ARB FITTING INSTRUCTIONS

# Generic Remote Lock Kit for Centre Handle Rear Door Canopies

**FITTING KIT: 6178762**

**! PLEASE PROVIDE A COPY OF THESE INSTRUCTIONS TO THE CUSTOMER!**

## IMPORTANT:

- 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.
- 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.
- The installer is to check correct operation and clearances of all components.
- Ensure all electrical connections are correct and tight.
- 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.

## SAFETY NOTICE WHEN WORKING ON ELECTRIC VEHICLES:

### FOR HIGH VOLTAGE (HV) ELECTRIC VEHICLES

Work on and fitting parts to High Voltage (HV) electric vehicles has the potential to involve an interaction with the HV systems and presents significant risks of serious injury or death due to electric shock, arc flashes and potential explosions or fires.
When undertaking work or fitting parts that will involve an interaction with the vehicle's HV system, appropriately qualified personnel must undertake work in accordance with company procedures and local regulatory requirements. The qualifications required may vary depending on the location or region.
Failure to comply with these requirements and instructions may result in severe injury or death.
Consult your workshop manager before working on EV vehicles.



If you have any queries regarding the installation of this product, please contact the distributor from whom it was purchased, or alternatively the ARB office in your state.
**Head Office – ARB Corporation Ltd VIC:** 42-44 Garden Street, Kilsyth, Victoria, 3137 Tel: (03) 9761 6622 Fax: (03) 9761 6807
**WA:**(08) 9244 3553 **NSW:** (02) 9821 3633 **ACT:** (02) 6280 7475 **SA:** (08) 8244 5001 **QLD:** (07) 3872 3872 **NT:** (08) 8947 2262 **TAS:** (03) 6331 4190

## HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

| | |
|---|---|
| • Protective eyewear  | • Hearing protection  |

*NOTE: 'WARNING' notes in the fitting procedure relate to OH&S situations. To avoid a potentially hazardous situation it is suggested that protective safety gear be worn or a safe work procedure be employed. If these notes and warnings are not heeded, injury may result.*

## TOOL LIST FOR FITMENT:

| | |
|---|---|
| • Phillips head screwdrivers<br>• 7mm spanner<br>• Side cutters<br>• Wire strippers<br>• Crimping tool<br>• Torque wrench 0.4 to 4.5Nm. | • 1/4 ", 10mm socket<br>• Draw wire / welding wire<br>• Electrical tape<br>• Long nose pliers<br>• Small flat blade screwdriver |

## FITTING THE REMOTE LOCK KIT IS UNDERTAKEN THE FOLLOWING STAGES:

1. Fitting the generic remote lock kit to the door and to the interior lamp.
2. Fitting the vehicle application specific wiring harness for the remote lock kit (which is separate to these instructions and is provided in the vehicle specific remote lock kit).
3. Operational checks and door locking adjustment (per Section 2 of these instructions).

**!! IMPORTANT !! other than specifically specified in this instruction.**

**REQUIRED SCREW TORQUES: Refer as stated in this instruction**

**SCREW TORQUES: These must be adhered to avoid warranty issues.**



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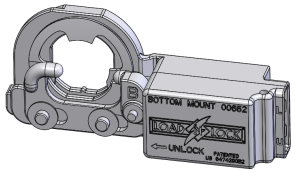
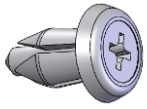
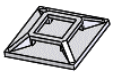
| Kit No | Part No | Picture | Qty | Description |
|---|---|---|---|---|
| **2). 6178762**<br><br>**GENERIC CANOPY REMOTE LOCK KIT FOR LEVER HANDLE REAR DOOR** | 671PJ007 |  | 1 | LOOM-DOOR FRAME |
| | 671PJ008 |  | 1 | LOOM-DOOR GLASS |
| | 668PJ006 |  | 1 | LOOM-DOOR AJAR SWITCH |
| | 671PG003 |  | 1 | REMOTE LOCK ACTUATOR MOTOR |
| | 6152318 |  | 1 | FLANGE HEAD PHILLIPS SCREW 3/16” 10-32 |
| | 6151702 |  | 1 | M3 X 16MM PHILLIPS HEAD SCREW |
| | 6151703 |  | 1 | M3 NYLOC NIT |
| | 671PH003 |  | 1 | INTERIOR LIGHT WITH ELECTICAL CONNECTION |
| | 180804 |  | 3 | CONNECTOR CLOSED END 2.5MM |
| | 6821135 |  | 1 | 7MM SPLIT CONVOLUTED TUBE AT 250MM LONG |
| | 6151783 |  | 4 | SCRIVET- STEM 5.0 O.D.x 10MM LONG |

| | | | | |
|---|---|---|---|---|
| | 6821178 |  | 4 | CABLE TIE 3.6 X 140MM LONG |
| | 6821293 |  | 1 | CABLE TIE BASE |
| | 6602018 |  | 1 | ALCOHOL WIPES |

**The below represents the top level part number for the separate vehicle specific remote locking kit:**

| **TABLE 1** | | | | | |
|---|---|---|---|---|---|
| **Canopy Application and canopy part number** | | **Top level kit part number:** | **Top level kit contains** | | |
| | | | **Vehicle Specific Loom** | **Bracket - Wiring Cover Door Glass**  | **Generic Remote Lock Kit** |
| Toyota Hilux 2026+ Dual Cab | CLS81 | 6178761 | 671PJ009 | 671PD013 | 6178762 |



