



WORK INSTRUCTION

Process Name/Title:

CLAMP ASSEMBLY PROCESS

Effectivity Date:

October 14, 2024

Model code/Part number:

380D / 7L0139-7020B

Customer:

TRQSS

Car Model:

TOYOTA CAMRY

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

WI-ENG-PDE-1116

Revision No.:

1

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PARTS: 1. Assy parts; Clamp 82711-52090 (W); Clamp 82711-16820 (B); Label 7V8130-0020; Black tape

JIG:

1. Clamp assembly jig
2. Label Dispenser

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

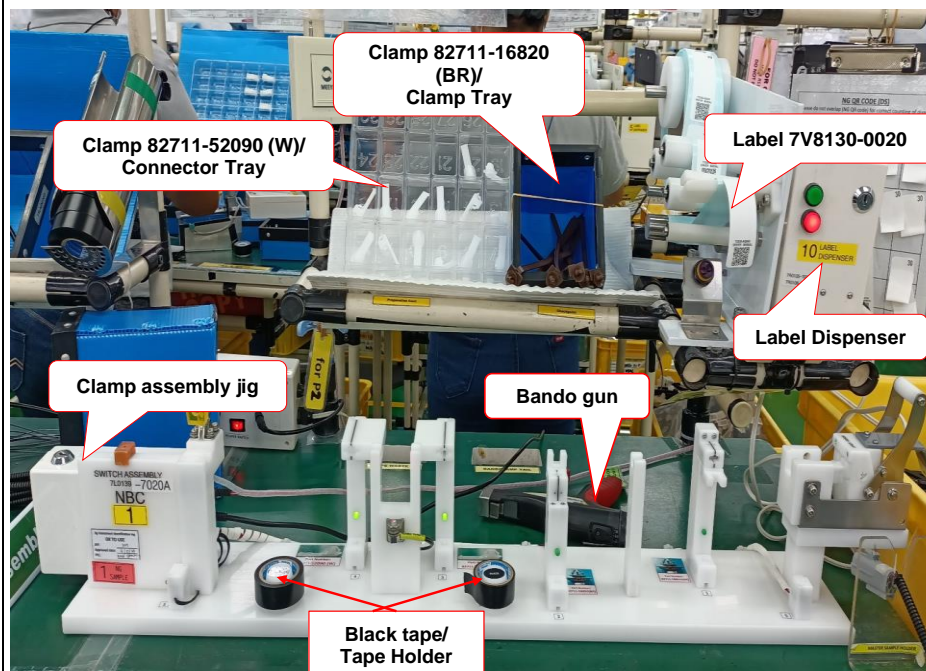
QUALITY POINTERS

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.

Document reference/s:

1. Refer to **WI-ENG-PDE-649** for Taping assembly process

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

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
10/14/24	1	Change purpose from Pre-launch to Masspro.	M. Ariola	C. Villanueva	A. Arañes	N/A	M. Ariola	C. Villanueva	A. Arañes	n/a
10/11/24	0	Initial issue.	M. Ariola	C. Villanueva	A. Arañes	N/A				

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PARTS:		1. Clamp 82711-16820 (BR) [2pcs.] 2. Clamp 82711-52090 (W) [2pcs.]	3. Black tape [2pcs.]	JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp setting			<div>1. No wrong use of clamp 2. No damaged clamp 3. No missing clamp 4. No wrong use of tape 5. No missing tape</div> <div>STANDARD TAPING FOR CLAMP</div> <div>One wind for under tape</div> <div></div> <div>Important reminders/Note/s: 1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.</div> <div>CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div>82711-52090 (W)</div><div>NG</div><div>82711-12A80 (W)</div></div> <div>BAND CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div>82711-16820 (BR)</div><div>NG</div><div>82711-26380 (BR)</div></div>

