



## WORK INSTRUCTION

Process Name/Title:

## OFFLINE ASSEMBLY PROCESS

Effectivity Date:

August 28, 2024

Model code/Part number:

311D / 7L0153-7023

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1018

Purpose:

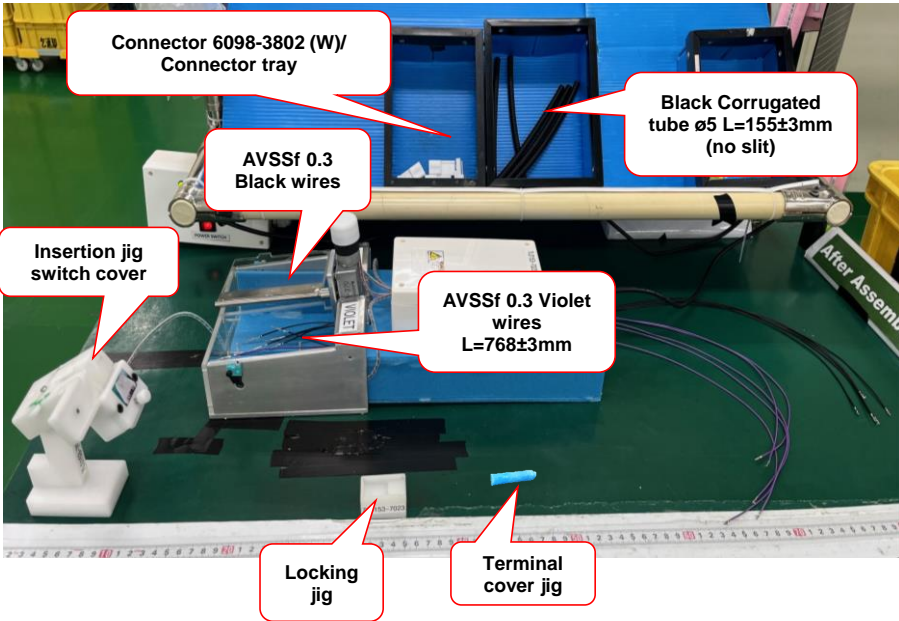
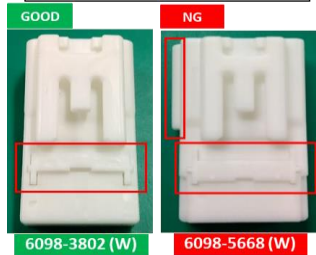
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Revision No.:

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PARTS:		1. Connector 6098-3802 (W); AVSSf 0.3 Black wires L=768±3mm; AVSSf 0.3 Violet wires L=768±3mm; Black Corrugated tube ø5 L=155±3mm (no slit)				JIG:		1. Insertion jig with switch cover 2. Terminal cover jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE		QUALITY POINTERS	
1	OFFLINE	<div>TABLE LAY-OUT</div> 				<div><b>Safety Instruction</b> Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)</div> <div><b>Housekeeping</b> 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div><b>Alert level</b> For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>		<div>1. No missing parts/tools 2. No excess parts/tools</div> <div><b>Document references:</b> 1. Refer to WI-PRO-CNC-017 for Wire Strip lenght tolerance.</div> <div>CONNECTOR ILLUSTRATION</div> 	
Revision History						Prepared by	Reviewed by	Approved by	Noted by
08/28/24	0	Initial issue. Separate process 2-4 from Taping Assembly process. Inclusion of Good and No Good Deformed terminal.				D. Castillo	C. Villanueva	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted
						Est. Date:	August 28, 2024		

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	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO			Revision No.:	0	Page No.:	2 of 7

PARTS:	1. Connector 6098-3802 (W)			JIG:	1. Insertion jig with switch cover		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS		
2	OFFLINE	Connector setting to insertion jig 6098-3802 (W)		n/a	<div>1. Use the provided jig per model</div> <div>2. No wrong orientation of connector</div> <div>3. No wrong use of connector</div> <div>4. No damaged connector</div> <div>Important reminder's/Note:</div> <div>1. Please hold the wire near terminal.</div> <div>2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion.</div> <div>Do not exert extra force.</div> <div>Document references:</div> <div>1. Refer to WI-PRO-CNC-017 for Wire Strip lenght tolerance.</div> <div>2. Refer to GL PRO-ASY-029 for pull-push-pull-push procedure</div> <div>CONNECTOR ILLUSTRATION</div> <div><div>GOOD</div><div>NG</div><div></div><div></div><div>6098-3802 (W)</div><div>6098-5668 (W)</div></div>		

