



## WORK INSTRUCTION

Process Name/Title:

## TAPING ASSEMBLY PROCESS

Effectivity Date:

February 24, 2023

Model Code/Part Number:

920B / 7R0117-7022

Customer:

TRMX

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☒ PRE-LAUNCH☐ MASSPRO

Document No.:

WI-ENG-PDE-640

Revision No.:

0

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## PARTS:

- Connector 6198-1142 (W)
- TVSSf 0.3 wires B/W-G L=645±3mm

JIG:

n/a

NO.

PROCESS NAME

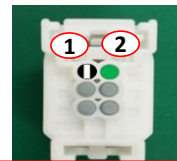
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

1

n/a

Wire Insertion to connector  
6198-1142 (W)

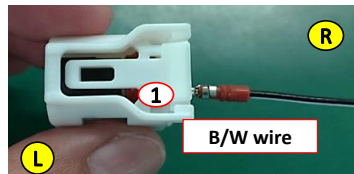
VISUAL REFERENCE



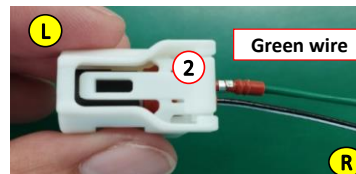
Wire facing



Connector Orientation



B/W wire



Green wire

1. Hold the connector **6198-1142 (W)** then get the **Black/White wire** and insert to terminal **slot 1** using right hand. Conduct **2x** push-pull after wire insertion.

2. Get the **Green wire** and insert to terminal **slot 2** using right hand. Conduct **2x** push-pull after wire insertion.

**Safety Instruction**

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

**Housekeeping**

- Maintain and always practice 5's.
- 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.

- No loose insertion
- No wrong insertion
- One by one insertion
- No deformed terminal
- No wrong wire facing

**Important reminders/Note/s:**

- Please hold the wire near terminal.**
  - Make sure wires are properly inserted.**
- Conduct Pull-Push-Pull-Push after insertion.**  
**Do not exert extra force.**

**Document references:**

- Refer to GL-PRO-ASY-029 for Pull-Push procedure.**
- Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance**

## Revision History

| Eff. Date | Rev. No | Details of Change  | Revised   | Reviewed   | Approved      | Noted     | Prepared by | Reviewed by | Approved by   | Noted by  |
|-----------|---------|--|-----------|------------|---------------|-----------|-------------|-------------|---------------|-----------|
| 2/24/23   | 0       | Initial issue. Remove Y-OR wire, Connector 6198-1161 (B) and Clamp 12A60 (W); Additional 82711-3A640 (B); COT quantity from [3pcs] to [1pc] length from L=452mm to 450mm ; Additional dummy seal from [2pcs] to [4pcs] | M. Ariola | J. Loterte | C. Villanueva | A. Arañes | M. Ariola   | J. Loterte  | C. Villanueva | A. Arañes |

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☐ PROTOTYPE☒ PRE-LAUNCH☐ MASSPRO

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| PARTS: |  | 1. Assy parts<br>2. Black Corrugated tube (No slit) Ø5 L=450±3mm   |  |  | JIG   | 1. Locking jig  |
|--------|--|--|--|--|---|---|
| NO.    | PROCESS NAME   | WORK PROCEDURE/ ILLUSTRATION   |  |  | TOOLS/PPE   | QUALITY POINTERS  |
| 2      | Connector lock   | <div></div> <div>1. Put the connector into locking jig using right hand and then press 2x using both hands. Check the connector lock if properly locked.</div> <div><div>BEFORE PRESSING</div><div>AFTER PRESSING</div></div>   |  |  | n/a   | 1. use the provided jig per model<br>2. No unlock/ half-locked connector<br>3. No damaged lock.<br><br><b>Important reminders/Note/s:</b><br><b>1. Manual locking may cause damaged connector lock.</b> |
| 3      | Wire insertion to Black Corrugated tube (No slit) Ø5 L=450±3mm | <div></div> <div>1. Get the cover jig using right hand then insert both terminals using right hand.</div> <div></div> <div>2. Get the <b>Black Corrugated tube (No Slit) Ø5 L=450±3mm</b> using right hand then insert the wires using left hand.</div> <div></div> <div>3. After insertion, remove the terminal cover jig using right hand.</div> |  |  | <div>TERMINAL COVER JIG</div>  | 1. No wrong usage of parts.<br>2. No deformed terminal.   |

