

**WORK INSTRUCTION**

Process Name/Title:

**CLAMP ASSEMBLY PROCESS**

Effectivity Date:

**March 08, 2025**

Model code/Part number:

**521B / 7M0656-7020**

Customer:

**TRJ**

Car Model:

**TOYOTA CAMRY**

Document No.:

**WI-ENG-PDE-1209**

Purpose:



PROTOTYPE



PRE-LAUNCH



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**PARTS:**

1. Assy parts; Clamp 82711-48210(B); Clamp 82711-52090 (W); Clamp 82711-35730 (B); Gray tape [2 pcs.]; Black Tape [4 pcs.]

JIG:

1. Clamp Assembly jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	Clamp	Table Lay-out	<div><b>Safety Instruction</b> Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</div> <div><b>Housekeeping</b> 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div><b>Alert level</b> For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>	1. No missing parts/tools 2. No excess parts/tools

## Revision History

Eff. Date	Rev. No	Details of Change	Revised	Checked	Reviewed	Approved	Prepared by	Checked by	Reviewed by	Approved by
03/08/25	0	Initial issue.	A.Hernandez	J.Loterte	C.Villanueva	A.Arañes	A.Hernandez	J.Loterte	C.Villanueva	A.Arañes

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### PARTS:

1. Clamp 82711-48210(B)  
2. Clamp 82711-52090 (W) [2pcs]

3. Clamp 82711-35730 (B)  
4. Black tape [3pcs]

5. Gray tape [2pcs]

JIG:

1. Clamp assembly jig

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

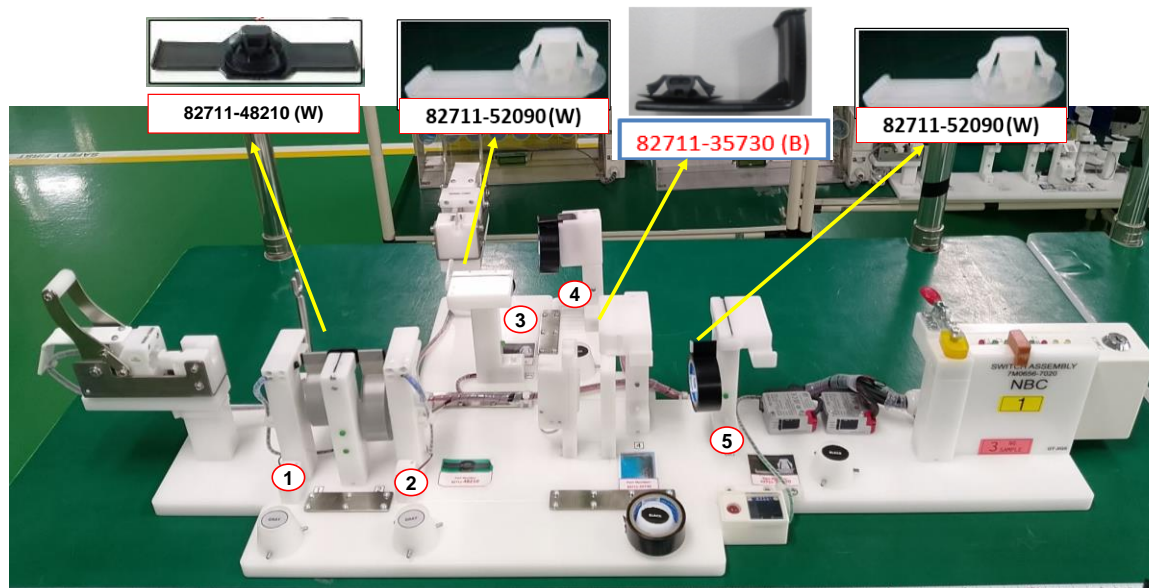
### TOOLS/PPE

### QUALITY POINTERS

2

Clamp

Clamp setting



1. Get 1pc. of clamp **82711-48210 (B)** then set to clamp location **1** and **2** using both hands.

2. Get 2pcs. of clamp **82711-52090 (W)** then set to clamp location **3** and **5** using both hands.

3. Get 1pc. of clamp **82711-35730 (B)** then set to clamp location **4** using both hands.

4. Get the **Gray tape** then initially attach to clamp location **1** and **2** using both hands.

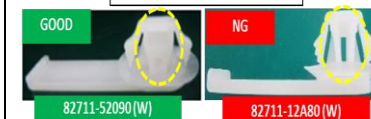
5. Get the **Black tape** then initially attach to clamp location **3,4** and **5** using both hands.

