



## WORK INSTRUCTION

Process Name/Title:

## CLAMP ASSEMBLY PROCESS

Model code/Part number:

311D / 7L0152-7023

Customer:

TRQSS

Car Model:

TOYOTA RAV 4

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

October 4, 2024

Validity Date:

n/a

Document No.:

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Revision No.:

0

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**PARTS:** 1. Assy parts; clamp 82711-48210 (B) [2 pcs.]; Clamp 82711-3A640 (B); 4. Clamp 82711-33640 (B); Black Tape [6 pcs.]

JIG:

1. Clamp Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

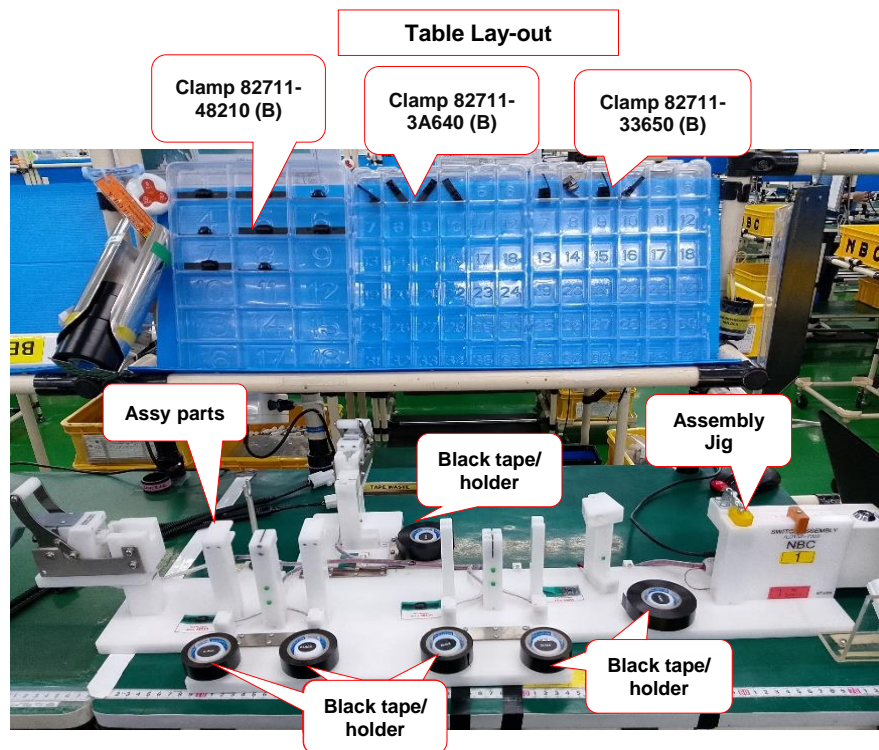
TOOLS/PPE

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.

**Important reminders/Note/s:**

1. Refer to WI-ENG-PDE-675 for Offline assembly process
2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance

1. No missing parts/tools
2. No excess parts/tools

## Revision History

Prepared by

Reviewed by

Approved by

Noted by

10/04/24

0

Initial issue.

A.Hernandez

C. Villanueva

A. Arañes

n/a

A.Hernandez

C. Villanueva

A.Arañes

n/a

Eff. Date

Rev. No

Details of Change

Revised

Reviewed

Approved

Noted

Est. Date:

October 4, 2024

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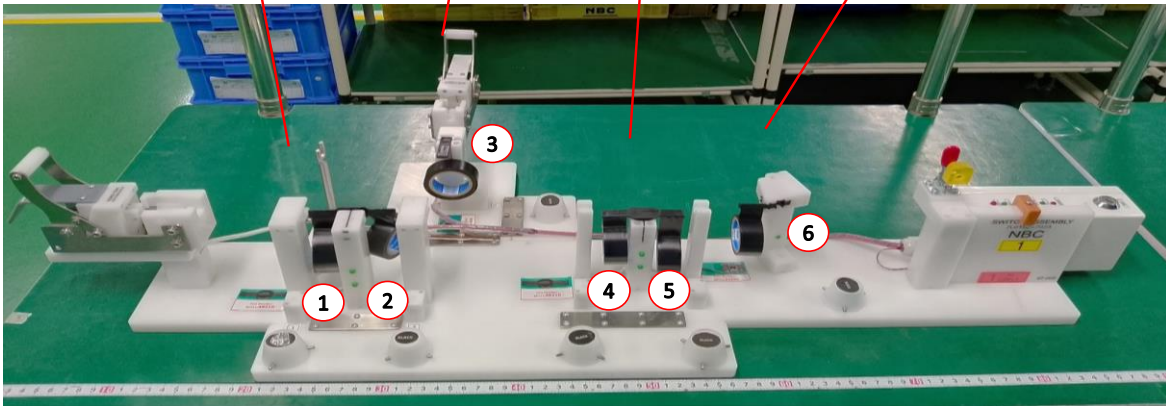
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PARTS:		1. Assy parts 2. Clamp 82711-48210 (B) [2 pcs.] 3. Clamp 82711-3A640 (B)		4. Clamp 82711-33640 (B) 5. Black Tape [6 pcs.]		JIG:	1. Clamp Assembly jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp Setting	<div><div> 82711-48210 (B)</div><div> 82711-3A640 (B)</div><div> 82711-48210 (B)</div><div> 82711-33650 (B)</div></div>  <div>1. Get 1pc. of clamp <b>82711-48210 (B)</b> using right hand and set to clamp location <b>1,2,4 and 5</b> using both hands.</div> <div>2. Get 1pc. of clamp <b>82711-3A640 (B)</b> using right hand and set to clamp location <b>6</b> using both hands.</div> <div>3. Get 1pc. of clamp <b>82711-33650 (B)</b> using right hand and set to clamp location <b>5</b> using both hands.</div> <div>4. Initially attach <b>Black tape</b> to clamp location <b>1, 2, 3,4,5 and 6</b> using both hands.</div>				<div>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</div> <div><b>Important reminders/Note/s:</b>  <b>1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.</b></div>

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Car Model: **TOYOTA RAV 4**

Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

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PARTS:		1. Assy parts 2. Black tape		JIG:	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	<div><div><div><div><div>Connector Setting</div><div>82711-48210 (B)</div></div><div><div>82711-3A640 (B)</div><div>82711-48210 (B)</div><div>82711-33650 (B)</div></div></div><div></div></div><div><div><p>1. Put the assy parts into jig (<i>See above picture for the correct setting</i>). First, set the <b>connector 6188-0093 (W)</b> to <b>checker 1</b>. Second, set the <b>(VM tube (Sunprene) with B-B wires)</b> together with the stopper then press by toggle clamp. Last, initially put the COT (with <b>Connector 6189-1161(B)</b>) in hook.</p></div><div><p>2. Check if <b>LED</b> light for <b>POWER, CLAMP, WIRE 1</b> and <b>WIRE 2</b>, and sequence light was <b>ON</b>. If encountered abnormality, <b>STOP</b> immediately and <b>CALL</b> the attention of the leader . <b>WAIT</b> for the further instructions. Continue it the sequence light on <b>location 1</b> was <b>ON</b>.</p></div></div><div><div><div><div><div>COT 1</div><div>HOOK</div></div><div><div>COT 2</div><div>SIDE A</div></div></div><div></div></div><div><p>3. Wrap the <b>COT 2 (SIDE A)</b> of clamp 2 windings of tape using both hands. Press the <b>SW</b> button after taping (<b>Do not cut the tape</b>).</p></div></div></div>			<div><p><b>Important reminders/Notes</b></p><p><b>1. Please check the clamp first before start of clamp assembly to avoid wrong use of clamp.</b></p><p>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</p><div><div>CLAMP ILLUSTRATION</div><div><div><div>GOOD</div><div></div><div>82711-48210 (B)</div></div><div><div>NG</div><div></div><div>82711-3F290 (B)</div></div></div></div></div>

