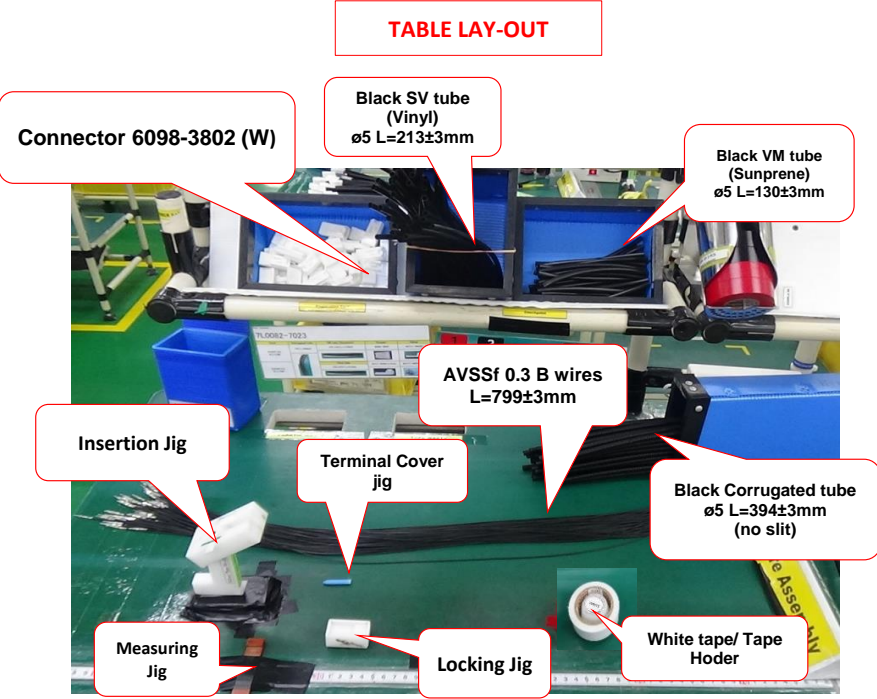


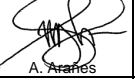


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	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
	Model code/Part number: 550B / 7L0083-7023		Customer: TRQSS	Car Model: TOYOTA-HIGHLANDER	Document No.:	WI-ENG-PDE-447A		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		Revision No.:		2	Page No.:	1 of 7	

PARTS:		1. All parts: Connector 6098-3802 (W) ; AVSSf 0.3 B wires L=799±3mm; SV tube (Vinyl) ø5 L=213±3mm; Black Corrugated tube ø5 L=394±3mm (no slit); VM tube (Sunprene) ø5 L=130±3mm; White tape		JIG:		1. Terminal cover jig 2. Insertion Jig 3. Locking jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS			
1	P1 2 Table Lay-out		<p>Safety Instruction Be sure to wear prescribed 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 references: 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
06/11/24	2	Merged Offline and Taping assembly process. Transfer Taping 2, Taping 3, Clamp setting, Clamp assembly and By two's process to WI-ENG-PDE-447B due to process improvement. Update Table layout and Quality checkpoints.	D. Castillo	C. Villanueva	A. Arañes	n/a	 D. Castillo	 C. Villanueva	 A. Arañes	n/a	
02/17/23	1	Work instruction improvement: Change MP from 2MP to 1MP. Inclusion batching and Quality checkpoint (Page 9). Change term of Vinyl tube to SV tube (Vinyl); Sunprene tube to VM tube (Sunprene). Update table layout and quality pointers. Improved By two's inspection.	D. Castillo	J. Loterte	C. Villanueva	A. Arañes					
03/04/22	0	Initial issue.	K. Doria	J. Loterte	C. Villanueva	A. Arañes					
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	March 04, 2022			

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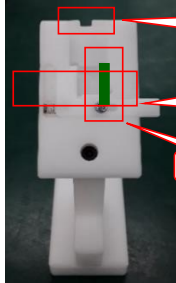
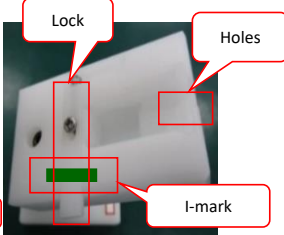


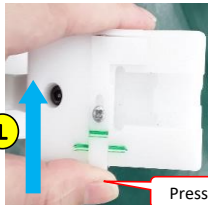
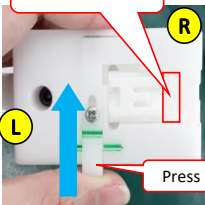
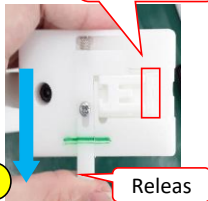

