) (D).
7. Remove 3<sup>rd</sup> seat anchor cover rear LH (7-Person seat only) (E).
8. Dislodge the quarter trim lower LHS panel (F).



9. Remove the foam silencer pad (A)
10. Remove the LH rear seat release lever bracket (B)



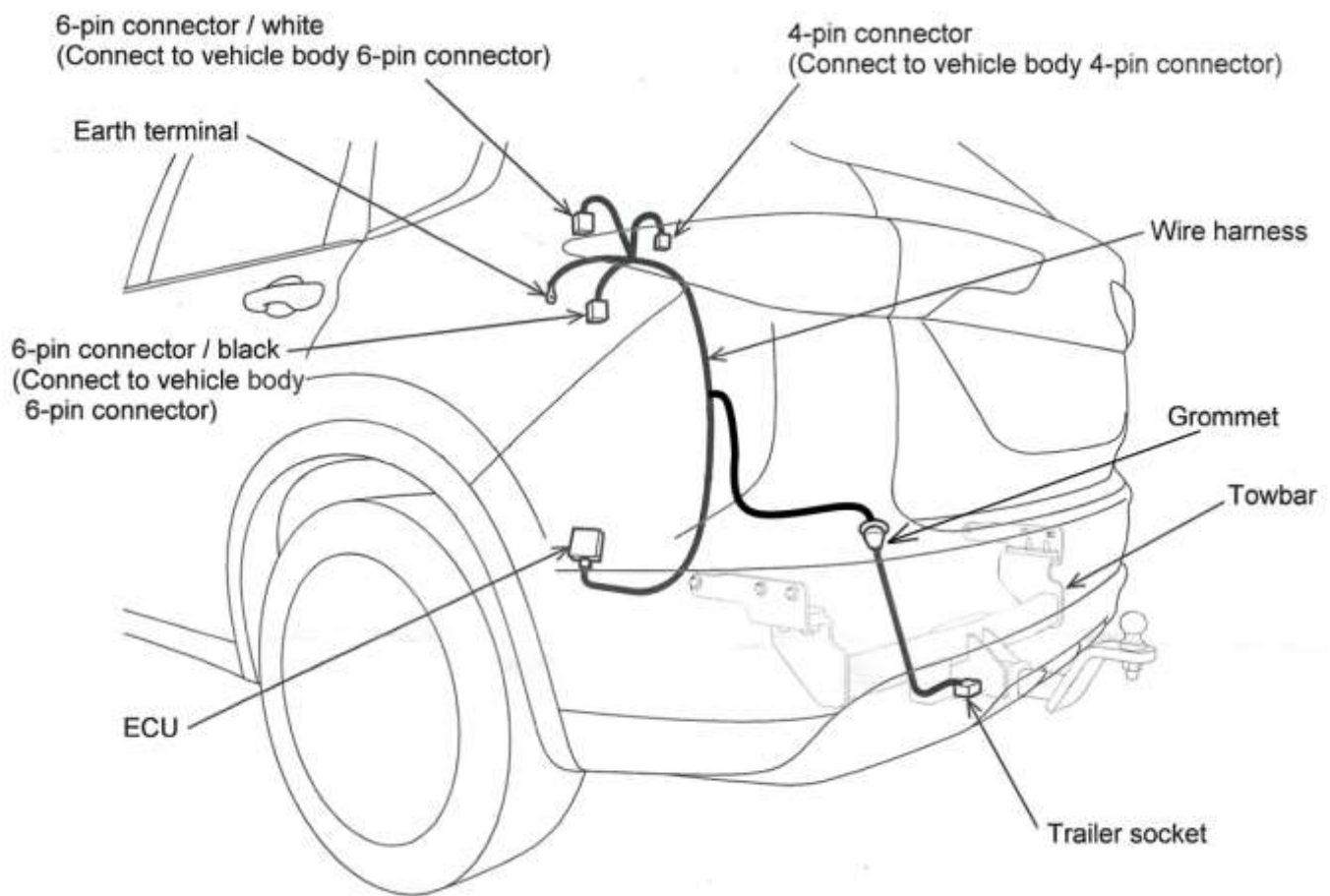
# Trailer Harness Layout



## Trailer Harness Layout

### CAUTION:

- When routing the harness, ensure to prevent the harness getting caught on the edge of panels, sharp edges & sources of heat.
- Secure the harness using cable ties or tape to prevent movement and interference with other parts.
- Temporarily attach the harness during installation. After completion of wiring installation, fasten the harness tightly.
- When connecting the connectors ensure they are secure and click into place.
- Ensure the line colour of the terminals are correct when inserting.