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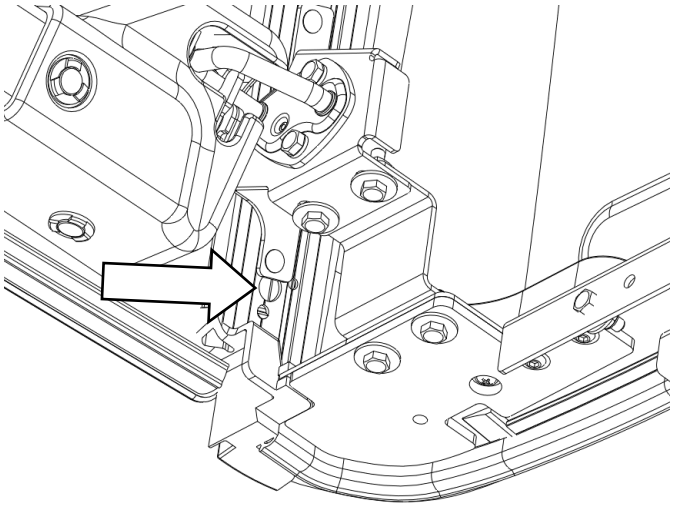
## SECTION 1: FITTING THE REMOTE LOCKING KIT TO THE DOOR AND INTERIOR LAMP


1.0) Open the canopy main door. Depress the plastic tabs on the interior light cover at the switch end and remove the plastic lens from the interior light.

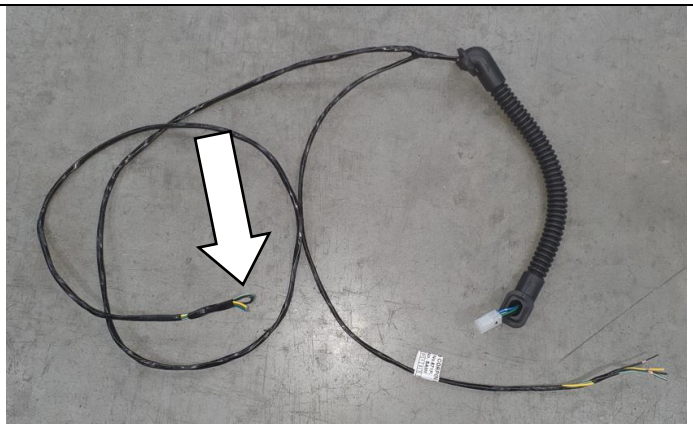
Remove the four batteries and remove the interior light from its mounting bracket by undoing the M4 screws in two locations using a phillips screwdriver and 7mm spanner on the nyloc nuts on the back. Retain screws, nuts and washers for reuse. Discard the battery operated interior lamp.

1.1) Remove the Tek screw from the light bracket using a 1/4” socket and loosen the other one to allow the lamp bracket to hang freely to the side. Retain the Tek screw that was removed.



1.2) On the inside of the canopy, to the side of the door frame near the top bend in the frame, feed a draw wire / piece of welding wire, through the large hole in the frame and feed it down the left-hand side for the door frame to the lower left-hand rear corner of the canopy.

Using needle nose pliers, pull the wire out from the large hole machined in the lower end of the door frame below the striker loop support bracket.



1.3) Pass the draw wire through the loop on the longest end of the door frame loom (671PJ007). Secure the draw wire to the loom with electrical tape and use the other end of the welding wire to pull the loom down through the door frame to the lower left-hand inner corner of the canopy.



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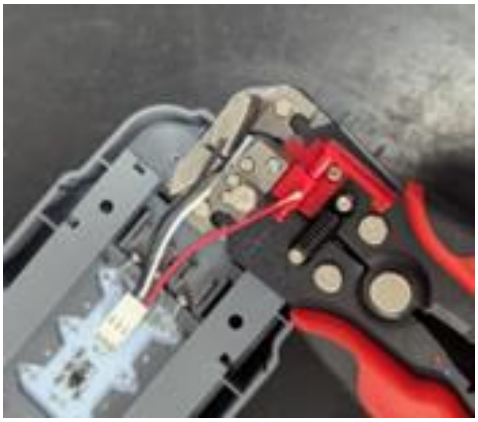
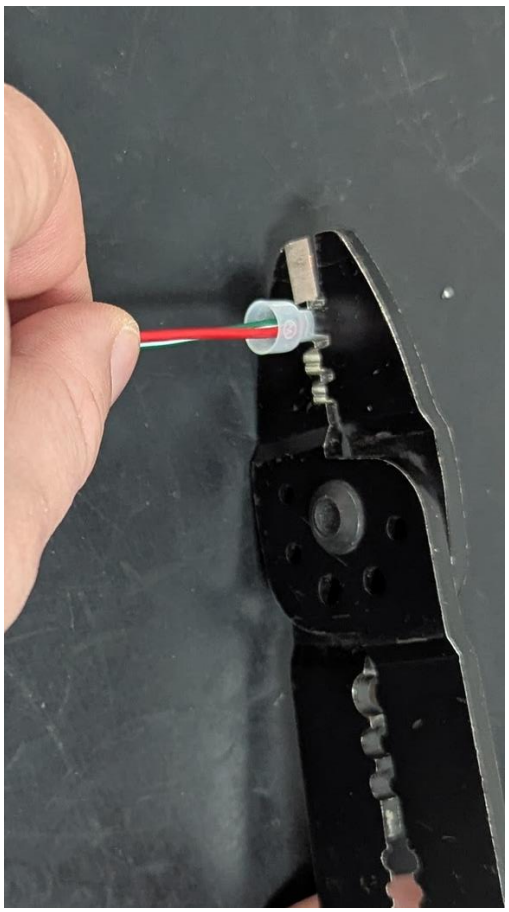
1.4) Using the same method, pass a draw wire through the large hole machined in the door frame behind the interior lamp bracket and feed it towards the other large hole in the door frame where the current wires are drawn through.

