



WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:	April 26, 2023	
Validity Date:	n/a	
Document No.:	WI-ENG-PDE-553C	
Revision No.:	3	Page No.: 1 of 9

Process Name/Title:	TAPING ASSEMBLY PROCESS		Customer:	TRMX
Model Code/Part Number:	780B / 7R0102-7023A			
Purpose:	<input type="checkbox"/> PROTOTYPE	<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO	

PARTS:	1. Assy parts; Clamp 82711-16830 (B); Clamp 82711-52090 (W); Black tape [2pcs]; Label 7V4010-0020	JIG:	1. Clamp Assembly jig 2. Label Dispenser
--------	---	------	---

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P3	Table Lay-out		<div>Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</div> <div>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>	<div>1. No missing parts/tools 2. No excess parts/tools</div> <div>Important reminders/Note/s: 1. Please check the clamp first before setting to clamp assembly to avoid wrong use of clamp.</div> <div>CLAMP ILLUSTRATION </div> <div>BAND CLAMP ILLUSTRATION </div>

Revision History								Prepared by	Reviewed by	Reviewed by	Approved by
04/26/23	3	Inclusion of quality checkpoints	J. Loterte	C. Villanueva	A. Arañes	n/a				n/a	
11/10/22	2	Improve Quality pointers; Reminders/notes and references on page no.1,2,3,4,6 and 8 due to document improvement; Improve Work/illustration on process no. 5 due to process improvement.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes					
07/22/22	1	Change from Pre-Launch to Masspro.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes					
07/20/22	0	Initial Issue. QR Code 7V4010-0020 label direction.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes					
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	July 20, 2022			

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Validity Date:

n/a

Model Code/Product Number:

780B / 7R0102-7023A

Customer:

TRMX

Document No.:

WI-ENG-PDE-553C

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

Page No.:

2 of 9

PARTS:

1. Clamp 82711-16830 (B) [2pcs]
2. Clamp 82711-52090 (W) [2pcs]

3. Black tape [2pcs.]

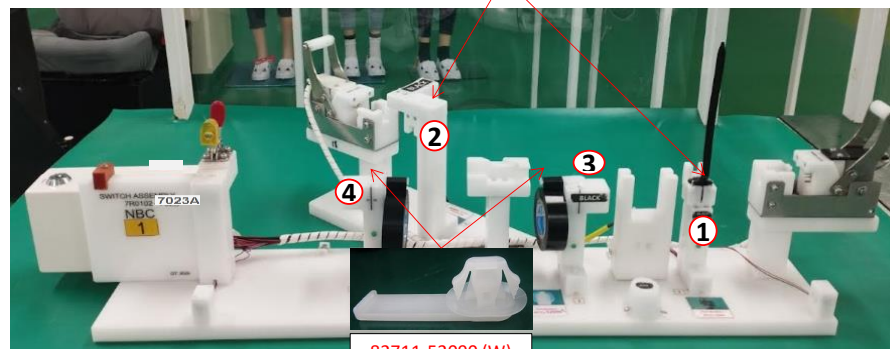
JIG

1. Clamp assembly jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P3	Clamp setting	n/a	<div>1. No wrong use of clamp 2. No damaged clamp 3. No wrong use of tape</div> <div>Important reminders/Note/s:</div> <div>1. Please check the clamp first before setting to clamp assembly to avoid wrong use of clamp.</div> <div>CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div>82711-52090 (W)</div><div>NG</div><div>82711-12A80 (W)</div></div> <div>BAND CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div>82711-16830 (B)</div><div>NG</div><div>82711-34490 (B)</div></div>



82711-16830 (B)



82711-52090 (W)

1. Get 2pcs of band clamp 82711-16830 (B) using right hand and insert to clamp location 1 and 2 using both hands.

2. Get 2pcs of clamp 82711-52090 (W) using right hand and insert to clamp location 3 and 4 using both hands.

3. Get Black tape using right hand and put pre-tape on clamp location 3 and 4 using both hands.



One side tape under clamp

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Model Code/Product Number:

780B / 7R0102-7023A

Customer:

TRMX

Document No.:

WI-ENG-PDE-553C

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

Page No.:

3 of 9

PARTS:

