



## WORK INSTRUCTION

Process Name/Title:

## CLAMP ASSEMBLY PROCESS

Effectivity Date:

December 05, 2024

Validity Date:

n/a

Model code/Part number:

310D / 7N0240-7020

Customer: TRJ

Car Model: TOYOTA RAV 4

Document No.:

WI-ENG-PDE-1177

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

0

Page No.:

1 of 7

## PARTS:

1. Assy parts; clamp 82711-48210 (B); Clamp 82711-3A640 (B); 4. Clamp 82711-33640 (B); Black Tape [5 pcs.]; Orange Tape

JIG:

1. Clamp Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

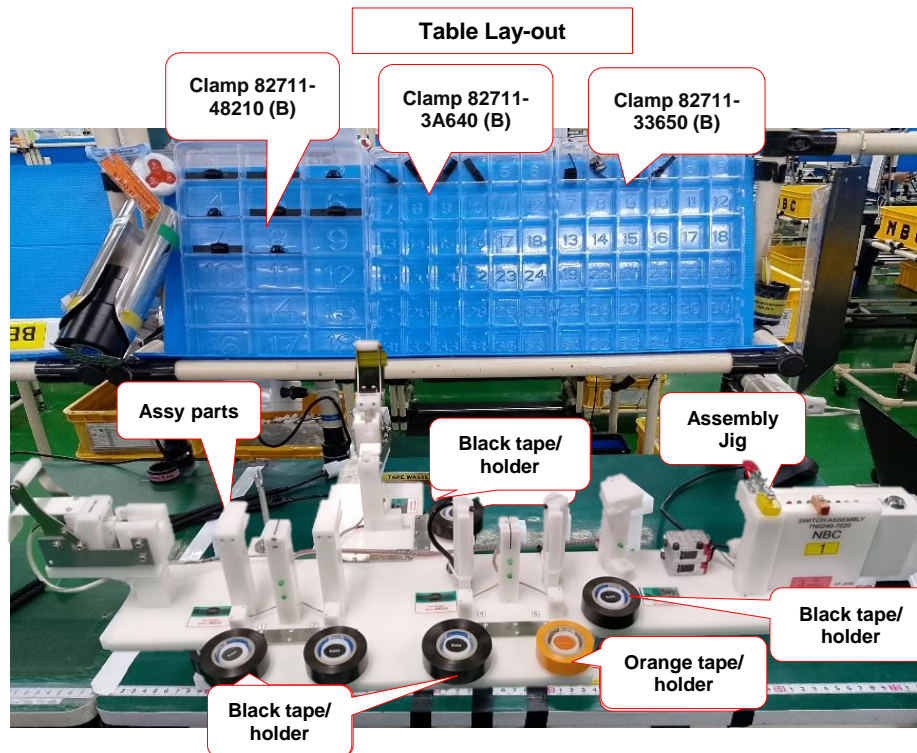
TOOLS/PPE

QUALITY POINTERS

1

Clamp  
Assy

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.

**Important reminders/Note/s:**

1. Refer to WI-ENG-PDE-675 for Offline assembly process
2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance

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

Revision History

Prepared by

Reviewed by

Approved by

Noted by

12/05/24

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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0

Page No.:

2 of 7

**PARTS:**

1. Assy parts
2. Clamp 82711-48210 (B) [2 pcs.]
3. Clamp 82711-3A640 (B)

4. Clamp 82711-33640 (B)
5. Black Tape [5 pcs.]
6. Orange Tape

JIG:

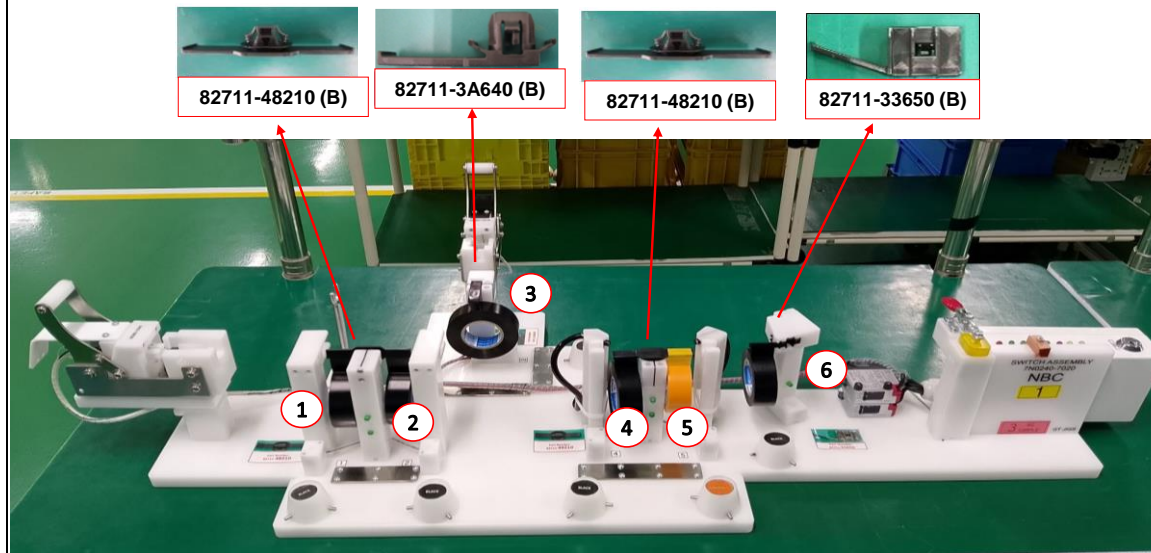
1. Clamp Assembly jig

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

2

Clamp  
Assy

Clamp Setting



1. Get 1pc. of clamp **82711-48210 (B)** using right hand and set to clamp location **1,2,4 and 5** using both hands.

2. Get 1pc. of clamp **82711-3A640 (B)** using right hand and set to clamp location **3** using both hands.

3. Get 1pc. of clamp **82711-33650 (B)** using right hand and set to clamp location **6** using both hands.

4. Initially attach **Orange tape** to clamp location **5** using both hands.

5. Initially attach **Black tape** to clamp location **1, 2, 3,4, and 6** using both hands.

1. No wrong use of parts
2. No wrong use of tape
3. No damaged clamp
4. No wrong clamp position

**Important reminders/Note/s:**

**1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.**

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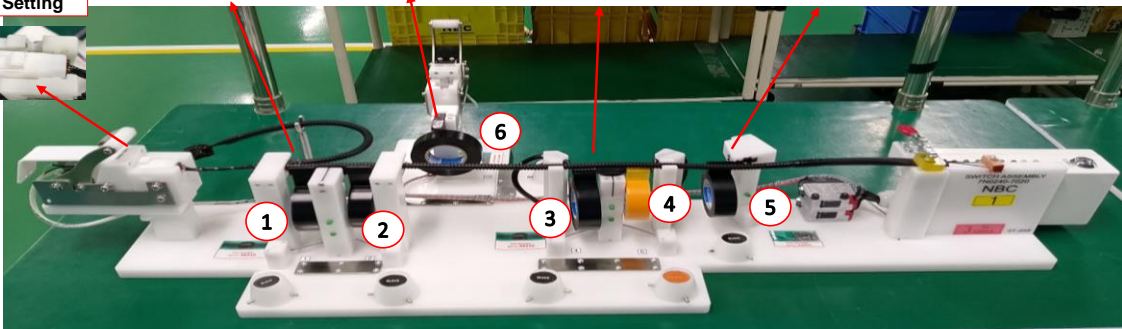


☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

0

Page No.:

3 of 7

PARTS:		1. Assy parts 2. Black tape 3. Orange Tape		JIG:	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	<div><div><div>Connector Setting</div><div>82711-48210 (B)</div><div>82711-3A640 (B)</div><div>82711-48210 (B)</div><div>82711-33650 (B)</div></div><div></div><div><div>1. Put the assy parts into jig (<i>See above picture for the correct setting</i>). First, set the <b>connector 6188-0093 (W)</b> to <b>checker 1</b>. Second, set the <b>(VM tube (Sunprene) with B-B wires)</b> together with the stopper then press by toggle clamp. Last, initially put the COT (with <b>Connector 6189-1161(B)</b>) in hook.</div></div><div><div><div><div>COT 1</div><div>COT 2</div><div>HOOK</div></div><div><div><div>1</div><div>2</div><div>2</div></div><div><div><div>2</div></div></div></div><div><div>2. Hold the tape on <b>location 2</b> and make <b>2 windings</b> using both hands. Press the <b>SW button</b> after taping (<b>Do not cut the tape</b>).</div></div></div></div></div>			<div><p><b>Important reminders/Notes</b></p><p><b>1. Please check the clamp first before start of clamp assembly to avoid wrong use of clamp.</b></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></div><div><div>NG</div><div></div></div></div></div></div>