1.5) Loop the draw wire through the loop on the shorter end of the door frame loom (671PJ007) and secure with the electrical tape. Pull this through the door frame to exit the hole at the lamp bracket position.

1.6) Ensure the wires at both ends of the door frame have been pulled through adequately to allow the rubber grommet to seat properly into the hole in the frame.
Then insert two of the 5mm x 10mm long scrivets (6151783) through the tabs each side of the grommet, to secure it to the door frame.



1.7) Prepare the interior lamp (671PJ003). Cut the connector off where the wires are level to the edge of the lamp body.
Strip the ends of the three wires to approximately 10-15mm length.



1.8) Connect the wires from the door frame loom to the interior lamp, behind the lamp bracket, on the door frame, by twisting the wires together.

Wires are to be connected as follows from lamp to door frame loom:

**Red – Green/White**

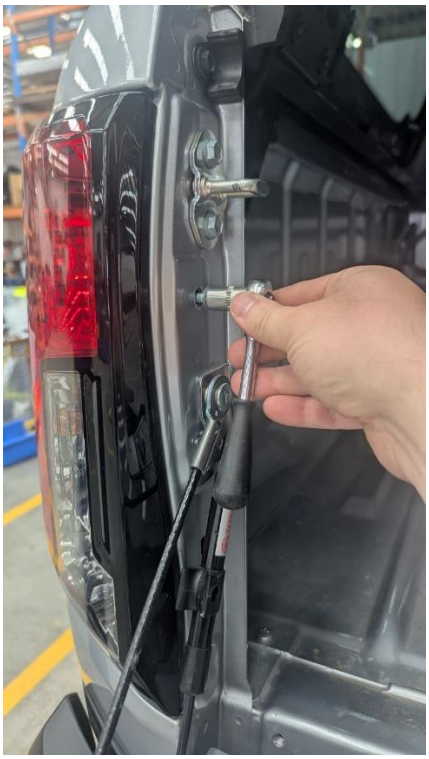
**Black – Black**

**White – Black/White**

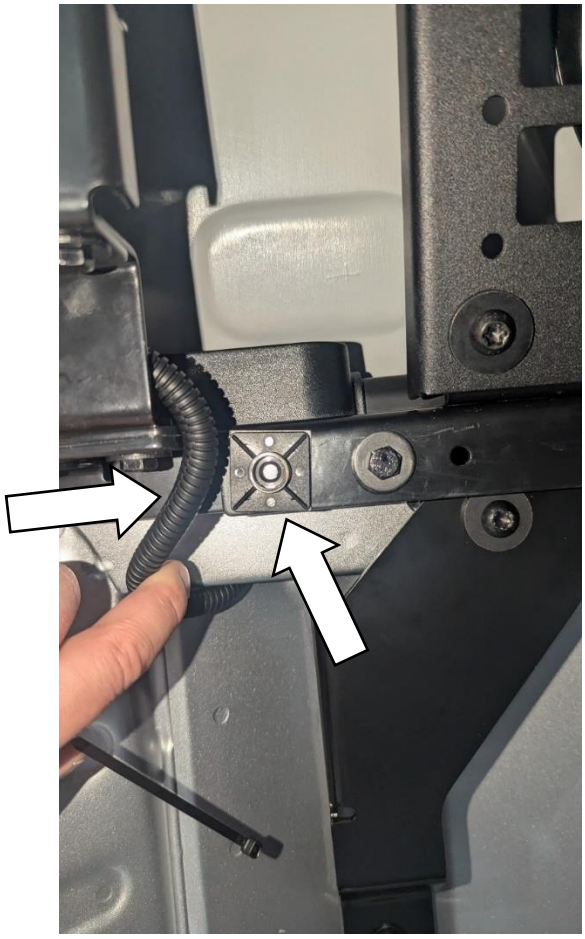
Insert each of the joined wires into three individual closed end connectors (180804) and crimp down using pliers.

1.9) The yellow wire in the door frame loom is not used. Trim this wire flush back to the door frame loom sheathing so no copper is exposed and tape this over on the door frame loom.

1.10) After unclipping and removing the lens cover on the wired lamp, reinstall the lamp to the lamp bracket using the M4 screws, nuts and washers previously retained.
Align the wiring from the lamp into the pressed channel in the lamp bracket and reinstall the lamp bracket to the door frame using the retained Tek screw. Do the two tek screws up in the lamp bracket being careful not to strip them in the door frame.