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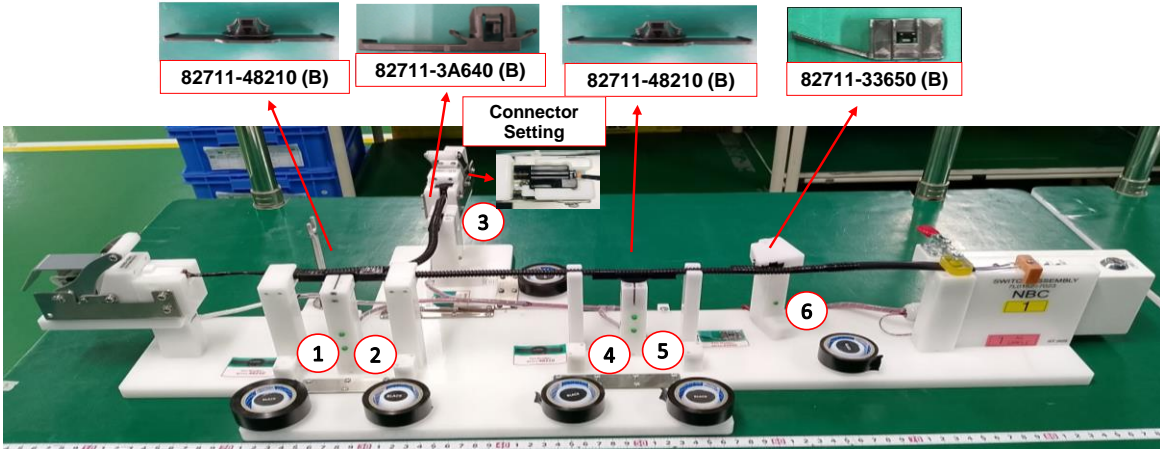


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PARTS:		1. Assy parts 2. Black tape		JIG:	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy  Clamp Assembly (Continuation)	<div></div> <div>4. Remove the <b>COT 1</b> from the hook and set the <b>connector 6189-1161 (B)</b> to <b>Checker 2</b> using both hands then lock. (<i>Refer to above illustration for the correct setting</i>). Continue the process if the sequence light was <b>ON</b>.</div> <div>5. Combine the <b>COT 1</b> and <b>COT 2</b>. Hold the black tape on clamp <b>location 1 (SIDE A)</b> then start taping using both hand. Make <b>3 windings</b> of tape then cut the tape. Press the <b>SW button</b> after taping. Continue the process if the sequence light on <b>location 2</b> was <b>ON</b>.</div> <div>6. On Clamp <b>location 2 (SIDE B)</b>. Hold the Black tape using right hand. Make <b>3 winding</b> of tape then cut the tape. Press the <b>SW button</b> after taping. Continue the process if the sequence light on <b>location 3</b> was <b>ON</b>.</div>			<p><i>Important reminders/Notes</i></p> <p><i>1. Please check the clamp first before start of clamp assembly to avoid wrong use of clamp.</i></p> <p>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</p> <div><p>CLAMP ILLUSTRATION</p><div><p>GOOD</p><p>82711-48210 (B)</p></div><div><p>NG</p><p>82711-3F290 (B)</p></div></div>

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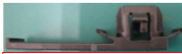