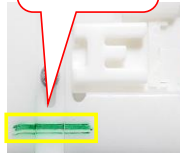

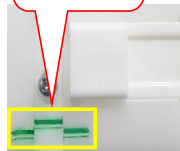

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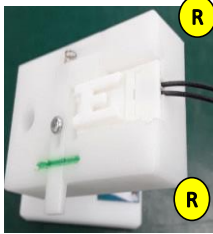
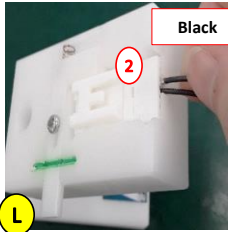
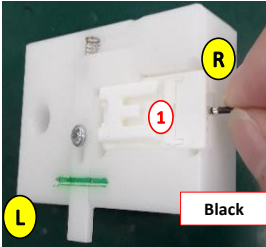
PARTS:	1. Connector 6098-3802 (W)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1 Connector setting to insertion jig 6098-3802 (W)	<div><div><div>Insertion jig</div></div><div><div>Lock</div><div>Holes</div><div>I-mark</div></div><div><div>Connector orientation</div></div><div><div>Insertion jig orientation</div></div><div><div><div><div><div>L</div><div>Press</div></div></div><div><div><div>L</div><div>Press</div></div></div><div><div><div>R</div><div>Connector Lock</div></div><div><div>L</div><div>Releas</div></div></div></div><div><div>1. Press the lock of insertion jig using left thumb.</div></div><div><div>2. Get the connector 6098-3802 (W) and insert into jig using right hand and release the lock using left hand.</div></div><div><div></div><div>3. Check the holes/terminal slot for B-B wires.</div></div></div></div> <div>n/a</div> <div><div><div>Connector Orientation Illustration</div><div><div>I-mark is align</div></div><div><div>2 Holes are open.</div></div><div><div>I-mark is not align</div></div><div><div>All Holes are open.</div></div></div></div>		

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	WORK INSTRUCTION				Effectivity Date:	June 11, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCES				Validity Date:	n/a		
	Model code/Part number: 550B / 7L0083-7023		Customer: TRQSS	Car Model: TOYOTA-HIGHLANDER	Document No.:	WI-ENG-PDE-447A		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	2	Page No.:	3 of 7

PARTS:	1. AVSSf 0.3 B wires L=799±3mm [2 pcs]			JIG:	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P1 Wire insertion to connector 6098-3802 (W)	<div><div>Wire facing</div><div>1. Get the first Black wire and insert to Slot 1 of connector using right hand.</div><div>2. Get the second Black wire and insert to Slot 2 of connector using right hand.</div><div>3. After insertion, push the lock using left thumb, hold the wires and gently pull out the connector from jig using right hand.</div></div>		n/a	<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</div> <div>Document references: <i>1.Refer to GL-PRO-ASY-029 for Pull-Push procedure.</i> <i>2.Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</i></div> <div>Important reminders/Note/s: <i>1. Make sure wires are properly inserted.</i> <i>Conduct Pull-Push-Pull-Push after insertion.</i> <i>Do not exert extra force.</i> <i>2.Insertion should be left to right.</i></div>

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TRQSS

Car Model:

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Document No.:

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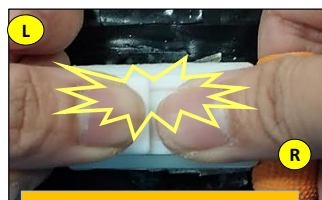
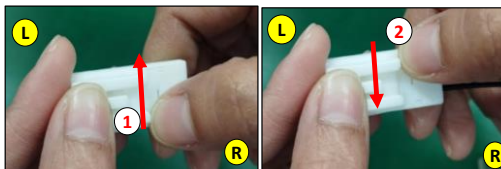



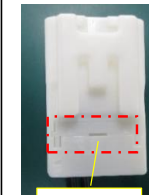

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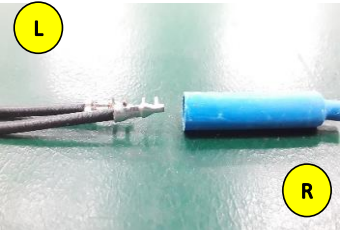
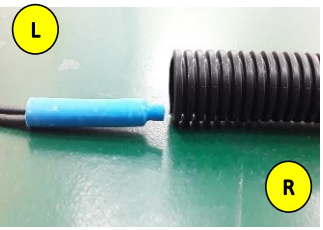
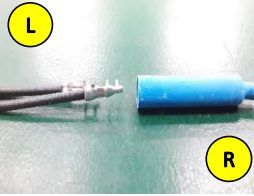

