



WORK INSTRUCTION

CLAMP ASSEMBLY PROCESS

Process Name/Title:

Model code/Part number: 311D / 7L0151-7022 Customer: TRQSS Car Model: TOYOTA-RAV4

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

August 28, 2024

Validity Date:

n/a

Document No.:

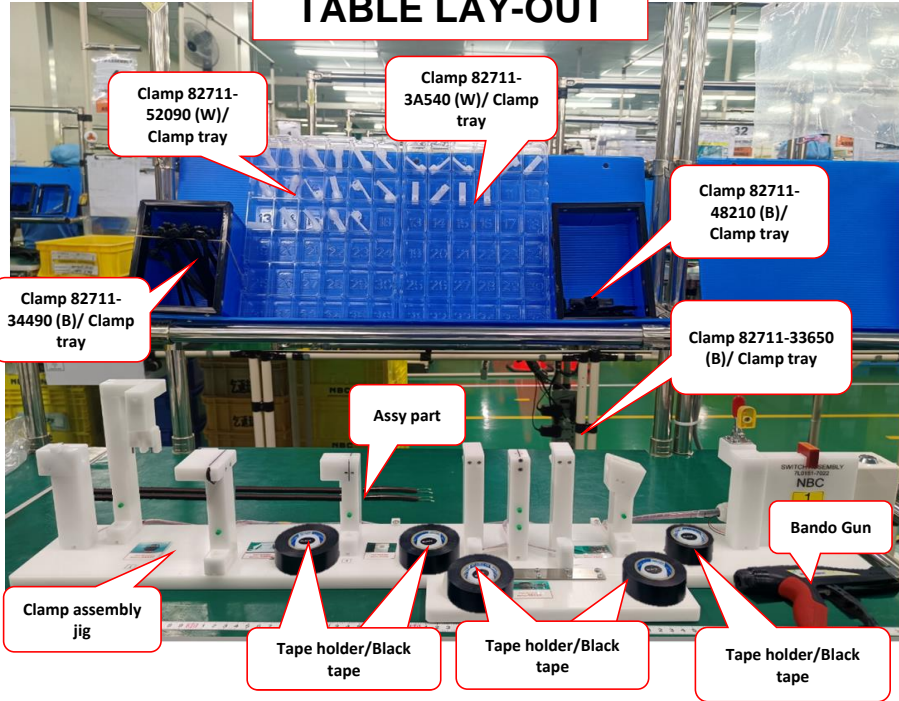
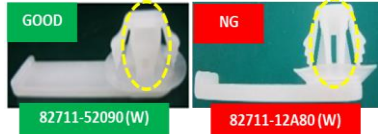
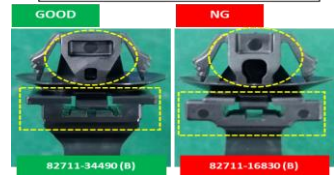
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PARTS:		1. Assy parts; Clamp 82711-52090 (W); 82711-48210(B); Clamp 82711-34490 (B); Clamp 82711-3A540 (W); Clamp 82711-33650 (B); Black tape [5pcs.]				JIG:		1. Clamp assembly jig									
NO.		PROCESS NAME		1 WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE		QUALITY POINTERS							
1		Clamp assy		<div>TABLE LAY-OUT</div> 				<div>Safety Instruction Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)</div> <div>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>		<div>1. No missing parts/tools 2. No excess parts/tools</div> <div>CLAMP ILLUSTRATION  BAND CLAMP ILLUSTRATION </div>							
Revision History										Prepared by		Reviewed by		Approved by		Noted by	
08/29/24		1		Change Purpose from Pre-launch to Masspro. Update the Work procedure/Illustrations.				M. Ariola		C.Villanueva		A. Arañes		n/a			
07/19/24		0		Initial issue. Excluded process from WI-ENG-PDE-844. Change Process name/Title from TAPING ASSEMBLY PROCESS to CLAMP ASSEMBLY PROCESS due to new process improvement. Provide permanent Clamp assembly jig and Additional table lay-out. Improved measurement and Visual Inspections/Quality checkpoints. Change purpose from Pre-launch to Masspro.				M. Ariola		C.Villanueva		A. Arañes		n/a			
Eff. Date		Rev. No		Details of Change				Revised		Reviewed		Approved		Noted		Est. Date:	
																July 19, 2024	

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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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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 [5 pcs.]

