

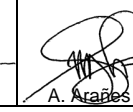

	<b>WORK INSTRUCTION</b>			Effectivity Date:	October 01, 2024		
	Process Name/Title: <b>CLAMP ASSEMBLY PROCESS</b>			Validity Date:	n/a		
	Model code/Part number: <b>241B / 7L0048-7023A</b>	Customer: <b>TRQSS</b>	Car Model: <b>LEXUS-ES</b>	Document No.:	<b>WI-ENG-PDE-1070</b>		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO			Revision No.:	1	Page No.:	1 of 9

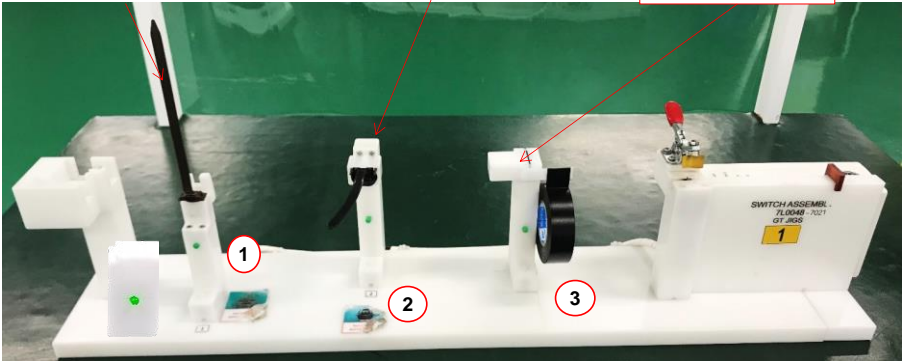




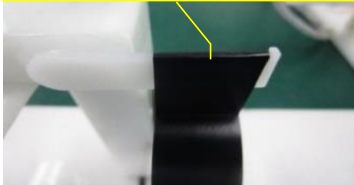


PARTS:		1. Assy parts; Clamp 82711-52090 (W); Clamp 82711-16820 (BR); Clamp 82711-48240 (W); Clamp 82711-34490 (B); Black Tape		JIG:	1. Clamp assembly jig 2. Clamp attachment holder jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
1	Clamp assy	<div><div>Table Lay-out</div><div><div>Clamp 82711-48240 (W)/ Clamp Tray</div><div></div></div></div>			

Revision History							Prepared by	Reviewed by	Approved by	Noted by	
							 D. Castillo	 C. Villanueva	 A. Arañes	n/a	
10/01/24	1	Changr from Pre-launch to Masspro.	D.Castillo	C.Villanueva	A. Arañes	N/A					
09/24/24	0	Initial issue. Separate clamp assembly from Taping assembly process.	D.Castillo	C.Villanueva	A. Arañes	N/A					
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted					
							Est. Date:	September 24, 2024			

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<b>PARTS:</b>	1. Clamp 82711-16820 (BR) 2. Clamp 82711-34490 (B) 3. Clamp 82711-52090 (W) 4. Black 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	<div><div>82711-16820 (BR)</div><div>82711-34490 (B)</div><div>82711-52090 (W)</div><div>1. Get 1pc of Band clamp 82711-16820 (BR) using right hand and set to clamp location 1.</div><div>2. Get 1pc of Band clamp 82711-34490 (B) using right hand and set to clamp location 2.</div><div>3. Get 1pc of clamp 82711-52090 (W) using right hand and set to clamp location 3.</div><div>4. Initially attached the black tape on clamp location 3.</div><div><div>BAND CLAMP ILLUSTRATION</div><div><div>GOOD</div><div>82711-34490 (B)</div></div><div><div>NG</div><div>82711-16830 (B)</div></div></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>			n/a	<div>STANDARD TAPING FOR CLAMP</div> <div>One wind for under tape</div>  <div>Important reminders/Note/s:</div> <div>1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.</div> <div>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</div> <div><div>BAND CLAMP ILLUSTRATION</div><div><div>GOOD</div><div>82711-16820 (BR)</div></div><div><div>NG</div><div>82711-26380 (BR)</div></div></div>		


