

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

Effectivity Date:

August 2, 2021Product Name/Code: **100B / 7M0592-7020B**

Customer:

TRJ

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

WI-ENG-PDE-311D

Revision No.:

1

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PARTS:	1. Clamp 82711-52090 (W) [4pcs.] 2. Clamp 82711-3A540 (B) [1pc.]	3. Black tape [4pcs.] 4. Orange tape [1pc.]	JIG:	1. Clamp assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P4 Clamp setting	<div><div>1. Get 2pcs. of clamp 82711-52090 (W) using right hand then set to clamp location 2 and 3 using both hands.</div><div>2. Get 2pcs. of clamp 82711-52090 (W) using right hand then set to clamp location 5 and 6 using both hands.</div><div>3. Get 1pc. of clamp 82711-3A540 (W) using right hand then set to clamp location 4 using both hands.</div><div>4. Get the Orange tape then initially attach to clamp location 5 using both hands.</div></div>	<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>STANDARD TAPING FOR CLAMP One side tape under clamp</div> <div>1. No damaged clamp 2. No wrong use of parts 3. No wrong use of tape 4. No wrong insertion of clamp</div> <div>Note: Please check the Clamp first before start of assembly to avoid wrong use of clamp.</div>

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
08/02/21	1	Transfer process owner from Production (WI-PRO-ASY-116D) to Engineering (WI-ENG-PDE-311D). Change connector color in accordance with color standardization for plastic parts (Refer to GL-COM-003). Apply some improvements and update picture/illustration in all process.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes				
04/10/18	n/a	Previously established as Engineering instruction (EI-ENG-PDE-027). Initial issue	S. Manalo	R. Alcantara	A. Arañes	n/a	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes

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PARTS:

1. Assy parts
2. Black tape

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

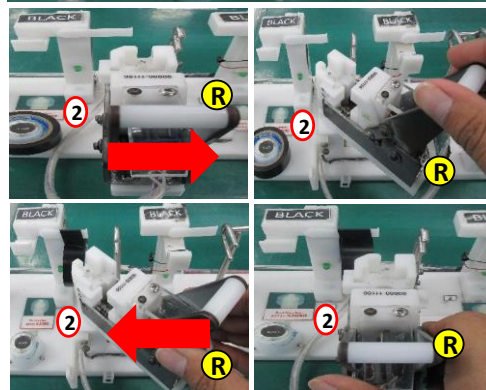
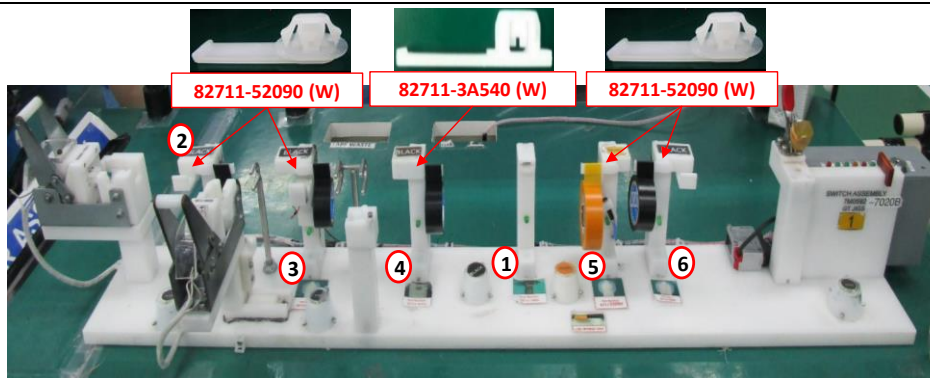
TOOLS/PPE

QUALITY POINTERS

1

P4

Clamp Assembly
(Continuation)



For the attachment of tape on clamp location 2.

5. Hold the checker handle using right then slide to right side.

6. Initially attach **Black tape** on clamp location 2 using both hands then slide the checker handle back to its position.

7. Initially attach Black tape on clamp location 3, 4, and 6 using both hands.

n/a

STANDARD TAPING FOR CLAMP

One side tape under clamp

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

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PARTS:

1. Assy parts
2. Black sunprene tube $\varnothing 9$ L=93 \pm 3mm

JIG

1. Terminal cover jig

NO.

