



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Model code/Part number:

311D / 7L0151-7021

Customer:

TRQSS

Car Model:

TOYOTA RAV4

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

June 6, 2024

Validity Date:

n/a

Document No.:

WI-ENG-PDE-844

Revision No.:

1

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PARTS:

1. Connector 6098-3802 (W); AVSSf 0.3 Black Wires L=768±3mm; Black Corrugated tube ø5 L=630±6mm (no slit); Black VM tube (Sunprene) ø9 L=112±3mm; Black tape

JIG:

1. Insertion jig
2. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

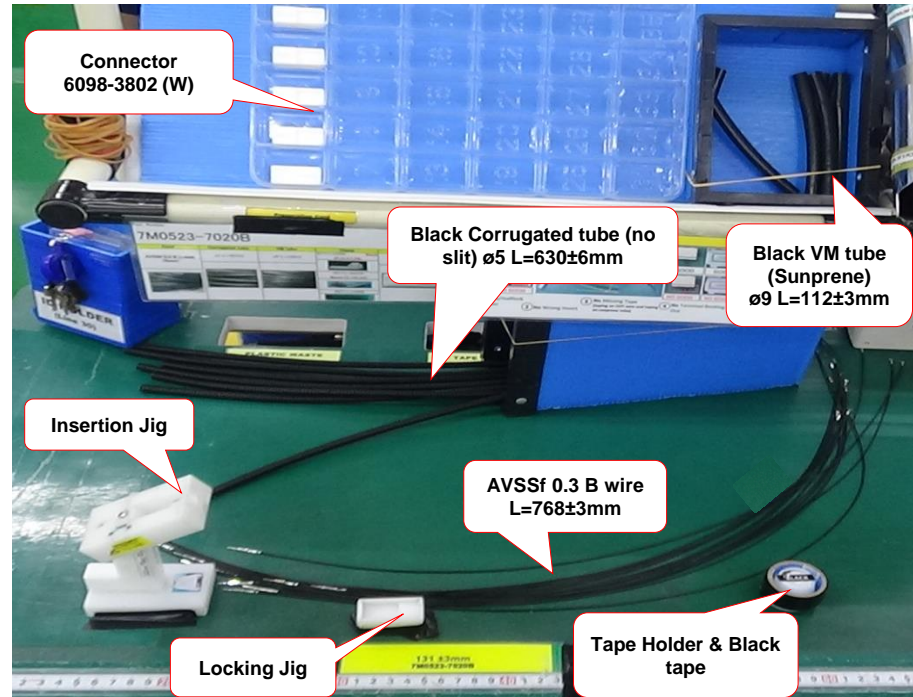
QUALITY POINTERS

1

P1

Table Lay-out

TABLE LAY-OUT



Safety Instruction

Be sure to wear prescribed 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

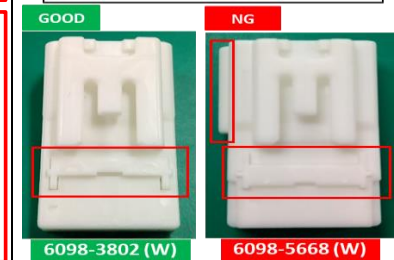
For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.

Document reference/s:

1. Refer to **WI-PRO-CNC-017** for Wire and Strip Length Tolerance

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

CONNECTOR ILLUSTRATION



Revision History

Prepared by

Reviewed by

Approved by

Noted by

06/06/24 1 Change from Pre-launch to Masspro. Inclusion of table lay-out. Provide insertion jig. Separate Clamp setting and Clamp assembly to Clamp assembly process. Improved Measurement and Quality checkpoints.

M.Ariola

C. Villanueva

A. Arañes

n/a

02/16/24 0 Initial issue.

M.Ariola

C. Villanueva

A. Arañes

n/a

Eff. Date

Rev. No

Details of Change

Revised

Reviewed

Approved

Noted

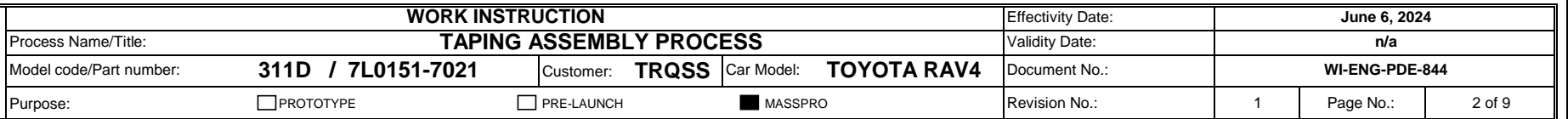
Est. Date:

