



## WORK INSTRUCTION

Process Name/Title:

## CLAMP ASSEMBLY PROCESS

Effectivity Date:

March 12, 2025

Validity Date:

n/a

Model code/Part number:

177D / 7L0129-7020B

Customer:

TRQSS

Car Model:

TOYOTA COROLLA

Document No.:

WI-ENG-PDE-1050

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

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## PARTS:

1. Assy parts; Clamp 82711-52090 (W); Clamp 82711-60640 (B); Urethane Foam (width=50; L=41±1mm); Black tape; Blue tape

JIG:

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

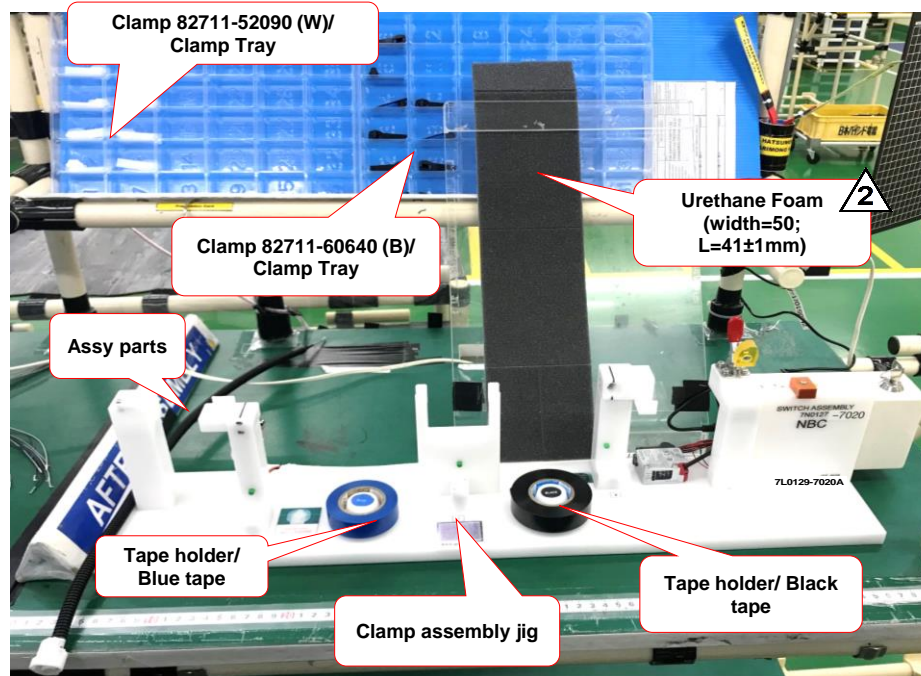
QUALITY POINTERS

1

Clamp  
Assy

Table Lay-out

## 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.

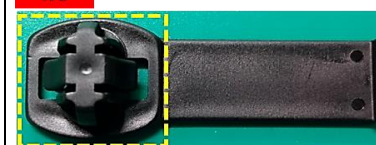
## CLAMP ILLUSTRATION

GOOD



82711-60640 (B)

NG



82711-21020 (B)

## CLAMP ILLUSTRATION



82711-52090 (W)



82711-12A80 (W)

## Revision History

							Prepared by	Checked by	Reviewed by	Approved by
03/10/25	2	Change specs of Urethane foam from t=5; width=50; L=50±1mm to t=5; width=50; L=41±1mm to avoid peel-off of urethane foam and change the illustration of GOOD and NG condition of sponge attachment process.	A.Hernandez	J.Loterte	C. Villanueva	A. Arañes				
09/12/24	1	Change purpose from Pre-launch to Masspro.	M. Ariola	n/a	C. Villanueva	A. Arañes				
09/11/24	0	Initial issue.	M. Ariola	n/a	C. Villanueva	A. Arañes				
Eff. Date	Rev. No	Details of Change	Revised	Checked	Reviewed	Approved	Est. Date:	September 11, 2024		

