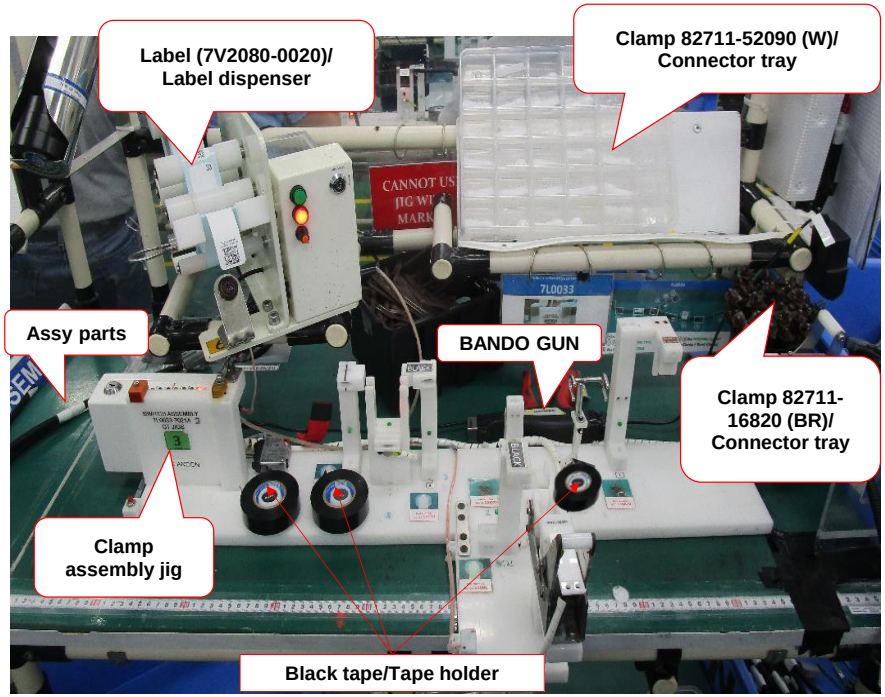
	WORK INSTRUCTION			Effectivity Date:	July 10, 2024		
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number:	010B / 7L0033-7024	Customer: TRQSS	Car Model: TOYOTA-CAMRY	Document No.:	WI-ENG-PDE-938	
	Purpose:	☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.: 1 of 9

PARTS:	1. Assy parts: Label (7V2080-0020); Clamp 82711-52090 (W); Clamp 82711-16820 (BR); Black tape [3pcs.]	JIG:	1. Clamp assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	CLAMP ASSY	Table Lay-out	**TABLE LAY-OUT**  	**Safety Instruction** Be sure to wear prescribed 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.	***Document reference/s:*** *1. Refer to **WI-ENG-PDE-065A-C** for Taping assemmbly process* 1. No missing parts/tools 2. No excess parts/tools

Revision History							Prepared by	Reviewed by	Approved by	Noted by
07/10/24	0	Initial issue. Separate clamp assembly to Clamp assembly process.	D.Castillo	C.Villanueva	A. Arañes	n/a	D. Castillo	C.Villanueva	A. Arañes	N/A
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	July 10, 2024		

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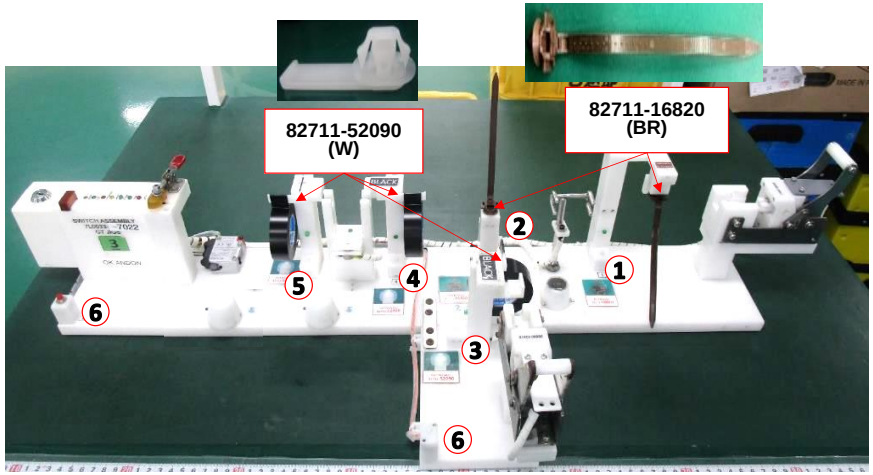
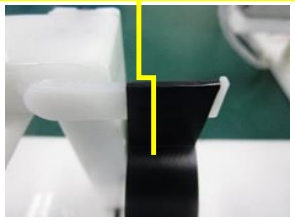
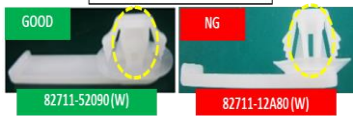
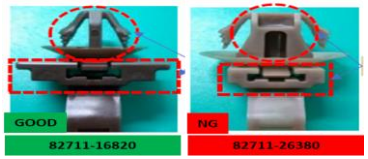
DCC Stamp

