

**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

March 07, 2023

Model Code/Part Number:

100B / 7M0595-7021

Customer:

TRJ

Validity Date:

n/a

Document No.:

WI-ENG-PDE-430D

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

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PARTS:

1. Assy parts; Clamp 82711-52090 (W) [5pcs.]; Clamp 82711-3A540 (W); Clamp 82711-48210 (B); Black tape [6pcs.]; Gray tape

JIG:

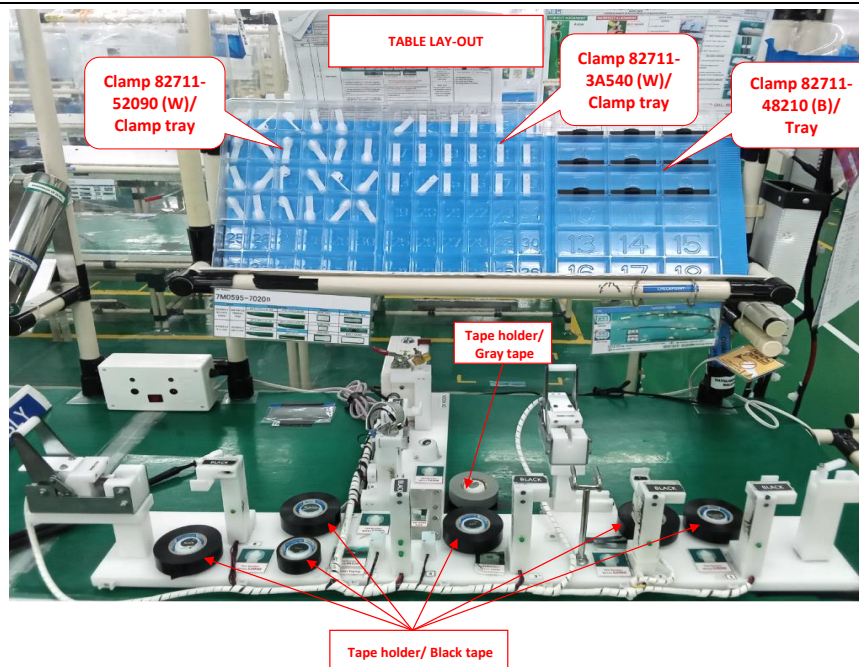
1. Clamp Assembly Jig

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

1

P4

Table Lay-out

**Safety Instruction**

Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)

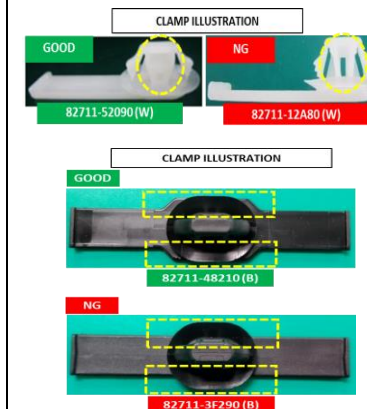
Housekeeping

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



03/07/23 1 Inclusion of Quality Checkpoints. Improve quality pointers: Reminders, notes and references; Improve work procedure/Illustration- Visual/ by two's Inspection as document process improvement.

03/01/22 0 Initial issue

Eff. Date Rev. No Details of Change

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Est. Date:

March 1, 2022

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PARTS:

1. Clamp 82711-52090 (W) [5pcs.]
2. Clamp 82711-3A540 (W)
3. Clamp 82711-48210 (B)

4. Black tape [7pcs.]
5. Gray tape

JIG:

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

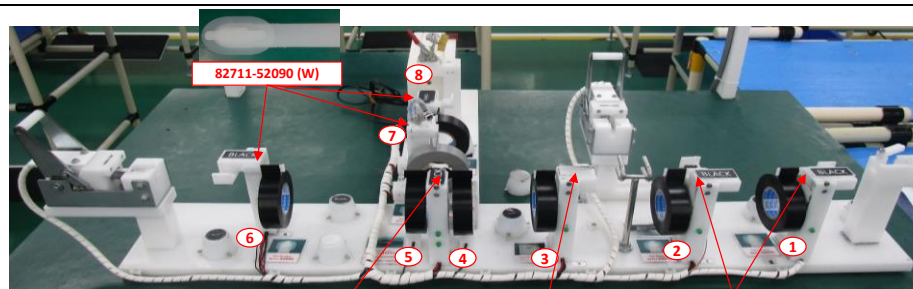
TOOLS/PPE

QUALITY POINTERS

2

P4

Clamp setting



82711-48210 (B)

