



## WORK INSTRUCTION

Process Name/Title: **CLAMP ASSEMBLY PROCESS**Model Code/Part Number: **D94L / 7N0030-7020**Customer: **N/A**Purpose: ☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

June 7, 2023

Validity Date:

n/a

Document No.:

WI-ENG-PDE-672

Revision No.:

0

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## PARTS:

1. Clamp 82711-48070 (GR); Clamp 82711-52070 (W); Black tape [2pcs]

JIG:

1. Clamp Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

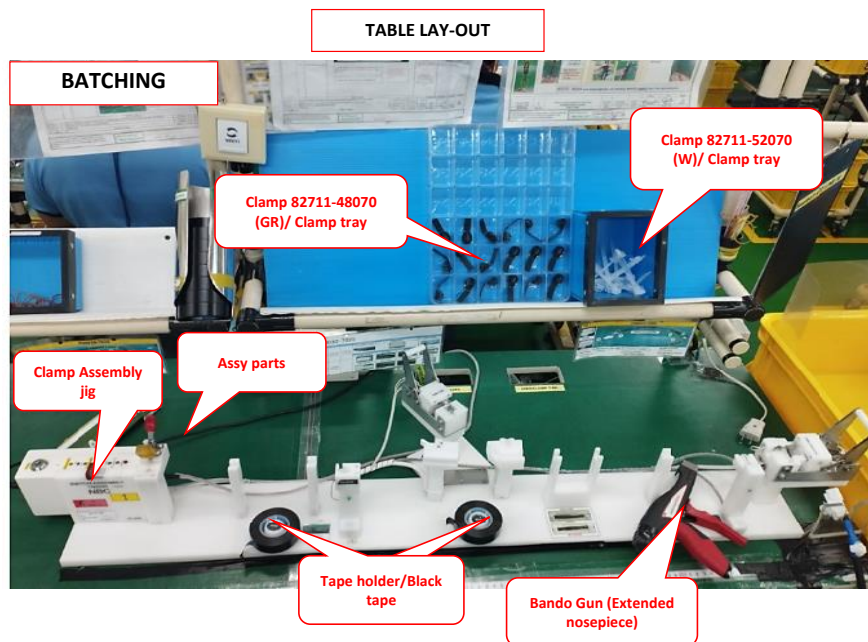
TOOLS/PPE

QUALITY POINTERS

1

n/a

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.

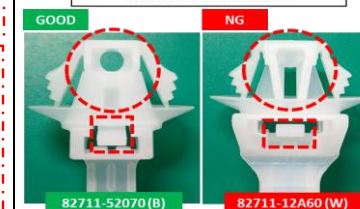
**Alert level**

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

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

**Important reminders/Note/s:**

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

**BAND CLAMP ILLUSTRATION**

## Revision History

| Eff. Date | Rev. No | Details of Change   | Revised   | Reviewed   | Approved      | Noted     | Prepared by | Reviewed by | Approved by   | Noted by  |
|-----------|---------|---|-----------|------------|---------------|-----------|-------------|-------------|---------------|-----------|
| 06/07/23  | 0       | Initial Issue. Excluded from P3 due to separation of <b>Taping Assembly Process</b> and <b>Clamp Assembly Process</b> . | M. Ariola | J. Loterte | C. Villanueva | A. Arañes | M. Ariola   | J. Loterte  | C. Villanueva | A. Arañes |

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Model Code/Part Number: **D94L / 7N0030-7020**

Customer: **TRJ**

Document No.:

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Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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### PARTS:

1. Clamp 82711-48070 (GR)
2. Clamp 82711-52070 (W)

### JIG

1. Clamp Assembly Jig

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

### TOOLS/PPE

### QUALITY POINTERS

2

n/a

Clamp Setting



82711-48070 (GR)



82711-52070 (W)



1. Get the clamp **82711-48070 (GR)** then set to clamp location ② using right hand.

2. Get the clamp **82711-52070 (W)** and set to clamp location ①, using right hand.

3. Initially attach tape to location ② using right hand.

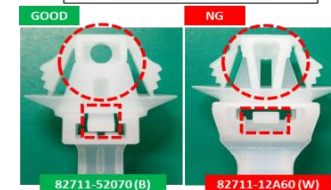
n/a

1. No damaged clamp
2. No wrong usage of parts
3. No missing clamp

### Important reminders/Note/s:

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

### BAND CLAMP ILLUSTRATION



One side tape under clamp



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PARTS:

1. Assy parts

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

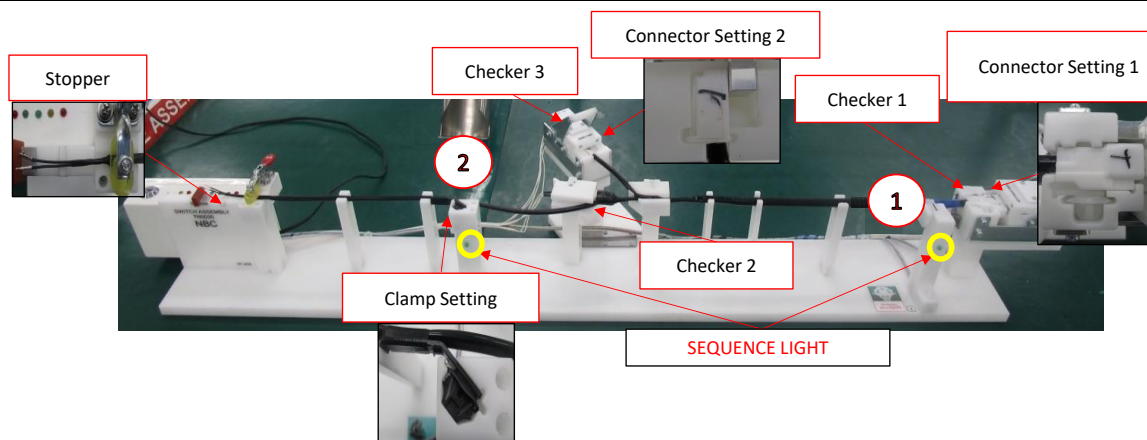
TOOLS/PPE

QUALITY POINTERS

3

n/a

Clamp Assembly  
(Continuation)



**Important reminders/Note/s:**

1. Make sure no gap between stopper jig and terminals.
2. You will hear the buzzer if the sensor detects wrong use of tape and missing tape.

1. No damaged clamp
2. No wrong usage of parts
3. No missing clamp

1. Put the assy. First, set the connector to **Checker 1** then pull the checker fixture for continuity checking. Color sensor light will beep/buzz if sensor detect the **Blue tape**. Second, set the connector to **Checker 2** then push the lock for continuity checking. Then, set the connector to **Checker 3** then pull the checker fixture for continuity checking. Last, set the 2 Black wires with terminal end together within the stopper then press by Toggle clamp. Continue if the sequence light of location ① was on.

**Note: terminal should touch the aluminum to check the continuity.**

2. Check if all LED light for **POWER ON**, **WIRE1** and **WIRE2** and **CLAMP ON** and **COLOR SENSOR** was **ON**. Check also if 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.

3. Initially tighten the band clamp on location ① using right hand.

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**PARTS:**

1. Assy parts

**JIG**

1. Clamp Assembly Jig

**NO.**

**PROCESS NAME**

**WORK PROCEDURE/ ILLUSTRATION**

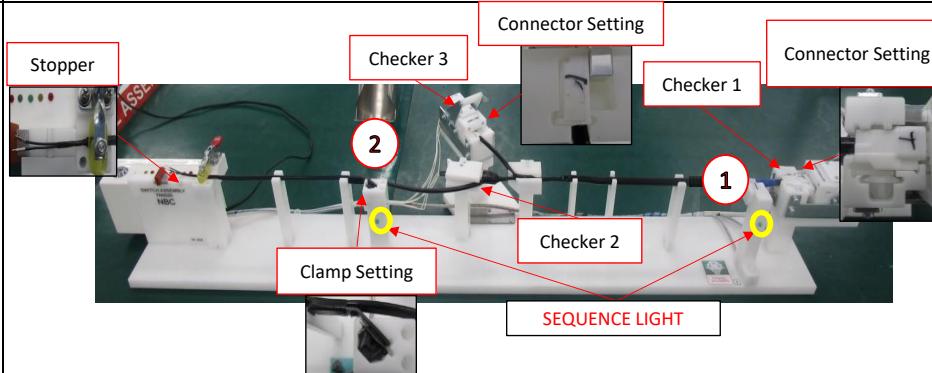
**TOOLS/PPE**

**QUALITY POINTERS**

3

n/a

Clamp Assembly

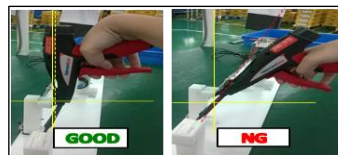


4. Initially tighten the band clamp on location ① using right hand.

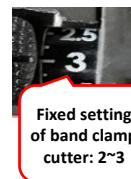
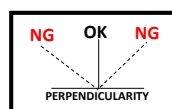
5. Get the bando gun and cut the band clamp 82711-52070 using right hand. Press the sequence light button after cutting. Continue to location ② if light was **ON**.

