



# FITTING INSTRUCTIONS

HARNESS PART NUMBER: **3525020.**  
HARNESS DESCRIPTION: **HARNESS DL HB SIGNAL.**  
APPLICATION: **HIGH BEAM SIGNAL FOR DRIVING LIGHTS.**  
FITTING TIME: **30 MINUTES APPROX.**

*PATENT PENDING*, this harness is covered by Australian and international patent applications.

For operation of driving lights on Toyota Landcruiser 300, this harness is used to generate a high beam output signal. This harness can be used with the below ARB driving light harnesses.

- 3500480 WIRING LOOM V2
- 3500520 WIRING LOOM
- 3500810 WIRING LOOM LIGHTBAR
- 3500811 WIRING LOOM LIGHTBAR V2
- SJBHARN WIRING LOOM SOLIS

## COMPLIANCE:

- ◆ RoHS compliant.
- ◆ REACH compliant.
- ◆ CE compliant.

## NOTES:

- ◆ This product must be installed exactly as per these instructions.
- ◆ The installation of this product may require the use of specialised tools and/or techniques.
- ◆ It is recommended that this product is only installed by trained personnel.
- ◆ These instructions are correct at the date of publication. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer.
- ◆ During installation, it is the duty of the installer to check correct operation/clearances of all components.
- ◆ Unless otherwise instructed, tighten fasteners to specified torque.
- ◆ Ensure all electrical connections are correct and tight with good earth connection to the engine and/or chassis. Failure to do this may result in component failure or fire.
- ◆ Make sure all wires are securely fastened away from any hot, sharp or moving surfaces. Do not fasten any wires to the brake lines or fuel lines.
- ◆ Make sure that all electrical connections are strong and well insulated.
- ◆ Work safely at all times.

## ARB 4x4 ACCESSORIES

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Do not pull on the wiring harness forcefully



Do not connect wiring harness to engine



Ensure all connections are tight and pushed home

## FITTING PROCEDURE:

As shown below, there are three harnesses included with this product; Harness (A), Harness (B) and Harness (C). Before completing the installation, please ensure the below 3525020 harness layout (IMAGE 1) is understood to assist with the installation process.

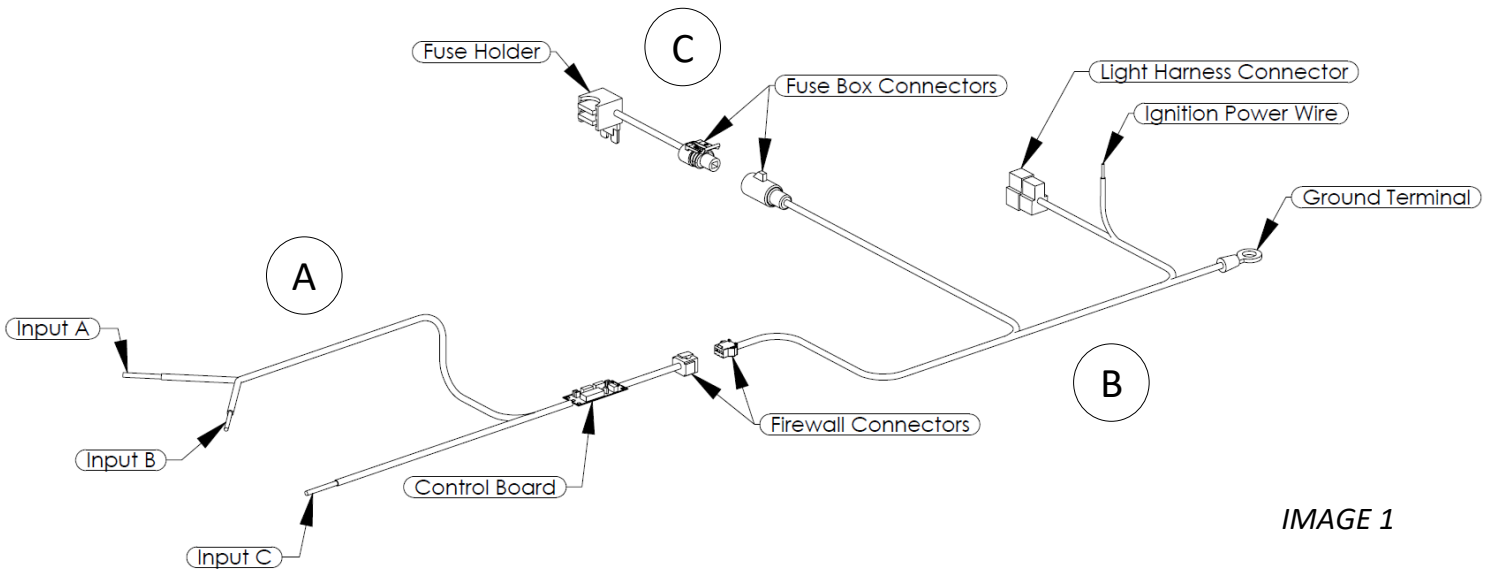
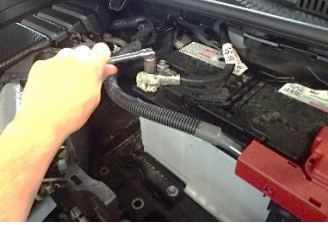