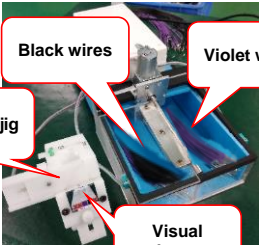
INSERTION JIG WITH SWITCH COVER

Black wires

Violet wires

Insertion jig

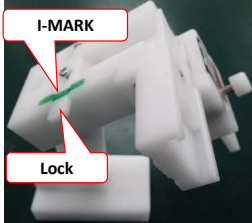
Visual reference




I-MARK

Lock

INSERTION JIG ORIENTATION



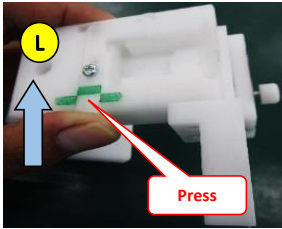
CONNECTOR ORIENTATION



L

↑

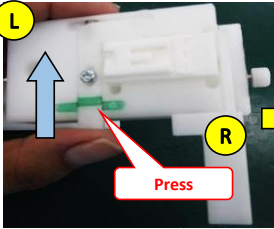
Press



L

↑

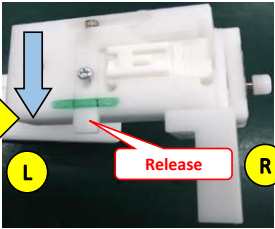
Press



L

↓

Release

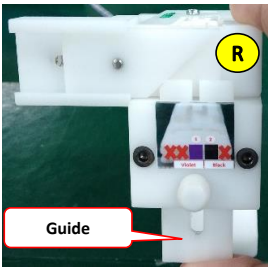


1. Press the lock of insertion jig using left thumb.

2. Insert the connector 6098-3802 (W) into jig using right hand and release the lock.

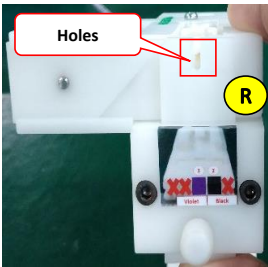
Note: Follow the connector orientation.

R



Guide

Holes



3. Push the guide using left hand. The slot for Violet wire will be opened.

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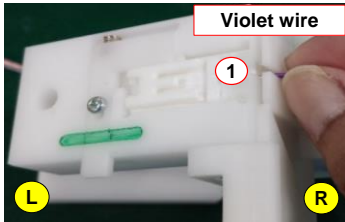
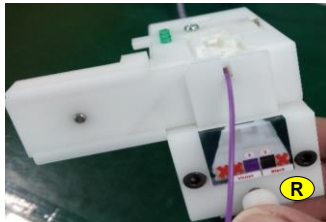
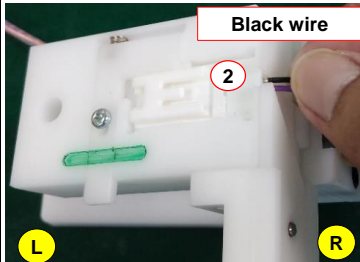

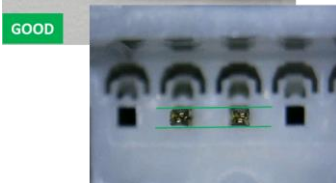
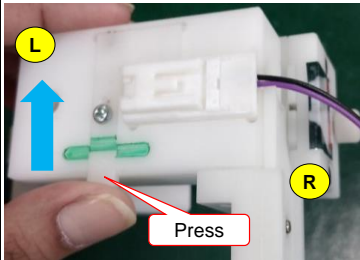

