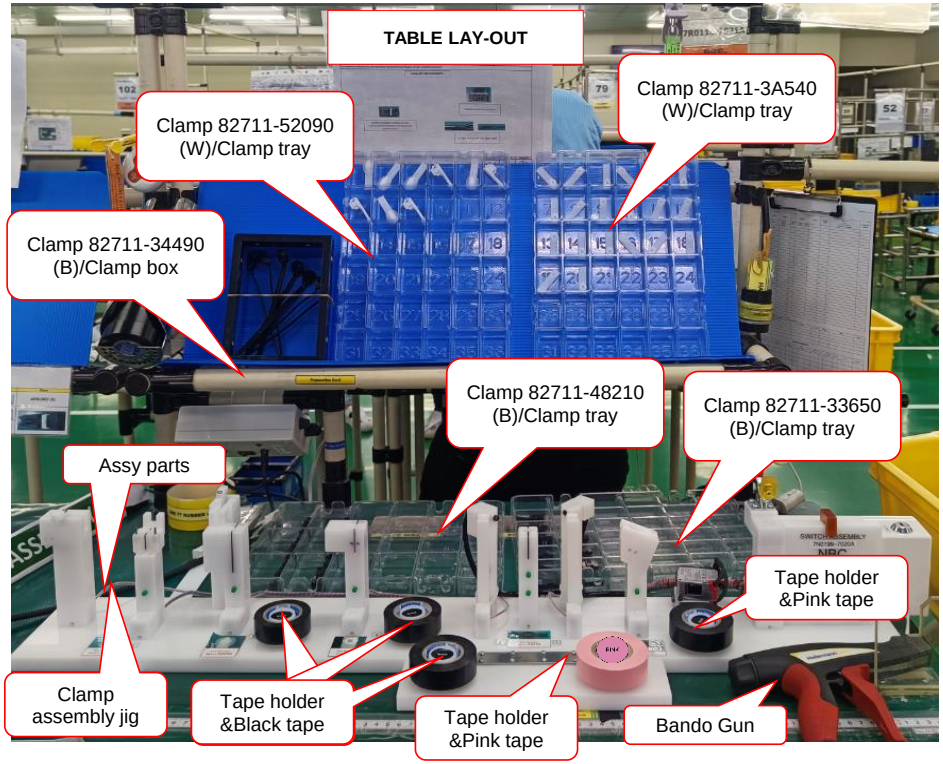
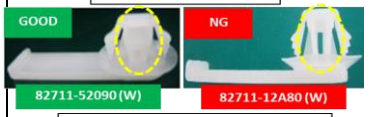
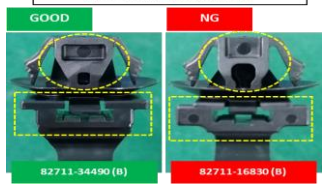
	WORK INSTRUCTION			Effectivity Date:	June 14, 2024	
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a	
	Model code/Part number: 310D / 7N0199-7020A	Customer: TRJ	Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-914	
	Purpose: ☐ PROTOTYPE	☐ PRE-LAUNCH	■ MASSPRO	Revision No.:	1	Page No.: 1 of 6

PARTS:	1. Clamp 82711-52090 (W) 2. Clamp 82711-48210 (B) 3. Clamp 82711-34490 (B)	4. Clamp 82711-3A540 (W) 5. Clamp 82711-33650 (B) 6. Black tape [4 pcs.]	7. Pink tape 8. Assy part	JIG:	1. Clamp Assembly Jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	Clamp Assy	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 missing parts/tools CLAMP ILLUSTRATION  BAND CLAMP ILLUSTRATION 

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted
06/14/24	1	Change the purpose from Pre-launch to Masspro. Additional table lay-out. Update the Visual inspections/Quality Checkpoints				
06/06/24	0	Initial issue.	M.Ariola	C. Villanueva	A. Arañes	n/a

Prepared by	Reviewed by	Approved by	Noted by
M. Ariola	C. Villanueva	A. Arañes	n/a
Est. Date:	June 6, 2024		