PARTS:		1. AVSSf 0.3 B wires L=799±3mm [2 pcs]		JIG:	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1	Connector lock			
		<div><div><p>1. Load the connector into the jig holding both side of the connector, tip first.</p></div><div><p>2. Press the lower part of connector to fully insert into the locking jig.</p></div><div><p>Right thumb-Lower Left thumb-middle</p><p>3. Press the lower parts of connector using right hand while left hand holding the middle.</p></div><div><p>Right thumb-upper Left thumb-middle</p><p>4. Press the upper part of connector using right hand while left hand holding the middle.</p></div><div><p>Right thumb-middle Left thumb-middle</p><p>5. Lift then press the connector in the middle using left and right hand.</p></div><div><p>6. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</p></div></div> <div><div><p>LOCKING JIG</p></div></div> <div><div><p>Before pressing</p></div><div><p>After pressing</p></div><div><div><p>GOOD Full Lock</p></div><div><p>NG Half Lock</p></div></div><p>Important reminders/Note/s:</p><p>1. Use provided jig tool to lock the connector. 2. Manual locking may cause damaged lock.</p><p>Document references:</p><p>1. Please refer to GL-PRO-ASY-017 for the verification of connector lock.</p><p>1. No unlock/half-locked connector 2. Use provided jig tool to lock the connector</p></div>			

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	Process Name/Title:		Model code/Part number: 550B / 7L0083-7023	Customer: TRQSS	Car Model: TOYOTA-HIGHLANDER	Document No.: WI-ENG-PDE-447A		
	Purpose:		<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO			Revision No.: 2 Page No.: 5 of 7		



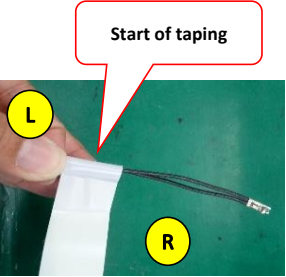
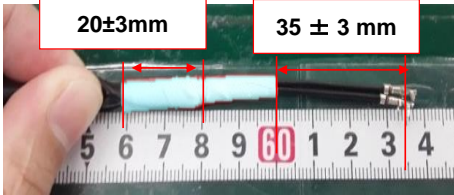

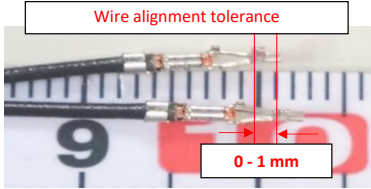
PARTS:	1. Assy parts (Connector 6098-3802 (W) ; AVSSf 0.3 B wires L=799±3mm [2pcs] 3. Black Corrugated tube ø5 L=394±3mm (no slit) 2. SV tube (Vinyl) ø5 L=213±3mm			JIG:	1.Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1	Wire Insertion to Black SV tube (Vinyl) ø5 L=213±3mm	<div><div>1.Hold the assy part using left hand then get the SV tube (Vinyl) ø5 L= 213±3mm using right hand and insert the Black wires.</div></div>	n/a	1. No wrong usage of parts. 2. No deformed terminal.
6		Wire Insertion to Corrugated tube ø5 L=394±3mm (no slit)	<div><div><div>1. Hold the wires using left hand, get the terminal cover jig using right hand and insert the wires.</div></div><div><div>2. Get the corrugated tube ø5, L=394±3 (no slit) using right hand and insert to wires.</div></div><div><div>3. After insertion, remove the terminal cover jig using right hand.</div></div></div> <div><div>Terminal cover jig</div></div> <td>1. No wrong usage of parts. 2. No deformed terminal.</td>	1. No wrong usage of parts. 2. No deformed terminal.	