JIG:

1. Clamp assembly jig

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

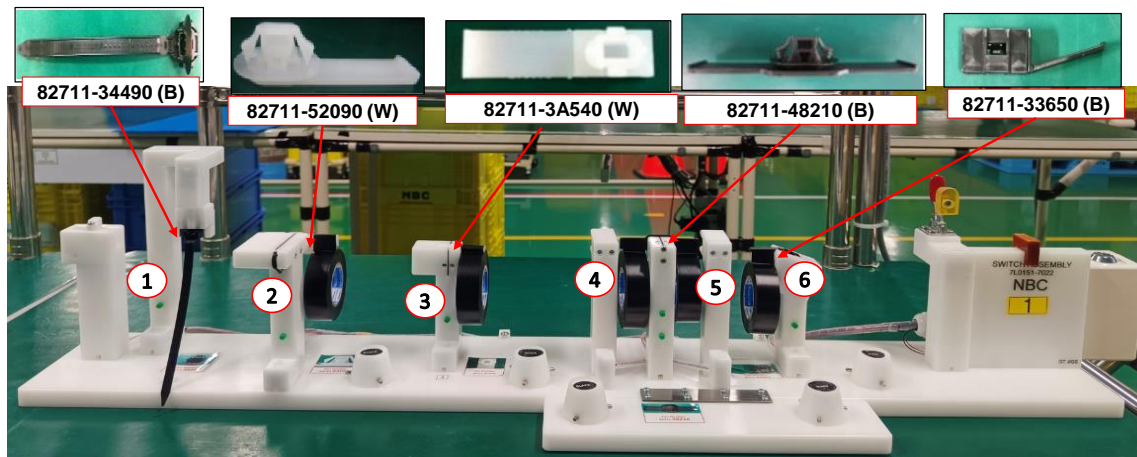
TOOLS/PPE

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 **2 and 3** using both hands.

5. Get 1pc. of clamp **82711-33650 (B)** using right hand and set to clamp location **1** using both hands.

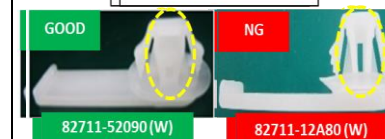
6. Initially attach **Black tape** to clamp location **1, 2, 3, 4 and 5** using both hands.

1. No wrong use of parts
2. No wrong use of tape
3. No damaged clamp
4. No wrong clamp position

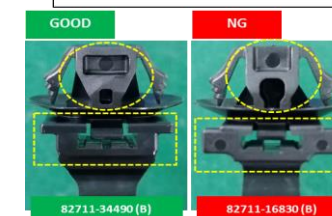
Important reminders/Note/s:

1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.

CLAMP ILLUSTRATION



BAND CLAMP ILLUSTRATION



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PARTS:

1. Assy parts
2. Black tape [5pcs]

JIG:

1. Clamp assembly jig

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

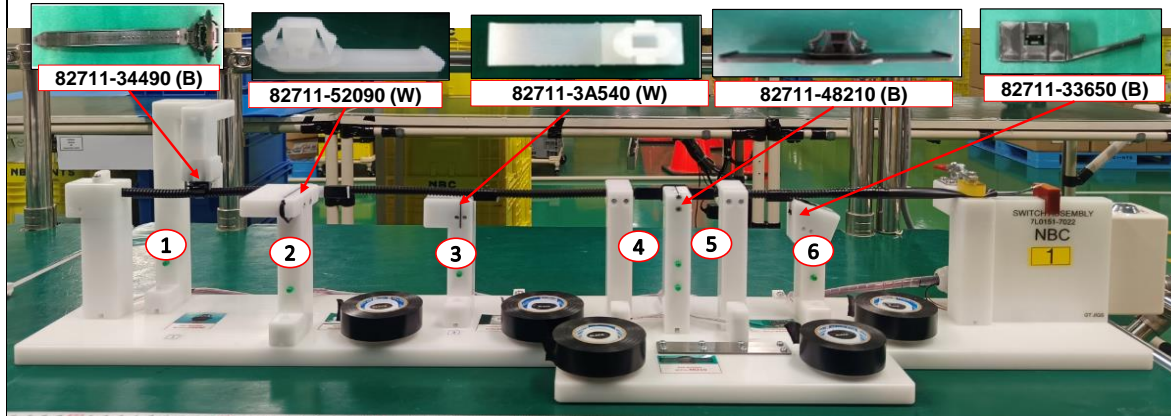
TOOLS/PPE

QUALITY POINTERS

3

Clamp
assy

Clamp assembly



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.

3. Hold the tape on clamp location **2** make **3 windings** of tape then cut the tape using both hands. Proceed to clamp location **3**.

4. On clamp location **3**, hold the tape then make **3 windings** of tape then cut the tape using both hands. Proceed to clamp location **4**.

PROPER CUTTING POSITION OF BANDO GUN



BANDO GUN ALIGNMENT

IMPROPER CUTTING POSITION OF BANDO GUN



1. No wrong use of parts
2. No wrong use of tape
3. No damaged clamp
4. No wrong clamp position

Important reminders/Note/s:

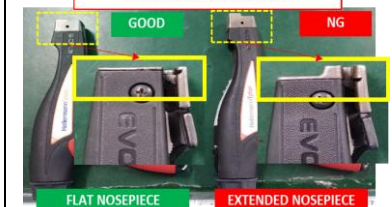
1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.