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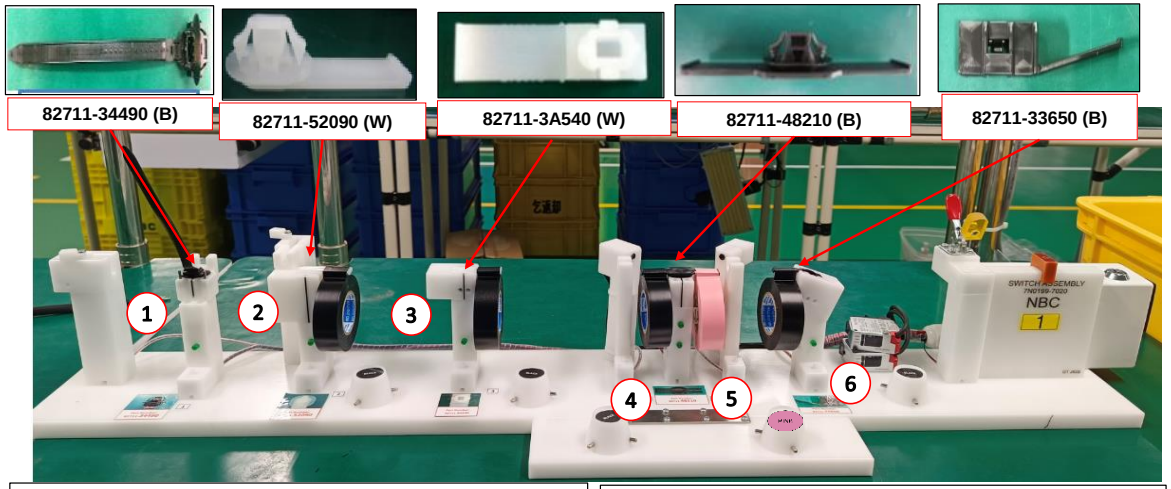
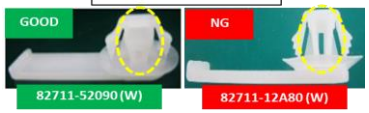
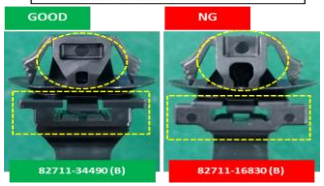
NBC	WORK INSTRUCTION			Effectivity Date:	June 14, 2024
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number:	310D / 7N0199-7020A	Customer: TRJ / Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-914
	Purpose:	☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO		Revision No.:	1 — Page No.: 2 of 6

PARTS:	1. Clamp 82711-52090 (W) 2. Clamp 82711-48210 (B) 3. Clamp 82711-34490 (B) 4. Clamp 82711-3A540 (W) 5. Clamp 82711-33650 (B) 6. Black tape [4 pcs.] 7. Pink tape	JIG:	1. Clamp Assembly Jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp setting	 1. Get 1pc. of clamp **82711-34490 (B)** using right hand and set to clamp location **1** using both hands. 2. Get 1pc. of clamp **82711-52090 (W)** using right hand and set to clamp location **2** using both hands. 3. Get 1pc. of clamp **82711-3A540 (W)** using right hand and set to clamp location **3** using both hands. 4. Get 1pc. of clamp **82711-48210 (B)** using right hand and set to clamp location **4 and 5** using both hands. 5. Get 1pc. of clamp **82711-33650 (B)** using right hand and set to clamp location **6** using both hands. 6. Initially attach **White tape** to clamp location **5** using both hands. 6. Initially attach **Black tape** to clamp location **2, 3, 4, and 6** using both hands.		1. No wrong use of tape 2. No wrong clamp position 3. No damaged clamp 4. No missing clamp ***Important reminders/Note/s:*** *1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.* STANDARD TAPING FOR CLAMP One wind for under clamp CLAMP ILLUSTRATION  BAND CLAMP ILLUSTRATION 