82711-3A540 (W)

82711-52090 (W)

1. Get 2pcs. of clamp **82711-52090 (W)** using right hand then set to jig clamp **1 and 2** using both hands.

2. Get 3pcs. of clamp **82711-52090 (W)** using right hand then set to jig location **6, 7 & 8** using both hands.

3. Get 1pc. of clamp **82711-3A540 (W)** using right hand then set to clamp location **3** using both hands.

STANDARD TAPING FOR CLAMP ONE SIDE

One side tape under clamp



One side taping



Two sides taping

4. Get 1pc of clamp **82711-48210 (B)** using right hand then set to clamp location **4~5** using both hands.

5. Get the Black tape and start pre-taping on clamp location **1-6** and location **8**.

6. Get the **Gray** tape and start pre-taping on clamp location **7**.

Safety Instruction

Be sure to wear required 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

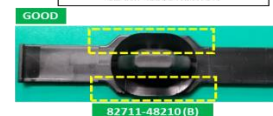
For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.

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

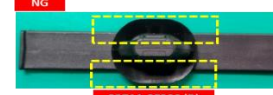
Important reminders/Note/s:

1. Please check all the clamp before start of assembly to avoid wrong use of parts.

CLAMP ILLUSTRATION

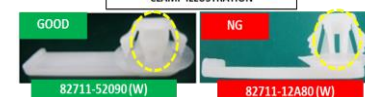


GOOD 82711-48210 (B)



NG 82711-3F290 (B)

CLAMP ILLUSTRATION



GOOD 82711-52090 (W)

NG 82711-12A80 (W)

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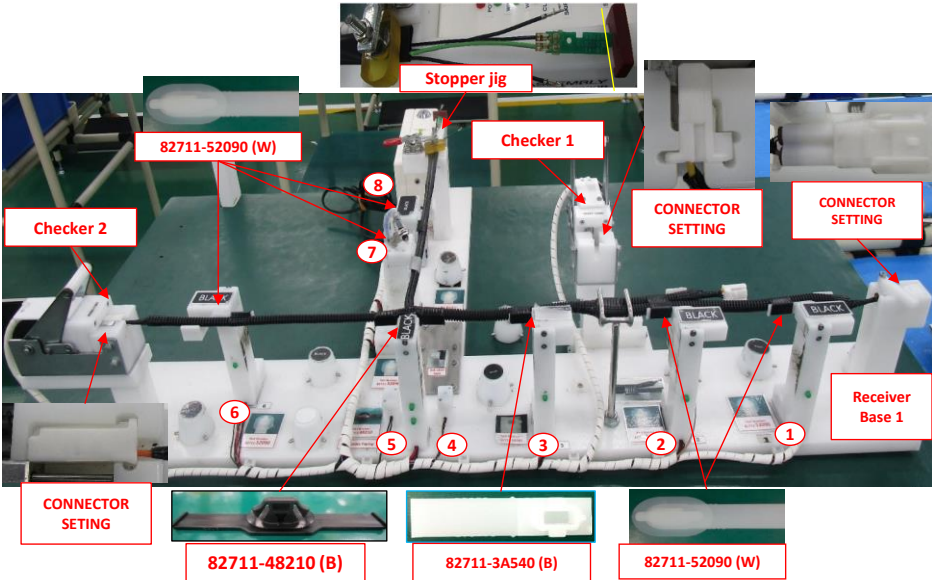

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Model Code/Part Number:	100B / 7M0595-7021	Customer:	TRJ
Purpose:	<input type="checkbox"/> PROTOTYPE	<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO

PARTS:		1. Assy parts 2. Black tape		JIG	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P4 Clamp Assembly	<div></div> <div><div><p>1. Get the assy parts and set into jig. (<i>See above picture for correct setting</i>). First, set the connector 6188-0407 (W) to Receiver base 1 and then lock. Second, set the connector 6098-3810 (W) to Checker 1 and then pull the checker fixture for continuity checking. Third, set the connector 6098-2220 (W) to Checker 2 and then pull the checker fixture for continuity checking. Last, set the hotmelted G-B/W wires together within the stopper and then press by toggle clamp. Continue if the sequence light on location 1 was ON.</p></div><div><p>2. Check if all LED light for POWER ON, WIRE1, WIRE2, CLAMP ON was ON. If encountered abnormality, STOP and immediately CALL the attention of the leader and WAIT for further instruction and then continue the process.</p></div></div>		n/a	<div>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</div> <div>Important reminders/Note/s: <div>1. Please check all the clamp before start of assembly to avoid wrong use of parts. 2. Make sure no gap between the hotmelted wires and the stopper jig</div></div>

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Purpose:	<input type="checkbox"/> PROTOTYPE	<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO

PARTS:		1. Assy parts 2. Black tape		JIG	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
4	P4 Clamp Assembly (Continuation)	<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 if the sequence light on location 2 was ON.</p><p>4. On clamp location 2, hold the black tape using right hand then tape the clamp with COT 1, make 2 windings, do not cut the tape. Then, remove connector 6098-3810 (W) from Checker 1. Combine with COT 2, then tape. Make 3 windings of tape using both hands then cut the tape. Press the SW button after taping. Continue if the sequence light on location 3 was ON.</p></div> <div><p>First, 2 winds</p><p>Second, 3 winds</p><p>After Taping</p></div>	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> <p>Important reminders/Note/s:</p> <p>1. Make sure no gap between the holmelted wires and the stopper jig</p>	

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Purpose:	<input type="checkbox"/> PROTOTYPE	<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO		

PARTS:		1. Assy parts 2. Black tape		JIG	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	1 QUALITY POINTERS
5	P4 Clamp Assembly (Continuation)	<div><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 if the sequence light 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 if the sequence light on location 5 was ON.</p><p>7. Hold the tape on clamp location 5. Make 3 windings of tape using both hands then cut the tape. Press the SW button after taping. Continue if the sequence light on location 6 was ON.</p><p>8. Hold the tape on clamp location 6. Make 3 windings of tape using both hands then cut the tape. Press the SW button after taping. Continue if the sequence light on location 7 was ON.</p></div>		n/a	<div><p>1. No loose/tight clamp attached</p><p>2. No damage clamp</p><p>3. No missed tape</p><p>4. No missing parts</p><p>5. Make sure no clearance between PCB and stopper jig</p><p>Important reminders/Note/s:</p><p>1. Make sure no gap between the holmelted wires and the stopper jig</p></div>

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Model Code/Part Number:				Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO

PARTS:		1. Assy parts 2. Gray tape 3. Black tape		JIG	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
6	P4 Clamp Assembly (Continuation)	<p>9. Hold the Gray tape using right hand and then start taping using both hands on clamp location 7. Make 3 windings of tape then cut the tape. Color sensor light will beep/buzzer if sensor detects Gray tape. Press the SW button after taping. Continue if the sequence light on location 8 was ON. Note: Use GRAY TAPE only.</p> <p>10. Hold the tape on clamp location 8. Make 3 windings of tape using both hands then cut the tape. Press the SW button after taping. Go sound will be heard.</p> <p>11. Conduct POINT CHECKING of all clamps & all taping before removing 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> <p>Important reminders/Note/s:</p> <p>1. Make sure no gap between the holmelted wires and the stopper jig</p>	

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Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:		n/a			JIG	n/a	
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	⚠️ QUALITY POINTERS
7	P4	Visual/By two's inspection	<div><div>ACTUAL PRODUCT</div></div> <div><div><div>Assembled parts</div></div><div><div>Master sample</div></div></div> <div><div>1. Conduct alignment of harness (Master sample vs. Assembled parts) using both hands.</div><div><div></div><div>2. Check the connector lock condition, Insertion, terminal and taping condition.</div><div><div></div><div>3. Check the presence of all clamp attachments and taping condition and inside spot taping.</div></div></div></div>				<div>MASTER SAMPLE</div> <div></div> <div>1. No skip checking during inspection.</div> <div><div><div>CLAMP ILLUSTRATION</div><div><div><div>GOOD</div><div>82711-52090 (W)</div></div><div><div>NG</div><div>82711-12A80 (W)</div></div></div></div><div><div>CONNECTOR ILLUSTRATION</div><div><div><div>GOOD</div><div>6098-3810 (W)</div></div><div><div>NG</div><div>6098-5677 (W)</div></div></div></div></div>

