



# WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:	February 10, 2022		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-397A		
Revision No.:	0	Page No.:	1 of 9

Process Name/Title:	TAPING ASSEMBLY PROCESS		
Model Code/Part Number:	780B / 7R0103-7022	Customer:	TRMX
Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS:	1. All parts: Connector 6189-1142 (W); AVSSf 0.3 Y-OR wire L=490±2mm; Black COT (no slit) φ7 L=208±3mm; Black vinyl tube φ5 L=233±3mm; Connector 6189-1161 (B); Black sunprene tube φ5 L=135±3mm; Black COT (no slit) φ7 L=355±3mm; MRSW-CP TVSSf 0.3 G-B/W wire L=757±3mm; Black tape [1pc.]	JIG:	1. Insertion jig with switch cover 2. Locking jig 3. Terminal cover jig
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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P1	Table Lay-out 	<b>Safety Instruction</b> Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)  <b>Housekeeping</b> 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.  <b>Alert level</b> For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.	<i>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</i>  1. No missing parts/tools 2. No excess parts/tools

## Revision History

02/10/22	0	Initial issue. Wire color from Gray (GR) to Green (G) (MRSW CP TVSSf 0.3 from GR-B/W to MRSW CP TVSSf 0.3 G-B/W); Refer to CL-ENG-PDE-254A	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	Prepared by	Reviewed by	Approved by	Noted by
Eff. Date	Rev. No	Details of Change	Prepared	Reviewed	Approved	Noted	Est. Date:	December 07, 2020		

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☐ PRE-LAUNCH

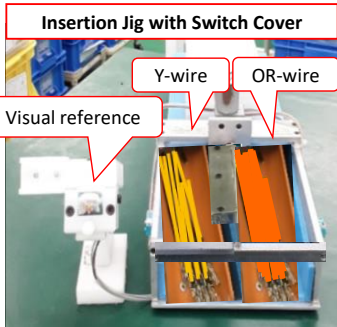
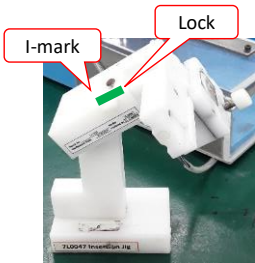
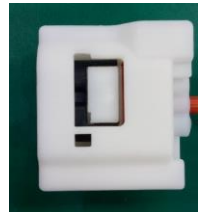
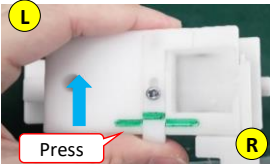


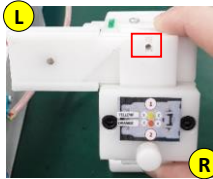

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PARTS:		1. Connector 6189-1142 (W)		JIG	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1 Connector setting to Insertion jig 6189-1142 (W)	<div><p>Visual reference</p><p>Y-wire</p><p>OR-wire</p></div> <div><p>I-mark</p><p>Lock</p><p>Insertion Jig Orientation</p></div> <div><p>Connector Orientation</p></div> <div><p>Press</p><p>1. Press the insertion jig lock using left hand.</p></div> <div><p>Press</p></div> <div><p>Release</p></div> <div><p>Note: Follow the connector orientation.</p></div> <div><p>3. Push the guide using right hand. The slot for <b>Y wire</b> will be opened.</p></div>		n/a	<div><p>CONNECTOR ORIENTATION ILLUSTRATION</p><p>I-mark is align</p><p>1 hole is open</p><p>GOOD</p></div> <p>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</p>

