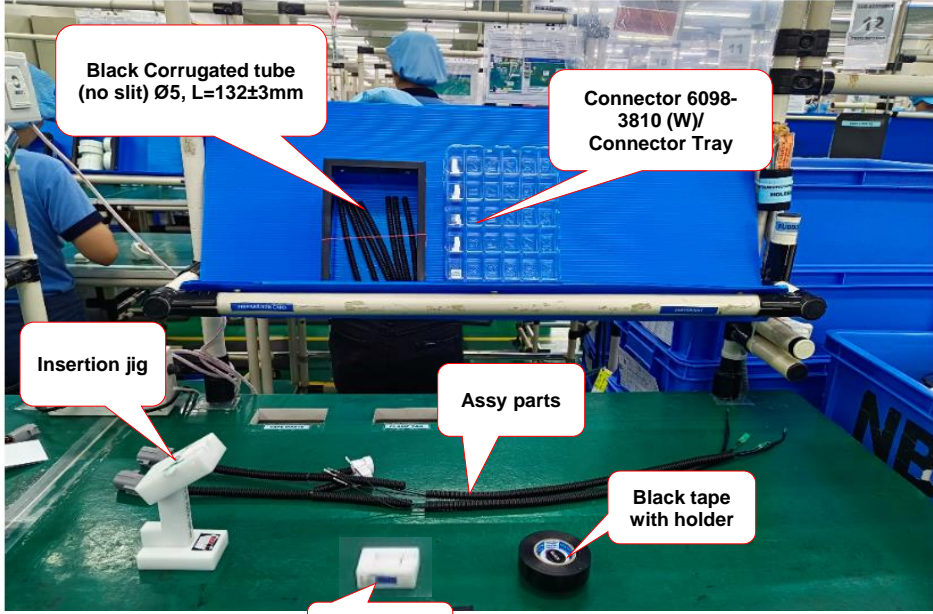







WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

Effectivity Date:	November 18, 2024		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-870C		
Revision No.:	1	Page No.:	1 of 7

Process Name/Title:
Model code/Part number: **930B / 7N0205-7020C** Customer: **TRJ** Car Model: **TOYOTA-4RUNNER**
Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:		1. Assy parts 2. Connector 6098-3810 (W) 3. Black Corrugated tube (no slit) Ø5, L=132±3mm 4. Black tape		JIG:	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
1	P3 TABLE LAY-OUT	<p>TABLE LAY-OUT</p> 		<p>Safety Instruction Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	<p>Document reference/s: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p> <p>1. No missing parts/tools 2. No excess parts/tools</p>

Revision History							Prepared by	Reviewed by	Approved by	Noted by
							 M. Ariola	 C. Villanueva	 A. Arañes	
11/18/24	1	Change purpose from Pre-launch to Masspro. Update the Visual Inspections/Quality checkpoints	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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**WORK INSTRUCTION****TAPING ASSEMBLY PROCESS**

Effectivity Date:

November 18, 2024

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n/a

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

Document No.:

WI-ENG-PDE-870C

Purpose:


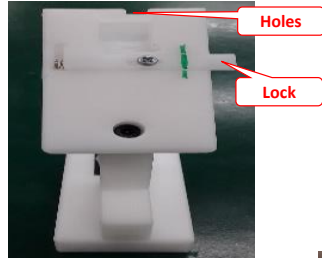

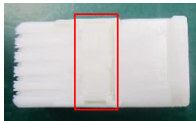
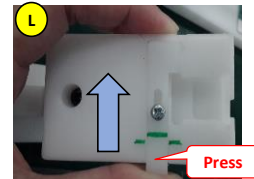
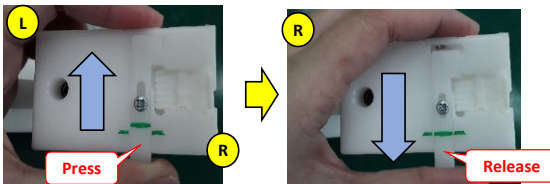

