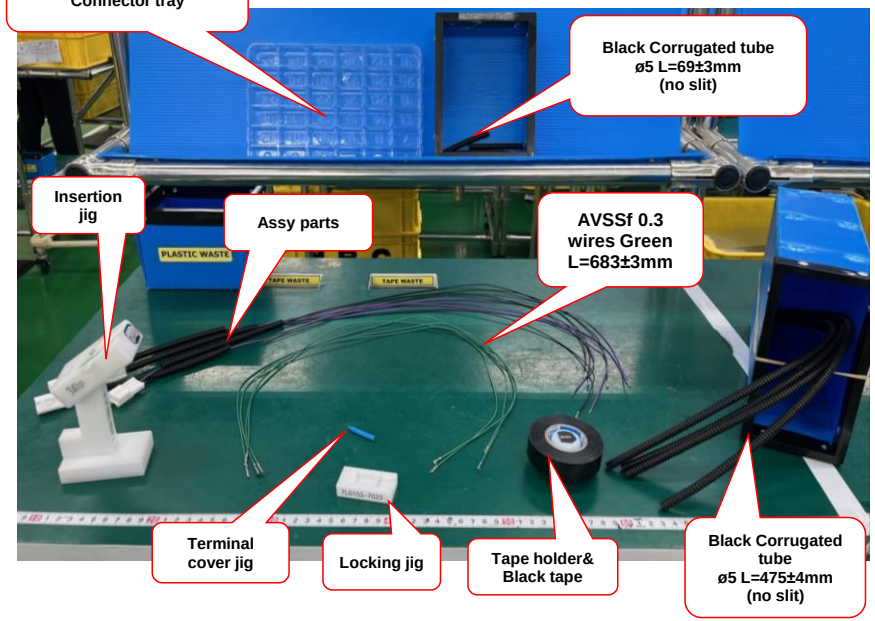
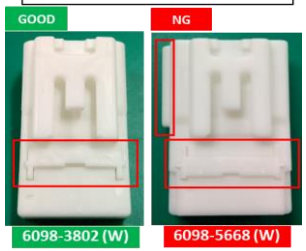
	WORK INSTRUCTION			Effectivity Date:	January 13, 2025	
	Process Name/Title:	TAPING ASSEMBLY PROCESS		Validity Date:	n/a	
	Model code/Part number: 311D / 7L0153-7023	Customer: TRQSS	Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-963A	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	2	Page No.: 1 of 7

PARTS:	1. Connector 6098-3810 (W); AVSSf 0.3 Green wires L=683±3mm; Black Corrugated tube ø5 L=475±4mm (no slit)	JIG:	1. Insertion jig 2. Terminal cover jig 3. Locking 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 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-ENG-PDE-1018 for Offline Assembly process*** ***2. Refer to WI-PRO-CNC-017 for Wire Strip lenght tolerance.*** CONNECTOR ILLUSTRATION 

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted
01/13/25	2	Additional Quality pointers "No insufficient tape" and add document references (Page 6) as countermeasure to customer claim.	D. Castillo	C. Villanueva	A. Arañes	n/a
08/28/24	1	Change purpose from Pre-launch to Masspro. Additional table lay-out and provide insertion jig. Seprate some process to Offline and Clamp assembly process. Update Visual Inspectios/ Quality Checkpoints.	D.Castillo	C.Villanueva	A. Arañes	n/a
08/20/24	0	Initial issue	D.Castillo	C.Villanueva	A. Arañes	n/a

Prepared by	Reviewed by	Approved by	Noted by
D. Castillo	C.Villanueva	A. Arañes	n/a
Est. Date:	August 20, 2024		

