

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

Process Name/Title:

Model Code/Part Number: **587B / 7M0532-7021**

Customer:

TRJ

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

March 16, 2023

Validity Date:

n/a

Document No.:

WI-ENG-PDE-414B

Revision No.:

1

Page No.:

1 of 8**PARTS:**

1. Assy parts; Clamp 82711-34490 (B); Clamp 82711-35730 (B); Clamp 82711-52090 (W); Brown tape; Black tape [2pcs.]

JIG:

1. Clamp Assembly jig

NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****1 QUALITY POINTERS**

1

P2

Table Lay-out

Clamp 82711-34490
(B)/Clamp Tray

Assy parts

Bando
GunClamp 82711-35730 (B)
/Clamp TrayClamp
Assembly
Jig

Black tape

Clamp 82711-52090 (W)
/Clamp Tray

Table Lay-out

Safety Instruction

Be sure to wear prescribed 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.

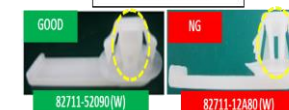
Bando Gun

1. No missing parts/tools
2. No excess parts/tools

Important reminders/Note/s:

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

CLAMP ILLUSTRATION



BAND CLAMP ILLUSTRATION

**Revision History**

Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
03/16/23	1	Improve Work procedure/illustration on process no. 5- Visual/ By two's inspection; Improve Quality pointers: Reminders, notes and references on page no.1 to 7 Inclusion of Quality Checkpoints on page no. 8 due to document process improvements.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
02/22/22	0	Initial issue.	K. Doria	J. Loterte	C. Villanueva	A. Arañes	M. Ariola	J. Loterte	C. Villanueva	A. Arañes

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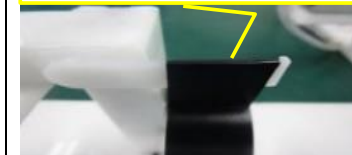
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PARTS:		1. Clamp 82711-34490 (B) 2. Clamp 82711-35730 (B) 3. Clamp 82711-52090 (W)	4. Brown tape 5. Black tape	JIG	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	1 QUALITY POINTERS
2	P2	Clamp setting	<div></div> <div>1. Get 1 piece of clamp 82711-34490 (B) using right hand and insert to location 1 using both hands.</div> <div>2. Get 1 piece of clamp 82711-35730 (B) using right hand and insert to location 2 using both hands.</div> <div>3. Get 1 piece of clamp 82711-52090 (W) using right hand and insert to location 3 using both hands.</div> <div>4. Initially attach Brown tape on clamp location 2 using both hands.</div> <div>5. Initially attach Black tape on clamp location 3 using both hands.</div>	n/a	<div>STANDARD TAPING FOR CLAMP</div> <div>One side tape under clamp</div> <div></div> <div>1. No loose tape 2. No flip-out tape 3. No peel-off tape 4. No wrong use of tape 5. No wrong use of clamp 6. No missing clamp</div> <div>Important reminders/Note/s: 1. Please check the clamp before start of assembly to avoid wrong use of parts.</div>

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PARTS:

1. Assy parts
2. Black tape

JIG

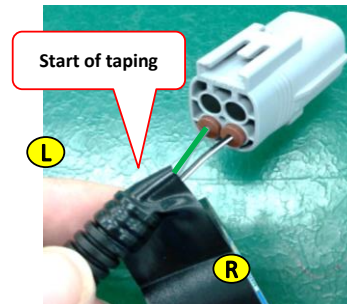
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NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

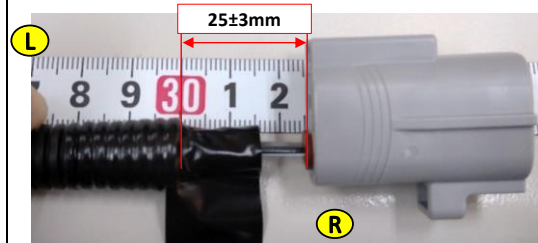
3

P2

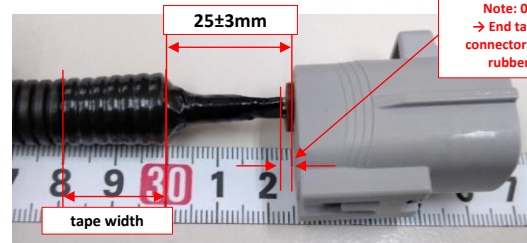
Taping 1
Black corrugated tube to
wire near connector



1. Hold the corrugated tube using left hand, get the Black tape then start taping using both hands.



2. Measure from end of corrugated tube up to connector **25±3mm** then continue the taping process using both hands.
Refer to WI-PRO-ASY-001 for taping procedure.