6. Hold the tape on clamp location ② and start taping using both hands (**3 winds**). Press the sequence light button. **Go** buzzer will be heard.

7. **CONDUCT POINT CHECKING** before removing from jig.



**BANDO GUN**



1. No damaged clamp
2. No wrong usage of parts
3. No missing clamp

**Important reminders/Note/s:**

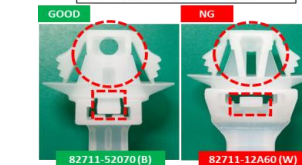
1. **Make sure no gap between stopper jig and terminals.**
2. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).



**BANDO GUN ILLUSTRATION**



**BAND CLAMP ILLUSTRATION**



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☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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## PARTS:

1. Assembled parts
2. Master sample

JIG

N/A

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

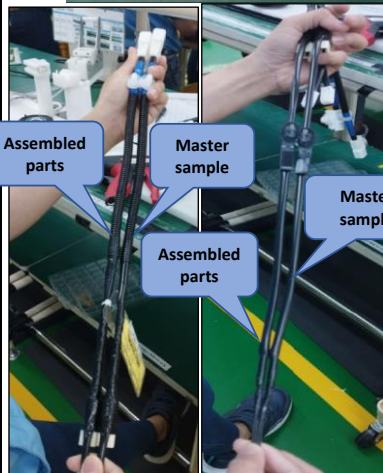
4

n/a

Visual/By Two's Inspection



ACTUAL PRODUCT



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



3. Check the **presence of Clip type clamp attachment**



2. Check the **connector lock condition, terminal and insertion.**



4. Check the **taping condition. Must be BLUE TAPE only.**



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

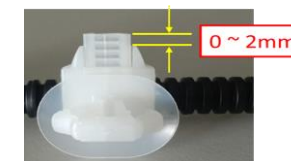
## MASTER SAMPLE



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).**



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☐ PRE-LAUNCH


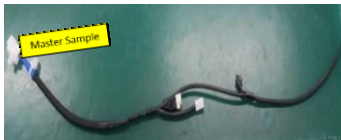




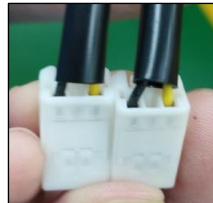


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|        |              |  |  |  |           |  |
|--------|--------------|--|--|--|-----------|--|
| PARTS: |              | 1. Assembled parts<br>2. Master sample       |  |  | JIG       | N/A  |
| NO.    | PROCESS NAME |  | WORK PROCEDURE/ ILLUSTRATION   |  | TOOLS/PPE | QUALITY POINTERS   |
| 4      | n/a          | Visual/By Two's Inspection<br>(Continuation) | <div><p>ACTUAL PRODUCT</p></div>   |  |           | <div>MASTER SAMPLE</div> <div></div> <div>1. No skip checking during inspection</div> |
|        |              |  | <div><div></div><div></div><div></div><div></div><div></div><div><p>6. Check the <b>Y-Taping condition.</b></p></div><div><p>2. Check the <b>connector lock condition, terminal and insertion.</b></p></div><div><p>5. Check <b>the taping condition of COT to SV tube (Viny)</b>. Conduct <b>slightly pulling of SV tube (Vinyl) during bending of parts w/ COT to SV tube (Vinyl) taping to avoid overlook of missing tape.</b></p></div><div></div><div></div><div><p>8. Check <b>terminal appearance</b>. Must be <b>no deformed terminal.</b></p></div></div> |  |           |  |

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PARTS:

N/A

JIG

N/A

NO.