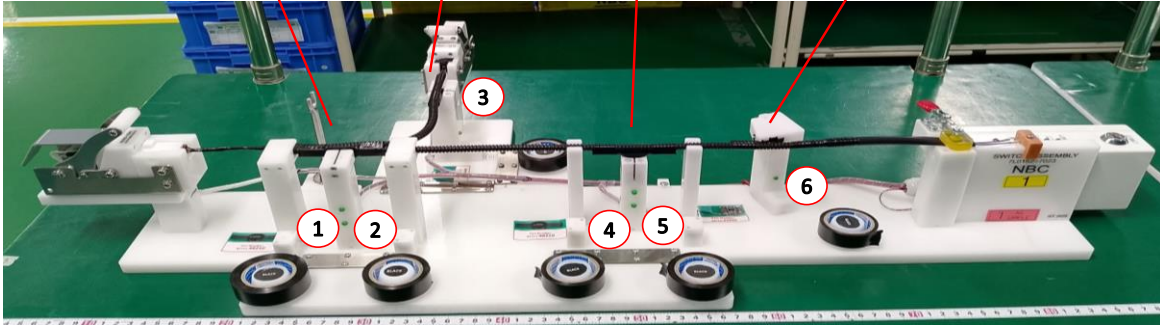


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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy  Clamp Assembly (Continuation)	<div><div> 82711-48210 (B)</div><div> 82711-3A640 (B)</div><div> 82711-48210 (B)</div><div> 82711-33650 (B)</div></div> <div><div><div>7. On Clamp <b>location 3</b> hold the Black tape using right hand. Make <b>3 winding</b> of tape then cut the tape. Press the SW button after taping. Continue the process if the sequence light on <b>location 4</b> was <b>ON</b>.</div><div>8. On Clamp <b>location 4</b> hold the Black tape using right hand. Make <b>3 winding</b> of tape then cut the tape. Press the SW button after taping. Continue the process if the sequence light on <b>location 5</b> was <b>ON</b>.</div><div>9. On Clamp <b>location 5</b> hold the Black tape using right hand. Make <b>3 winding</b> of tape then cut the tape. Press the SW button after taping. Continue the process if the sequence light on <b>location 6</b> was <b>ON</b>.</div></div><div><div>10. On Clamp <b>location 6</b> hold the Black tape using right hand. Make <b>3 winding</b> of tape then cut the tape. Press the SW button after taping. <b>GO</b> buzzer will be heard.</div><div>11. After taping, <b>CONDUCT POINT CHECKING</b> before removing the harness from jig.</div></div></div> <div><div>Important reminders/Notes</div><div>1. Please check the clamp first before start of clamp assembly to avoid wrong use of clamp.</div><div>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</div><div><div>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div>82711-48210 (B)</div></div><div><div>NG</div><div>82711-3F290 (B)</div></div></div></div>			

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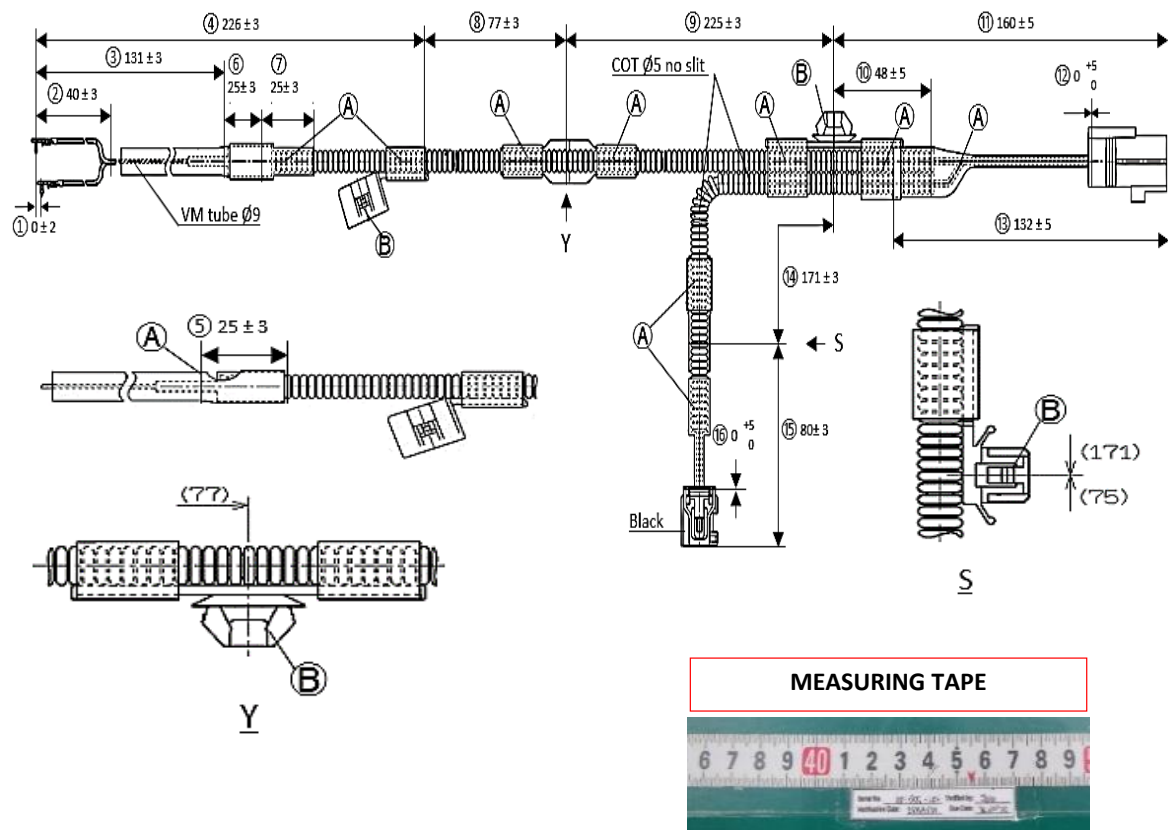
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PARTS:	1. Assy Parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy Measurement			<p><b>Important reminders and note/s:</b></p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>2. For Hatsumono, Nakamono and Owarimono.</p> <p><b>Document reference/s:</b></p> <p>1. Refer to <b>WI-PRO-ASY-056</b> for Sub-assembly Hatsumono Nakamono Owarimono Inspection</p> <p>1. No wrong dimension</p>