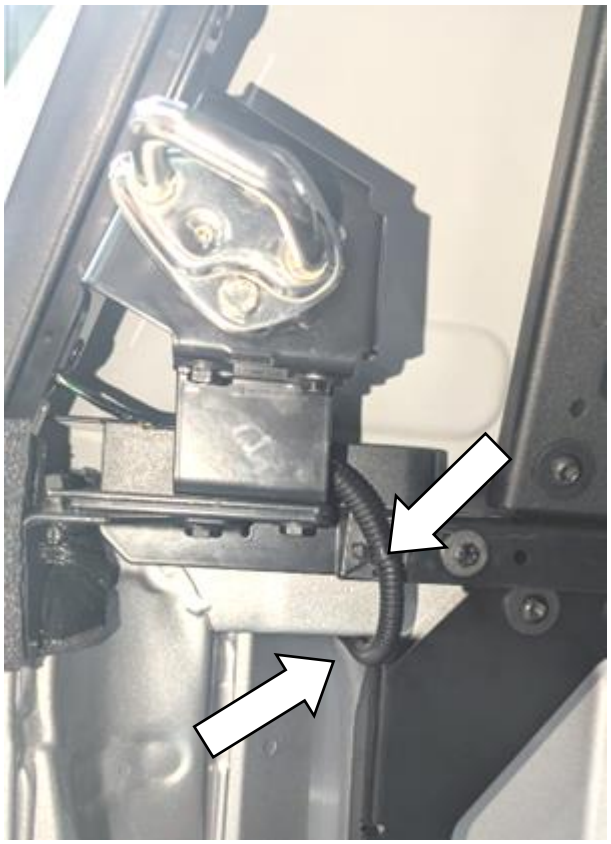


1.11) With the tailgate open, remove the hardware holding the left-hand side vehicle tail lamp assembly. Disconnect the electrical connector on the tail lamp and remove the tail lamp assembly from the vehicle.



1.12) On the inside of the canopy in the left-hand rear corner, sleeve the wiring harness where it exists from the door frame with the 7mm split piece of convoluted tube (6821135)

1.13) Using the supplied alcohol swab, clean and assemble the cable tie base (6821293) to the vertical surface of the rear of the left-hand base rail of the canopy and adhere in place as shown with pressure.



1.14) Route the wires in the convoluted tube under the lip of the vehicle's tub and down into the tail lamp recess.

1.15) Secure the loom to the cable tie base by threading through a cable tie.


1.16) Using the supplied connector that came with the door frame harness (671PJ007), fit the terminals and seals to the wires. Populate the terminals into the connector housing per the pinout below. Install the blanking plug for the unused cavity to ensure connector is waterproof.

**1 – Green/White**

**2 – Green**

**3 – Blue**

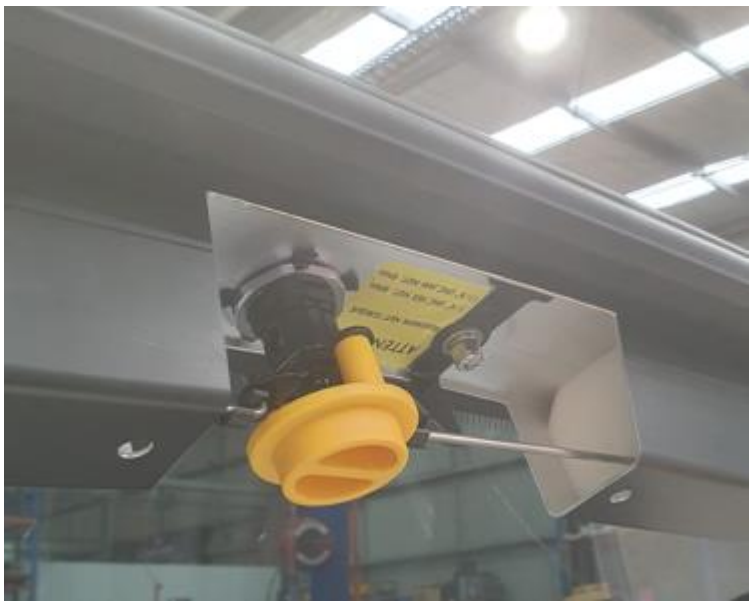
**4 – Black**

**5 – Yellow**

**6 – Unused (Cavity plug)**

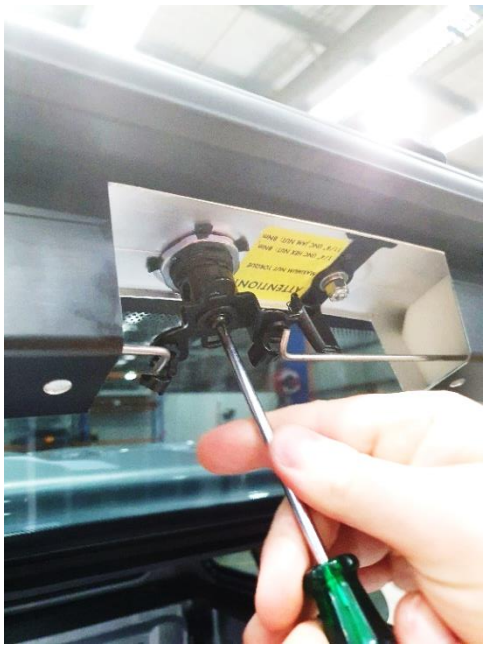
1.17) Using a flat blade screwdriver remove the two scrivets from the left-hand latch cover over the latch on the door glass. Retain all parts.

1.18) Using a flat blade screwdriver remove the two scrivets from the centre latch cover on the door glass. Retain all parts.



