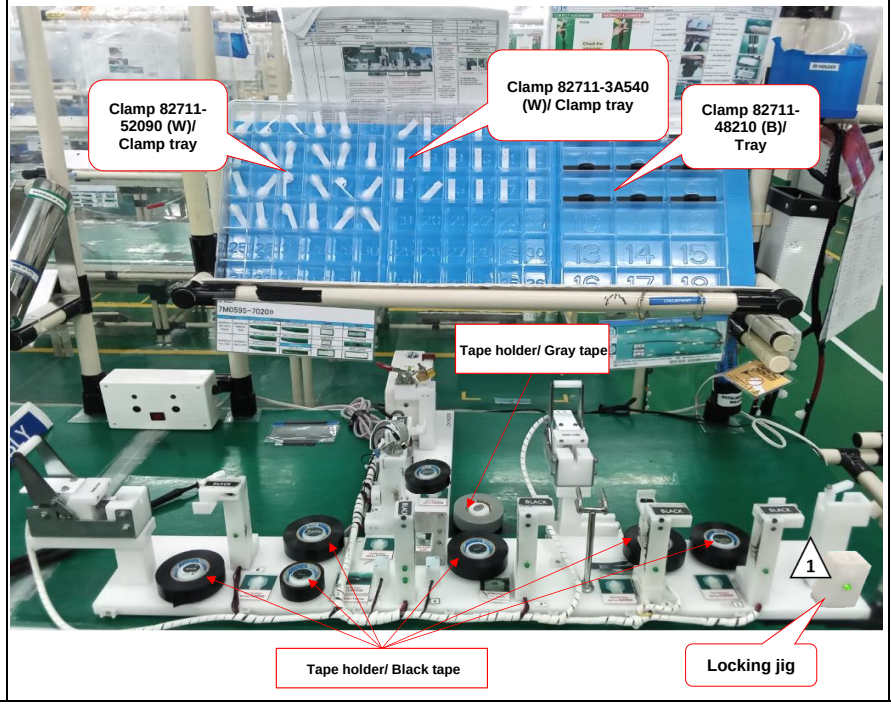
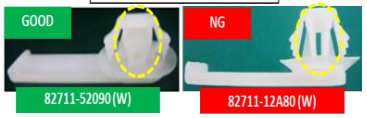
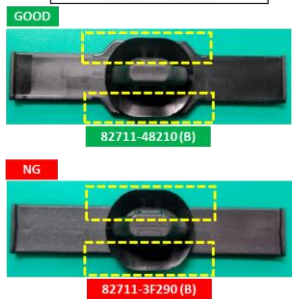
	WORK INSTRUCTION			Effectivity Date:	July 10, 2024		
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number: 100B / 7M0595-7021	Customer: TRJ	Car Model: LEXUS UX (TOYOTA)	Document No.:	WI-ENG-PDE-698		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.:	1 of 9

PARTS:	1. Assy parts; Clamp 82711-52090 (W) [5pcs]; Clamp 82711-3A540 (W); Clamp 82711-48210 (B); Black tape [7pcs]; Gray tape	JIG:	1. Clamp assembly jig 2. Locking 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.	1. No missing parts/ tools. 2. No excess parts/ tools CLAMP ILLUSTRATION  CLAMP ILLUSTRATION 

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted
07/10/24	1	Integrate connector lock process of connector 6188-0407 to Clamp assembly jig as improvement. Improved Table lay-out, Measurement and Visual inspection/Quality checkpoints.	D.Castillo	C. Villanueva	A. Arañes	n/a
07/21/23	0	Initial issue. Changed Process Name/Title from **TAPING ASSEMBLY PROCESS** to **CLAMP ASSEMBLY PROCESS**; Changed **WI-ENG-PDE-430D** to **WI-ENG-PDE-698** due to separation of process. Updated template. Inclusion of **CAR NAME- LEXUS (TOYOTA) UX.**	M. Ariola	J. Loterte	C. Villanueva	A. Arañes

Prepared by	Reviewed by	Approved by	Noted by
D. Castillo	C. Villanueva	A. Arañes	n/a
Est. Date:	July 21, 2023		