	WORK INSTRUCTION			Effectivity Date:	July 10, 2024		
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number:	010B / 7L0033-7024	Customer: TRQSS	Car Model: TOYOTA-CAMRY	Document No.:	WI-ENG-PDE-938	
	Purpose:	☐ PROTOTYPE	☐ PRE-LAUNCH	■ MASSPRO	Revision No.:	0	Page No.: 2 of 9

PARTS:	1. Clamp 82711-52090 (W) [3pcs] 2. Clamp82711-16820 (BR) [2pcs]	3. Black tape	JIG:	1. Clamp Assembly Jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	CLAMP ASSY	Clamp Setting	 1. Get 3pcs. of clamp **82711-52090 (W)** using both hands then set to clamp location **5, 4, and 3** using both hands. 2. Get 2pcs. of clamp **82711-16820 (BR)** using both hands then set to clamp location **2 and 1** using both hands. 3. Get the Black tape then initially attach to clamp location **5, 4 and 3** using both hands.	n/a	**STANDARD TAPING FOR CLAMP** One wind for under tape  ***Important reminders/Note/s:*** ***1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.*** 1. No wrong use of clamp 2. No damaged clamp 3. No wrong clamp position 4. No wrong use of tape CLAMP ILLUSTRATION  CLAMP ILLUSTARTION 

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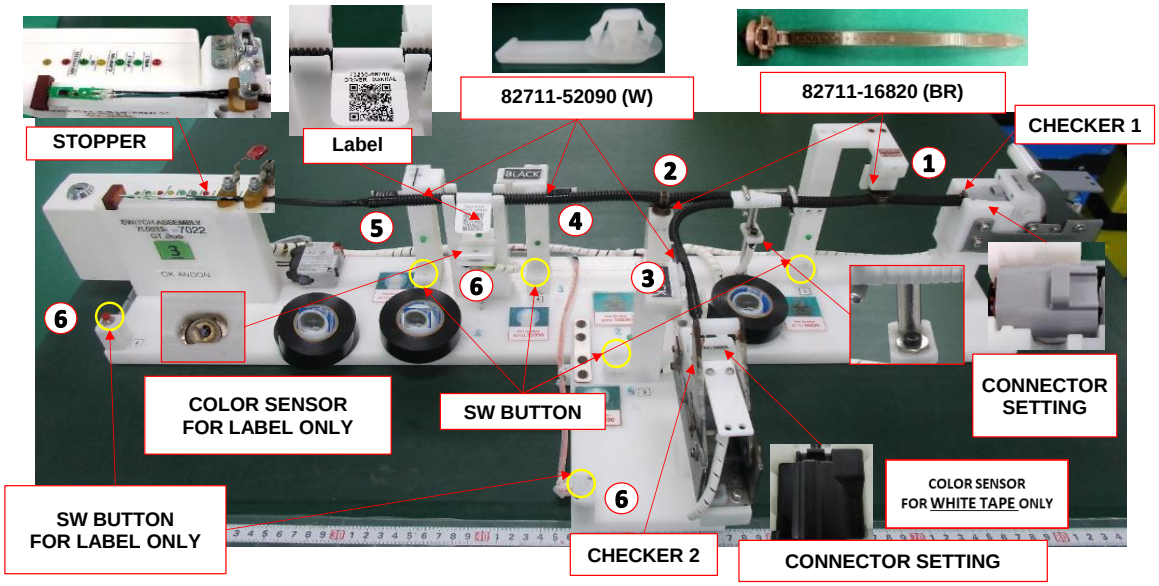
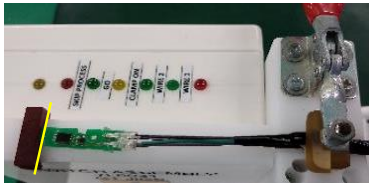
	WORK INSTRUCTION			Effectivity Date:	July 10, 2024	
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a	
	Model code/Part number: 010B / 7L0033-7024	Customer: TRQSS	Car Model: TOYOTA-CAMRY	Document No.:	WI-ENG-PDE-938	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.: 3 of 9

