



WORK INSTRUCTION

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

October 18, 2024

Validity Date:

n/a

Model code/Part number:

310D / 7N0199-7020B

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1060

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

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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=135±3mm (no slit)

JIG:

1. Insertion jig with switch cover
2. Terminal cover jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

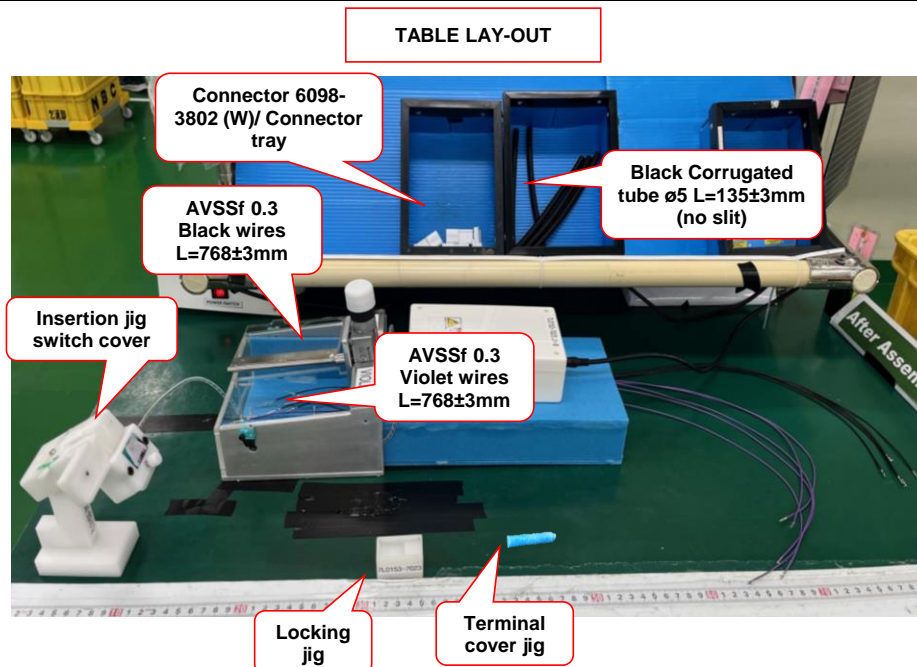
TOOLS/PPE

QUALITY POINTERS

1

Offline

Table lay-out

**Safety Instruction**

Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)

Housekeeping

1. Maintain and always practice 5's.
2. Personal things on the workplace is prohibited. Keep it in your locker.

Alert level

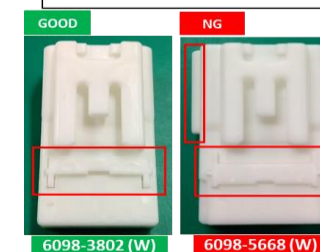
For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.

1. No missing parts/tools
2. No excess parts/tools

Document references:

1. Refer to WI-PRO-CNC-017 for Wire Strip length tolerance.

CONNECTOR ILLUSTRATION



Revision History

Prepared by

Reviewed by

Approved by

Noted by

10/18/24 1 Change purpose from Pre-launch to Masspro.

M. Ariola

C. Villanueva

A. Arañes

n/a

09/24/24 0 Initial issue.

M. Ariola

C. Villanueva

A. Arañes

n/a

Eff. Date

Rev. No

Details of Change

Revised

Reviewed

Approved

Noted

Est. Date:

September 24, 2024

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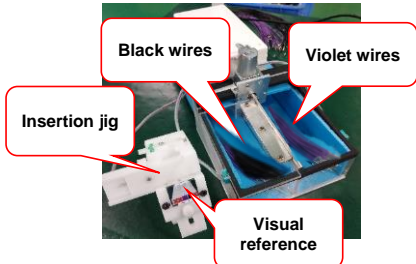
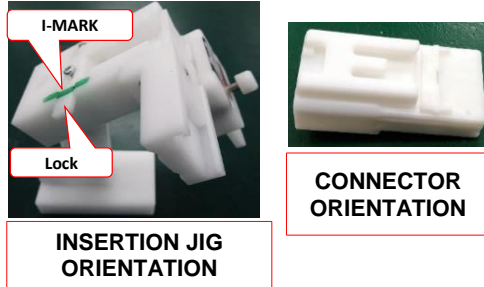
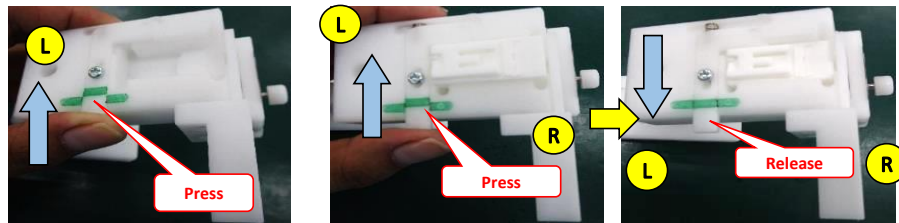
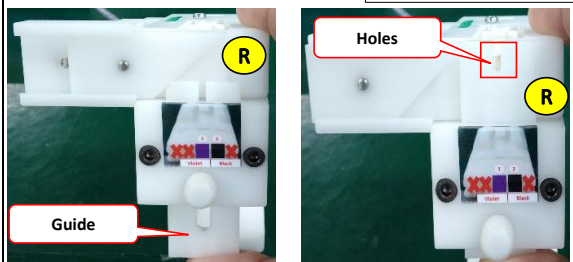

