



WORK INSTRUCTION

Process Name/Title:

CLAMP ASSEMBLY PROCESS

Effectivity Date:

June 24, 2024

Validity Date:

n/a

Model code/Part number:

550B / 7L0082-7023

Customer:

TRQSS

Car Model: TOYOTA-HIGHLANDER

Document No.:

WI-ENG-PDE-776

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

0

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PARTS:		1. All parts: Assy parts; Clamp 82711-52090 (W); Clamp 82711-48070 (GR); Clamp 82711-3A540 (W); Black tape [5pcs]				JIG:		1. Clamp assembly jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE		QUALITY POINTERS	
1	Clamp Assy	<div>TABLE LAY-OUT</div> <div>Clamp 82711-52090</div> <div>Clamp 82711-48070</div> <div>Clamp 82711-3A540</div> <div>Clamp assembly</div> <div>Assy parts</div> <div>Black Tape/Tape</div>				<div>Safety Instruction</div> <div>Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)</div> <div>Housekeeping</div> <div>1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div>Alert level</div> <div>For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>		<div>Document references:</div> <div>1. Refer to WI-ENG-PDE-386A-B Taping Assembly Process</div> <div>1. No missing parts/tools 2. No excess parts/tools</div> <div>CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div>82711-52090 (W)</div><div>NG</div><div>82711-12A80 (W)</div></div>	
Revision History						Prepared by	Reviewed by	Approved by	Noted by
06/24/24	0	Initial issue. Separate Clamp setting and Clamp assembly process from Taping assembly process (WI-ENG-PDE-386) to Clamp assembly process due to Process improvement.				D.Castillo	C.Villanueva	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted
						Est. Date:	June 24, 2023		

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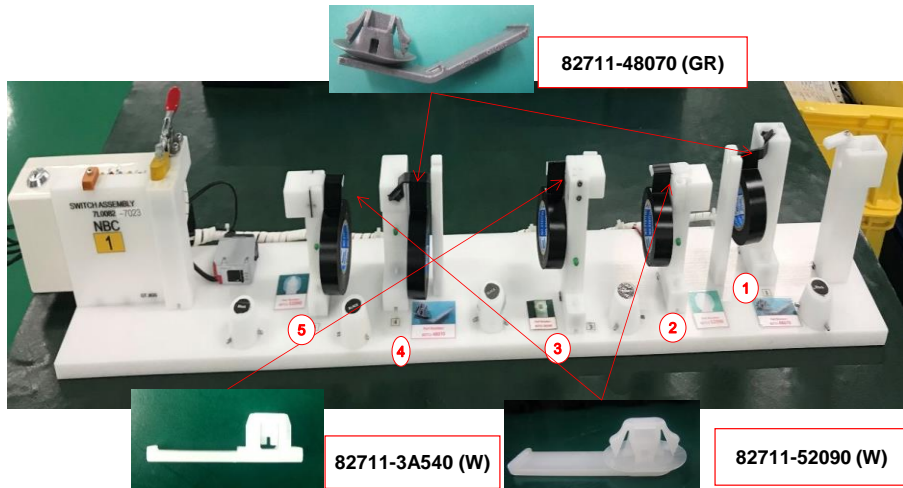


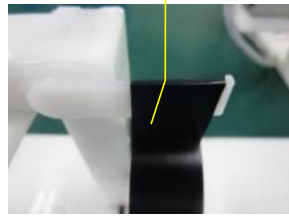
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PARTS:		1. Clamp 82711-52090 (W) [2pcs.] 2. Clamp 82711-48070 (GR) [2pcs]		3. Clamp 82711-3A540 (W) 4. Black tape [5pcs]		JIG:	1. Clamp Assembly jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp Setting	<div></div> <div>1. Get 2pcs of clamp 82711-48070 (GR) using right hand and set to clamp location 1 and 4 using both hands.</div> <div>2. Get 1pc of clamp 82711-3A540 (W) using right hand and set to clamp location 3 using both hands.</div> <div>3. Get 2pcs of clamp 82711-52090 (W) using right hand and set to clamp location 2 and 5 using both hands.</div> <div>4. Initially attach Black tape on clamp location 1 and 2 using both hands. location 1, 2, 3, 4 and 5.</div>			n/a	<div>Important reminders/Note/s:</div> <div>1. Please check the clamp before start of assembly to avoid wrong use of clamp.</div> <div><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> <div>1. No wrong use of clamp 2. No damaged clamp 3. No wrong use of tape</div> <div><div>STANDARD TAPING FOR CLAMP</div><div>One wind for under clamp</div><div></div></div>

