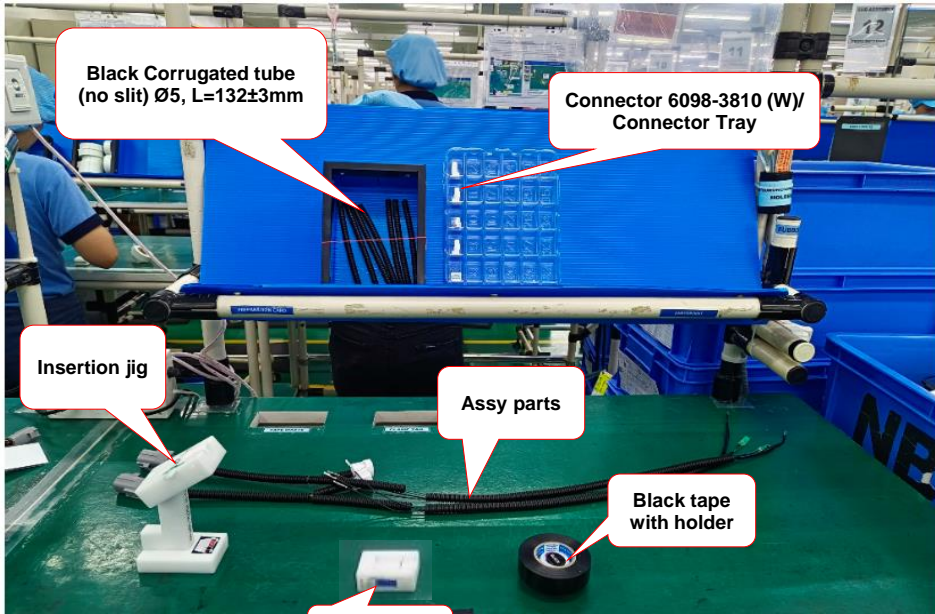




WORK INSTRUCTION  
TAPING ASSEMBLY PROCESS

Effectivity Date:	February 07, 2024		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-782C		
Revision No.:	1	Page No.:	1 of 7

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

<b>PARTS:</b>		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
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>		<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
1	P3 TABLE LAY-OUT			<div><b>Safety Instruction</b> Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)</div> <div><b>Housekeeping</b> 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div><b>Alert level</b> For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>	<b>Document reference/s:</b> 1. Refer to WI-PRO-CNC-017 for <b>Wire and Strip Length Tolerance</b>  1. No missing parts/tools 2. No excess parts/tools

Revision History

							Prepared by	Reviewed by	Approved by	Noted by
02/07/24	1	Change pre-launch to mass pro. Inclusion of table lay-out. Separate Insertion and Clamp assembly process.	M. Ariola	C.Villanueva	A. Arañes	n/a				n/a
01/15/24	0	Initial issue	M. Ariola	C.Villanueva	A. Arañes	n/a	M. Ariola	C.Villanueva	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	January 15, 2024		

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# WORK INSTRUCTION

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930B

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7N0205-7020A

Customer: TRJ

Car Model: TOYOTA-4RUNNER

Validity Date:

n/a

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Document No.:


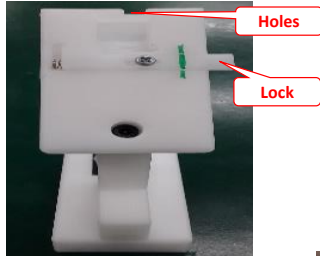


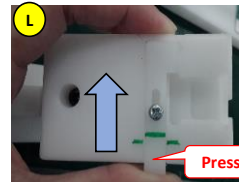
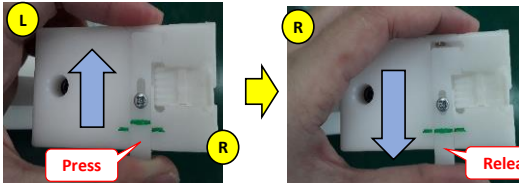