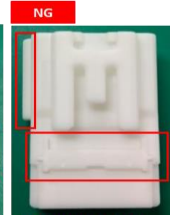
☒ MASSPRO

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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)	<div><div>INSERTION JIG WITH SWITCH COVER</div><div></div><div></div><div></div><div><div>1. Press the lock of insertion jig using left thumb.</div><div>2. Insert the connector 6098-3802 (W) into jig using right hand and release the lock. <i>Note: Follow the connector orientation.</i></div><div></div><div>3. Push the guide using left hand. The slot for Violet wire will be opened.</div></div></div>		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><i>Important reminder's/Note:</i></div> <div>1. <i>Please hold the wire near terminal.</i></div> <div>2. <i>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion.</i></div> <div>3. <i>Do not exert extra force.</i></div> <div><i>Document references:</i></div> <div>1. <i>Refer to WI-PRO-CNC-017 for Wire Strip lenght tolerance.</i></div> <div>2. <i>Refer to GL PRO-ASY-029 for pull-push-pull-push procedure</i></div> <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></div>

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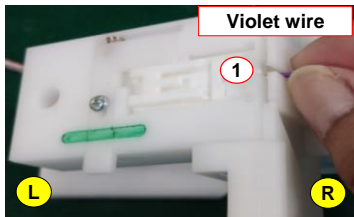
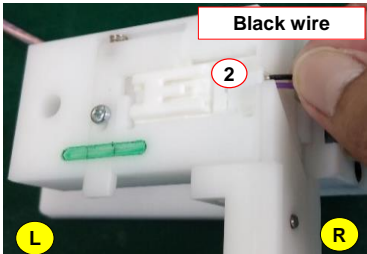
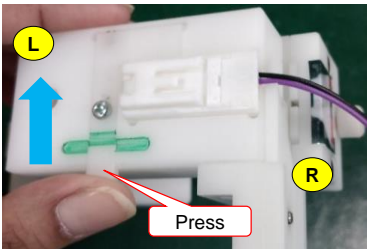




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PARTS:		1. AVSSf 0.3 Violet wire L=768±3mm 2. AVSSf 0.3 Black wire L=768±3mm		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Offline Wire insertion to connector 6098-3802 (W)	<div><p>Wire facing</p></div> <div><p>Violet wire</p><p>1</p><p>L R</p><p>1. Hold the insertion jig using left hand. Get the Violet wire then insert to terminal slot 1 using right hand.</p></div> <div><p>Black wire</p><p>2</p><p>L R</p><p>3. Get the Black wire then insert to terminal slot 2 using right hand.</p></div> <div><p>Press</p><p>L R</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> <div><p>NO DEFORMATION ON TERMINAL</p><p>GOOD</p></div> <div><p>DEFORMED TERMINAL</p><p>NO GOOD</p></div>		n/a	<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>Important reminder's/Note:</p> <p>1. Please hold the wire near terminal.</p> <p>2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>Document references:</p> <p>1. Refer to WI-PRO-CNC-017 for Wire Strip lenght tolerance.</p> <p>2. Refer to GL PRO-ASY-029 for pull-push-pull-push procedure</p> <div><p>CONNECTOR ILLUSTRATION</p><div><p>GOOD</p><p>6098-3802 (W)</p></div><div><p>NG</p><p>6098-5668 (W)</p></div></div>

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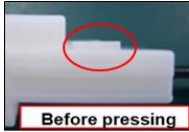
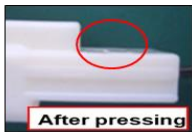