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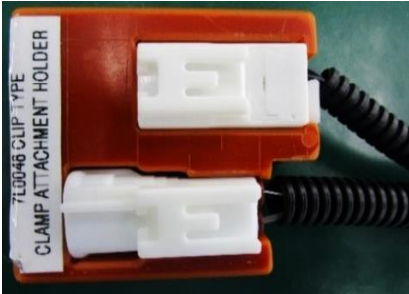
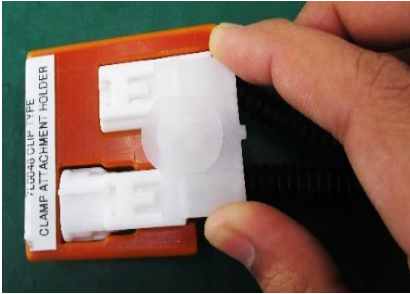
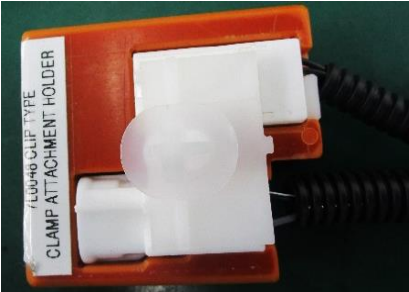

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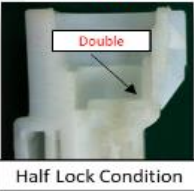
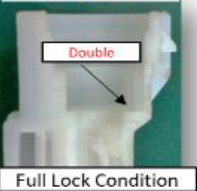

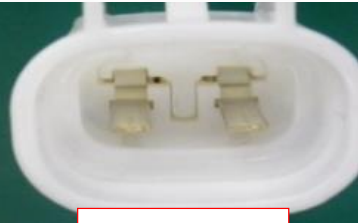

PARTS:		1. Assy parts 2. Clamp 82711-48240 (W)		JIG:	1. Clamp attachment holder jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
3	Clamp assy	Clamp Attachment				
		<div>CONNECTOR SETTING</div> <div></div> <div>1. Set the 2 connectors into clamp holder jig using both hands. <i>Follow the above illustration for the correct setting.</i></div> <div></div> <div>2. Hold the clamp using right hand, strongly push the clamp, sound will be heard if fully inserted.</div> <div></div> <div>3. After inserting the clamp, remove the 2 connectors from clamp holder jig using both hands. Check the clamp attachment.</div>		<div>Pushing direction</div> <div>CLAMP ATTACHMENT JIG</div> <div></div>	1. No wrong attachment of clamp 2. No damage on parts 3. No loose attachment	

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

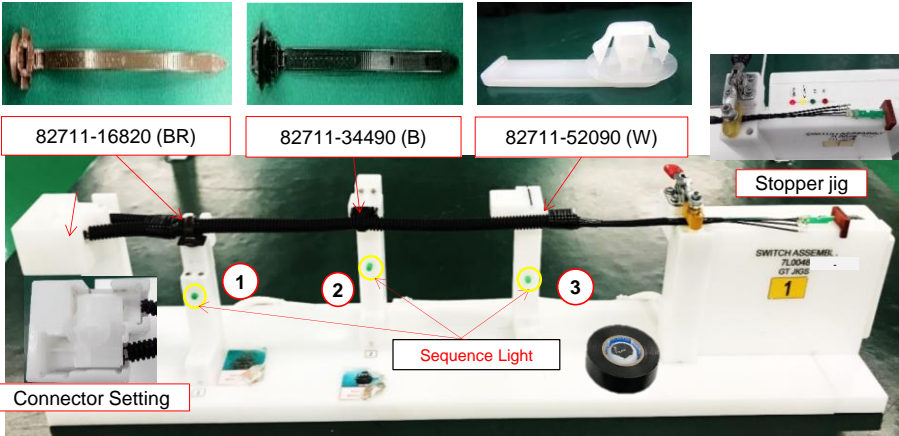
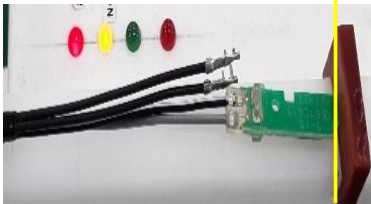
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<b>PARTS:</b>	1. Assy parts			JIG:	1. Clamp assembly jig				
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>			<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>			
5	Clamp assy	Clamp assembly	<div><p>82711-16820 (BR)      82711-34490 (B)      82711-52090 (W)</p><p>Stopper jig</p><p>Connector Setting</p><p>Sequence Light</p><p>1      2      3</p></div> <div><p>1. Get the assy parts using both hands. Put first the connectors to receiver base, second, put the terminal/PCB to stopper jig then pull down the toggle clamp using right hand. <b>Note: Refer to above illustration for the correct setting.</b></p><p>2. Check if LED for <b>POWER, CLAMP</b> and <b>SEQUENCE</b> light in clamp location <b>1</b> is <b>ON</b>. If encountered abnormality, <b>STOP</b> the process, <b>CALL</b> the Leader and <b>WAIT</b> for instruction.</p><p>3. Initially tighten the band clamp from location <b>1~2</b> using both hands.</p></div>			n/a	<div><p><b>Important reminders/Note/s:</b></p><p><b>1. Make sure no gap between stopper jig and PCB</b></p><p><b>2. Make 2-3 windings for clamp taping</b></p><p>1. No damaged clamp 2. No wrong usage of parts 3. No missing clamp 4. No missing tape</p></div>		

