



## WORK INSTRUCTION

Process Name/Title:

## CLAMP ASSEMBLY PROCESS

Effectivity Date:

March 15, 2025

Model code/Part number:

559D / 7N0237-7020B

Customer:

TRJ

Car Model:

TOYOTA HI-ACE

Validity Date:

n/a

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Revision No.:

0

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## PARTS:

1. Assy parts

2. Clamp 82711-16830 (B)

3. Clamp 82711-16820 (BR)

4. Black tape

5. Brown tape

JIG:

1. Clamp assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

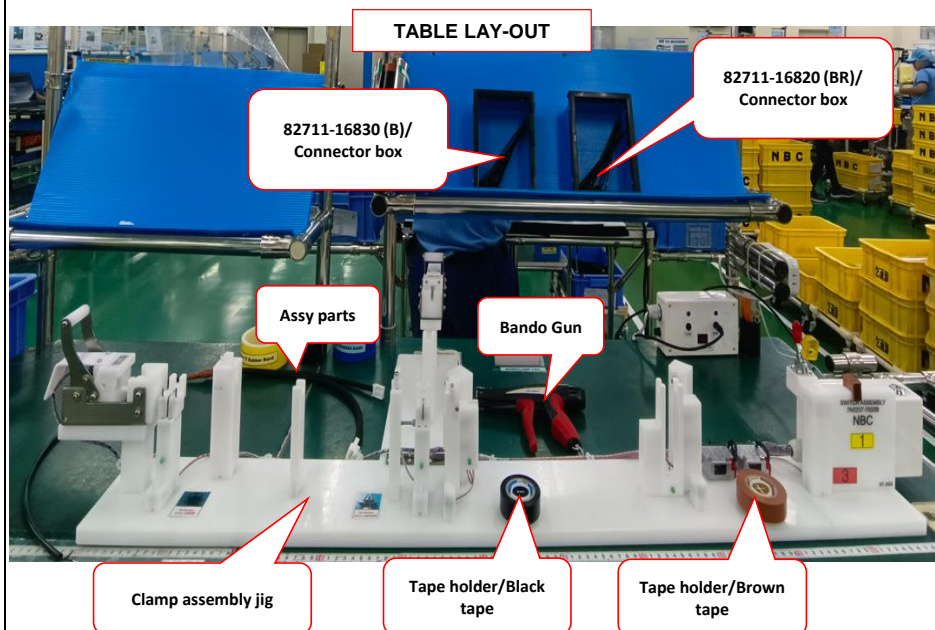
TOOLS/PPE

QUALITY POINTERS

1

Clamp  
Assy

Table lay-out

**Safety Instruction**

Be sure to wear 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**

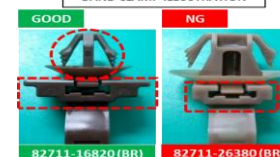
For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.

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

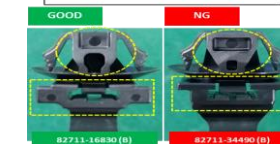
**Document reference/s:**

1. Refer to WI-ENG-PDE-1064A-C for the TAPING ASSEMBLY PROCESS

## BAND CLAMP ILLUSTRATION



## BAND CLAMP ILLUSTRATION



## BANDO GUN ILLUSTRATION



## Revision History

Eff. Date	Rev. No	Details of Change	Revised	Checked	Reviewed	Approved	Prepared by	Checked by	Reviewed by	Noted by
03/15/25	0	Initial issue. Excluded to <b>WI-ENG-PDE-1064 TAPING ASSEMBLY PROCESS</b> ; Change purpose from pre-launch to Masspro. Additional table lay-out; Update the work procedure/illustration and Visual Inspection/Quality Checkpoint.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes	M. Ariola	J. Loterte	C. Villanueva	A. Arañes