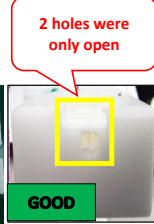
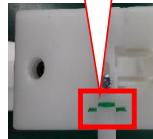
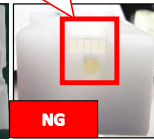
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PARTS:		1. Assy parts 2. Black Corrugated tube (no slit) Ø5, L=132±3mm		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Wire insertion to Black Corrugated tube (no slit) Ø5, L=132±3mm	<div></div> <div>1. Hold the assy parts then get the <b>Black Corrugated tube (no slit) Ø5, L=132±3mm</b> using right hand then insert the 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>1. Press the lock of insertion jig using left thumb.</div><div>2. Insert the connector <b>6098-3810 (W)</b> into jig using right hand and release the lock. <b>Note: Follow the connector orientation.</b></div><div></div></div></div>		n/a	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>Connector Orientation Illustration</div><div><div></div><div></div><div></div><div></div><div><div>GOOD</div><div>NG</div></div></div></div>

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## WORK INSTRUCTION

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Validity Date:

n/a

Model code/Part number:

930B

/

7N0205-7020A

Customer: TRJ

Car Model: TOYOTA-4RUNNER

Document No.:

WI-ENG-PDE-782C

Purpose:


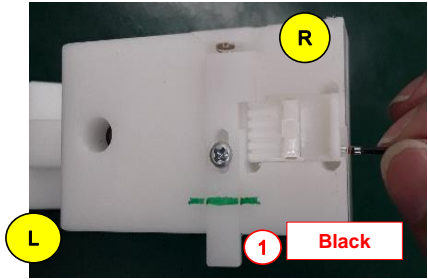
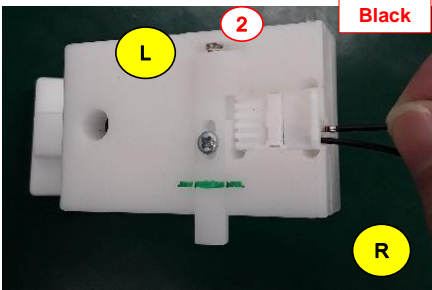
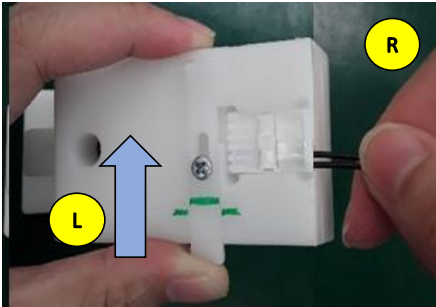
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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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 <b>1st Black wire</b> then insert to connector slot <b>1</b> using right hand. <b>Note: insertion process must be from left to right.</b></div></div> <div><div>2. Get the <b>2nd Black wire</b> then insert to connector slot <b>2</b> 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>7. No wrong use of connector 8. No damaged connector 9. No wrong insertion of wires 10. No loose insertion 11. One by one insertion 12. No deformed terminal 13. No wrong wire facing</div> <div><b>Important reminder's/Note:</b> <b>1. Please hold the wire near terminal.</b> <b>2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion.</b> <b>Do not exert extra force.</b></div> <div><b>Document references:</b> <b>1. Refer to WI-PRO-CNC-017 for Wire Strip lenght tolerance.</b> <b>2. Refer to GL PRO-ASY-029 for pull-push-pull-push procedure</b></div>

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# WORK INSTRUCTION

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930B

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7N0205-7020A

Customer:

TRJ

Car Model:

TOYOTA-4RUNNER

Validity Date:

n/a

Document No.:

WI-ENG-PDE-782C

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH


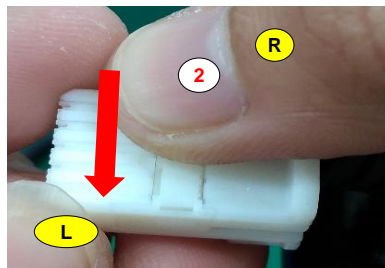
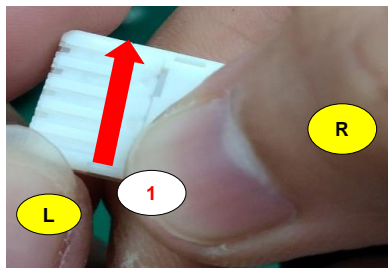