## Step 2: Drilling of Vehicle Parts

1. On the rear floor panel on the LHS, find a rectangular stamped section on the boot floor panel
2. Mark the centre of the rectangular stamped section with a centre punch.



Figure 1: Location of rectangular stamped section (pre-drilled & harness installed)



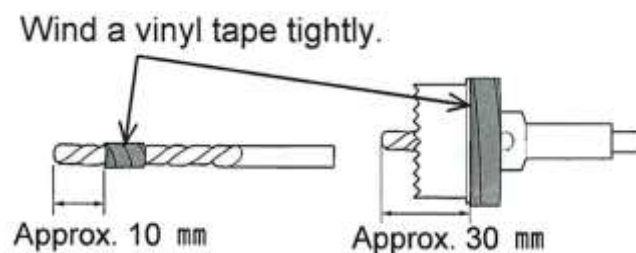
**NOTE:** When using a punch to mark the drilling position, be careful not to hit the panel too hard to avoid excessively denting the panel.

3. Drill a  $\varnothing$  3mm hole at the marked position of the floor panel
4. Drill a  $\varnothing$  20mm through the hole with the hole saw



### CAUTION:

- When drilling holes in vehicle body panels, attach a stopper (vinyl tape) to the drill bit and hole saw tips to prevent them from contacting other parts of the vehicle



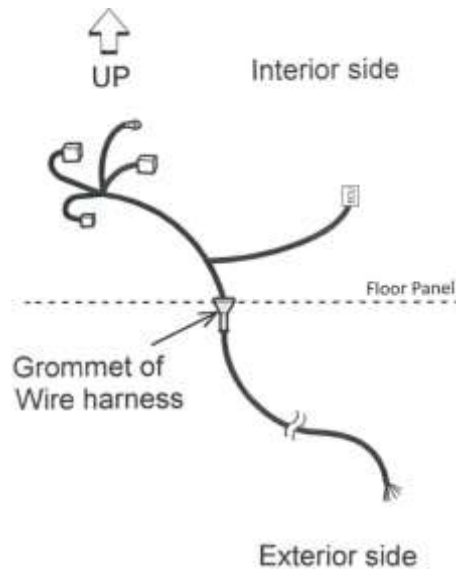
- Wear eye protection during the drilling process.
  - Be careful not to damage other parts of the vehicle with the drill bit and hole saw.
5. Remove any burrs from the hole with a round file.
  6. Make sure to remove any swarf and loose chips because it will cause rust.
  7. Apply touch-up paint / rust preventer to any exposed metal surfaces around the hole

# Installation Instructions



## Step 3: Install Trailer Wiring Harness

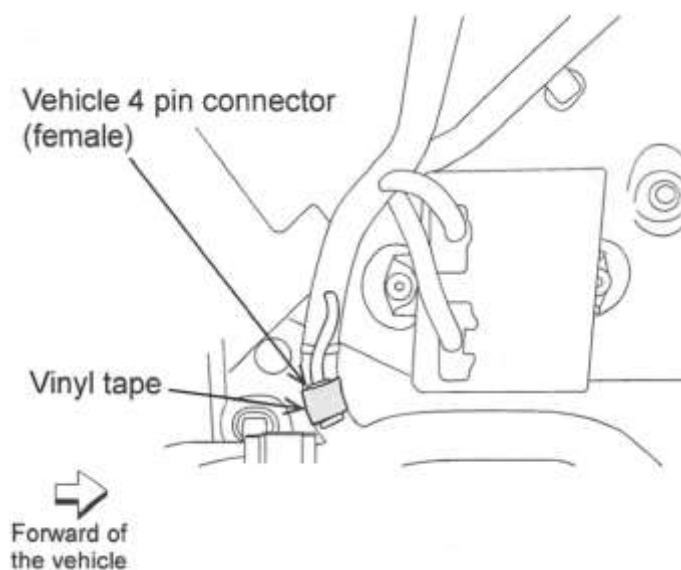
1. From the interior, pass the trailer end of the harness through the previously drilled through hole and pull it out to the exterior of the vehicle.