1. No wrong use of clamp
2. No damaged clamp
3. No wrong use of tape

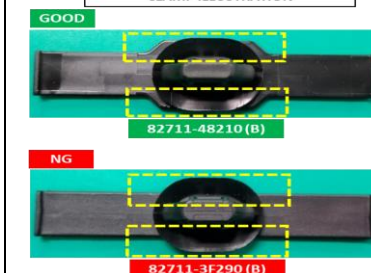
#### Important reminders/Note/s:

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

#### CLAMP ILLUSTRATION



#### CLAMP ILLUSTRATION



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PARTS:		1. Assy parts 2. Gray tape		JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Clamp	Clamp assembly			
		<div><div><div></div><div><div>82711-48210 (W)</div><div>82711-52090 (W)</div><div>82711-35730 (B)</div><div>82711-52090 (W)</div></div><div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div></div></div><div><div><div>1. Put the assy parts into jig (<i>See above picture for the correct setting</i>). First, set the <b>connector 6098-3802 (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 6098-2220(W)</b>) in hook.</div><div>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>.</div></div><div><div><div><div>COT 1</div><div>COT 2</div><div>SIDE A</div><div>SIDE B</div></div><div></div></div><div><div>3. Wrap the <b>COT 2 (SIDE A)</b> of clamp 2 windings of tape using both hands. Press the <b>SW button</b> after taping (<b>Do not cut the tape</b>).</div><div>4. Wrap the <b>COT 1 (SIDE B)</b> of clamp 2 windings of tape using both hands. Press the <b>SW button</b> after taping (<b>Do not cut the tape</b>).</div></div></div><div><div><div>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div>NG</div></div><div><div></div><div></div></div><div><div>82711-52090 (W)</div><div>82711-12A80 (W)</div></div></div><div><div>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div>NG</div></div><div><div></div><div></div></div><div><div>82711-48210 (B)</div><div>82711-3F290 (B)</div></div></div></div></div></div>			

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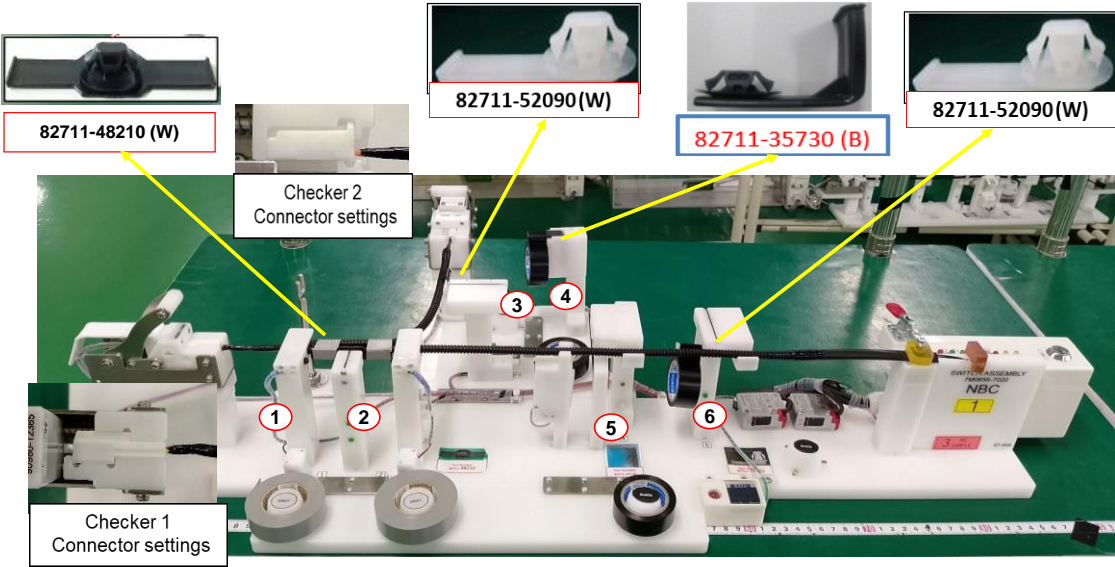




