



## WORK INSTRUCTION

Process Name/Title: **TAPING ASSEMBLY PROCESS**

Effectivity Date:

February 6, 2024

Model code/Part number: **930B / 7N0203-7020A** Customer: **TRJ** Car Model: **TOYOTA- RAV 4**

Validity Date:

n/a

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

Document No.:

WI-ENG-PDE-773

Revision No.:

1

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## PARTS:

1. MR SW CP (TVSSf 0.3 G wires L=608±3mm; TVSSf 0.3 B/W wires L=L=608±3mm)  
2. Connector 6188-0407 (W)

3. Black Corrugated tube (No slit) ø7, L=536±3mm  
4. Black tape

JIG:

1. Terminal cover jig  
2. Insertion jig

NO.

PROCESS NAME

1 WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

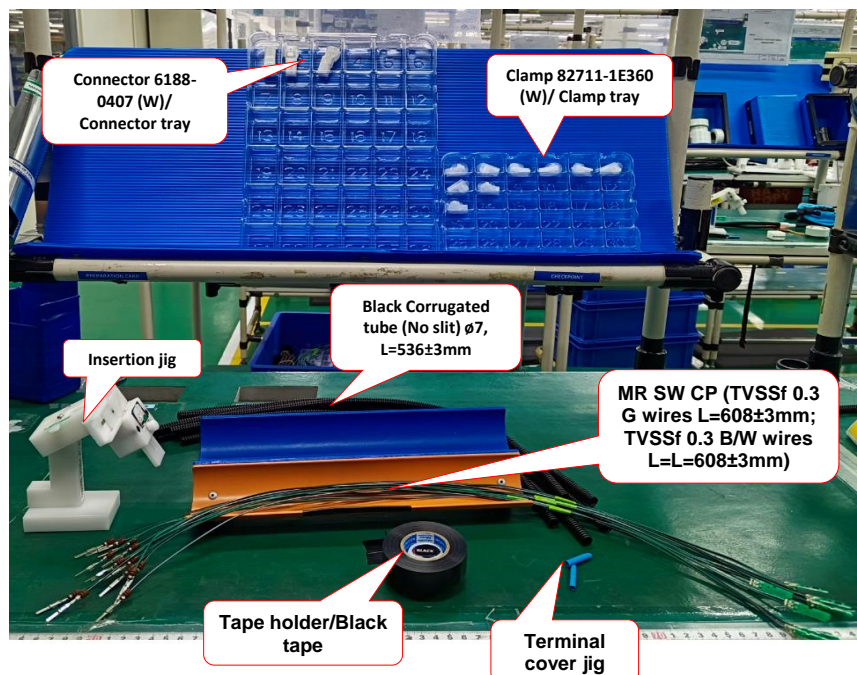
QUALITY POINTERS

1

P1

1  
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. Please refer to WI-PRO-CNC-017 for Wire and Strip length tolerance.

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

## Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
02/06/24	1	Change purpose from Pre-launch to Masspro. Additional table layout and Quality checkpoints; Improved Work procedure/Illustration on page no. 2 to 4.	M. Ariola	C. Villanueva	A. Arañes	n/a				
12/18/23	0	Initial issue	M. Ariola	C. Villanueva	A. Arañes	n/a				