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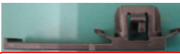


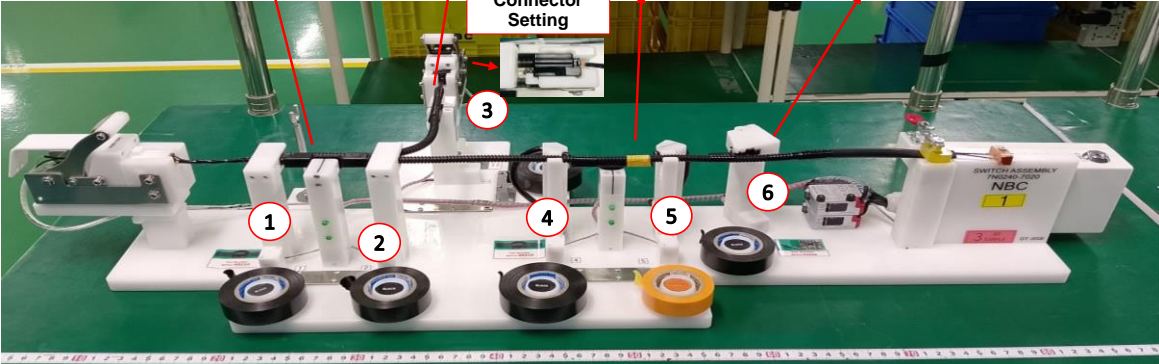




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Revision No.:

0

Page No.:

4 of 7

PARTS:		1. Assy parts 2. Black tape 3. Orange Tape	JIG:	1. Clamp Assembly jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	Clamp Assembly (Continuation)			
		<div><div><div>82711-48210 (B)</div></div><div><div>82711-3A640 (B)</div></div><div><div>82711-48210 (B)</div></div><div><div>82711-33650 (B)</div></div><div></div></div> <div>3. Remove the <b>COT 1</b> from the hook and set the <b>connector 6189-1161 (B)</b> to <b>Checker 2</b> using both hands then lock. (<i>Refer to above illustration for the correct setting</i>). Continue the process on location 1 if the sequence light was <b>ON</b>.</div> <div>4. Check if <b>LED</b> light for <b>POWER ON, CLAMP ON, WIRE 1</b> and <b>WIRE 2</b> was <b>ON</b>. If encountered abnormality, <b>STOP</b> immediately and <b>CALL</b> the attention of the leader . <b>WAIT</b> for the further instructions. Continue it the sequence light on <b>location 1</b> was <b>ON</b>.</div> <div>5. Combine the <b>COT 1</b> and <b>COT 2</b>. Hold the black tape on clamp <b>location 1 (SIDE A)</b> then start taping using both hand. Make <b>3 windings</b> of tape then cut the tape. Press the <b>SW button</b> after taping. Continue the process if the sequence light on <b>location 2</b> was <b>ON</b>.</div> <div>6. On Clamp <b>location 2 (SIDE B)</b>. Hold the Black tape using right hand. Make <b>3 winding</b> of tape then cut the tape. Press the <b>SW button</b> after taping. Continue the process if the sequence light on <b>location 3</b> was <b>ON</b>.</div> <td></td> <td><div><b>Important reminders/Notes</b></div><div>1. Please check the clamp first before start of clamp 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>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div><div>82711-48210 (B)</div></div><div><div>NG</div><div><div>82711-3F290 (B)</div></div></div></div></div></td>			<div><b>Important reminders/Notes</b></div> <div>1. Please check the clamp first before start of clamp 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>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div><div>82711-48210 (B)</div></div><div><div>NG</div><div><div>82711-3F290 (B)</div></div></div></div></div>

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Page No.:

5 of 7

## PARTS:

1. Assy parts
2. Black tape
3. Orange Tape

JIG:

1. Clamp Assembly jig

## NO.

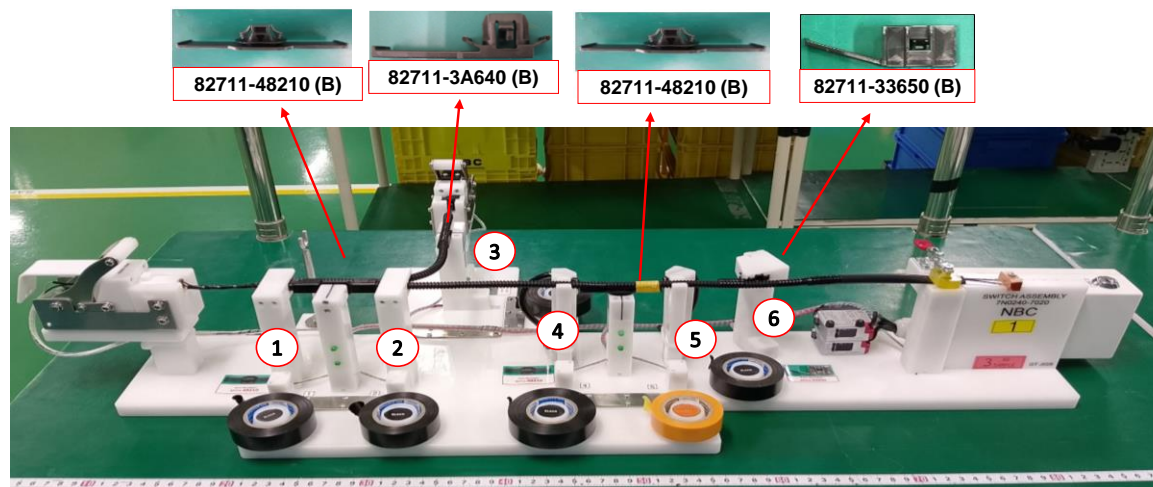
## PROCESS NAME

## WORK PROCEDURE/ ILLUSTRATION

## TOOLS/PPE

## QUALITY POINTERS

3

Clamp  
AssyClamp Assembly  
(Continuation)

7. On Clamp **location 3** hold the Black tape using right hand. Make **3 winding** of tape then cut the tape. Press the SW button after taping. Continue the process if the sequence light on **location 4** was **ON**.

8. On Clamp **location 4** hold the Black tape using right hand. Make **3 winding** of tape then cut the tape. Press the SW button after taping. Continue the process if the sequence light on **location 5** was **ON**.

9. On Clamp **location 5** hold the Black tape using right hand. Make **3 winding** of tape then cut the tape. Press the SW button after taping. Continue the process if the sequence light on **location 6** was **ON**.

10. On Clamp **location 6** hold the Black tape using right hand. Make **3 winding** of tape then cut the tape. Press the SW button after taping. **GO** buzzer will be heard.

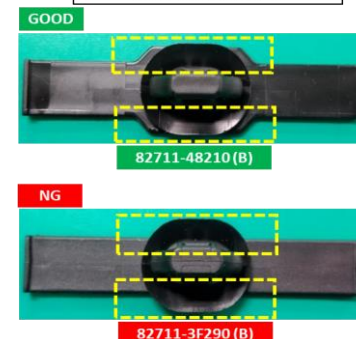
11. After taping, **CONDUCT POINT CHECKING** before removing the harness from jig.