1. Assy parts

JIG

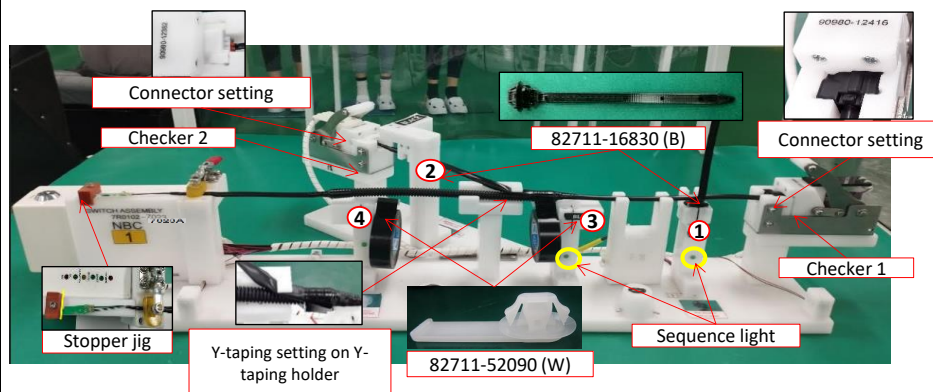
1. Clamp assembly jig

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

3

P3

Clamp Assembly



1. Get the assy parts and then set to jig. *(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. *(See below illustration for Y-Taping lock.)* Second, set the **PCB** to stopper jig and push down the toggle clamp. Last, set the connector **6189-1161 (B)** to **Checker 2** then push the checker fixture for continuity checking.

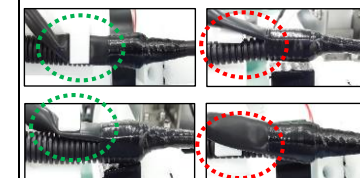
2. Check if LED for **POWER**, **CLAMP**, **WIRE1&WIRE2** and **SEQUENCE LIGHT** in the first location is **ON**. If encountered abnormality, **STOP** the process, **CALL** the Leader and **WAIT** for instruction.

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



n/a

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

Y-TAPING SETTING IN CLAMP ASSEMBLY JIG**GOOD****NG****Important reminders/Note/s:**

1. Make sure no clearance between **PCB** and stopper jig



CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Model Code/Product Number:

780B / 7R0102-7023A

Customer:

TRMX

Document No.:

WI-ENG-PDE-553C

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

Page No.:

4 of 9

PARTS:

1. Assy parts

JIG

1. Clamp assembly jig

NO.

PROCESS NAME

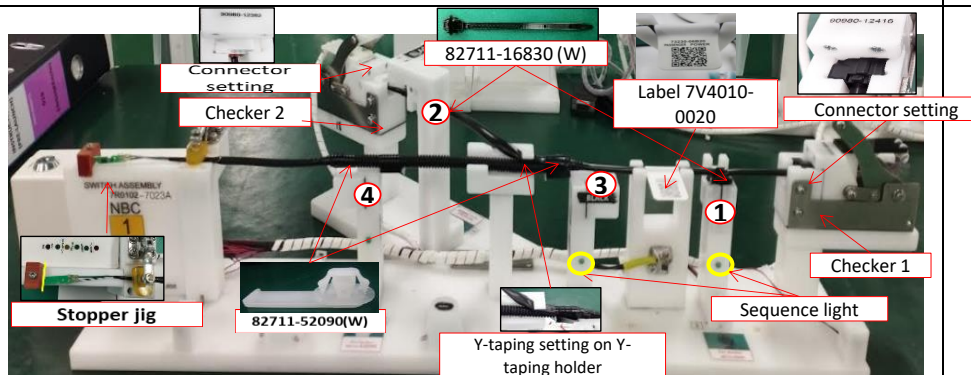
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

3

P3

Clamp Assembly
(continuation)

4. Get the Bando gun using right hand and cut the band clamp on clamp location **1** and **2** using both hands. Press the switch button after every cutting.

