



## WORK INSTRUCTION

## TAPING ASSEMBLY PROCESS

Effectivity Date:

November 4, 2024

Process Name/Title:

Model code/Part number:

930B / 7N0203-7020B

Customer: TRJ

Car Model: TOYOTA-4RUNNER

Validity Date:

n/a

Document No.:

WI-ENG-PDE-1139

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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); Connector 6188-0407 (W); Black Corrugated tube (No slit) ø7, L=536±3mm; Black tape

JIG:

1. Terminal cover jig  
2. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

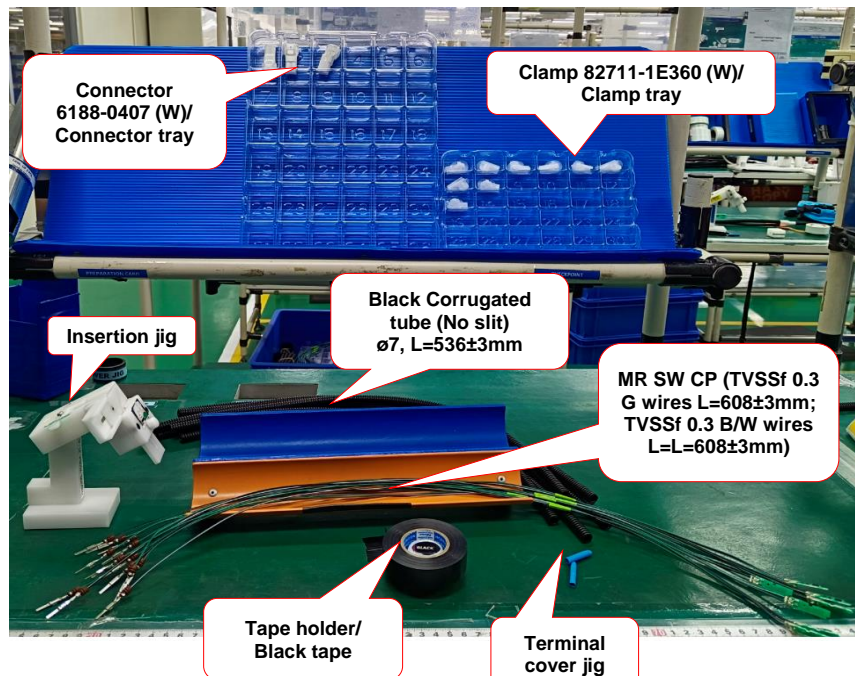
QUALITY POINTERS

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. 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

							Prepared by	Reviewed by	Approved by	Noted by
							 M. Ariola	 C. Villanueva	 A. Arañes	n/a
11/04/24	1	Change purpose from Pre-launch to Masspro.	M. Ariola	C.Villanueva	A. Arañes	n/a				
10/29/24	0	Initial issue	M. Ariola	C.Villanueva	A. Arañes	n/a				
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	October 29, 2024		

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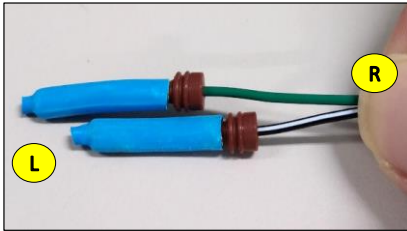

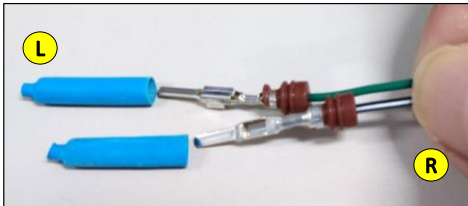

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PARTS:		1. MR SW CP (TVSSf 0.3 G wires L=608±3mm; TVSSf 0.3 B/W wires L=L=608±3mm) 2. Black Corrugated tube (No Slit) ø7, L=536±3mm		JIG:	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1  Wire insertion to Black Corrugated tube (No Slit) ø7, L=536±3mm	<div></div> <div><p>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.</p></div> <div></div> <div><p>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.</p></div> <div></div> <div><p>3. After insertion, remove the cover jig using left hand.</p></div>		<div><b>TERMINAL COVER JIG</b></div> <div></div>	1. No wrong usage of parts 2. No deformed terminal

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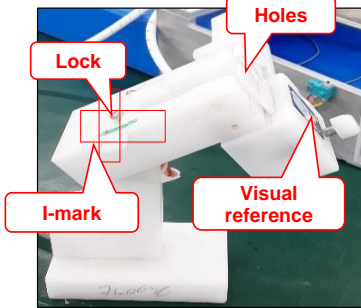
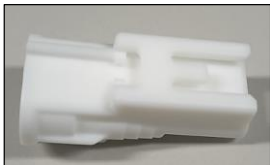

