

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

Process Name/Title:

Model Code/Part Number: **164B / 7M0531-7021**

Customer:

TRJ

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

February 16, 2023

Validity Date:

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1

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1 of 8**PARTS:**1. Assy parts; Assy parts; Clamp 82711-52090 (W); Clamp 82711-60640 (B); Black tape [3pcs.]; Black VM tube (Sunprene) $\phi 9$ L=97 \pm 3mm; Black sponge tape (7M0531-0021) t=5; width=50; L=50 \pm 1mm

JIG:

1. Clamp Assembly Jig

NO.	PROCESS NAME	WORK PROCEDURE/ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P2	Table Lay-out	<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>1. No missing parts/tools 2. No excess parts/tools 3. No wrong positions of parts/tools</div> <div> GOOD: 82711-60640 (B) NG: 82711-21020 (B) GOOD: 82711-52090 (W) NG: 82711-12A80 (W)</div>

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
02/16/23	1	Work instruction improvement. Improved By two's inspection and quality pointers. Change term Black sunprene tube to Black VM tube (Sunprenel). Inclusion of Quality checkpoints (Page 8).	D. Castillo	J. Loterte	C. Villanueva	A.Arañes	 D. Castillo	 J. Loterte	 C. Villanueva	 A. Arañes
02/10/22	0	PCB 2 chips (61C619-0002) to 1 chip (7N0994-7060). Wire color of Gray (GR) to Green(G) Initial issue.	M. Ariola	J. Loterte	C. Villanueva	A.Arañes				

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PARTS:

1.Clamp 82711-52090 (W)
2.Clamp 82711-60640 (B)

3. Black tape [2pcs]

JIG

Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

2

P2

Clamp setting



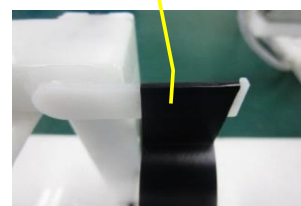
1. Get the clamp **82711-52090 (W)** using right hand and set to location **1** using both hands.

2. Get 1 pc. of clamp **82711-60640 (B)** then set to clamp location **2** using both hands

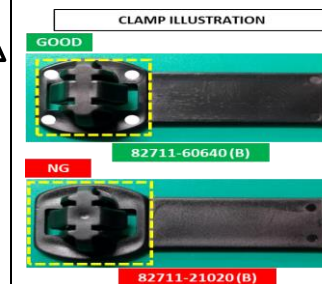
3. Get the Black tape then attach to clamp location **1** and **2** using both hands.

STANDARD TAPING FOR CLAMP

One side tape under clamp



n/a



Important reminders/Note/s:

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

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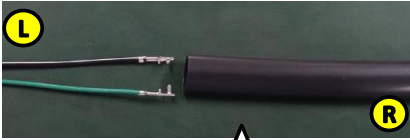
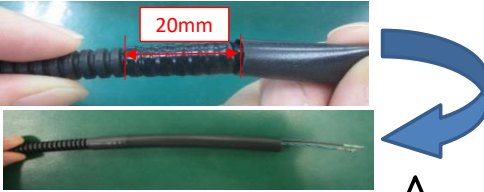

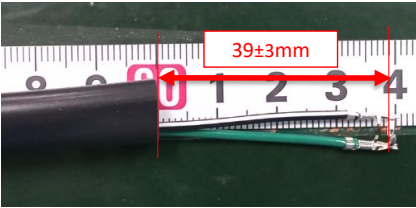



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PARTS:		1. Black tape 2. Assy parts	 3. Black VM tube (Sunprene) $\varnothing 9$ L=97 \pm 3mm	JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	 Wire insertion to VM tube (Sunprene) $\varnothing 9$ L=97 \pm 3mm	  1. Get the VM tube (Sunprene) using right hand then insert the Green and Black/White wire using left hand. 2. Insert the VM tube (Sunprene) to COT 20mm (Tape width) using both hands.		n/a	1. No wrong use of parts 2. No deformed terminal
4	P2  Taping COT to VM tube (Sunprene)	  1. Measure the end of VM tube (Sunprene) up to the terminal tip 39 \pm 3mm using both hands. 2. Hold the VM tube (Sunprene) using left hand then start taping using right hand.  3. After taping, check the taping condition and terminal appearance.			1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No wrong use of tape 5. No wrong dimension 6. No missing tape Important reminders/ Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement. 2. Refer to WI-PRO-ASY-001 for taping procedure.

