



# WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:

December 16, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number: 010B / 7L0031-7024

Customer: TRQSS

Document No.:

WI-ENG-PDE-428C

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

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**PARTS:** 1. Assy parts: Clamp 82711-52090 (W); Clamp 82711-16820 (BR); Label (7V2070-0020); Black tape [3pcs.]

JIG:

1. Clamp assembly jig  
2. Label Dispenser

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

1

P3

Table Lay-out

Clamp 82711-52090 (W)/  
Connector tray

Table Lay-out

Clamp 82711-16820 (BR)/  
Connector tray

Label (7V2070-0020)/  
Label dispenser

Assy parts

Bando gun

Clamp assembly jig

Black tape/Tape holder

## 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.



BANDO  
GUN

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

## Revision History

Eff. Date	Rev. No	Details of Change	Prepared by	Reviewed by	Approved by	Noted by
12/16/22	1	Improve quality pointers: Reminders/notes, references and by two's inspection. Inclusion of Quality checkpoints	M. Catapang	J. Loterte	C. Villanueva	A. Arañes
03/05/22	0	Initial issue	M. Catapang	J. Loterte	C. Villanueva	A. Arañes

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### PARTS:

1. Clamp 82711-52090 (W) [3pcs.]
2. Clamp 82711-16820 (BR) [2pcs.]

3. Black tape [3pcs.]

### JIG

1. Clamp Assembly Jig

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

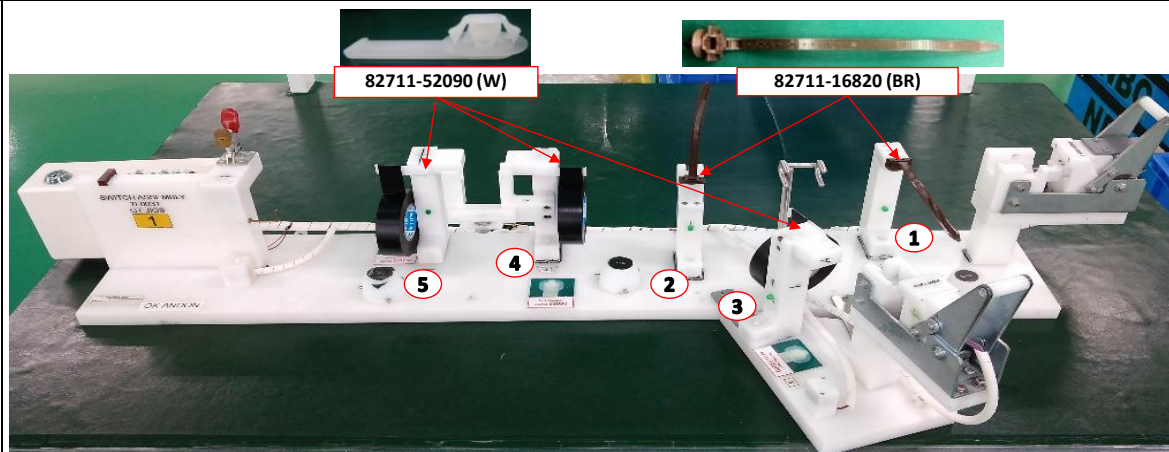
### TOOLS/PPE

### 1 QUALITY POINTERS

2

P3

Clamp setting



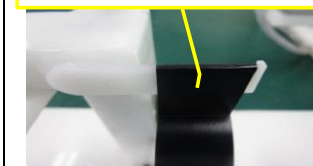
1. Get 3pcs. of clamp **82711-52090 (W)** using both hands then attach to clamp location **5, 4, and 3** using both hands.

