



WORK INSTRUCTION

Process Name/Title:

CLAMP ASSEMBLY PROCESS

Effectivity Date:

June 18, 2024

Validity Date:

n/a

Model code/Part number:

310B / 7M0555-7020A

Customer: TRJ

Car Model: TOYOTA-RAV4

Document No.:

WI-ENG-PDE-668

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

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PARTS:

1. Assy parts; Clamp 82711-48210 (B);Clamp 82711-52090 (W); Black tape [3pcs.]; Orange 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

Clamp 82711-48210 (B) /Clamp Tray

Clamp 82711-52090 (W) /Clamp Tray

Clamp assembly jig

Tape holder/ Black tape

Tape holder/

Tape holder/ Orange tape

Safety Instruction

Be sure to wear required 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

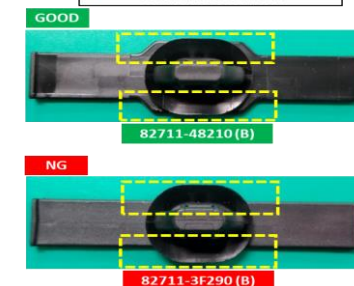
For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.

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

CLAMP ILLUSTRATION



CLAMP ILLUSTRATION



Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
06/18/24	1	Improve measurement and visual inspection.								
04/26/23	0	Initial Issue. Inclusion of Quality Checkpoints on page no.8; Standardized tube description: VM tube (Sunprene). Change Process Name/Title from TAPING ASSEMBLY PROCESS to CLAMP ASSEMBLY PROCESS; Document control no. from WI-ENG-PDE-116C to WI-ENG-PDE-668 due to separation of process.								
			M. Ariola	J. Loterte	C. Villanueva	A. Arañes	A. Hernandez	C. Villanueva	A. Arañes	n/a

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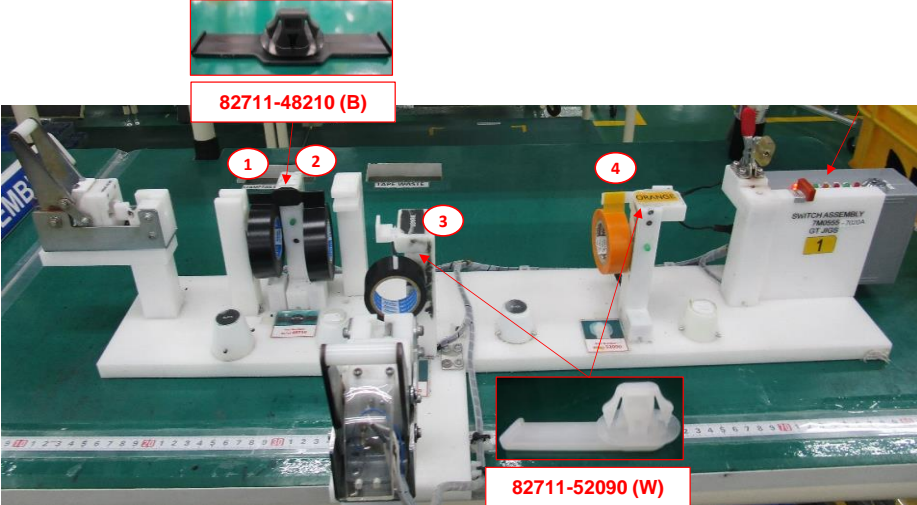

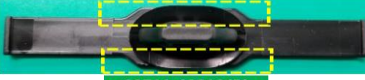
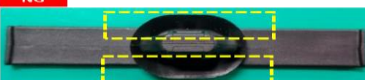