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PARTS:

1. Assy parts

JIG

1. Clamp Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

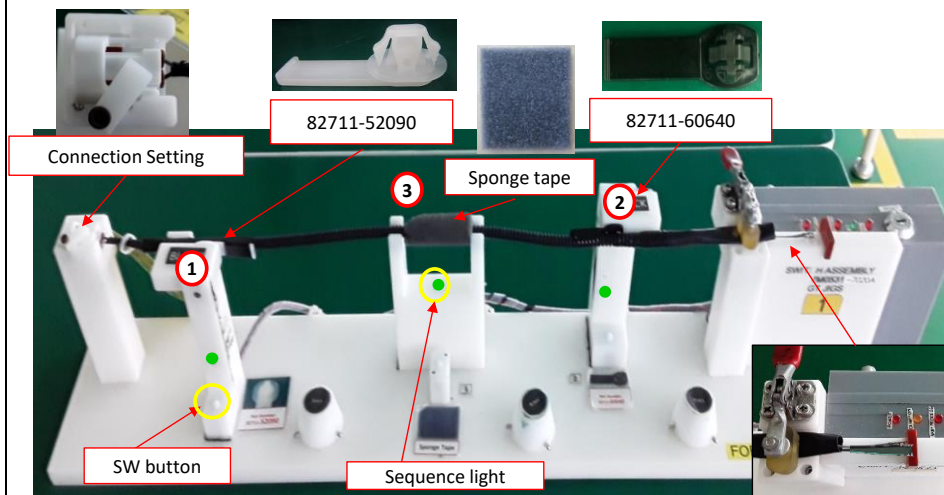
TOOLS/PPE

QUALITY POINTERS

5

P2

Clamp assembly



1. Get the assy parts then put into jig. (see above picture for correct setting) First, set the connector **6189-0451 (W)** to **Receiver base 1**. Continue to set the harness in jig. Last, set the end of **G-B/W wire** together within the stopper then press by **Toggle clamp** then continue to taping process

2. Hold the tape on clamp location **1**. Make **3 windings** of tape using both hands then cut the tape. Press the **SW button** after every tape. Continue the process on clamp location **2**.

3. Hold the clamp in **location 2** using left hand and begin taping using right hand. Make **3 windings** of tape. Press the **SW button** after taping.

4. Attach sponge tape. (Refer to next page for detailed process) Press the **SW button** after attachment. Go sound will be heard.

5. Conduct **POINT CHECKING** before removing the harness from jig.

N/A



Important reminders/ Note/s:

1. Make sure no gap between terminal and stopper jig.

1. No loose clamp attached
2. No damage clamp
3. No missed tape
4. No missing parts
5. No wrong use of clamp/tape

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PARTS:

1. Black sponge tape (width=50; L=50±1mm)

JIG

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

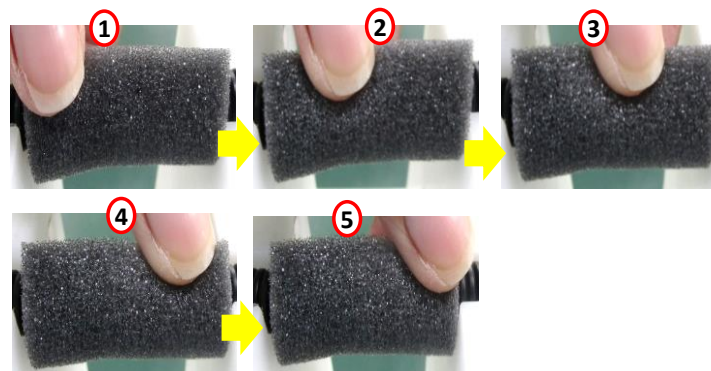
6

P2

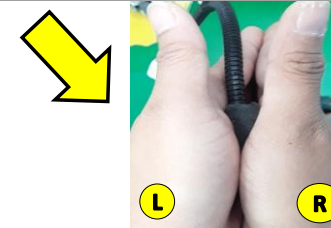
Sponge Tape Attachment



1 Get **sponge tape(width=50; L=50±1mm)** then attach to corrugated tube using left hand and slowly wrap to COT.
Follow the guide for the correct location of sponge tape.
Note: Do not stretch or pull the sponge tape

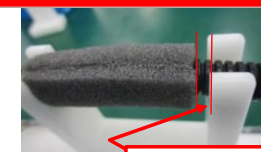


2. Press the sponge tape using both palm and roll 3 times to make sure that the sponge tape attachment is GOOD.



1. No peel-off attachment
2. No loose/tight attachment
3. No wrong attachment
- 4.No missing sponge
- 5.No wrong use of sponge
- 6.No damage sponge

NO GOOD ATTACHMENT OF SPONGE TAPE

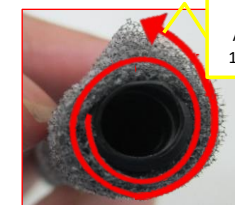


With gap on guide of jig.

Peel-off Sponge



Tight Attachment 1.6-1.7 Wrap



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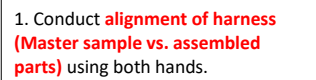





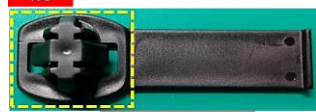


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PARTS:		n/a		JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P2	Visual/By Two's Inspection	<div><div><p>Assembled parts</p></div><div><p>Master sample</p></div></div> <div><p>ACTUAL PRODUCT</p></div> <div><p>2. Check the connector lock, wire insertion and taping condition.</p></div> <div><p>3. Check the presence of all clamp attachment and taping condition.</p></div> <div><p>1. Conduct alignment of harness (Master sample vs. assembled parts) using both hands.</p></div> <div><p>4. Check the presence of Black sponge tape</p></div> <div><p>5. Conduct bending of COT and VM tube and taping condition.</p></div> <div><p>6. Check the terminal appearance. Must be no deformed terminal.</p></div>	<div><p>MASTER SAMPLE</p></div> <div><p>CLAMP ILLUSTRATION</p><p>GOOD</p><p>82711-60640 (B)</p><p>NG</p><p>82711-21020 (B)</p><p>CLAMP ILLUSTRATION</p><p>GOOD</p><p>82711-52090 (W)</p><p>NG</p><p>82711-12A80 (W)</p></div>	