MEASURING TAPE

Note: 0~5mm
→ End tape up to
connector (includes
rubber seal)

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

Important reminders/Note/s:

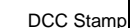
1. Please use calibrated/verified measuring tape when getting the measurement.

1. No loose tape
2. No flip-out tape
3. No peel-off tape
4. No wrong use of tape
5. No wrong dimension

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PARTS:

1. Assy parts

JIG

1. Clamp Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

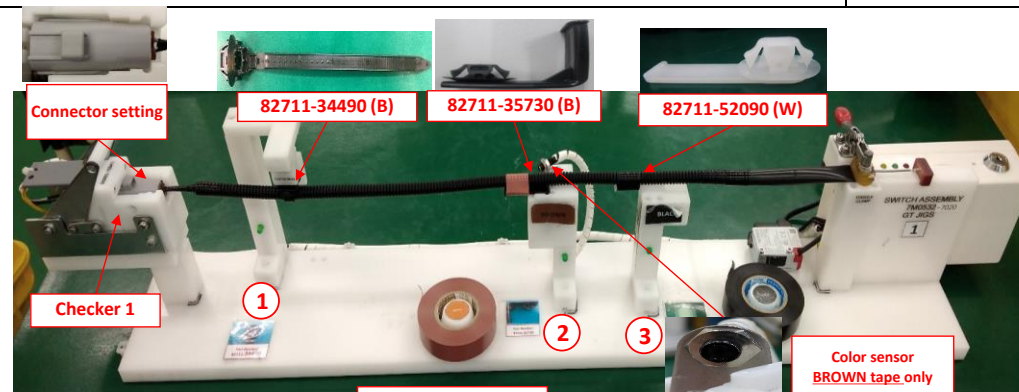
TOOLS/PPE

1 QUALITY POINTERS

4

P2

Clamp assembly
(Continuation)



Bando Gun

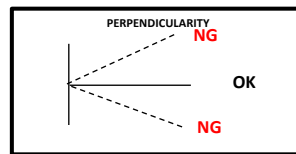


4. Get the bando gun using right hand then cut the band clamp on location **1**. Press the SW button after cut. Continue the process if sequence light on location **2** was **ON**.



Fixed setting of
band clamp cutter:
3 ~ 4

BANDO GUN ALIGNMENT



5. Hold the clamp in location **2** using left hand and start taping using right hand. **Color sensor light** will beep/buzz if sensor detects **Brown tape** during taping. Make **3 windings** before cutting of tape. Press the **SW button** after taping. Continue the process if sequence light in location **3** was **ON**.

6. Hold the clamp in location **3** using left hand and start taping using right hand. Make **3 windings** before cutting of tape. Press the **SW button** after taping. **Go** sound will be heard.

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



Important reminders/Note/s:

1. Make sure no clearance between
stopper jig and terminals.

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



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PARTS:		n/a		JIG	n/a	
NO.	PROCESS NAME	1 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	1 QUALITY POINTERS	
5	P2	Visual/By Two's Inspection	<div><p>ACTUAL PRODUCT</p></div>		<div>1. No skip checking during inspection</div> <div><div>MASTER SAMPLE</div></div> <div>Important reminders/Notes/:</div> <div>1. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).</div> <div><p>0 ~ 2mm</p></div> <div>CLAMP ILLUSTRATION</div> <div><div>GOOD</div><p>82711-52090 (W)</p><div>NG</div><p>82711-12A80 (W)</p></div> <div>BAND CLAMP ILLUSTRATION</div> <div><div>GOOD</div><p>82711-16B30 (B)</p><div>NG</div><p>82711-34490 (B)</p></div>	
			<div><div>Assembled parts</div><div>Master sample</div></div> <div>1. Conduct alignment of harness (Master sample vs. Assembled parts) using both hands</div> <div><div>2. Check the connector lock condition, insertion terminal and taping condition.</div></div> <div><div>3. Check the presence of all clamp attachment, taping condition, color of tape and band clamp cut.</div></div> <div><div>4. Check the taping condition of COT to VM tube (Sunprene). Conduct slightly bending.</div></div> <div><div>5. Check the terminal appearance, Must be no deformed terminal.</div></div>			

