



## WORK INSTRUCTION

## TAPING ASSEMBLY PROCESS

Process Name/Title:

Model code/Part number:

310D

/

7N0199-7020A

Customer: TRJ

Car Model:

TOYOTA-RAV4

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

June 14, 2024

Validity Date:

n/a

Document No.:

WI-ENG-PDE-913B

Revision No.:

1

Page No.:

1 of 6

## PARTS:

1. Assy parts; Black VM tube (Sunprene) Ø9 L=112±3mm; Black tape

JIG:

n/a

NO.

PROCESS NAME

1

WORK PROCEDURE/ ILLUSTRATION

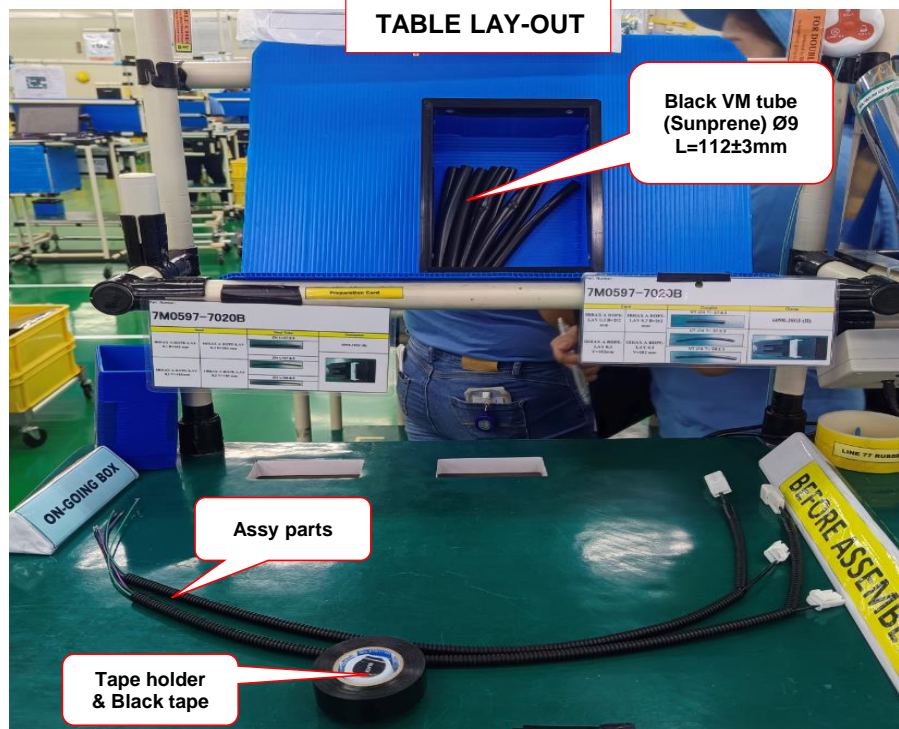
TOOLS/PPE

QUALITY POINTERS

1

P2

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 wrong use of parts/tools
2. No missing parts/tools

## Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
6/14/24	1	Change purpose from Pre-launch to Masspro. Additional table lay-out; Visual inspection/Quality Checkpoints					M. Ariola	C. Villanueva	A. Arañes	n/a
6/06/24	0	Initial issue								

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PROTOTYPE



PRE-LAUNCH




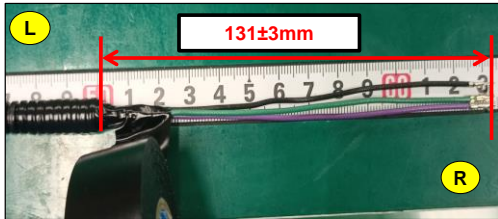
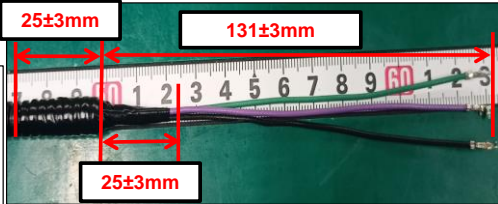


MASSPRO

Revision No.:

1

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PARTS:		1. Assy parts 2. Black VM tube (Sunprene) Ø9 L=112±3mm		3. Black tape	JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	Taping 1 COT to wire near terminal  P2	<div><div></div><div></div><div></div><div>1. Hold the assy parts using left hand. Get <b>Black tape</b> using right hand and start pre-taping.</div><div>2. Measure from COT to Connector <b>131±3mm</b> using both hands and continue the taping process.</div><div>3. After taping, check the measurement and taping condition.</div></div> <div></div> <div>1. No loose tape 2. No flip-out tape 3. No peel-off tape 4. No wrong use of tape 5. No wrong dimension  <b>Important reminders/Notes/:</b> <b>1. Please use calibrated/verified measuring tape when getting the measurement.</b></div>				
3	Wire insertion to Black VM tube (Sunprene) Ø9 L=112±3mm	<div><div></div><div>1. Get the Black VM tube (Sunprene) Ø9 L=112±3mm using right hand then insert the <b>B-G-V wires</b>.</div></div>			n/a	1. No deformed terminal 2. No wrong usage of parts.

