

**WORK INSTRUCTION**Process Name/Title: **TAPING ASSEMBLY PROCESS**Model Code/Part Number: **010B / 7L0032-7024** Customer: **TRJ**Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

Effectivity Date:

**June 3, 2023**

Validity Date:

**n/a**

Document No.:

**WI-ENG-PDE-401B**

Revision No.:

**5**

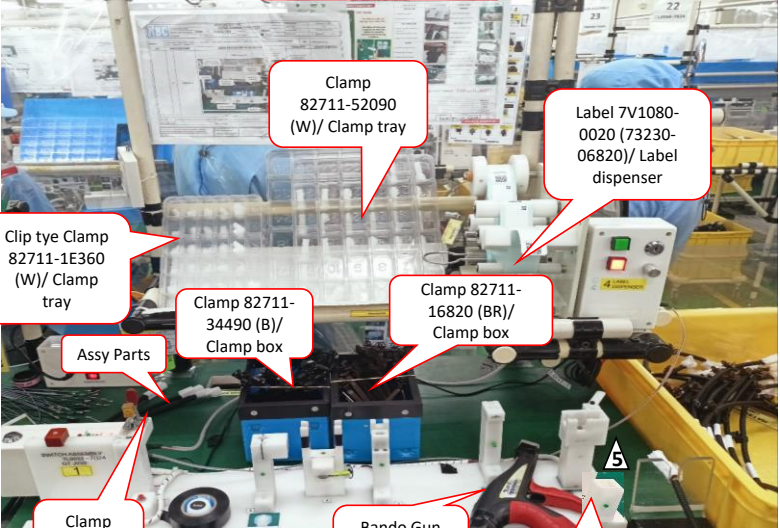

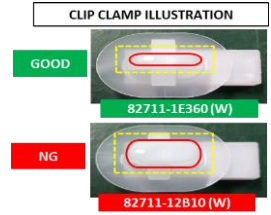
Page No.:





**1 of 10****PARTS:**

1. Assy parts: Clamp 82711-34490 (B); Clamp 82711-16820 (BR); Clip type clamp 82711-1E360 (W); Label 7V1080-0020 (73230-06B20 Passenger power); Clamp 82711-52090 (W)

JIG:

1. Clamp Assembly jig
2. Locking jig
3. Label dispenser

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P2 Table Lay-out	<p><b>TABLE LAY-OUT</b></p> 	<p><b>Safety Instruction</b> Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p><b>Safety Instruction</b> Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p><b>Alert level</b> For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	<ol style="list-style-type: none"><li>1. No missing parts/tools</li><li>2. No excess parts/tools</li></ol> <p><b>CLAMP ILLUSTRATION</b></p>  <p><b>CLIP CLAMP ILLUSTRATION</b></p> 

							Prepared by	Reviewed by	Approved by	Noted by
06/03/23	5	Inclusion of connector lock process, improvement due to QC claim (Unlock connector). Integrate the locking jig to Assembly jig. Change the work procedure for cutting of Band clamp to previous method.	D. Castillo	J. Loterte	C.Villanueva	A. Arañes	 D. Castillo	 J. Loterte	 C. Villanueva	 A. Arañes
04/12/23	4	Change sequence of process no. 2- Clamp setting and no. 4- Clamp assembly. Improve work procedure for cutting of Band clamp as countermeasure for encountered mis-alignment of band clamp.	M. Ariola	J. Loterte	C.Villanueva	A. Arañes				
04/05/23	3	Correction of Quality Checkpoints Illustration on page no.8	M. Ariola	J. Loterte	C.Villanueva	A. Arañes				
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	February 14, 2022		

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**TAPING ASSEMBLY PROCESS**

Effectivity Date:

June 3, 2023

Model Code/Part Number:

**010B / 7L0032-7024**

Customer:

**TRQSS**

Document No.:

**WI-ENG-PDE-401B**

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

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**PARTS:**

1. Clamp 82711-34490 (B)
2. Clamp 82711-16820 (BR)

3. Clamp 82711-52090 (W)

**JIG**

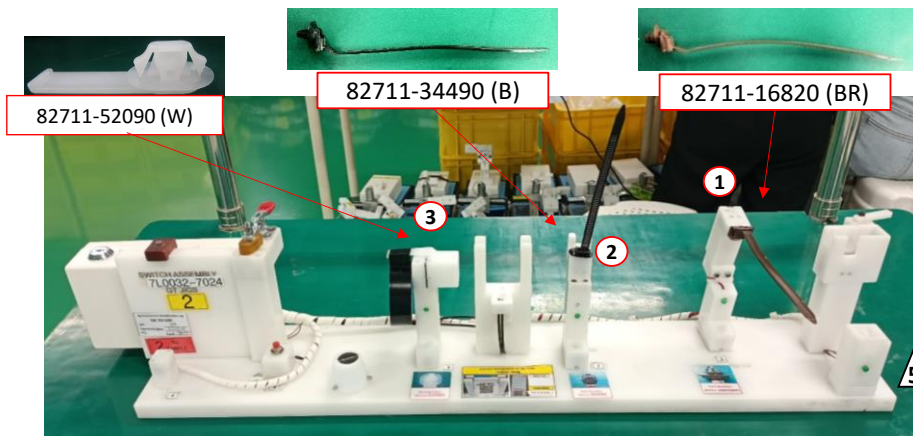
1. Clamp assembly jig

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

2

P2

Clamp setting



1. Get 1pc of band clamp 82711-16820 (BR) then attach to clamp location **1**.

2. Get 1pc of band clamp 82711-34490 (B) then attach to clamp location **2**.

3. Get 1 pc of Clamp **82711-52090 (W)** then attach to **clamp location 3**.

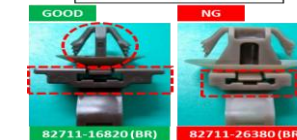
4. Initially attach black tape on clamp location **3**.

n/a

1. No flip-out tape
2. No peel-off tape
3. No loose tape
4. No missing tape
5. No wrong use of tape
6. No damaged clamp
7. No wrong use of clamp
8. No missing clamp

**Important reminders/Notes/:**

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

**CLAMP ILLUSTRATION****BAND CLAMP ILLUSTRATION****BAND CLAMP ILLUSTRATION**

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### PARTS:

1. Assy parts

### JIG

1. Locking jig

NO.

PROCESS NAME

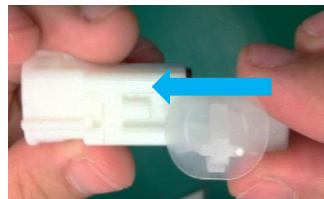
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

3

Clamp attachment  
(clip type clamp)



1. Hold the connector using left hand, get the clip type clamp 82711-1E360 (W) then insert the clamp using right hand. *Note: Sound will be heard if properly inserted.*

N/A

1. Must be fully inserted

CLIP CLAMP ILLUSTRATION

GOOD



82711-1E360 (W)

NG



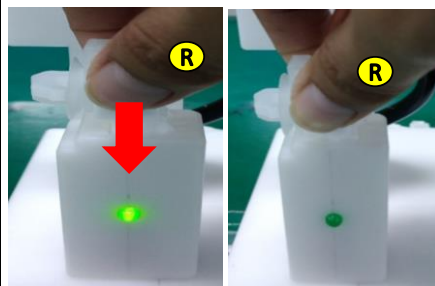
82711-12B10 (W)

4

P2

5

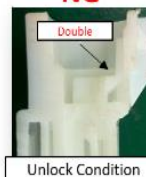
Connector lock



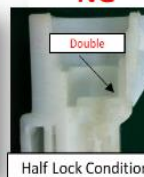
1. Put the connector into locking jig using right hand then press 2x to lock using both hands. Check the lock if properly locked.