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PARTS:		1. Assy parts 2. Black tape		JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Clamp  Clamp assembly (Continuation)	<div></div> <div>5. Remove the <b>COT 1</b> from the hook and set the <b>connector 6098-2220 (W)</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>6. 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>7. 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>			<div>1. No loose/tight clamp attachment. 2. No damaged clamp. 3. No missing tape. 4. No missing spot tape. 5. No missing parts 6. Make sure there is no clearance between the PCB and the stopper jig</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> <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>

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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 Clamp assembly (Continuation)	    <p>8. Conduct spot taping on COT in clamp location 5. Make <b>2 winds</b> only then cut the tape. Press the <b>SW</b> button after taping. <b>Note: No excessive windings of tape</b></p> <p>9. Press the <b>SW button</b> and get the clamp (<b>82711-35730 (B)</b>) in location 4 then put in location 5.</p>		<p>1. No damaged clamp 2. No wrong usage of parts 3. No missing clamp 4. No missing tape</p> <p><b>Important reminders/Note/s:</b></p> <p><b>1. Make sure no gap between stopper jig and terminals.</b></p> <p><b>2. Make 2-3 windings for clamp taping.</b></p>

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### PARTS:

1. Assy parts
2. Black tape

JIG:

1. Clamp assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

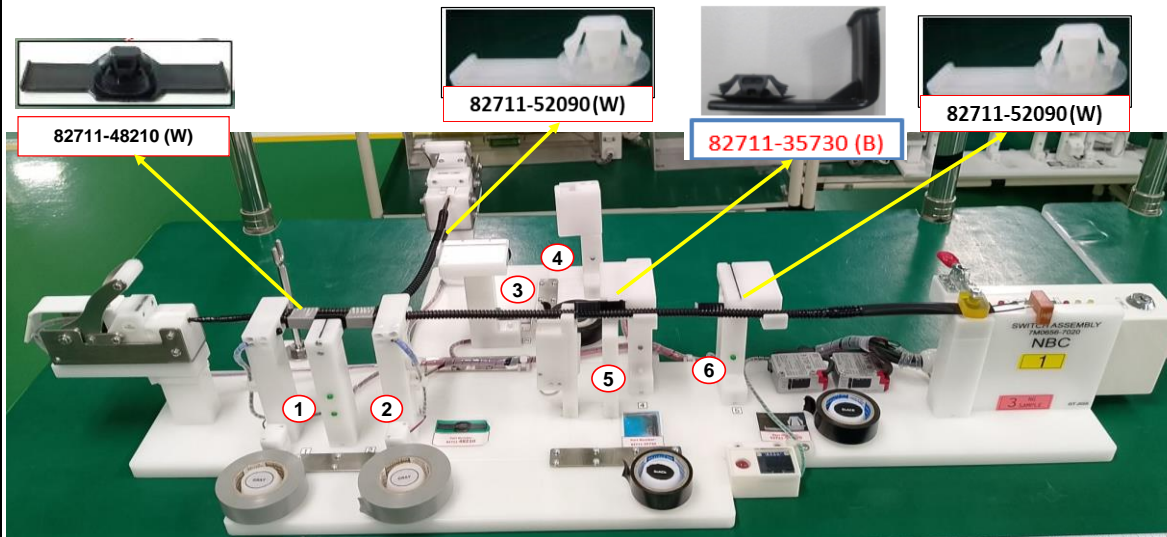
TOOLS/PPE

QUALITY POINTERS

3

Clamp

Clamp assembly  
(Continuation)