PARTS:	1. Assy parts	JIG:	1.Clamp Assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	CLAMP ASSY	Clamp Assembly	 1. Get the assy parts and set into jig. ***(See above picture for correct setting).*** First, set the connector **6188-0066 (GR)** to **Checker 1** then pull the checker fixture for continuity checking. Second, set the connector to **6189-1161 (B)** to **Checker 2** then pull the checker fixture for continuity checking. Last, set the end of **G/BW hot melted wires** together within the stopper then press by **Toggle clamp.** Continue if the sequence light in location **1** was **ON.** 2. Check if all **LED light** for **POWER ON, WIRE1, WIRE2 and CLAMP ON** was **ON.** If encountered abnormality, **STOP** and immediately **CALL** the attention of the leader. **WAIT** for further instruction and continue the process.		 ***Important reminders/Note/s:*** ***1. Make sure no gap between stopper jig and PCB*** ***2. Make 2-3 windings for clamp taping*** 1. No loose/tight clamp attached 2. No damage clamp 3. No missed tape 4. No missing parts 5. Make sure no clearance between PCB and stopper jig

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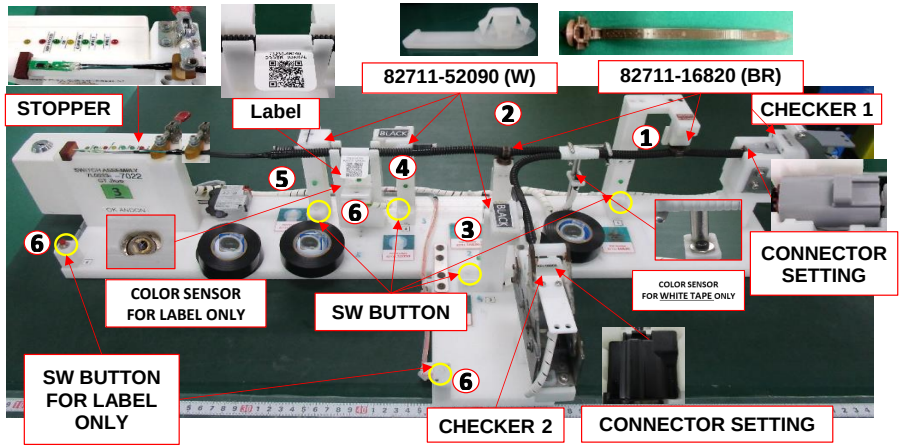
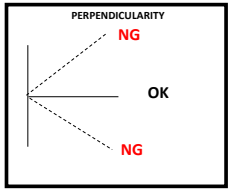
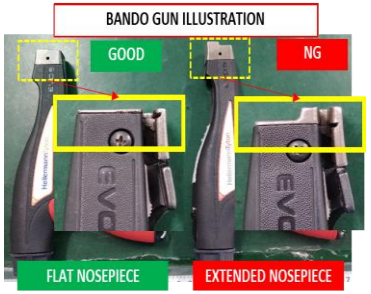
PARTS:	1. Assy parts	JIG:	1. Clamp Assembly Jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	CLAMP ASSY	Clamp Assembly (Continuation)	 3. Initially tighten the band clamp on location **1 and 2** using both hands. 4. Get the bando gun using right hand then cut the band clamp on location **1** using both hands. Press the **SW button** after cut. Continue if the sequence light on clamp location **2** was **ON.** **Fixed setting of band clamp cutter: 3 ~ 4** **BANDO GUN ALIGNMENT** **Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube. For: ø5 - 1~2, ø7 - 3~4** **BANDO GUN POSITION ON CLAMP LOCATION 1** 	**BANDO GUN** 	 ***Important reminders/Note/s:*** ***1. Make sure no gap between stopper jig and PCB*** ***2. Make 2-3 windings for clamp taping*** 1. No loose/tight clamp attached 2. No damage clamp 3. No missed tape 4. No missing parts 5. Make sure no clearance between PCB and stopper jig 