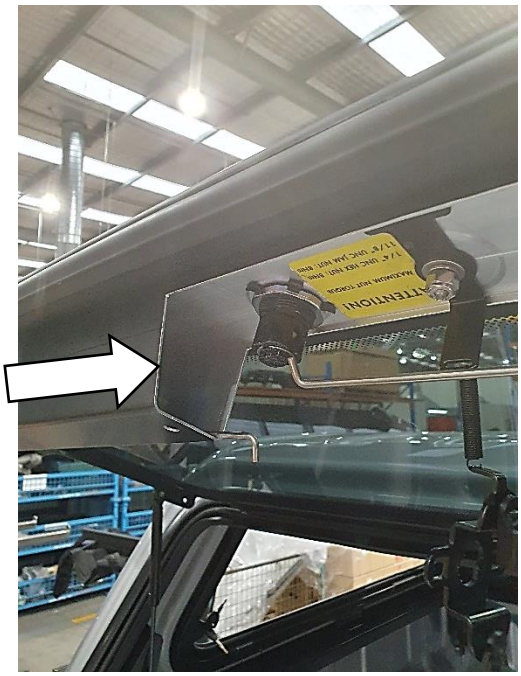
1.19) Remove the yellow interior release handle by unclipping it from the lock cam plate and retain it.

1.20) Unclip the rod end retaining clips from the metal pull rods and pull them out free and unclip the spring connected to the cam plate.

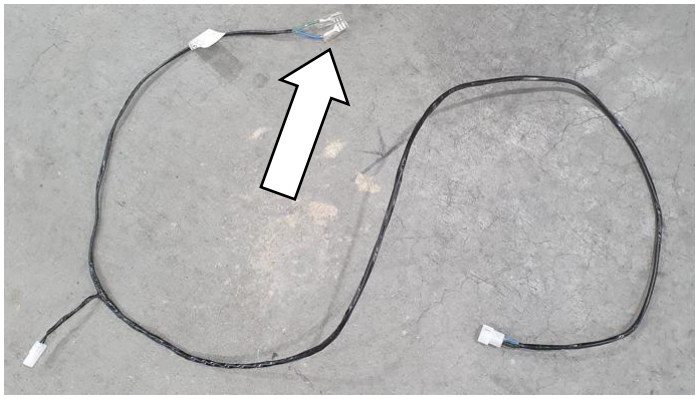


1.21) Undo the screw holding the lock mechanism cam plate on the back of the lock handle and retain the cam plate. Retain the washer but discard the screw.

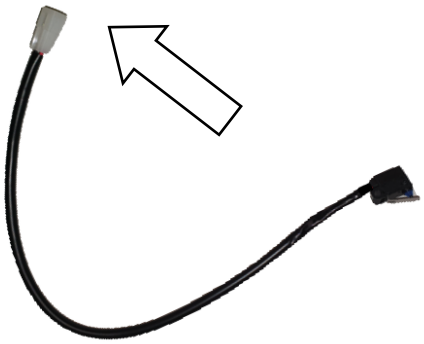
**Take a good note of the orientation of the cam plate before removal.**



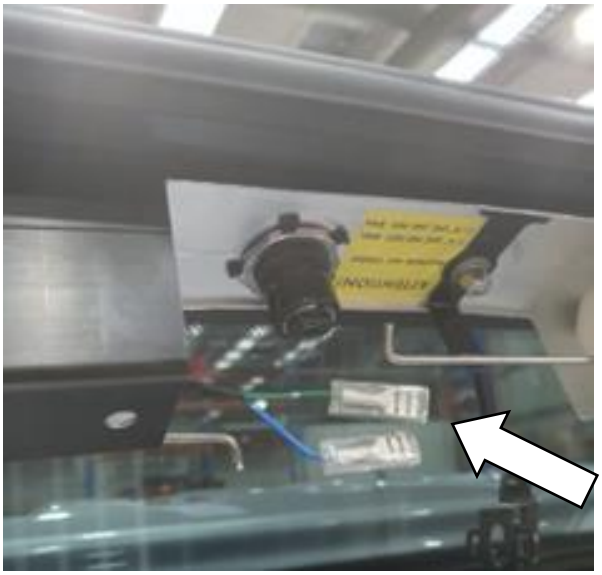
1.22) Remove the foam block assembled over the pull rod inside the lock channel on the glass, on the left-hand side of the door only and retain it.



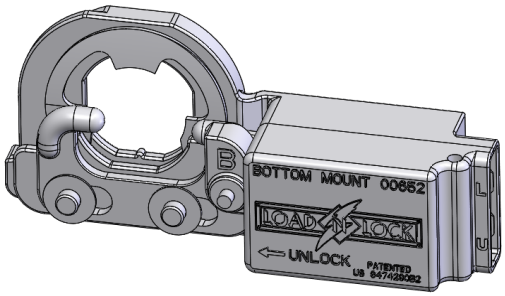
1.23) Locate the female spade terminals of the door glass loom (671PJ008) on the blue and green wires. Thread these through the hollow lock mechanism channel on the glass from the rotary latch end.



1.24) Locate the door ajar switch loom (668PJ006). Connect the door ajar switch to the door glass harness.



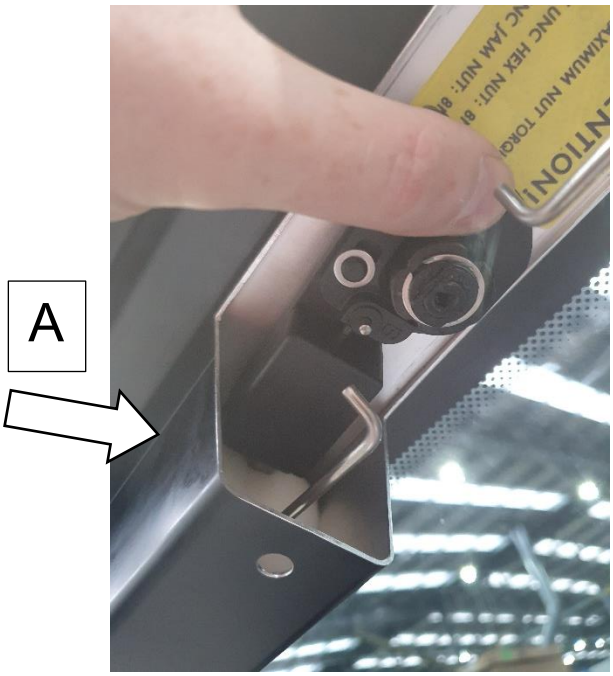
1.25) Continue to feed the door glass loom's female spade terminals along the lock channel on the glass, until they come out of at the centre near the back of the door handle.