2. Attach the grommet of the trailer harness in the through hole. Ensure that the grommet makes a good seal.

 **NOTE:** Depending on the position of the grommet relative to the trailer harness, it may be necessary to remove the tape which secures the grommet to the harness and move it along the harness to a more suitable location. Make sure to tape the grommet to the harness once a suitable length of harness is pulled through.

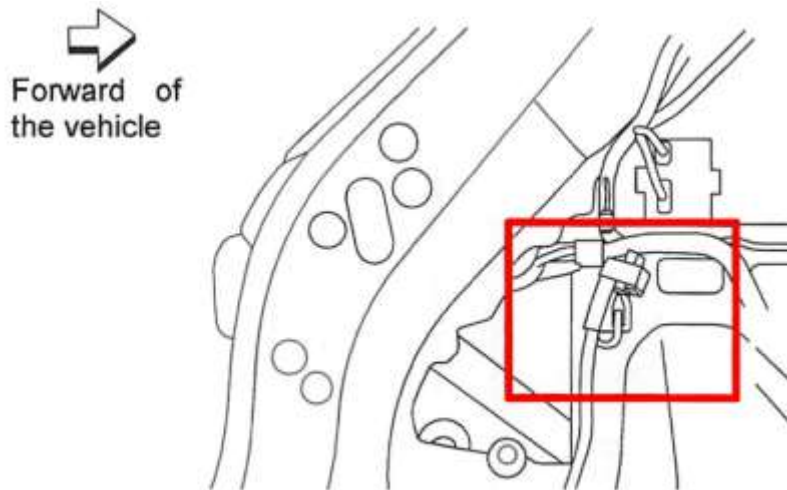
3. Remove the vinyl tape from the taped 4-Pin female connector and pull it out.



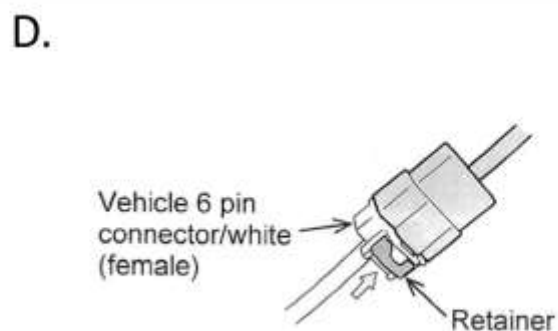
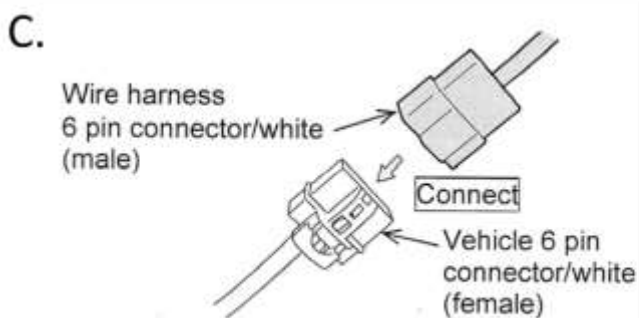
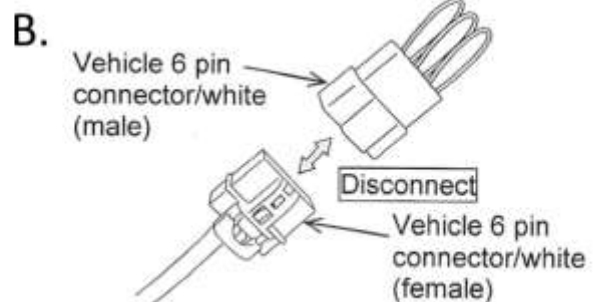
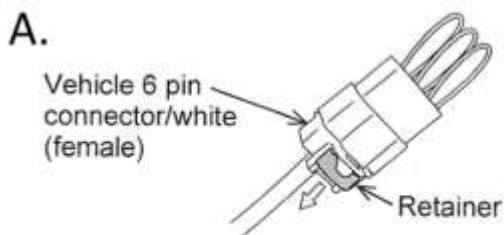
# Installation Instructions