February 16, 2024

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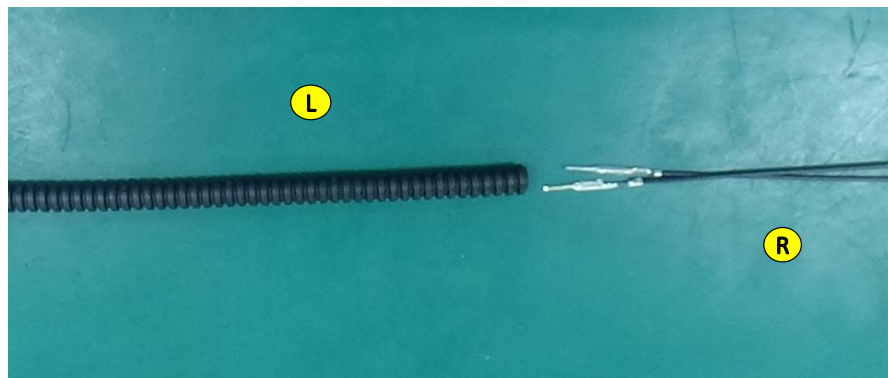
3 of 9**PARTS:**

1. AVSSf 0.3 Black Wires L=768±3mm [2pcs]
2. Black Corrugated tube ø5 L=630±6mm (no slit)

JIG:

n/a**NO.****PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS****3****P1**

Wire insertion to
Black Corrugated tube
ø5 L=630±6mm
(no slit)



1. Get **Black COT Ø5 L=630±6mm** using left hand and insert Black wire AVSSf 0.3 L=768±3mm using right hand.

N/A

1. No wrong use of parts
2. No deformed terminal

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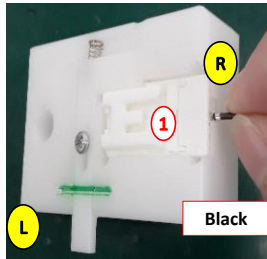
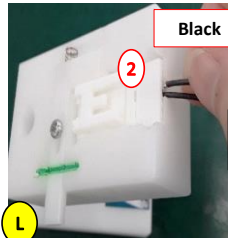
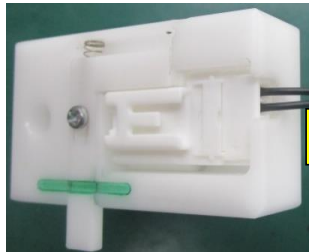
☒ MASSPRO

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PARTS:	1. Assy parts		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	P1 Wire insertion to connector 6098-3802 (W)	<div><div><div><div>WIRE FACING</div></div><div><div><div>1</div><div>Black</div><div>L</div><div>R</div></div><div><div>2</div><div>Black</div><div>L</div><div>R</div></div><div><div><div>L</div><div>R</div><div>Press</div></div><div><div>1. Get the first Black wire and insert to Slot 1 of connector using right hand.</div><div>2. Get the second Black wire and insert to Slot 2 of connector using right hand.</div><div>3. After insertion, push the lock button using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</div></div></div></div></div></div>	N/A	<p>Important reminders/Note/s:</p> <p>1. Please hold the wire near terminal during insertion. 2. Insertion must be from left to right. 3. Make sure wires are properly inserted. <u>Conduct Pull-Push-Pull-Pull after insertion.</u> Do not exert extra force.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-CNC-017 for Wire and Strip length tolerance. 2. Refer to GL-PRO-ASY for pull-push procedure.</p> <p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p>

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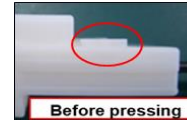
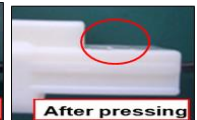







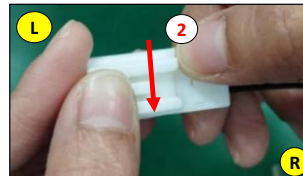
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PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1	Connector Lock			
		<div><div><p>1. Load the connector into the jig holding both side of the connector, tip first.</p></div><div><p>2. Press the lower part of connector to fully insert into the locking jig.</p></div></div>			<div><p>Before pressing</p></div> <div><p>After pressing</p></div> <div><div><p>Full Lock</p></div><div><p>Half Lock</p></div></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>		<div><div>LOCKING JIG</div></div>	<div>1. Use the provided jog per model 2. No unlocked/half-locked connector</div> <div>Important reminders/Note/s: 1. Manual locking may cause damaged connector lock.</div> <div>Document reference/s: 1. Refer to WI-PRO-KIT-001 for Proper locking and checking of connector lock.</div>
		<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>			