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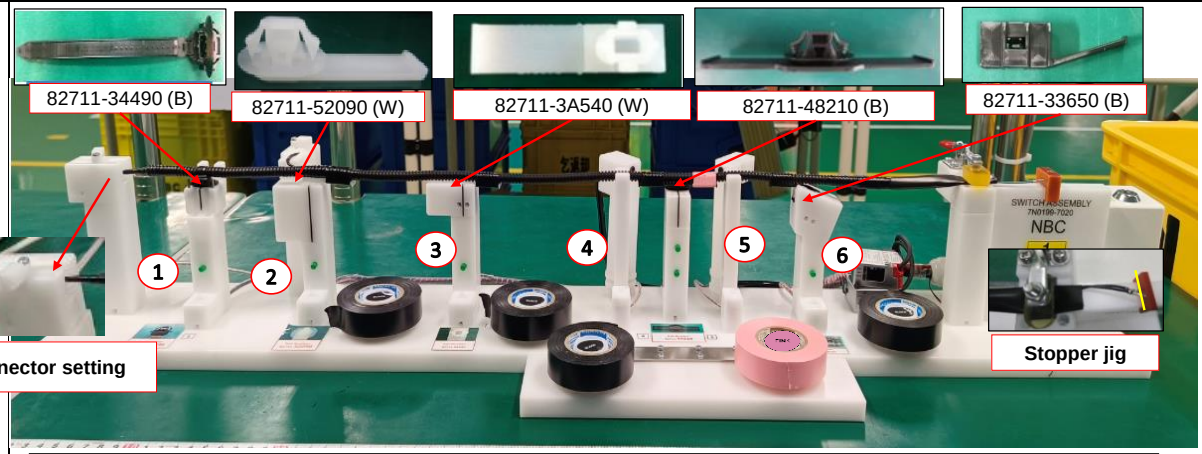
	WORK INSTRUCTION			Effectivity Date:	June 14, 2024	
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a	
	Model code/Part number: 310D / 7N0199-7020A	Customer: TRJ	Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-914	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.: 3 of 6

PARTS:	1. Clamp 82711-52090 (W) 2. Clamp 82711-48210 (B) 3. Clamp 82711-34490 (B)	4. Clamp 82711-3A540 (W) 5. Clamp 82711-33650 (B) 6. Black tape [4 pcs.]	7. Pink tape 8. Assy part	JIG:	1. Clamp Assembly Jig

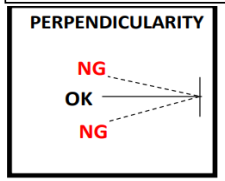
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	Clamp Assembly			1. No wrong use of tape 2. No wrong clamp position 3. No damaged clamp 4. No missing clamp

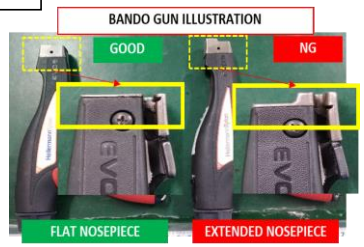


1. Put the assy into jig. ***(See above picture for the correct setting).*** First, set the connector **6098-3802 (W)** to **Receiver base 1.** Second, set the **B-B wires** together within stopper then press by toggle clamp.

2. Initially tighten the band clamp on **location 1** using both hands. Get the bando gun using right hand then cut the band clamp using both hands. Continue the process if the sequence light on **location 2** was **ON**.

BANDO GUN ALIGNMENT





Important reminders/Note/s:

1. Must be no gap between terminal and stopper jig.

2. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).

3. Setting of band clamp cutter depends on the size of the COT/SV tube (Vinyl) ø5- 1~2, ø7- 3~4

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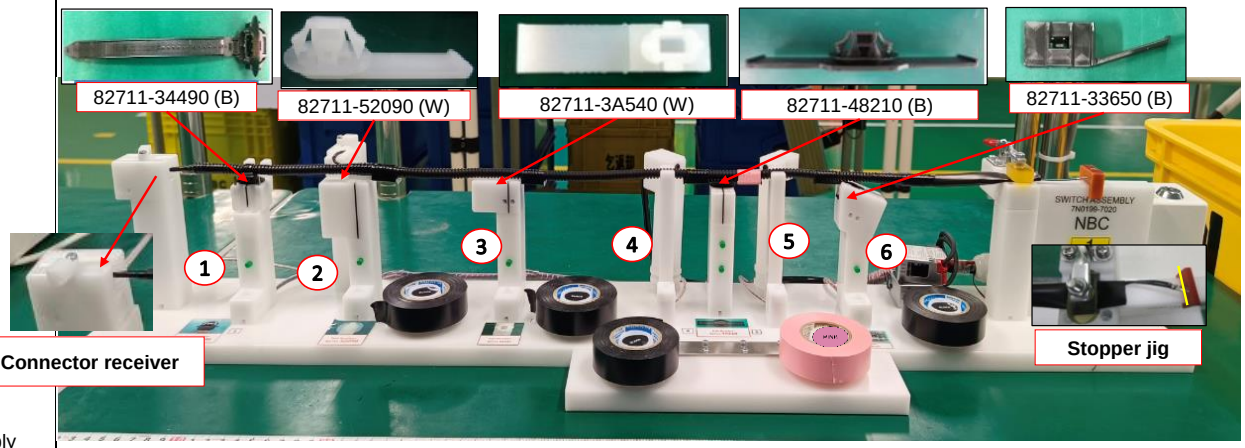
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number: 310D / 7N0199-7020A	Customer: TRJ	Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-914
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.: 1	Page No.: 4 of 6