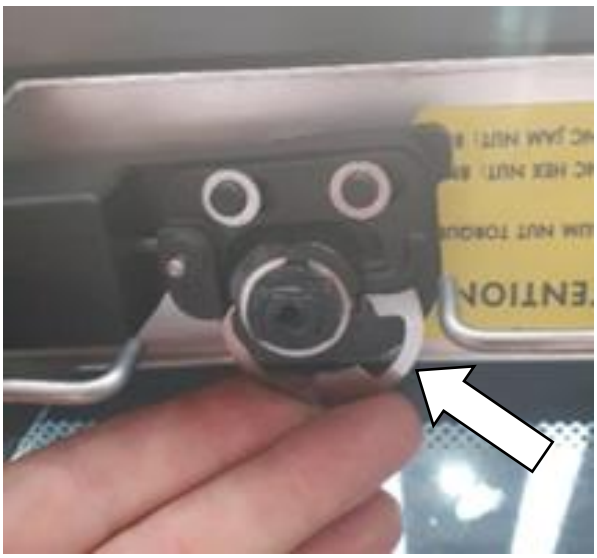

1.26) To the end of the remote lock actuator motor (671PG003) connect the spade terminals to the letters moulded on the unit as follows:

**Green wire to "L"**

**Blue wire to "U"**



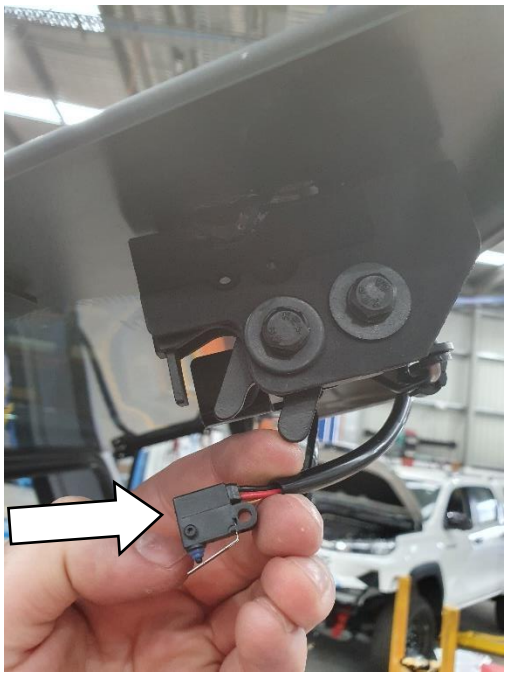

1.27) Reinstall the foam block on the left-hand side back into the lock channel on the glass ensuring the split in the foam block goes over the latch rod.
The wiring loom connected to the actuator motor is to sit to the lower side of the lock channel at “A” in the corner of the channel.
Install the actuator motor over the shaft on the back of the handle.



1.28) To retain the actuator, install the large circlip to the groove in the shaft on the handle to retain the actuator in place.

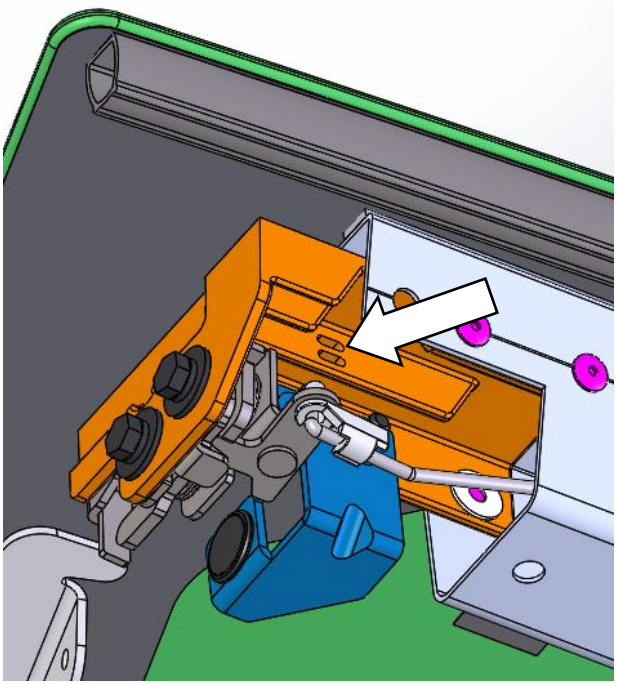
1.29) Reinstall the lock cam plate, over the shaft of the handle. Use the retained washer and a new flange head screw (6152318) to assemble it. **Torque the screw only to 2Nm.**
Reattach the spring to the cam plate.
Reattach the pull rods to the clips on either side.

1.30) Reinstall the interior release handle by clipping it back into the cam plate.
Test the door handle and ensure the lock mechanism functions.