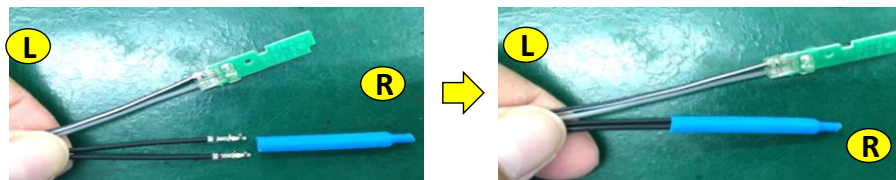
PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

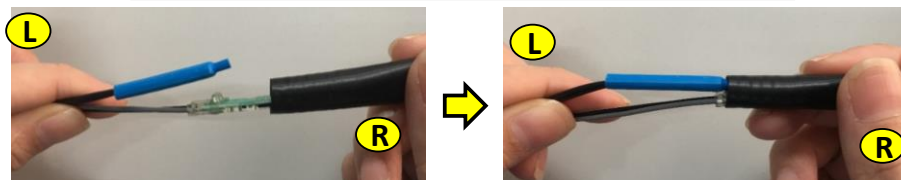
TOOLS/PPE

QUALITY POINTERS

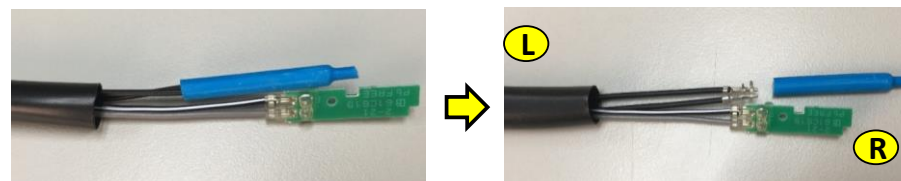
1



1. Get the terminal cover jig using right hand then insert the terminal **B/B wires** using left hand.



2. Hold the Black Sunprene tube $\varnothing 9$ L=93 \pm 3mm using right hand then Insert first the **hotmelted wires** and then next the **B/B wires** with cover jig using left hand.



3. After insertion, remove the terminal cover jig using right hand.

TERMINAL COVER JIG



1. No wrong usage of parts
2. No deformed terminal

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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

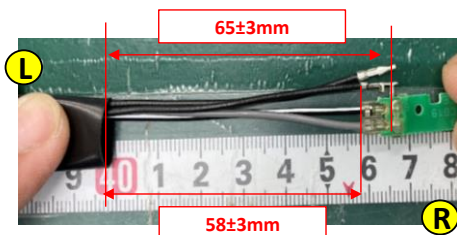
TOOLS/PPE

QUALITY POINTERS

3

P4

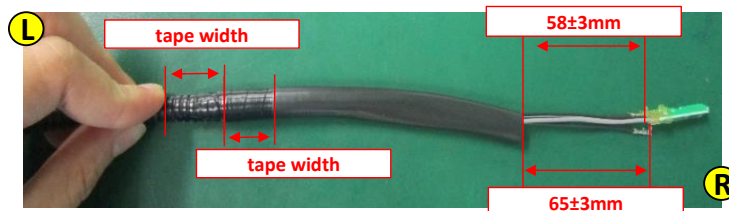
Taping 1
Black sunprene tube to
Black corrugated tube
near PCB and terminal
pointed tip



1. Measure from end of the sunprene tube up to the edge of hotmelt **58±3mm** and sunprene tube up to terminal tip **65±3mm** using both hands.



2. Hold the sunprene tube using left hand then start taping using both hands.
Note: Refer to WI-PRO-ASY-001 for taping procedure



3. After taping, check the measurement, terminal appearance and taping condition.

MEASURING TAPE



1
*Note:
Please use calibrated/verified
measuring tape when getting the
measurement.*