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)			1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No tight/loose clamp attachment



3. On clamp location **2**, hold the tape then make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if the sequence light on **location 3** was **ON**.

4. On clamp location **3**, hold the tape then make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if the sequence light on **location 4** was **ON**.

5. On clamp location **4**, hold the tape then make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if the sequence light on **location 5** was **ON**.

6. On clamp location **5**, hold the tape then make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if the sequence light on **location 6** was **ON**.

7. On clamp location **6**, hold the tape then make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. **GO** sound will be heard.

8. After taping, **CONDUCT POINT CHECKING** before removing the harness from jig.

Important reminders/Note/s:

1. Must be no gap between terminal and stopper jig.

2. Make 2-3 windings for clamp taping

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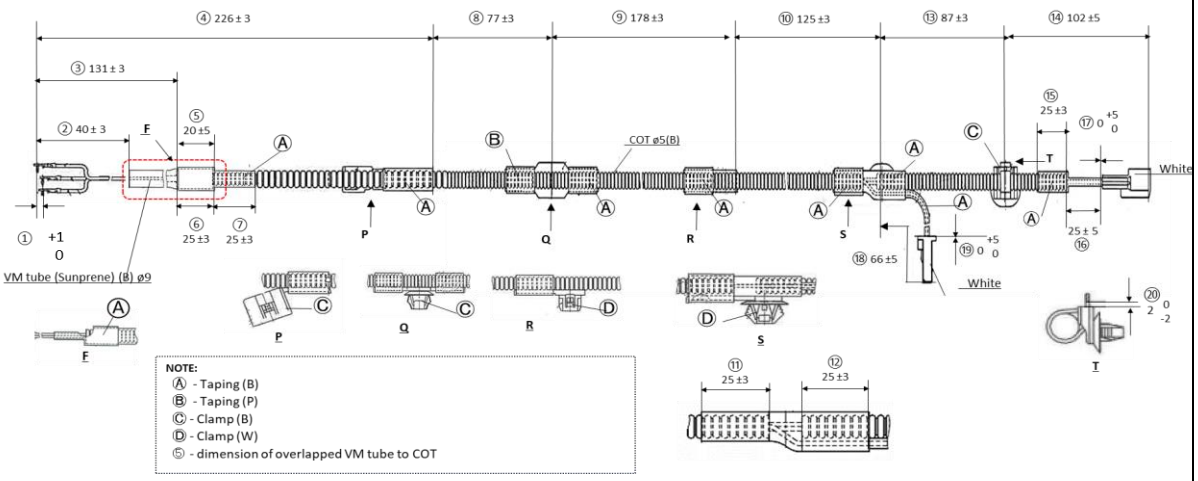
	Model code/Part number:	310D / 7N0199-7020A	Customer: TRJ / Car Model: TOYOTA-RAV4	Document No.:	WI-ENG-PDE-914
	Purpose:	☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO		Revision No.:	1 / Page No.: 5 of 6

PARTS:	1. Assy parts	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	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.: 6 of 6

PARTS:	1. Assy parts	JIG:	n/a

⚠1 **VISUAL INSPECTION/ QUALITY CHECKPOINTS**

CLAMP ASSY **7N0199-7020A**

1. **Check the alignment of clamp**
2. **No Missing Tape (Black tape)**

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