2. Get 2pcs. of clamp **82711-16820 (BR)** using both hands then attach to clamp location **2 and 1** using both hands.

3. Get the Black tape then initially attach to clamp location **5, 4 and 3** using both hands.

#### STANDARD TAPING FOR CLAMP

One side tape under clamp

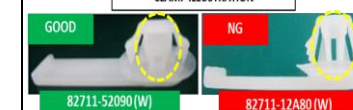


1. No damaged clamp
2. No wrong use of parts
3. No wrong use of tape
4. No wrong insertion of clamp

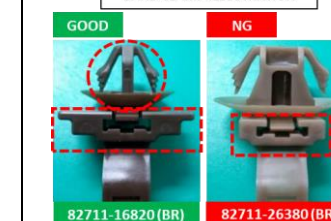
#### Important reminders/Note/s:

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

#### CLAMP ILLUSTRATION



#### BAND CLAMP ILLUSTRATION



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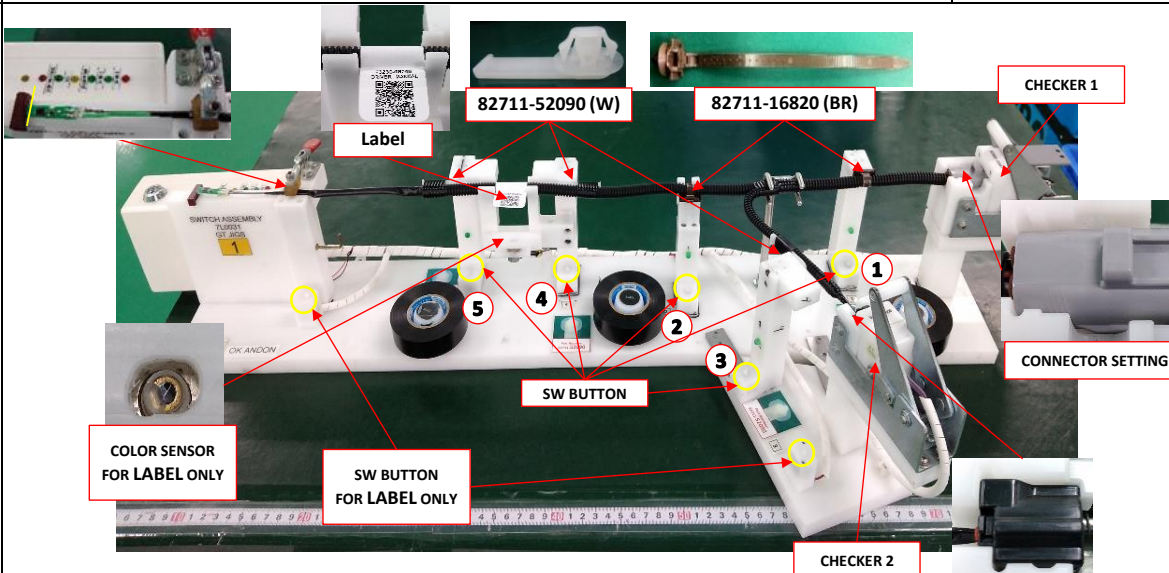


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PARTS:		1. Assy parts		JIG	1. Clamp Assembly Jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	1 QUALITY POINTERS	
2	P3	Clamp Assembly (Continuation)	 <p>1. Get the assy parts and set into jig. (<i>See above picture for correct setting</i>). First, set the connector <b>6188-0066 (GR)</b> to <b>Checker 1</b> then pull the checker fixture for continuity checking. Second, set the connector to <b>6189-1161 (B)</b> to <b>Checker 2</b> then pull the checker fixture for continuity checking. Last, set the end of <b>G/BW hotmelted wire</b> together within the stopper then press by <b>Toggle clamp</b>. Continue if the sequence light in location <b>1</b> was <b>ON</b>.</p> <p>2. Check if all <b>LED light</b> for <b>POWER ON, WIRE1, WIRE2 and CLAMP ON</b> was <b>ON</b>. If encountered abnormality, <b>STOP</b> and immediately <b>CALL</b> the attention of the leader. <b>WAIT</b> for further instruction and continue the process.</p>	 <p><b>Important reminders/Note/s:</b></p> <p><b>1. Make sure no gap between stopper and PCB</b></p> <p>1. No loose/tight clamp attached 2. No damage clamp 3. No missed tape 4. No missing parts 5. Make sure no clearance between PCB and stopper jig</p> 	

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PARTS:

1. Assy parts

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

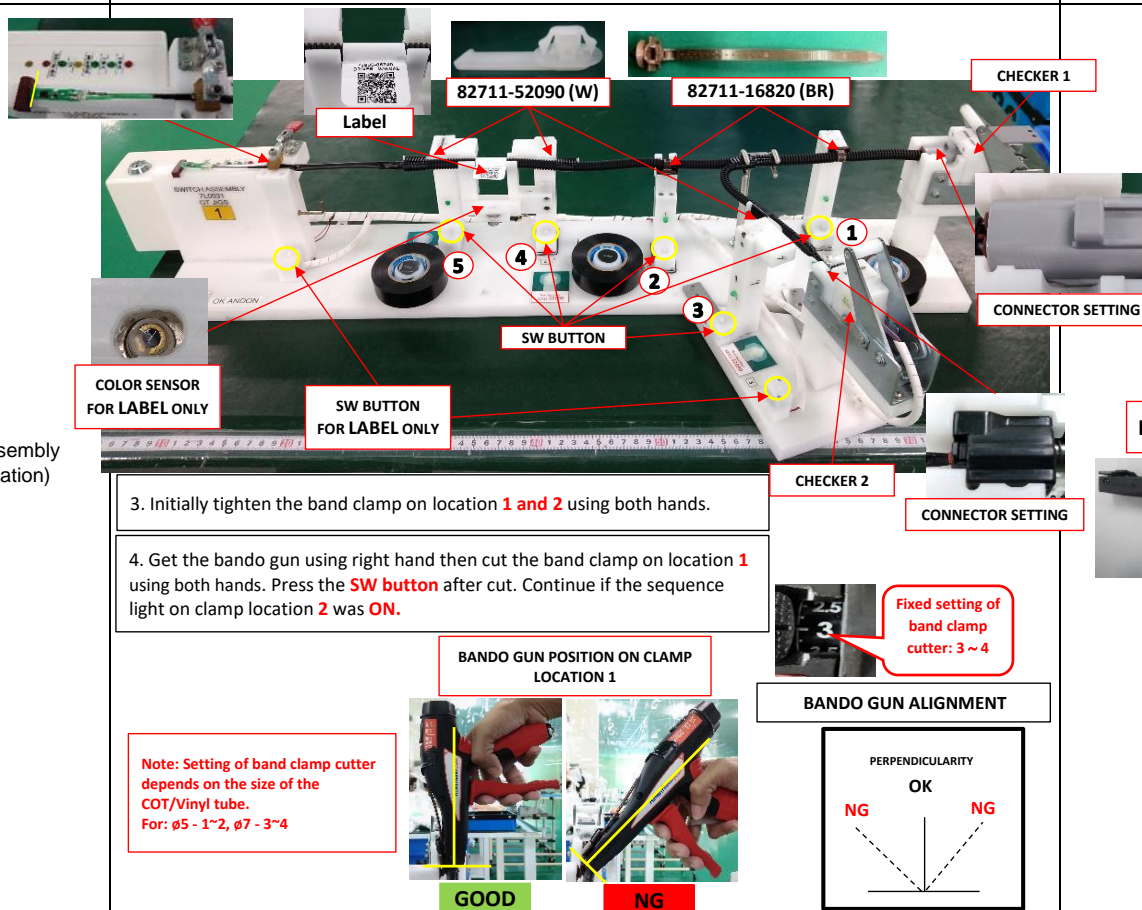
TOOLS/PPE

1 QUALITY POINTERS

2

P3

Clamp Assembly  
(Continuation)



3. Initially tighten the band clamp on location **1** and **2** using both hands.

4. Get the bando gun using right hand then cut the band clamp on location **1** using both hands. Press the **SW button** after cut. Continue if the sequence light on clamp location **2** was **ON**.

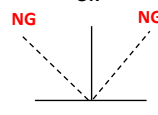
BANDO GUN POSITION ON CLAMP  
LOCATION 1

Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube.  
For:  $\phi 5 - 1 \sim 2$ ,  $\phi 7 - 3 \sim 4$

Fixed setting of band clamp cutter: 3 ~ 4

BANDO GUN ALIGNMENT

PERPENDICULARITY

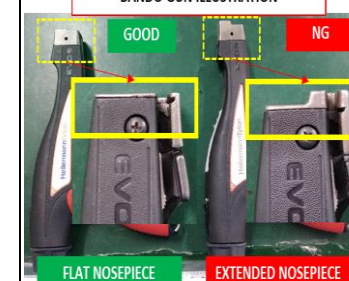


Important reminders/Note/s:

1. Make sure no gap between stopper and PCB

1. No loose/tight clamp attached
2. No damage clamp
3. No missed tape
4. No missing parts
5. Make sure no clearance between PCB and stopper jig

BANDO GUN ILLUSTRATION



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PARTS:

1. Assy parts

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

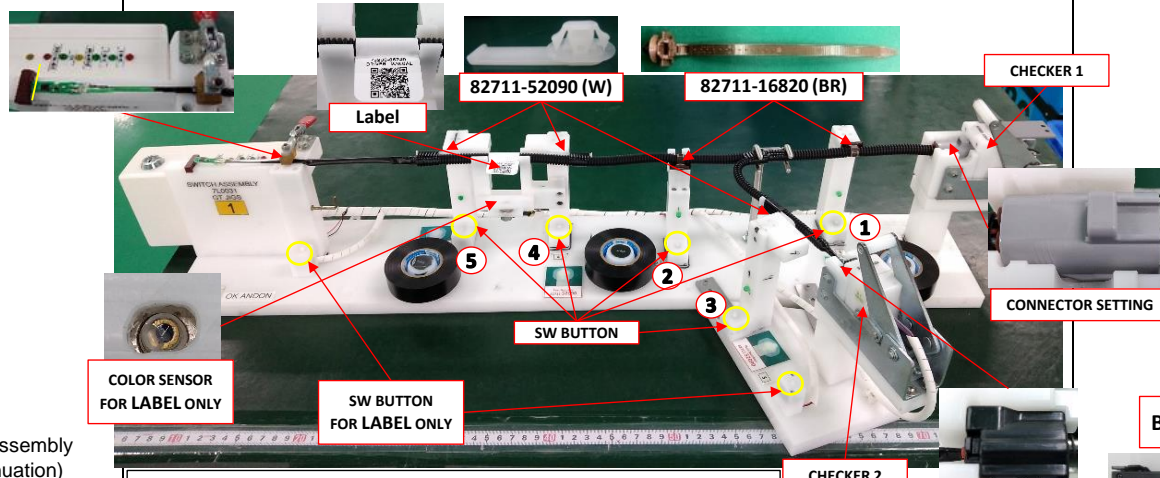
TOOLS/PPE

1 QUALITY POINTERS

2

P3

Clamp Assembly  
(Continuation)



5. Cut the band clamp on location **2** using both hands. Press the **SW button** after cut. Continue if the sequence light on clamp location **3** was **ON**.

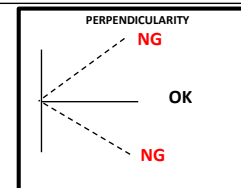
BANDO GUN POSITION ON CLAMP  
LOCATION 2



Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube.  
For:  $\phi 5 - 1 \sim 2$ ,  $\phi 7 - 3 \sim 4$

Fixed setting of  
band clamp  
cutter: 3 ~ 4

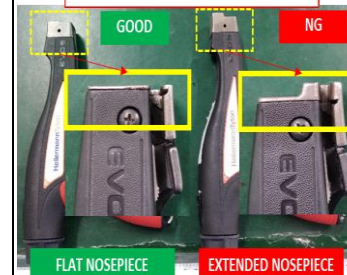
BANDO GUN ALIGNMENT



BANDO GUN



BANDO GUN ILLUSTRATION



Important reminders/Note/s:

1. Make sure no gap between stopper and PCB

1. No loose/tight clamp attached
2. No damage clamp
3. No missed tape
4. No missing parts
5. Make sure no clearance between PCB and stopper jig

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### PARTS:

1. Assy parts
2. Black tape

### JIG

1. Clamp Assembly Jig

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

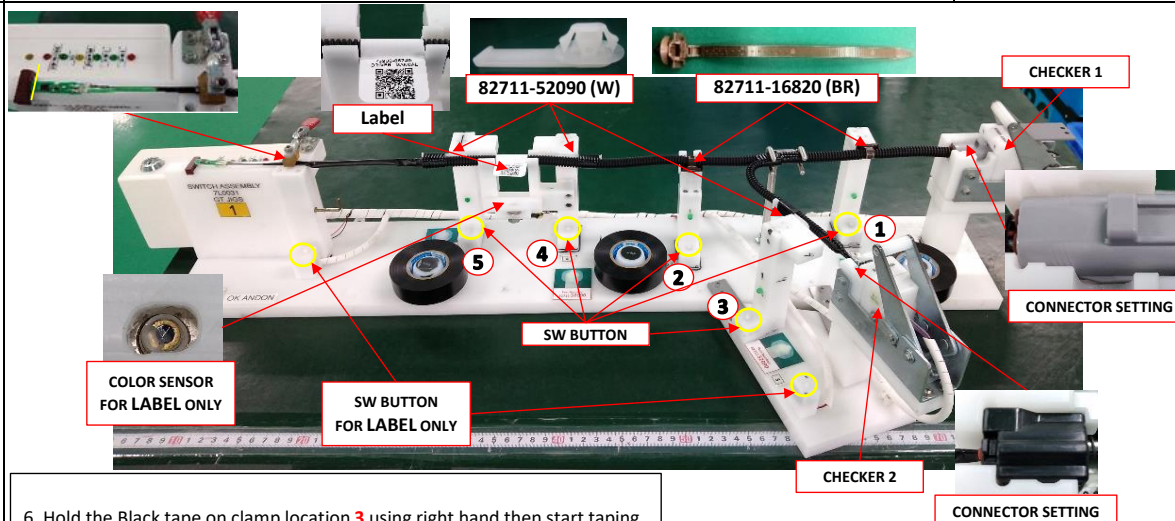
### TOOLS/PPE

### 1 QUALITY POINTERS

2

P3

Clamp Assembly  
(Continuation)



6. Hold the Black tape on clamp location **3** using right hand then start taping using both hands. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **4** was **ON**.

7. Hold the Black tape on clamp location **4** using right hand then start taping using both hands. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **5** was **ON**.

8. Hold the Black tape on clamp location **5** using right hand then start taping using both hands. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue on label attachment (*Refer to next page for label attachment procedure*)

9. For label attachment, **color sensor** will light if detects the **label code**. After attachment, press the **SW button** using both index finger (**same timing**). **Go** sound will be heard.



SW BUTTON  
FOR LABEL ONLY  
*Press same timing*

10. Conduct **POINT CHECKING** before removing the harness from jig.



**Important reminders/Note/s:**  
**1. Make sure no gap between stopper and PCB**

1. No loose/tight clamp attached
2. No damage clamp
3. No missed tape
4. No missing parts
5. Make sure no clearance between PCB and stopper jig

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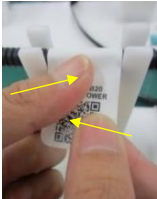
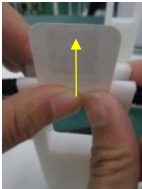
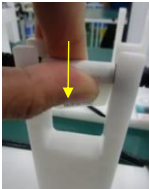




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### PARTS:

1. Assy parts
2. Label 7V2070-0020

### JIG

1. Clamp Assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS															
3	P3	Label attachment	<table><tr><th>Model</th><th>Item No</th><th>Item Name</th></tr><tr><td>7L0030</td><td>73230-06750</td><td>Passenger Manual</td></tr><tr><td>7L0031</td><td>73230-06740</td><td>Driver Manual</td></tr><tr><td>7L0032</td><td>73230-06B20</td><td>Passenger Power</td></tr><tr><td>7L0033</td><td>73230-06760</td><td>Driver Power</td></tr></table>	Model	Item No	Item Name	7L0030	73230-06750	Passenger Manual	7L0031	73230-06740	Driver Manual	7L0032	73230-06B20	Passenger Power	7L0033	73230-06760	Driver Power	<div><div><div>31</div><div>Model code</div></div><div><div>73230-06740 DRIVER MANUAL</div><div>Item no. &amp; name</div></div></div> <div></div>		
			Model	Item No	Item Name																
			7L0030	73230-06750	Passenger Manual																
7L0031	73230-06740	Driver Manual																			
7L0032	73230-06B20	Passenger Power																			
7L0033	73230-06760	Driver Power																			
<div><div>1. Get the label Check the model code, item no. &amp; name</div><div></div></div>	<div><div>2. Align the end part of label in the jig.</div><div></div><div></div><div></div></div>																				
<div><div>3. Fold the center part of the label</div><div></div></div>	<div><div>4. Align both end part of label .</div><div></div></div>	<div><div>5. After alignment , Press the label with both fingers.</div><div></div><div><div>GOOD</div></div></div> <div><div>6. Press the label upside down using finger.</div><div></div><div><div>Acceptable overlap 0~1mm</div></div></div> <div><div></div><div><div>NG</div></div></div>																			
				n/a	<div><div>1. No bubbles</div><div>2. No damage</div><div>3. No peel off</div><div>4. No wrong use of label</div><div>5. No missing parts</div><div>6. No loose attachment</div></div> <div></div>																