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PARTS:	1. Clamp 82711-48210 (B) 2. Clamp 82711-52090 (W) [2pcs.]	3. Black tape [3pcs.] 4. Orange tape	JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy Clamp Setting	 <p>1. Get 1pc. of clamp 82711-48210 (B) then attach to location 1 and 2</p> <p>2. Get 2pcs. of clamp 82711-52090 (W) then attach to location 3 and 4 on jig.</p> <p>3. Initially attach Orange tape on clamp location 4 and Black tape on clamp location 1, 2 and 3 using both hands.</p>	n/a	<p>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</p> <p>STANDARD TAPING FOR CLAMP</p> <p>One side tape under clamp</p>  <p>Important reminders/note/s: 1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.</p> <p>CLAMP ILLUSTRATION</p> <p>GOOD</p>  <p>82711-48210 (B)</p> <p>NG</p>  <p>82711-3F290 (B)</p> <p>CLAMP ILLUSTRATION</p> <p>GOOD</p>  <p>82711-52090 (W)</p> <p>NG</p>  <p>82711-12A80 (W)</p>

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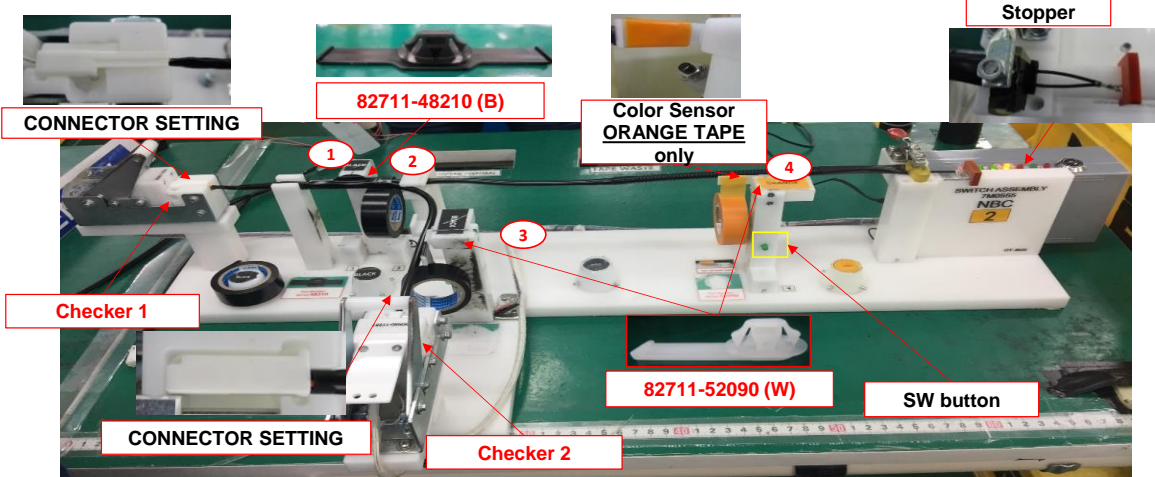
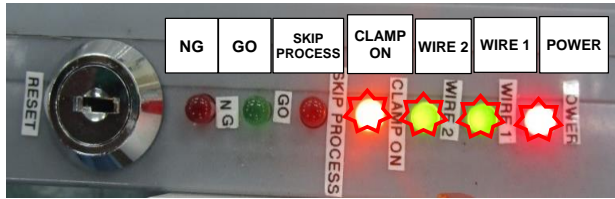

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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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><p>1. Get the assy parts and set into jig. (<i>See above picture for correct setting of harness</i>). First, set the connector 6098-3802 (W) to Checker 1 then pull the checker fixture for continuity checking. Second, set the connector 6098-2220 (W) to Checker 2 then pull the checker fixture for continuity checking. Last, set the terminal end together (with direct contact terminal to terminal to avoid sensor malfunction of clamp) within the stopper then press by Toggle clamp. Continue if the sequence light in location 1 was on.</p><p>2. Check if all LED light for Power On, Clamp On, Wire1 & Wire2 was On. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction then continue the process.</p><p>3. Hold the tape on clamp location 1 then start taping using both hands. Make 3 windings of tape then cut the tape. Press the SW button after taping. Continue if sequence light in location 2 was on.</p></div> <div></div>		<div></div> <p>Important reminders/note/s:</p> <p>1. Make sure no gap between stopper jig and terminals</p> <p>1. No damaged clamp 2. No wrong usage of parts 3. No missing clamp</p>