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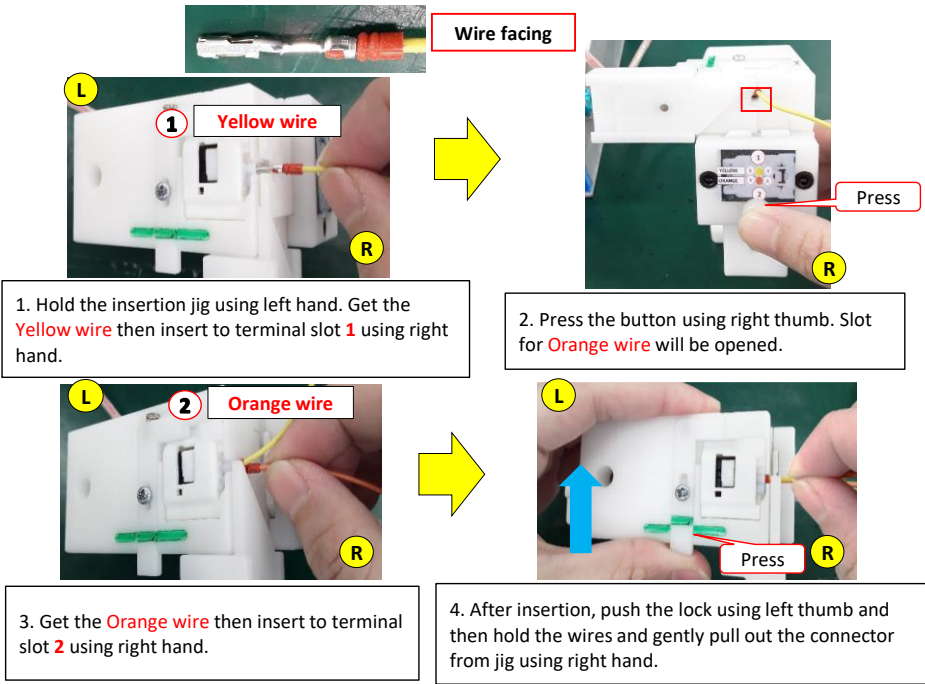
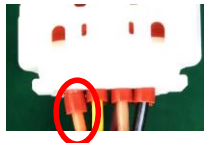

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PARTS:		1. AVSSf 0.3 wire Y-OR L=490±2mm 2. Black Corrugated tube $\phi 7$ L=208±3mm (no slit)			JIG	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
3	P1 Wire Insertion to connector 6189-1142 (W)	 <p>1. Hold the insertion jig using left hand. Get the <b>Yellow wire</b> then insert to terminal slot <b>1</b> using right hand.</p> <p>2. Press the button using right thumb. Slot for <b>Orange wire</b> will be opened.</p> <p>3. Get the <b>Orange wire</b> then insert to terminal slot <b>2</b> using right hand.</p> <p>4. After insertion, push the lock 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 <u>rubber seal</u> to prevent sagging.</p>  <p>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p> <ul style="list-style-type: none"><li>1. No loose insertion</li><li>2. No wrong insertion</li><li>3. One by one insertion</li><li>4. No deformed terminal</li><li>5. No wrong wire facing</li></ul> <p>Make sure wires are properly inserted. Conduct <b>Pull-Push-Pull-Push</b> after insertion. Do not exert extra force.</p> <p>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p>
4	Wire insertion to COT $\phi 7$ L=208±3mm (no slit)	 <p>1. Get the corrugated tube <math>\phi 7</math> L=208±3mm using right hand then insert the <b>Y-OR wire</b> using left hand.</p>			n/a	<ul style="list-style-type: none"><li>1. No wrong use of parts</li><li>2. No deformed terminal</li></ul>

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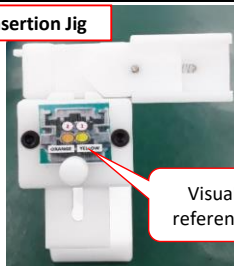
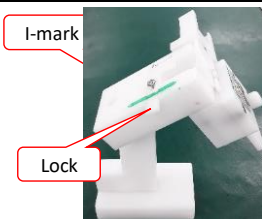




