

**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

March 10, 2023

Model Code/Part Number:

310B / 7M0521-7021

Customer:

TRJ

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

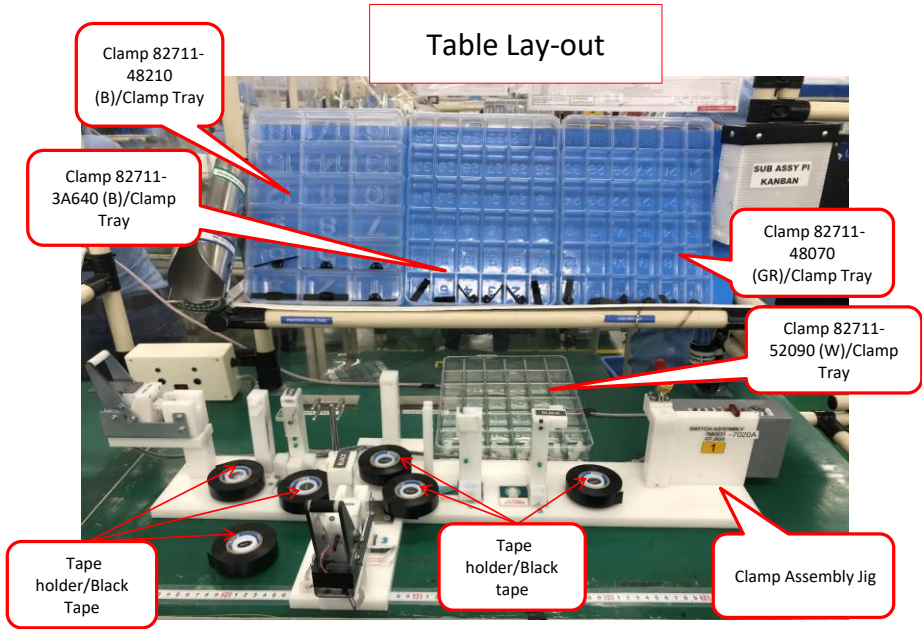
WI-ENG-PDE-416C

Revision No.:





1

Page No.:

1 of 9

PARTS:	1. Assy parts; Clamp 82711-48210 (B); Clamp 82711-3A640 (B); Clamp 82711-48070 (GR); Clamp 82711-52090 (W); Black Tape			JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
1	P3	Table Lay-out		<p>Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	1. No missing parts/tools 2. No excess parts/tools

Revision History

Revision History							Prepared by	Reviewed by	Approved by	Noted by
03/10/23	1	Improve Quality pointers/Reminders/Note and references on pages no.2, 3,4 and 5; improve Work procedure/Illustratio on Process no. 4-Visual/ By two's inspection. Inclusion of Quality Checkpoints on page no. 9.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes	 M. Ariola	 J. Loterte	 C. Villanueva	 A. Arañes
02/23/22	0	Initial Issue.	K. Doria	J. Loterte	C. Villanueva	A. Arañes				
Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted	Est. Date:			

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:

March 10, 2023

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number: 310B / 7M0521-7021

Customer: TRJ

Document No.:

WI-ENG-PDE-416C

Purpose: ☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

2 of 9

PARTS:

1. Clamp 82711-48210 (B)
2. Clamp 82711-3A640 (B)
3. Clamp 82711-48070 (GR)

4. Clamp 82711-52090 (W)
5. Black tape [7pcs.]

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

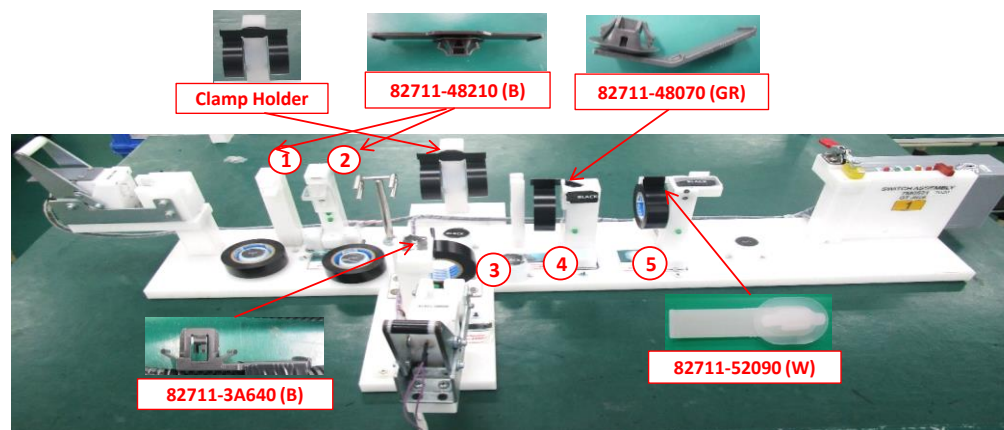
TOOLS/PPE

QUALITY POINTERS

2

P3

Clamp Setting



1. Get the clamp **82711-3A640 (B)** using right hand and put to location **3** using both hands.

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

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

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

5. Get the clamp **82711-48210 (B)** using right hand then put to clamp holder and initially attach black tape using both hands.

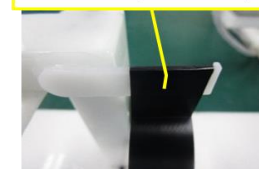
1

Important Reminders/Note/s:

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

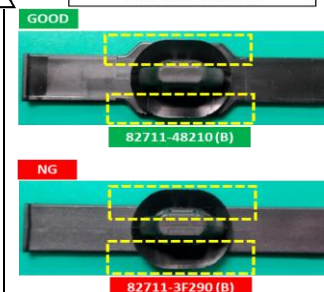
STANDARD TAPING FOR CLAMP

One side tape under clamp



1

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 TAPING ASSEMBLY PROCESS

Effectivity Date:	March 10, 2023	
Validity Date:	n/a	
Document No.:	WI-ENG-PDE-416C	
Revision No.:	1	Page No.: 3 of 9

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

Model Code/Part Number: **310B / 7M0521-7021** Customer: **TRJ**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:		1. Assy parts 2. Black tape		JIG	1. Clamp Assembly Jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P3 Clamp Assembly	<div></div> <div><p>1. Get the assy parts then put into jig. (See above picture for correct setting). First, set the connector 6188-0066 (GR) to Checker 1 then pull the checker fixture for continuity checking. Continue to set the harness in jig. Second, set the connector (6189-1161) to Checker 2 then push the lock for continuity checking. Last, set the end of G/BW hotmelted wire together within the stopper then press by Toggle clamp. Continue if the sequence light of location ① was ON.</p><p>2. Check if all LED light for POWER ON, WIRE1, WIRE2 and CLAMP ON was ON. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process.</p></div> <div></div>		n/a	<div><p>1. No damaged clamp 2. No wrong usage of parts 3. No missing clamp 4. No missing tape</p><p>1 Important reminders/Notes/:</p><p>1. Make sure no gap between stopper jig and hotmelted terminals.</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:	March 10, 2023		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-416C		
Revision No.:	1	Page No.:	4 of 9

Process Name/Title:

Model Code/Part Number: 310B / 7M0521-7021

Customer: TRJ

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

PARTS:

1. Assy parts
2. Black tape

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

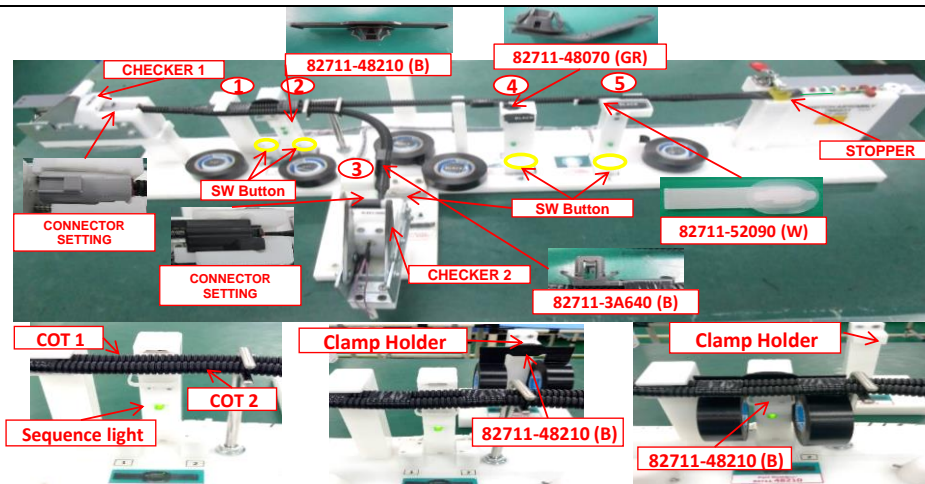
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

3

P3

Clamp Assembly
(Continuation)

3. Fix the 2 corrugated tube and 2 windings of tape on both sides (tape width) using both hands then cut the tape.

4. Get the clamp in clamp holder (82711-48210) and set to location 1 and 2.

5. Hold the tape on clamp location 1 then start taping using both hands. Make 3 windings of tape then cut the tape. Press the SW button after taping. Continue if sequence light on location 2 was ON.

6. Hold the tape on clamp location 2 then start taping using both hands. Make 3 windings of tape then cut the tape. Press the SW button after taping. Continue if sequence light on location 3 was ON.

7. Hold the tape on clamp location 3 then start taping using both hands. Make 3 windings of tape then cut the tape. Press the SW button after taping. Continue if sequence light on location 4 was ON.

n/a

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

1. Important reminders/Notes/:

1. Make sure no gap between stopper jig and hotmelted terminals.



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

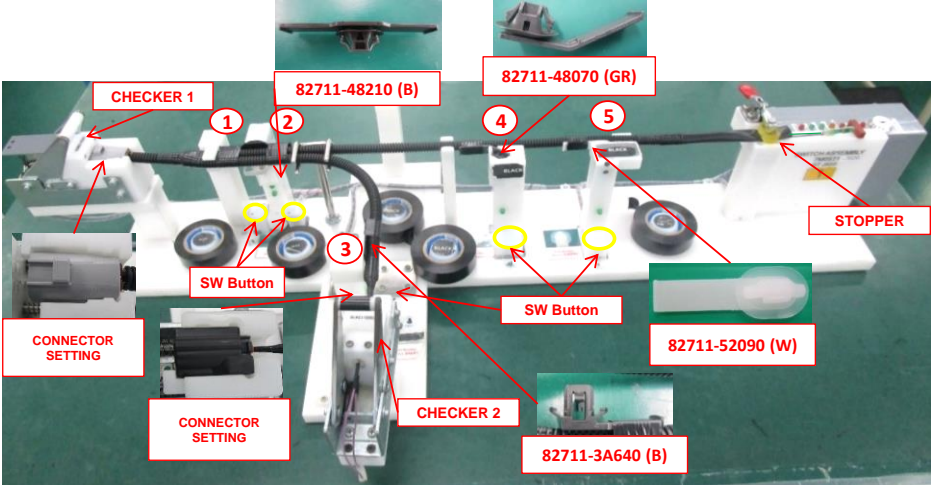

DCC Stamp



WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

Effectivity Date:	March 10, 2023
Validity Date:	n/a
Document No.:	WI-ENG-PDE-416C
Revision No.:	1
Page No.:	5 of 9

