

**WORK INSTRUCTION**

Process Name/Title:

CLAMP ASSEMBLY PROCESS

Effectivity Date:

June 11, 2024

Model code/Part number:

310D / 7N0198-7020ACustomer: **TRJ**

Car Model:

TOYOTA RAV4

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

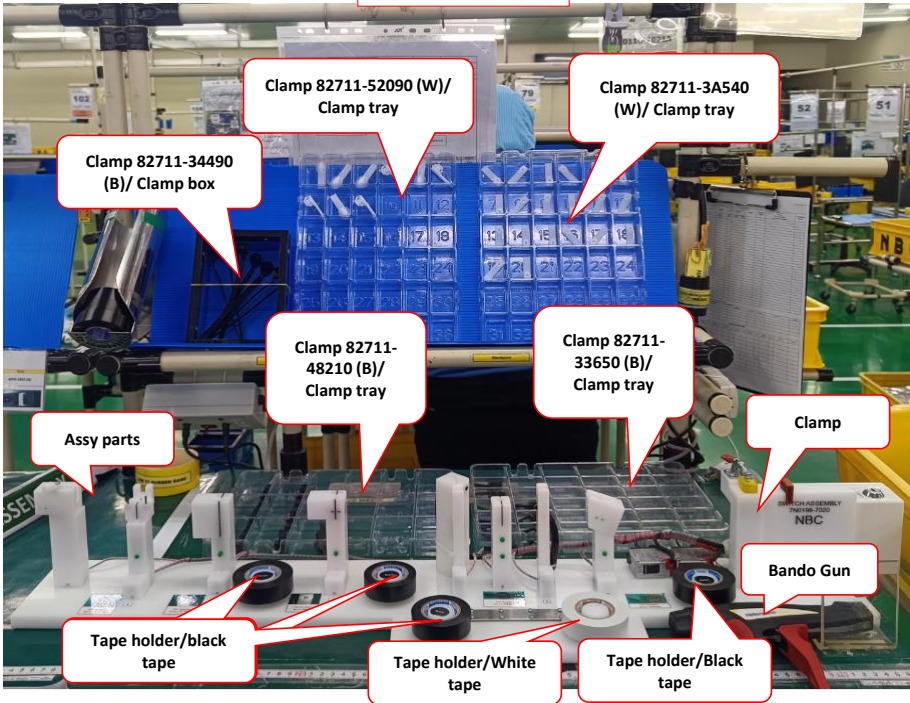
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PARTS:		1. Clamp 82711-52090 (W) 2. Clamp 82711-48210 (B) 3. Clamp 82711-34490 (B) 4. Clamp 82711-3A540 (W) 5. Clamp 82711-33650 (B) 6. Black tape [4pcs] 7. White tape				JIG:	1. Clamp Assembly Jig		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS		
1	Clamp Assy 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>CLAMP ILLUSTRATION</p> <p>GOOD: 82711-52090 (W) NG: 82711-12A80 (W)</p> <p>BAND CLAMP ILLUSTRATION</p> <p>GOOD: 82711-34490 (B) NG: 82711-16830 (B)</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	1	Change purpose from Pre-launch to Masspro. Update illustration of clamp setting, clamp assembly and Visual Inspection/ Quality Checkpoints.							
06/03/24	0	Initial issue.				M. Ariola	C. Villanueva	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted

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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp setting	<div>1. Get 1pc. of clamp 82711-34490 (B) using right hand and set to clamp location 1 using both hands.</div> <div>2. Get 1pc. of clamp 82711-52090 (W) using right hand and set to clamp location 2 using both hands.</div> <div>3. Get 1pc. of clamp 82711-3A540 (W) using right hand and set to clamp location 3 using both hands.</div> <div>4. Get 1pc. of clamp 82711-48210 (B) using right hand and set to clamp location 4 and 5 using both hands.</div> <div>5. Get 1pc. of clamp 82711-33650 (B) using right hand and set to clamp location 6 using both hands.</div> <div>6. Initially attach White tape to clamp location 5 using both hands.</div> <div>7. Initially attach Black tape to clamp location 2, 3, 4, and 6 using both hands.</div>			<p>1. No wrong use of tape 2. No wrong clamp position 3. No damaged clamp 4. No missing clamp</p> <p>Document references: 1. Refer to WI-ENG-PDE-911 Taping Assembly Process</p> <p>Important reminders/Note/s: 1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.</p> <p>2. One wind for under tape</p> <p>CLAMP ILLUSTRATION</p> <p>GOOD NG </p> <p>82711-52090 (W) 82711-12A80 (W)</p> <p>BAND CLAMP ILLUSTRATION</p> <p>GOOD NG </p> <p>82711-34490 (B) 82711-16830 (B)</p> <p>STANDARD TAPING FOR CLAMP</p> <p>One wind for under clamp</p>