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PRE-LAUNCH



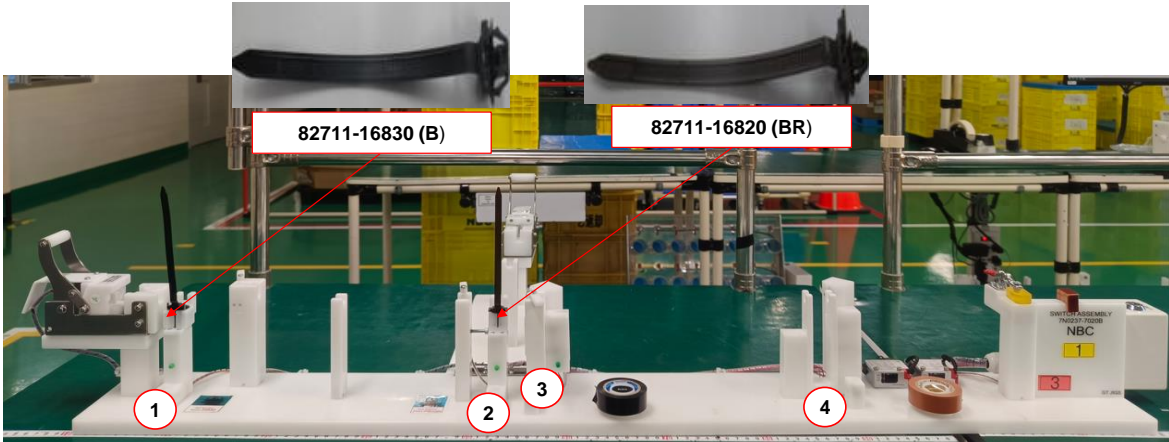




MASSPRO

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PARTS:		1. Clamp 82711-16830 (B) 2. Clamp 82711-16820 (BR) 3. Black tape 4. Brown tape		JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp setting		<div></div> <div><div>1. Get 1pc. of clamp <b>82711-16830 (B)</b> using right hand and set to clamp location <b>1</b> using both hands.</div><div>2. Get 1pc. of clamp <b>82711-16820 (BR)</b> using right hand and set to clamp location <b>2</b> using both hands.</div></div> <div><div><div>BAND CLAMP ILLUSTRATION</div><div><div>GOOD</div><div>NG</div></div><div></div><div><div>82711-16820 (BR)</div><div>82711-26380 (BR)</div></div></div><div><div>BAND CLAMP ILLUSTRATION</div><div><div>GOOD</div><div>NG</div></div><div></div><div><div>82711-16830 (B)</div><div>82711-34490 (B)</div></div></div></div>	

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☐ PROTOTYPE

☐ PRE-LAUNCH

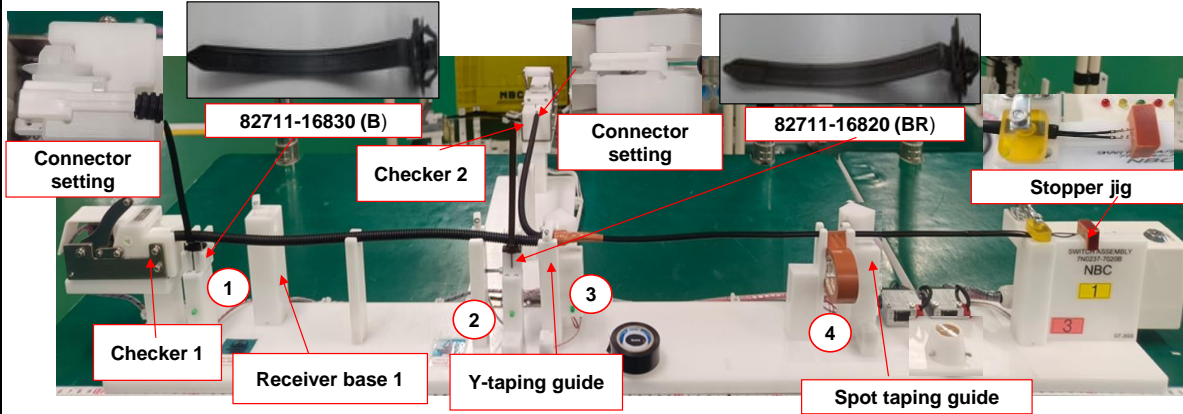

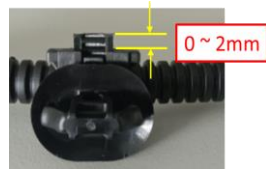
☒ MASSPRO

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PARTS:		1. Clamp 82711-16830 (B) 2. Clamp 82711-16820 (BR)		3. Assy parts 4. Black tape	5. Brown tape	JIG:	1. Clamp assembly jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS	
3	Clamp Assy	Clamp Assembly	<div></div> <div>1. Put the assy parts into jig (<b>See above picture for the correct setting</b>). First, set the connector <b>6098-3802 (W)</b> with clip to <b>checker 1</b>. then pull the checker fixture for continuity checking. Second set the harness on the Y-taping guide then lock. Third, set the connector <b>6098-5677 (W)</b> to <b>checker 2</b> using both hand. Last, set the terminal end together within the stopper jig then press by toggle clamp. Check if the sequence light of <b>Location 1</b> was <b>ON</b>.</div> <div>2. Check if all LED light for <b>POWER on, CLAMP on, Wire 1 &amp; Wire 2</b> was <b>ON</b>. If encounter abnormality , STOP and immediately CALL the attention of the leader. WAIT for further instruction then continue the process.</div> <div>3. Get the <b>Brown tape</b> using right hand. Initially attach the tape on the spot taping guide <b>location 4</b> using both hand.</div> <div>4. Initially tighten the band clamp on Clamp location <b>1</b> and <b>2</b> using both hands.</div> <div><div>BANDO GUN ILLUSTRATION</div><div></div><div>Fixed setting of band clamp cutter: 1~ 2</div></div>					<div>1. Make sure no gap between stopper and terminal. 2. No wrong use of clamp 3. No damaged clamp</div> <div><b>Important reminders/Notes:</b></div> <div>1. <b>Must be no gap between the terminal and stopper jig.</b></div> <div>2. <b>Using steel rule , Check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).</b></div> <div>3. <b>Setting of band clamp cutter depends on the size of the COT/SV tube (Vinyl) Ø5- 1~2, Ø7- 3~4</b></div> <div></div>