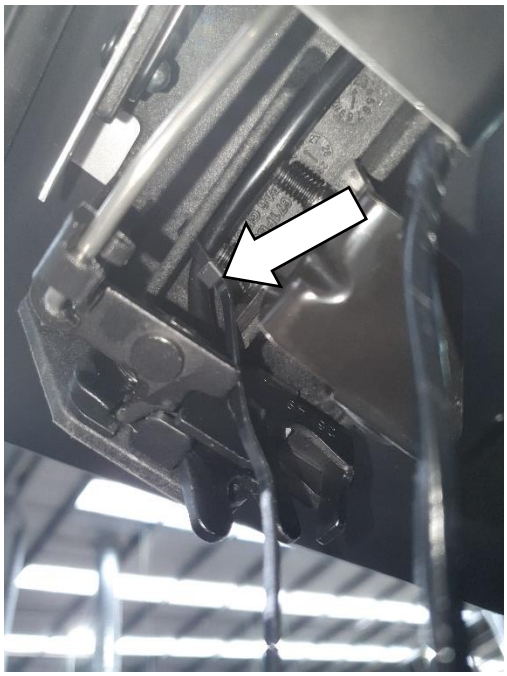


1.31) Ensure the left-hand side rotary latch is open, locate the door ajar switch on the loom (668PJ006). Locate the switch under the rotary latch on the inside of the plastic support backet on the glass. From the inside, pass the M3 x 16mm Philips head screw (6151702) through the switch and the plastic bracket ensuring the peg on the switch is seated into the hole on the plastic bracket.
The spring lever on the switch is to be positioned so it protrudes into square hole in the body of the rotary latch.
The thread of the screw is to be on the outer side as shown.

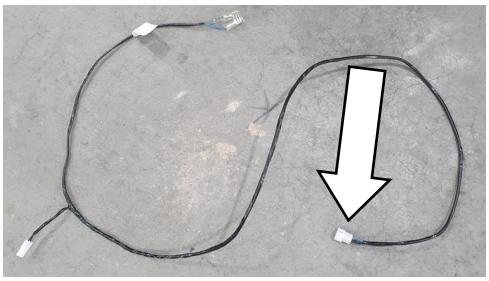
1.32) On the protruding thread, assemble a M3 nyloc nut (61517093). Do this up to a **torque of 0.4Nm.**

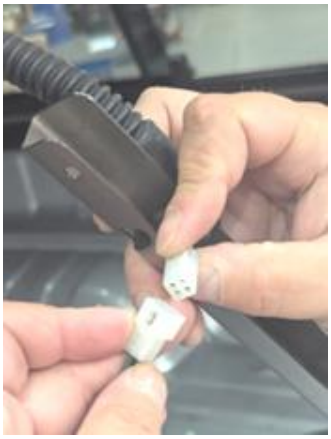


1.33) Feed a cable tie through the two slots on the plastic latch mounting bracket as shown and fasten it around the door ajar switch loom cable. Ensure the routing is as illustrated on the next page and nothing impedes the movement of the latch mechanism.

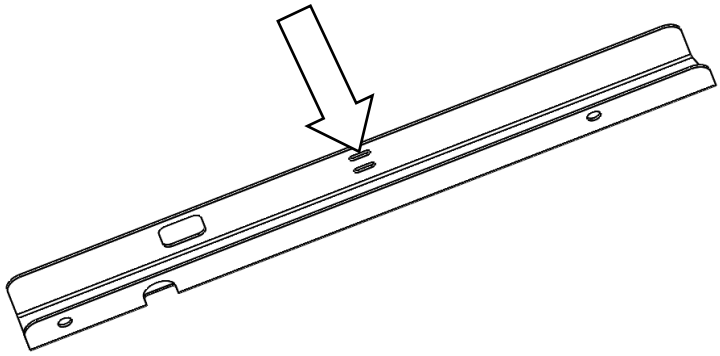
| | |
|---|---|
|  | |
|  | 1.34) In the retained left-hand rotary latch cover, twist and break out the square section to allow for wiring loom assembly. |
|  | 1.35) Place the cover back over the rotary latch on the glass with the wiring exiting up the glass from the door glass loom (671PJ008) through the square hole in the cover.<br>Reinstall the retained scrivets to assemble the cover back over the rotary latch. |

1.36) From the door frame loom (671PJ007), fit the grommet end through the square hole in the wiring cover bracket **(671PDXXX) Refer to the vehicle application specific hardware kit for the bracket part number. Or refer to Table 1 on page 4**





1.37) From the door glass loom (671PJ008) connect the 4-pin female connector to the male connector from the door frame within the channel of the wiring cover bracket.



1.38) Bundle up the wires by looping them along the inside channel along the length of the wiring cover bracket and zip tie them to the inside the bracket. Use the slotted holes in the bracket to pass a cable tie from the inside through and back through the hole in the bracket from the outside to the inside to retain the wiring inside the channel.

1.39) Assemble the wiring cover bracket to the inside of the gas strut support bracket that is glued to the glass. Assemble two 5 x 10mm long scrivets (6151783), through the holes on the gas strut bracket into the holes on the wiring cover bracket.

1.40) Replace all interior lock mechanism covers and reinsert the retained covers.

