



WORK INSTRUCTION

CLAMP ASSEMBLY PROCESS

Effectivity Date:

February 06, 2024

Process Name/Title:

Validity Date:

n/a

Model code/Part number:

930B / 7N0202-7020A

Customer: TRJ

Car Model: TOYOTA 4RUNNER

Document No.:

WI-ENG-PDE-824

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

0

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PARTS:

1. Assy parts

2. Clamp 82711-33650 (B)

3. Clamp 82711-48210 (B)

4. Clamp 82711-52090 (W)

5. Brown tape

6. Black tape [3 pcs.]

JIG:

1. Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

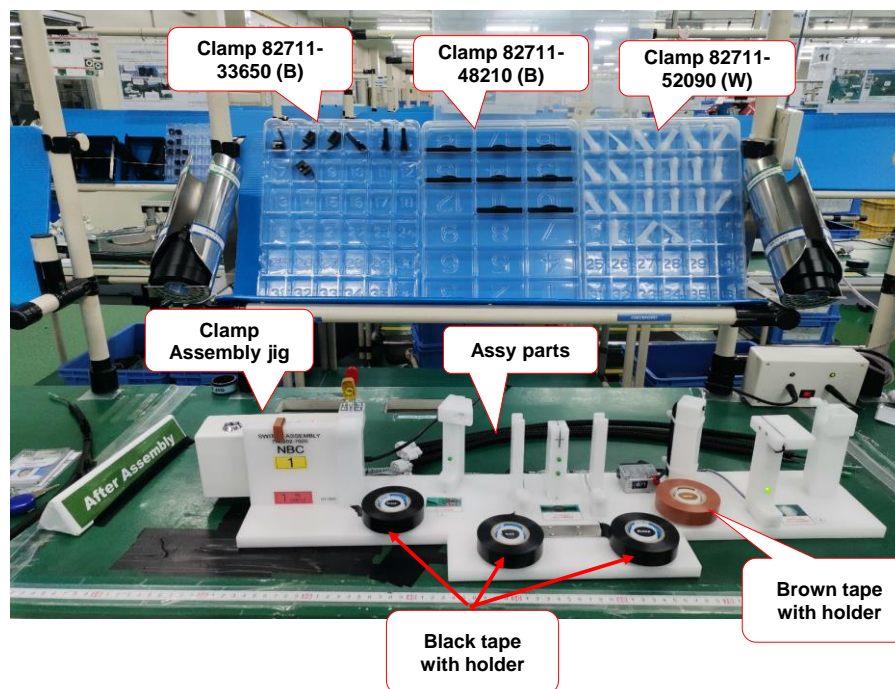
TOOLS/PPE

QUALITY POINTERS

1

P2

TABLE LAY-OUT

**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
3. No wrong position of parts/tools

Revision History

Prepared by

Reviewed by

Approved by

Noted by

02/06/24 0 Initial issue.

A.Hernandez C.Villanueva A. Arañes n/a

A.Hernandez

C.Villanueva

A.Arañes

n/a

Eff. Date Rev. No

Details of Change

Revised

Reviewed

Approved

Noted

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PARTS:		1. Assy parts 2. Clamp 82711-33650 (B) 3. Clamp 82711-48210 (B)		4. Clamp 82711-52090 (W) 5. Brown tape 6. Black tape [3 pcs.]		JIG:	1. Assembly jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	P2	Clamp Setting	<div><div><p>82711-33650 (B)</p></div><div><p>82711-48210 (B)</p></div><div><p>82711-52090 (W)</p></div><div><p>1</p><p>2</p><p>3</p><p>4</p><p>Sequence light</p><p>Color sensor Brown tape only</p></div></div>				<p>Important reminders/Notes</p> <p>1. Please check the clamp first before start of clamp assembly to avoid wrong use of clamp.</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><div>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div><p>82711-48210 (B)</p></div></div><div><div>NG</div><div><p>82711-3F290 (B)</p></div></div></div>
			<div><div>1. Get 1pc of clamp 82711-33650 (B) using right hand then set to Clamp location no. 4 using both hands.</div><div>2. Get 1pc of clamp 82711-48210 (B) using right hand then set to Clamp location no. 2 and 3 using both hands.</div><div>3. Get 1pc of clamp 82711- 52090 (W) using right hand then set to Clamp location no. 1 using both hands.</div><div>4. Initially attach BROWN TAPE to location 4 using both hands.</div><div>5. Initially attach BLACK TAPE to location 1,2, and 3 using both hands.</div><div><div>STANDARD TAPING FOR CLAMP</div><div>One side tape under clamp</div><div></div></div></div>				