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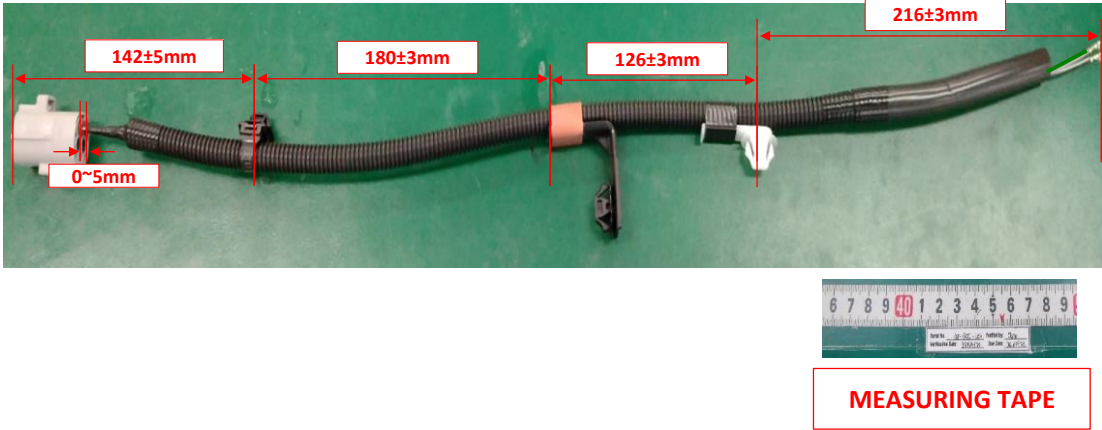
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PARTS:		n/a		JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	1 QUALITY POINTERS
6	P2 Measurement				1. No wrong dimension Important reminders/Notes/: 1. Please use calibrated/verified measuring tape when getting the measurement. 2.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

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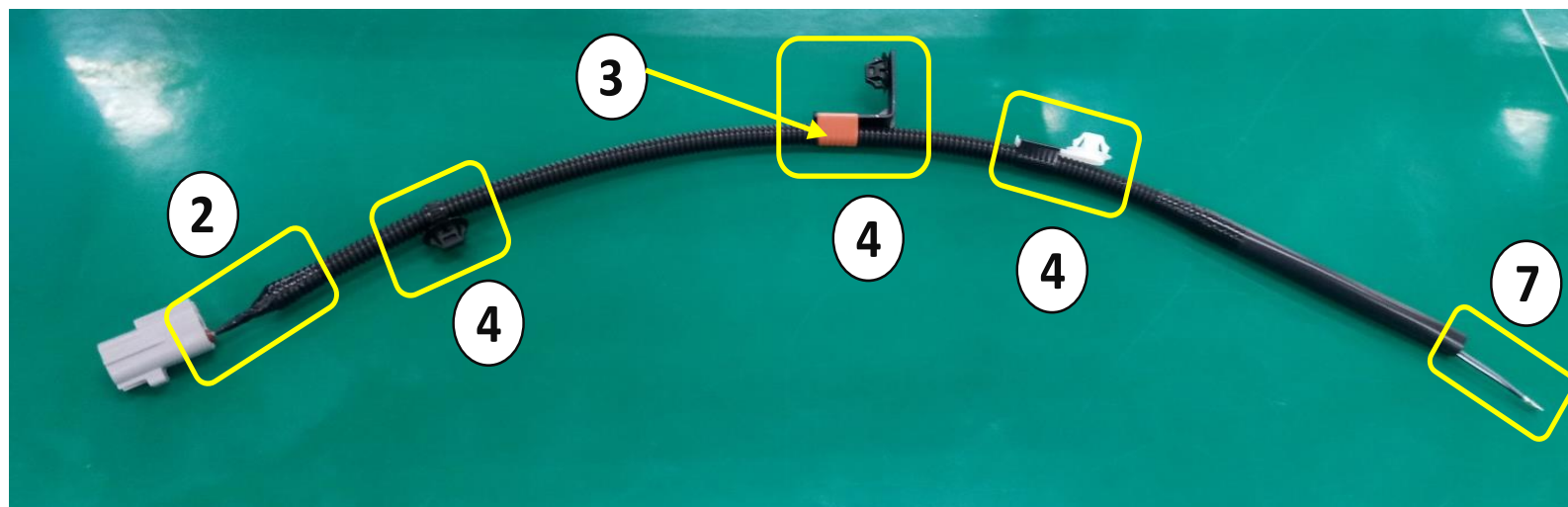
n/a

JIG

n/a



QUALITY CHECKPOINTS

P2**7M0532-7021****GOOD****NO GOOD**

① No
Unlock/Halflock
Connector

② No Missing Tape

③ No Wrong Used of
Tape (brown tape)

④ No Missing Clamp(3pcs.)

⑤ Checking of
loose/tight band
clamp attachment

⑥ Conduct BENDING on
sunprene tube

⑦ No Deformed Terminal

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