## Important reminders/Notes

1. Please check the clamp first before start of clamp assembly to avoid wrong use of clamp.

1. No wrong use of parts
2. No wrong use of tape
3. No damaged clamp
4. No wrong clamp position

## CLAMP ILLUSTRATION



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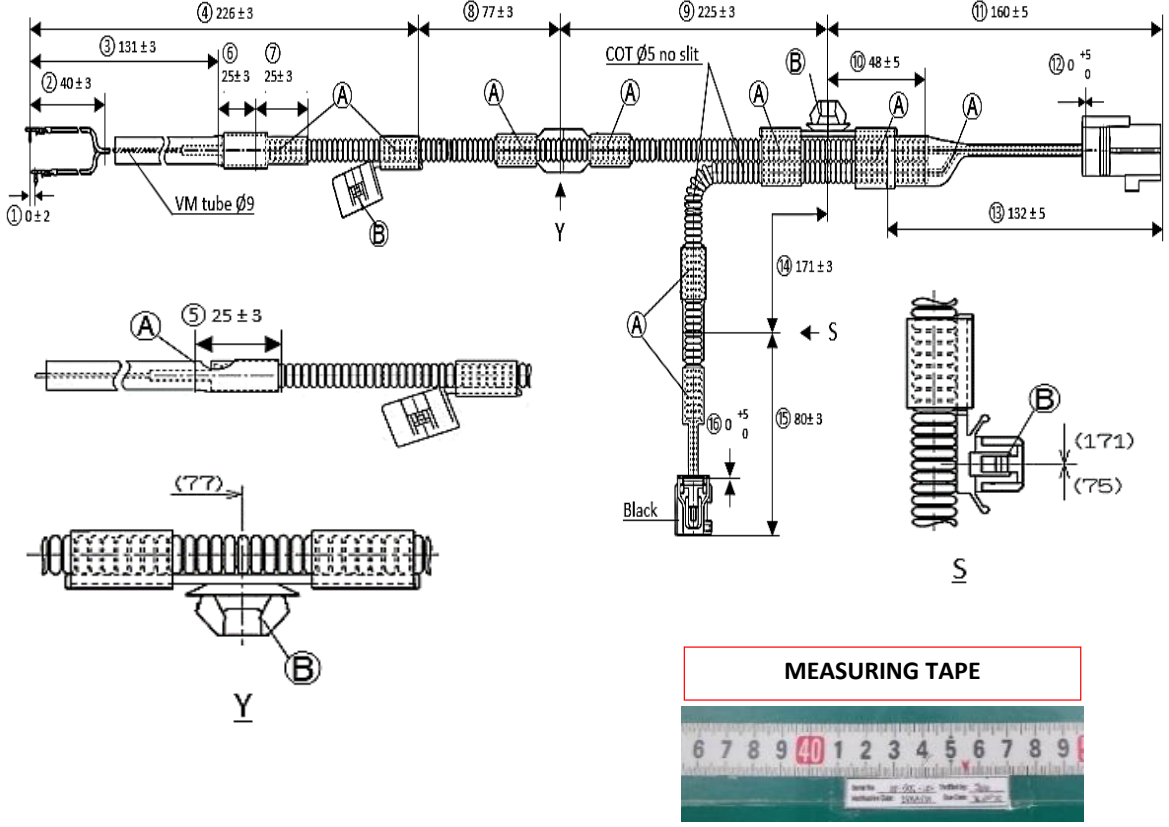
**WI-ENG-PDE-1177**

Revision No.:

0

Page No.:

6 of 7

PARTS:		1. Assy Parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy	Measurement			<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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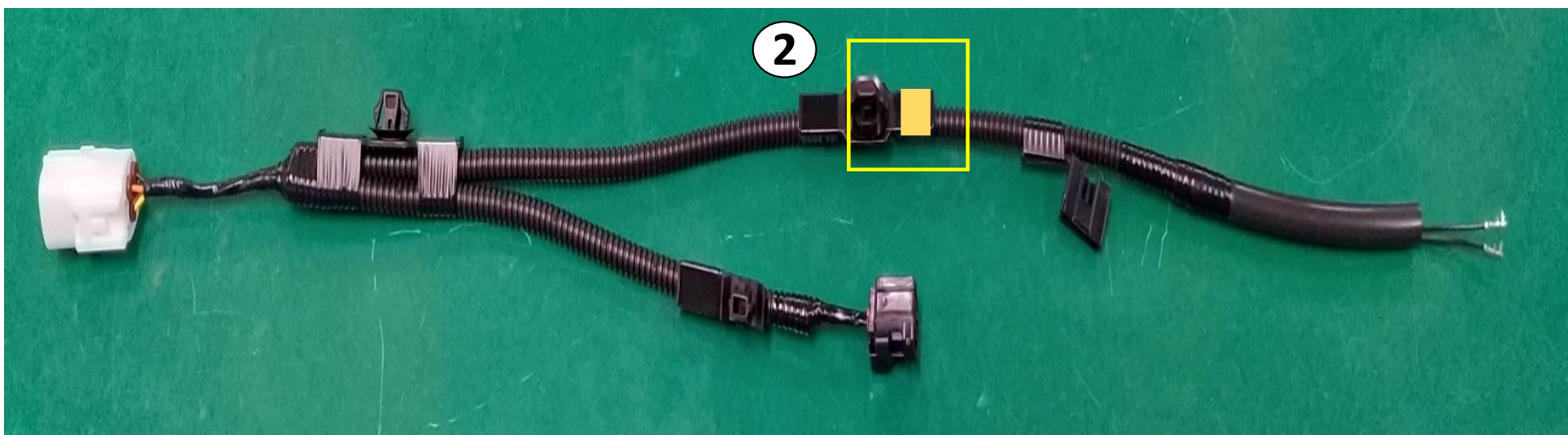
7 of 7

PARTS:

n/a

JIG:

n/a

**VISUAL INSPECTION/QUALITY CHECKPOINTS****CLAMP ASSY****7N0240-7020**

- ① Check the **Clamp Alignment**      ② No **Wrong used of Clamp taping (Orange)**      ③ No **Missing Spot Tape**  
④ No **Missing Tape**

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