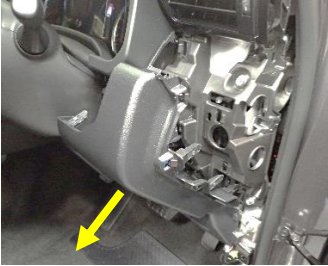


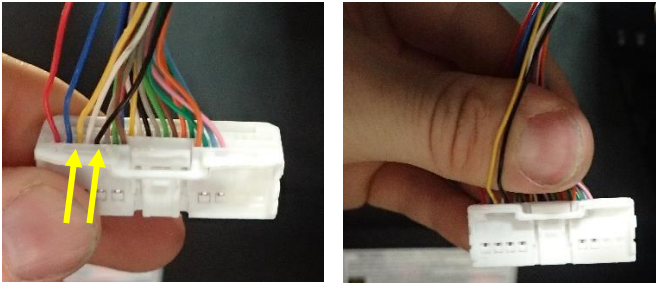
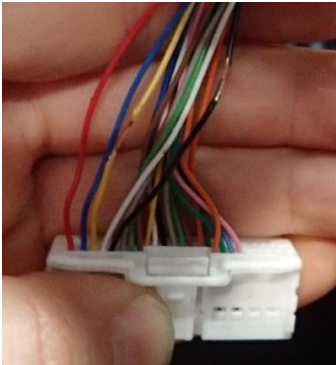

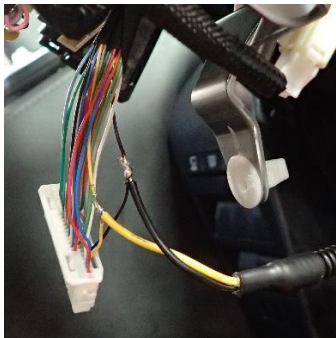


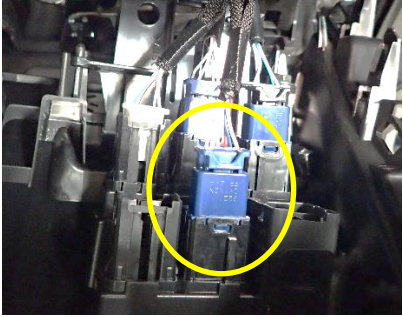
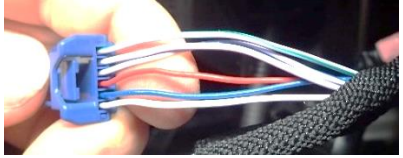





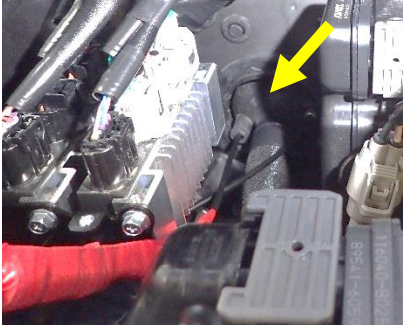
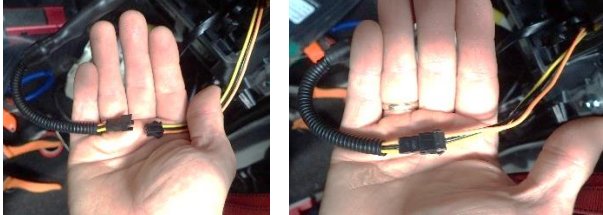