4. Remove the vinyl tape from the 2x 6-Pin connectors taped to the vehicle harness. Pull the connectors out for access.



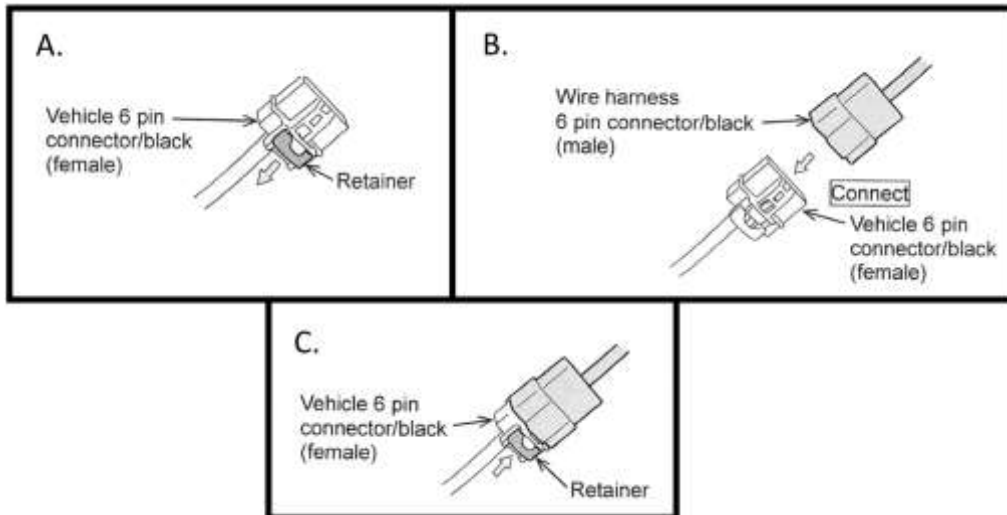
5. Follow the instructions below to connect the 6-Pin connector (white male) of the trailer harness to the vehicle 6-Pin connector (white female)
- A. Pull out the retainer of the vehicle harness 6-Pin connector/white (female) and unlock it.
  - B. Disconnect the vehicle harness 6-Pin connector/white (male). This can be discarded.
  - C. Connect the 6-Pin connector from the trailer harness (white (male)) to the vehicle harness 6-Pin connector/white (female).
  - D. Push the retainer of the vehicle harness 6-Pin connector/white (female) and lock it.



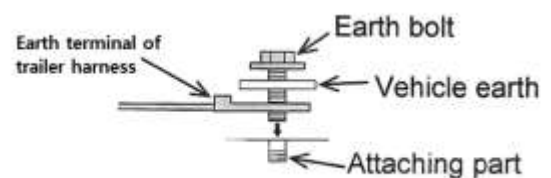
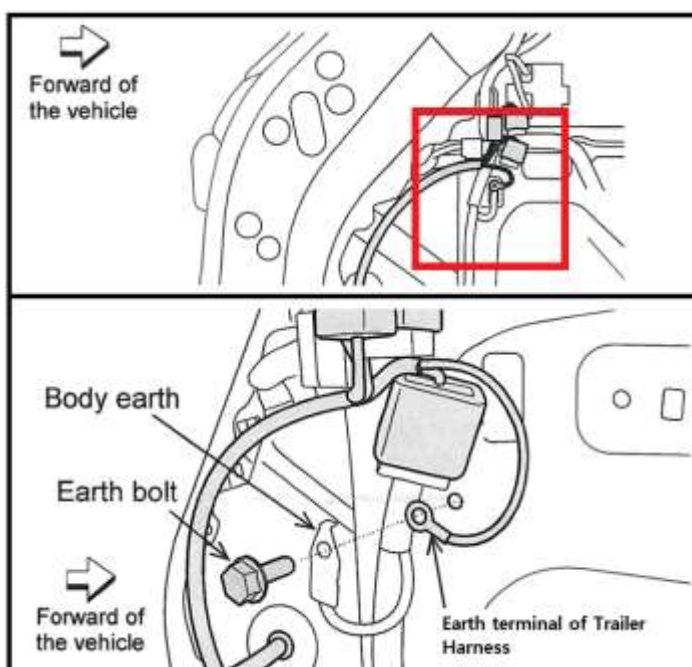
# Installation Instructions



6. Follow the instructions below to connect the 6-Pin connector/black (male) of the trailer harness to the vehicle 6-Pin connector/black (female)
  - A. Pull out the retainer of the vehicle harness 6-Pin connector/black (female) and unlock it.
  - B. Connect the trailer harness 6-Pin connector /black (male) to the vehicle harness 6-Pin connector/black (female).
  - C. Push the retainer of the vehicle harness 6-Pin connector/black (female) and lock it.