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PRE-LAUNCH



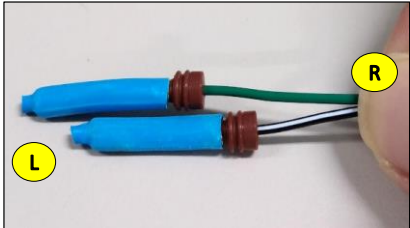

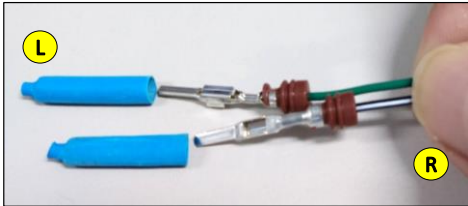

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<b>PARTS:</b>	1.1. MR SW CP (TVSSf 0.3 G wires L=608±3mm; TVSSf 0.3 B/W wires L=L=608±3mm) 2. Black Corrugated tube (No Slit) ø7, L=536±3mm		JIG:	1. Terminal cover jig
<b>NO.</b>	<b>PROCESS NAME</b>	<b>1 WORK PROCEDURE/ ILLUSTRATION</b>	<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
2	P1  Wire insertion to Black Corrugated tube (No Slit) ø7, L=536±3mm	<div data-bbox="555 475 963 703"></div> <div data-bbox="1037 547 1444 660">1. Get the <b>MRSW CP TVSSf 0.3 G-B/W wires L=608±3mm</b> using right hand, then get the terminal cover jig using left hand then insert to both terminals (<b>G-B/W wires</b>) using right hand.</div> <div data-bbox="555 735 974 948"></div> <div data-bbox="1037 812 1422 880">2. Get the corrugated tube <b>ø7 L=536±3mm</b> using left hand then insert the <b>G-B/W wires</b> using right hand.</div> <div data-bbox="544 984 1010 1190"></div> <div data-bbox="1048 1040 1386 1086">3. After insertion, remove the cover jig using left hand.</div>	<div data-bbox="1500 786 1713 842"><b>TERMINAL COVER JIG</b></div> <div data-bbox="1496 863 1713 932"></div>	1. No wrong usage of parts 2. No deformed terminal

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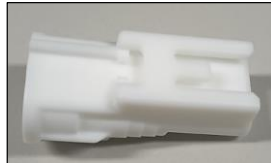



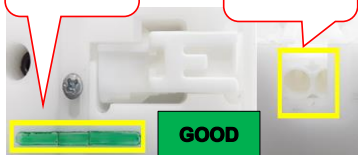

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. Assy parts 2. Connector 6188-0407 (W)		JIG:	1.Insertion jig
NO.	PROCESS NAME	<div><div>1</div>WORK PROCEDURE/ ILLUSTRATION</div>		TOOLS/PPE	QUALITY POINTERS
3	P1	<div><div>Connector setting to insertion jig 6188-0407 (W)</div><div><div><div>INSERTION JIG ILLUSTRATION</div><div><div><div><div>Lock</div><div>Holes</div><div>I-mark</div><div>Visual reference</div></div></div><div><div>CONNECTOR ORIENTATION</div><div></div></div></div></div><div><div><div><div><div>L</div><div></div><div>Press</div></div><div>1. Press the lock of insertion jig using left thumb.</div></div><div><div><div><div>L</div><div></div><div>Press</div><div>R</div></div><div>2. Insert the connector <b>6188-0407 (W)</b> into jig using right hand and release the lock. <i>Note: Refer to above illustration for correct setting.</i></div></div><div><div><div><div>L</div><div></div><div>Release</div></div><div>3. Check the holes/terminal slot for <b>B/W wire</b>.</div></div></div></div></div></div><div>n/a</div></div></div>		<div><div>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</div><div><div>Connector Orientation Illustration</div><div><div><div><div><div>I-mark is align</div><div>1 hole is open</div></div><div></div><div>GOOD</div></div><div><div><div><div>I-mark is not align</div><div>1 hole is open</div></div><div></div><div>NG</div></div></div></div></div></div></div>	

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PRE-LAUNCH



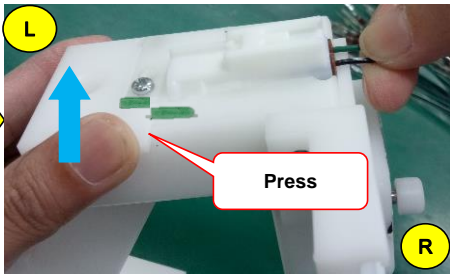
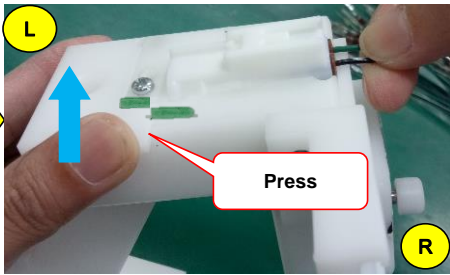
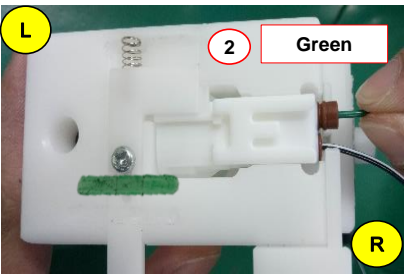
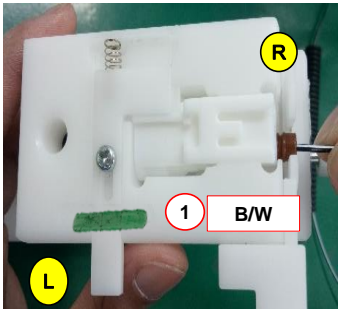
MASSPRO