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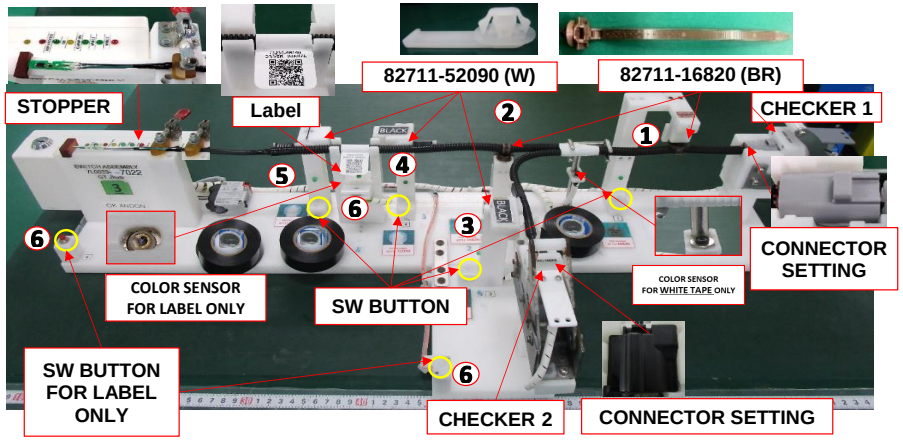
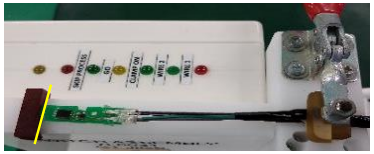
	WORK INSTRUCTION			Effectivity Date:	July 10, 2024	
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a	
	Model code/Part number: 010B / 7L0033-7024	Customer: TRQSS	Car Model: TOYOTA-CAMRY	Document No.:	WI-ENG-PDE-938	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.: 5 of 9

PARTS:	1. Assy parts ; Clamp 82711-52090 (W) ; Clamp82711-16820 (BR) ; Black tape;Label (7V2080-0020)/Label dispenser	JIG:	1. Clamp Assembly Jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	CLAMP ASSY	Clamp Assembly (Continuation)	 5. Cut the band clamp on location **2** using both hands. Press the **SW button** after cut. Continue if the sequence light on clamp location **3** was **ON.** **Fixed setting of band clamp cutter: 3 ~ 4** **BANDO GUN** **Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube.** **For: ø5 - 1~2, ø7 - 3~4** **BANDO GUN POSITION ON CLAMP LOCATION 2** **GOOD** **NG** **PERPENDICULARITY** OK NG	**BANDO GUN** 	 **Important reminders/Note/s:** ***1. Make sure no gap between stopper jig and PCB*** ***2. Make 2-3 windings for clamp taping*** 1. No loose/tight clamp attached 2. No damage clamp 3. No missed tape 4. No missing parts 5. Make sure no clearance between PCB and stopper jig **BANDO GUN ILLUSTRATION** **GOOD** **NG** **FLAT NOSEPIECE** **EXTENDED NOSEPIECE**

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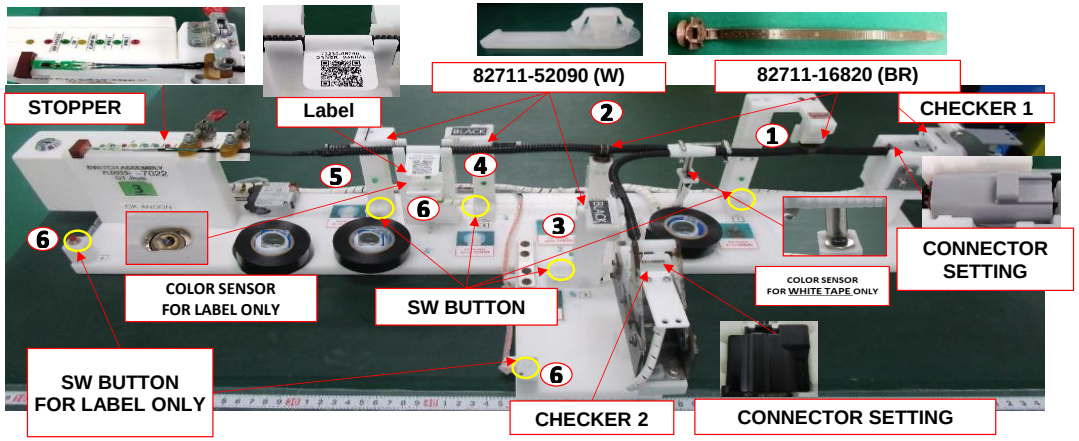
	Model code/Part number:	010B / 7L0033-7024	Customer: TRQSS / Car Model: TOYOTA-CAMRY	Document No.:	WI-ENG-PDE-938		
	Purpose:	☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO		Revision No.:	0	Page No.:	6 of 9