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PROTOTYPE



PRE-LAUNCH



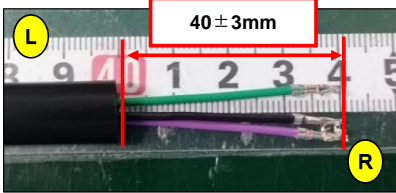
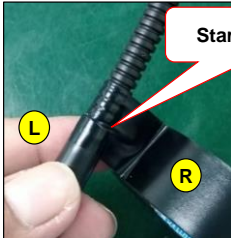




MASSPRO

Revision No.:

1

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PARTS:		1. Assy parts 2. Black tape	JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	P2 Taping 2 Black Corrugated tube to Balck VM tube (Sunprene)	<div><p>1. Measure from end of VM tube (Sunprene) up to terminal pointed tip <b>40±3mm</b> using both hands.</p></div> <div><p>2. Hold the COT using left hand, get the <b>Black tape</b> using right hand then start pre-taping using both hands.</p></div> <div><p>3. Confirm measurement of <b>25±3mm</b> from end of tape up to end of tube then continue the taping process using both hands.</p></div> <div><p>4. Confirm measurement of <b>25±3mm</b> from end of tube up to end of tape then continue the taping process using both hands.</p></div> <div><p>5. After taping, check the measurement, terminal appearance and taping condition.</p></div>	<div><b>MEASURING TAPE</b></div> 	<p><b>Important reminders/Notes/:</b></p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>1. No loose tape 2. No flip-out tape 3. No peel-off tape 4. No wrong use of tape 5. No wrong dimension</p>

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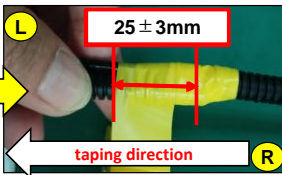
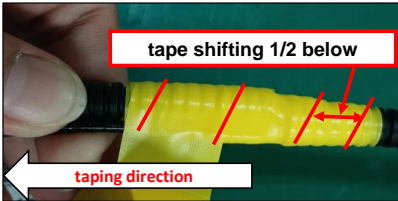
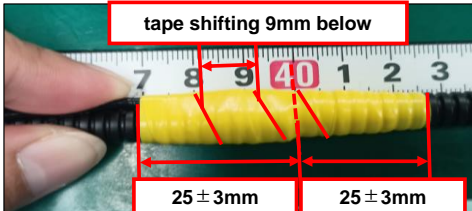

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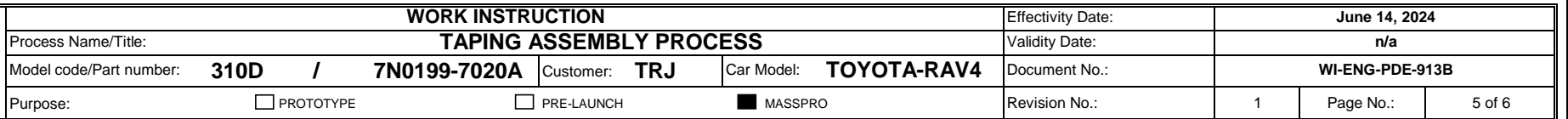
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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P2	Y-taping			
		<div><div><div><div><div>No gap between the tubes and wires</div><div></div></div><div>1. Fix the tubes and wires.</div></div><div><div><div>Do not exert excessive force during pulling &amp; winding of tape.</div><div><div>Start of taping</div></div></div><div>2. Start taping at the middle of combined tubes and wires, then wind the tape to left side (width must be 25mm)</div></div><div><div><div><div><div>taping direction</div></div><div>25 ± 3mm</div></div><div>tape shifting 1/3 below</div></div><div>3. Wind the tape 1/3 shifting until it reach the other side of the tubes and wires (must be 25±3mm)</div></div><div><div><div><div>tape shifting 1/2 below</div></div><div>taping direction</div></div><div>4. Wind the tape 1/2 shifting</div></div><div><div><div><div>tape shifting 9mm below</div></div><div>25 ± 3mm</div><div>25 ± 3mm</div></div><div>5. Wind the tape 1/2 shifting going to other side of tubes and wires then cut the tape. After taping, check the measurement and taping condition.</div></div></div></div> <div><div>MEASURING TAPE</div></div>		<div><div>Important reminders/Note/s:</div><div>1. Use yellow tape for easy visualization of tape shifting, but actual should be BLACK TAPE.</div><div>2. Please use calibrated/verified measuring tape when getting the measurement.</div><div>1. No loose tape</div><div>2. No flip-out tape</div><div>3. No peel-off tape</div><div>4. No wrong use of tape</div><div>5. No wrong dimension-out tape</div></div>	

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**PARTS:**

1. Assy parts

JIG:

n/a

**1****VISUAL INSPECTION/ QUALITY CHECKPOINTS****TAPING - P2****7N0199-7020A****1****No wrong facing of Y-taping****2****No missing tape****3****No VM tube (Sunprene)**

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