



WORK INSTRUCTION

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

Effectivity Date:

April 17, 2021

Product Name/Code: **780B / 7R0103-7021**



Customer:

TRMX

Validity Date:

n/a

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Document No.:

WI-ENG-PDE-206A

Revision No.:

1

Page No.:

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PARTS:

- Connector 6189-1142 (W)
- AVSSf 0.3 wire Y L=490mm

- AVSSf 0.3 wire OR L=490mm

JIG:

- Insertion jig with switch cover

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

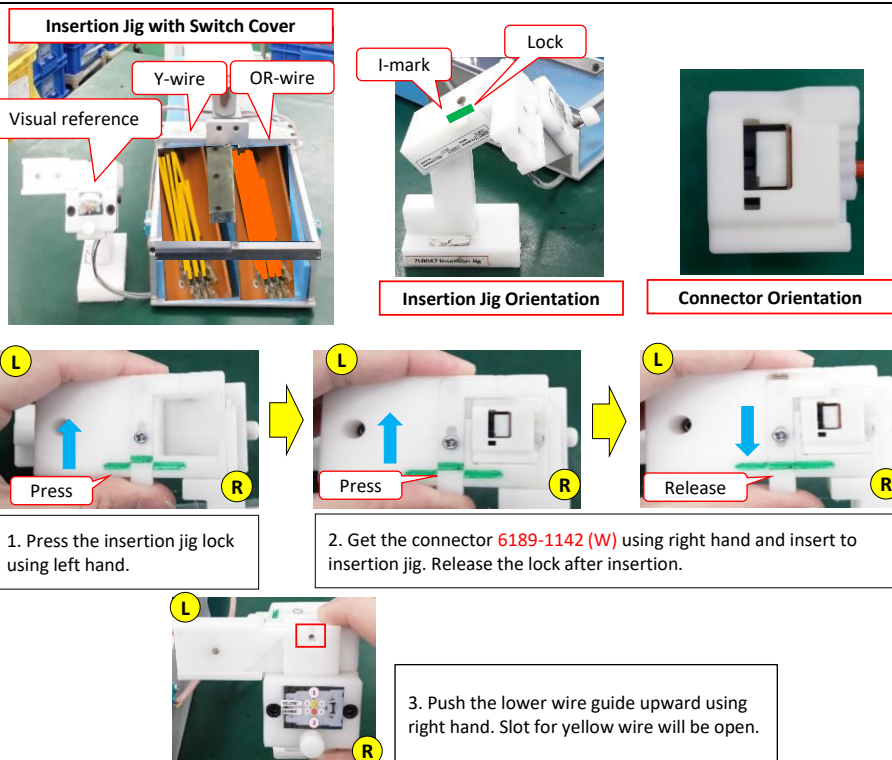
TOOLS/PPE

QUALITY POINTERS

1

P1

Connector setting to
Insertion jig
6189-1142 (W)



Safety Instruction

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

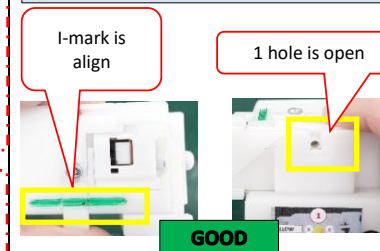
Housekeeping

- 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.

CONNECTOR ORIENTATION ILLUSTRATION



- Use the provided jig per model
- No wrong orientation of connector

Revision History

Eff. Date	Rev. No	Details of Change	Revise	Check	Approve	Noted	Prepared by:	Checked by:	Approved by:	Noted by:
04/17/21	1	Change part number from 7R0103-7020B to 7R103-7021 and change from pre-launch to masspro.	D.Castillo	C.Villanueva	A.Shimamura	A.Arañes	D.Castillo	C.Villanueva	A.Shimamura	A.Arañes
12/07/20	0	Initial issue.	D.Castillo	R. Peñaloza	A.Shimamura	A.Arañes	D.Castillo	C.Villanueva	A.Shimamura	A.Arañes

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PARTS:

1. Black Corrugated tube $\phi 7$ L= 208 \pm 3mm (no slit)

JIG

1. Insertion jig with switch cover

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Wire Insertion to connector 6189-1142 (W)	<p>1. Hold the insertion jig using left hand. Get the Yellow wire and insert to connector using right hand.</p> <p>2. Press the button using right thumb. slot for Orange wire will be open.</p> <p>3. Get the Orange wire and insert to connector using right hand.</p> <p>4. After insertion, push the lock button using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</p>	N/A	<p>Note: During insertion, hold the wire not rubber seal to prevent sagging.</p> <p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p> <p>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p>
3	Wire insertion to COT $\phi 7$ L= 208 \pm 3mm (no slit)	<p>Get the corrugated tube $\phi 7$ L= 208\pm3mm using right hand then insert the yellow wire and orange wire by using left hand.</p>	N/A	<p>1. No wrong use of parts 2. No deformed terminal</p>

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
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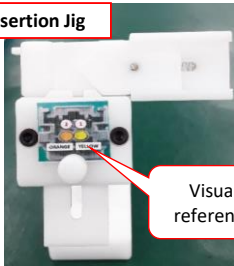




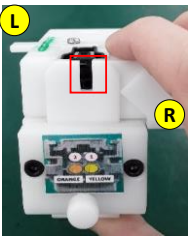

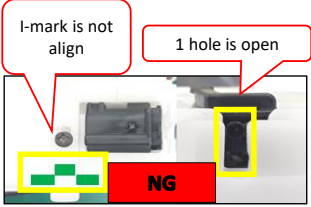
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PARTS:

1. Black Vinyl tube $\phi 5$ L= 233 \pm 3mm
2. Connector 6189-1161 (B)

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Wire insertion to Vinyl tube $\phi 5$ L= 233 \pm 3mm	 <p>Get the Vinyl tube $\phi 5$ L= 233\pm3mm using right hand then insert the yellow wire and orange wire by using left hand.</p>	N/A	<ol style="list-style-type: none">1. No wrong use of parts2. No deformed terminal
5	Connector setting to Insertion jig 6189-1161 (B)	<p>Insertion Jig</p>  <p>Insertion Jig Orientation</p>  <p>Connector Orientation</p>  <p>Press</p>  <p>Release</p>  <p>1. Press the insertion jig lock using left hand.</p>  <p>2. Get the connector 6189-1161 (B) using right hand and insert to insertion jig. Release the lock after insertion.</p> <p>3. Push the lower wire guide upward using right hand. Slot for yellow wire will be open.</p>	N/A	<p>CONNECTOR ORIENTATION ILLUSTRATION</p>  <p>I-mark is align</p> <p>1 hole is open</p> <p>GOOD</p>  <p>I-mark is not align</p> <p>1 hole is open</p> <p>NG</p> <ol style="list-style-type: none">1. Use the provided jig per model2. No wrong orientation of connector

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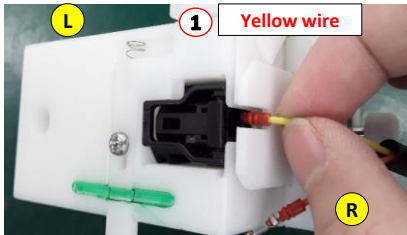
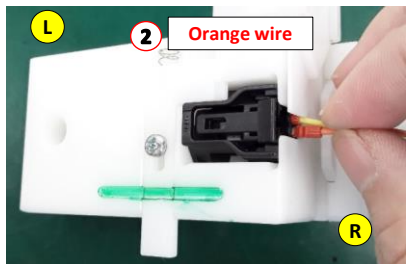
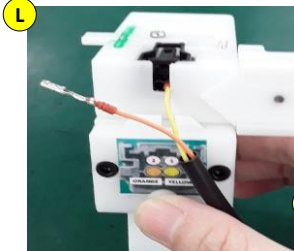
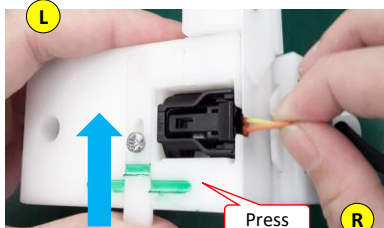
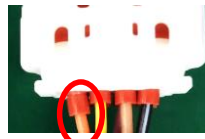
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PARTS:

1. Assy parts

JIG


1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	P1 Wire insertion to connector 6189-1161 (B)	<div><p>Wire facing</p></div> <div><p>1. Hold the insertion jig using left hand. Get the Yellow wire and insert to connector using right hand.</p></div> <div><p>3. Get the Orange wire and insert to connector using right hand.</p></div> <div><p>2. Press the button using right thumb. slot for Orange wire will be open.</p></div> <div><p>4. After insertion, push the lock button using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</p></div>	n/a	<div><p>Note: During insertion, hold the wire not rubber seal to prevent sagging.</p></div>  <div><ol style="list-style-type: none">1. No loose insertion2. No wrong insertion3. One by one insertion4. No deformed terminal5. No wrong wire facing<p>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p></div>

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PARTS:

1. Assy parts
2. Black Sunprene tube $\phi 5$ L= 135 \pm 3mm

3. MR SW CP A7475-7R0103-7040 (TVSSf 0.3 wires GR L=757mm, B/W L=757mm)

JIG

1. Locking jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	Connector lock	      <p>Put the connector into locking jig using right hand then press 2x. Check the connector lock if properly lock.</p>	Locking Jig 	<ol style="list-style-type: none">1. No unlock/Half-locked connector2. No damaged lock
8	Wire insertion to Sunprene tube $\phi 5$ L= 135 \pm 3mm	 <p>1. Get the sunprene tube $\phi 5$ L= 135\pm3mm using left hand then insert the GR and B/W hotmelted wires (MR SW CP) by using right hand.</p>	n/a	<ol style="list-style-type: none">1. No wrong use of parts2. No deformed terminal

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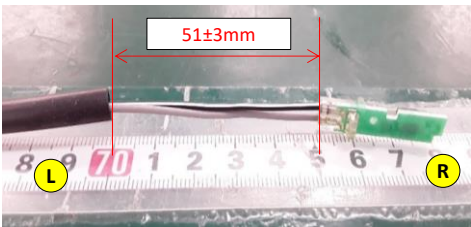
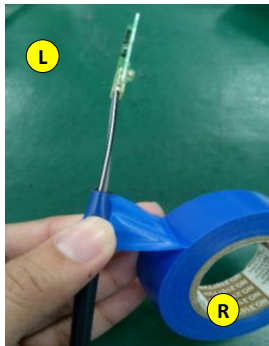
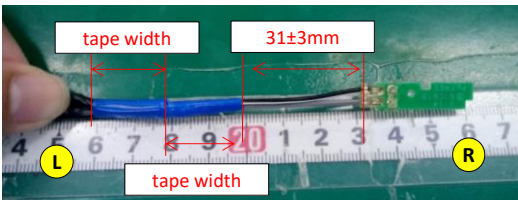



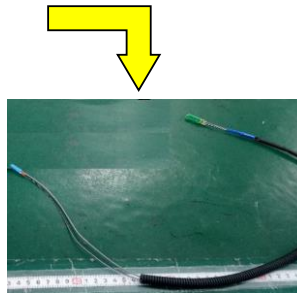

PARTS:

1. Blue tape
2. Assy parts

3. Black Corrugated tube $\phi 7$ L= 355 \pm 3mm (no slit)

JIG

1. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	P1 Taping 1 Sunprene tube to wire near PCB	 <ol style="list-style-type: none">1. Hold the Sunprene tube using left hand. Measure the end of Sunprene up to the edge of hotmelted wires 51\pm3mm using right hand.  <ol style="list-style-type: none">2. Hold the Sunprene tube using left hand. Get the Blue tape using right hand and start taping. Refer to WI-PRO-ASY-001 for taping procedure.  <ol style="list-style-type: none">3. After taping, check the measurement and taping condition.	 Measuring tape	<div>Note: Please use calibrated/verified measuring tape when getting the measurement.</div> <ol style="list-style-type: none">1. No peel-off tape2. No flip out tape3. No loose tape4. No wrong use of tape5. No wrong dimension6. no missing tape
10	Wire insertion to COT $\phi 7$ L= 355 \pm 3mm (no slit)	 <ol style="list-style-type: none">1. Get the terminal cover jig using right hand and insert wires using left hand.  <ol style="list-style-type: none">2. Get the corrugated tube $\phi 7$ L= 355\pm3mm using right hand then insert the assy parts (MR SW CP) by using left hand. 	 Terminal cover jig	<ol style="list-style-type: none">1. No wrong use of parts2. No deformed terminal

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PARTS:

1. Assy parts

JIG

1. Insertion jig
2. Terminal cover jig

NO.

PROCESS NAME


WORK PROCEDURE/ ILLUSTRATION


TOOLS/PPE


QUALITY POINTERS

11

Wire insertion to Assy parts

 $\phi 7 \text{ L} = 208 \pm 3 \text{mm}$

 Get the assy parts using both hands. Insert the GR and B/W wire to corrugated tube $\phi 7 \text{ L} = 208 \pm 3 \text{mm}$ using right hand.

 2. After insertion, remove the cover jig using right hand.

Terminal Cover jig




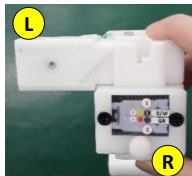
1. No wrong use of parts
2. No deformed terminal

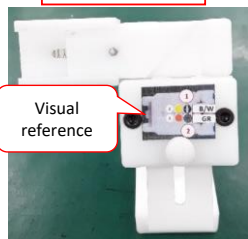
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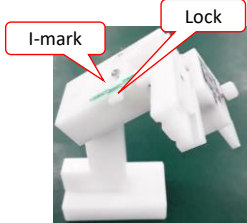
P2

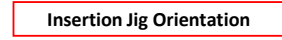
Connector setting to Insertion jig 6189-1142 (W)

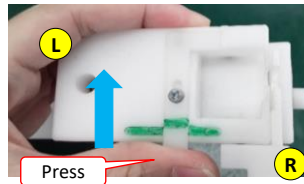
 **Connector Orientation**

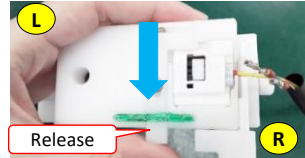
 **Visual reference**

 **Insertion Jig**

 **I-mark** **Lock**

 **Insertion Jig Orientation**

 **Press**

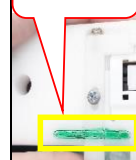
 **Release**


1. Press the lower wire guide using right thumb to make sure connector with inserted wires will be inserted.


2. Press the Insertion jig lock using left thumb. Get the assy parts and insert the connector using right hand.

3. After insertion, release the insertion jig lock using left thumb.

CONNECTOR ORIENTATION ILLUSTRATION

 **I-mark is align**

 **1 hole is open**

 **GOOD**

1. Use the provided jig per model
2. No wrong orientation of connector

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PARTS:

1. Assy parts

JIG

1. Insertion jig
2. Locking jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
13	Wire insertion to Connector (Assy parts)	<p>Wire facing</p> <p>1. Hold the assy parts upward using left hand. Slot for B/W wire must be open.</p> <p>B/W wire</p> <p>2. Insert the B/W wire using right hand.</p> <p>GR wire</p> <p>3. Press the push button using right hand. Slot for GR wire will be open.</p> <p>4. Insert the GR wire using right hand.</p> <p>5. After insertion, press the lock button using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</p>	N/A	<p>Note: During insertion, hold the wire not rubber seal to prevent sagging.</p> <p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p> <p>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p>
14	Connector lock	<p>Put the connector into locking jig using right hand then press 2x. Check the connector lock if properly lock.</p> <p>BEFORE PRESSING</p> <p>AFTER PRESSING</p>	<p>Locking Jig</p>	<p>1. No unlock/Half-locked connector 2. No damaged lock</p>

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