

	<b>WORK INSTRUCTION</b>						Effectivity Date:		March 7, 2023	
	<b>TAPING ASSEMBLY PROCESS</b>						Validity Date:		n/a	
	Process Name/Title:				Model Code/Part Number: <b>177D / 7L0128-7020A</b>		Customer: <b>TRQSS</b>		Document No.: <b>WI-ENG-PDE-352C</b>	
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO						Revision No.:		2	Page No.:

<b>PARTS:</b>	1. All parts: Assy parts; Clamp 82711-52090 (W); Clamp 82711-3A540 (W); Clamp 82711-34490 (B); Black tape [4pcs.]; White tape						<b>JIG:</b>	1. Clamp assembly jig	
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>						<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
1	P3	<div style="text-align: center;"> <b>Table Lay-out</b> </div>						<div style="border: 1px dashed red; padding: 5px; margin-bottom: 10px;"> <b>Safety Instruction</b>            Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)         </div> <div style="border: 1px dashed red; padding: 5px; margin-bottom: 10px;"> <b>Housekeeping</b>            1. Maintain and always practice 5's.            2. Personal things on the workplace is prohibited. Keep it in your locker.         </div> <div style="border: 1px dashed red; padding: 5px;"> <b>Alert level</b>            For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.         </div>	<div style="margin-bottom: 10px;"> <b>1.</b> No missing parts/tools  <b>2.</b> No excess parts/tools         </div> <div style="text-align: center;"> <b>CLAMP ILLUSTRATION</b> </div> <div style="text-align: center;"> <b>BAND CLAMP ILLUSTRATION</b> </div>

Revision History								Prepared by	Reviewed by	Approved by	Noted by
03/07/23	2	Work instruction improvement. Improve work procedure/ Illustration and Quality pointers. Update by two's inspection. Inclusion of Quality checkpoints (Page 9).	D.Castillo	J. Loterte	C. Villanueva	A. Arañes					
01/17/22	1	Change from Pre-launch to Masspro. Additional Table Lay-out; Change part number from 7L0128-7020 to 7L0128-7020A due to change in COT length from $\phi 5 L=517\pm 5mm$ to $\phi 5 L=512\pm 2mm$ due to removal of tolerance from COT to MR SW.	K. Doria	J. Loterte	C. Villanueva	A. Arañes					
10/13/21	0	Initial issue	M. Catapang	J. Loterte	C. Villanueva	A. Arañes					
Eff. Date	Rev. No	Details of Change		Revised	Reviewed	Approved	Noted	Est. Date:	October 13, 2021		

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DCC Stamp



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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

2 of 9

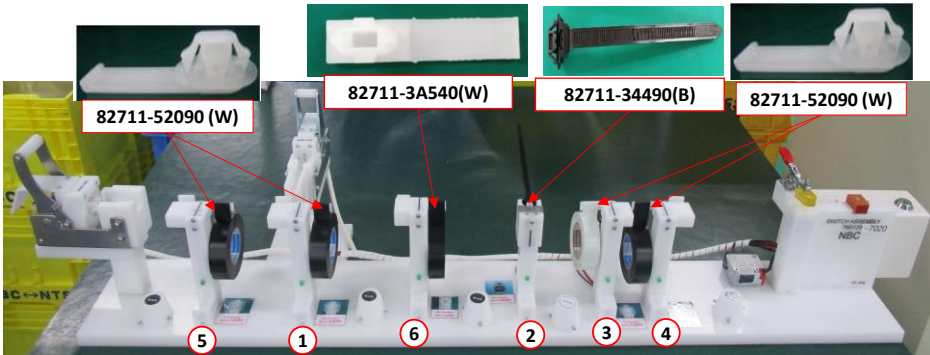
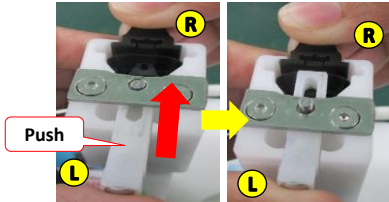

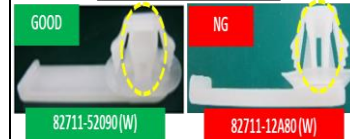
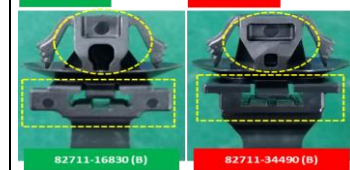
### PARTS:

1. Clamp 82711-52090 (W) [4pcs.]
2. Clamp 82711-3A540 (W)
3. Clamp 82711-34490 (B)

4. Black tape [4pcs.]
5. White tape

### JIG

1. Clamp assembly jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P3 Clamp setting	 <div><div><p>1. Get 2 pcs. of clamp <b>82711-52090 (W)</b> using both hands then insert to clamp location <b>5 and 1</b> using both hands.</p></div><div><p>2. Get 2 pcs. of clamp <b>82711-52090 (W)</b> using both hands then insert to clamp location <b>3 and 4</b> using both hands.</p></div><div><p>3. Get 1 pc. of clamp <b>82711-3A540 (W)</b> using right hand then insert to clamp location <b>6</b> using both hands.</p></div><div><p>5. Get the <b>Black tape</b> then initially attach to clamp location <b>5, 1, 6 and 4</b> using both hands.</p></div><div><p>4. Get 1 pc. of clamp <b>82711-34490 (B)</b> using right hand then insert to clamp location <b>2</b> using both hands. <i>(See below illustration for clamp setting)</i></p></div><div><p>6. Get the <b>White tape</b> then initially attach to clamp location <b>3</b> using both hands.</p></div></div>	n/a	<div><p><b>STANDARD TAPING FOR CLAMP</b></p><p>One side tape under clamp</p></div> <div><p>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</p><p><b>Important reminders/Note/s:</b> <b>1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.</b></p><p><b>CLAMP ILLUSTRATION</b></p><p><b>BAND CLAMP ILLUSTRATION</b></p></div>

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☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

3 of 9

### PARTS:

1. Assy parts
2. Black tape

### JIG

1. Clamp assembly jig

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

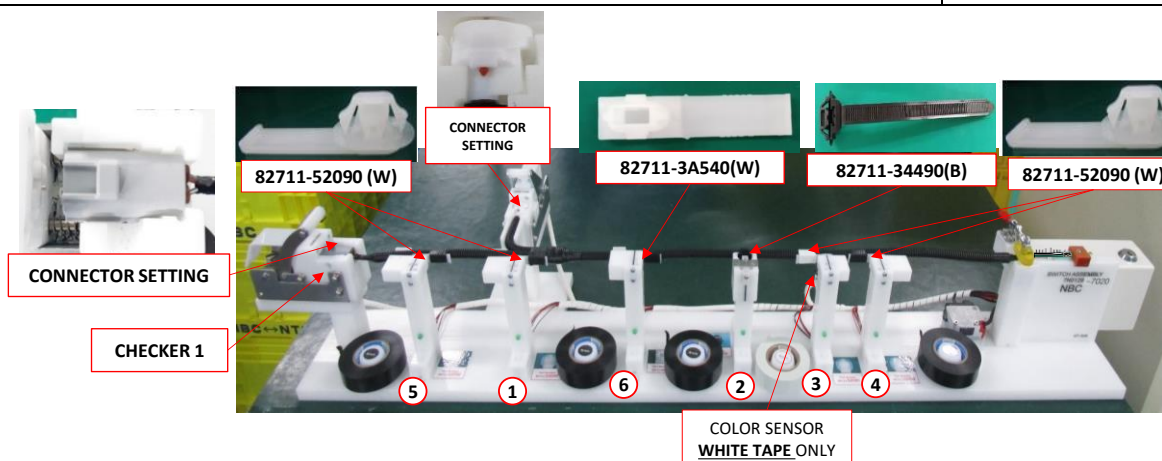
### TOOLS/PPE

### QUALITY POINTERS

3

P3

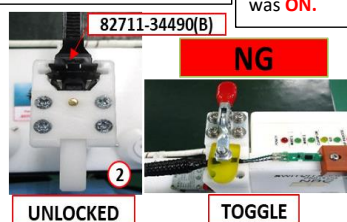
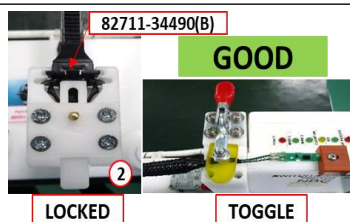
Clamp assembly



1. Get the assy parts and set into jig. (See above picture for correct setting of harness). First, set the connector 6188-0066 (GR) to Checker 1 then pull the checker fixture for continuity checking. Second, set the connector 6189-0451 (W) to Checker 2 then pull the checker fixture for continuity checking. Continue to set the harness in jig. Last, set the terminal within the stopper then press by Toggle clamp. Continue if the sequence light of location 1 was ON.