PARTS:	1. Assy parts ; Clamp 82711-52090 (W) ; Clamp82711-16820 (BR) ; Black tape;Label (7V2080-0020)/Label dispenser	JIG:	1. Clamp Assembly Jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	CLAMP ASSY	Clamp Assembly (Continuation)			

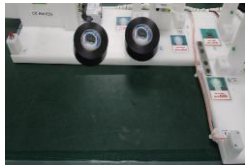


6. Hold the Black tape on clamp location **3** using right hand then start taping using both hands. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **4** was **ON.**

7. Hold the Black tape on clamp location **4** using right hand then start taping using both hands. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **5** was **ON.**

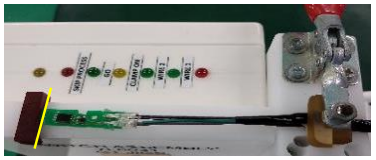
8. Hold the Black tape on clamp location **5** using right hand then start taping using both hands. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue on label attachment *(Refer to next page for label attachment procedure)*

9. For label attachment, **color sensor** will light if detects the **label code**. After attachment, press the **SW button** using both index finger **(same timing). Go** sound will be heard.



10. Conduct **POINT CHECKING** before removing the harness from jig.

SW BUTTON FOR LABEL ONLY
Press same timing



Important reminders/Note/s:

1. Make sure no gap between stopper jig and PCB

2. Make 2-3 windings for clamp taping

1. No loose/tight clamp attached
2. No damage clamp
3. No missed tape
4. No missing parts
5. Make sure no clearance between PCB and stopper jig

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	WORK INSTRUCTION			Effectivity Date:	July 10, 2024		
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number:	010B / 7L0033-7024	Customer: TRQSS	Car Model: TOYOTA-CAMRY	Document No.:	WI-ENG-PDE-938	
	Purpose:	☐ PROTOTYPE	☐ PRE-LAUNCH	■ MASSPRO	Revision No.:	0	Page No.: 7 of 9

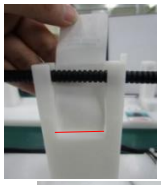
PARTS:	1. Assy parts 2. Label 7V2080-0020			JIG:	1. Clamp Assembly jig
NO.	**PROCESS NAME**		**WORK PROCEDURE/ ILLUSTRATION**	**TOOLS/PPE**	**QUALITY POINTERS**
4	CLAMP ASSY	Label attachment		n/a	1. No bubbles 2. No damage 3. No peel off 4. No wrong use of label 5. No missing parts 6. No loose attachment 7. No wrong usage of label **NG Attachment**

Model	Item No	Item Name
7L0030	73230-06750	Passenger Manual
7L0031	73230-06740	Driver Manual
7L0032	73230-06B20	Passenger Power
7L0033	73230-06760	Driver Power

Model code

1. Get the label.
Note: Check the model code, item no. & name

Item no. & name

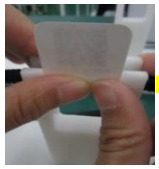


2.Align the end part of label in the jig.

3.Fold the center part of the label

5.After alignment , Press the label with both fingers .