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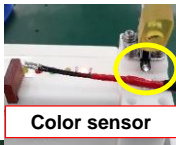



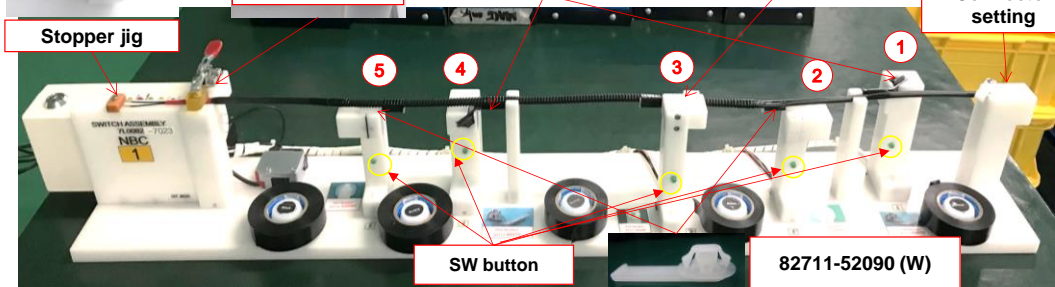

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PARTS:	1. Assy parts		JIG:	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	<div><div><div></div><div></div><div></div><div></div><div></div></div><div></div></div> <div><div><p>1. Get the assy parts and set to jig using both hands. <i>(see above picture for correct setting)</i> First, put the white connector to receiver base then lock. Second, put the terminal to stopper jig and pull the toggle clamp. <i>Note: Beep sound will be heard if color sensor detect the RED tape.</i></p></div><div><p>2. Check if all LED light for POWER and CLAMP ON was ON. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction then continue the process. Continue if the sequence light in location 1 is ON.</p></div><div><p>3. Hold the tape on clamp location 1 and start taping (3 windings) using both hands. Press the switch button after taping. Continue to location 2 if light was ON.</p></div></div> <div><div><p>4. Repeat the procedure 3 to clamp location 2,3 and 4. Continue to location 5 if light was ON.</p></div><div><p>5. Hold the tape on clamp location 5, and start taping (3 windings) using both hands. Press the switch button after taping. GO sound will be heard.</p></div><div><p>6. After taping, CONDUCT POINT CHECKING before removing the harness from jig.</p></div></div> <div><div></div><p>Important reminders/Note/s:</p><p>1. Make sure no gap between terminal and stopper</p><p>2. Make 2-3 windings for clamp taping</p><p>1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No tight/loose clamp attachment</p></div>		