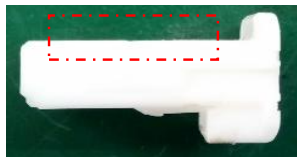
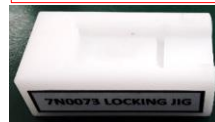
☒ MASSPRO

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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><div>1. Put the connector into locking jig using right hand then press <b>2x</b> using both hands. Touch the connector lock to confirm if properly locked.</div></div><div><div></div><div>2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</div><div><div><div>Before Pressing</div></div><div><div>After Pressing</div></div></div></div></div>		<div>LOCKING JIG</div> <div></div>	<div><b>Important reminders/Notes:</b></div> <div>1. <b>Manual locking may cause damaged connector lock.</b></div> <div>1. Use the provided locking jig per model</div> <div>2. No unlock/half-locked connector</div>

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☐ PROTOTYPE

☐ PRE-LAUNCH

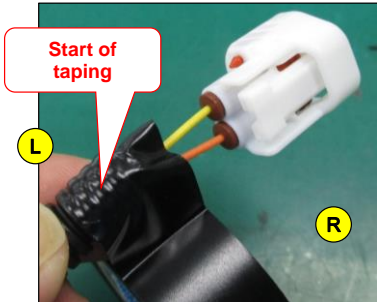
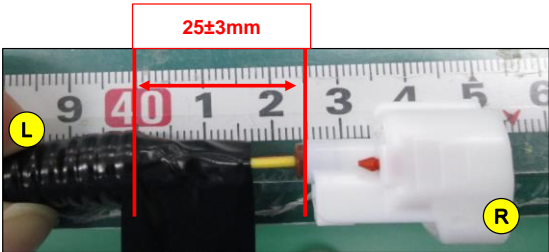
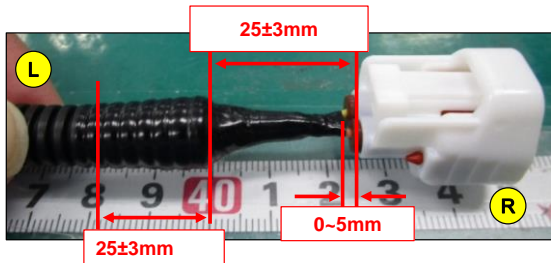


☒ MASSPRO

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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P3	<p>Taping 1 Black Corrugated tube to wire near connector</p>  <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 <b>25±3mm</b> 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>  <p><b>MEASURING TAPE</b></p>			<ol style="list-style-type: none"><li>1. No flip-out tape</li><li>2. No peel-off tape</li><li>3. No loose tape</li><li>4. No missing tape</li><li>5. No wrong dimension</li><li>6. No wrong use of tape</li></ol>

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☐ PROTOTYPE

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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

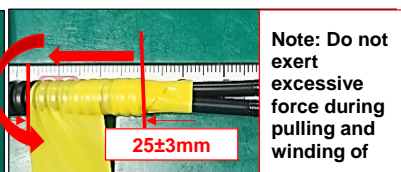
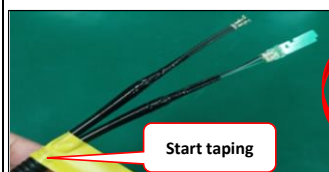
Taping 2  
Y-Taping



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

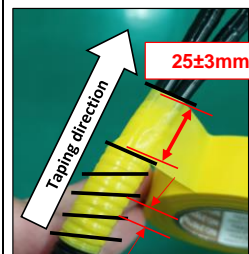


2. Hold the assy parts using right hand. Measure from end of COT up to edge of hotmelted wires and terminal pointed tip **112±3mm** using right hand.