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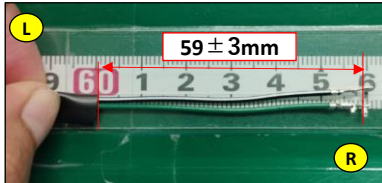
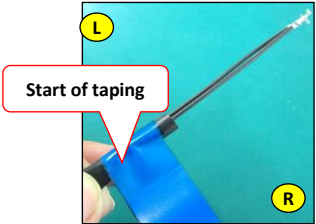
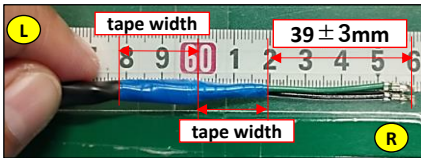

### PARTS:

1. Assy parts
2. Black VM tube (Sunprene) Ø5 L=125±3mm

3. Blue tape

JIG

n/a

| NO. | PROCESS NAME  | WORK PROCEDURE/ ILLUSTRATION  | TOOLS/PPE  | QUALITY POINTERS   |
|-----|---|---|--|--|
| 4   | Wire insertion to Black VM tube (Sunprene) Ø5 L=125±3mm |  <p>1. Get the Black VM tube (Sunprene) Ø5 L=125±3mm using right hand then insert the assy parts using left hand.</p>  | n/a  | <ol style="list-style-type: none"><li>1. No wrong use of parts.</li><li>2. No deformed terminals.</li></ol>  |
| 5   | Taping 1<br>Black corrugated tube to wire near terminal |  <p>1. Hold the Black VM tube (Sunprene) using left hand, measure from end of Black VM tube (Sunprene) up to terminal tip L=59±3mm</p>  <p>2. Hold the assy parts using left hand, get the BLUE TAPE using right hand then start taping process using both hands.</p>  <p>3. After taping, Check the measurement, taping condition and wire alignment.</p> |  <p>MEASURING TAPE</p> | <ol style="list-style-type: none"><li>1. No flip-out tape</li><li>2. No peel-off tape</li><li>3. No loose tape</li><li>4. No missing tape</li><li>5. No wrong dimension</li><li>6. No wrong use of tape</li></ol> <p><b>Important reminders/Note/s:</b><br/>1. Please use calibrated/verified measuring tape when getting the measurement.</p> |

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### PARTS:

1. Clamp 82711-12A80(W)  
2. Clamp 82711-58020 (W)

3. Clamp 82711-3A640 (B)  
4. Black tape [2pcs]

### JIG

1. Temporary Clamp assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

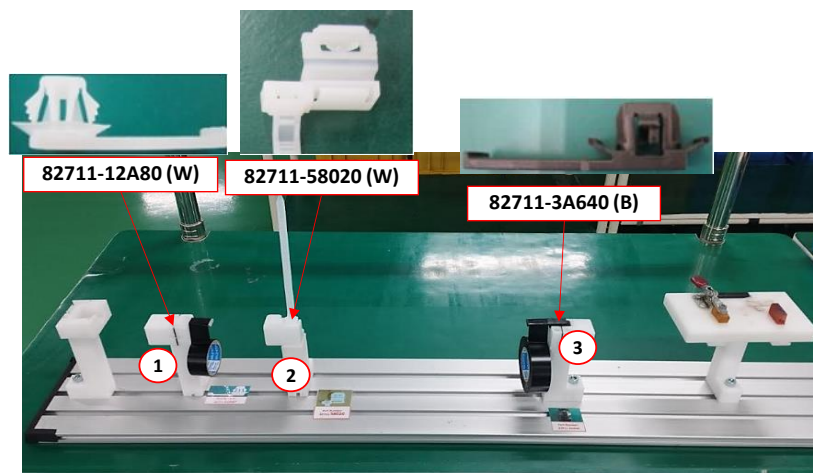
TOOLS/PPE

QUALITY POINTERS

7

n/a

Clamp setting



1. Get 1pc. of clamp **82711-12A80 (W)** then set to clamp location **1** using both hands.

2. Get 1pc. of clamp **82711-58020 (W)** then set to clamp location **2** using both hands.

3. Get 1pc. of clamp **82711-3A640 (B)** then set to clamp location **3** using both hands.

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

n/a

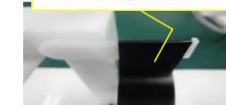
1. No damaged clamp
2. No wrong use of clamp
3. No wrong use of tape
4. No missing clamp

### Important reminders/Note/s:

**1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.**

### STANDARD TAPING FOR CLAMP

One side tape under clamp



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### PARTS:

1. Assy parts
2. Black tape

### JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

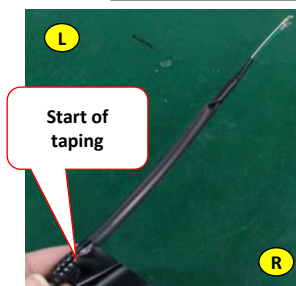
6

n/a

Taping 2  
COT to Black VM tube  
(Sunprene)



1. Measure from end of corrugated tube up to terminal pointed tip **184±3mm** using both hands.



2. Hold the corrugated tube and sunprene tube using left hand, get the **Black tape** then start taping process using both hands.