### Coupler Cross Sectional View

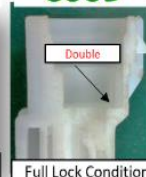
NG



NG



GOOD



Before lock



After lock

LOCKING JIG



1. Use the provided locking jig per model  
2. No unlock/half-locked connector  
3. No skip of locking process

**Important reminders/Note/s:**

**1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR**

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Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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## PARTS:

1. Assy parts

## JIG

1. Clamp assembly jig

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

5

P2

Clamp assembly

**82711-52090 (W)** **82711-34490 (B)** **82711-16820(BR)** Connector setting

**Stopper jig** **SW Button**

1. Put the assy parts into jig using both hands. First put the connector into receiver base using left hand and lock using right hand. Second, put the terminal to stopper jig using left hand and pull down the toggle clamp using right hand. *Refer to above illustration for the correct setting.*

2. Check if the LED light for **POWER** and **CLAMP** is **ON**. If encountered abnormality, **STOP** the process, **CALL** the attention of the Leader and **WAIT** for instruction.

3. Initially tighten the two clamp **82711-34490 (B)** and **82711-16820 (BR)** using right hand.

4. Get the bando gun using right hand then cut the band clamp on Location **1**. Press the switch button after cutting of band clamp. Continue if the sequence light in location **2** was **ON**.

**BAND CLAMP CUT POSITION FOR LOCATION 1**

**BANDO GUN ALIGNMENT**

VERTICAL LINE  
NG OK NG

Fixed setting of band clamp cutter: 1~ 2

**BANDO GUN**



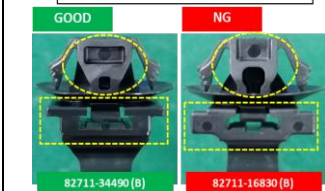
1. No wrong setting of clamp
2. No wrong use of clamp
3. No Loose attachment of clamp
4. No wrong setting of Bando gun

### Important reminders/Note/s:

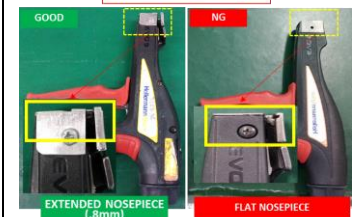
1. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).
2. Make sure no gap between the terminal and stopper jig.



**BAND CLAMP ILLUSTRATION**



**BANDO GUN ILLUSTRATION**



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PARTS:		1. Assy parts		JIG	1. Clamp assembly jig	
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P2	Clamp assembly (Continuation)	<div><div><div><div><div></div><div>82711-52090 (W)</div></div><div><div></div><div>82711-34490 (B)</div></div><div><div></div><div>82711-16820 (BR)</div></div><div><div></div><div>Connector setting</div></div></div><div></div><div><div><div><div></div><div>5</div><div>5. Cut the band clamp on Location 2. Press the switch button after cutting of band clamp. Continue if the sequence light in location 3 was ON.</div></div><div><div><div><div></div><div>6</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. Proceed to label attachment.</div></div></div></div><div><div><div><div></div><div>GOOD</div><div>82711-34490 (B)</div></div><div><div></div><div>NG</div><div>82711-16830 (B)</div></div></div><div><div><div><div></div><div>GOOD</div><div>EXTENDED NOSEPIECE (.8mm)</div></div><div><div></div><div>NG</div><div>FLAT NOSEPIECE</div></div></div></div><div><div><div><div></div><div>BANDO GUN</div></div><div><div><div><div></div><div>PERPENDICULARITY</div><div>OK</div><div>NG</div><div>NG</div></div><div>Fixed setting of band clamp cutter: 1~2</div></div></div></div></div></div></div></div></div></div>		<div><div><div><div></div><div>BANDO GUN</div></div></div></div>	<div>1. No wrong setting of clamp 2. No wrong use of clamp 3. No Loose attachment of clamp 4. No wrong setting of Bando gun</div> <div>Important reminders/Note/s: 1. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm). 2. Make sure no gap between the terminal and stopper jig.</div>

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## PARTS:

1. Label 7V1080-0020 (73230-06B20 Passenger power)

## JIG

1. Clamp assembly jig  
2. Label dispenser

**NO.**

**PROCESS NAME**

**WORK PROCEDURE/ ILLUSTRATION**

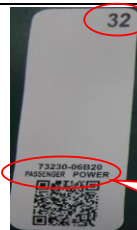
**TOOLS/PPE**

**QUALITY POINTERS**

6

P2

Clamp assembly  
Label Attachment



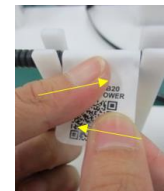
Model Code

Item no. & name



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

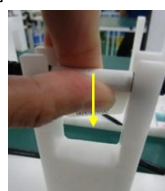
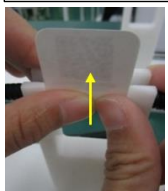
2. Align the end part of label in the jig.