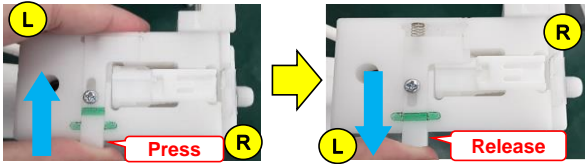
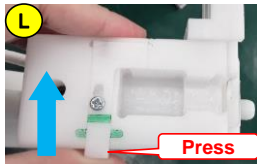
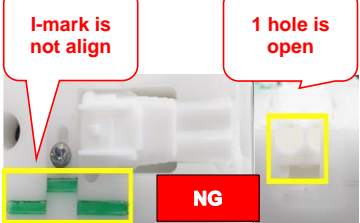
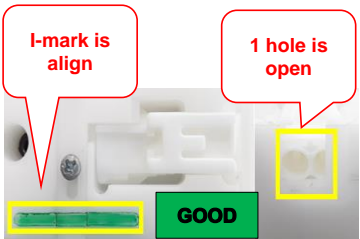
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PARTS:		1. Assy parts 2. Connector 6188-0407 (W)		JIG:	1.Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P1	<div><div>INSERTION JIG ILLUSTRATION</div><div>CONNECTOR ORIENTATION</div><div>Connector setting to insertion jig 6188-0407 (W)</div><div></div><div>1. Press the lock of insertion jig using left thumb.</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>3. Check the holes/terminal slot for <b>B/W wire</b>.</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>Connector Orientation Illustration</div> <div></div>

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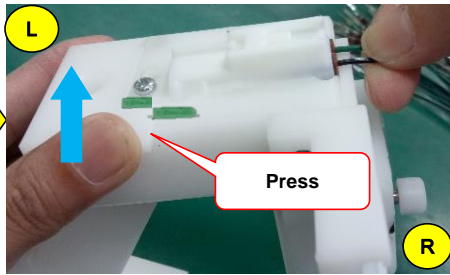
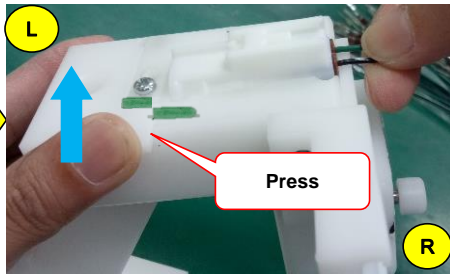
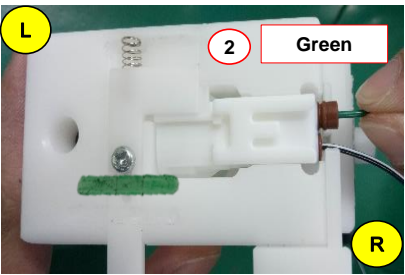
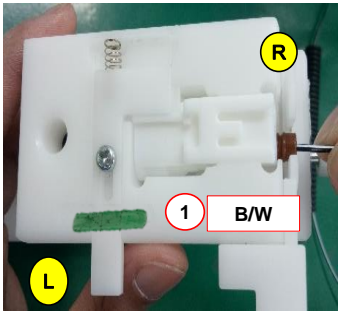
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PARTS:	1. Assy parts			JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1 Wire insertion to connector 6188-0407 (W)	<div></div> <div>1. Hold the Insertion jig using left hand. Get <b>Black/White wire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

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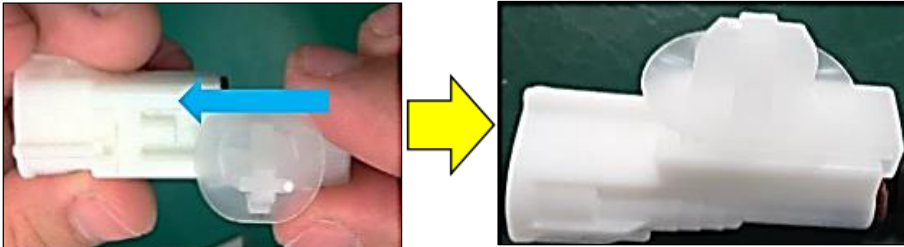
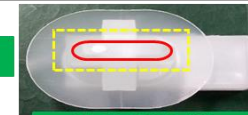
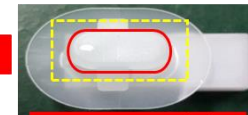
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PARTS:		1. Assy parts 2. Clamp 82711-1E360 (W)		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1 Clamp attachment (Clip type clamp)	 <div>1. Hold the connector using left hand, get the clip type clamp <b>82711-1E360 (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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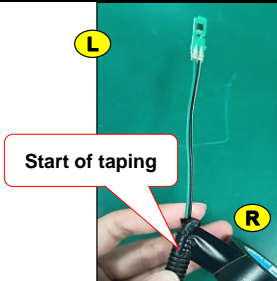
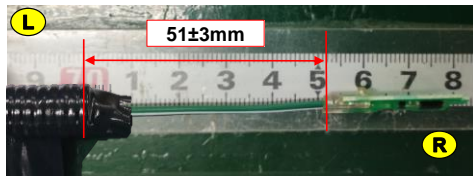