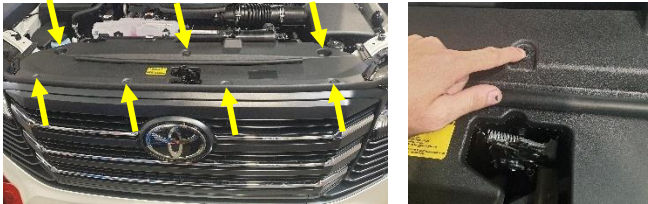
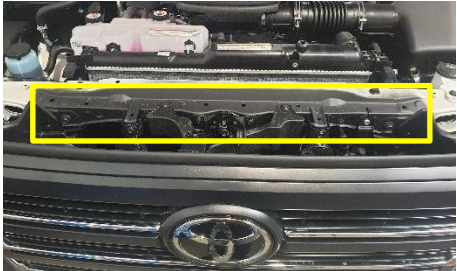



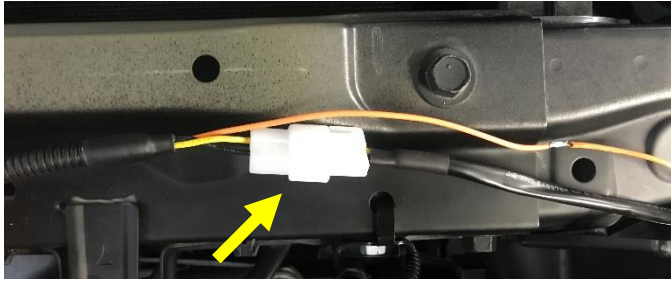
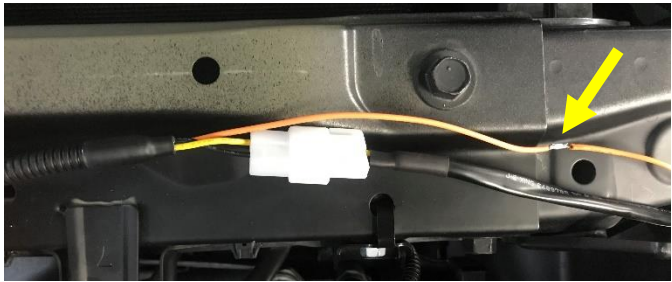
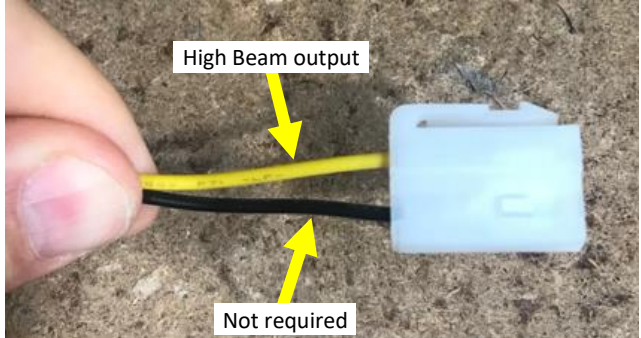


IMAGE 1

<p>1. Remove the negative (-) terminal from the battery.</p>	
<p>2. Inside the vehicle cabin, on the drivers side, remove the right hand cover panel. This can be removed by pulling to the right at the base of the panel as shown.</p> <p>NOTE: RIGHT HAND DRIVE VEHICLE SHOWN.</p>	
<p>3. Remove the right hand switch panel. This can be removed by pulling the panel reward.</p>	
<p>4. Remove steering column shroud.</p> <p>There are three screws to remove as shown.</p> <p>The two shroud pieces can then be unclipped and pulled apart.</p>	
<p>5. Locate the white plug connector, located beneath the steering wheel column.</p> <p>6. Disconnect the plug by pressing the release and pulling the plug out.</p>	