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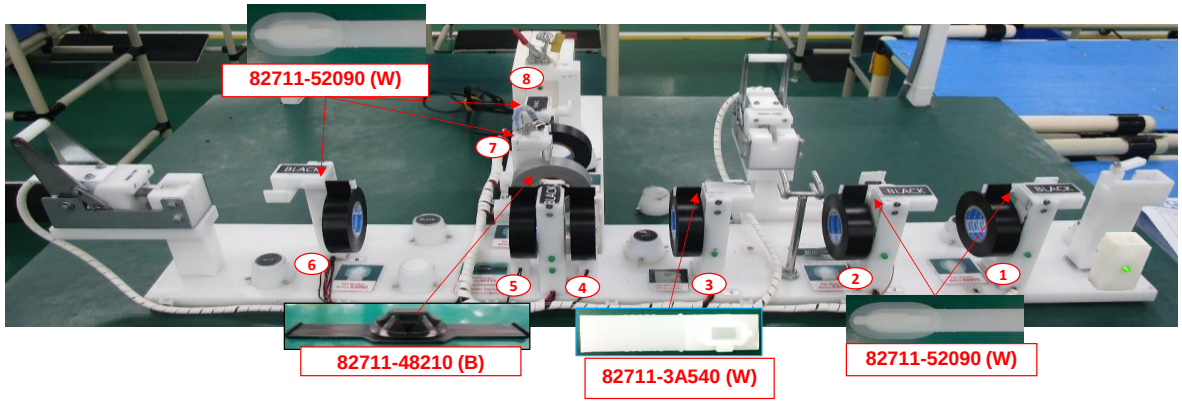
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.:	2 of 9

PARTS:	1. Clamp 82711-52090 (W) [5pcs.] 2. Clamp 82711-3A540 (W) 3. Clamp 82711-48210 (B)	4. Black tape [7pcs.] 5. Gray tape [1pc]	JIG:	1. Clamp Assembly Jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp Setting			1. No damaged clamp 2. No wrong use of parts 3. No wrong use of tape 4. No wrong insertion of clamp ***Important reminders/note/s:*** *1.Please use calibrated/verified measuring tape when getting the measurement.*



1. Get 2pcs. of clamp **82711-52090 (W)** using right hand then set to jig clamp **1 and 2** using both hands.

2. Get 3pcs. of clamp **82711-52090 (W)** using right hand then set to jig location **6, 7 & 8** using both hands.

3. Get 1pc. of clamp **82711-3A540 (W)** using right hand then set to clamp location **3** using both hands.

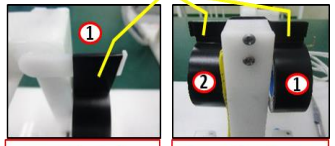
4. Get 1pc of clamp **82711-48210 (B)** using right hand then set to clamp location **4~5** using both hands.