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

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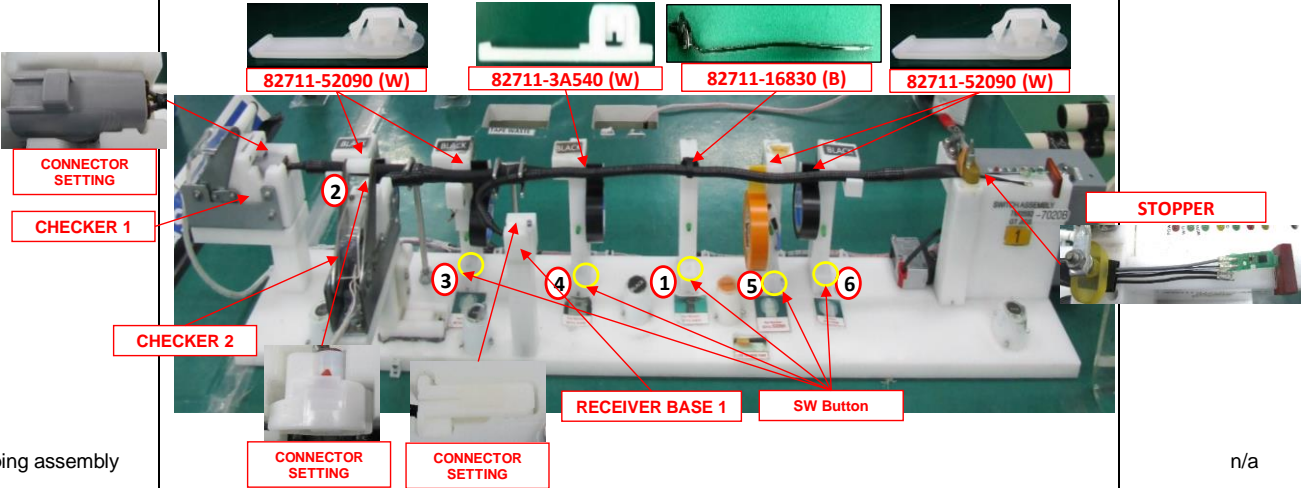

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PARTS:		1. Assy parts 2. Clamp 82711-16830 (B) 1		JIG	1. Clamp Assembly Jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P4 Taping assembly	<div><div><p>82711-52090 (W) 82711-3A540 (W) 82711-16830 (B) 82711-52090 (W)</p><p>CONNECTOR SETTING CHECKER 1 CHECKER 2 RECEIVER BASE 1 SW Button STOPPER</p></div><div><p>1. Put the assy into jig. (See above picture for the correct setting). 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.. Third, set the connector 6098-3810 (W) to Receiver base 1 then lock. Last, set the hotmelted wire and B/B wires together within stopper then press by toggle clamp. Continue if the sequence light light on clamp 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><p>3. Get 1pc. of clamp 82711-16830 (B) using right hand then set to clamp location 1 using both hands.</p></div></div> <div>n/a</div> <div><p>Note: Make sure no gap between stopper jig and hotmelted terminals.</p><ol style="list-style-type: none">1. No loose/tight clamp attached2. No damage clamp3. No missed tape4. No missing parts5. Make sure no clearance between PCB and stopper jig</div>			

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PARTS:

1. Assy parts
2. Black tape

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

4

P4

Taping assembly
(Continuation)

