



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

November 18, 2024

Process Name/Title:

Validity Date:

n/a

Model code/Part number: 930B / 7N0205-7020C Customer: TRJ Car Model: TOYOTA-4RUNNER

Document No.:

WI-ENG-PDE-870B

Purpose: ☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

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PARTS:

1. Assy parts; Black SV tube (Vinyl) $\varnothing 4$, L=72 \pm 3mm; Black corrugated tube $\varnothing 7$, L=111 \pm 3mm (No slit); AVSSf 0.3 B-B wires L=643 \pm 3mm (No slit); Black tape

JIG:

1. Insertion jig
2. Locking jig
3. Terminal cover jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

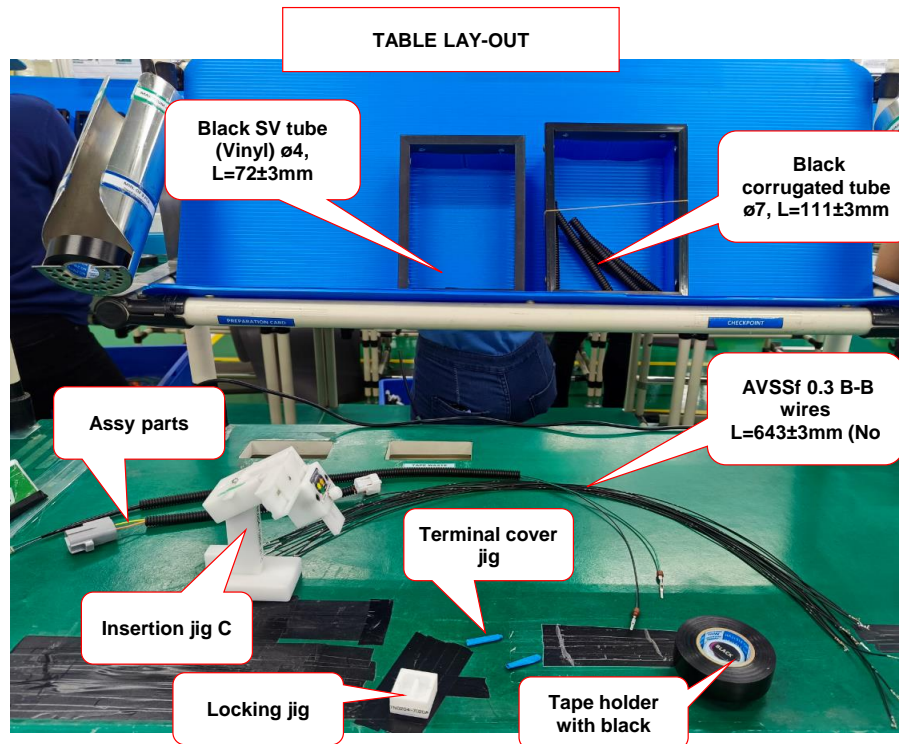
TOOLS/PPE

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 missing parts/tools
2. No excess parts/tools

Document references:

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

Revision History

Prepared by

Reviewed by

Approved by

Noted by

11/18/24 1 Change purpose from Pre-launch to Masspro; Update the Visual Inspections/Quality Checkpoints Illustration.

M. Ariola

C.Villanueva

A. Arañes

n/a

04/16/24 0 Initial issue

M. Ariola

C.Villanueva

A. Arañes

n/a

Eff. Date

Rev. No

Details of Change

Revised

Reviewed

Approved

Noted

Est. Date:

April 16, 2024

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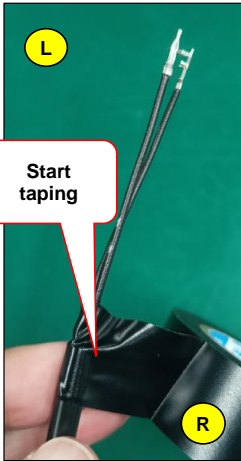