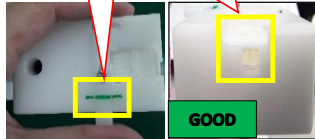

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. Assy parts 2. Black Corrugated tube (no slit) Ø5, L=132±3mm		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Wire insertion to Black Corrugated tube (no slit) Ø5, L=132±3mm	<div></div> <div>1. Hold the assy parts then get the Black Corrugated tube (no slit) Ø5, L=132±3mm using right hand then insert the to B-B wire using both hands.</div>		n/a	1. No wrong usage of parts. 2. No deformed terminal
3	P3 Connector setting to Insertion jig 6098-3810 (W)	<div><div><div></div><div></div><div></div></div><div><div></div><div></div><div>1. Press the lock of insertion jig using left thumb.</div><div>2. Insert the connector 6098-3810 (W) into jig using right hand and release the lock. Note: Follow the connector orientation.</div><div></div><div>3. Check the holes/terminal slot for B-B wires.</div></div></div>		n/a	<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><div></div><div></div></div><div>Connector Orientation Illustration <div>I-mark was align2 holes were only open GOOD I-mark is NOT alignAll holes were open NG</div></div></div>

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WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

November 18, 2024

Process Name/Title:

Validity Date:

n/a

Model code/Part number:

930B

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7N0205-7020C

Customer: TRJ

Car Model: TOYOTA-4RUNNER

Document No.:

WI-ENG-PDE-870C

Purpose:


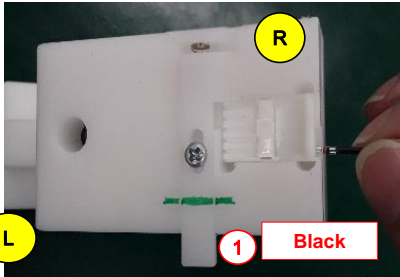
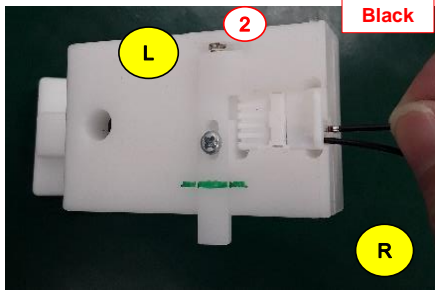
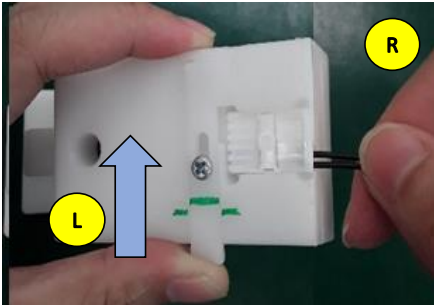
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. Assy parts 2. Connector 6098-3810 (W) 3. AVSSf 0.3 B-B wires L=643±3mm (No slit),		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P3 Wire insertion to Connector 6098-3810 (W)	<div><div>WIRE FACING</div></div> <div><div>1. Get the 1st Black wire then insert to connector slot 1 using right hand. Note: insertion process must be from left to right.</div></div> <div><div>2. Get the 2nd Black wire then insert to connector slot 2 using right hand.</div></div> <div><div>3. 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></div>		n/a	<div>1. No wrong use of connector 2. No damaged connector 3. No wrong insertion of wires 4. No loose insertion 5. One by one insertion 6. No deformed terminal 7. No wrong wire facing</div> <div>Important reminder's/Note: 1. Please hold the wire near terminal. 2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> <div>Document references: 1. Refer to WI-PRO-CNC-017 for Wire Strip lenght tolerance. 2. Refer to GL PRO-ASY-029 for pull-push-pull-push procedure</div>

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7N0205-7020C

Customer: TRJ

Car Model: TOYOTA-4RUNNER

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WI-ENG-PDE-870C

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH


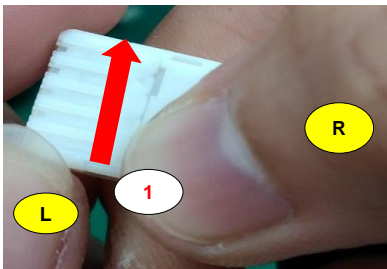

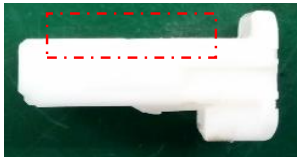
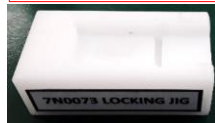
☒ MASSPRO