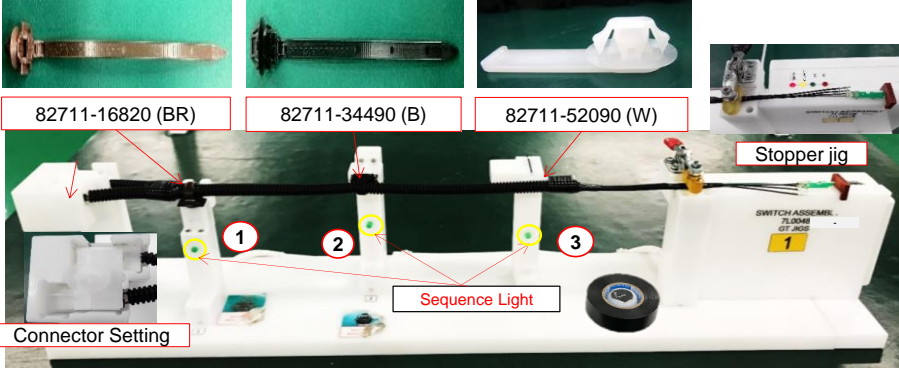

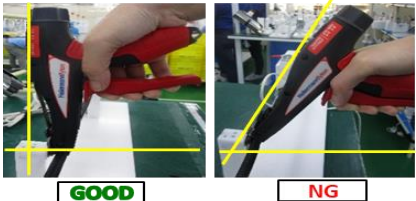



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<b>PARTS:</b>	1. Assy parts			JIG:	1. Clamp assembly jig			
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>			<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>		
5	Clamp assy	<div><div><p>3. Get the bando gun and cut the band clamp on location 1. Press the switch button after cutting. Continue to location 2 if light was ON.</p><p>4. Cut the band clamp on location 2. Press the switch button after cutting. Continue to location 3 if light was ON.</p></div><div><p><b>BANDO CLAMP POSITION ON CLAMP LOCATION 1</b></p><p><b>BANDO GUN ALIGNMENT</b></p><p>PERPENDICULARITY</p><p>NG OK NG</p></div><div><p><b>BANDO CLAMP POSITION ON CLAMP LOCATION 2</b></p><p><b>BANDO GUN ALIGNMENT</b></p><p>PERPENDICULARITY</p><p>NG OK NG</p></div><div><p>Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube. For: ø5 - 1~2, ø7 - 3~4</p></div></div>				<p><b>Important reminders/Note/s:</b></p> <p>1. Make sure no gap between stopper jig and PCB</p> <p>2. Make 2-3 windings for clamp taping</p> <p>1. No damaged clamp 2. No wrong usage of parts 3. No missing clamp 4. No missing tape</p> <div><p><b>Bando Gun Illustration</b></p></div>		

