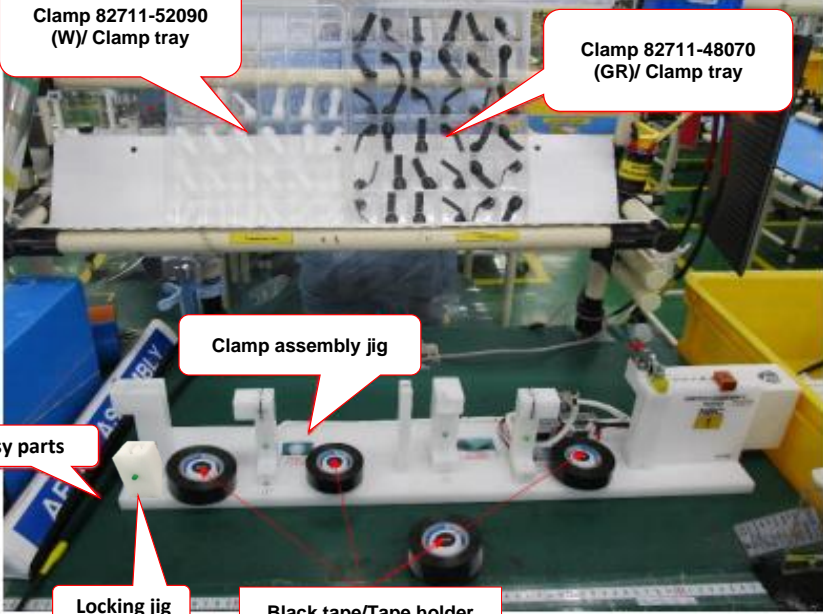




	WORK INSTRUCTION CLAMP ASSEMBLY PROCESS			Effectivity Date:	October 15, 2024		
	Process Name/Title:			Validity Date:	n/a		
	Model code/Part number:	102D / 7L0121-7024A	Customer:	TRQSS	Car Model:	TOYOTA-RAV4	
	Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		Document No.:	WI-ENG-PDE-1097		
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PARTS:		1. All parts: Assy part; Clamp 82711-52090 (W); Clamp 82711-48070 (GR); Black tape [4pcs]		JIG:	1. Clamp Assembly Jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
1	CLAMP ASSY	<div> <div>Table Lay-out</div>  </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>	1. No missing parts/tools 2. No excess parts/tools <div> CLAMP ILLUSTRATION  </div>

Revision History						Prepared by	Reviewed by	Approved by	Noted by			
						 A. Hernandez	 C. Villanueva	 A. Arañes	n/a			
10/15/24	1	Change from Pre-launch to Masspro.			A. Hernandez					C. Villanueva	A. Arañes	n/a
10/14/24	0	Initial issue			A. Hernandez					C. Villanueva	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change			Revised					Reviewed	Approved	Noted
						Est. Date: October 14, 2024						

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☐ PRE-LAUNCH

☒ MASSPRO

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PARTS:	1. Clamp 82711-52090 (W) [2pcs.] 2. Clamp 82711-48070 (GR) 3. Black tape [3pcs.]		JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	CLAMP ASSY Clamp setting	<div data-bbox="566 448 1704 930"></div> <div data-bbox="636 973 1135 1106"><p>1. Get 2pcs. of clamp 82711-52090 (W) using both hands then set to clamp location 1 and 3 using both hands.</p></div> <div data-bbox="636 1134 1135 1267"><p>2. Get 1pc. of clamp 82711-48070 (GR) using right hand then set to clamp location 2 using both hands.</p></div> <div data-bbox="1151 1070 1648 1203"><p>3. Initially attach Black tape on clamp location 1, 2, and 3 using both hands.</p></div>		<div data-bbox="1756 421 2101 453">STANDARD TAPING FOR CLAMP</div> <div data-bbox="1756 459 2101 507"><p>One side tape under clamp</p></div> <div data-bbox="1756 512 2101 643"></div> <div data-bbox="1731 722 1960 842"><p>1. No wrong use of clamp 2. No damaged clamp 3. No missing clamp 4. No wrong use of tape 5. No missing tape</p></div> <div data-bbox="1731 930 2051 956"><p>Important reminders/Note/s:</p></div> <div data-bbox="1731 968 2101 1037"><p>1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.</p></div> <div data-bbox="1756 1110 2101 1267"><div>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div></div><div>82711-52090 (W)</div></div><div><div>NG</div><div></div><div>82711-12A80 (W)</div></div></div>