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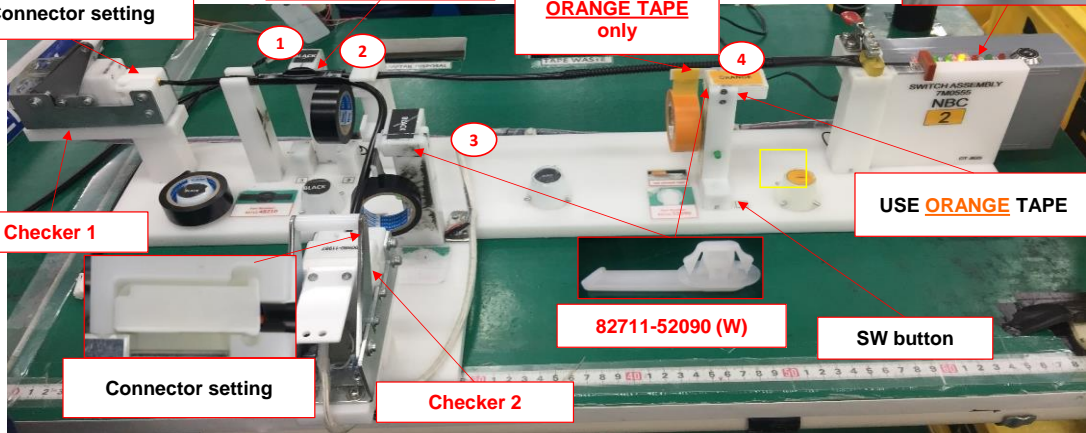


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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	Clamp Assembly (Continuation)			
		<div><div><p>Connector setting</p></div><div><p>82711-48210 (B)</p></div><div><p>Color Sensor ORANGE TAPE only</p></div><div></div><div></div></div> <div><p>4. Hold the tape on clamp location 2 then start taping using both hands. Make 3 windings of tape then cut the tape. Press the SW button after taping. Continue if sequence light in location 3 was on.</p><p>5. Hold the tape on clamp location 3 then start taping using both hands. Make 3 windings of tape then cut the tape. Press the SW button after taping. Continue if sequence light in location 4 was on.</p><p>6. Hold the tape on clamp location 4 then start taping using both hands. Make 3 windings of tape then cut the tape. (Note: Color sensor light will beep/buzz if sensor detects Orange tape on the first winding of tape). Press the SW button after taping. Go sound will be heard.</p><p>7. After taping, CONDUCT POINT CHECKING before removing the harness from jig.</p></div> <div><div></div><p>Important reminders/note/s: 1. Make sure no gap between stopper jig and terminals</p><p>1. No damaged clamp 2. No wrong usage of parts 3. No missing clamp</p></div>			

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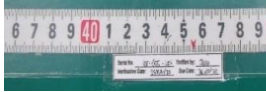
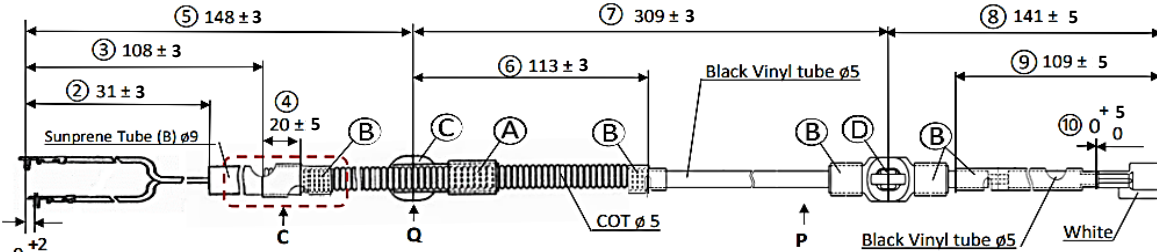
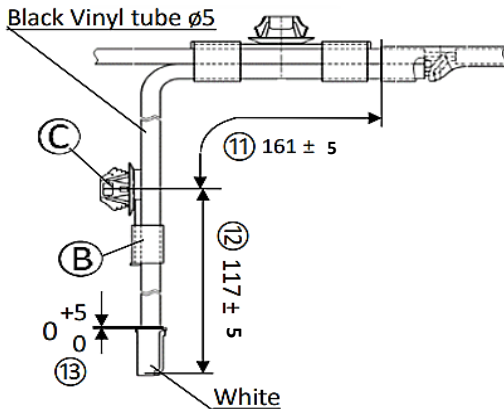
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PARTS:	1.Assy parts		JIG:	n/a
NO.	PROCESS NAME	1 WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	1 QUALITY POINTERS
5	Clamp Assy	Measurement	<div>MEASURING TAPE</div>   <p>NOTE: Ⓐ - Taping (OR) Ⓑ - Taping (B) Ⓒ - Clamp (W) Ⓓ - Clamp (B)</p> 	<p>Important reminders and note/s:</p> <p>1.Please use calibrated /verified measuring tape when getting the measurement.</p> <p>2. For Hatsumono,Nakamono and Owarimono.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-ASY-056 for Sub-assembly Hatsumono Nakamono Owarimono Inspection.</p> <p>1. No wrong dimension</p>