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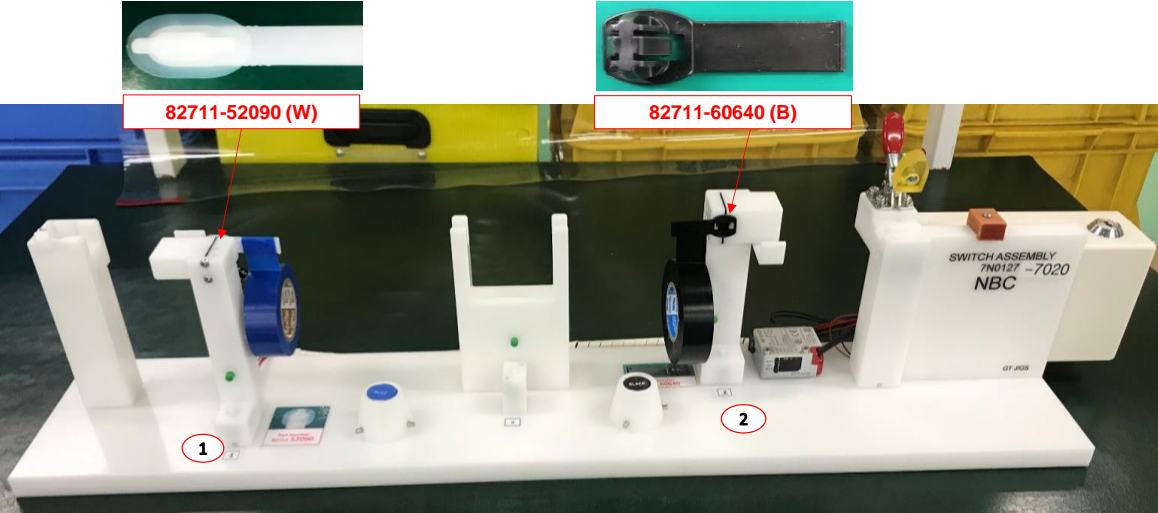
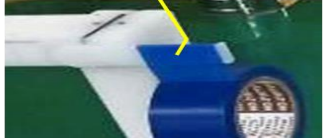
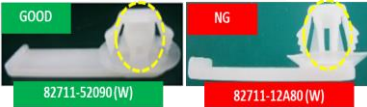

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<b>PARTS:</b>	1. Clamp 82711-52090 (W) 2. Clamp 82711-60640 (B)	3. Black tape 4. Blue tape	JIG:	1. Clamp Assembly Jig
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>	<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
2	Clamp Assy  Clamp Setting	<div></div> <div>1. Get 1 pc. of clamp <b>82711-52090 (W)</b> then set to clamp location <b>1</b> using both hands.</div> <div>2. Get 1 pc. of clamp <b>82711-60640 (B)</b> then set to clamp location <b>2</b> using both hands.</div> <div>3. Get the <b>Blue tape</b> then attach to clamp location <b>1</b> using both hands.</div> <div>4. Get the <b>Black tape</b> then attach to clamp location <b>2</b> using both hands.</div>		<div>1. No loose clamp attached 2. No damage clamp 3. No wrong use of clamp 4. No damage clamp 5. No flip-out tape 6. No peel-off tape 8. No missing tape 9. No wrong use of tape 10. No wrong use of clamp</div> <div><b>Important reminders/Note/s:</b> 1. Please check the clamp before start of assembly to avoid wrong use of parts.</div> <div><b>STANDARD TAPING FOR CLAMP</b></div> <div>One wind for under tape</div> <div></div> <div>CLAMP ILLUSTRATION</div> <div></div> <div>GOOD</div> <div>NG</div> <div>82711-52090 (W)</div> <div>82711-12A80 (W)</div> <div>CLAMP ILLUSTRATION</div> <div></div> <div>GOOD</div> <div>NG</div> <div>82711-60640 (B)</div> <div>82711-21020 (B)</div>