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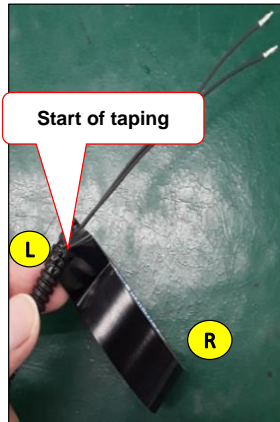

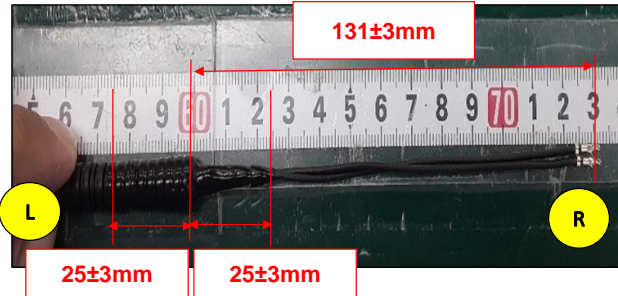

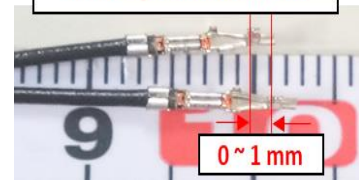
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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P1 Taping 1 Corrugated tube to wire near terminal	<div><p>Start of taping</p></div> <div><p>131±3mm</p><p>2. Measure from end of COT up to the terminal tip 131±3m then continue the taping process.</p></div> <div><p>131±3mm</p><p>25±3mm 25±3mm</p></div> <div><p>1. Hold the COT (Assy Part) using left hand, get the Black tape then start taping using both hands.</p><p>3. After taping, check the taping condition, wire alignment and measurement.</p></div>		<div><p>MEASURING TAPE</p></div>	<div><p>Wire alignment tolerance</p><p>0 ~ 1 mm</p></div> <div><p>1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No wrong use of tape</p><p>Important reminders and Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</p><p>Document reference/s: 1. Refer to WI-PRO-ASY-001 for taping procedure.</p></div>

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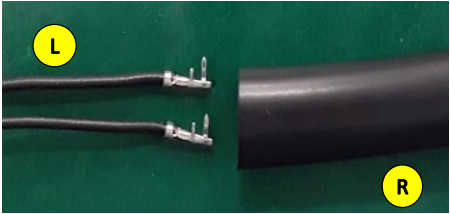
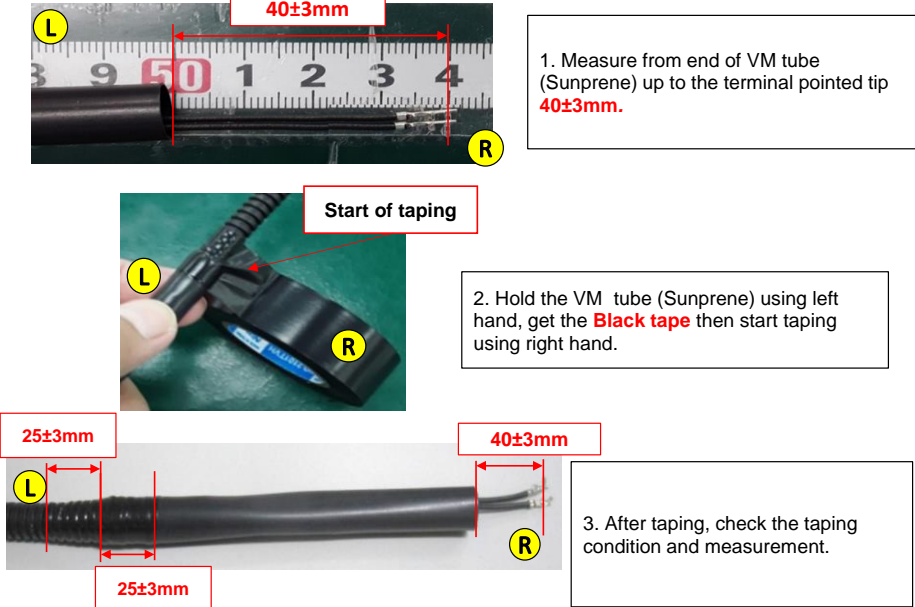

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:	1. Assy parts 2. Black tape 3. VM tube (Sunprene) Ø9 L=112±3mm		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	Wire insertion to Black VM tube (Sunprene) Ø9 L=112±3mm		n/a	1. No wrong use of parts 2. No deformed terminal
8	P1 Taping 2 Black Corrugated tube (No slit) to Black VM tube (Sunprene)			Important reminders and Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement. Document reference/s: 1. Refer to WI-PRO-ASY-001 for taping procedure. 1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No wrong use of tape