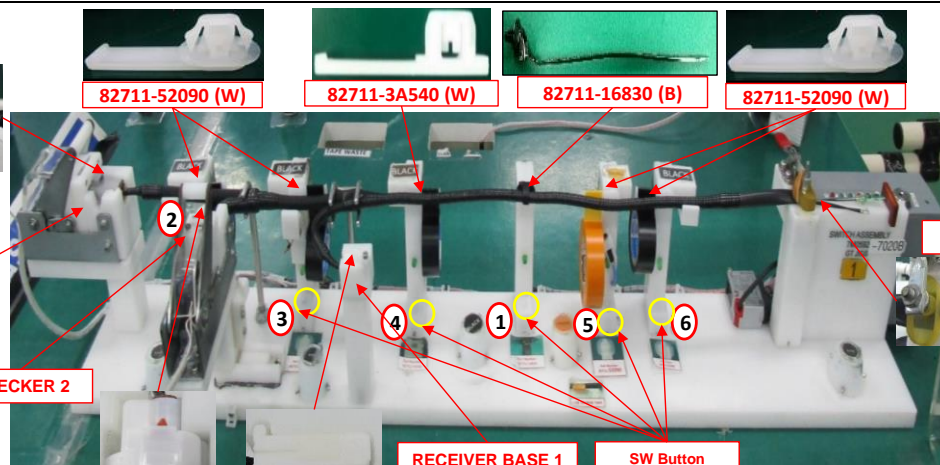
1



CONNECTOR
SETTING

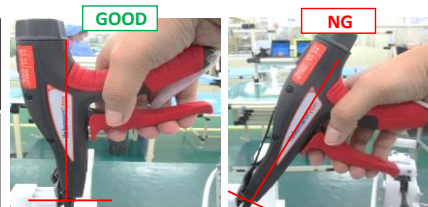
CHECKER 1

CHECKER 2

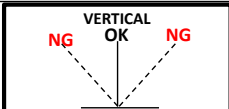


4. Initially tighten the band clamp on clamp location **1** using right hand.

5. Get the bando gun using right hand then cut the band clamp on location **1**. Press the **SW button** after taping. Continue if the sequence light on clamp location **2** was **ON**.



BANDO GUN ALIGNMENT



Note: Setting of band clamp
cutter depends on the size of
the COT/Vinyl tube.
For: $\phi 5 - 1 \sim 2$, $\phi 7 - 3 \sim 4$

n/a



Note: Make sure no gap between
stopper jig and hotmelted terminals.

1. No loose/tight clamp attached
2. No damage clamp
3. No missed tape
4. No missing parts
5. Make sure no clearance between PCB and stopper jig