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PRE-LAUNCH



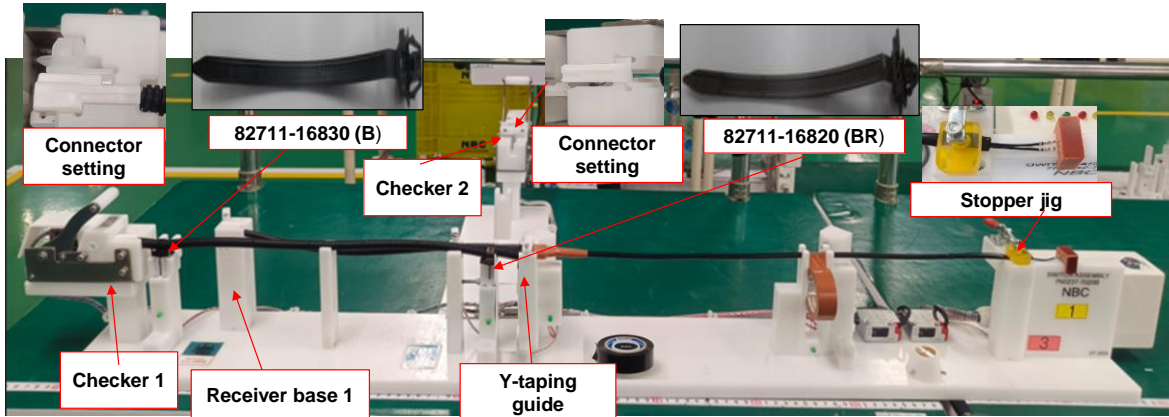

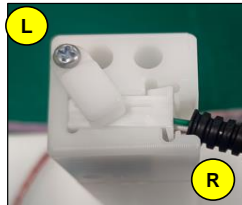



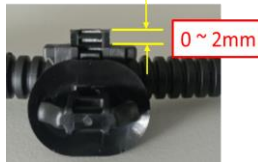
MASSPRO

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PARTS:		1. Clamp 82711-16830 (B) 2. Clamp 82711-16820 (BR)	3. Assy parts 4. Black tape	5. Brown tape	JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	Clamp Assembly (Continuation)	<div><p>5. Get the bando gun using right hand then cut the band clamp on <b>location 1</b> using both hands. Press the SW button after cut. Continue the process if sequence light on clamp <b>location 2</b> was <b>ON</b>.</p><div><p>6. Unlock the <b>checker fixture 2</b> using left hand, remove the Connector <b>6098-5677 (W)</b> using right hand. Combine the <b>COT with Connector 6098-5667 (W)</b> and <b>COT Ø7</b> to <b>COT guide</b> then lock using both hand</p></div><div><p>7. Set the connector <b>6098-5677 (W)</b> to Connector <b>receiver base 1</b> using both hand then lock.</p></div><div><p><b>BANDO GUN ALIGNMENT</b></p><div></div><div><p><b>PROPER CUTTING POSITION OF BANDO GUN</b></p><p><b>GOOD</b></p></div><div><p><b>IMPROPER CUTTING POSITION OF BANDO GUN</b></p><p><b>NG</b></p></div></div><div><p>0 ~ 2mm</p></div></div>			<p>1. Make sure no gap between stopper and terminal. 2. No wrong use of clamp 3. No damaged clamp</p> <p><b>Important reminders/Notes:</b></p> <p>1. <b>Must be no gap between the terminal and stopper jig.</b></p> <p>2. <b>Using steel rule , Check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).</b></p> <p>3. <b>Setting of band clamp cutter depends on the size of the COT/SV tube (Vinyl) Ø5- 1~2, Ø7- 3~4</b></p>

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PRE-LAUNCH



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### PARTS:

1. Brown tape
2. Assy parts

3. Black tape

JIG:

1. Clamp assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

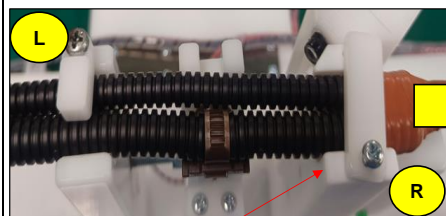
TOOLS/PPE

QUALITY POINTERS

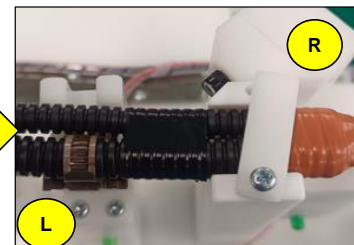
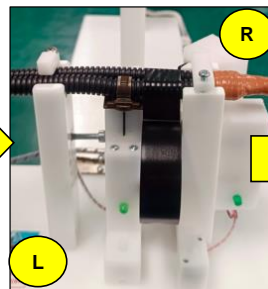
3

Clamp Assy

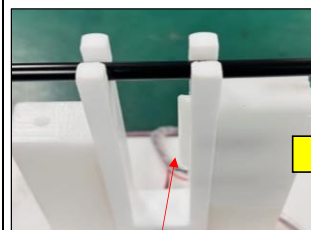
Clamp Assembly  
(Continuation)



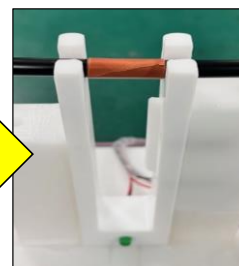
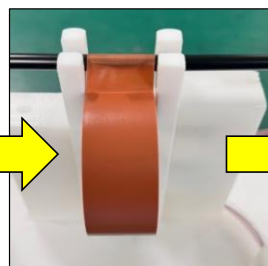
Spot taping guide with switch



8. Get the **Black tape** and start taping to Location **3**. **Make 3 windings** only of tape. Press the **SW button** after taping. **Go** sound will be heard.  
Note: Jig will alarm if lacking and excess winding.



Spot taping guide with switch



9. Hold the **Brown tape** and start taping to Location **4**. **Make 3 windings** only of tape. Press the **SW button** after taping. **Go** sound will be heard.  
Note: Jig will alarm if lacking and excess winding.

10. Conduct **POINT CHECKING**, before removing of harness from jig.

11. Remove the harness from jig. Start from toggle clamp up to clamp up to connector receiver base.

1. No missing Spot tape
2. No wrong color of tape

### 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.

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☐ PROTOTYPE

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### PARTS:

1. Assy parts

JIG:

n/a

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

### TOOLS/PPE

### QUALITY POINTERS

4

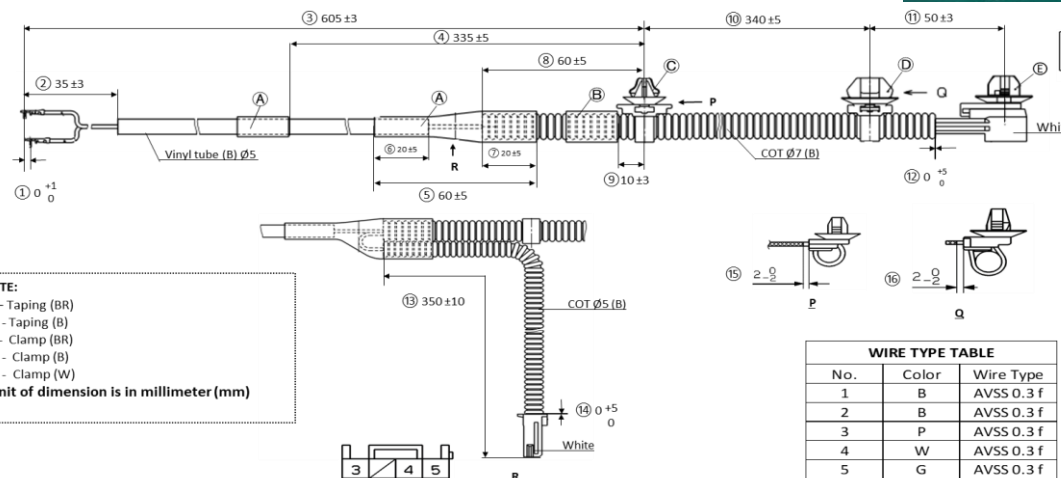
Clamp  
Assy

Measurement

#### NOTE:

- (A) - Taping (BR)
- (B) - Taping (B)
- (C) - Clamp (BR)
- (D) - Clamp (B)
- (E) - Clamp (W)

\*Unit of dimension is in millimeter (mm)



#### Important reminders and note/s:

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

2. For Hatsumono and Owarimono.

#### Document reference/s:

1. Refer to **WI-PRO-ASY-056** for Sub-assembly Hatsumono Nakamono Owarimono Inspection

1. No wrong dimension

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**7 of 7****PARTS:**

1. Assy parts

JIG:

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****CLAMP ASSY****7N0237-7020B****1****Check the alignment of clamp**

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