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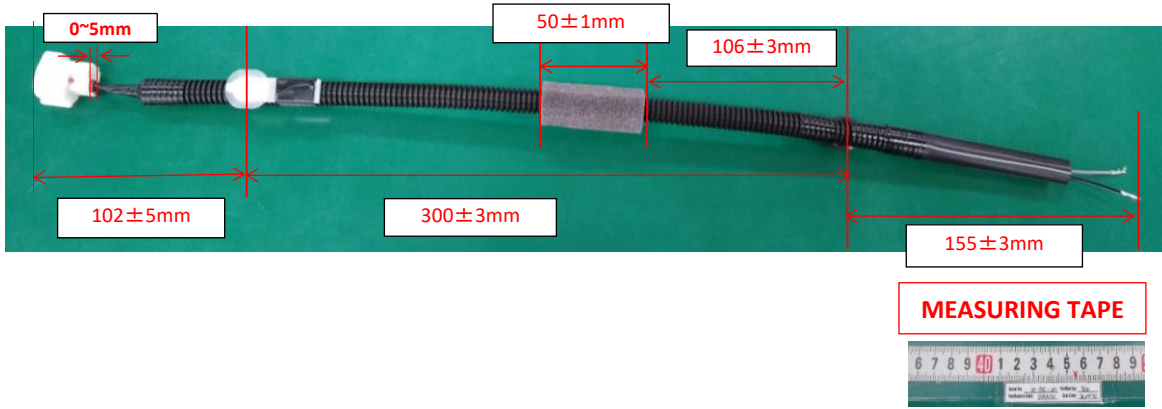
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		n/a		JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
8	Measurement				<div>1. No wrong dimension</div> <div>Important reminders/Note/s:</div> <div>1. Please use calibrated/ verified measuring tape when getting the measurement.</div> <div>2. For Hatsumono and Owarimono</div>
	P2				

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PROTOTYPE



PRE-LAUNCH



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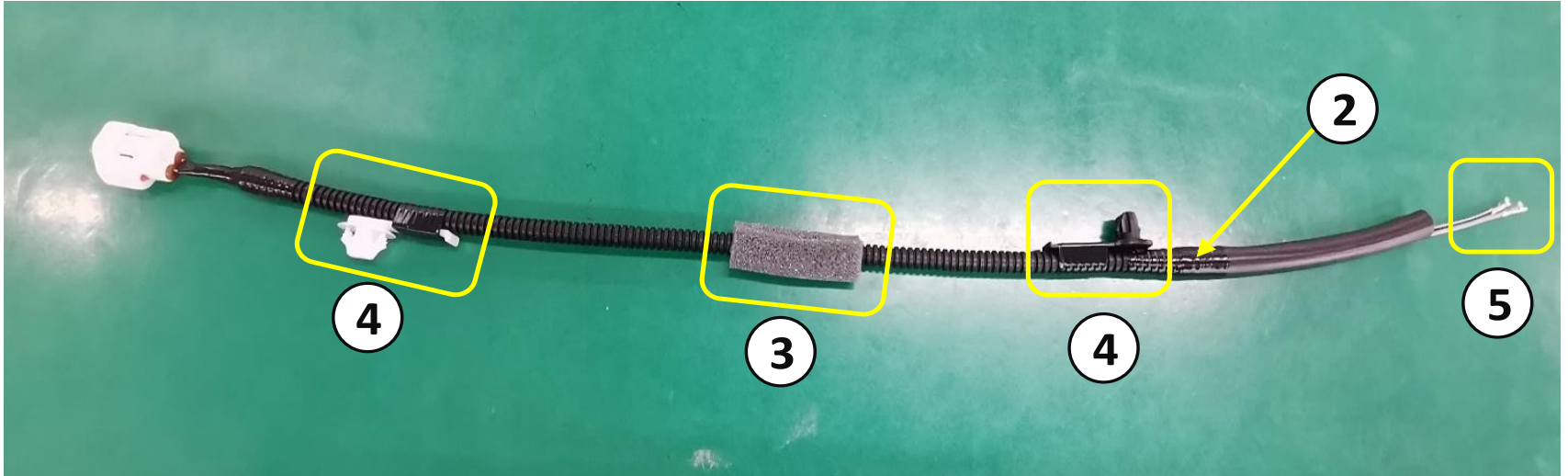
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PARTS:

n/a

JIG

n/a

**QUALITY CHECKPOINTS****P2****7M0531-7021****GOOD****NO GOOD**

1 No **Unlock/Halflock Connector**

2 No **Missing Tape**
(conduct bending on sunprene tube)

3 No **Missing Sponge**

4 No **Missing Clamp(2pcs.)**

5 No **Deformed Terminal**

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