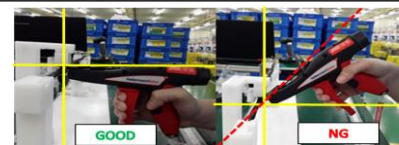
5. Tape the clamp on location **3** and **4** using both hands. Make 3 windings and cut the tape. Press the **switch button** after every taping. Go sound will be heard. **Continue on label Attachment. (Refer to the next page for label attachment).**

6. 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.

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

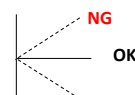


Fixed setting of
band clamp
cutter: 1 ~ 3



BANDO GUN ALIGNMENT

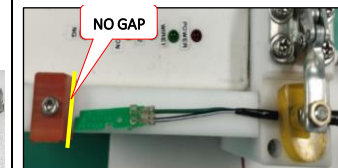
PERPENDICULARITY



BANDO GUN



FLAT NOSEPIECE



1. No damaged clamp
2. No wrong use of clamp
3. No wrong use of tape
4. No missing clamp
5. No wrong use of bando gun

Important reminders/Note/s:

1. Make sure no clearance between PCB and stopper jig

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Effectivity Date:

April 26, 2023

Process Name/Title:

TAPING ASSEMBLY PROCESS

Validity Date:

n/a

Model Code/Product Number:

780B

/

7R0102-7023A

Customer:

TRMX

Document No.:

WI-ENG-PDE-553C

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

Page No.:

5 of 9

PARTS:

1. Assy parts
2. Label 7V4010-0020

JIG

1. Clamp Assembly jig
2. Label Dispenser

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

3

P3

Label attachment

Model	Items	Item Name
7R0102	73240-0C140	Driver Manual
7R0103	73240-0C150	Driver Power
7R0104	73240-0C160	Driver PWR-MEM
7R0105	73230-0C170	Passenger Manual
7R0106	73230-0C180	Passenger Power

02

Model code

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

Item no. & name



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



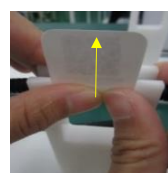
3. Fold the center part of the label



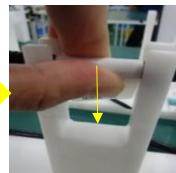
4. Align both end part of label .



5. After alignment, Press the label with both fingers .



6. Press the label upside down using finger.

**GOOD**Acceptable overlap
0~1mm**NG**

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
7. No wrong usage of label



CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Model Code/Product Number:

780B / 7R0102-7023A

Customer:

TRMX

Document No.:

WI-ENG-PDE-553C

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

Page No.:

6 of 9

PARTS:

1. Assembled parts
2. Master sample

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

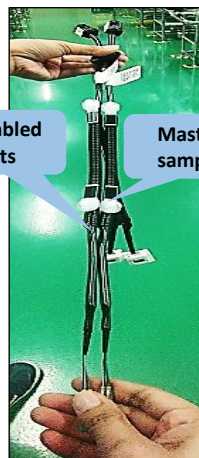
TOOLS/PPE

QUALITY POINTERS

5

P3

Visual/By two's inspection



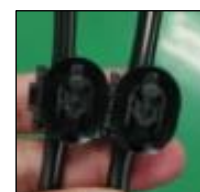
Assembled parts

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 **presence of all clamp attachment and taping condition.**



4. Check the **presence and condition of QR code label.**



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



MASTER SAMPLE



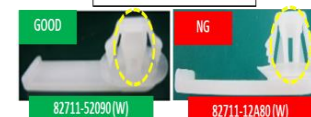
1. No skip checking during inspection.

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



BAND CLAMP ILLUSTRATION



CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**Process Name/Title: **TAPING ASSEMBLY PROCESS**

Effectivity Date:

April 26, 2023

Model Code/Product Number: **780B / 7R0102-7023A** Customer: **TRMX**

Validity Date:

n/a

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

Document No.:

WI-ENG-PDE-553C

Revision No.:

3

Page No.:

7 of 9

PARTS:

1. Assembled parts
2. Master sample

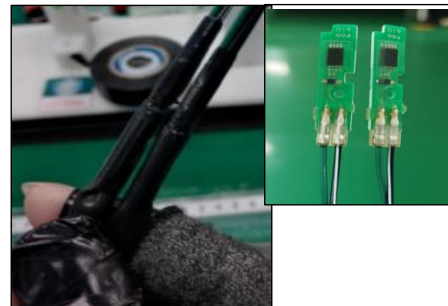
JIG

n/a

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

5

P3

Visual/By two's inspection
(Continuation)6. Check the **connector lock, terminal** and **insertion** and **taping condition**.7. Check the **Taping condition**. Conduct **Slightly bending**.8. Check the **Y-Taping condition**.9. Check the **Taping condition and PCB appearance**.**MASTER SAMPLE**

1. No skip checking during inspection.

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Model Code/Product Number:

780B / 7R0102-7023A

Customer:

TRMX

Document No.:

WI-ENG-PDE-553C

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

Page No.:

8 of 9

PARTS:

n/a

JIG

n/a

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

6

Visual/By two's inspection

**MEASURING TAPE**

1. No wrong dimension

Important reminders/Note/s:

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

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Model Code/Product Number:

780B

/

7R0102-7023A

Customer:

TRMX

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Effectivity Date:

April 26, 2023

Validity Date:

n/a

Document No.:

WI-ENG-PDE-553C

Revision No.:

3

Page No.:

9 of 9

PARTS:

1. Assy parts

JIG

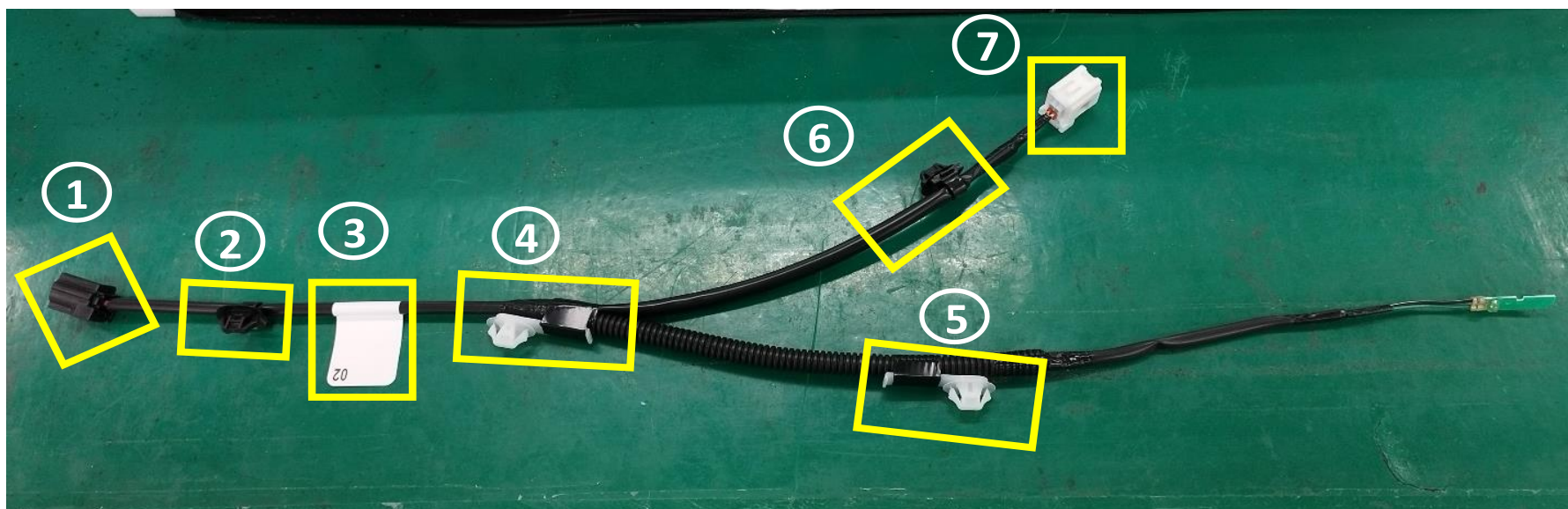
n/a



QUALITY CHECKPOINTS

P3

7R0102-7023A



1

7

No UNLOCKED/HALFLOCKED CONNECTOR

3

No MISSING BARCODE

2

4

5

6

No MISSING CLAMP/BAND CLAMP

8

CORRECT FACING OF CLAMP

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)

MASTER COPY

DCC Stamp