PROCESS NAME

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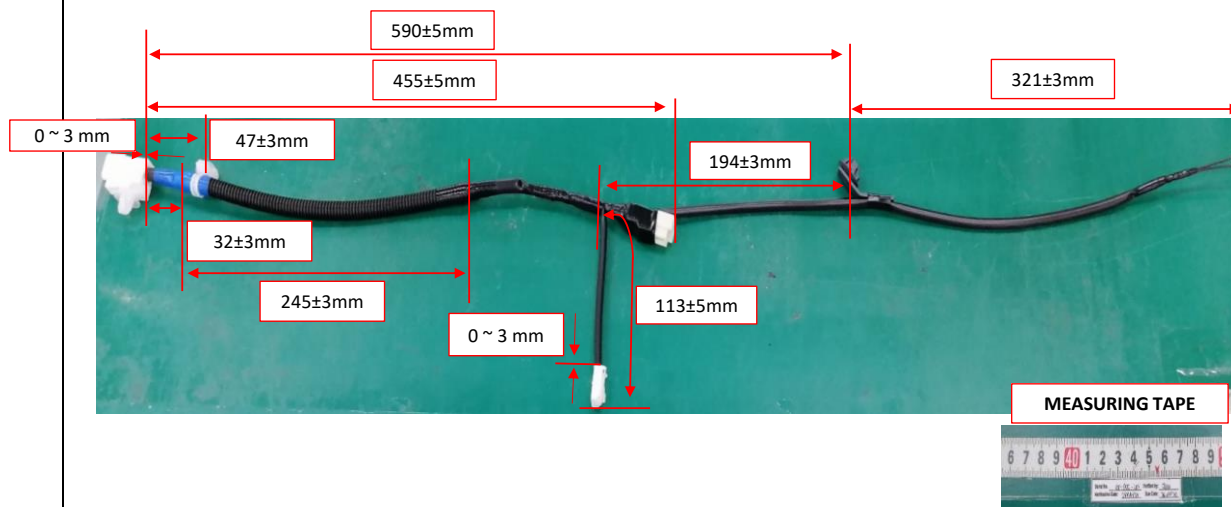
TOOLS/PPE

QUALITY POINTERS

5

n/a

Measurement



**Important reminders/Note/s:**

1. Please use calibrated/verified measuring tape when getting the measurement
2. For hatsumono and Owarimono

1. No wrong dimension

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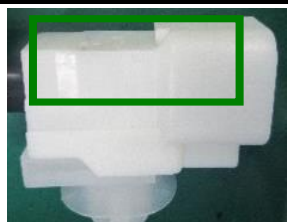
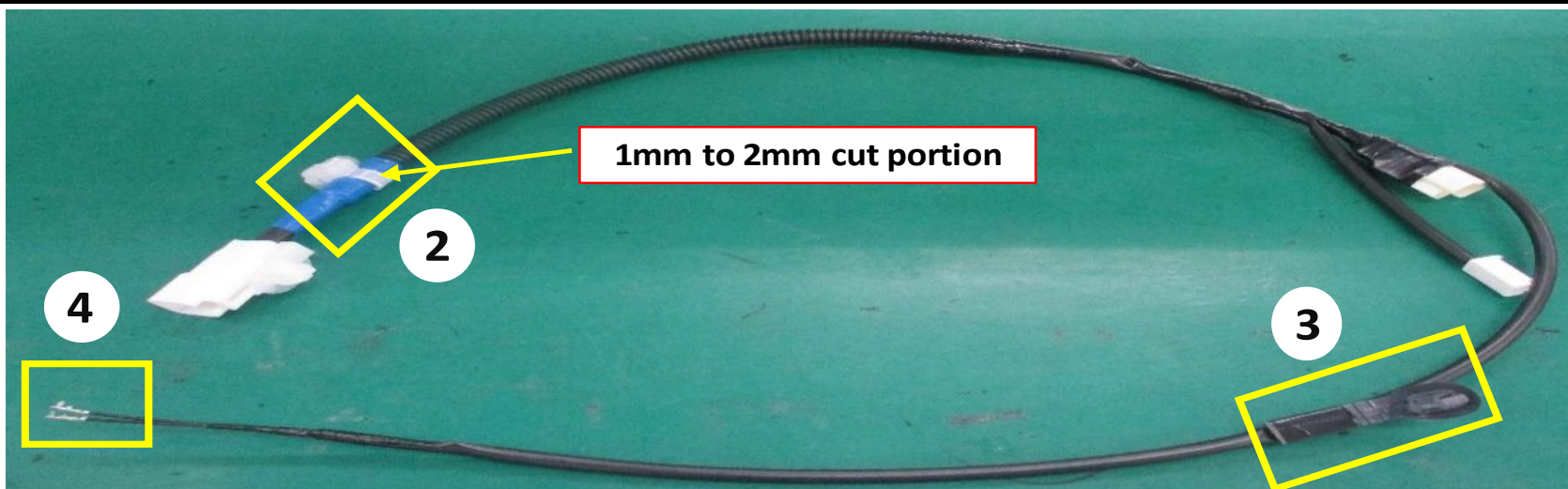
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PARTS: N/A

JIG

N/A

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

**P4****7N0030-7020****GOOD****NO****1** No Unlock Connector (on 2 connector)**2** **3** No Missing Clamp (2pcs.) and check the condition of cut for 1mm to 2mm cut portion**4** No Deformed Terminal  
**5** Checking of Clamp Alignment

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