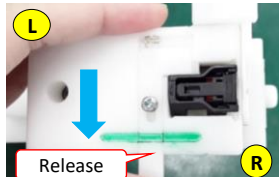
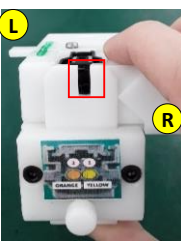
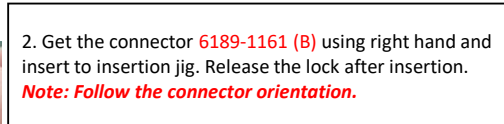
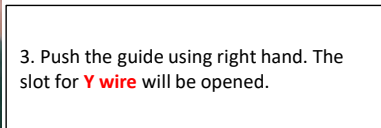
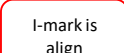
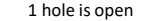

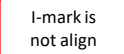
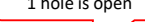

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PARTS:		1. Black Vinyl tube $\phi 5$ L=233 $\pm$ 3mm 2. Connector 6189-1161 (B)			JIG	1. Insertion jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	Wire insertion to Black Vinyl tube $\phi 5$ L=233 $\pm$ 3mm		<div><div></div><div>1. Get the Vinyl tube <math>\phi 5</math> L=233<math>\pm</math>3mm using right hand then insert the Y-OR wire using left hand.</div></div>		n/a	1. No wrong use of parts 2. No deformed terminal
6	P1	Connector setting to Insertion jig 6189-1161 (B)	<div><div><div><div><p>Visual reference</p></div><div><p>I-mark</p></div><div><p>Lock</p></div><div><p>Insertion Jig Orientation</p></div><div><p>Connector Orientation</p></div><div><p>Press</p></div><div><p>Release</p></div><div><p>1. Press the insertion jig lock using left hand.</p></div><div><p>2. Get the connector 6189-1161 (B) using right hand and insert to insertion jig. Release the lock after insertion. <i>Note: Follow the connector orientation.</i></p></div><div><p>3. Push the guide using right hand. The slot for Y wire will be opened.</p></div></div></div></div>		n/a	<div><div>CONNECTOR ORIENTATION ILLUSTRATION</div><div><div><p>I-mark is align</p></div><div><p>1 hole is open</p></div><div><p>GOOD</p></div><div><p>I-mark is not align</p></div><div><p>1 hole is open</p></div><div><p>NG</p></div></div><div>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</div></div>

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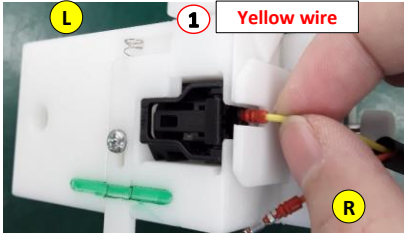
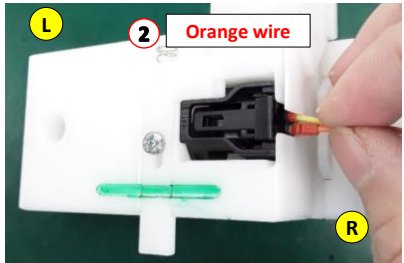
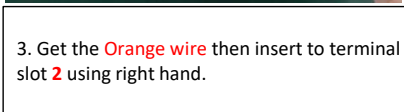
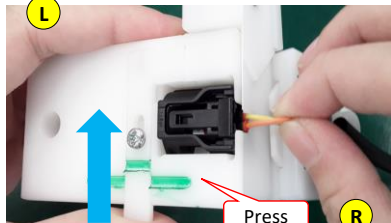
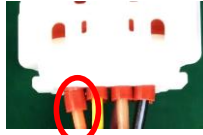
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PARTS:	1. Assy parts			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P1  Wire insertion to connector 6189-1161 (B)	<div><p>Wire facing</p></div> <div><p>1. Hold the insertion jig using left hand. Get the <b>Yellow wire</b> then insert to terminal slot <b>1</b> using right hand.</p></div> <div><p>2. Press the button using right thumb. Slot for <b>Orange wire</b> will be opened.</p></div> <div><p>3. Get the <b>Orange wire</b> then insert to terminal slot <b>2</b> using right hand.</p></div> <div><p>4. After insertion, push the lock 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><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 <b>Pull-Push-Pull-Push</b> after insertion. Do not exert extra force.</p><p>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p></div>