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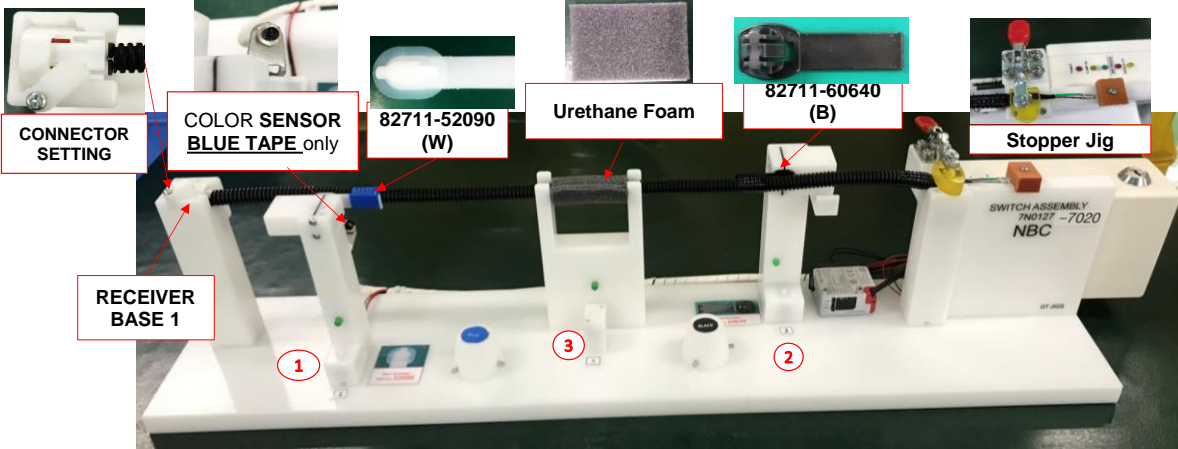
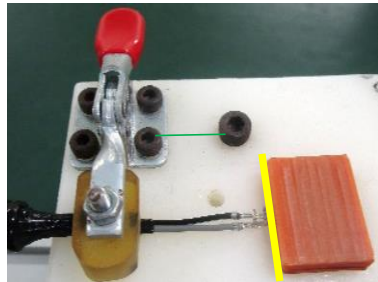
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PARTS:		1. Assy parts 2. Urethane Foam t=5; width=50; L=41±1mm)		JIG:	1. Clamp Assembly Jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
3	Clamp Assy	Clamp Assembly			<p><b>Important reminders/Note/s:</b></p> <p>1. Make sure no gap between terminal and stopper jig.</p> <p>2. Make 2-3 windings for clamp taping.</p>	
			<p>1. Get the assy parts then put into jig. <i>(See above picture for correct setting)</i>. First, set the connector <b>6189-0451 (W)</b> to <b>Receiver base 1</b>. Continue to set the harness in jig. <b>Color sensor</b> light will beep/buzz if sensor detects <b>Blue tape</b>. Last, set the end of <b>G-B/W wire</b> together within the stopper then press by <b>Toggle clamp</b> then continue if the sequence light on clamp location <b>1</b> was <b>ON</b>.</p>			
			<p>2. Check if all <b>LED light</b> for <b>POWER ON, WIRE1, WIRE2 and CLAMP ON. SENSOR</b> was <b>ON</b>. If encountered abnormality, <b>STOP</b> and immediately <b>CALL</b> the attention of the leader. <b>WAIT</b> for further instruction and continue the process.</p>			<p>3. Hold the tape on clamp location <b>1</b>. Make <b>3 windings</b> of tape then cut the tape using both hands. Continue the process on clamp location <b>2</b>.</p>
			<p>4. Hold the tape on clamp location <b>2</b>. Make <b>3 windings</b> of tape then cut the tape using both hands. Continue the process on attachment of sponge tape. <i>(Proceed on next page for the instruction of sponge tape attachment.)</i></p>			<p>5. Conduct <b>POINT CHECKING</b> before removing the harness from jig.</p>

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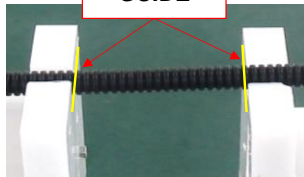