7. Connect the trailer harness 4-Pin connector (male) to the vehicle harness 4-Pin connector (female) (The vinyl tape was removed from the female connector in step (3) of this section).
8. Apply vinyl tape to the connected 4-pin connector.
9. Remove the vehicle earth bolt (M6) and tighten the trailer harness earth terminal and vehicle earth together. If the existing earth bolt is not long enough procure a suitable length replacement bolt (M6 x 1.0). Ensure to attach the earth terminals as in the figure below.



# Installation Instructions



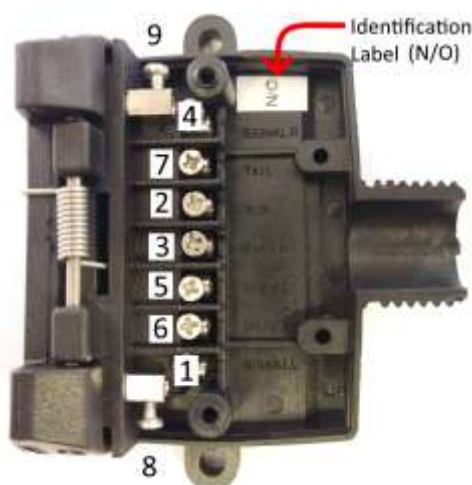
10. Tidy up the internal wiring with cable ties (not supplied). Cable tie bases can be used to create cable tie fastening points (not supplied).
11. Find a suitable flat location nearby the wiring connections on the body panels for mounting the ECU.
12. Clean the area with an alcohol wipe (not supplied).
13. Peel the double sided tape on the ECU and adhere to the pre-cleaned location.
14. If possible, also use cable ties (not supplied) to secure the ECU.

 **NOTE:** When tidying up the cabling, ensure that interference will not occur when re-installing the parts which were removed in Step 1.

15. Insert the external branch of the trailer harness into the trailer socket grommet.
16. Using the table below, insert the trailer harness terminals into a **Normally Open (N/O)** 7-Pin Flat Socket (TAG PNo. UNT032RSF).

 **NOTE:** Make sure that the 7-Pin Flat Socket is of the **Normally Open (N/O)** variety. This can be confirmed by the label in the inner part of the trailer socket or via a continuity test with a multi-meter.

| Pin No. | Function                     | Cable Colour  |
|---------|------------------------------|---------------|
| 1       | Trailer Left Indicator Lamp  | Yellow        |
| 2       | Trailer Reverse Lamp / Aux   | Black         |
| 3       | Earth                        | White (thick) |
| 4       | Trailer Right Indicator Lamp | Green         |
| 5       | Electric Brakes              | Blue          |
| 6       | Trailer Brake Lamp           | Red           |
| 7       | Trailer Tail Lamp            | Brown         |
| 8       | Trailer Presence             | Purple        |
| 9       | Earth                        | White         |



17. Attach the trailer socket grommet to the trailer socket.
18. Apply vinyl tape around the trailer socket grommet and the trailer socket to adhere them together and create a seal.
19. Install the Trailer Socket to the towbar plug mount using the nuts and bolts supplied with the socket kit.
20. Tidy up the external portion of the harness with cable ties (not supplied).