5. Get the Black tape and start pre-taping on clamp location **1-6** and location **8.**

6. Get the **Gray tape** and start pre-taping on clamp location **7.**

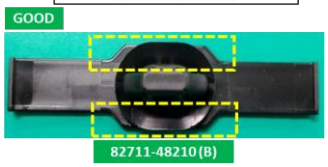
STANDARD TAPING FOR CLAMP
ONE SIDE

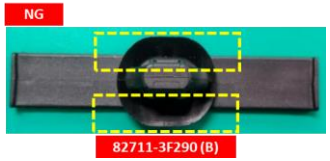
One wind for under tape



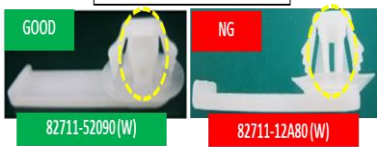
One side taping | Two sides taping

CLAMP ILLUSTRATION





CLAMP ILLUSTRATION



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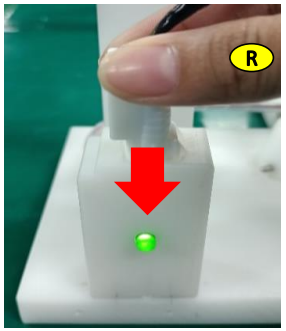
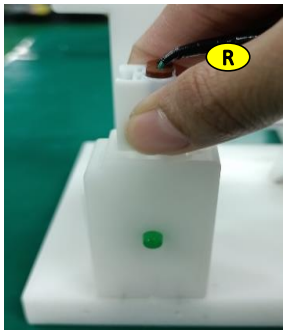
	WORK INSTRUCTION			Effectivity Date:	July 10, 2024		
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number: 100B / 7M0595-7021	Customer: TRJ	Car Model: LEXUS UX (TOYOTA)	Document No.:	WI-ENG-PDE-698		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.:	3 of 9

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

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	1 Clamp Assy	Connector Lock	  1. Put the connector into locking jig using right hand then press **2x** to lock using both hands. Check the lock if properly locked. Before lock After lock	LOCKING JIG	***Important reminders/Note/s:*** ***1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR.*** 1. Use the provided locking jig per model 2. No unlock/half-locked connector 3. No skip of locking process

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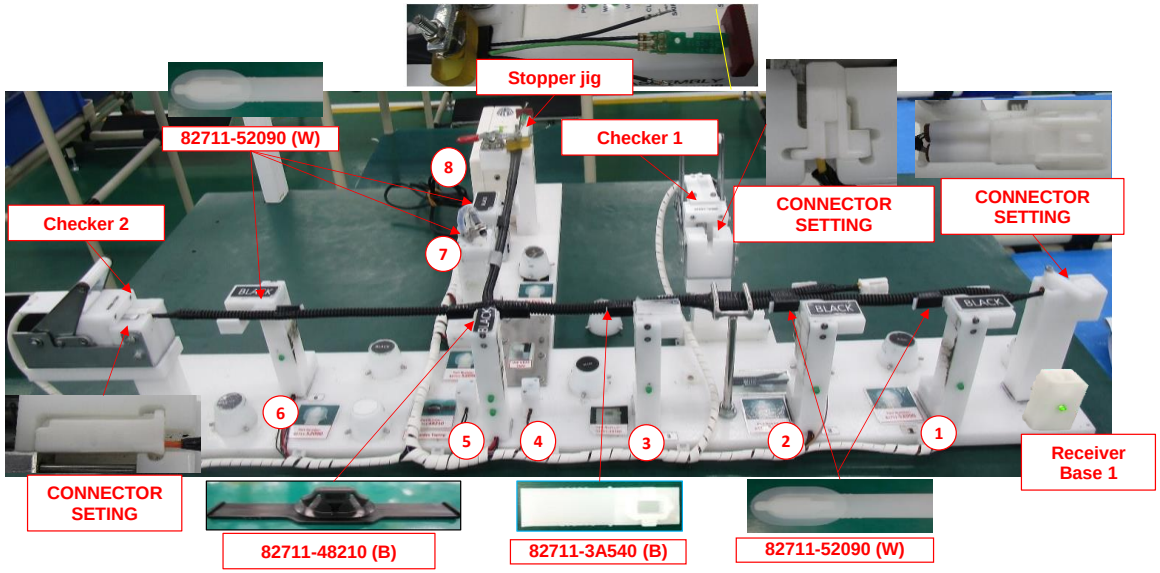
	Model code/Part number: 100B / 7M0595-7021	Customer: TRJ	Car Model: LEXUS UX (TOYOTA)	Document No.:	WI-ENG-PDE-698		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.:	4 of 9

PARTS:	1. Assy parts			JIG:	1. Clamp assembly jig
NO.	**PROCESS NAME**		**WORK PROCEDURE/ ILLUSTRATION**	**TOOLS/PPE**	**QUALITY POINTERS**
4	Clamp Assy	Clamp Assembly			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 ***Important reminders/note/s:*** *1. Please check all the clamp before start of assembly to avoid wrong use of parts.* *2. Make sure no gap between the holmelted wires and the stopper jig.* *3. Make 2-3 windings for clamp taping*

1. Get the assy parts and set into jig. ***(See above picture for correct setting).*** First, set the connector **6188-0407 (W)** to **Receiver base 1** and then lock. Second, set the connector **6098-3810 (W)** to **Checker 1** and then pull the checker fixture for continuity checking. Third, set the connector **6098-2220 (W)** to **Checker 2** and then pull the checker fixture for continuity checking. Last, set the hotmelted **G-B/W wires** together within the stopper and then press by toggle clamp. Continue if the sequence light on location **1** was ON.