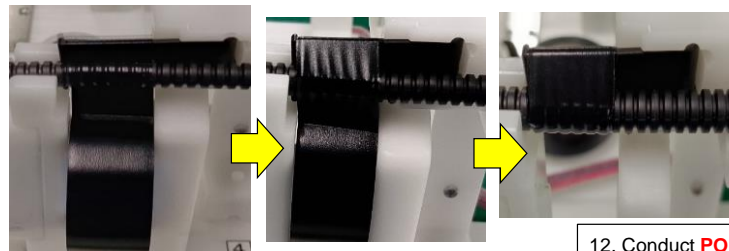


1. No wrong use of tape
2. No missing tape
3. No damage clamp
4. No missing clamp
5. No skip process



### Important reminders/Note/s:

1. Make sure no gap between stopper jig and terminals.
2. Make 2-3 windings for clamp taping



11. Tape the clamp on location **6** using both hands. Make **3 winds** then cut the tape. Press the **SW button** after taping. **Go** sound will be heard .

10. Tape the clamp on location **5** using both hands. Make **3 winds** then cut the tape. Press the SW button after taping. Continue the process if sequence light in location **6** was **on**.  
**Note: Controller will alarm if detect excessive windings of tape.**

12. Conduct **POINT CHECKING** before removing the harness from jig.

13. After point checking, remove the toggle clamp first up to the connector receiver base 1 and 2.

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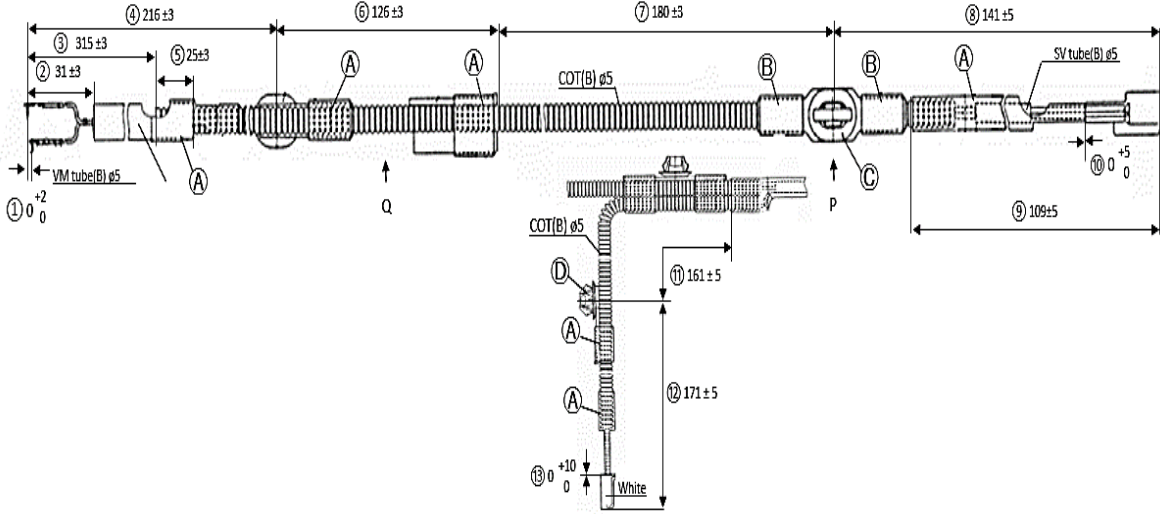

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PARTS:		1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	Clamp	Measurement		<div>MEASURING TAPE</div>  	<p><b>Important reminders and note/s:</b></p> <p>1. Please use calibrated/verified measuring 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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**PARTS:**

1. Assy parts

JIG:

n/a

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****CLAMP ASSY****7M0656-7020**

① Check the **Clamp Alignment**

② No **Wrong used of Tape (Gray) Clamp Taping**

③ No **Missing Spot Tape**

④ No **Missing Clamp**

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