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

### MEASURING TAPE



### Important reminders/Note/s:

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

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### PARTS:

1. Assy parts

### JIG

1. Temporary Clamp assembly jig

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

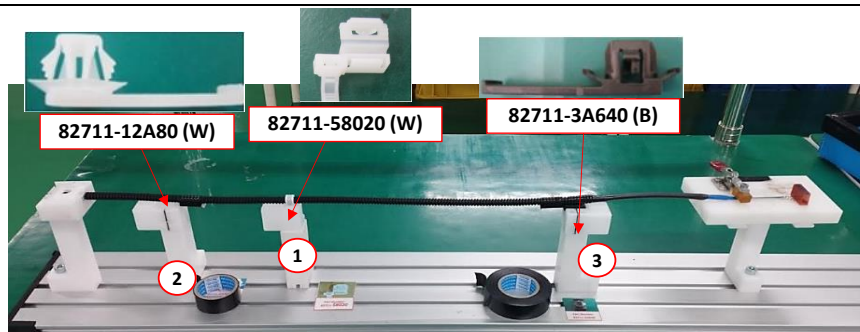
### TOOLS/PPE

### QUALITY POINTERS

8

n/a

Clamp Assembly



1. Get the assy parts and set to jig using both hands. (See above picture for correct setting). First, set the connector **6098-3802 (W)** in **Receiver base 1**. Continue to set the harness then last, set the **B/W-G wires** together within the stopper then press by **Toggle clamp**.

2. Initially attach the Band clamp on location **1** using both hands.

3. Get the Bando Gun (USE FLAT NOSEPIECE) using right hand then cut the clamp on location **1** using both Hands. Proceed to Location **2**

4. Hold the tape on location **3** then start taping using both hands. Make **3 windings** of tape and then cut the tape. Proceed to Clamp location **4**.

5. Hold the tape on location **4** then start taping using both hands. Make **3 windings** of tape and then cut the tape.

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

### BANDO GUN



### FLAT NOSEPIECE

### STANDARD TAPING FOR CLAMP

One side tape under clamp



### BANDO GUN ILLUSTRATION



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### PARTS:

1. Assembled parts
2. Engineering sample

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

9

n/a

Visual/ By two's inspection



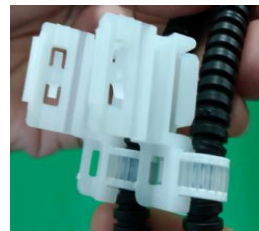
1. Conduct alignment of harness (**Master sample vs. Assembled parts**) using both hands.



2. Check **the Connector lock condition, insertion and terminal.**



3. Check the **presence of all clamp attachment and taping condition.**



4. Check **presence of Band clamp attachment and band clamp cut.**

1. No Skip checking during inspection

MASTER SAMPLE



CLAMP ILLUSTRATION



### 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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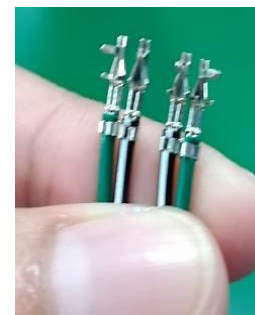
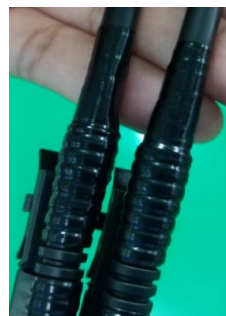
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**8 of 10****PARTS:**

1. Assembled parts
2. Engineering sample

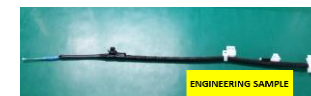
**JIG****n/a****NO.****PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS****9****n/a**Visual By two's inspection  
(Continuation)**ACTUAL PRODUCT**

5. Check **taping condition from COT to Black VM tube (Sunprene)**. Conduct **slightly bending of part with COT to Black VM tube (Sunprene)** taping to avoid overlook of missing tape.