2. Check if all **LED light** for **POWER ON, WIRE1, WIRE2, CLAMP ON** was **ON.** If encountered abnormality, **STOP** and immediately **CALL** the attention of the leader and **WAIT** for further instruction and then continue the process.

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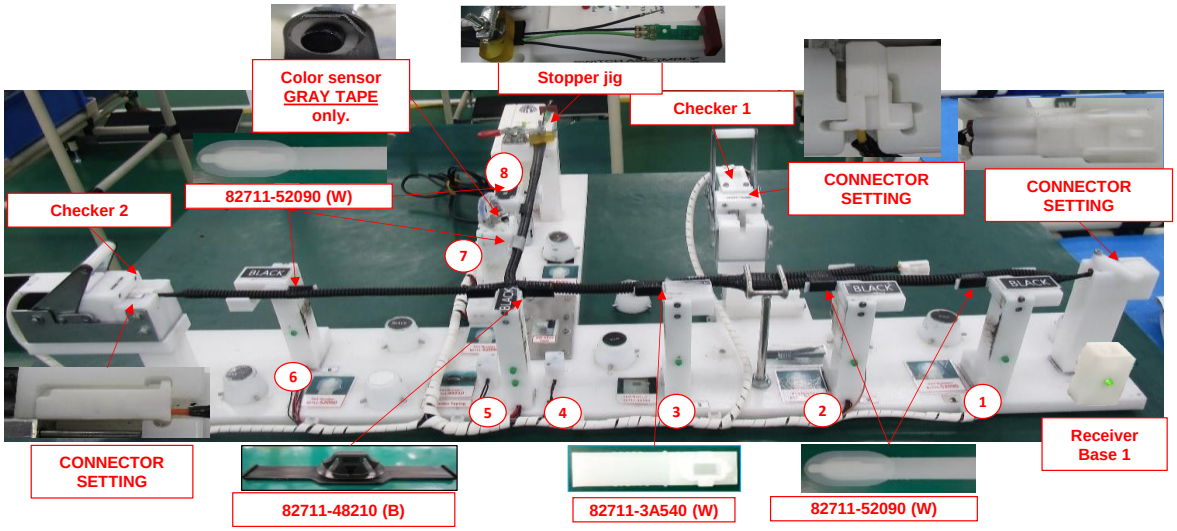
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.:	5 of 9

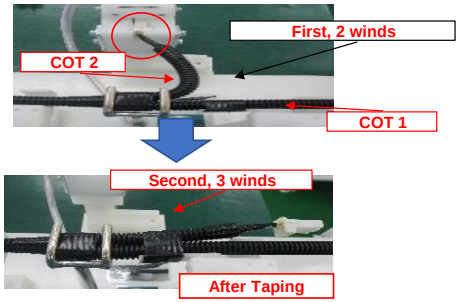
PARTS:	1. Assy parts	JIG:	1. Clamp assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy	Clamp Assembly (Continuation)			



3. Hold the tape on clamp location 1. Make **3 windings of tape** using both hands then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **2** was **ON.**

4. On clamp location **2,** hold the black tape using right hand then tape the clamp with **COT 1**, make **2 windings,** do not cut the tape. Then, remove connector **6098-3810 (W)** from **Checker 1.** Combine with **COT 2**, then tape. Make **3 windings of tape** using both hands then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **3** was **ON.**



Important reminders/note/s:

1. Please check all the clamp before start of assembly to avoid wrong use of parts.

2. Make sure no gap between the holmelted wires and the stopper jig.

3. 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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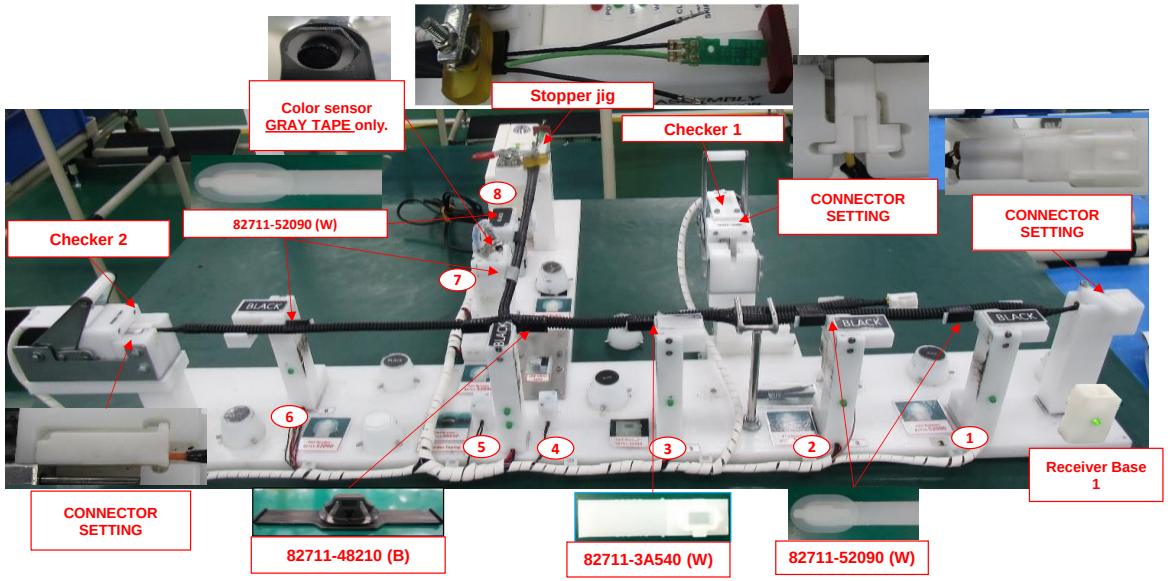
PARTS:	1. Assy parts	JIG:	1. Clamp Assembly Jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy	Clamp Assembly (Continuation)	 5. Hold the tape on clamp location **3.** Make **3 windings of tape** using both hands then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **4** was **ON.** 6. Hold the tape on clamp location **4.** Make **3 windings of tape** using both hands then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **5** was **ON.** 7. Hold the tape on clamp location **5.** Make **3 windings of tape** using both hands then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **6** was **ON.** 8. Hold the tape on clamp location **6.** Make **3 windings of tape** using both hands then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **7** was **ON.**		***Important reminders/note/s:*** *1. Please check all the clamp before start of assembly to avoid wrong use of parts.* *2. Make sure no gap between the holmelted wires and the stopper jig.* *3. 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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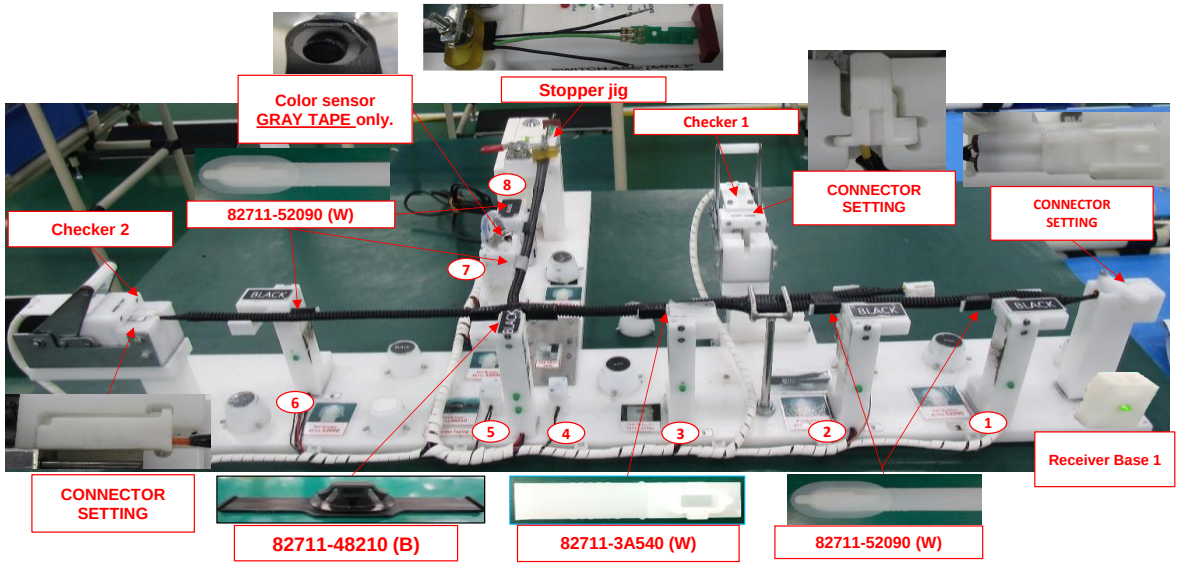
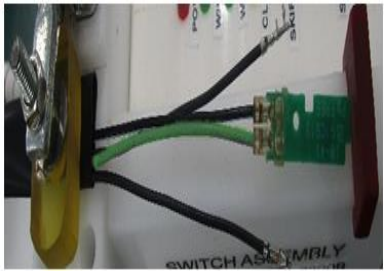
PARTS:	1. Assy parts	JIG:	1. Clamp Assembly Jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy	Clamp Assembly (Continuation)	 9. Hold the **Gray tape** using right hand and then start taping using both hands on clamp location **7.** Make **3 windings of tape** then cut the tape. **Color sensor** light will beep/buzzer if sensor detects **Gray tape.** Press the **SW button** after taping. Continue if the sequence light on location **8** was **ON.** **Note: Use GRAY TAPE only.** 10. Hold the tape on clamp location **8.** Make **3 windings of tape** using both hands then cut the tape. Press the **SW button** after taping. **Go** sound will be heard. 11. Conduct **POINT CHECKING** of all clamps & all taping before removing from jig.		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  ***Important reminders/note/s:*** *1. Please check all the clamp before start of assembly to avoid wrong use of parts.* *2. Make sure no gap between the holmelted wires and the stopper jig.* *3. Make 2-3 windings for clamp taping*