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2. Black tape

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

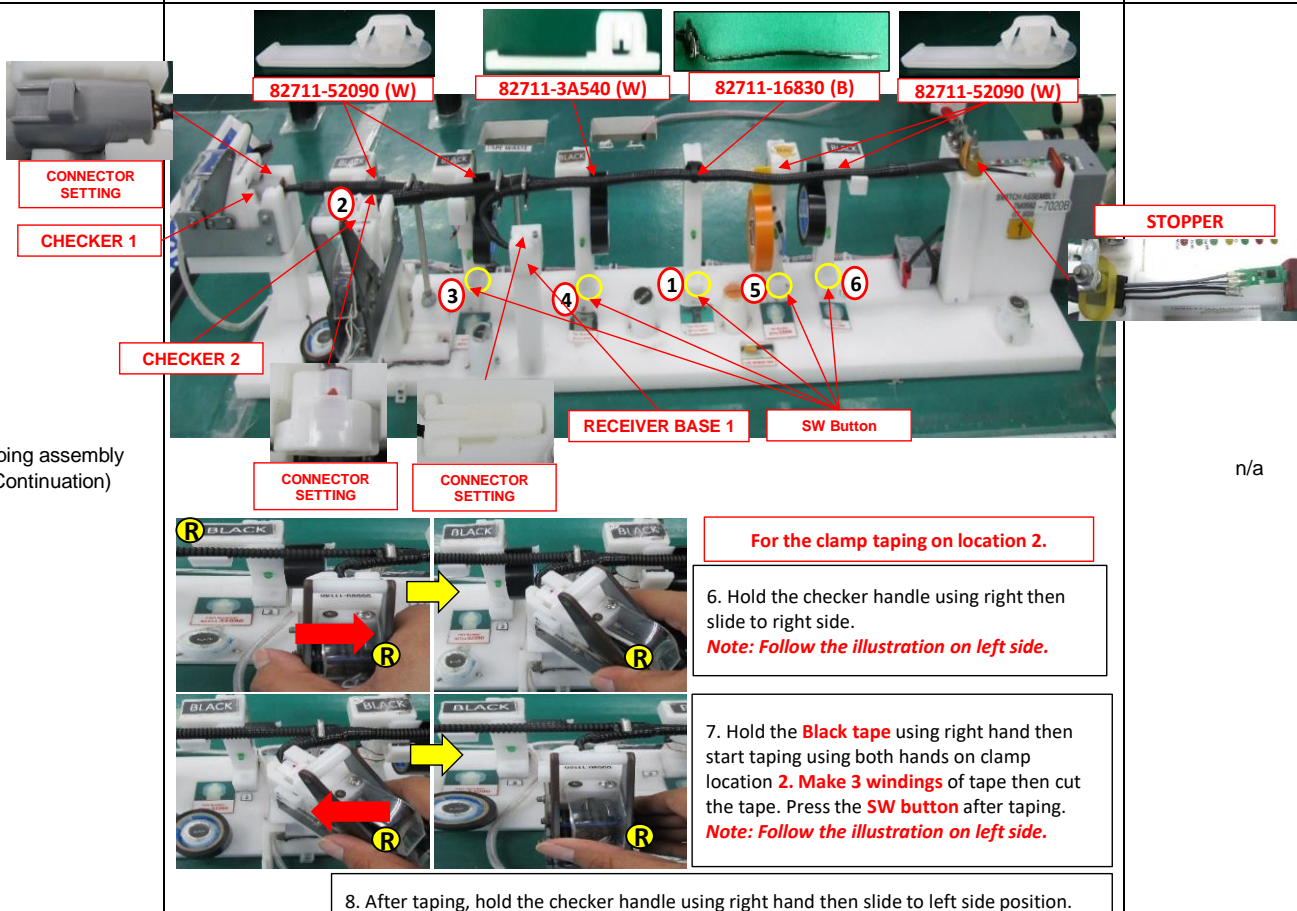
QUALITY POINTERS

4

P4

Taping assembly
(Continuation)

1



n/a



1. No loose/tight clamp attached
2. No damage clamp
3. No missed tape
4. No missing parts
5. Make sure no clearance between PCB and stopper jig