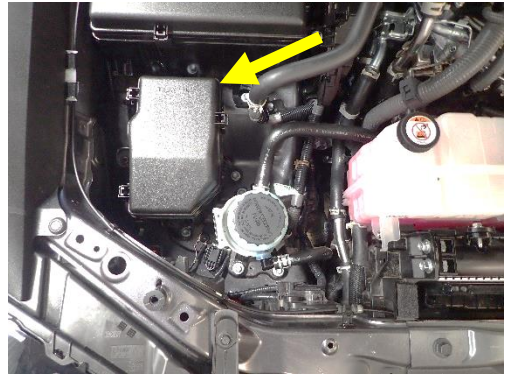
<p>7. Hold the plug and find the Yellow and Black wires as shown.</p>	
<p>8. Strip the Yellow and Black wires in preparation for joining with the ARB harness.</p> <p>The two strips must be staggered to ensure the wire joins do not contact each other.</p>	
<p>9. See 3525020 harness layout (IMAGE 1), take Harness Ⓐ as shown.</p>	
<p>10. Join wires <b>Input A</b> and <b>Input B</b> (IMAGE 1) to the vehicle wires as per below:</p> <ul style="list-style-type: none"> <li>• Harness Ⓐ Yellow wire with vehicle Yellow wire.</li> <li>• Harness Ⓐ Black wire with vehicle Black wire.</li> </ul>	
<p>11. Cover exposed wires with electrical tape and bundle all wires with soft tape.</p>	
<p>12. Reconnect the white plug connector into the steering column socket.</p> <p>13. Route the harness along the steering column and toward the right hand switch panel. Leave slack in the harness for adjustment of the steering wheel.</p> <p>14. Secure with cable ties.</p>	

<p>15. At the vehicle right hand side switch panel, locate and disconnect the AHB (Auto High Beam) switch connector.</p> <p>This is the top blue connector as shown.</p>	
<p>16. Locate the Red wire on the AHB connector.</p>	
<p>17. Strip and join wire <b>Input C</b> (IMAGE 1) to the vehicle wire as per below:</p> <ul style="list-style-type: none"> <li>• Harness <b>Ⓐ</b> Red wire with vehicle Red wire.</li> </ul>	
<p>18. Cover exposed wire with electrical tape and bundle all wires with soft tape.</p>	
<p>19. See 3525020 harness layout (IMAGE 1), take Harness <b>Ⓑ</b> as shown.</p>	
<p>20. Locate the vehicle's firewall grommet. This is located under the bonnet adjacent the brake fluid reservoir.</p> <p>21. Locate nipple, cut and remove nipple to allow Harness <b>Ⓑ</b> to enter the vehicle cabin.</p>	

<p>22. In preparation to bring Harness ② through the firewall, take the <b>Firewall Connector</b> and tape onto a plastic pipe as shown.</p>	
<p>23. Slightly push the pipe with Harness ② into the firewall grommet nipple.</p> <p>24. Spray pipe and taped connector with lubricate.</p> <p>25. From inside the cabin, locate the pipe and pull with taped connector through into the vehicle cabin.</p>	
<p>26. Take <b>Firewall Connectors</b> (IMAGE 1) from Harness ① and Harness ②, connect together as shown.</p> <p>27. Inside vehicle cabin, secure both Harness ① and Harness ② with cable ties.</p>	
<p>28. Refit the steering column shroud and install original three retaining screws.</p> <p>29. Refit the right hand switch column. Ensure all button plugs are installed.</p> <p>30. Refit the right hand cover panel.</p>	
<p>31. In the engine bay, route Harness ② between drivers side wheel arch and the fuse boxes.</p>	
<p>32. Remove radiator cover trim.</p> <p>To remove, press each clip to release and remove.</p> <p>Place clips in safe location.</p>	
<p>33. Once all clips are removed, lift the radiator cover trim to remove.</p> <p>34. Route harness ② beneath radiator top cross member.</p>	