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

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



**NOTE:** On clamp location 2, if clamp 82711-34490 (B) is locked and the toggle clamp is set, the proces will proceed. If clamp 82711-34490 (B) is unlock and the toggle clamp is set, the process will not proceed and NG buzz will be heard.



**Important reminders/Note/s:**  
1. Make sure no gap between stopper jig and PCB.

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

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Document No.:

WI-ENG-PDE-352C

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

4 of 9

### PARTS:

1. Assy parts
2. Black tape

### JIG

1. Clamp assembly jig

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

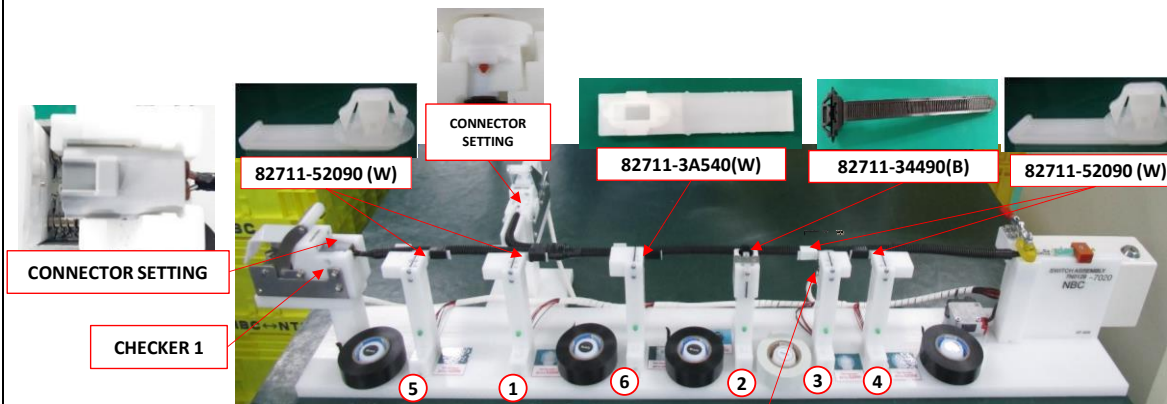
### TOOLS/PPE

### QUALITY POINTERS

3

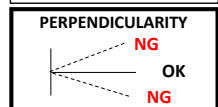
P3

Clamp assembly  
(Continuation)

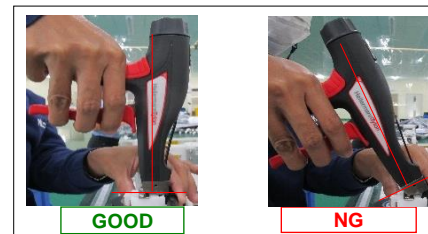


4. Initially tighten the band clamp on clamp location **2** using both hands.
5. Get the bando gun using right hand then cut the band clamp on location **2** using both hands. Press the **SW** button after cut. Continue the process if sequence light on clamp location **3** was **ON**.

#### BANDO GUN ALIGNMENT



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 jig and PCB.**

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

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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