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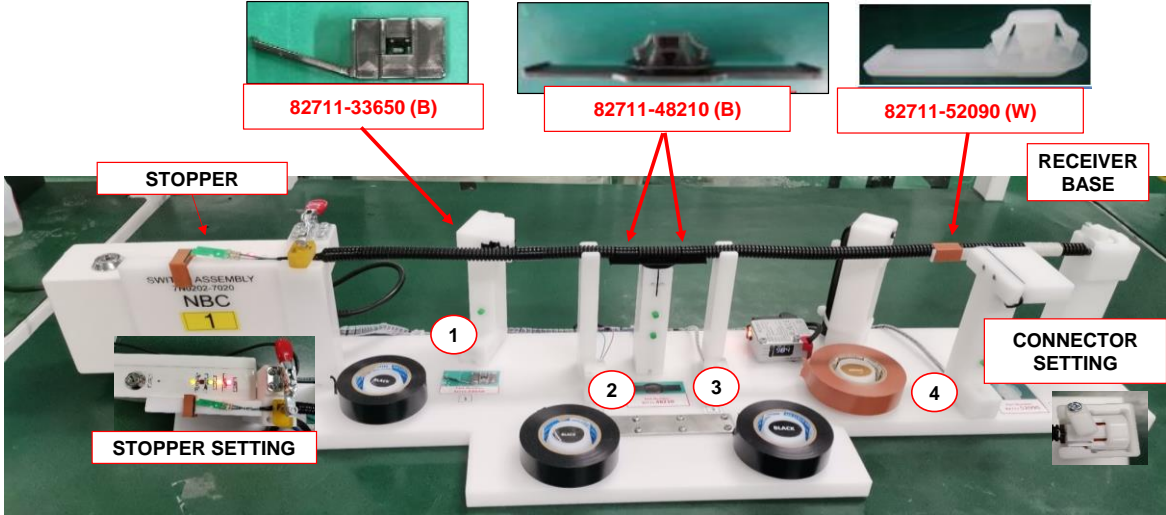
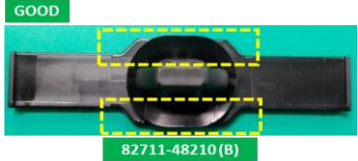
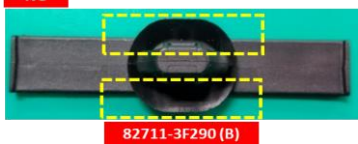
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PARTS:	1. Assy parts		JIG:	1. Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P2	Clamp Assembly	<div></div>	<div><p>Important reminders/Notes</p><p>1. Please check the clamp first before start of clamp assembly to avoid wrong use of clamp.</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> <div><p>CLAMP ILLUSTRATION</p><div><p>GOOD</p></div><div><p>NG</p></div></div>
		<div><p>1. Get the assy part and set to jig. (See above picture for the correct setting). First, set the connector 6189-0451 (W) to Receiver base and lock. Continue to set the harness in jig. Last, set B/W-G wires with PCB end together within stopper then press by toggle clamp.</p></div>	<div><p>4. Hold the tape on clamp location 2 and 3, make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue if sequence on clamp location 4 was ON.</p></div>	
		<div><p>2. Check if LED light for POWER ON and CLAMP ON was ON. Check also the clamp location 1 sequence light is ON. If encountered abnormality, STOP and immediately CALL the attention of the leader, WAIT for further instruction then continue the process.</p></div>	<div><p>5. 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. Go sound will be heard.</p></div>	
		<div><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 if sequence on clamp location 2 was ON.</p></div>	<div><p>6. Conduct POINT CHECKING before removing the harness from jig.</p></div>	

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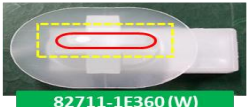


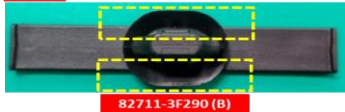





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PARTS:		1. Assy parts 2. Master sample		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P2	<div><div></div><div>ACTUAL PRODUCTS</div></div>			<div>1. No skip checking during inspection.</div> <div>MASTER SAMPLE</div> <div></div> <div>CLIP CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div></div><div>82711-1E360 (W)</div></div> <div><div>NG</div><div></div><div>82711-12B10 (W)</div></div> <div>CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div></div><div>82711-48210 (B)</div></div> <div><div>NG</div><div></div><div>82711-3F290 (B)</div></div>
		<div><div><div>ASSEMBLED PARTS</div><div></div><div>MASTER SAMPLE</div></div><div>1. Conduct alignment of harness (Master sample vs. Assembled parts) using both hands.</div><div><div></div><div>2. Check the connector lock condition, insertion, and terminal.</div></div><div><div></div><div>4. Check the taping condition.</div></div><div><div></div><div>3. Check the presence of all clamp attachment and taping condition. Conduct slightly bending of parts with wing-type clamp.</div></div><div><div></div><div>5. Check the hotmelted wires (B/W-G) appearance. Must be no deformed terminal.</div></div></div>			