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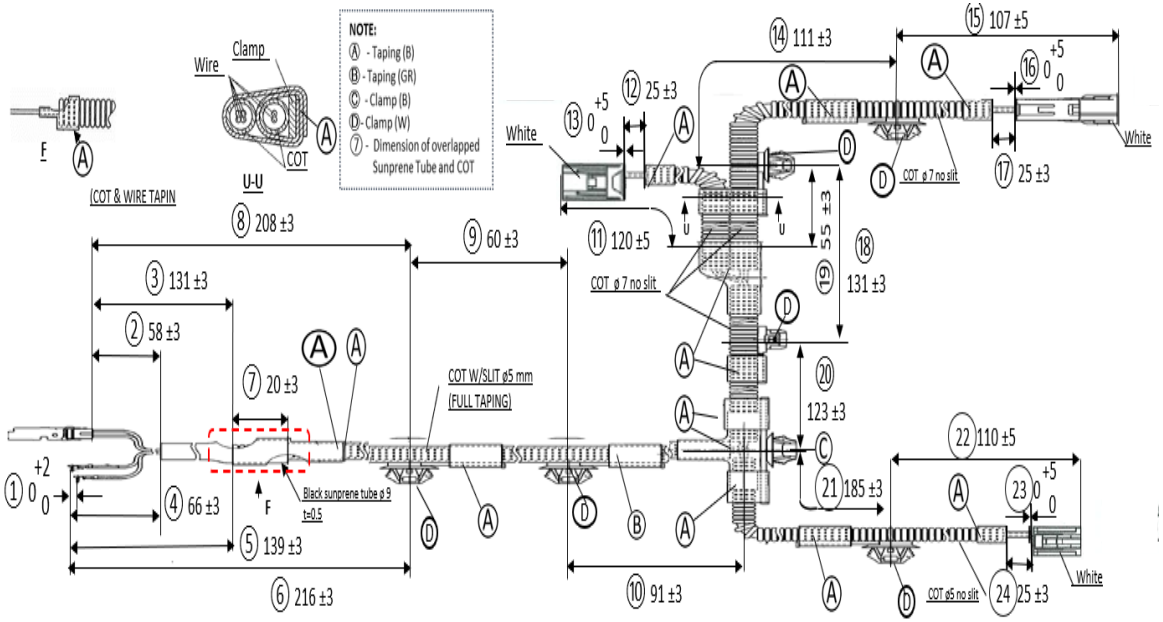
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.: 8 of 9