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PARTS:

n/a

JIG

n/a

NO.

PROCESS NAME

1

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

1

QUALITY POINTERS

4

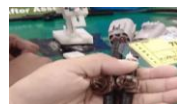
P3

Visual/By Two's Inspection

1



Assembled parts



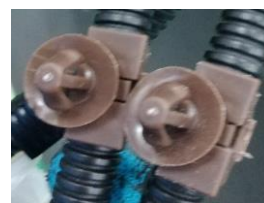
Master sample



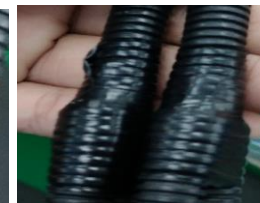
1. Conduct alignment of harness (Master sample vs. assembled parts) using both hands.



2. Check the connector lock, terminal and insertion.



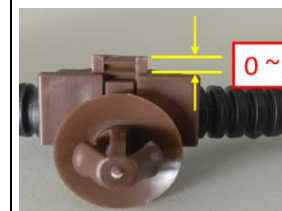
3. Check the Y-Taping condition, presence of all clamp attachment, taping condition and band clamp cut condition.



MASTER SAMPLE



1. No skip checking during inspection



Important reminders/Note/s:

1. Using a steel rule, check if the band cut measurement is within the required dimension (0~2mm) and should not exceed the maximum value.

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PARTS:

n/a

JIG

n/a

NO.

PROCESS NAME

1 WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

1 QUALITY POINTERS

4

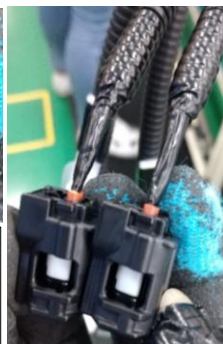
P3

Visual/By Two's  
Inspection  
(Continuation)

1



4. Check the **connector lock, terminal, insertion and taping condition.**



6. Check the **taping condition.**



5. Check the **Y-Taping condition, presence of all clamp attachment, taping condition and band clamp cut condition.**



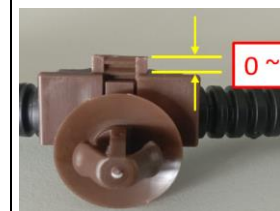
7. Check the **terminal and PDB appearance.** Must be **no deformed terminal.**



MASTER SAMPLE



1. No skip checking during inspection



0 ~ 2mm

Important reminders/Note/s:

1. Using a steel rule, check if the band cut measurement is within the required dimension (0~2mm) and should not exceed the maximum value.

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n/a

JIG

n/a

NO.

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WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