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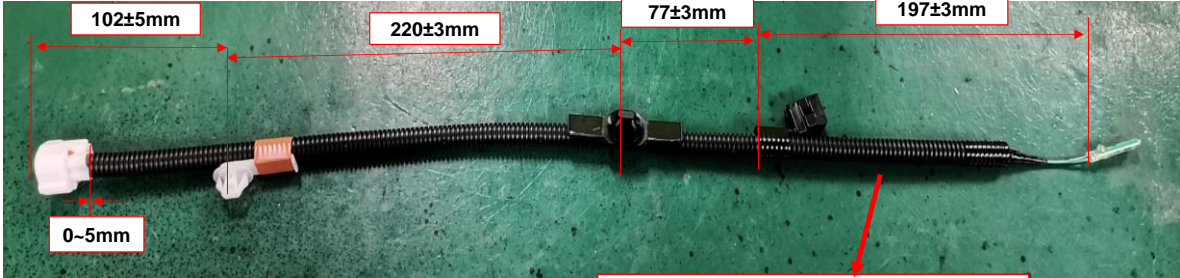
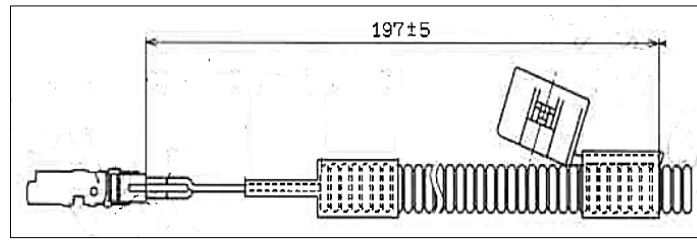

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PARTS:		1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P2	Measurement	<div><p>MEASURING TAPE</p><p>Note: Measurement from end of clamp taping (82711-33650) to end of PCB.</p></div>		<p>1. No wrong dimension</p> <p>Important reminders/Note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>2. For Hatsumono and Owarimono.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-ASY-056 for Sub assembly Hatsumono, Nakamono, and Owarimono Inspection.</p>

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PARTS:

n/a

JIG:

n/a

QUALITY CHECKPOINTS

P2

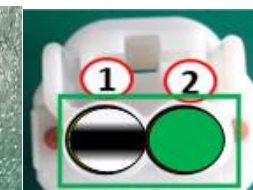
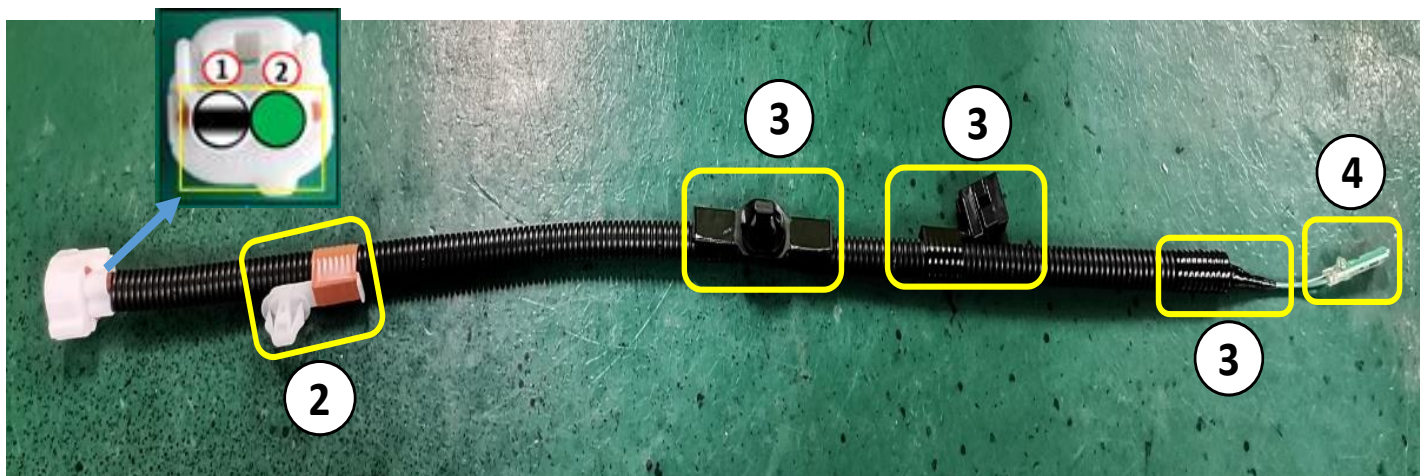
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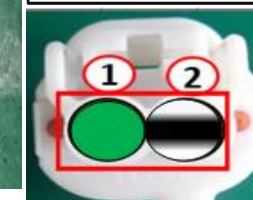
GOOD



NO GOOD



GOOD



NO GOOD

- 1 No **WRONG INSERT**
No **UNLOCKED/HALFLOCKED**
No **TBO**

- 2 No **Missing Clamp**
No **Wrong color of tape (Brown)**

- 3 No **Wrong color of tape (Black)**

- 4 No **Missing Tape**

- 5 No **DEFORMED
TERMINAL/PCB**

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