PARTS:	1. Assy parts			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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	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.: 1	Page No.: 9 of 9

PARTS:	1. Assy parts	JIG:	n/a

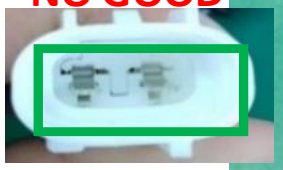
1 **VISUAL INSPECTION/ QUALITY CHECKPOINTS**

Clamp Assy

7M0595-7021

GOOD

NO GOOD

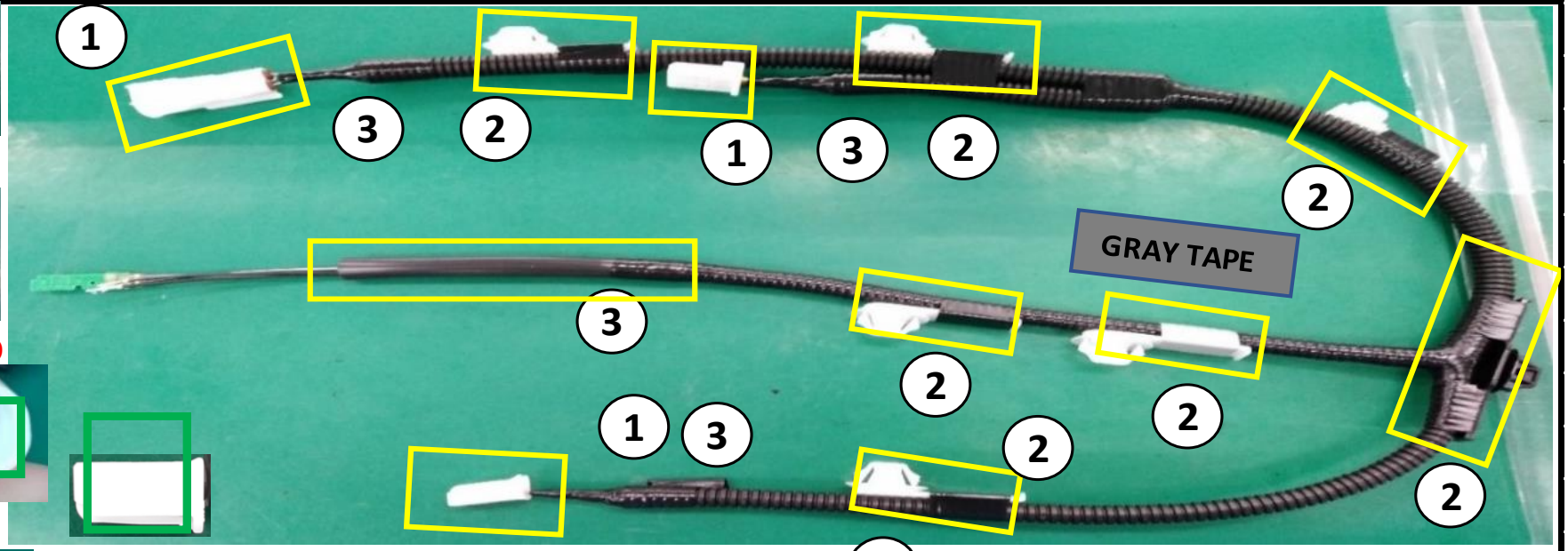


GOOD

GOOD

NO GOOD

NO GOOD



1 No WRONG INSERT
No UNLOCKED/HALFLOCKED
NO TBO

2 NO Missing Clamp

3 No Missing Tape
No WRONG USED OF TAPE

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