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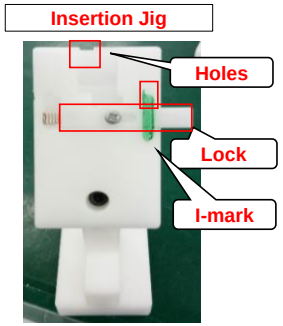
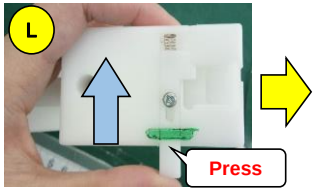
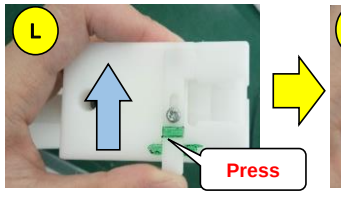
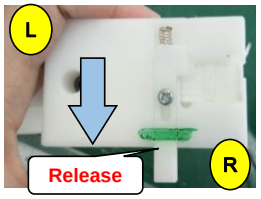
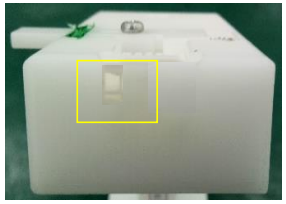
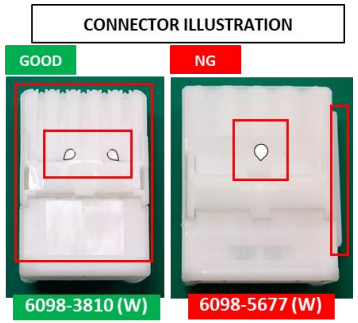
NBC	WORK INSTRUCTION			Effectivity Date:	January 13, 2025
	Process Name/Title:	TAPING ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number:	311D / 7L0153-7023	Customer: TRQSS / Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-963A
	Purpose:	☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO		Revision No.:	2 / Page No.: 2 of 7

PARTS:	1. Connector 6098-3810 (W)			JIG:	1. Insertion jig
NO.	**PROCESS NAME**		**WORK PROCEDURE/ ILLUSTRATION**	**TOOLS/PPE**	**QUALITY POINTERS**
2	P1	Connector setting to insertion jig 6098-3810(W)	  1. Press the lock of insertion jig using left thumb.   2. Insert the connector **6098-3810** into jig using right hand and release the lock.  3. Check the holes/terminal slot for **G wires.**	n/a	1. Use provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector 

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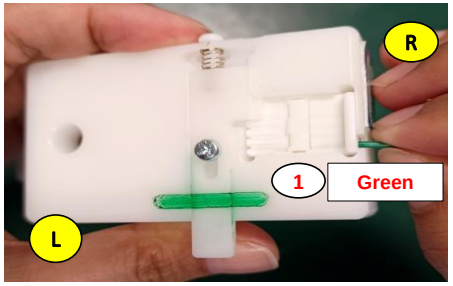
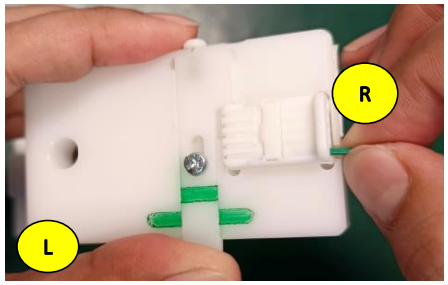
	Model code/Part number: 311D / 7L0153-7023	Customer: TRQSS	Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-963A	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	2	Page No.: 3 of 7

PARTS:	1. Black Corrugated tube ø5 L=69±3mm (no slit) 2. AVSSf 0.3 Green wire L=659±3mm	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P1	Wire Insertion to Black Corrugated tube ø5 L=69±3mm (no slit)	 1. Get the **Black Corrugated tube ø5 L=69±3mm (no slit)** using left hand and get **AVSSf 0.3 Green wire L=69±3mm** then insert using right hand.	n/a	***Document references:*** ***1. Refer to WI-PRO-CNC-017 for Wire Strip lenght tolerance.*** 1. No wrong usage of parts. 2. No deformed terminal
4		Wire insertion to Connector 6098-3810 (W)	 **CONNECTOR ORIENTATION** **WIRE FACING**   1. Get the **Green wire** and insert to **Slot 1** of connector using right hand. Conduct **2x** push pull after wire insertion. 2. After insertion, push the lock using left thumb and then hold the wires and gently pull out the connector from jig using right hand.		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 ***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.*** ***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***

