

**WORK INSTRUCTION****TAPING ASSEMBLY PROCESS**

Effectivity Date:

September 23, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number: **220D / 7L0135-7020**Customer: **TRQSS**

Document No.:

WI-ENG-PDE-438B

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:

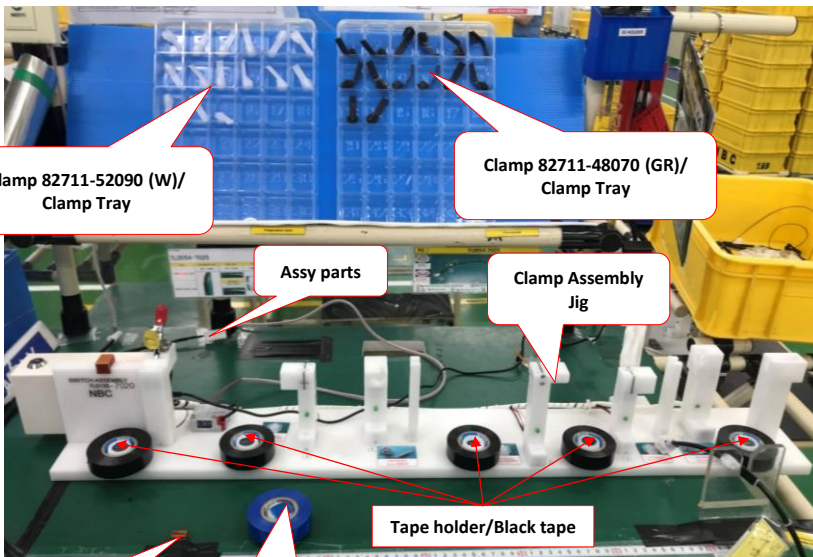
1 of 8

PARTS:

1. Assy parts; Clamp 82711-52090 (W); Clamp 82711-48070 (GR); Black tape (5pcs.); Blue tape (1pc.)

JIG:

1. Clamp assembly jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P2	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.	1. No missing parts/tools 2. No excess parts/tools

Revision History

Eff. Date	Rev. No	Details of Change	Prepared by	Reviewed by	Reviewed by	Approved by
09/23/22	2	Improve: Quality pointers and notes in: Process no.2, 3, 4, 5 and 6 as document improvement. Work procedure and illustration in process no.5 - visual/by two's inspection.	M. Catapang	J. Loterte	C. Villanueva	A. Arañes
03/28/22	1	Change Pre-launch to Masspro.	K. Doria	J. Loterte	C. Villanueva	A. Arañes
02/28/22	0	Initial issue.	K. Doria	J. Loterte	C. Villanueva	A. Arañes
Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted

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

TAPING ASSEMBLY PROCESS

Effectivity Date:

September 23, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number: 220D /

7L0135-7020

Customer:

TRQSS

Document No.:

WI-ENG-PDE-438B

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

2 of 8

PARTS:

1. Clamp 82711-52090 (W) [3pcs.]
2. Clamp 82711-48070 (GR) [2pcs.]

3. Black Tape [5pcs.]

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

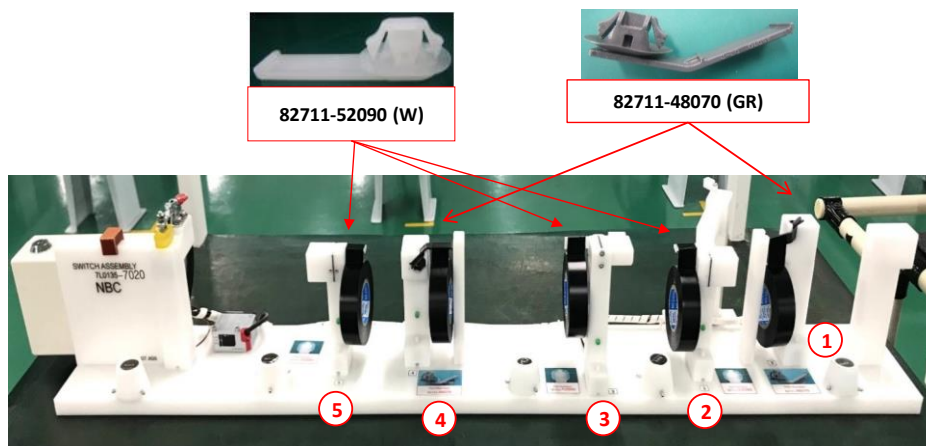
TOOLS/PPE

QUALITY POINTERS

2

P2

Clamp Setting



1. Get the clamp **82711-52090 (W)** using right hand and put to location **5,3 and 2** using both hands.

2. Get the clamp **82711-48070 (GR)** using right hand and put to location **4 and 1** using both hands.

3. Initially attach black tape to location **5, 4, 3, 2 and 1** using both hands.

n/a

2

STANDARD TAPING FOR CLAMP

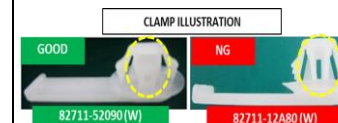
One side tape under clamp



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

Important reminders/Note/s:

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



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

September 23, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number:

220D /

7L0135-7020

Customer:

TRQSS

Document No.:

WI-ENG-PDE-438B

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

3 of 8

PARTS:

1. Assy parts
2. Blue tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

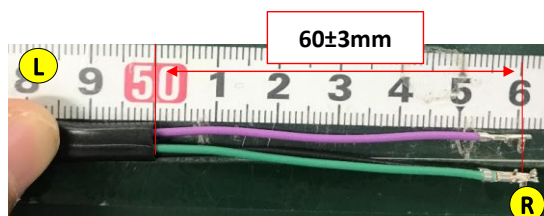
TOOLS/PPE

QUALITY POINTERS

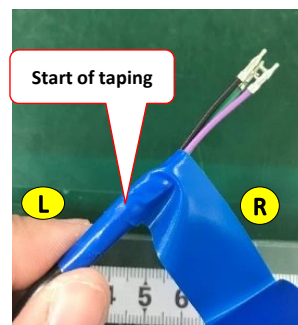
3

P2

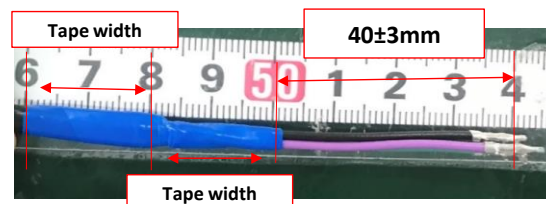
Taping 1
Sunprene tube to wire near
terminal



1. Measure the end of the sunprene tube up to the terminal tip **60±3mm**.



2. Get the **Blue tape**, hold the sunprene tube using left hand then start the taping process.

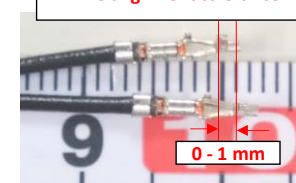


3. After taping, check the dimension, taping condition and wire alignment.

MEASURING TAPE



Wire alignment tolerance



1. No flip-out tape
2. No peel-off tape
3. No loose tape
4. No missing tape
5. No wrong dimension
6. No wrong use of tape

2

Important reminders/Note/s:

1. Use **BLUE TAPE** only
2. Please use calibrated/verified measuring tape when getting the measurement.

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

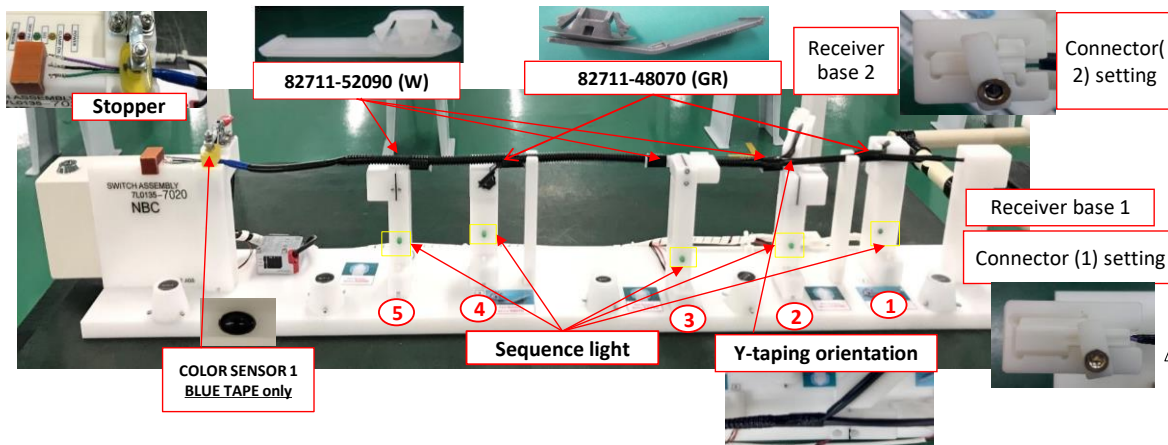




WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:	September 23, 2022		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-438B		
Revision No.:	2	Page No.:	4 of 8