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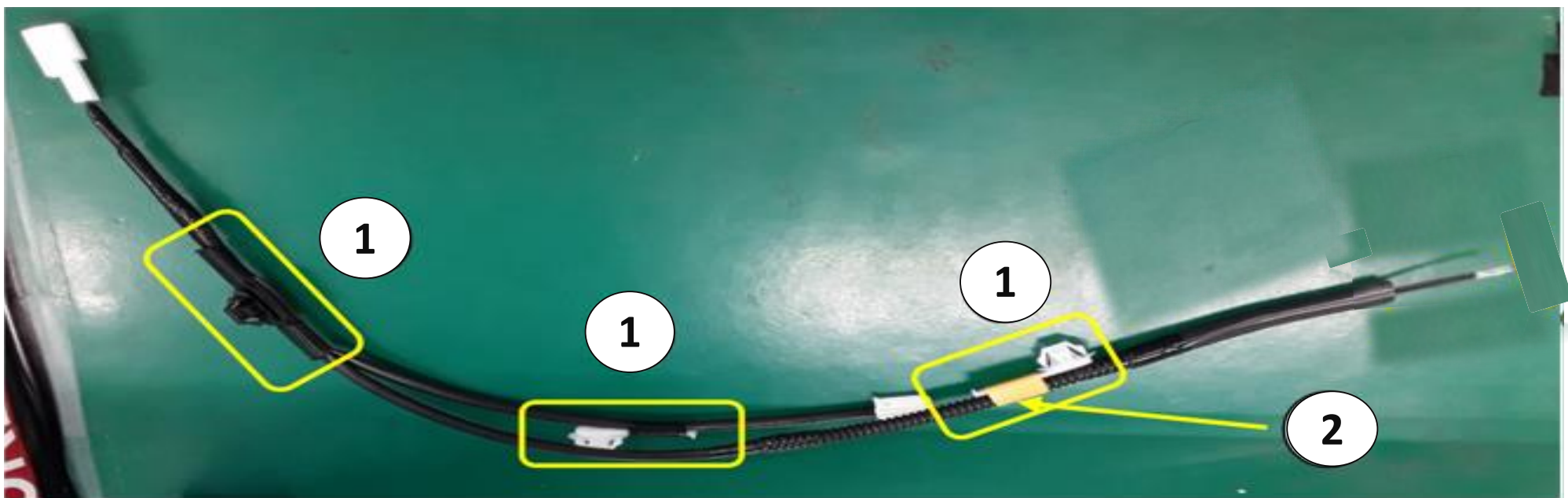
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PARTS:

1. Assy parts

JIG:

n/a

**1 VISUAL INSPECTION****CLAMP ASSEMBLY****7M0555-7020A****1 No Missing Clamp****2 No Wrong Color of Tape
(Orange tape only)****3 No Misalign Clamp**

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