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1. Assy parts
2. Black tape

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

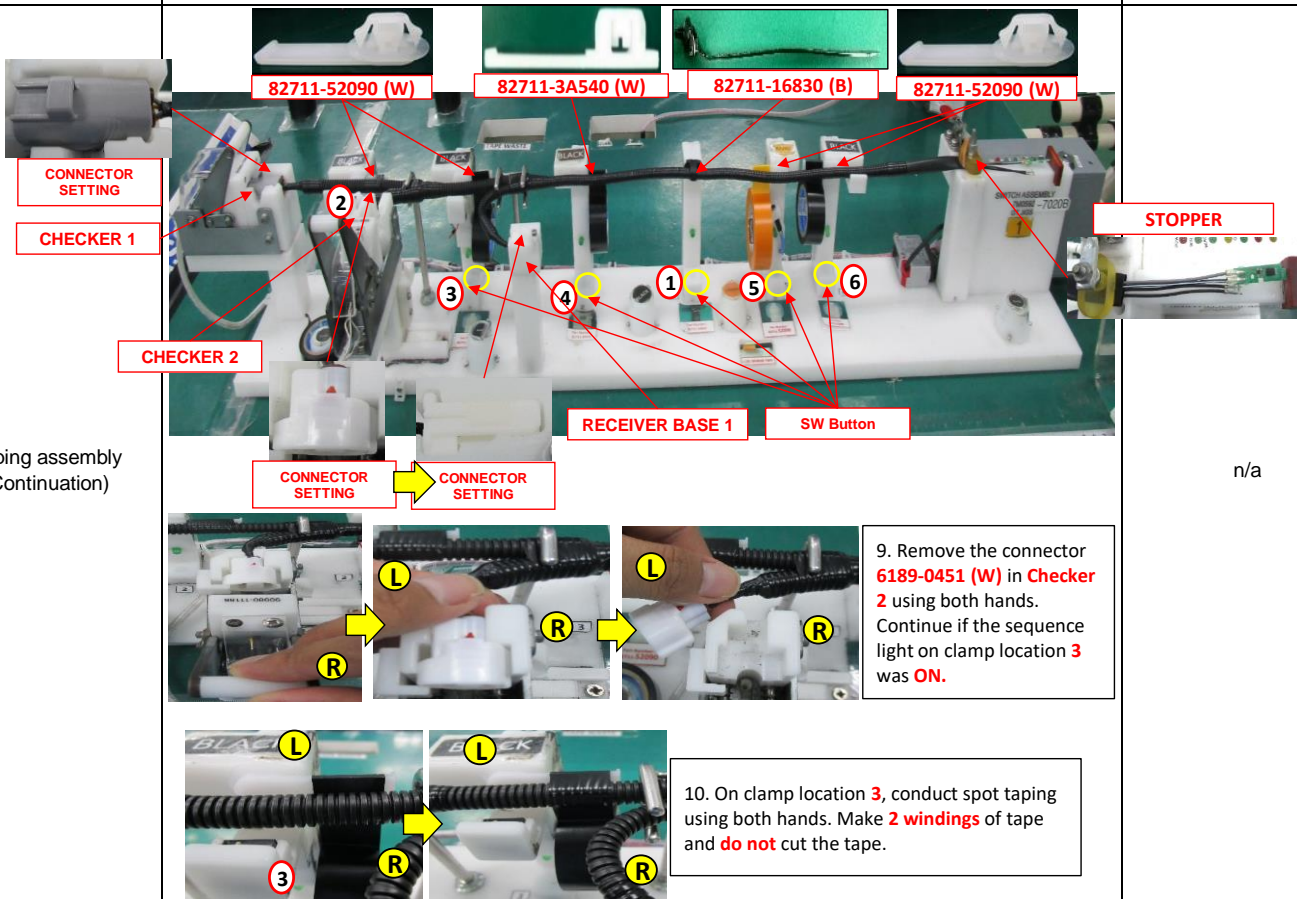
QUALITY POINTERS

4

P4

Taping assembly
(Continuation)

1



n/a



1. No loose/tight clamp attached
2. No damage clamp
3. No missed tape
4. No missing parts
5. Make sure no clearance between PCB and stopper jig

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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	P4 Taping assembly (Continuation)	 <p>11. Release the lock of Receiver base 1 using right hand then remove the connector 6098-3810 (W) using left hand. Note: Follow the illustration on left side.</p> <p>12. Combine the 2 COT using both hands, hold the Black tape using right hand then start taping using both hands on clamp location 3. Make 3 windings of tape then cut the tape. Press the SW button after taping. Continue if the sequence light on clamp location 4 was ON.</p>	n/a	 <ol style="list-style-type: none">1. No loose/tight clamp attached2. No damage clamp3. No missed tape4. No missing parts5. Make sure no clearance between PCB and stopper jig

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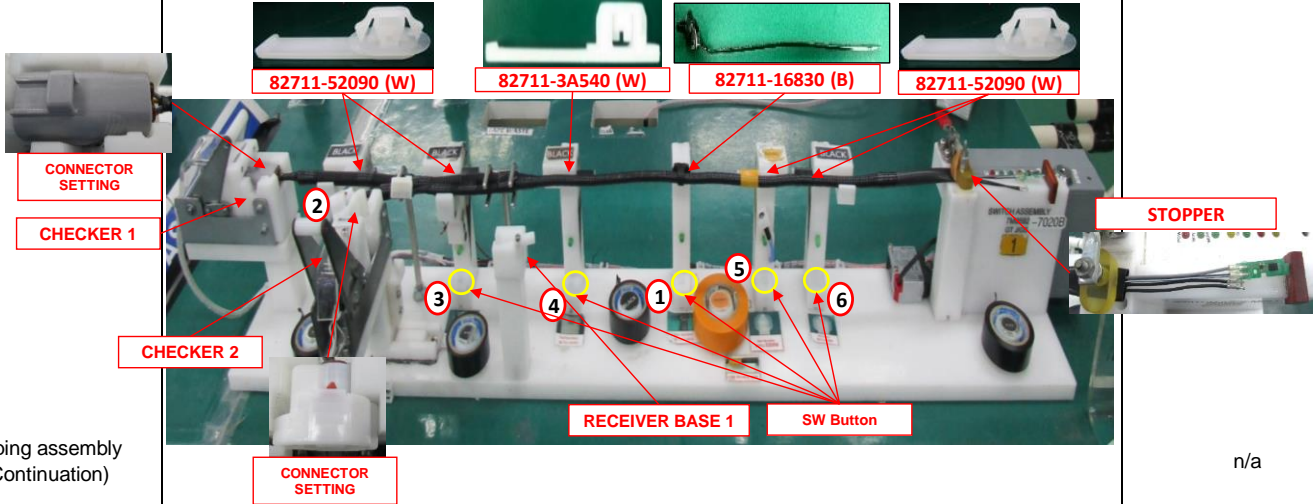

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:	1. Assy parts 2. Black tape 3. Orange tape			JIG	1. Clamp Assembly Jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P4 Taping assembly (Continuation)	 <p>13. Hold the Black tape using right hand then start taping using both hands on clamp location 4. Make 3 windings of tape then cut the tape. Press the SW button after taping. Continue if the sequence light on clamp location 5 was ON.</p> <p>14. Hold the Orange tape using right hand then start taping using both hands on clamp location 5. Make 3 windings of tape then cut the tape. Color sensor light will beep/buzz if sensor detects Orange tape during taping. Press the SW button after taping. Continue if the sequence light on clamp location 6 was ON.</p> <p>15. Hold the Black tape using right hand then start taping using both hands on clamp location 6. Make 3 windings of tape then cut the tape. Press the SW button after taping. Go sound will be heard.</p> <p>16. After taping, CONDUCT POINT CHECKING before removing the harness from jig.</p>		n/a	 <p>1. No loose/tight clamp attached 2. No damage clamp 3. No missed tape 4. No missing parts 5. Make sure no clearance between PCB and stopper jig</p>