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PARTS:	1. Assy parts			JIG:	1. Insertion jig
NO.	PROCESS NAME	1 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1 Wire insertion to connector 6188-0407 (W)	<div><p>1. Hold the Insertion jig using left hand. Get <b>Black/White wire</b> then insert to terminal <b>slot 1</b> using right hand.</p><p>2. Push the button using right hand. The slot for <b>Green wire</b> will be opened.</p><p>3. Get <b>Green wire</b> then insert to terminal <b>slot 2</b> using right hand.</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.</p></div>		n/a	<p>1. No wrong use of connector 2. No damaged connector 3. No wrong insertion 4. One by one insertion 5. No deformed terminal 6. No wrong wire facing</p> <p><b>Important reminder/Notes/:</b></p> <p><b>1. Please hold the wire near terminal during insertion.</b> <b>2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</b></p> <p><b>Document reference/s:</b></p> <p><b>1. Please refer to WI-PRO-CNC-017 for Wire and Strip length tolerance.</b> <b>2. Please refer to GL-PRO-ASY-029 for Pull-Push procedure.</b></p>

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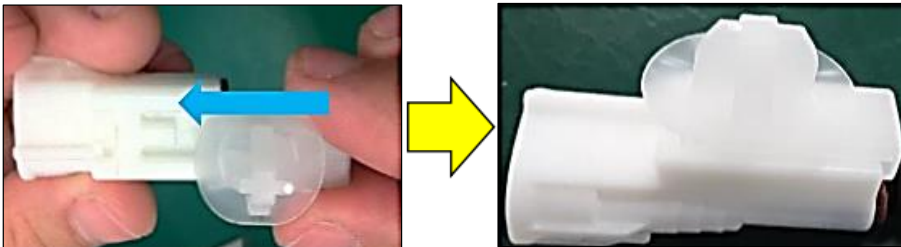
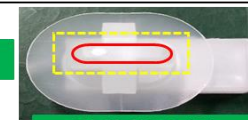
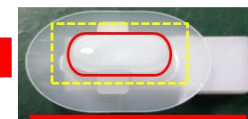
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. Assy parts 2. Clamp 82711-1E360 (W)		JIG:	n/a
NO.	PROCESS NAME	1 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1 Clamp attachment (Clip type clamp)	 <div>1. Hold the connector using left hand, get the clip type clamp <b>82711-1E360 (W)</b> then insert the clamp to connector using right hand. Note: Sound will be heard if properly inserted.</div>		n/a	1. Must be fully inserted <div>CLIP CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div>82711-1E360 (W)</div><div>NG</div><div>82711-12B10 (W)</div></div>

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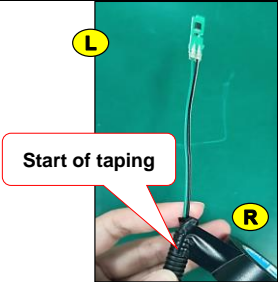
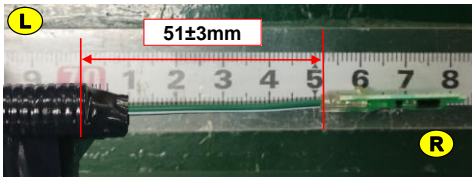

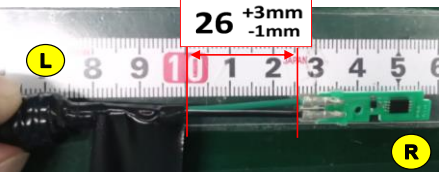
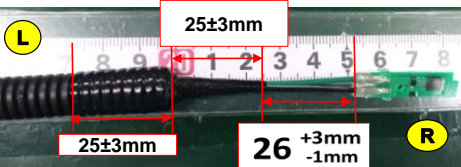