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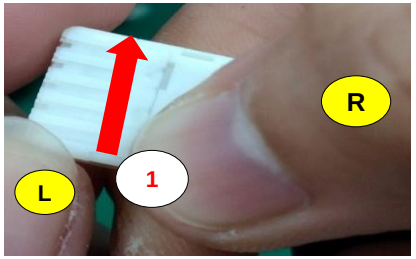
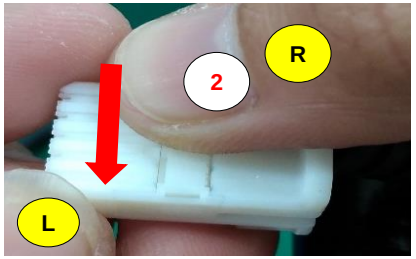
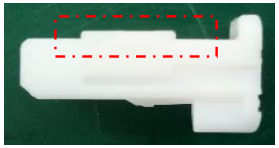
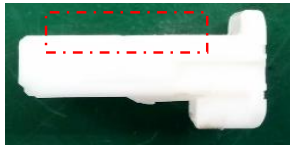
PARTS:	1. Assy parts	JIG:	1. Locking jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	P1	Connector lock	 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.   2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.  **Before Pressing**  **After Pressing**	**LOCKING JIG** 	***Important reminders/Note/s:*** ***1. Manual locking may cause damaged connector lock*** 1. No wrong usage of parts 2. No deformed terminal

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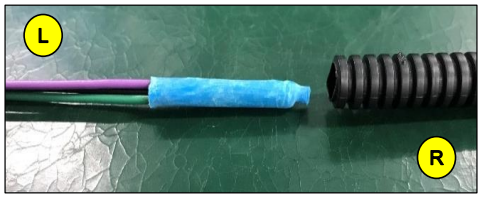
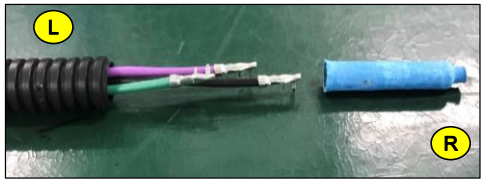
	Process Name/Title:	TAPING ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number: 311D / 7L0153-7023	Customer: TRQSS	Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-963A		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	2	Page No.:	5 of 7

PARTS:	1. Assy parts 2. Black Corrugated tube ø5 L=475±4mm (no slit)	JIG:	1. Terminal cover jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	P1	Wire Insertion to Black Corrugated tube ø5 L=475±4mm (no slit)	 1. Combine the **B-V-G wires** using both hands. Get the terminal cover jig using right hand then insert to **B-V-G wires** both hands.  2. Get the Corrugated tube **ø5, L=475±4mm** using right hand then insert to **B-V-G wires** using both hands.  3. After insertion, remove the terminal cover jig using right hand.	**Terminal cover Jig** 	1. No wrong usage of parts. 2. No deformed terminal

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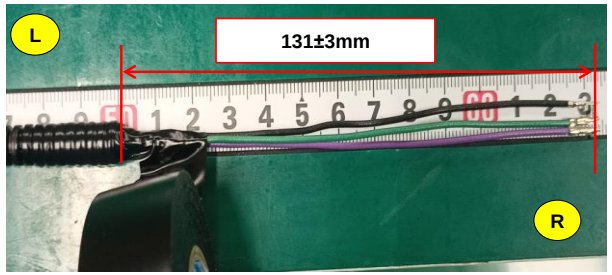
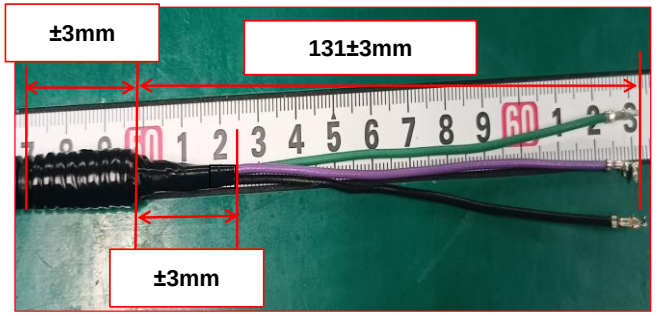
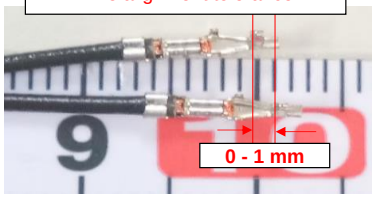
	Model code/Part number: 311D / 7L0153-7023	Customer: TRQSS	Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-963A	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	2	Page No.: 6 of 7