4. Align both end part of label .



6. Press the label upside down using finger.

GOOD

Acceptable overlap
0~1mm

NG

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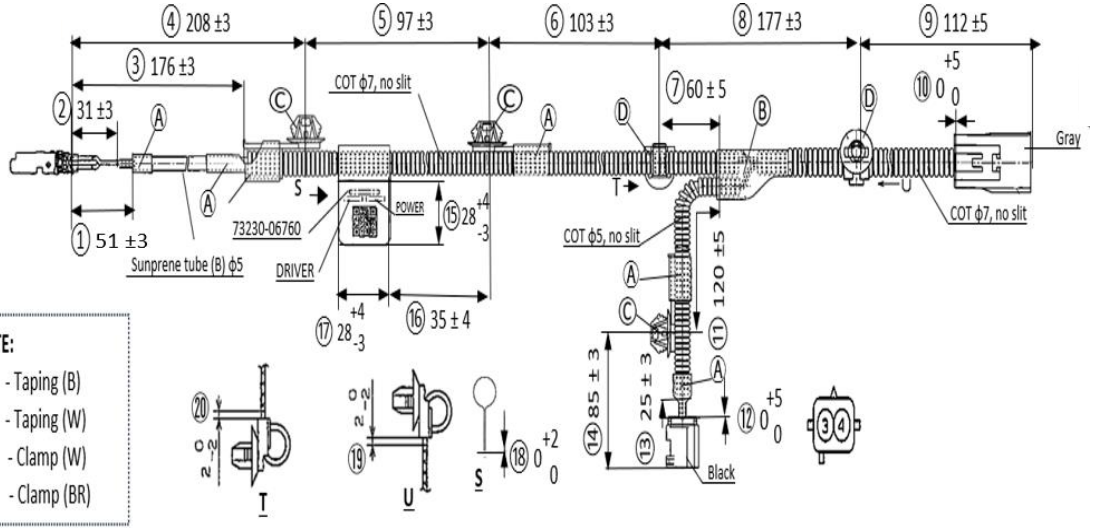
NBC	WORK INSTRUCTION			Effectivity Date:	July 10, 2024
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number:	010B / 7L0033-7024	Customer: TRQSS / Car Model: TOYOTA-CAMRY	Document No.:	WI-ENG-PDE-938
	Purpose:	☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO		Revision No.:	0 / Page No.: 8 of 9

PARTS:	1.Assy Part	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	CLAMP ASSY	Measurement		MEASURING TAPE	***Important reminders and note/s:*** ***1. Please use calibrated/verified measuring tape when getting the measurement.*** ***2. For Hatsumono, Nakamono and Owarimono.*** ***Document reference/s:*** *1. Refer to **WI-PRO-ASY-056** for Sub-assembly Hatsumono Nakamono Owarimono Inspection* 1. No wrong dimension

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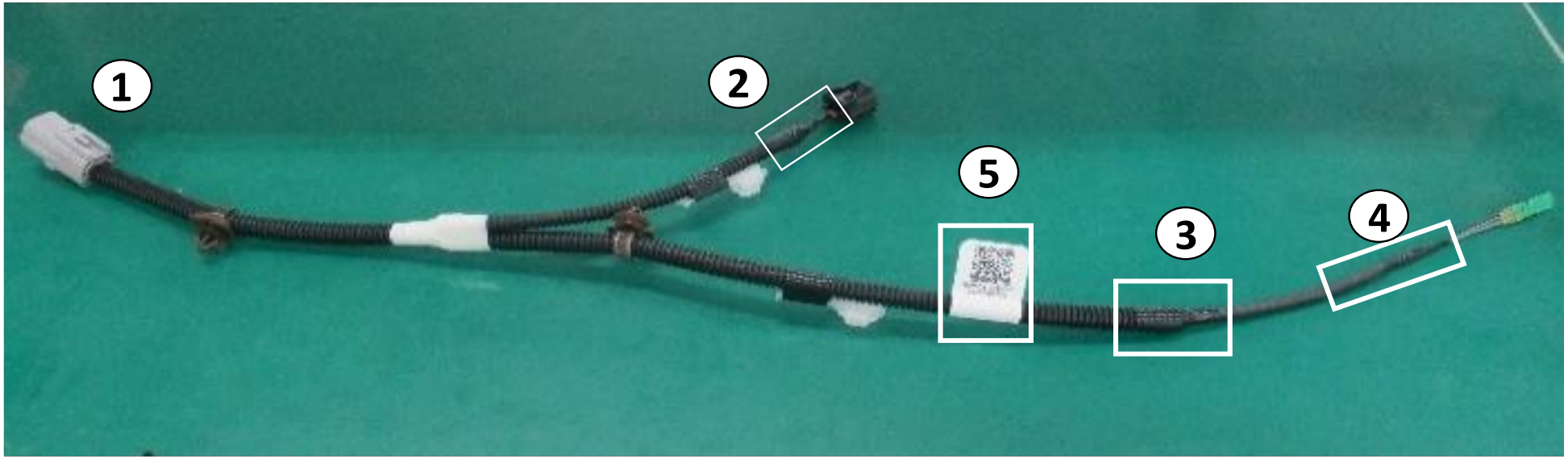
PARTS:	1. Assy Parts	JIG:	n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS

CLAMP ASSY	7L0033-7024



① No Deformed terminal

②③④ No MISSING TAPE

⑤ No Wrong orientation of Bar code

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