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	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:		2	Page No.: 6 of 7

PARTS:	1. Assy parts 2. Black VM tube (Sunprene) ø5 L=130±3mm 3. White tape 4. Black tape			JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	Wire Insertion to Black VM tube (Sunprene) ø5 L=130±3mm	 <div>1. Hold the assy part using left hand then get the VM tube (Sunprene) ø5 L= 130±3mm using right hand and insert the Black wires.</div>		n/a	1. No wrong usage of parts. 2. No deformed terminal.
8	P1 Taping 1 VM tube (Sunprene) to wire near terminal	<div><div>1. Hold the sunprene tube using left hand. Measure from VM tube (Sunprene) up to terminal pointed tip 55±3mm.</div></div> <div><div>2. Get White tape using right hand, hold the VM tube (Sunprene) ø5 L=130±3mm using left hand then fold the sunprene tube and start taping using right hand.</div></div> <div><div>3. After taping check the measurement, wire alignment and taping condition.</div></div>		<div>Measuring tape</div> 	1. No loose tape 2. No peel-off tape 3. No flip-out tape 4. No wrong dimension 5. No wrong use of tape 6. No missing tape Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement. 2. Refer to WI-PRO-ASY-001 for taping procedure. <div><div>Wire alignment tolerance 0 - 1 mm</div></div>

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PARTS:

1. Assy parts

JIG:

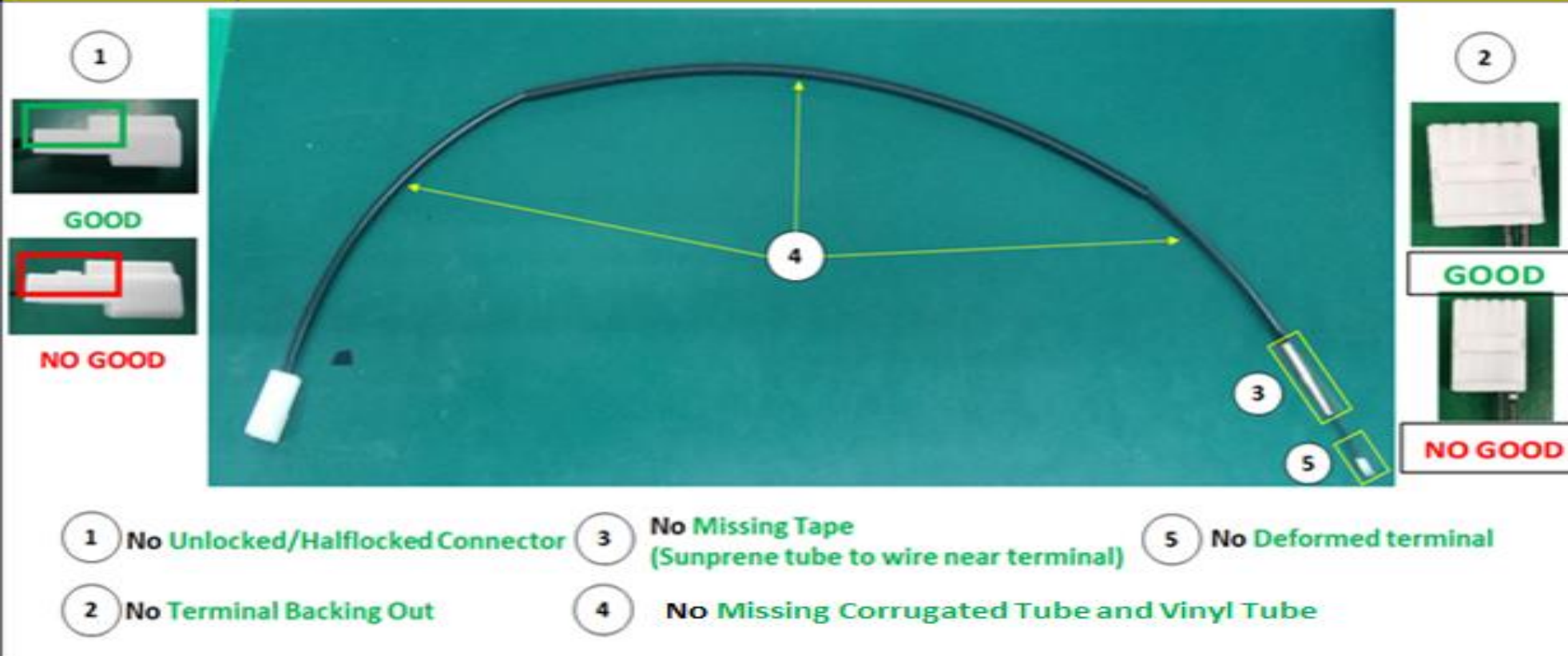
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VISUAL INSPECTION/ QUALITY CHECKPOINTS

P1

7L0083-7023



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