3. Fold the center part of the label

4. Align both end part of label .

5. After alignment , Press the label with both fingers.  
**Make sure it was attach properly.**



6. Press the label upside down using finger.

7. Press the SW button after label attachment. Conduct **POINT CHECKING** and remove the harness from jig.



**GOOD**

Acceptable overlap  
**0~1mm**

n/a

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



**NG**

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PRE-LAUNCH



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## PARTS:

1. Assembled parts
2. Master sample

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

7

P2

Visual/By two's inspection

ACTUAL PRODUCT

Assembled parts

Master sample

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

2. Check the **connector lock, terminal, wire insertion** and **presence of clip type clamp attachment**.

3. Check the **presence of all clamp attachment**.

MASTER SAMPLE

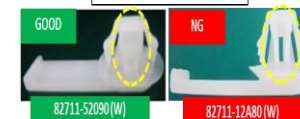
1. No skip checking during inspection.

**Important reminders/Note/s:**

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



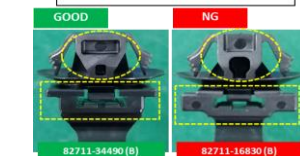
CLAMP ILLUSTRATION



82711-52090 (W)

82711-12A80 (W)

BAND CLAMP ILLUSTRATION



82711-94490 (B)

82711-16830 (B)

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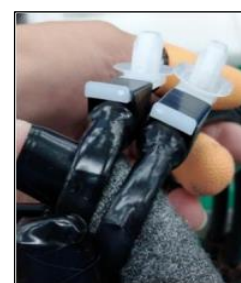
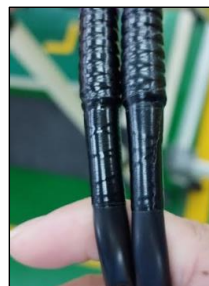
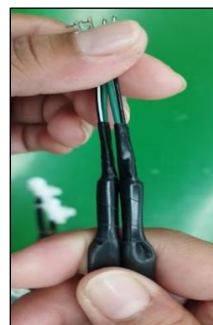
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**8 of 10****PARTS:**

1. Assembled parts
2. Master sample

**JIG****n/a****NO.****PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS****8****P2**

Visual/By two's inspection (Continuation)

**ACTUAL PRODUCT**4. Check **the presence of QR code label.**5. Check the **taping condition**. Conduct slightly bending of COT and Sunprene tube.6. Check **the taping condition**.7. Check **the taping condition and terminal appearance**. Must be **no deformed terminal**.**MASTER SAMPLE**

1. No skip checking during inspection.

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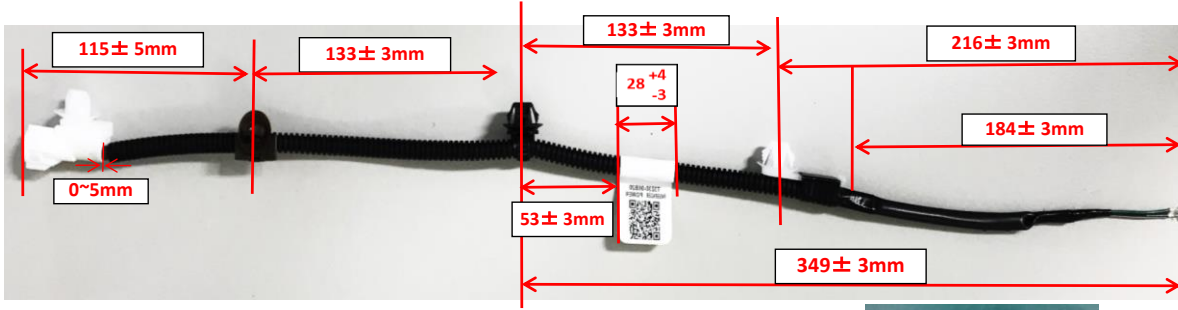