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. Assy part 2. Black tape 3. Black SV tube (Vinyl) $\phi 4$, L=72 \pm 3mm		4. AVSSf 0.3 B-B wires L=643 \pm 3mm (No slit)		JIG:	n/a
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2		Wire insertion to Black SV tube (Vinyl) $\phi 4$, L=72 \pm 3mm	<div></div> <div>1. Get the Black SV tube (Vinyl) $\phi 4$, L=72\pm3mm using right hand then insert the Black wires.</div>			n/a	1. No wrong usage of parts. 2. No deformed terminal
3	P2	Taping 2 Black SV tube (Vinyl) to wire near terminal	<div></div> <div>1. Hold the Black SV tube (Vinyl) using left hand. Measure from end of SV tube (Vinyl) up to edge of hotmelted wires 60\pm3mm using right hand.</div> <div></div> <div>2. Hold the Black SV tube (Vinyl) using left hand. Get the black tape using right hand and start taping process.</div>			<div>MEASURING TAPE</div> 	Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement. 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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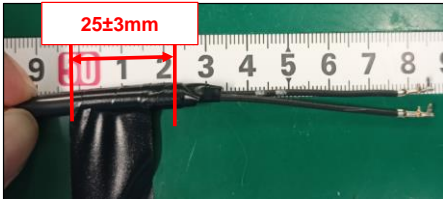
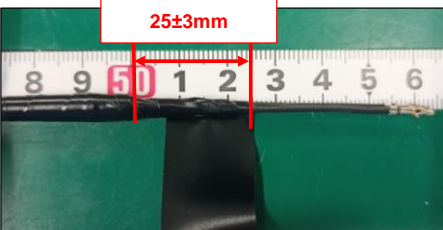
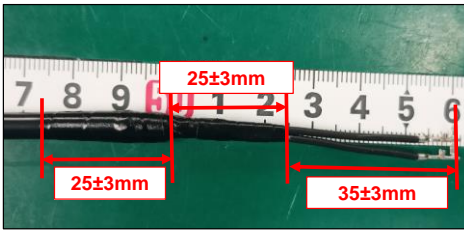

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PARTS:		1. Assy part 2. Black tape	JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P2 Taping 2 Black SV tube (Vinyl) to wire near terminal (Continuation)	<div><p>25±3mm</p><p>3. Confirm the measurement from end of tape up to end of SV tube (Vinyl) 25±3mm then start taping using both hands.</p></div> <div><p>25±3mm</p><p>4. Confirm the measurement from SV tube (Vinyl) up to end of tape 25±3mm then start taping using both hands.</p></div> <div><p>25±3mm</p><p>25±3mm</p><p>35±3mm</p><p>5. After taping, check the measurement and taping condition.</p></div>	 <p>MEASURING TAPE</p>	<p>Important reminders/Note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <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>

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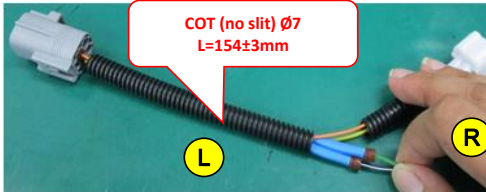


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PARTS:		1. Assy parts		JIG:	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	Wire insertion to Black corrugated tube $\varnothing 7$, L=111 \pm 3mm (No slit)		<p>1. Get the MRSW CP (TVSSf 0.3 G-B/W wires L=784\pm3mm) using right hand then insert the terminal cover jig using left hand.</p>	<div>TERMINAL COVER JIG</div> 	1. No wrong usage of parts. 2. No deformed terminal
6	Wire insertion to black corrugated tube $\varnothing 7$, L=154 \pm 3mm (No slit) (Assy parts)	 	<p>1. Hold the COT (no slit) Ø7 L=154\pm3mm using left hand then insert the MRSW CP TVSSf 0.3 G-B/W wires L=784\pm3mm using right hand.</p> <p>2. After insertion, remove the cover jig using right hand.</p>	<div>TERMINAL COVER JIG</div> 	1. No wrong usage of parts. 2. No deformed termina

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☐ PRE-LAUNCH


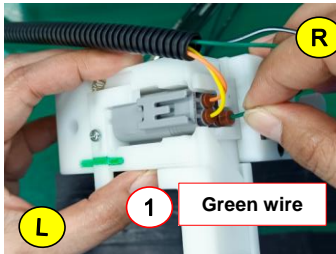

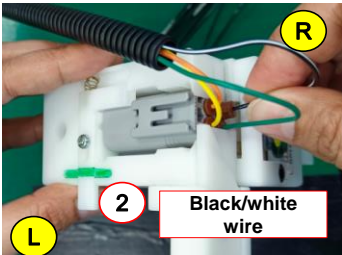

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PARTS:	1. Assy parts		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P2 Wire insertion to connector 6188-0066 (GR) (Assy parts)	<div> WIRE FACING</div> <div> 1. Hold the G wire then insert to terminal slot 1 using right hand.</div> <div> 2. Press the button using right thumb. The slot for B/W wire will be opened.</div> <div> 3. Hold the B/W wire then insert to terminal slot 2 using right hand.</div> <div> 4. After insertion, push the lock using left thumb then hold the wires and gently pull out the connector from jig using right hand.</div>		<p>Important reminders/Note/s:</p> <p>1. Please hold the wire near terminal.</p> <p>2. Make sure wires are properly inserted.</p> <p>Conduct Pull-Push-Pull-Push after insertion.</p> <p>Do not exert extra force.</p> <p>Document references:</p> <p>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p> <p>1. No loose insertion</p> <p>2. No wrong insertion</p> <p>3. One by one insertion</p> <p>4. No deformed terminal</p> <p>5. No wrong wire facing</p>

