

**WORK INSTRUCTION**

Efec October 07, 2022

December 09, 2022

Process Name/Title:

TAPING ASSEMBLY PROCESS

Validity Date:

n/a

Model Code/Part Number:

920B / 7R0117-7020A

Customer:

TRMX

Document No.:

WI-ENG-PDE-551C

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

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PARTS:

1. Assy parts: Clamp 82711-12A80 (W); Clamp 82711-12A60 (W); Clamp 82711-58020 (W); Black tape [2pcs.]

JIG:

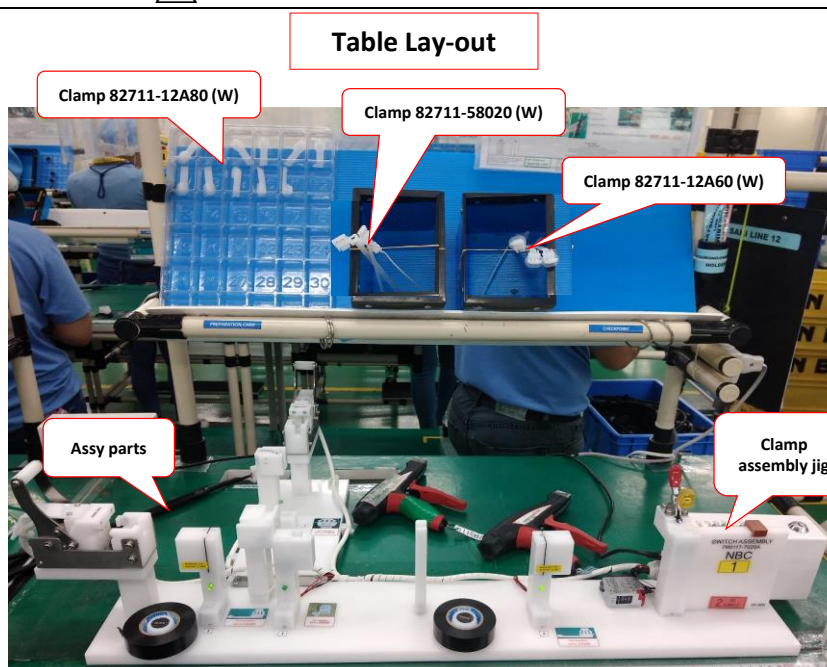
1. Clamp assembly jig

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

1

P3

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.

**BANDO GUN**

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

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
12/09/22	1	Additional table lay-out ; Quality checkpoints - as improvement of documentation and process. Improve work procedure/illustration/quality pointers in all process. Provide clamp assembly jig	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	M. Catapang	J. Loterte	C. Villanueva	A. Arañes
06/21/22	0	Initial issue	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	M. Catapang	J. Loterte	C. Villanueva	A. Arañes

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PARTS:

1. Clamp 82711-12A80 (W) (2pcs.)
2. Clamp 82711-58020 (W)

3. Clamp 82711-12A60 (W)
4. Black tape (2pcs.)

JIG

1. Clamp assembly jig

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

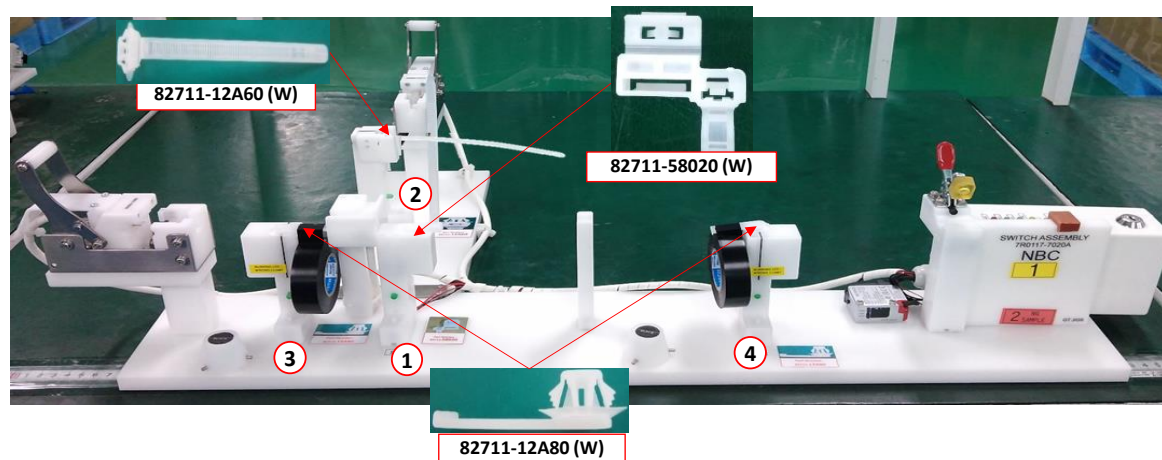


QUALITY POINTERS

2

P3

Clamp setting



1. Get **2pcs.** of clamp **82711-12A80 (W)** then set to clamp location **3 and 4** using both hands.

3. Get **1pc.** of clamp **82711-12A60 (W)** then set to clamp location **2** using both hands.

2. Get **1pc.** of clamp **82711-58020 (W)** then set to clamp location **1** using both hands.

4. Initially attach **Black tape** on clamp location **3 and 4** using both hands.

Important reminders/Note/s:

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

1. No loose attachment of clamp
2. No damaged parts
3. No missing parts

CLAMP ILLUSTRATION



BAND CLAMP ILLUSTRATION



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PARTS:

1. Assy parts

JIG

1. Clamp assembly jig

NO.

PROCESS NAME

1

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

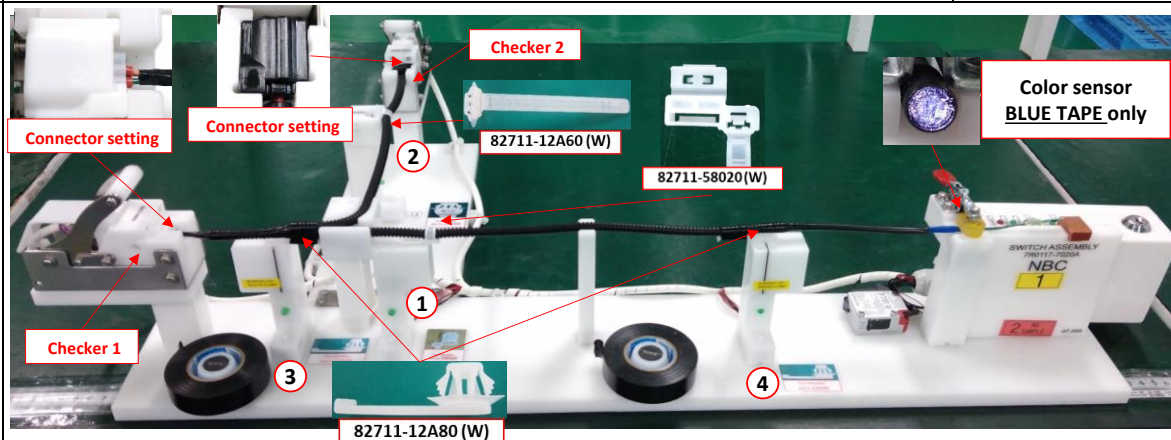
1

QUALITY POINTERS

3

P3

Clamp assembly



1. Get the assy parts and set to jig using both hands. *(See above picture for correct setting).* First, set the connector **6189-1142 (W)** to **Checker 1** then pull the checker fixture for continuity checking. Continue to set the harness in jig. **Color sensor light** will beep/buzz if sensor detects **Blue tape**. Set the end of PCB within the stopper jig then press the toggle clamp. Last, set the connector **6189-1161 (B)** to **Checker 2** then pull the checker fixture for continuity checking. Continue if the clamp location **1** was **ON**.

2. Check if all LED light for **Power On, Clamp On, Wire1 & Wire2, Color sensor** was **ON**. If encountered abnormality, **STOP** and immediately **CALL** the attention of the leader. **WAIT** for further instruction then continue the process.

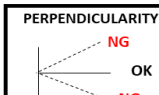
3. Initially tighten the band clamp on clamp location **1 and 2** using both hands.

4. Get the Bando gun (**FLAT NOSEPIECE**) using right hand then cut the clamp on location **1** using both hands. Press the **SW button** after cut. Continue if the clamp location **2** was **ON**.