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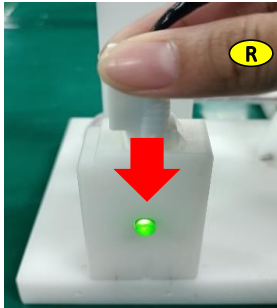
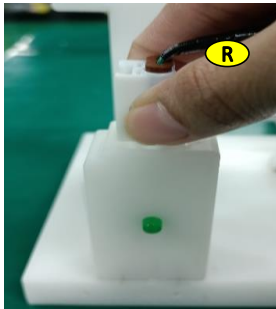
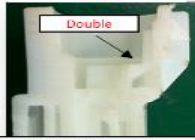
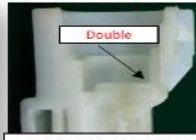
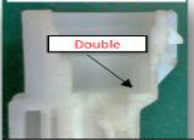



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PARTS:	1. Assy parts		JIG:	1. Locking Jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	CLAMP ASSY	<div><div></div><div></div><div><div>1. Put the connector into locking jig using right hand then press 2x to lock using both hands. Check the lock if properly locked.</div></div></div> <div><div><div><div>NG</div><div>Unlock Condition</div></div><div><div>NG</div><div>Half Lock Condition</div></div><div><div>GOOD</div><div>Full Lock Condition</div></div></div><div><div><div>Before lock</div></div><div><div>After lock</div></div></div></div>	<div>LOCKING JIG</div> <div></div>	<div>Important reminders/Note/s:</div> <div>1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR.</div> <div>1. Use the provided locking jig per model 2. No unlock/half-locked connector 3. No skip of locking process</div>

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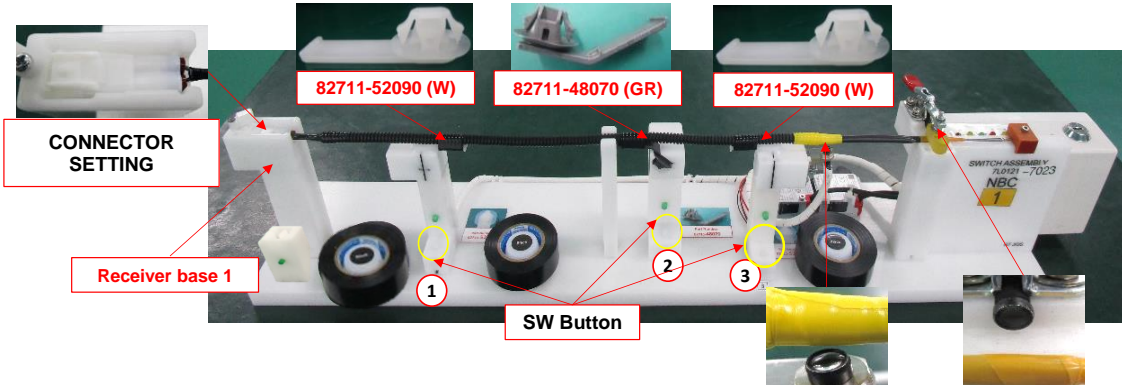

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PARTS:		1. Assy parts 2. Black tape		JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	CLAMP ASSY	<div><div></div><div><p>1. Get the assy parts and set into jig. <i>(See above picture for correct setting of harness)</i>. First, set the connector 6188-0407 (W) to Receiver base 1 then lock. Continue to set the harness in jig, Color sensor light will beep/buzz if detects Yellow tape. Color sensor light will beep/buzz if sensor detects Orange tape. Last, set the G-B/W wires together within stopper jig then press by toggle clamp. Continue if sequence light in location 1 was ON.</p><p>2. Check if all LED light for Power On, Clamp On, Wire1 & Wire2, Sensor ON 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. Make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if sequence light in clamp location 2 was ON.</p></div><div><p>4. Hold the tape on clamp location 2. Make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if sequence light in clamp location 3 was ON.</p><p>5. Hold the tape on clamp location 3. Make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Go sound will be heard.</p><p>6. After taping, CONDUCT POINT CHECKING before removing the harness in jig.</p></div></div>		<div></div> <div><p>Important reminders/Note/s:</p><p>1. Make sure no gap between stopper and terminals.</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>	

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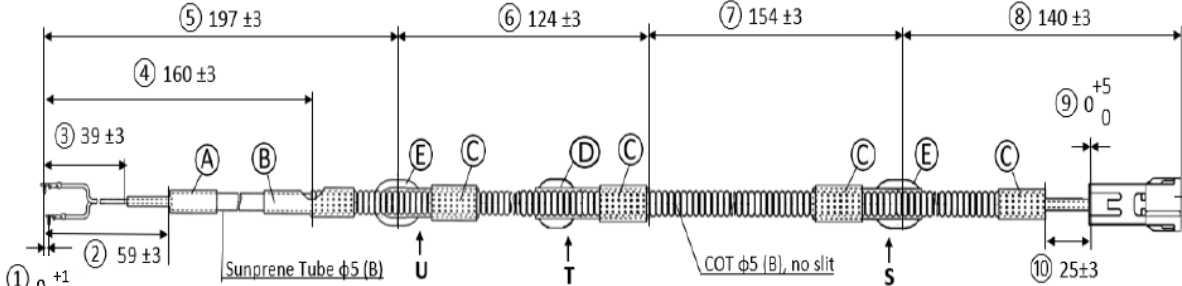