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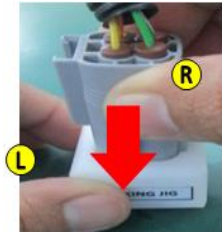
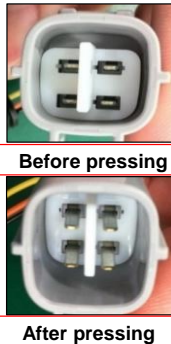











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PARTS:		1. Assy parts 2. AVSSf 0.3 B-B wires L=643±3mm (No slit), 3. Black Corrugated tube (no slit) Ø5, L=132±3mm		JIG:	n/a									
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS									
8	Connector lock	<div><div></div><div></div><div><p>1. Put the connector into locking jig using both hands and then press 2x. Check the connector if properly locked.</p></div></div> <div><p>Coupler Cross Sectional View</p><table><tr><td>NG</td><td>NG</td><td>GOOD</td></tr><tr><td></td><td></td><td></td></tr><tr><td>Unlock</td><td>Half Lock Condition</td><td>Full Lock Condition</td></tr></table></div>		NG	NG	GOOD				Unlock	Half Lock Condition	Full Lock Condition	<div>LOCKING JIG</div> 	<p>Important reminders/Note/s:</p> <p>1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR</p> <p>1. No wrong usage of parts. 2. No deformed terminal</p>
NG	NG	GOOD												
														
Unlock	Half Lock Condition	Full Lock Condition												
9	P2 Wire insertion to Assy parts (2)	<div><div></div><div><p>1. Hold the assy parts using left hand, Get the B-B wires using left hand then insert to COT (no slit) Ø7 L=391±3mm (Assy parts) using right hand.</p></div></div>		n/a	<p>1. No wrong usage of parts. 2. No deformed terminal</p>									

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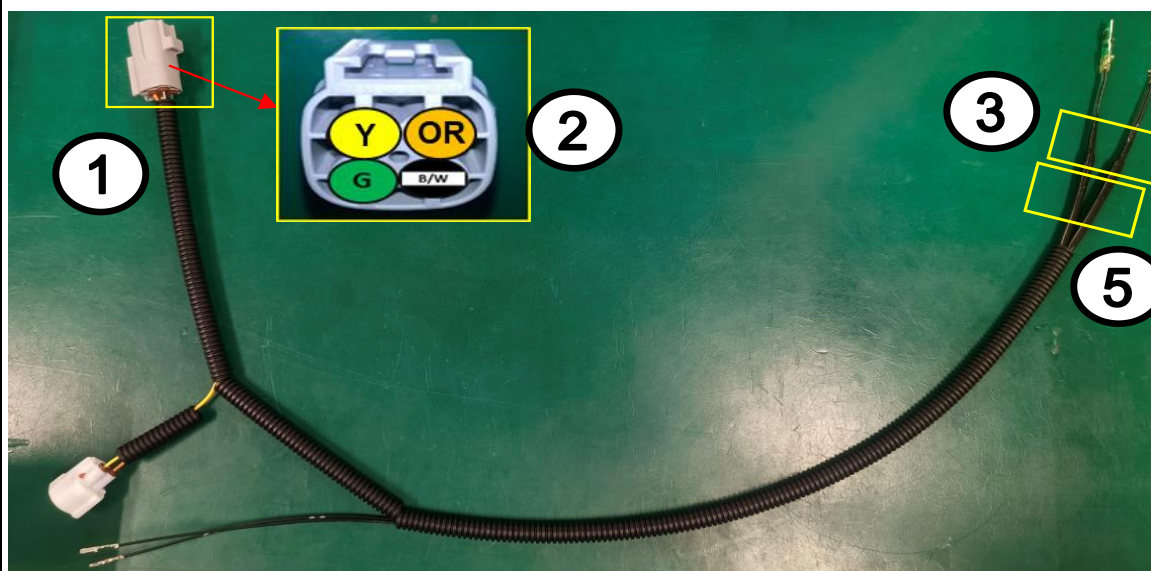
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PARTS:

n/a

JIG:

n/a

QUALITY CHECKPOINTS**TAPING - P2****7N0205-7020C**

- ① No **Unlock/half-locked**
- ② No **Wrong insertion**
- ③ No **Missing tape**
- ④ No **Terminal Backing Out**
- ⑤ No **Missing parts (COT and SV tube (Vinyl))**

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