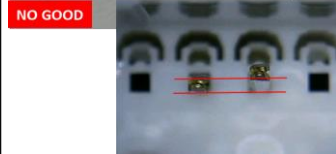

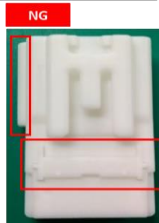
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PARTS:		1. AVSSf 0.3 Violet wire L=768±3mm 2. AVSSf 0.3 Black wire L=768±3mm		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	OFFLINE  Wire insertion to connector 6098-3802 (W)	<div><div></div><div><p><b>Violet wire</b></p><p>1</p><p>L R</p></div><div><p><b>Wire facing</b></p></div><div><p>1. Hold the insertion jig using left hand. Get the <b>Violet wire</b> then insert to terminal slot <b>1</b> using right hand.</p><p>2. Press the button using right thumb. The slot for <b>Black wire</b> will be opened.</p></div><div><p><b>Black wire</b></p><p>2</p><p>L R</p></div><div><p>3. Get the <b>Black wire</b> then insert to terminal slot <b>2</b> using right hand.</p><div><p>NO DEFORMATION ON TERMINAL</p><p>GOOD</p></div></div><div><p>L R</p><p>Press</p><p>4. After insertion, push the lock using left thumb and then hold the wires and gently pull out the connector from jig using right hand. Check the terminal condition.</p><div><p>DEFORMED TERMINAL</p><p>NO GOOD</p></div></div></div>		n/a	<div><p>1. No wrong use of connector 2. No damaged connector 3. No wrong insertion of wires 4. No loose insertion 5. One by one insertion 6. No deformed terminal 7. No wrong wire facing</p><p><b>Important reminder's/Note:</b></p><p>1. <b>Please hold the wire near terminal.</b></p><p>2. <b>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</b></p><p><b>Document references:</b></p><p>1. <b>Refer to WI-PRO-CNC-017 for Wire Strip length tolerance.</b></p><p>2. <b>Refer to GL PRO-ASY-029 for pull-push-pull-push procedure</b></p><div><div><p>GOOD</p><p>6098-3802 (W)</p></div><div><p>NG</p><p>6098-5668 (W)</p></div></div></div>

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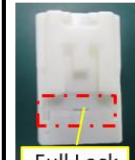

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<b>PARTS:</b>	1. Assy Parts			JIG:	1. Locking jig
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>		<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
4	OFFLINE Connector lock	<div><p>1. Load the connector into the jig holding both side of the connector, tip first.</p></div> <div><p>2. Press the lower part of connector to fully insert into the locking jig.</p></div> <div><p>3. Press the lower parts of connector using right hand while left hand holding the middle.</p></div> <div><p>4. Press the upper part of connector using right hand while left hand holding the middle.</p></div> <div><p>5. Lift then press the connector in the middle using left and right hand.</p></div> <div><p>6. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</p></div> <div></div>		<div><b>LOCKING JIG</b></div> 	<p>1. Use the provided jog per model 2. No unlocked/half-locked connector</p> <p><b>Important reminders/Note/s:</b></p> <p><b>1. Manual locking jig may caused damaged connector lock.</b></p> <p><b>Document references:</b></p> <p><b>1. Refer to GL-PRO-ASY-017 for the verification of connector lock.</b></p> <div><p>Before pressing</p><p>After pressing</p></div> <div><p>Full Lock</p><p>Half Lock</p></div>





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<b>PARTS:</b>		1. Assy parts 2. Black Corrugated tube ø5 L=155±3mm (no slit)			JIG:		1. Terminal cover jig	
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>			<b>TOOLS/PPE</b>		<b>QUALITY POINTERS</b>	
5	OFFLINE	<div><div><p>1. Combine the <b>B-V wires</b> using both hands. Get the terminal cover jig using right hand then insert to <b>B-V wires</b> both hands.</p></div><div><p>2. Get the Corrugated tube <b>ø5, L=155 ±3mm</b> using right hand then insert to <b>B-V wires</b> using both hands.</p></div><div><p>3. After insertion, remove the terminal cover jig using right hand.</p></div></div> <div><div>Terminal cover Jig</div></div> <div>1. No wrong usage of parts. 2. No deformed terminal</div>						