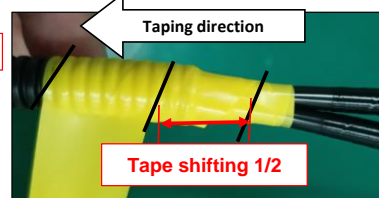
Note: Do not exert excessive force during pulling and winding of

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**

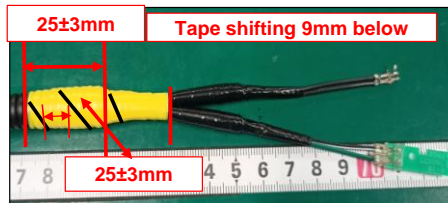


Tape shifting 1/3 below

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.



Tape shifting 9mm below

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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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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PARTS:

n/a

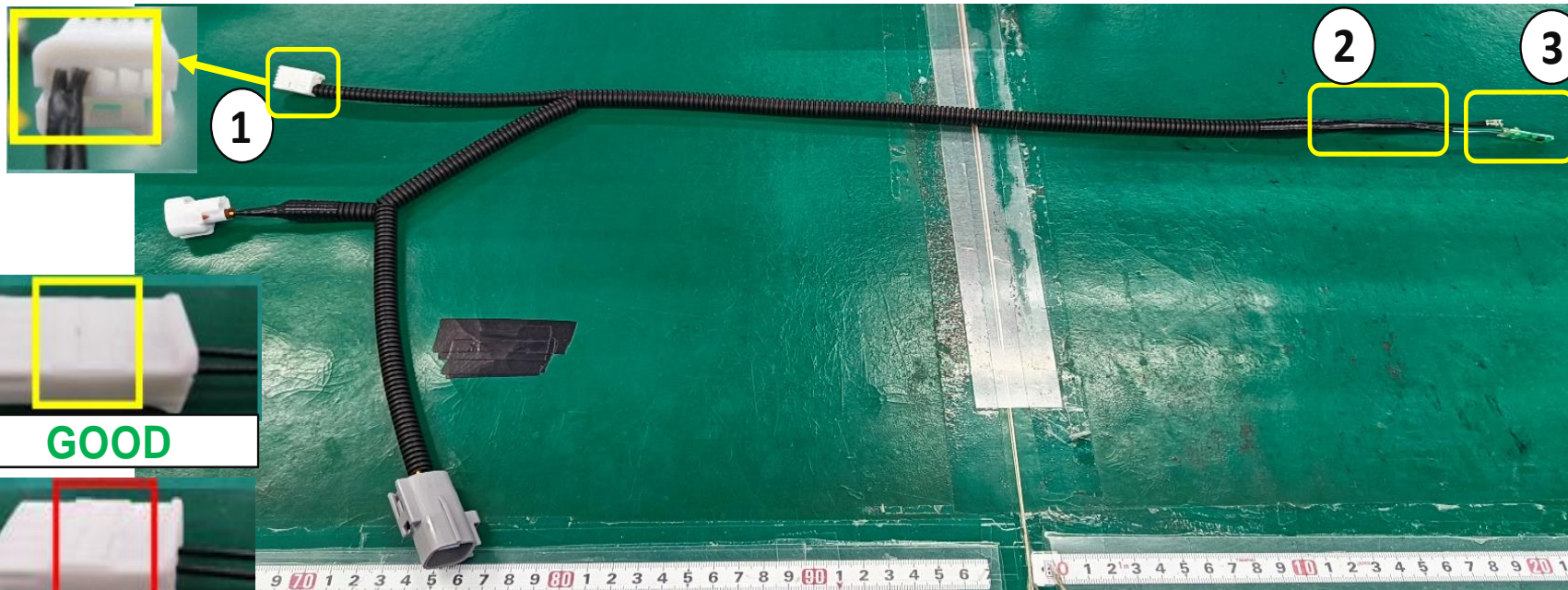
JIG:

n/a

### QUALITY CHECKPOINTS

P3

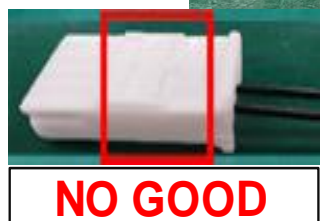
7N0205-7020A



Proper alignment of B-B wire and hotmelt



GOOD



NO GOOD

1 No WRONG INSERT  
No UNLOCKED/HALFLOCKED  
No TBO

2 No MISSING TAPE  
(Y-TAPING)

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