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	1 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P1 Taping 1 Black Corrugated tube to Wire near PCB	<div><p>Start of taping</p></div> <div><p>51±3mm</p></div> <div><p>1. Hold the assy parts using left hand, get <b>Black tape</b> then conduct pre-taping using both hands.</p></div> <div><p>2. Measure from end of COT up to edge of hotmelted wires <b>51±3mm</b> then continue the taping process using both hands</p></div> <div><p>25±3mm</p></div> <div><p>3. Confirm measurement of <b>25±3mm</b> from end of tape up to end of COT then continue the taping process using both hands.</p></div> <div><p>26 +3mm -1mm</p></div> <div><p>4. Confirm measurement of <b>26+3/-1mm</b> from end of tape up to edge of PCB then continue the taping process using both hands.</p></div> <div><p>25±3mm 26 +3mm -1mm</p></div> <div><p>5. After taping, check the measurement and taping condition.</p></div>		<div><p>MEASURING TAPE</p></div>	<p><b>Important reminders/Notes</b></p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No wrong use of tape 5. No wrong dimension 6. No missing tape</p>

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Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	1	Page No.:	7 of 7

PARTS:	n/a	JIG:	n/a
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### 1 QUALITY CHECKPOINTS

# P1

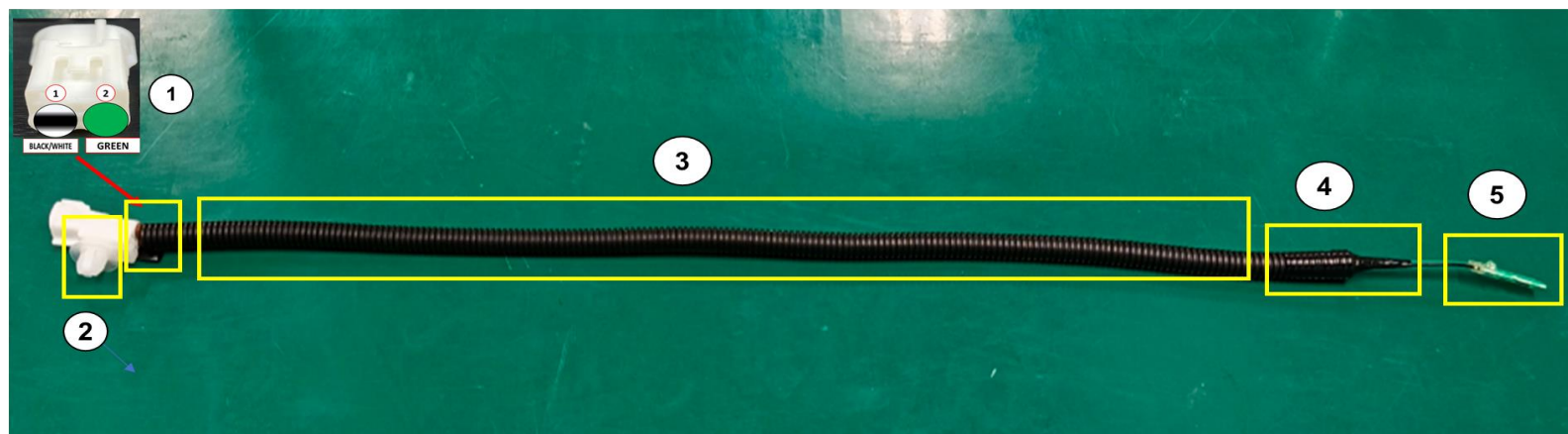
# 7N0203-7020A



**GOOD**



**NO GOOD**



- 1 No **WRONG INSERT**  
No **UNLOCKED/HALFLOCKED**  
No **TBO**

- 2 No **MISSING CLIP TYPE CLAMP**
- 3 No **MISSING COT**
- 4 No **MISSING TAPE**

- 5 No **DEFORMED TERMINAL/PCB**

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