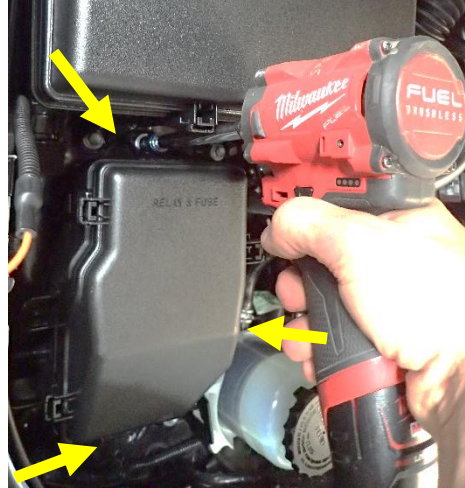
<p>35. Find the <b>Ground Terminal</b> on Harness ②. Fix the <b>Ground Terminal</b> onto a suitable grounding point on vehicle body or chassis.</p> <p>The horn mounting bolt or similar is acceptable for this ground.</p>	
<p>36. Find the <b>Light Harness Connector</b> on Harness ②.</p> <p>37. Connect the <b>Light Harness Connector</b> with the mating connector from the applicable ARB lighting harness (sold separately).</p>	
<p>38. Find the <b>Ignition Power Wire</b> on Harness ②.</p> <p>39. If ignition power is required, join the <b>Ignition Power Wire</b> with the mating wire on the ARB lighting harness (sold separately). If <u>not</u> required, tie back and cover with tape.</p> <p>40. Cover the wire join with heat shrink or tape.</p>	
<p><i>For lighting harnesses which do not have a Light Harness Connector, complete Step 41, otherwise continue to Step 42.</i></p> <p>41. Take the <b>Light Harness Connector</b> and cut off the white plug. Complete as per below with the Yellow and Black wires:</p> <ul style="list-style-type: none"> <li>From the <b>Light Harness Connector</b>, join the Yellow wire with the lighting harness high beam signal wire.</li> <li>From the <b>Light Harness Connector</b>, take the Black wire and tie back and cover with tape.</li> </ul>	
<p>42. Cover wires with protective tubing and route beneath the radiator top cross member.</p> <p>43. Secure harness with cable ties.</p>	
<p>44. Refit radiator cover trim using original clips.</p>	

45. Locate vehicle's front fuse box, found behind the drivers side head light.



46. With 10mm socket, remove the three bolts securing the fuse box to the vehicle body.

Place bolts in safe location.



47. Lift and rotate the fuse box from its mounting location.

48. Release all clips securing the fuse box base cover and remove the base cover.



49. Mark and drill a  $\varnothing 6.5\text{mm}$  hole in the base of the fuse box cover.

50. Deburr hole to allow fitment of grommet.



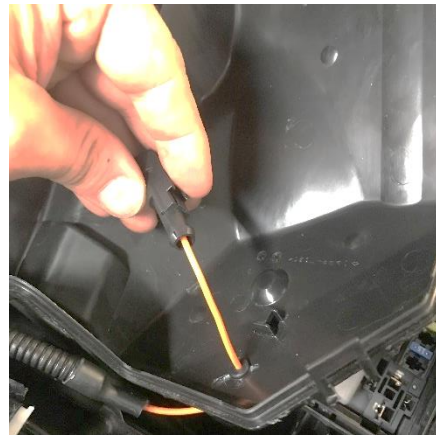
51. Find the **Fuse Box Connector** on Harness  $\text{\textcircled{B}}$ . Pass the terminal and seal through the hole in the fuse box.

52. Install the grommet securely in the drilled  $\varnothing 6.5\text{mm}$  hole.

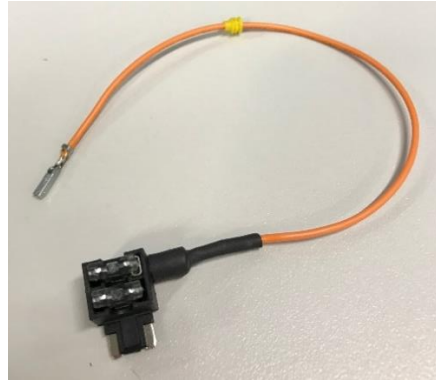


53. For the Harness ② **Fuse Box Connector**, find the loose socket connector and insert the orange wire terminal. Push the seal into the back of the connector.

Double check the terminal has clipped into the connector by tugging the wire.