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JIG

n/a

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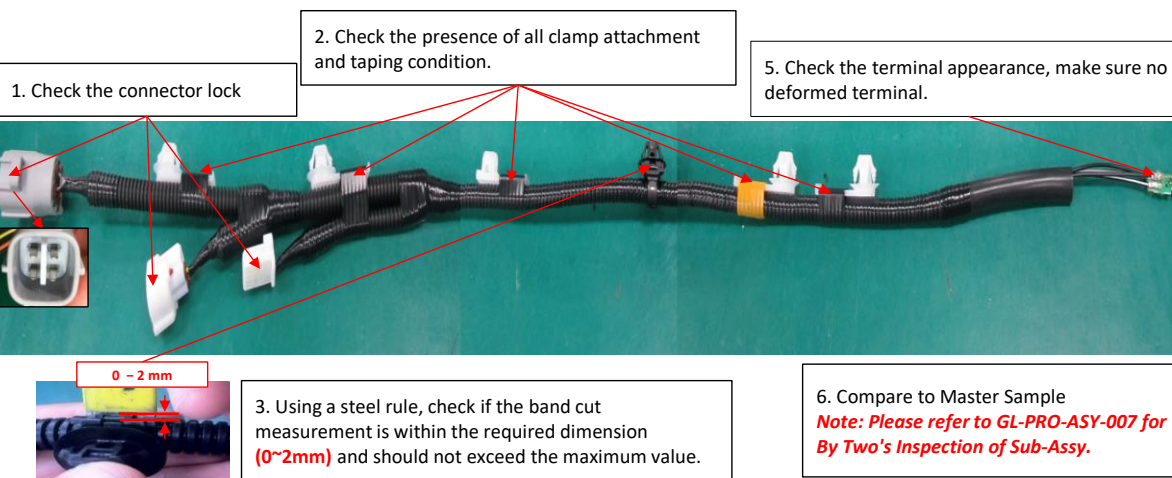
QUALITY POINTERS

5

1

Visual/By Two's Inspection

P4

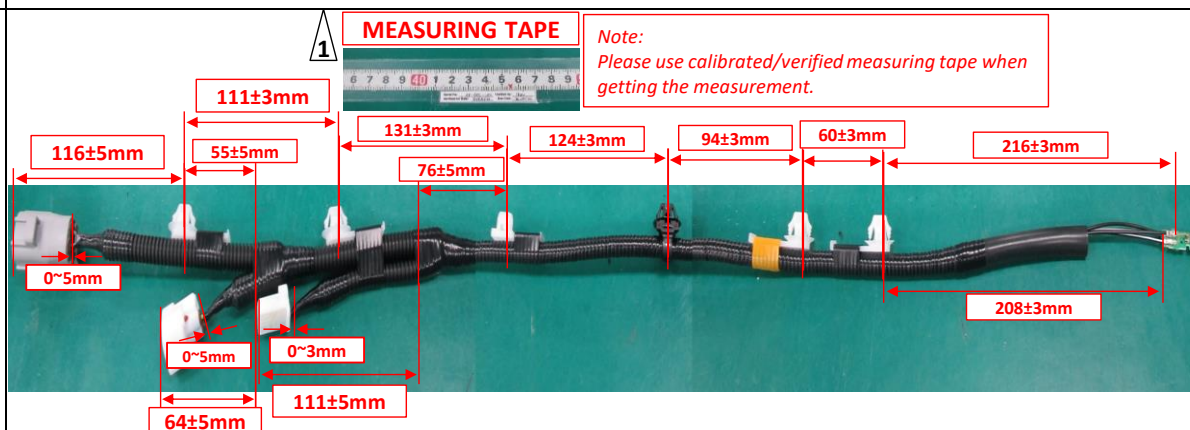


MASTER SAMPLE

6

1

Measurement



NOTE: FOR HATSUMONO AND OWARIMONO

1. No wrong dimension

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