Process Name/Title:
Model Code/Part Number: **310B / 7M0521-7021** Customer: **TRJ**
Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:		1. Assy parts 2. Black tape		JIG	1. Clamp Assembly Jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P3	Clamp Assembly (Continuation)	<div></div> <div>8. Hold the tape on clamp location 4 then start taping using both hands. Make 3 windings of tape then cut the tape. Press the SW button after taping. Continue if sequence light on location 5 was ON.</div> <div>9. Hold the tape on clamp location 5 then start taping using both hands. Make 3 windings of tape then cut the tape. Press the SW button after taping. Go sound will be heard.</div> <div>10. After taping, CONDUCT POINT CHECKING before removing of harness from jig.</div> <div>11. First, pull the 2 checker fixture (same timing) then remove the toggle clamp. Last, remove the harness from COT up to clamp.</div>	n/a	<div>1. No damaged clamp 2. No wrong usage of parts 3. No missing clamp 4. No missing tape</div> <div><div>1</div><div>Important reminders/Notes/:</div><div>1. Make sure no gap between stopper jig and hotmelted terminals.</div><div></div></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:

March 10, 2023

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number: 310B / 7M0521-7021

Customer: TRJ

Document No.:

WI-ENG-PDE-416C

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

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

4

P3

Visual/ by two's Inspection



ACTUAL PRODUCT

Assembled parts

Master sample



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



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



4. Check the **Y-Taping condition**.



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



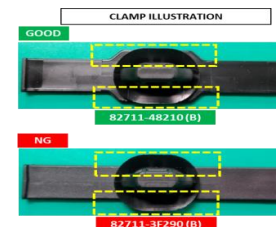
5. Check the **presence of Wing-type clamp and taping condition**. Conduct **slightly bending of parts with wing-type clamp**.



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

Model Code/Part Number:

310B

/

7M0521-7021

Customer:

TRJ

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

March 10, 2023

Validity Date:

n/a

Document No.:

WI-ENG-PDE-416C

Revision No.:

1

Page No.:

7 of 9

PARTS:

1. Assembled parts
2. Master sample

JIG

n/a

NO.

PROCESS NAME



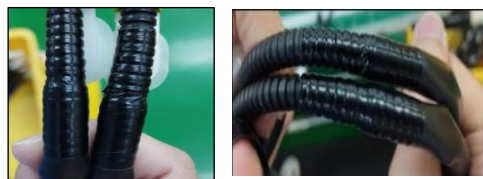
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

4

P3

Visual/ by two's Inspection
(Continuation)6. Check the **presence of all clamp attachment** and **taping condition**.7. Check the **taping condition of COT to VM tube (Sunprene)**. Conduct **slightly bending**.8. Check **the terminal and PCB appearance**. Must be **no deformed terminal**.

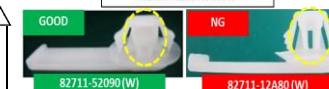
MASTER SAMPLE



1. No skip checking during inspection.



CLAMP ILLUSTRATION



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****TAPING ASSEMBLY PROCESS**

Effectivity Date:

March 10, 2023

Process Name/Title:

Validity Date:

n/aModel Code/Part Number: **310B / 7M0521-7021**Customer: **TRJ**

Document No.:

WI-ENG-PDE-416C

Purpose:

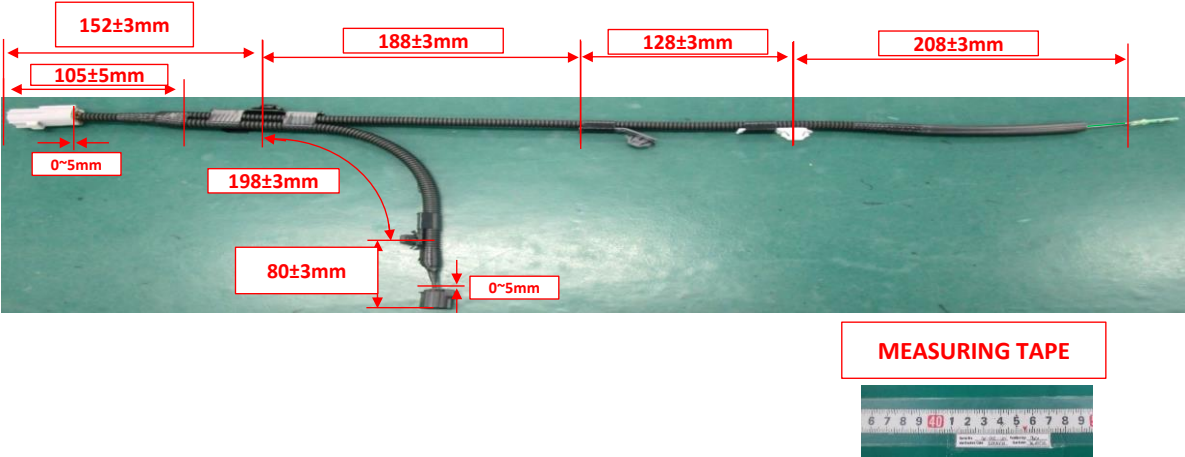
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