1 QUALITY POINTERS

5

P3

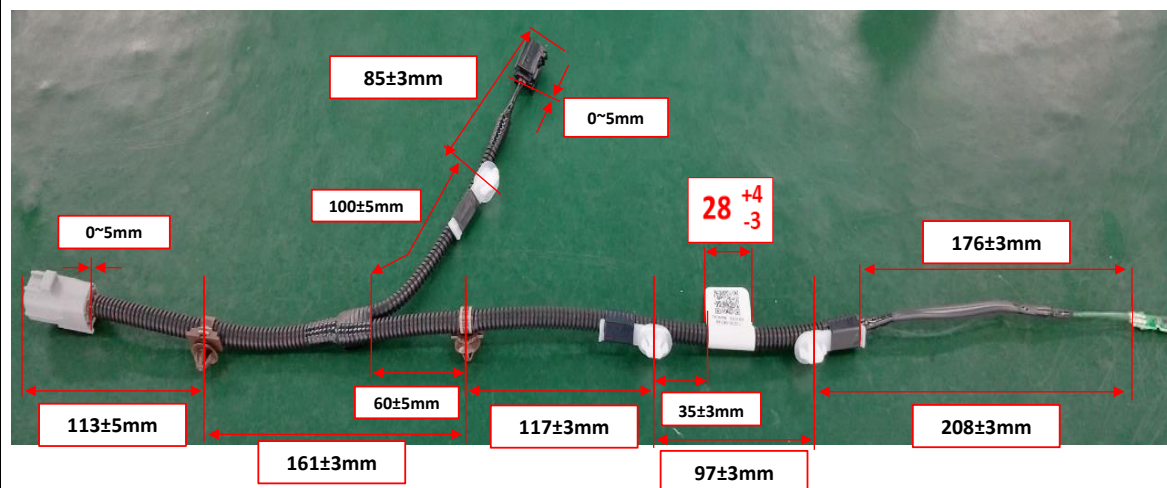
Measurement

### MEASURING TAPE



Note:

Please use calibrated/verified measuring tape when getting the measurement.



Important reminders/Note/s:  
1. FOR HATSUMONO AND OWARIMONO

1. No wrong dimension

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JIG

n/a

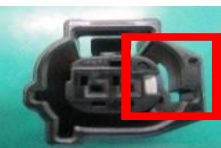
## 1 QUALITY CHECKPOINTS

P3

7L0031-7024



GOOD



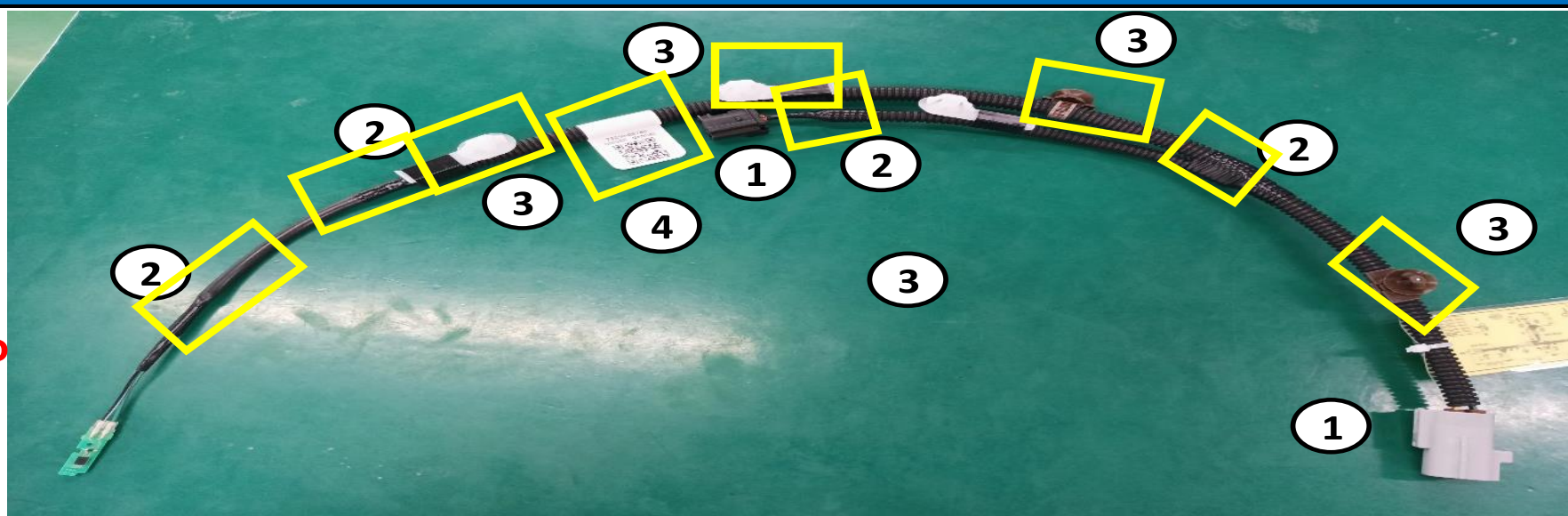
NO GOOD



NO GOOD



GOOD



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

② No **Missing tape** ④ No **Missing QR CODE**  
③ No **Missing CLAMP**

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