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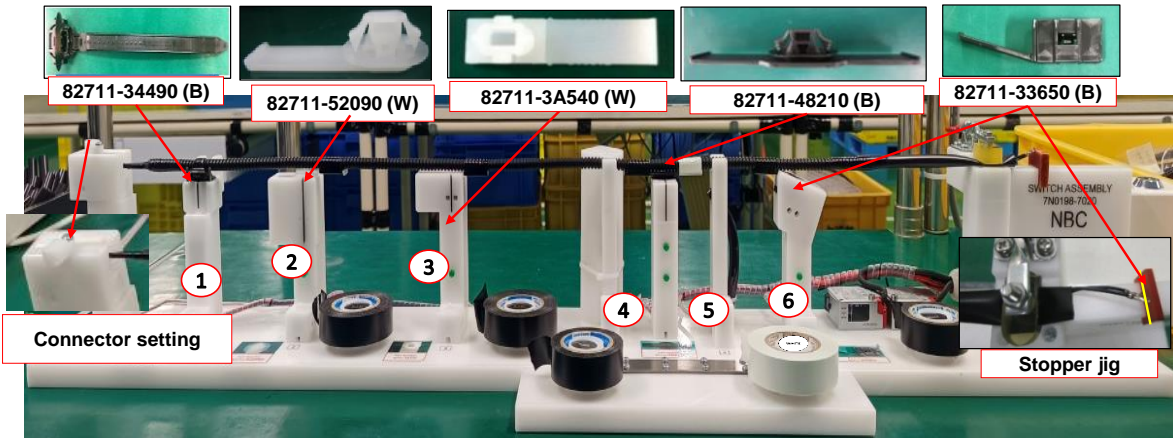


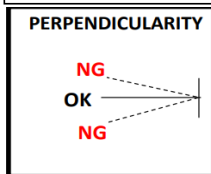



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NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp Assembly	<div><div></div><div>1. Put the assy into jig. <i>(See above picture for the correct setting)</i>. First, set the connector 6098-3802 (W) to Receiver base 1. Second, set the B-B wires together within stopper then press by toggle clamp.</div><div>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.</div><div><div><p>PROPER CUTTING POSITION OF BANDO GUN</p><p>GOOD</p></div><div><p>IMPROPER CUTTING POSITION OF BANDO GUN</p><p>NG</p></div></div><div><div><p>PERPENDICULARITY</p><p>NG OK NG</p></div><div><p>Fixed setting of band clamp cutter: 1~ 2</p></div><div><div><p>BANDO GUN ILLUSTRATION</p><p>GOOD</p><p>NG</p><p>FLAT NOSEPIECE</p><p>EXTENDED NOSEPIECE</p></div><div><p>0 ~ 2mm</p></div></div></div><div><div><p>Important reminders/Note/s:</p><p>1. Must be no gap between terminal and stopper jig.</p><p>2. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).</p><p>3. Setting of band clamp cutter depends on the size of the COT/SV tube (Vinyl) ø5- 1~2, ø7- 3~4</p></div></div></div>			

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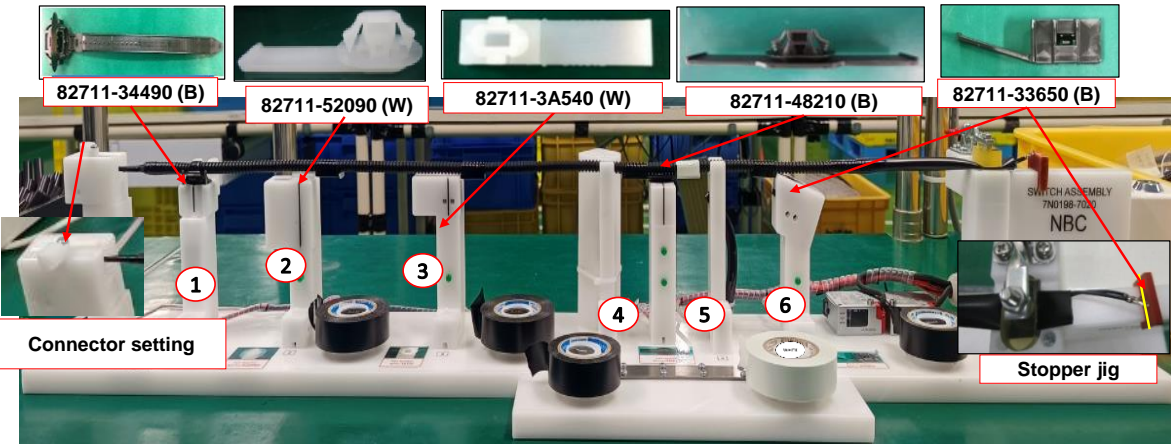