Process Name/Title:	TAPING ASSEMBLY PROCESS		
Model Code/Part Number:	220D / 7L0135-7020	Customer:	TRQSS
Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS:	1. Assy parts			JIG	1. Clamp assembly jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	P2	Clamp assembly jig	<div></div> <div><p>1. Get the assy parts and set to jig using both hands. First, put the connector 6098-3802 (W) to Receiver base 1 then lock. Second, put the connector 6098-3810 (W) to Receiver base 2 then lock. Continue to set the harness in jig. Color sensor will beep/buzz if sensor detects Blue tape. Last, set the terminal to stopper jig then pull down the toggle clamp. Continue if the sequence light of Location 1 is ON. <i>Refer to the above illustration for the correct setting.</i></p><p>2. Check if all LED light for POWER ON and CLAMP ON was ON. Check 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.</p><div><div><p>3. Hold the tape on clamp location 1. Make 3 windings of tape using both hands then cut the tape. Press the SW button after taping. Continue the process if sequence light button on location 2 was ON.</p></div><div><p>4. Hold the tape on clamp location 2. Make 3 windings of tape using both hands then cut the tape. Press the SW button after taping. Continue the process if sequence light button on location 3 was ON.</p></div></div></div>	<div></div> <p>Important reminders/Note/s: 1. Make sure no gap between stopper and terminals</p> <p>2.</p> <div><p>1. No damaged clamp</p><p>2. No wrong usage of parts</p><p>3. No missing clamp</p><p>4. No missing tape</p></div>	

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

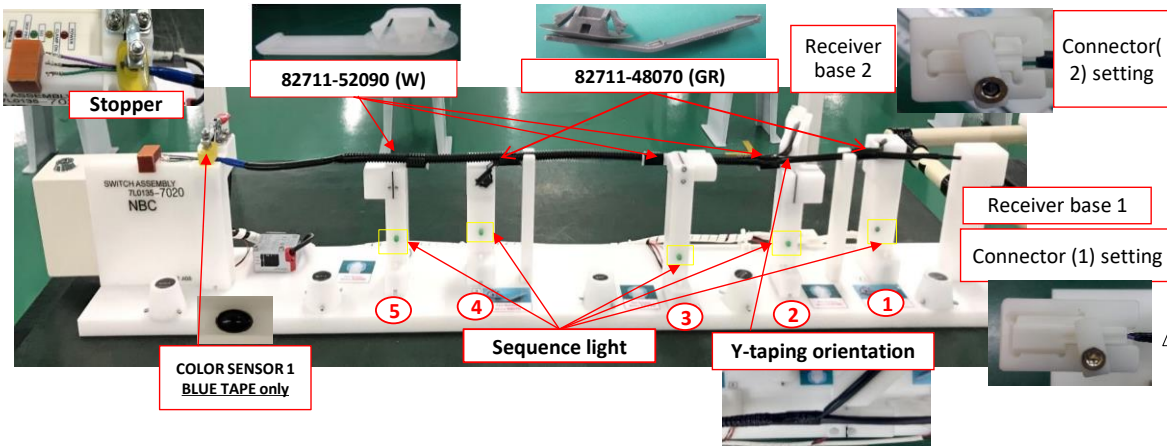
DCC Stamp



WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

Effectivity Date:	September 23, 2022		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-438B		
Revision No.:	2	Page No.:	5 of 8

Process Name/Title:	TAPING ASSEMBLY PROCESS		
Model Code/Part Number:	220D / 7L0135-7020	Customer:	TRQSS
Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS:		1. Assy parts		JIG	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P2 Clamp assembly jig (Continuation)				<p>Important reminders/Note/s: 1. Make sure no gap between stopper and terminals</p> <p>2</p> <ol style="list-style-type: none">1. No damaged clamp2. No wrong usage of parts3. No missing clamp4. No missing tape
		<p>5. Hold the tape on clamp location 3. Make 3 windings of tape using both hands then cut the tape. Press the SW button after taping. Continue the process if sequence light button on location 4 was ON.</p> <p>6. Hold the tape on clamp location 4. Make 3 windings of tape using both hands then cut the tape. Press the SW button after taping. Continue the process if sequence light button on location 5 was ON.</p> <p>7. Hold the tape on clamp location 4. Make 3 windings of tape using both hands then cut the tape. Press the SW button after taping. Continue the process if sequence light button on location 5 was ON.</p> <p>8. After taping, CONDUCT POINT CHECKING before removing the harness from jig.</p>			