5 of 9

### PARTS:

1. Assy parts
2. Black tape

3. White tape

### JIG

1. Clamp assembly jig

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

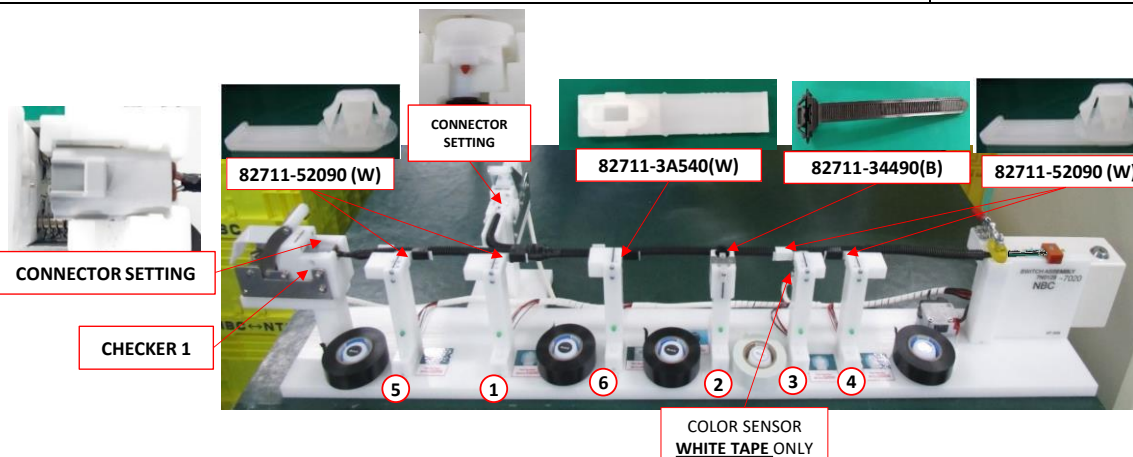
### TOOLS/PPE

### QUALITY POINTERS

3

P3

Clamp assembly  
(Continuation)



6. Hold the tape on clamp location **3**, make **3 windings** of tape then cut the tape using both hands. **Color sensor** light will beep/buzz if sensor detects **White tape**. Press the **SW button** after taping. Continue the process if sequence light on clamp location **4** was **ON**.

7. Hold the tape on clamp location **4**, make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if sequence light on clamp location **5** was **ON**.

8. Hold the tape on clamp location **5**, make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if sequence light on clamp location **6** was **ON**.

9. Hold the tape on clamp location **6**, make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. **Go** sound will be heard.

10. After taping, **CONDUCT POINT CHECKING** before removing the harness from jig.



**Important reminders/Note/s:**  
**1. Make sure no gap between stopper jig and PCB.**

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

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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

6 of 9

### PARTS:

1. Assembled parts
2. Master sample

JIG

n/a

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

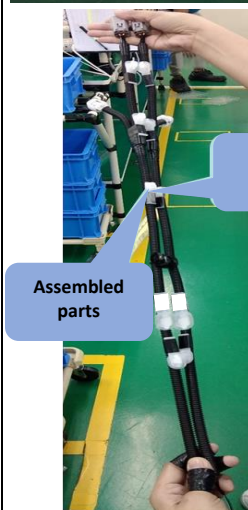
TOOLS/PPE

QUALITY POINTERS

4

P3

Visual/ By two's inspection



Master sample

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



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



3. Check the presence of clamp and taping condition.



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

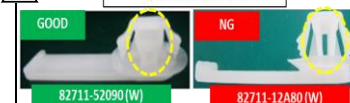
MASTER SAMPLE



1. No skip checking during inspection.



CLAMP ILLUSTRATION



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Document No.:

**WI-ENG-PDE-352C**

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

7 of 9

### PARTS:

1. Assembled parts
2. Master sample

JIG

n/a

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

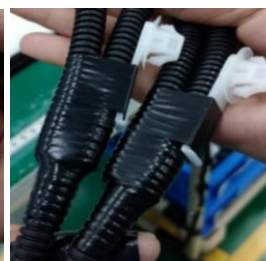
TOOLS/PPE

QUALITY POINTERS

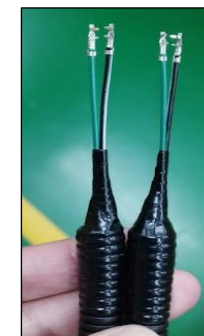
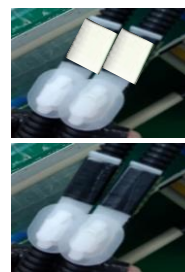
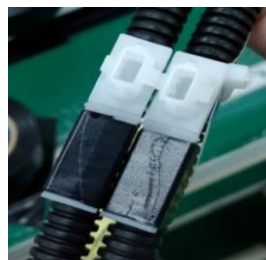
4

P3

Visual/ By two's inspection  
(Continuation)



5. Check the **presence of clamp in Y-Taping** condition.



6. Check the **presence of clamp, color of tape, taping condition and band clamp cut condition.**

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

**MASTER SAMPLE**

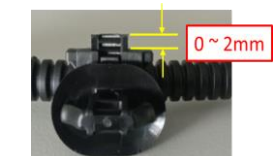
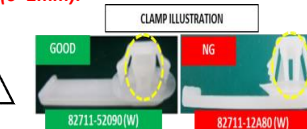