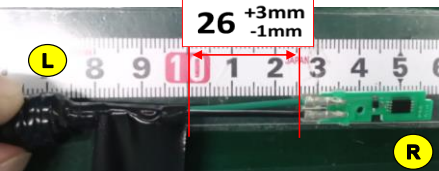
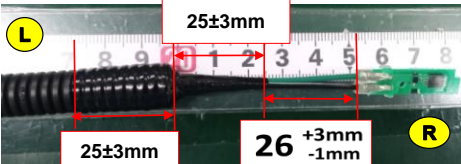

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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P1  Taping 1 Black Corrugated tube to Wire near PCB	<div><div><p>Start of taping</p></div><div><p>1. Hold the assy parts using left hand, get <b>Black tape</b> then conduct pre-taping using both hands.</p></div><div><p>51±3mm</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>		<div>MEASURING TAPE</div> 	<p><b>Important reminders and Note/s:</b> <b>1. Please use calibrated/verified measuring tape when getting the measurement.</b></p> <p><b>Document reference/s:</b> <b>1. Refer to WI-PRO-ASY-001 for taping procedure.</b></p> <ol style="list-style-type: none"><li>1. No peel-off tape</li><li>2. No flip out tape</li><li>3. No loose tape</li><li>4. No wrong use of tape</li><li>5. No wrong dimension</li><li>6. No missing tape</li></ol>

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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P1  Measurement	<div></div> <div>NOTE: ① - Taping (B) *Unit of measurement is in millimeter</div>	<div>MEASURING TAPE</div> 	<div>Important reminders and note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.  2. For Hatsumono, Nakamono and Owarimono.  Document reference/s: 1. Refer to <b>WI-PRO-ASY-056</b> for Sub-assembly Hatsumono Nakamono Owarimono Inspection</div> <div>1. No wrong dimension</div>

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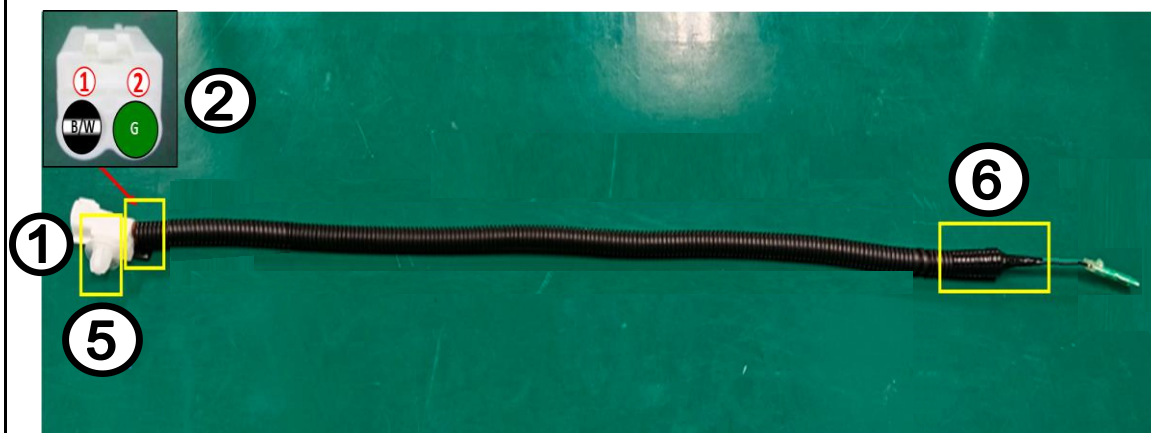
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**PARTS:**

1. Assy parts

JIG:

n/a

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****TAPING - P1****7N0203-7020B**

① No **Unlock/half-locked connector**

② No **Wrong insertion**

③ No **Deformed Terminal**

④ No **Terminal Backing Out**

⑤ No **Missing Clip type clamp**

⑥ No **Missing tape (Black tape)**

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