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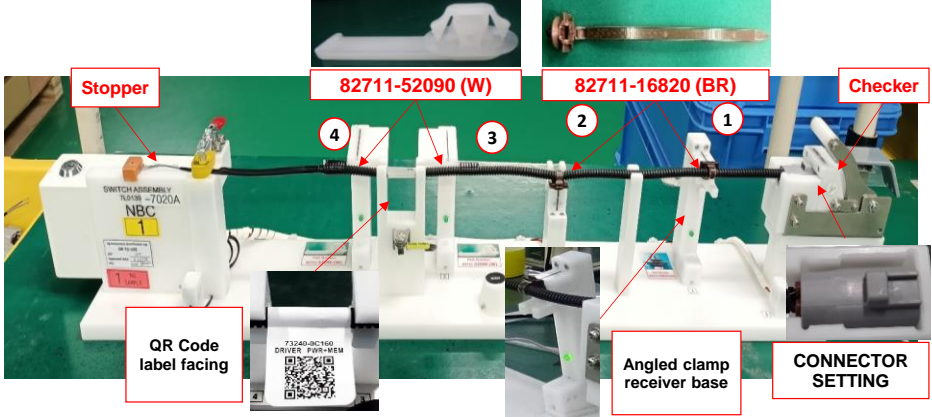
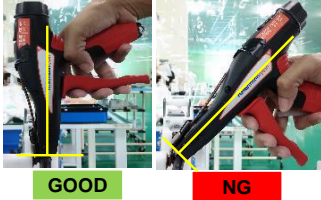
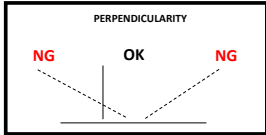


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PARTS:		1. Clamp 82711-52090 (W) 2. Clamp 82711-16820 (BR)		JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	<div></div> <div><p>1. Get the assy parts then set into jig. (See above illustration). First, set the connector 6188-0066 (GR) to Checker then pull the checker fixture for continuity checking. Continue to set the harness in jig. Last, set the G-B/W wires to stopper then press by toggle clamp.</p><p>2. Check if all LED light for Power On 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.</p><p>3. Initially tighten the band clamp on location 1 and 2 using both hands.</p><p>4. Get the bando gun using right hand and cut the band clamp on location 1 using both hands and press the SW button. Continue if sequence light in location 2 was ON.</p></div> <div><p>BANDO GUN POSITION ON CLAMP LOCATION 1</p><p>BANDO GUN ALIGNMENT</p><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>Bando Gun</p></div> <div><p>BANDO GUN ILLUSTRATION</p></div>	<p>Important reminders/Note/s:</p> <p>1. Make sure no gap between stopper and terminals.</p> <p>1. No wrong use of clamp 2. No damaged clamp 3. No missing clamp</p>

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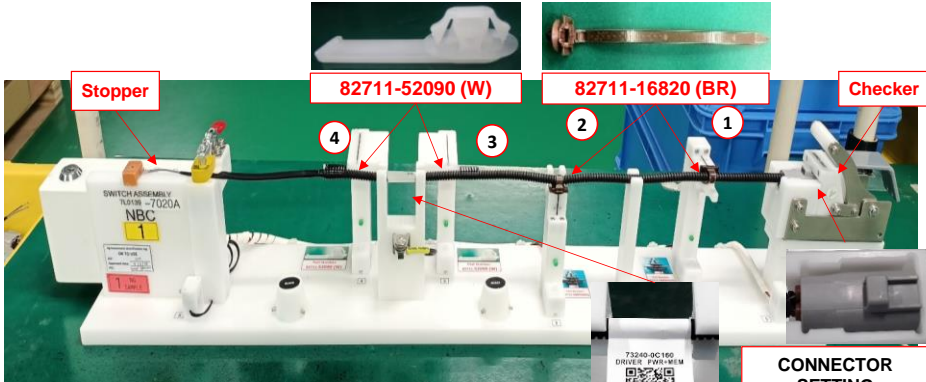