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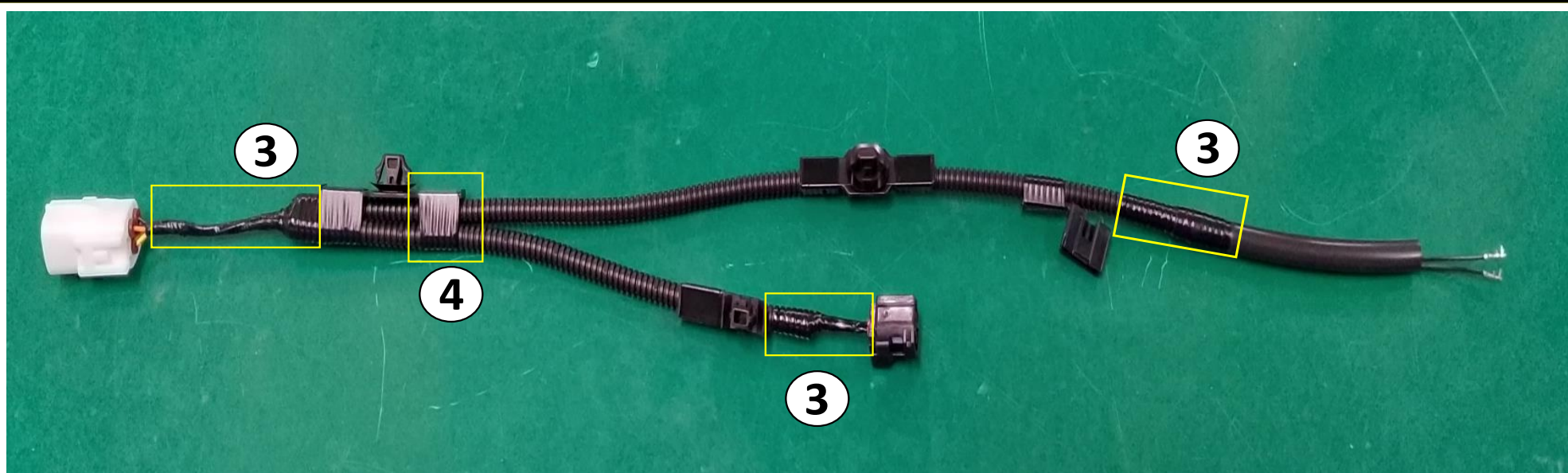
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n/a

JIG:

n/a

**VISUAL INSPECTION/QUALITY CHECKPOINTS****CLAMP ASSY****7L0152-7023**

- ① Check the Clamp Alignment      ② No Missing Clamp      ③ No Missing Tape (Blacktape)  
④ No Missing Spot inside tape

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