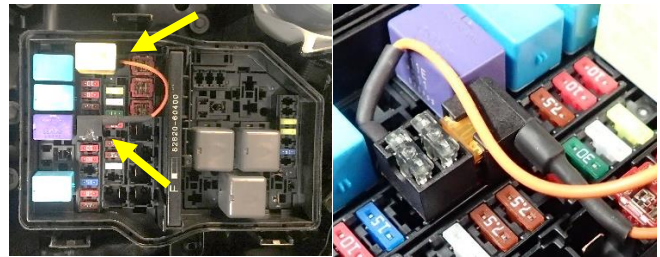
54. See 3525020 harness layout (IMAGE 1), take Harness ③ as shown.



55. Rotate the fuse box into its original position again and remove the fuse box lid.

56. Feed orange wire through the hole in fuse box as per first image.

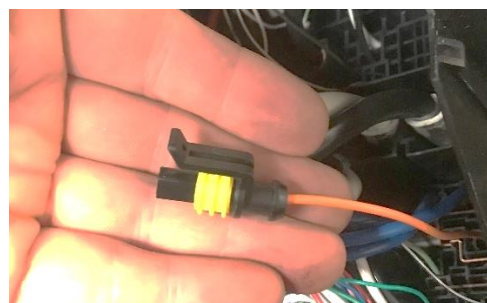
57. Install the **Fuse Holder** into the vacant fuse slot as per first image. If the vehicle is fitted with an ARB bullbar, you may need to stack the fuse holders as per second image.



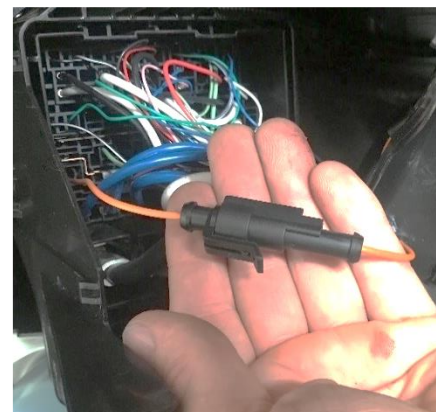
58. Refit the fuse box lid onto the fuse box and rotate the fuse box upside down again.

59. For the Harness ③ **Fuse Box Connector**, find the loose plug connector and insert the orange wire terminal. Push the seal into the back of the connector.




Double check the terminal has clipped into the connector by tugging the wire.



60. Join the **Fuse Box Connectors** together (plug connector and socket connector).





<p>61. Refit the fuse box base cover ensuring all clips are secure.</p> <p>62. Rotate the fuse box into its original mounting location and secure with original fasteners.</p>																									
<p>63. Install lighting harness as per instructions supplied with the harness (sold seperately).</p> <p>64. Install and connect driving lights.</p>																									
<p>65. Reconnect the negative (-) cable to the battery negative terminal.</p>																									
<p>66. Complete comprehensive test of all driving light functions as per Table 1.</p>	<table border="1"> <thead> <tr> <th>Vehicle ignition state</th> <th>Vehicle light stalk state</th> <th>Driving Lights controller state</th> <th>Driving Lights state</th> </tr> </thead> <tbody> <tr> <td rowspan="3">ON</td> <td>Parker</td> <td>ON</td> <td>OFF</td> </tr> <tr> <td>Low Beam</td> <td>ON</td> <td>OFF</td> </tr> <tr> <td>High Beam</td> <td>ON</td> <td>ON</td> </tr> <tr> <td rowspan="3">OFF</td> <td>Parker</td> <td>OFF</td> <td>OFF</td> </tr> <tr> <td>Low Beam</td> <td>OFF</td> <td>OFF</td> </tr> <tr> <td>High Beam</td> <td>OFF</td> <td>OFF</td> </tr> </tbody> </table> <p style="text-align: right;"><i>TABLE 1.</i></p>	Vehicle ignition state	Vehicle light stalk state	Driving Lights controller state	Driving Lights state	ON	Parker	ON	OFF	Low Beam	ON	OFF	High Beam	ON	ON	OFF	Parker	OFF	OFF	Low Beam	OFF	OFF	High Beam	OFF	OFF
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