PARTS:	1. Assy parts 2. Black tape	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P1	Taping 1 Black corrugated tube to wire near terminal	 1. Hold the assy parts using left hand. Get the **Black tape** using right hand then start taping between COT to wire using both hands.  2. Measure form end of COT up to terminal pointed tip **131±3mm** then continue the taping process using both hands  3. After taping, check the measurement, terminal alignment and taping condition.	MEASURING TAPE 	***Important reminders/Note/s:*** ***1. Please use calibrated/verified measuring tape when getting the measurement.*** ***Document references:*** ***1. Refer to WI-PRO-ASY-001A for Taping process*** 1. No flip-out tape 2.No peel-off tape 3. No loose tape 4. No wrong dimension 5. No wrong use of tape 6. No missing tape 7. No insufficient tape 

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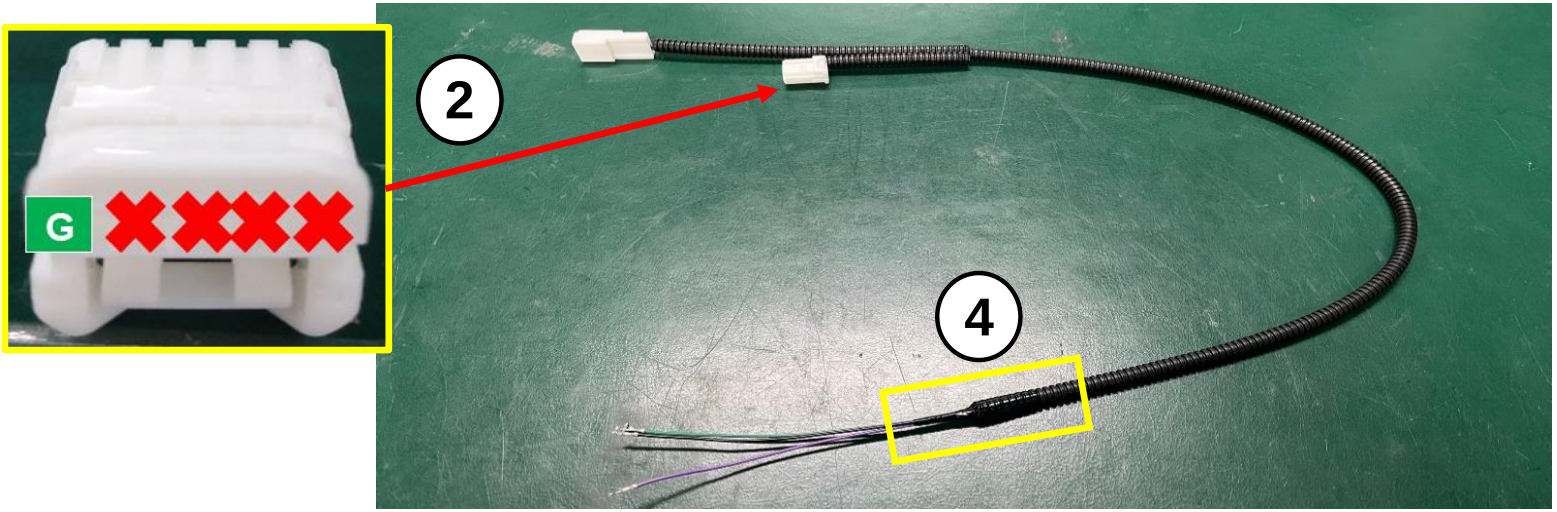
PARTS:	1. Assy parts	JIG:	n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS

TAPING - P1 7L0153-7023



1. No Unlocked/half-locked connector
2. No Wrong insert
3. No Terminal Backing out
4. No Missing tape

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