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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<b>PARTS:</b>	n/a			<b>JIG</b>	n/a
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>		<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
9	Measurement	  <b>MEASURING TAPE</b>			<b>Important reminders/Note/s:</b>  1. Please use calibrated/verified measuring tape when getting the measurement. 2. For Hatsumono and Owarinomo.  1. No wrong dimension
	P2				

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PARTS:

n/a

JIG

n/a

## QUALITY CHECKPOINTS

**P2**

**7L0032-7024**

1



**GOOD**



**NO GOOD**

2

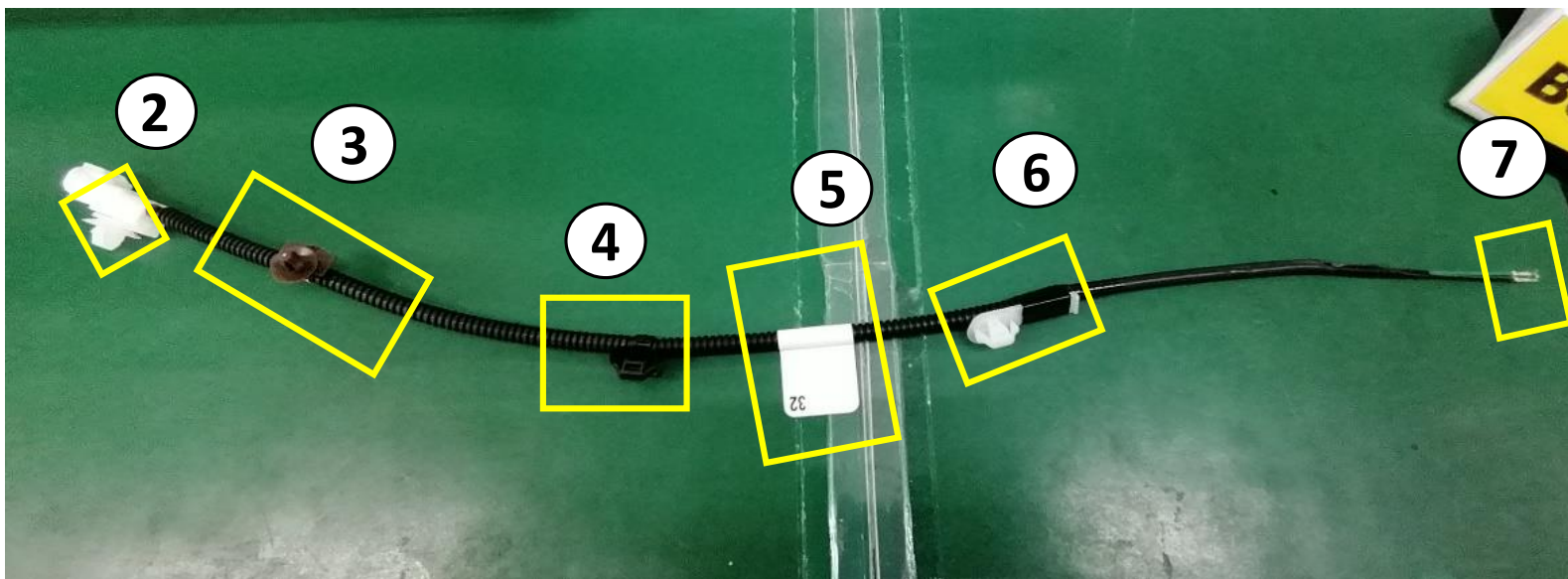
3

4

5

6

7



1

**No Unlocked/ Half Locked Connector**

5

**No Missing/Wrong use of Barcode**

2

3

4

6

**No Missing Clamp**

7

**No Deformed Terminal**

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