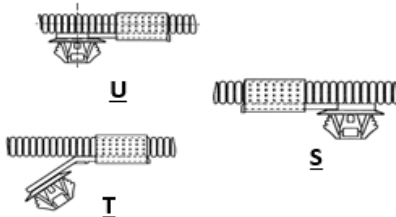

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PARTS:		n/a		JIG:	n/a									
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS									
6	CLAMP ASSY	<div>Measurement</div> <div><div><p>NOTE:</p><ul style="list-style-type: none">Ⓐ - Taping (OR)Ⓑ - Taping (Y)Ⓒ - Taping (B)Ⓓ - Clamp (GR)Ⓔ - Clamp (W)<p>Unit of measurement is in millimeter (mm)</p></div><div></div><table><caption>WIRE TYPE TABLE</caption><tr><th>NO.</th><th>COLOR</th><th>WIRE TYPE</th></tr><tr><td>1</td><td>G</td><td>TVSS 0.3f</td></tr><tr><td>2</td><td>B/W</td><td>TVSS 0.3f</td></tr></table></div> <div><div>MEASURING TAPE</div></div> <div><p>Important reminders/Note/s:</p><p>1. FOR HATSUMONO AND OWARIMONO.</p><p>2. Please use calibrated/verified measuring tape when getting the measurement.</p><p>1. No wrong dimension</p></div>		NO.	COLOR	WIRE TYPE	1	G	TVSS 0.3f	2	B/W	TVSS 0.3f		
NO.	COLOR	WIRE TYPE												
1	G	TVSS 0.3f												
2	B/W	TVSS 0.3f												

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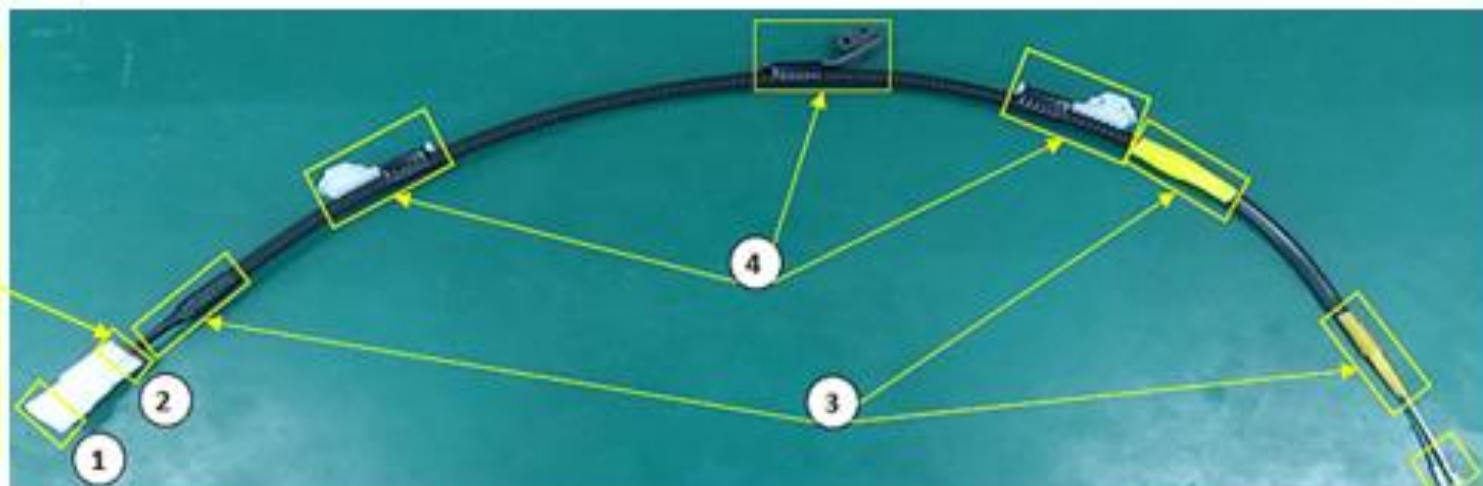
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PARTS:

n/a

JIG:

n/a

VISUAL INSPECTION/QUALITY CHECKPOINTS**CLAMP ASSY****7L0121-7024A****① No Unlocked/Halflocked Connector****④ No Missing Clamp****② No Wrong Insertion****⑤ No Misalign of Clamp****③ No Missing tape (BLACK)**

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