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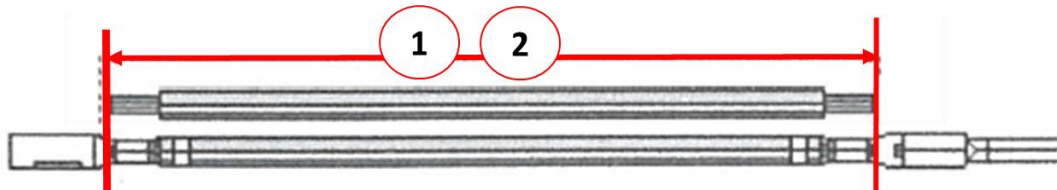
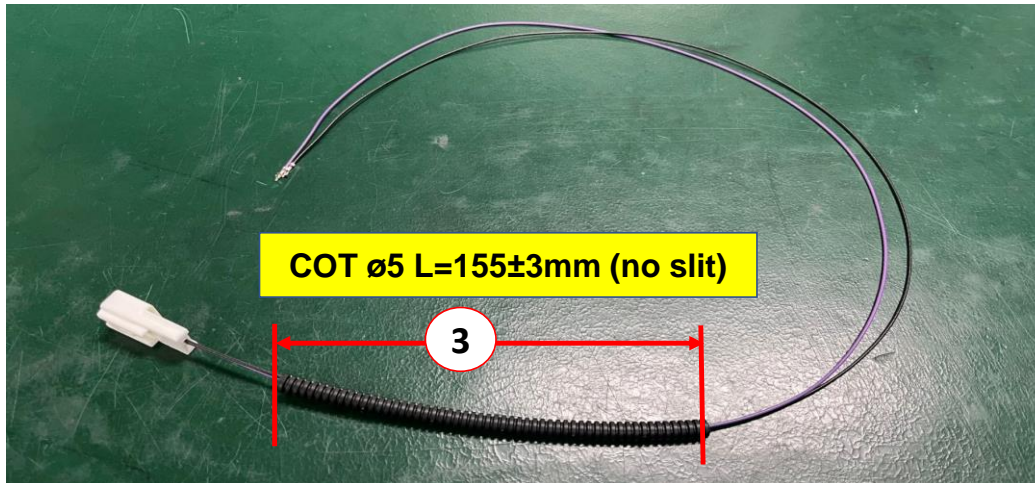
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PARTS:		1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	OFFLINE	Measurement	<div><p>Note:</p><p>1. Measurement point: End of core wire to the end of core wire</p><p>2. Terminal is reference only.</p></div> <div></div>	<div>MEASURING TAPE</div>	<p><b>Important reminders and note/s:</b></p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>2. For Hatsumono, Nakamono and Owarimono.</p> <p><b>Document reference/s:</b></p> <p>1. Refer to <b>WI-PRO-ASY-056</b> for Sub-assembly Hatsumono Nakamono Owarimono Inspection</p> <p>1. No wrong dimension</p>

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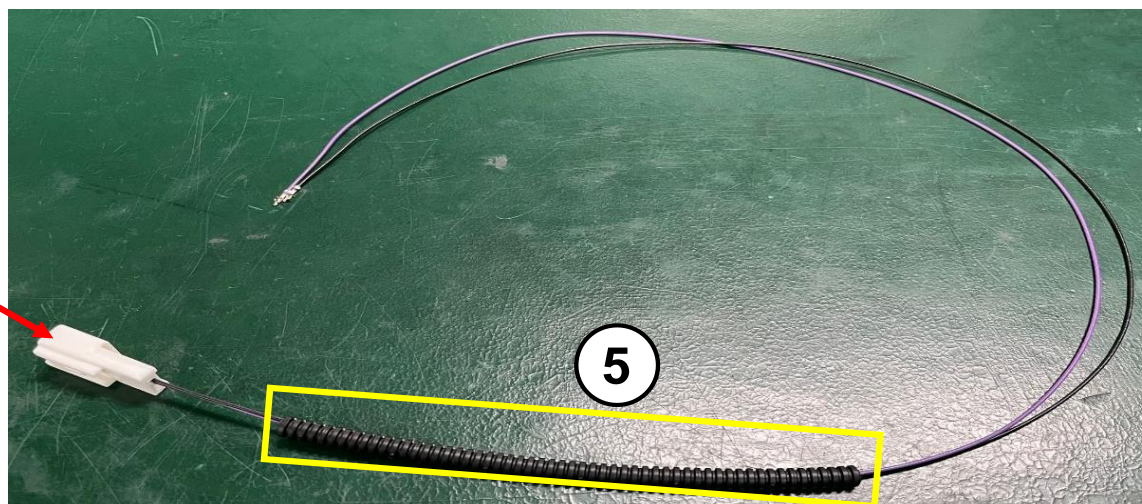
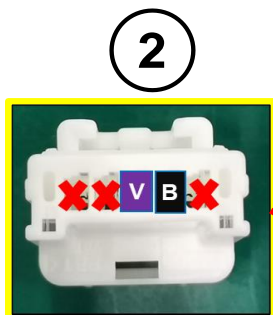
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**PARTS:**

1. Assy parts

JIG:

n/a

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****OFFLINE INSERTION****7L0153-7023**

- ① No **Unlocked/half-locked connector**
- ② No **Wrong insert**
- ③ No **Deformed terminal**

- ④ No **Terminal Backing out**
- ⑤ No **Missing COT**

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