BANDO GUN POSITION ON CLAMP LOCATION 1



BANDO GUN



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: 1~2



Important reminders/Note/s:

1. Make sure no gap between stopper and PCB

1. No loose attachment of clamp
2. No damaged clamp
3. No missing parts

BANDO GUN ILLUSTRATION



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PARTS:

1. Assy parts
2. Black tape

JIG

1. Clamp assembly jig

NO.

PROCESS NAME

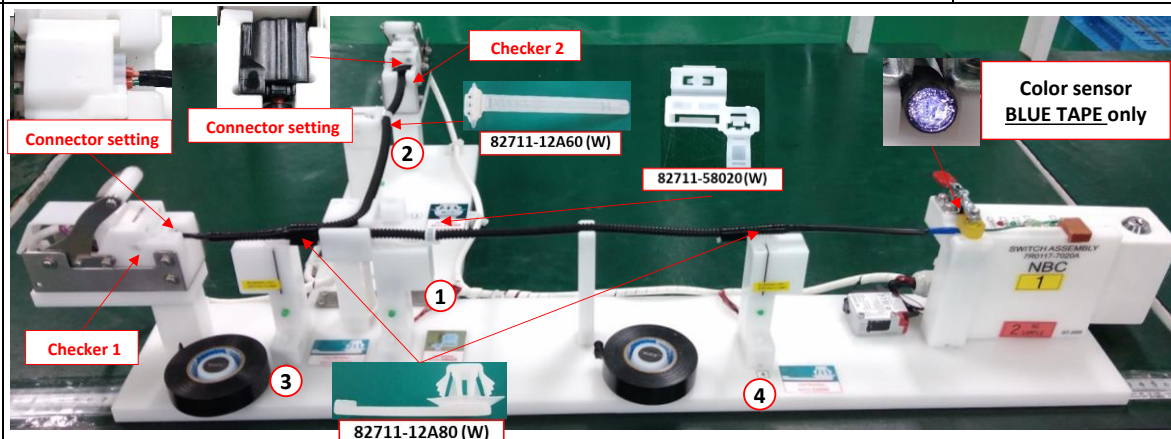
1 WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

1 QUALITY POINTERS

3

P3

Clamp assembly
(Continuation)

6. Get the Bando gun (**EXTENDED NOSEPIECE**) using right hand then cut the clamp on location **2** using both hands. Press the **SW button** after cut. Continue if the clamp location **3** was **ON**.

BANDO GUN POSITION ON CLAMP LOCATION 2



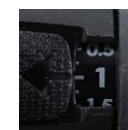
BANDO GUN ALIGNMENT

PERPENDICULARITY

NG
OK
NG

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

Fixed setting of band clamp cutter: 1~2



7. Hold the tape on clamp location **3** then start taping using both hands. Make **3 windings** of tape then cut the tape. Continue in clamp location **4**.

8. Hold the tape on clamp location **4** then start taping using both hands. Make **3 windings** of tape then cut the tape.

9. After taping, conduct **POINT CHECKING** before removing the harness from the jig.

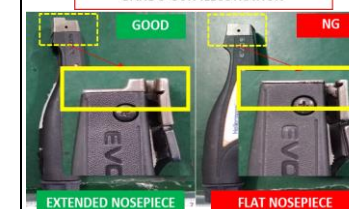


Important reminders/Note/s:

1. Make sure no gap between stopper and PCB

1. No loose attachment of clamp
2. No damaged clamp
3. No missing parts

BANDO GUN ILLUSTRATION



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PARTS:

1. Assy parts

JIG

n/a

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE



QUALITY POINTERS

4

P3

Visual/By two's inspection

1

ACTUAL PRODUCT

Assembled parts

Master sample

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

3. Check the **presence of ALL clamp attachment, cut appearance and taping condition..**

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

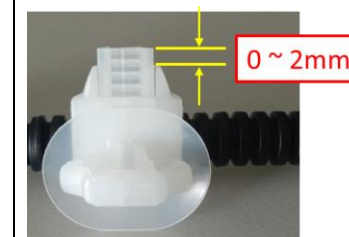
5. Check the **tape color, taping condition and PCB appearance.**