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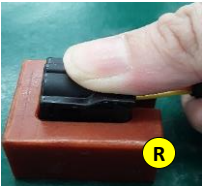







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<b>PARTS:</b>	1. Assy parts 2. Black Sunprene tube $\phi 5$ L=135 $\pm$ 3mm 3. MR SW CP TVSSf 0.3 wires G-B/W L=757 $\pm$ 3mm			<b>JIG</b>	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
8	P1	<div data-bbox="674 453 875 639"></div> <div data-bbox="607 655 949 783">Put the connector into locking jig using right hand then press <b>2x</b>. Check the connector lock if properly lock.</div> <div data-bbox="994 443 1505 863"><div data-bbox="1048 443 1453 592"><div data-bbox="1061 564 1218 592">Before Pressing</div><div data-bbox="1279 564 1420 592">After Pressing</div></div><div data-bbox="994 603 1505 863"><div data-bbox="1010 628 1167 660">NG</div><div data-bbox="1227 628 1384 660">NG</div><div data-bbox="1368 628 1505 660">GOOD</div><div data-bbox="1010 676 1167 799"><div data-bbox="1048 804 1128 847">Unlock Condition</div></div><div data-bbox="1182 676 1339 799"><div data-bbox="1211 804 1308 847">Half lock Condition</div></div><div data-bbox="1346 676 1505 799"><div data-bbox="1375 804 1464 847">Full lock Condition</div></div></div></div>	Locking Jig 	<b>NOTE:</b> <b>MANUAL LOCKING MAY CAUSE DAMAGED LOCK.</b>  1. Use the provided locking jig per model 2. No unlock/half-lock connector 3. No damaged connector	
9		<div data-bbox="815 959 1256 1118"></div> <div data-bbox="792 1118 1279 1262">1. Get the sunprene tube <math>\phi 5</math> L=135<math>\pm</math>3mm using left hand then insert the GR and B/W hotmelted wires (MR SW CP) by using right hand.</div>	n/a	<b>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</b>  1. No wrong use of parts 2. No deformed terminal	

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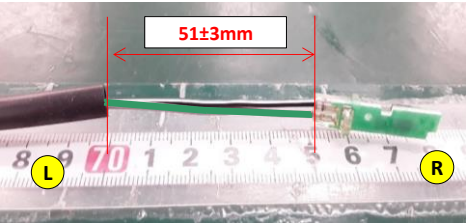
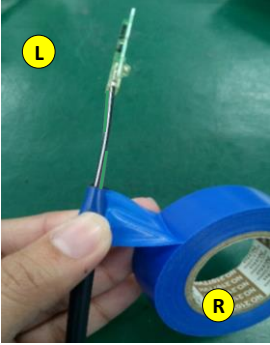
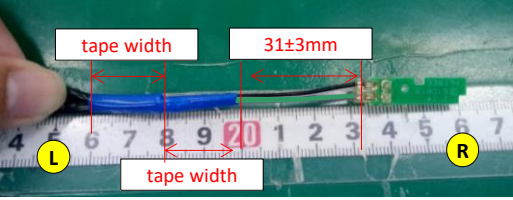