6. Check the taping condition and Color of tape (Must be **BLUE TAPE** only)

7. Check the **terminal appearance**. Must be **no deformed terminal**.

1. No Skip checking during inspection

**MASTER SAMPLE****ENGINEERING SAMPLE**

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n/a

**JIG**

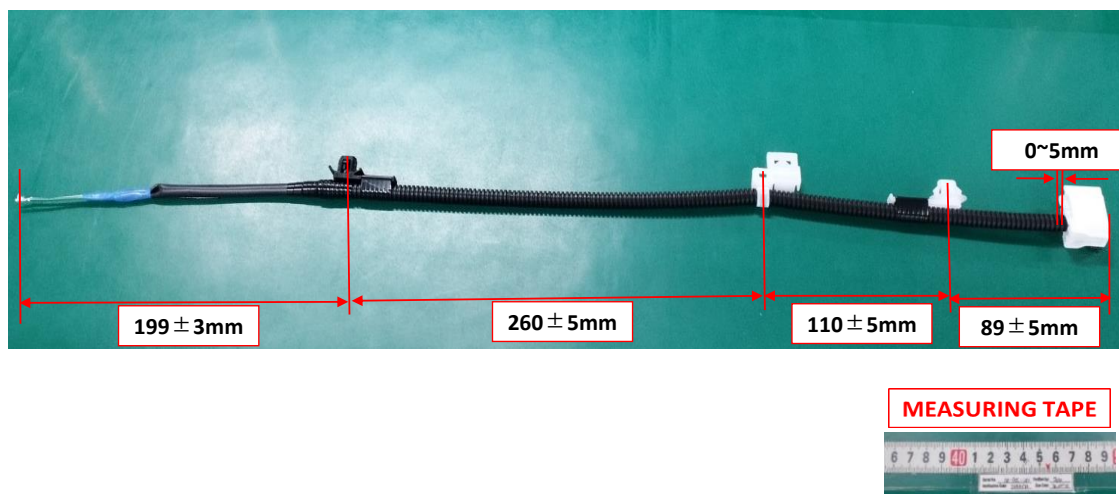
n/a

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

10

n/a

Clamp setting



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

**Important reminders/Note/s:**

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

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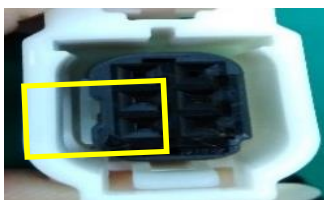
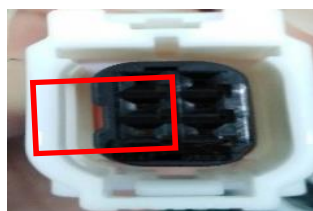
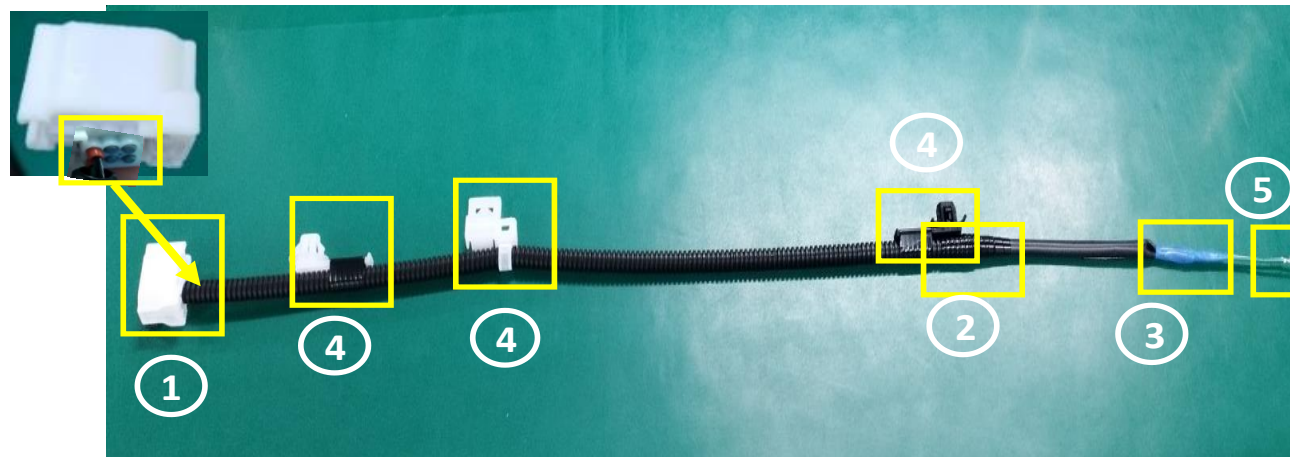
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n/a

**JIG**

n/a

**QUALITY CHECKPOINTS****P1****7R0117-7022****GOOD****NO GOOD****① No Unlocked/Half locked Connector****② No MISSING TAPE****③ No WRONG COLOR OF TAPE (BLUE TAPE)****④ No MISSING CLAMP/ BAND CLAMP****⑤ No DEFORMED TERMINAL**

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