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

MASTER SAMPLE



1. No skip process



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

5

P3

Measurement

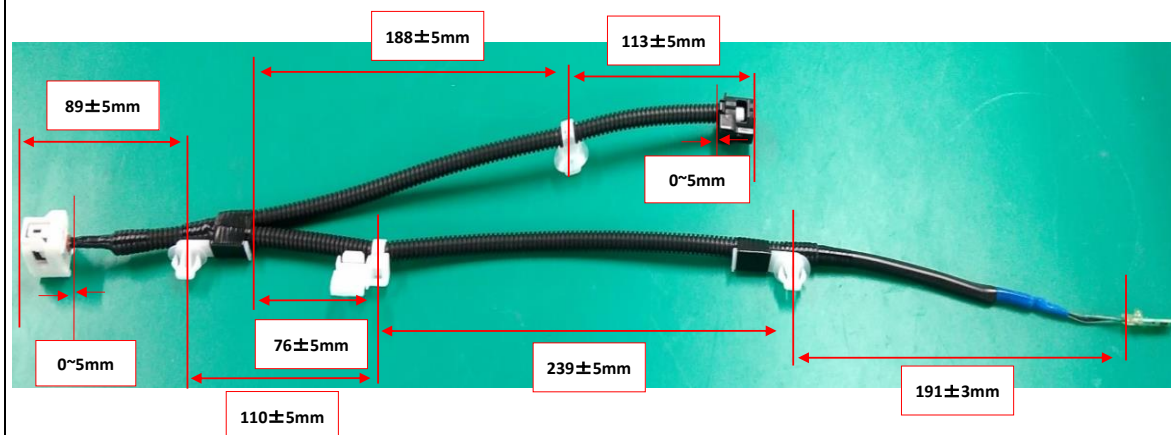
1

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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1. Assy parts

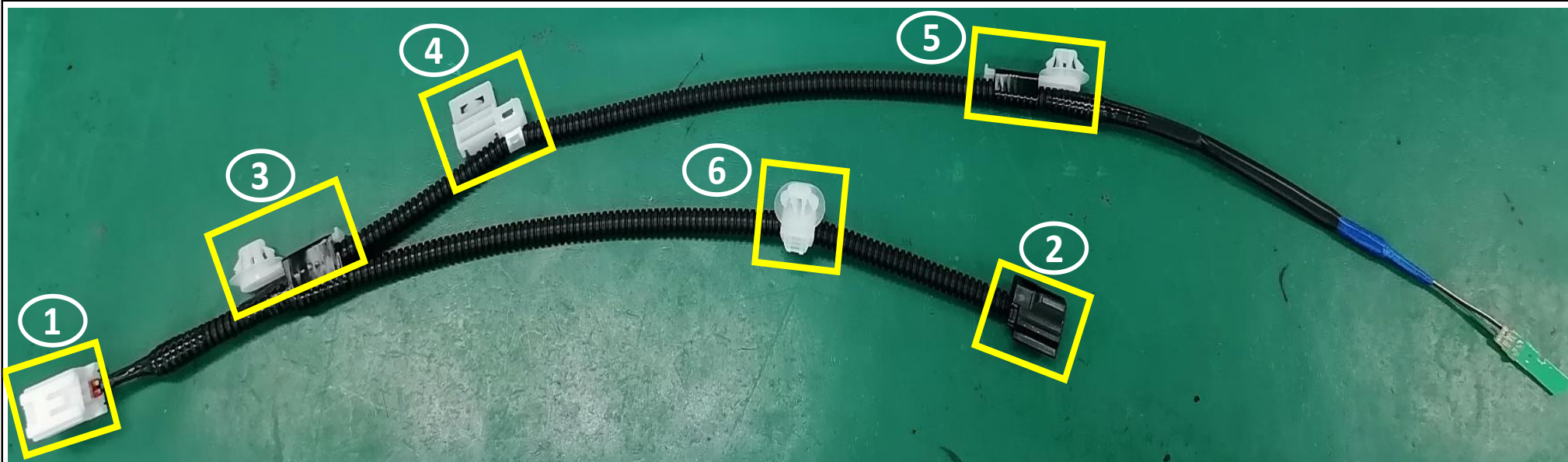
JIG

n/a

1 QUALITY CHECKPOINTS

P3

7R0117-7020A



1 2 No UNLOCKED/HALFLOCKED CONNECTOR

7 CORRECT FACING OF CLAMP

3 4 5 6 No MISSING CLAMP/BAND CLAMP

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