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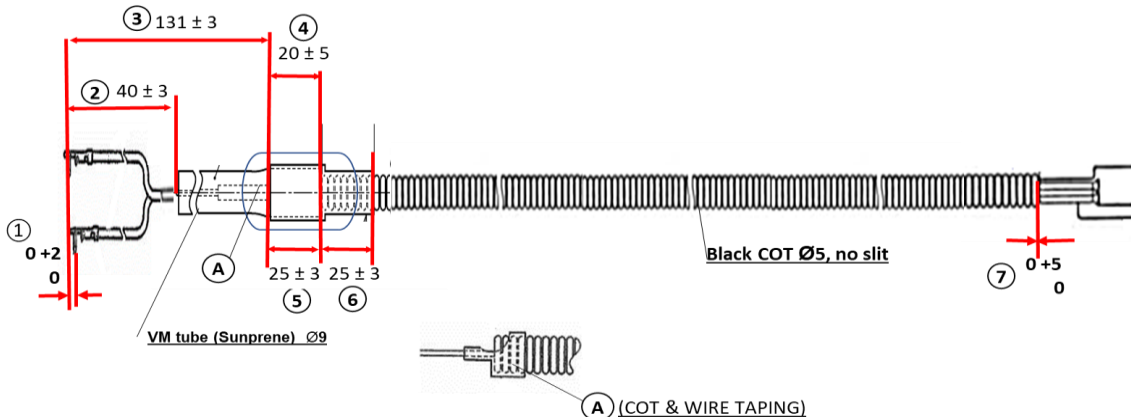

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PARTS:		1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	1	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	P1	Measurement		<div>MEASURING TAPE</div> 	<p>Important reminders and note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>2. For Hatsumono, Nakamono and Owarimono.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-ASY-056 for Sub-assembly Hatsumono Nakamono Owarimono Inspection</p> <p>1. No wrong dimension.</p>

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PARTS:

1. Assy parts

JIG:

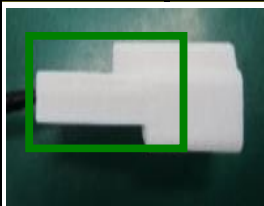
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VISUAL INSPECTION/ QUALITY CHECKPOINTS

TAPING - P1

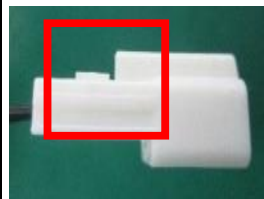
7L0151-7021



GOOD



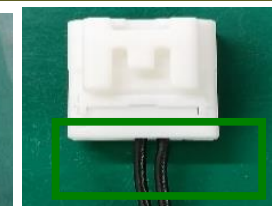
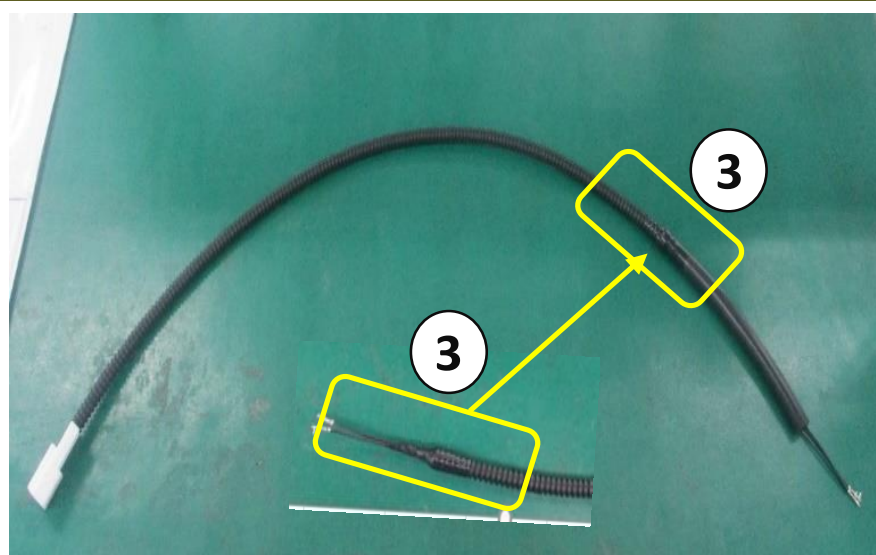
GOOD



NO GOOD



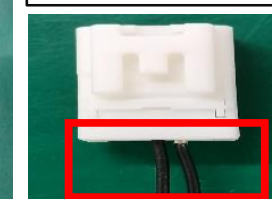
NO GOOD



GOOD



GOOD



NO GOOD



NO GOOD

1 No Unlock/Halflock Connector

2 No Wrong Insert

3 No Missing Tape (taping on COT-wire and taping on sunprene tube)

4 No Terminal Backing Out

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