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



BANDO GUN ILLUSTRATION



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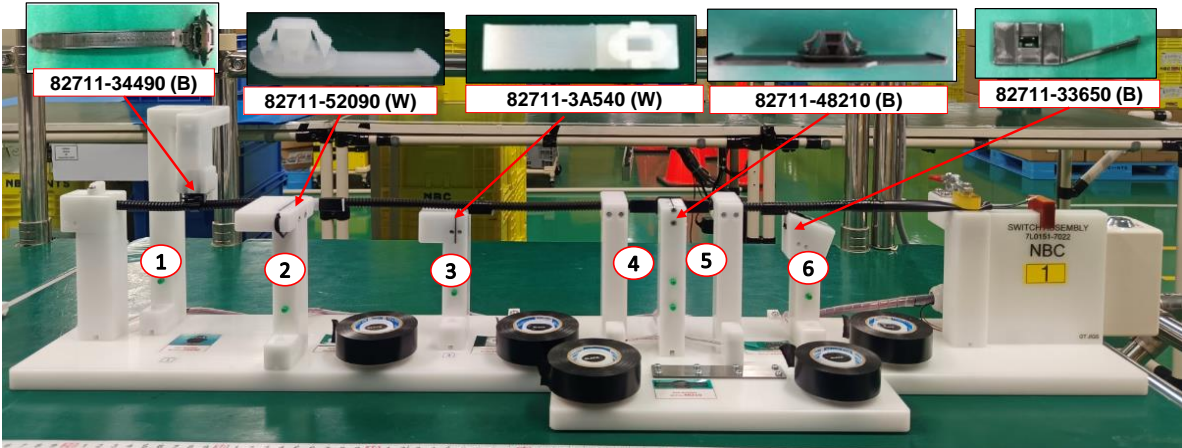
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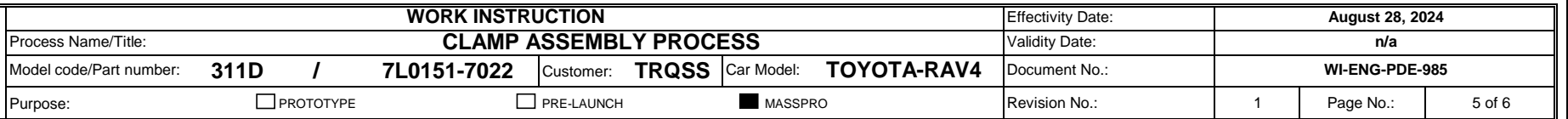
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PARTS:	1. Assy parts		JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	<div>1</div> WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Clamp assy Clamp assembly (Continuation)	<div><div>5. On clamp location 4, hold the tape then make 3 windings of tape then cut the tape using both hands. Proceed to clamp location 5.</div><div>6. On clamp location 5, hold the tape then make 3 windings of tape then cut the tape using both hands. proceed to Clamp location 6.</div><div>7. On clamp location 6, hold the tape then make 3 windings of tape then cut the tape using both hands.</div><div>8. After taping, CONDUCT POINT CHECKING before removing the harness from jig.</div></div>		1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position

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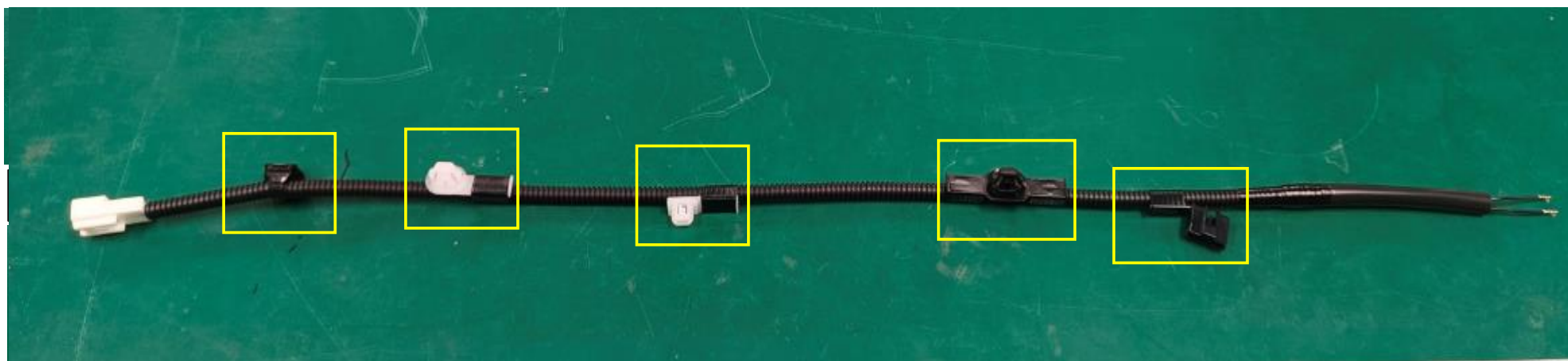
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PARTS:

n/a

JIG:

n/a

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****CLAMP
ASSY****7L0151-7021****1** Check the **alignment of clamps****2** No **Missing tape (Black tape)**

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