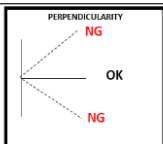

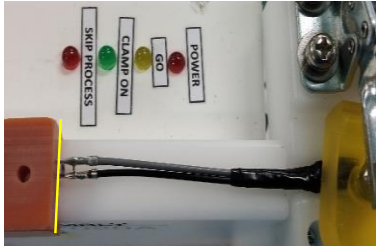
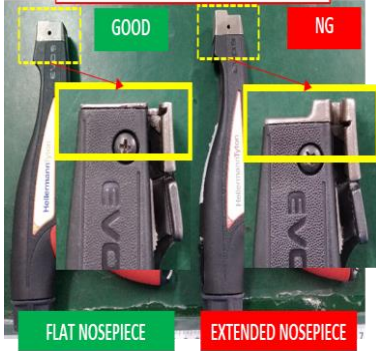
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PARTS:		1. Clamp 82711-52090 (W) 2. Clamp 82711-16820 (BR)		JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy Clamp assembly (Continuation)	<div></div> <div>5. Hold the bando gun using right hand and cut the band clamp on location 2 using both hands and press the SW button. Continue if sequence light in location 3 was ON.</div> <div><div>BANDO GUN POSITION ON CLAMP LOCATION 2</div><div></div></div> <div><div>Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube. For: ø5 - 1~2, ø7 - 3~4</div><div><div>BANDO GUN ALIGNMENT</div><div></div></div></div> <div>6. Hold the tape on clamp location 3 then start taping using both hands. Make 3 windings of tape then cut the tape and press the SW button. Continue if sequence light in location 4 was ON.</div> <div>7. Hold the tape on clamp location 4 then start taping using both hands. Make 3 windings of tape then cut the tape and press the SW button. Continue if sequence light in location 5 was ON.</div> <div>8. For label attachment, get the QR code label then attach using both hands. Press both SW button after attachment. Go sound will be heard. (Refer to the next page for label attachment).</div> <div>9. Conduct POINT CHECKING before removing the harness from jig.</div>		<div><div>Bando Gun</div></div>	<div></div> <div>Important reminders/Note/s: 1. Make sure no gap between stopper and terminals. 2. Make 2-3 windings for clamp taping</div> <div>1. No wrong use of clamp 2. No damaged clamp 3. No missing clamp</div> <div><div>BANDO GUN ILLUSTRATION</div><div></div></div>

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PARTS:

1. Assy parts

2. Label 7V8130-0020

JIG:

1. Clamp assembly jig

2. Label dispenser

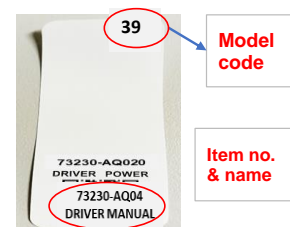
NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

4

Clamp
Assy

Label attachment

SWITCH ASSY P/N	SWITCH ASSY PART NUMBER REFERENCE	PART NO.	TOYOTA PART NO.	SEAT POSITION	SEAT TYPE
7L0141-702	41	7V8120-0020	73230-AQ020	DRIVER	POWER
7L0140-702	40	7V8110-0020	73230-AQ010	DRIVER	PWR + MEM
7L0139-702	39	7V8130-0020	73230-AQ040	DRIVER	MANUAL



1. Get the label.
Note: Check the model code, item no. & name



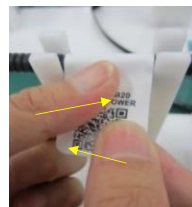
2. Align the end part of label in the jig.



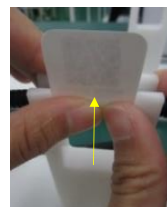
3. Fold the center part of the label



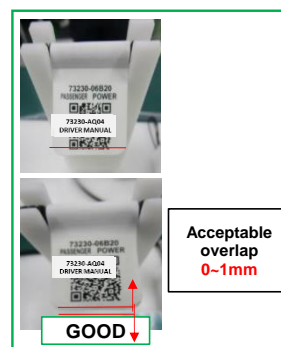
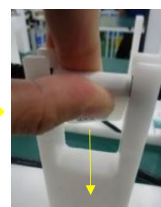
4. Align both end part of label .



5. After alignment , Press the label with both fingers .



6. Press the label upside down using finger.



Acceptable overlap
0~1mm

**NG**

1. No bubbles
2. No damage
3. No peel off
4. No wrong use of label
5. No missing parts
6. No loose attachment
7. No wrong usage of label



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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>MEASURING TAPE</div> 	<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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PARTS:

1. Assy parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**CLAMP ASSY****7L0139-7020B**

1

No Wrong Facing of Clamp

2

3

No Missing Tape (Black Tape)

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