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





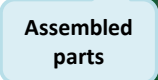
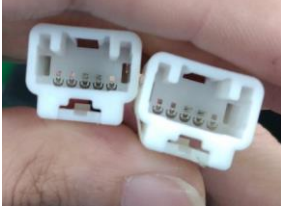


WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

Effectivity Date:	September 23, 2022		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-438B		
Revision No.:	2	Page No.:	6 of 8

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

Model Code/Part Number: **220D / 7L0135-7020** Customer: **TRQSS**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:		1. Assy parts		JIG	N/A
NO.	PROCESS NAME	2 WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
5	P2 2 Visual/By two's inspection	<div><p>ACTUAL PRODUCT</p><p>Master sample</p><p>Assembled parts</p><p>2. Check the terminal, connector lock condition, insertion and taping condition.</p><p>3. Check the presence of clamp and taping condition.</p><p>1. Conduct alignment of harness (Master sample vs. assembled parts) using both hands.</p></div>		<div><p>MASTER SAMPLE</p><p>1. No skip process</p></div>	

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

TAPING ASSEMBLY PROCESS

Effectivity Date:

September 23, 2022

Process Name/Title:

Model Code/Part Number: 220D /

7L0135-7020

Customer:

TRQSS

Validity Date:

n/a

Document No.:

WI-ENG-PDE-438B

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

7 of 8

PARTS:

1. Assy parts

JIG

N/A

NO.

PROCESS NAME

2

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

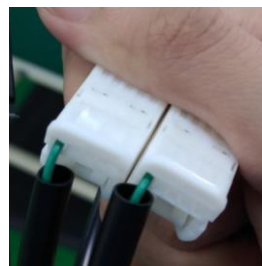
QUALITY POINTERS

5

P2

Visual/By two's inspection

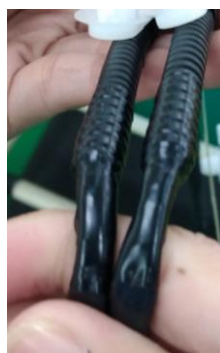
2



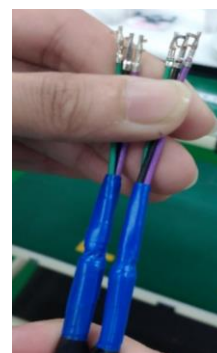
4. Check the **connector lock** condition and **insertion**.



5. Check the **presence of clamp and taping condition**.



6. Conduct bedding and check the **presence of tape in COT to tube** and **color of tape**.



7. Check the **taping condition** and **terminal appearance**. Must be **no deformed terminal**.

MASTER SAMPLE



1. No skip process

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:

September 23, 2022

Model Code/Part Number:

220D /**7L0135-7020**

Customer:

TRQSS

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

WI-ENG-PDE-438B

Revision No.:

2

Page No.:

8 of 8

PARTS:

n/a

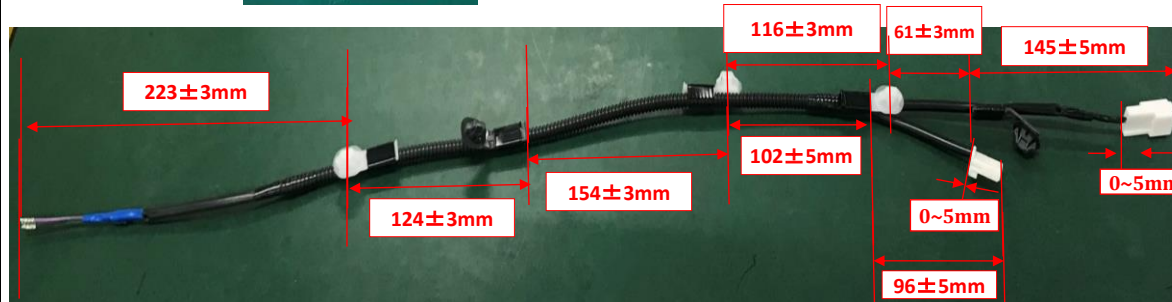
JIG

N/A

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

6

Measurement

MEASURING TAPE**Note:***Please use calibrated/verified measuring tape when getting the measurement.***2 Important reminders/Note/s:**
1. FOR HATSUMONO AND OWARIMONO

1. No wrong dimension

P2

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