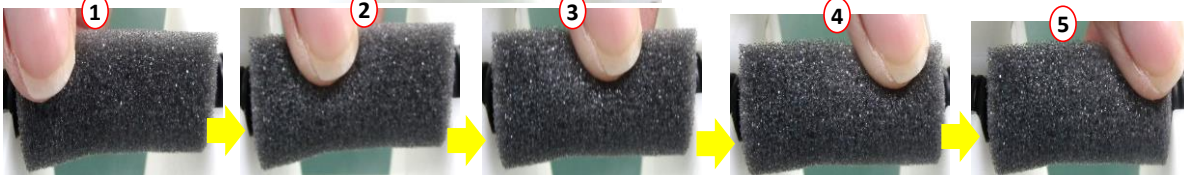
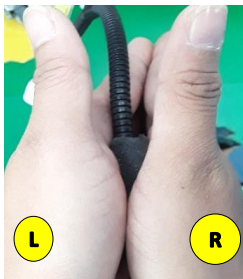
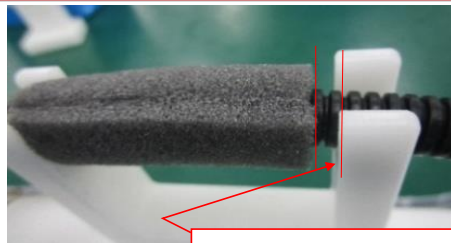
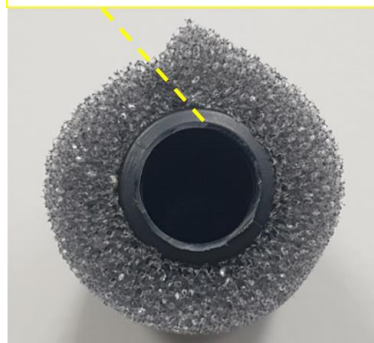
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PARTS:		1. Urethane Foam t=5; width=50; L=41±1mm)		JIG:	1. Clamp Assembly Jig
NO.	PROCESS NAME	2 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	2 QUALITY POINTERS
4	Clamp Assy	Urethane Foam Attachment			
		<div><div><p>GUIDE</p></div><div><p>Size of sponge tape should fit the jig</p></div><div><p>SPONGE TAPE</p></div><div><p>1 Get <b>Urethane Foam ( width=50; L=41±1mm)</b> then attach to corrugated tube using left hand and slowly wrap to COT. Follow the guide for the correct location of sponge tape. <b>Note: Do not stretch or pull the sponge tape</b></p></div><div></div><div><p>2. Press the sponge tape using both palm and roll 3 times to make sure that the sponge tape attachment is GOOD.</p></div><div><div><p>3. Remove the harness into jig. Start from ytoggle clamp then connector receiver base, clamp. Last is COT with foam.</p></div><div><p><b>L</b> <b>R</b></p></div><div><p>4, Male roll 3 times to make sure that the sponge tape attachment is GOOD using both hands.</p></div><div><p><b>NO GOOD ATTACHMENT OF SPONGE TAPE</b></p><p>With gap on guide of jig.</p></div></div><div><div><p><b>Standard attachment</b></p><p><b>End to end sponge attachment</b></p></div><div><p>1. No peel-off attachment 2. No loose/tight attachment 3. No wrong attachment 4.No missing sponge 5.No wrong use of sponge 6.No damage sponge</p></div></div></div>			

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PARTS:	1. Urethane Foam t=5; width=50; L=41±1mm)		JIG:	1. Clamp Assembly Jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	2 QUALITY POINTERS
4	Clamp Assy	<div>Urethane Foam Attachment (Continuation)</div> <div><div>NO GOOD SPONGE TAPE APPEARANCE</div><div><div>NG(Tight attachment)</div><div><div>Exceeded the height of start of sponge</div></div><div>NG(Loose attachment)</div><div><div>Not reach the height of start of sponge</div></div><div><div>Peel-off Sponge tape</div></div></div></div>		<div>Standard attachment</div> <div>End to end sponge attachment</div> <div></div> <div><div>1. No peel-off attachment</div><div>2. No loose/tight attachment</div><div>3. No wrong attachment</div><div>4.No missing sponge</div><div>5.No wrong use of sponge</div><div>6.No damage sponge</div></div>