# Installation Instructions



## Step 4: Installation of Fuse



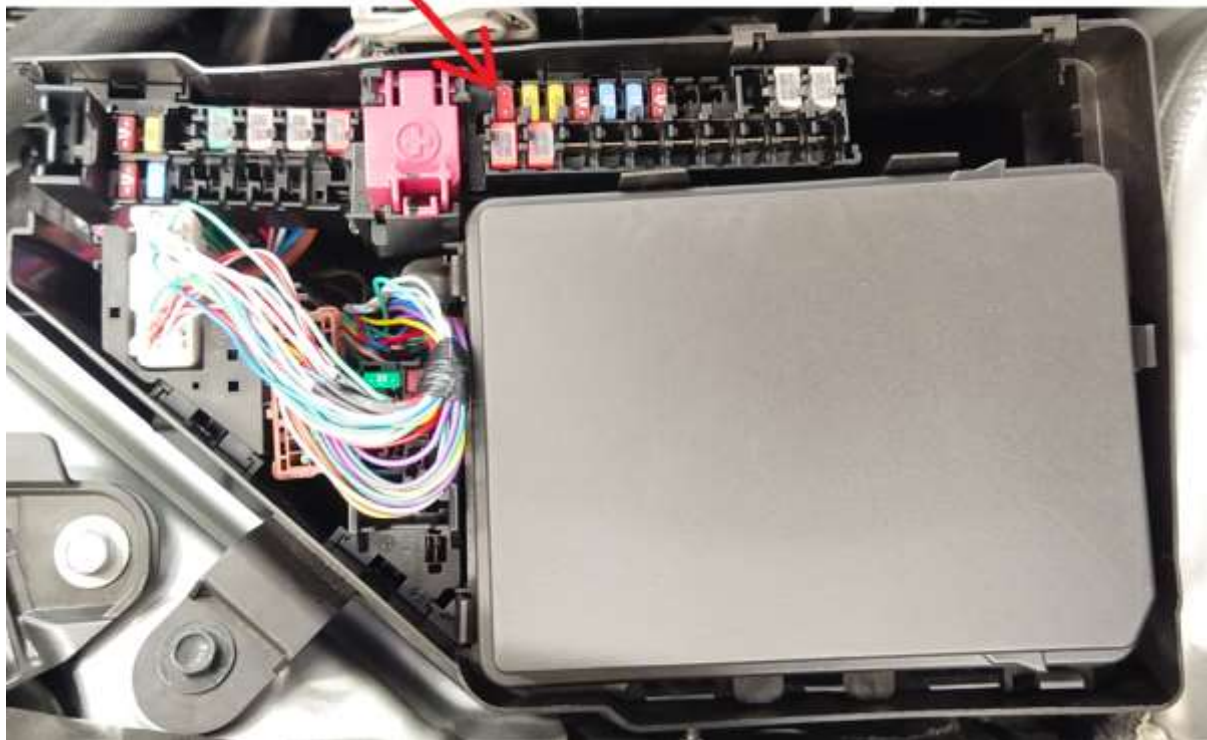
### NOTE:

- The vehicle has a dedicated trailer fuse in the fuse box in the engine bay.
- The fuse included with the vehicle is a 30A fuse and **must be replaced with a 10A fuse**.

1. Remove the cover of the USM box in the engine bay.



2. Refer to the fuse layout diagram in the interior of the USM box cover to locate the 'TRAILER' fuse.
3. Remove the 30A fuse and replace it with the supplied 10A micro fuse. The 30A fuse can be discarded.



4. Reinstall the cover of the USM box.

# Installation Instructions



## Step 5: Test the Harness Operation

1. Reconnect the negative terminal of the battery.
2. Use a 'Trailer Test Board' or 'Test Light' to check the trailer socket operation.

## Step 6: Reinstall Vehicle Body Parts

1. Ensure the harness operates correctly (Step 5)
2. Ensure the harness is tidy, secure and all connections are securely connected.

### CAUTION:

- During installation & reinstallation, take care to prevent the trailer & vehicle harness getting caught on any vehicle parts, sharp edges and sources of heat.
- Refer to the workshop owner's manual for details on reinstalling the vehicle parts.
- Place the installation instructions in the glove box of the vehicle after installation is complete.

### CAUTION:

Before towing with your vehicle, please refer to the vehicle Owner's Manual for trailer towing information

# TAG Warranty Statement



SWD warrants your TAG Wiring Harness for one (1) year from the date of the original retail purchase under the following conditions:

- You can show proof of purchase.
- The harness has been correctly installed by a suitably qualified installer.
- The harness has not been modified or abused in any way and has only been used for the purpose intended.
- The harness was not fitted second hand to your vehicle.

The extent of this warranty includes materials and workmanship used in the manufacture of the harness and is to the equivalent value of current, full replacement cost.

Nothing stated or implied in this warranty limits in any way, the statutory rights that you may have.

To make a claim visit the original installer in the first instance or, if you are unable to or are not satisfied with their help, then contact us direct by phone on 1300 669122 or visit [www.swd.com.au](http://www.swd.com.au).