1. No skip checking during insprction.



**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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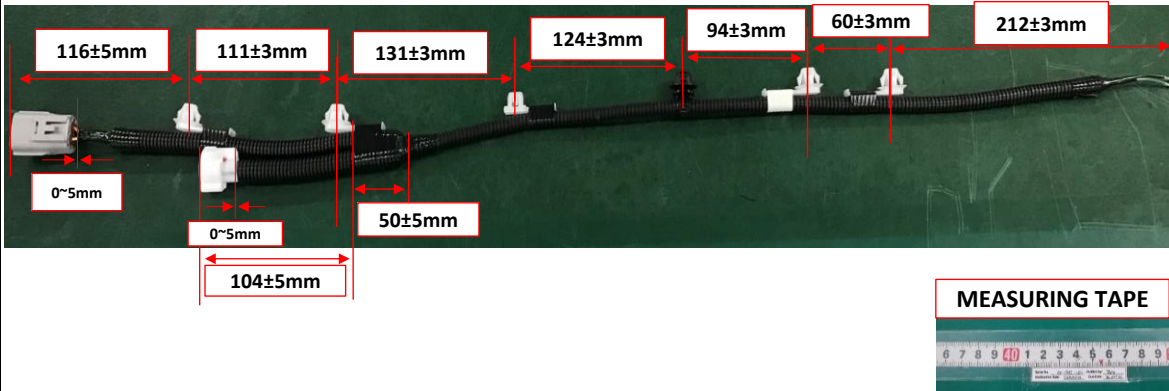
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:

8 of 9

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

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Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Revision No.:

**2**

Page No.:

**9 of 9**

PARTS:

n/a

JIG

n/a



## QUALITY CHECKPOINTS

**P3**

**7L0128-7020A**



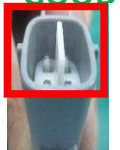
**GOOD**



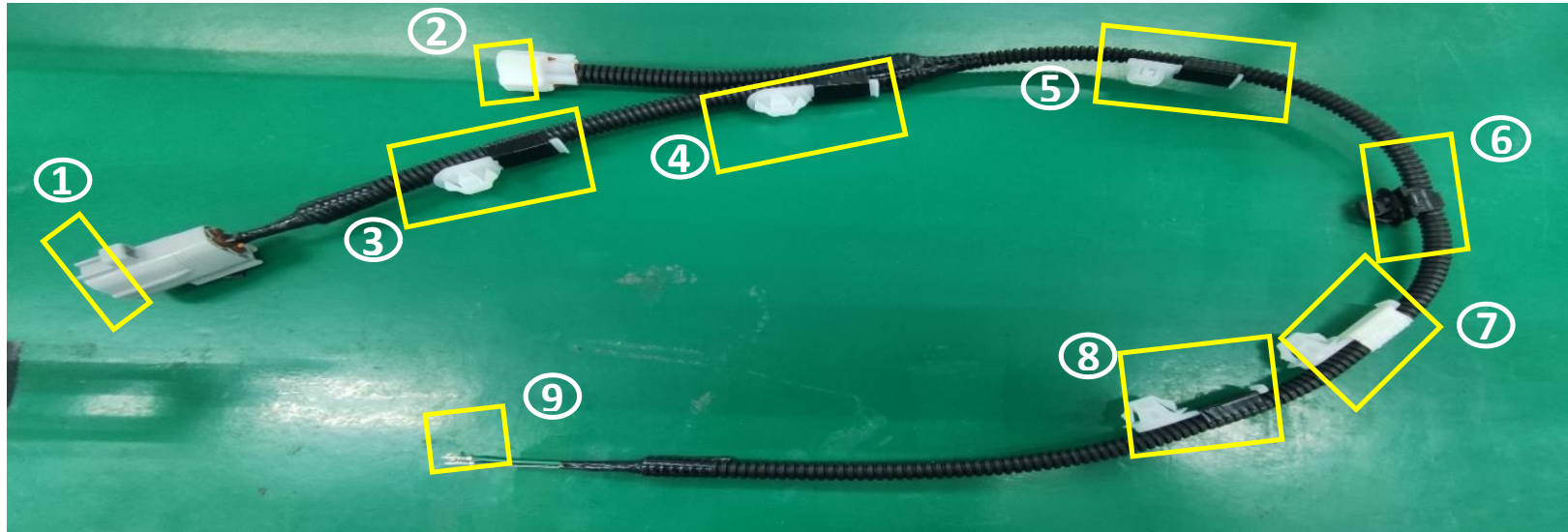
**NO GOOD**



**GOOD**



**NO GOOD**



1

2

**No Unlock/ Half Lock Connector**

6

**No Missing Band Clamp**

3

4

5

7

8

**No Missing Clamp**

9

**No Deformed Terminal**

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