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PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P3	Connector lock	<div><div>1. Put the connector into locking jig using right hand then press 2x using both hands. Touch the connector lock to confirm if properly locked.</div><div>2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</div><div><div>Before Pressing</div><div>After Pressing</div></div></div>	<div><div>LOCKING JIG</div></div>	<p>Important reminders/Notes:</p> <p>1. Manual locking may cause damaged connector lock.</p> <p>1. Use the provided locking jig per model</p> <p>2. No unlock/half-locked connector</p>

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TAPING ASSEMBLY PROCESS

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Process Name/Title:

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Model code/Part number: 930B / 7N0205-7020C

Customer: TRJ

Car Model: TOYOTA-4RUNNER

Document No.:

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Purpose:

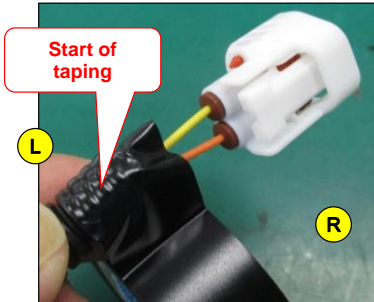
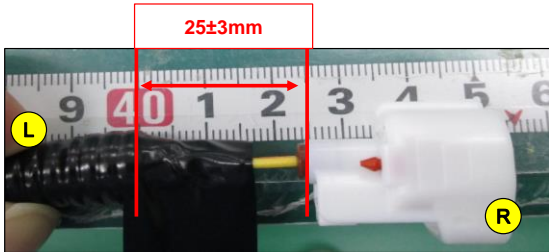
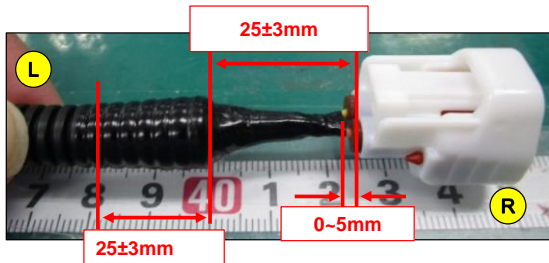

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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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	P3 Taping 1 Black Corrugated tube to wire near connector	 <p>1. Hold the corrugated tube using left hand then start taping using right hand.</p>  <p>2. Measure from end of the corrugated tube up to connector 25±3mm then continue the taping process using both hands. <i>Note: Refer to WI-PRO-ASY-001 for taping procedure</i></p>  <p>3. After taping, check the measurement and taping condition.</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

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WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Process Name/Title:

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

Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Effectivity Date:

November 18, 2024

Validity Date:

n/a

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PARTS:
1. Assy parts
2. Black tape

JIG:

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

7

P3

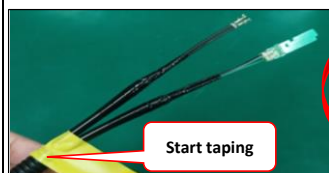
Taping 2
COT to 2 SV tube (Vinyl)



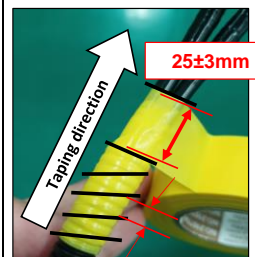
1. Fix the COT and 2 SV tube (Vinyl).



2. Hold the assy parts using right hand. Measure from end of COT up to edge of hotmelted wires and terminal pointed tip **112±3mm** using right hand.