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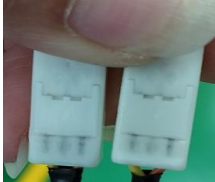

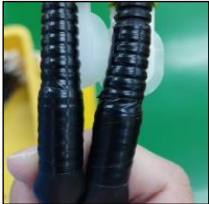




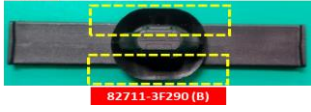
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PARTS:	n/a			JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	1 QUALITY POINTERS	
7	P4 Visual/By two's inspection (Continuation)	 <p>ACTUAL PRODUCT</p>        <p>4. Check the presence of wing type clamp and taping condition. Conduct bending of clamp with 2 sides taping.</p> <p>5. Check the connector lock condition, insertion, terminal and taping condition.</p> <p>6. Check the taping condition of COT to sunprene tube. Conduct slightly bending.</p> <p>7. Check the terminal and PCB appearance. Must be no deformed terminal.</p>		<p>MASTER SAMPLE</p>  <p>1. No skip checking during inspection.</p> <p>CLAMP ILLUSTRATION</p> <p>GOOD</p>  <p>82711-48210 (B)</p> <p>NG</p>  <p>82711-3F290 (B)</p>	

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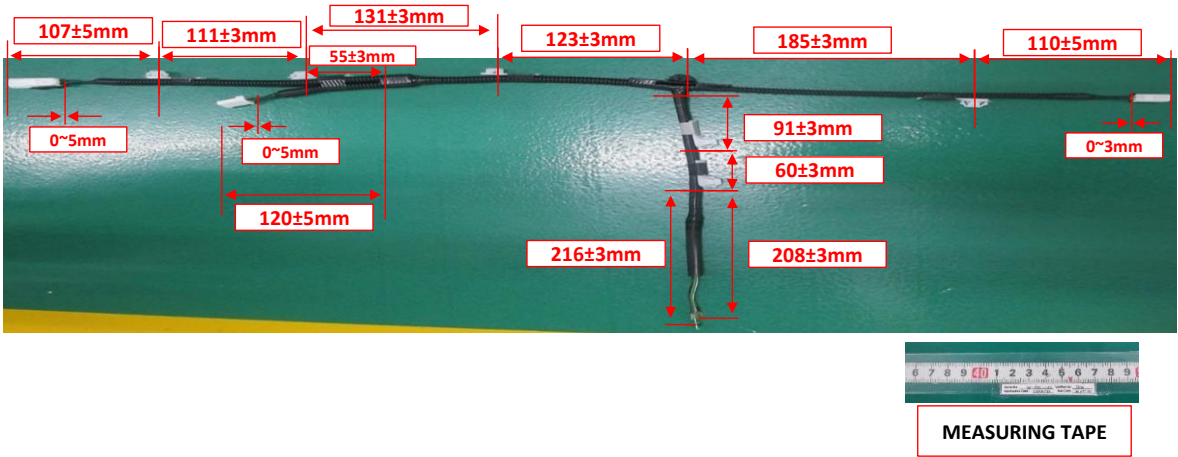
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PARTS:	n/a			JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
8	P4 Measurement		MEASURING TAPE	<p>1. No wrong dimension</p> <p>Important reminders/Note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>2. For Hatsumono and Owarimono.</p>	

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PARTS: n/a

JIG n/a

1 QUALITY CHECKPOINTS

P4

7M0595-7021

GOOD
NO GOOD
GOOD
GOOD
NO GOOD **NO GOOD**

1 No **WRONG INSERT**
No **UNLOCKED/HALFLOCKED**
No **TBO**

2 **NO Missing Clamp**
3 **No Missing Tape**
No **WRONG USED OF TAPE**

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