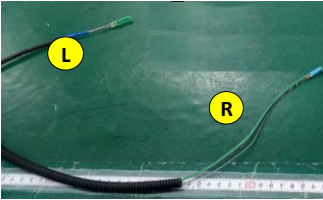

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PARTS:	1. Blue tape 2. Assy parts 3. Black Corrugated tube $\phi 7$ L=355 $\pm$ 3mm (no slit)			JIG	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
10	P1 Taping 1 Sunprene tube to wire near PCB	<div></div> <div>1. Hold the Sunprene tube using left hand. Measure the end of Sunprene up to the edge of hotmelted wires 51<math>\pm</math>3mm using right hand.</div> <div></div> <div>2. Hold the Sunprene tube using left hand. Get the <b>Blue tape</b> using right hand then start taping process using both hands. <i>Refer to WI-PRO-ASY-001 for taping procedure.</i></div> <div></div> <div>3. After taping, check the measurement and taping condition.</div>		<div><b>MEASURING TAPE</b></div> 	<div><b>NOTE:</b> <b>USE BLUE TAPE ONLY.</b></div> <div>1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong use of tape 6. No wrong dimension</div> <div><b>Note:</b> <i>Please use calibrated/verified measuring tape when getting the measurement.</i></div>
11	Wire insertion to COT $\phi 7$ L=355 $\pm$ 3mm (no slit)	<div></div> <div>1. Get the terminal cover jig using right hand and insert wires using left hand.</div> <div></div> <div>2. Get the corrugated tube <math>\phi 7</math> L=355<math>\pm</math>3mm using right hand then insert the assy parts (MR SW CP) using left hand.</div> <div></div>		<div><b>Terminal cover jig</b></div> 	<div>1. No wrong use of parts 2. No deformed terminal</div>

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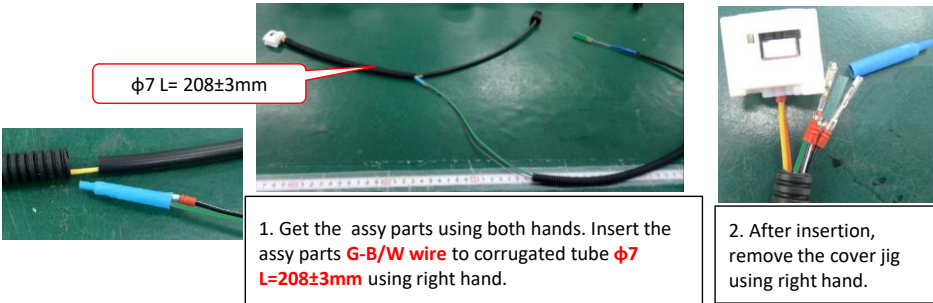
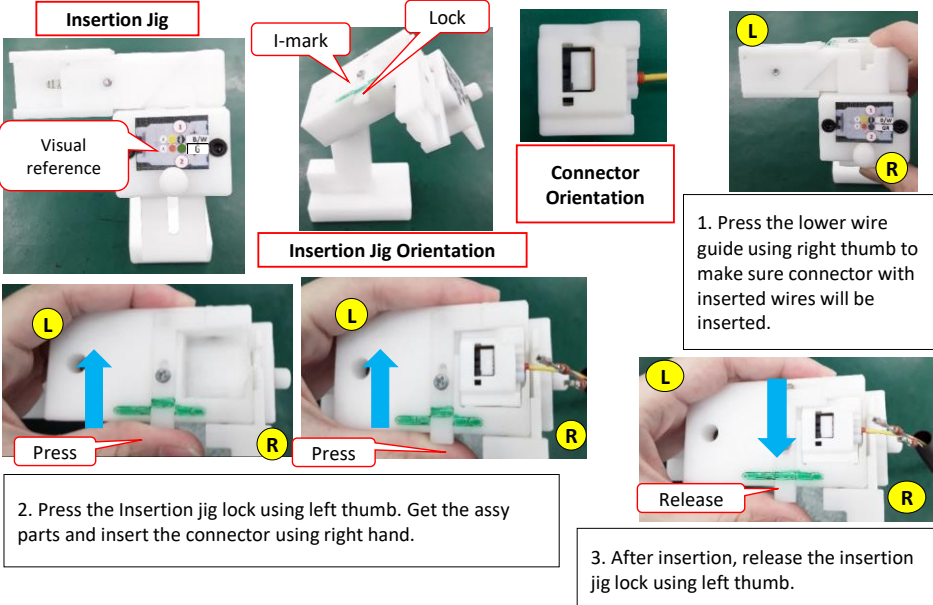