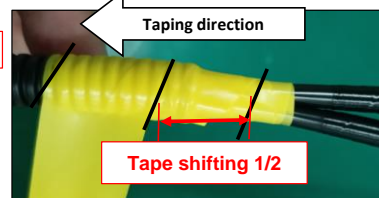


3. Start taping at the middle of combined COT and [2pcs] SV tube (Vinyl), then winding the tape going to the COT, width must be **25±3mm**

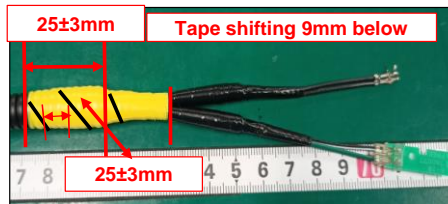


Tape shifting 1/3 below

5. Winding the tape 1/3 shifting until it reach the other side of SV tube (Vinyl), width must be **25mm**.



4. Winding the tape backward 1/2 shifting.



6. Winding the tape 1/2 shifting going to the other side of SV tube then cut the tape. After taping, check the measurement and taping condition.

MEASURING TAPE



Important reminders/Note/s:

1. Use **YELLOW TAPE** for easy visualization of shifting lines, but actual should be **BLACK TAPE**.

2. Please use calibrated/verified measuring tape when getting the measurement.

Document references:

1. Refer to WI-PRO-ASY-001 for Taping process

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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**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

November 18, 2024

Validity Date:

n/a

Model code/Part number:

930B

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7N0205-7020CCustomer: **TRJ**Car Model: **TOYOTA 4RUNNER**

Document No.:

WI-ENG-PDE-870C

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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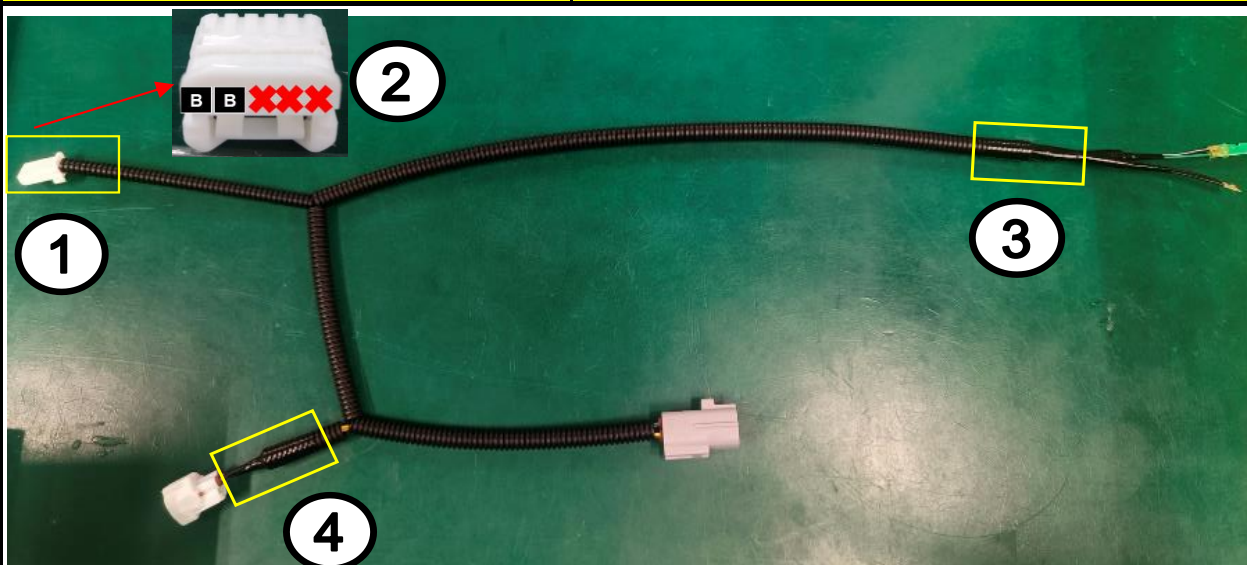
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PARTS:

n/a

JIG:

n/a

**VISUAL INSPECTIONS/ QUALITY CHECKPOINTS****TAPING - P3****7N0205-7020C**

- ① **No Unlocked/Half-locked connector**
- ② **No Wrong insertion**
- ③ **No Missing tape (COT to SV tube (Vinyl))**
- ④ **No missing tape (COT to wire near Connector)**

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