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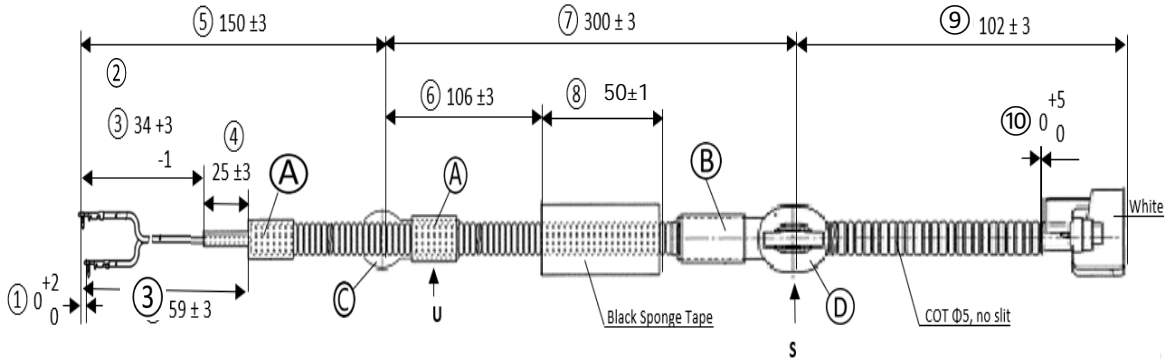
**WI-ENG-PDE-1050**

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PARTS:		1.Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	Clamp Assy	Measurement	<div><p><b>MEASURING TAPE</b></p></div>  <div><p><b>NOTE:</b></p><ul style="list-style-type: none"><li>Ⓐ - Taping (B)</li><li>Ⓑ - Taping (L)</li><li>Ⓒ - Clamp (B)</li><li>Ⓓ - Clamp (W)</li></ul></div>		<p><b>Important reminders and note/s:</b></p> <ol style="list-style-type: none"><li>Please use calibrated/verified measuring tape when getting the measurement.</li><li>For Hatsumono, Nakamono and Owarimono.</li></ol> <p><b>Document reference/s:</b></p> <ol style="list-style-type: none"><li>Refer to <b>WI-PRO-ASY-056</b> for Sub-assembly Hatsumono Nakamono Owarimono Inspection</li></ol> <p>1. No wrong dimension</p>

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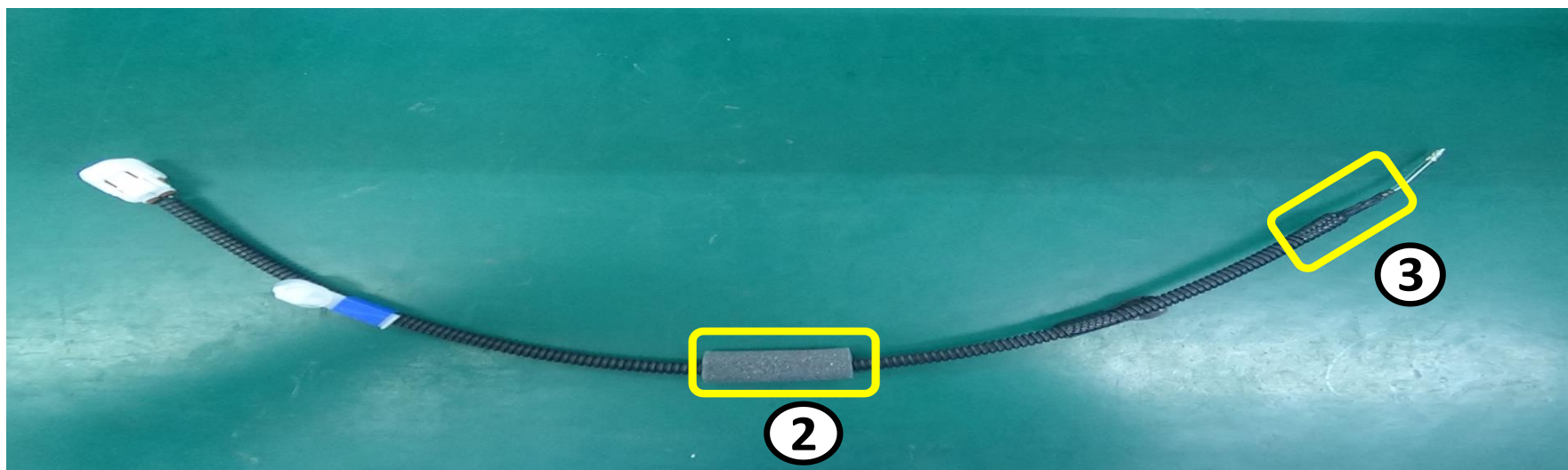
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**PARTS:**

1. Assy parts

JIG:

n/a

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****CLAMP ASSY****7L0129-7020B****① No Wrong Facing of Clamp****③ No Missing Tape (Black Tape)****② No Missing Urethane Foam**

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