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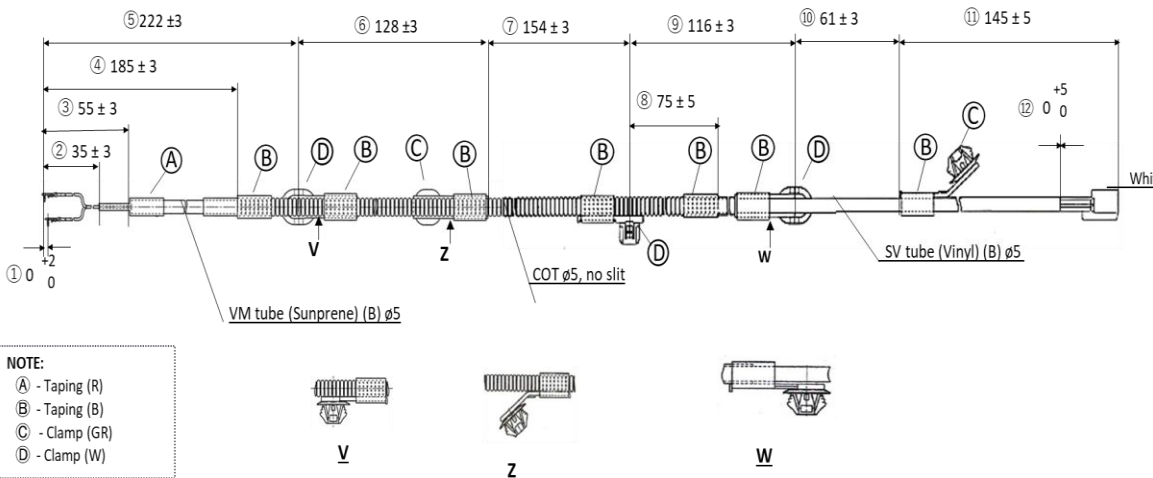

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PARTS:		1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy	Measurement	<div><div>MEASURING TAPE</div></div>  <div>NOTE: (A) - Taping (R) (B) - Taping (B) (C) - Clamp (GR) (D) - Clamp (W)</div>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

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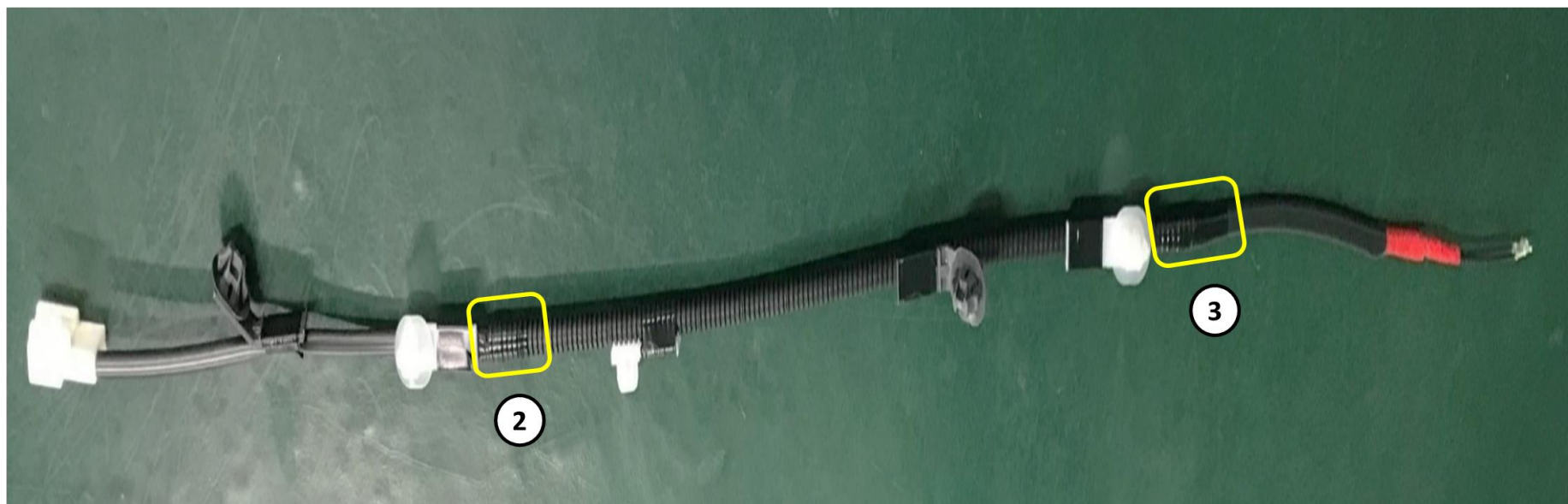
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1. Assy parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**CLAMP ASSY****7L0082-7022****1** No Wrong Facing of Clamp**2 3** No Missing Tape
(Black Tape)

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