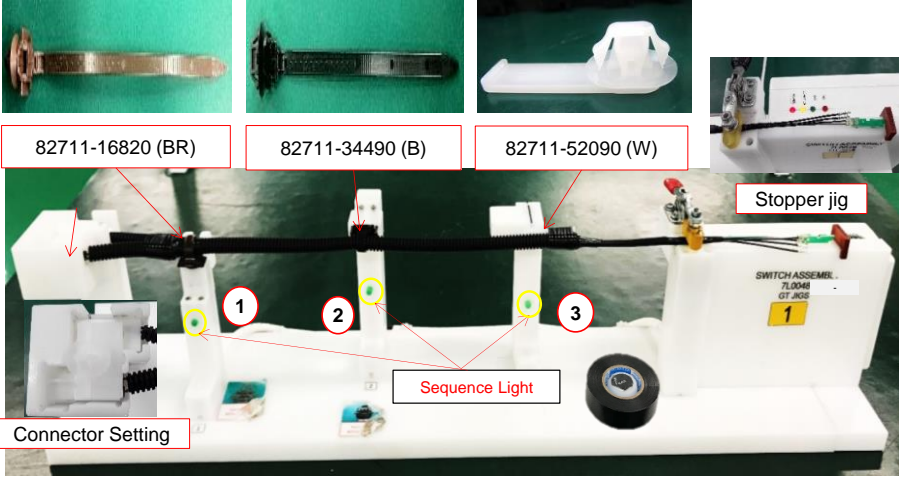

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PARTS:	1. Assy parts			JIG:	1. Clamp assembly jig				
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS			
5	Clamp assy	Clamp assembly (Continutaion)	<div><p>5. Hold the tape on clamp <b>location 3</b>, and start taping (3 windings) using both hands. Press the switch button after cutting. <b>G0</b> sound will be heard.</p><p>6. Conduct <b>POINT CHECKING</b> before removing from clamp assembly jig.</p><p>7. After Point checking, remove the harness from toggle clamp up to Connector receiver base.</p></div>			n/a	<div><p><b>Important reminders/Note/s:</b></p><p><b>1. Make sure no gap between stopper jig and PCB</b></p><p><b>2. Make 2-3 windings for clamp taping</b></p><p>1. No damaged clamp 2. No wrong usage of parts 3. No missing clamp 4. No missing tape</p></div>		

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PROTOTYPE



PRE-LAUNCH




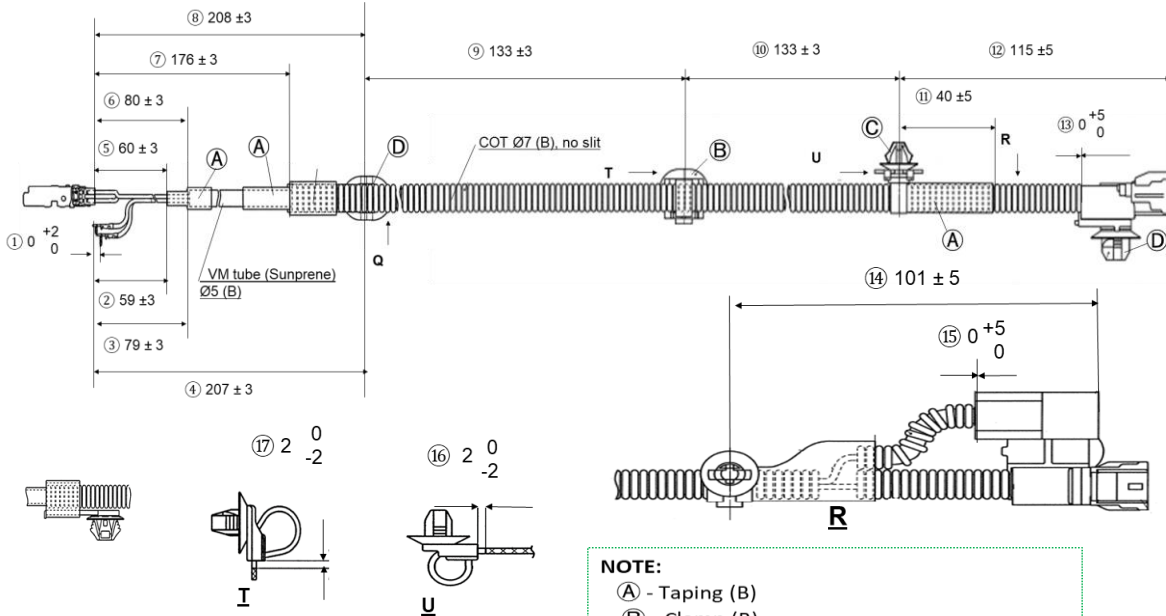
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PARTS:	1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	Clamp assy	Measurement	<div>MEASURING TAPE</div>   <div>NOTE: A - Taping (B) B - Clamp (B) C - Clamp (BR) D - Clamp (W)  *Unit of measurement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

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PROTOTYPE



PRE-LAUNCH



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**PARTS:**

1. Assy parts

JIG:

n/a

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****CLAMP ASSY****7L0048-7023A**

① ② ③ **No Missing Tape (Black tape)**

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