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PARTS:	1. Assy Parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Offline Connector lock	<div><div><p>1. Load the connector into the jig holding both side of the connector, tip first.</p></div><div><p>2. Press the lower part of connector to fully insert into the locking jig.</p></div><div><div><p>Right thumb-Lower Left thumb-middle</p><p>3. Press the lower parts of connector using right hand while left hand holding the middle.</p></div><div><p>Right thumb-upper Left thumb-middle</p><p>4. Press the upper part of connector using right hand while left hand holding the middle.</p></div><div><p>Right thumb-middle Left thumb-middle</p><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><div>LOCKING JIG</div></div> <div><div>1. Use the provided jig per model 2. No unlocked/half-locked connector</div><div>Important reminders/Note/s: 1. Manual locking jig may caused damaged connector lock.</div><div>Document references: 1. Refer to GL-PRO-ASY-017 for the verification of connector lock.</div><div><div><p>Before pressing</p><p>After pressing</p></div><div><div>GOOD <p>Full Lock</p></div><div>NG <p>Half Lock</p></div></div></div></div>		

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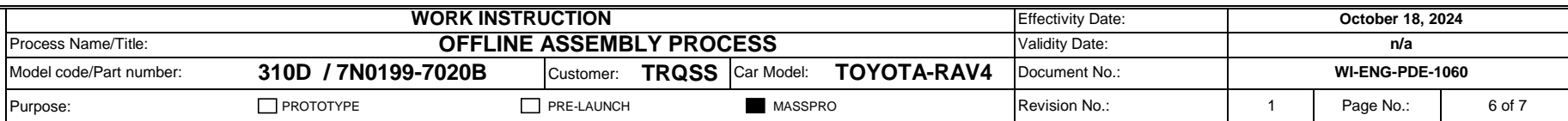
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PARTS:		1. Assy parts 2. Black Corrugated tube $\phi 5$ L=135 \pm 3mm (no slit)		JIG:	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	Offline	<div><div><p>1. Combine the B-V wires using both hands. Get the terminal cover jig using right hand then insert to B-V wires both hands.</p></div><div><p>2. Get the Corrugated tube $\phi 5$, L=135\pm3mm using right hand then insert to B-V wires using both hands.</p></div><div><p>3. After insertion, remove the terminal cover jig using right hand.</p></div></div> <div>Wire Insertion to Black Corrugated tube $\phi 5$ L=135\pm3mm (no slit)</div>		<div>Terminal cover Jig</div> 	1. No wrong usage of parts. 2. No deformed terminal

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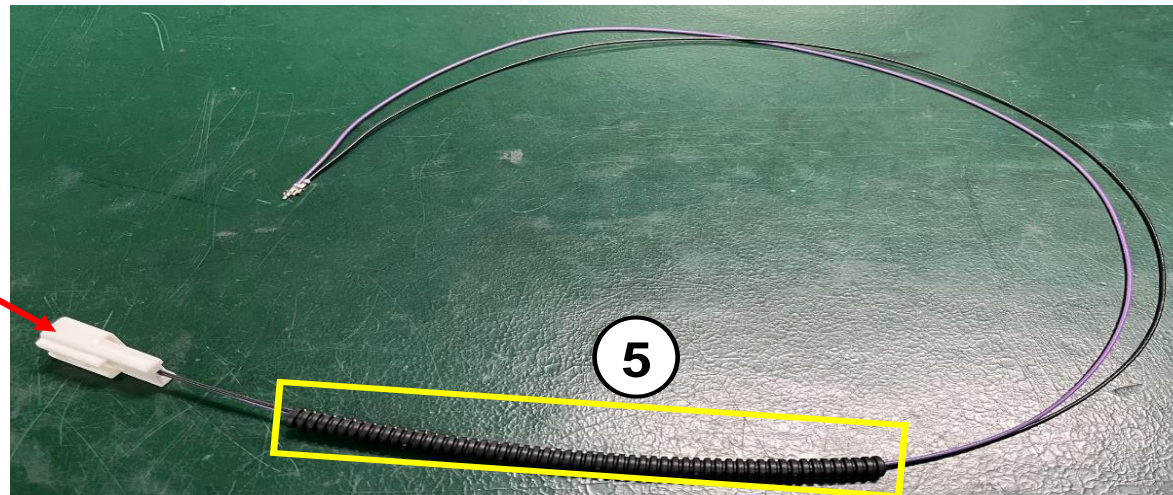
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PARTS:

1. Assy parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**OFFLINE INSERTION****7N0199-7020B****1** No **Unlocked/half-locked connector****2** No **Wrong insert****3** No **Deformed terminal****4** No **Terminal Backing****5** No **Missing COT**

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