8 of 9

PARTS:	n/a			JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
5	P3 Measurement			Important Reminders/Note/s: <i>1. Please use calibrated/verified measuring tape when getting the measurement.</i> <i>2. For Hatsumono and Owarimono.</i> 1. No wrong dimension	

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:

March 10, 2023

Model Code/Part Number: 310B / 7M0521-7021

Customer: TRJ

Validity Date:

n/a

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

Page No.:

9 of 9

PARTS:

n/a

JIG

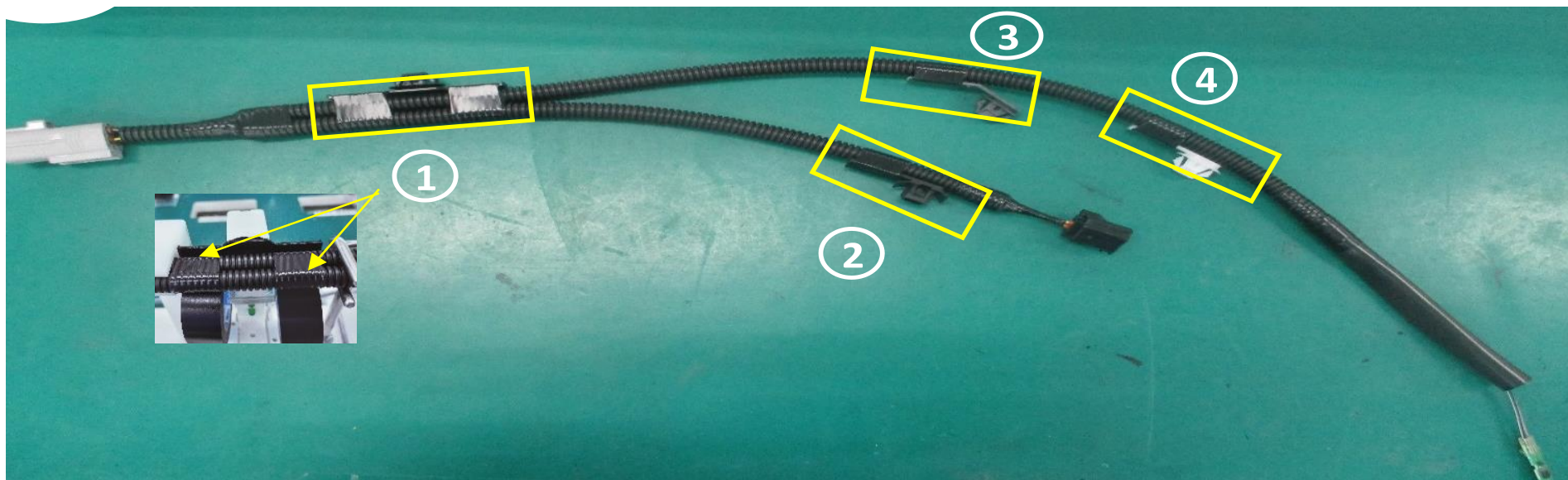
n/a



QUALITY CHECKPOINTS

P3

7M0521-7021



1

2

3

4

No MISSING CLAMP

No MISSING SPOT TAPE

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