1.41) **Refer to the <u>additional fitting instructions for the vehicle specific harness</u> connection that is to be made to the connector in the tail lamp recess at step 1.16. Once this is fitted and tested to operate, complete section 2 of these instructions.**



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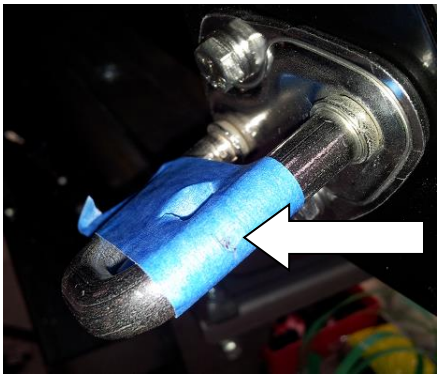
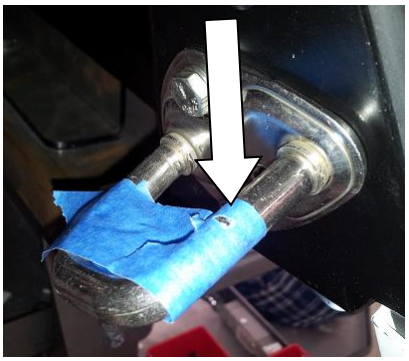
## SECTION 2: OPERATIONAL CHECKS AND ADJUSTMENT OF REAR DOOR LOCKING

2.0) **Once connection is completed to the vehicle's loom**. Check the interior light works when turned on via the switch to "ON" and then set the lamp switch to "DOOR" and check the interior light turns on when the door is open and turns off when the door is closed.

2.1) Place masking tape around the stainless-steel striker loops on both sides of the door and slam the door shut 3 times.



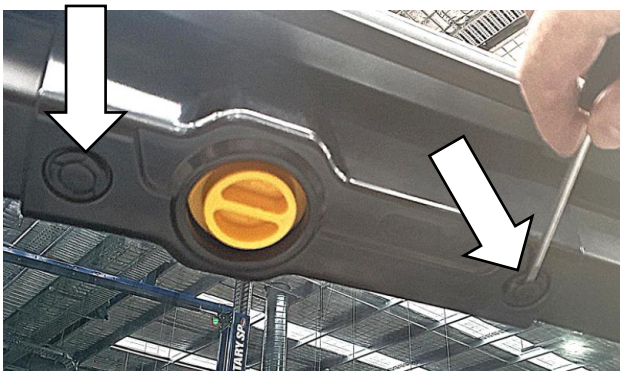


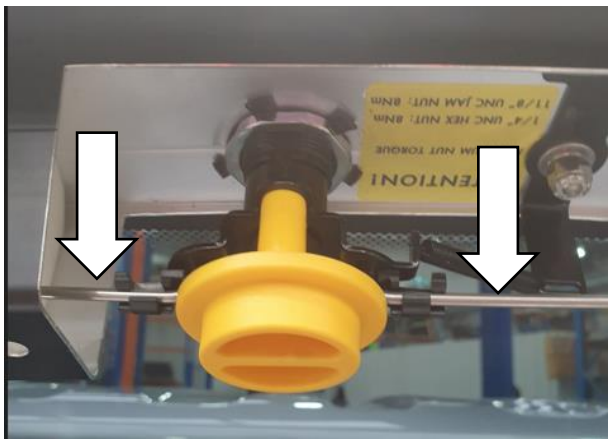
2.2) Check there is only wear on face of the tape that is rearwards from the vehicle on the striker loops.

2.3) If there is wear on top or underneath on the striker loop, loosen the bolts on the striker loops and adjust the position of the loop up or down to correct strike position into the rotary latches on the door glass so they do not bind when closing the door.

2.4) Tighten and retest with tape again until the desired latch wear point is obtained. Once satisfied, tighten the striker loop bolts to **9Nm**, using a torque wrench

2.5) With the door open, engage both latches to close them by pushing in the rotary latch pawls on both sides of the door, then **SLOWLY** twist the yellow release handle at the centre of the door and listen to hear if both latches open at **EXACTLY** the same time.





2.6) If the latches don't release at the same time, remove the 2 scrivets retaining the centre door cover, remove the cover to get access to the latch pull rods inside.

2.7) On the side which released last, undo the rod clip and pull the pull rod out. Rotate 1 turn to shorten it.

2.8) Reinstall the rods into the clips, **CLIP THE ROD END SHUT.**

2.9) Retest the latches by operating the interior handle to check they work simultaneously.

When satisfied, replace the covers, **check the scrivets are reinstalled.**



**If you have any queries regarding the installation of this product, please contact the distributor from whom it was purchased, or alternatively the ARB office in your state.**
**Head Office – ARB Corporation Ltd VIC:** 42-44 Garden Street, Kilsyth, Victoria, 3137 Tel: (03) 9761 6622 Fax: (03) 9761 6807
**WA:**(08) 9244 3553 **NSW:** (02) 9821 3633 **ACT:** (02) 6280 7475 **SA:** (08) 8244 5001 **QLD:** (07) 3872 3872 **NT:** (08) 8947 2262 **TAS:** (03) 6331 4190

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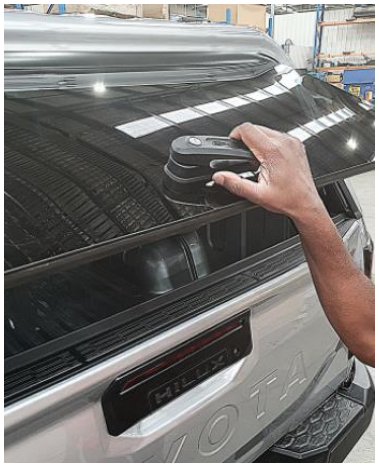
|---|---|
|  | 2.10) **Shut the door as gently as possible for a latch to engage.** Check that both latches engage at **EXACTLY** the same time. |



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