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PARTS:		1. Assy parts		JIG:	1. Clamp Assembly Jig
NO.	PROCESS NAME	⚠ WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	Clamp Assembly		<div></div> <div>3. On clamp location 2, hold the tape then make 3 windings of tape then cut the tape using both hands. Continue the process if the sequence light on location 3 was ON.</div> <div>4. On clamp location 3, hold the tape then make 3 windings of tape then cut the tape using both hands. Continue the process if the sequence light on location 4 was ON.</div> <div>5. On clamp location 4, hold the tape then make 3 windings of tape then cut the tape using both hands. Continue the process if the sequence light on location 5 was ON.</div> <div>6. On clamp location 5, hold the tape then make 3 windings of tape then cut the tape using both hands. Continue the process if the sequence light on location 6 was ON.</div> <div>7. On clamp location 6, hold the tape then make 3 windings of tape then cut the tape using both hands. Continue the process if the sequence light on location 6 was ON.</div> <div>8. After taping, CONDUCT POINT CHECKING before removing the harness from jig.</div>	<div>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</div> <div></div> <div>Important reminders/Note/s: 1. <i>Must be no gap between terminal and stopper jig.</i> 2. <i>Make 2-3 windings for clamp taping</i></div> <div><div>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div>82711-52090 (W)</div></div><div><div>NG</div><div>82711-12A80 (W)</div></div></div>

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PARTS:

1. Assy parts

JIG:

n/a

NO.

PROCESS NAME

1 WORK PROCEDURE/ ILLUSTRATION

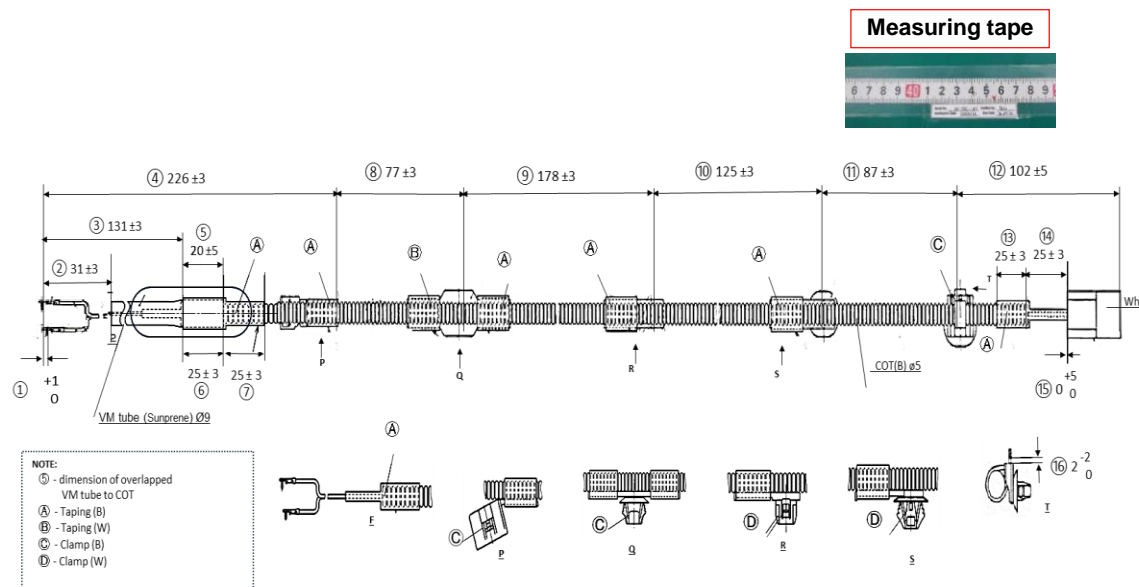
TOOLS/PPE

QUALITY POINTERS

4

Clamp
Assy

Measurement



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****7N0198-7020A**

1

Check the alignment of clamp

2

No Missing tape

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