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PARTS:		1. Assy parts		JIG	1. Insertion jig 2. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
12	Wire insertion to Assy parts	 <p><math>\phi 7</math> L= 208<math>\pm</math>3mm</p> <p>1. Get the assy parts using both hands. Insert the assy parts <b>G-B/W wire</b> to corrugated tube <math>\phi 7</math> L=208<math>\pm</math>3mm using right hand.</p> <p>2. After insertion, remove the cover jig using right hand.</p>		Terminal Cover jig	1. No wrong use of parts 2. No deformed terminal
13	P1 Connector setting to Insertion jig 6189-1142 (W)	 <p>Insertion Jig</p> <p>Visual reference</p> <p>I-mark</p> <p>Lock</p> <p>Connector Orientation</p> <p>Insertion Jig Orientation</p> <p>Press</p> <p>Release</p> <p>1. Press the lower wire guide using right thumb to make sure connector with inserted wires will be inserted.</p> <p>2. Press the Insertion jig lock using left thumb. Get the assy parts and insert the connector using right hand.</p> <p>3. After insertion, release the insertion jig lock using left thumb.</p>			<b>CONNECTOR ORIENTATION ILLUSTRATION</b>  <p>I-mark is align</p> <p>1 hole is open</p> <p>GOOD</p> <p>1. Use the provided jig per model 2. No wrong orientation of connector</p>

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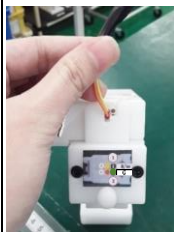

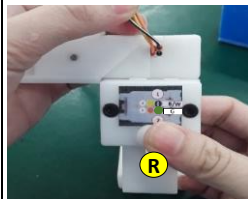
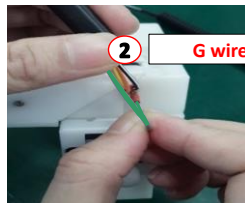

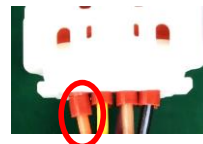
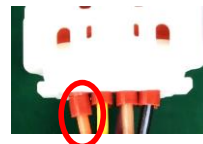

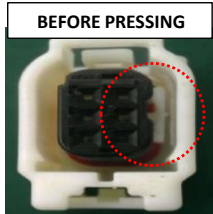
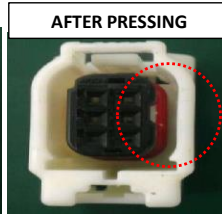

# WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:	February 10, 2022		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-397A		
Revision No.:	0	Page No.:	9 of 9

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

Model Code/Part Number: **780B / 7R0103-7022** Customer: **TRMX**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:		1. Assy parts			JIG	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
14	P1	Wire insertion to Connector (Assy parts)	<div><div><p>1. Hold the assy parts upward using left hand. Slot for B/W wire must be open.</p></div><div><p>1 <b>B/W wire</b> 2. Insert the B/W wire using right hand.</p></div><div><p>3. Press the push button using right hand. Slot for G wire will be open.</p></div><div><p>2 <b>G wire</b> 4. Insert the GR wire using right hand.</p></div><div><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></div></div> <div>N/A</div> <td><div>Note: During insertion, hold the wire not rubber seal to prevent sagging.</div><div></div><div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</div><div>Make sure wires are properly inserted Conduct <b>Pull-Push-Pull-Push</b> after insertion. Do not exert extra force.</div><div>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div></td>		<div>Note: During insertion, hold the wire not rubber seal to prevent sagging.</div> <div></div> <div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</div> <div>Make sure wires are properly inserted Conduct <b>Pull-Push-Pull-Push</b> after insertion. Do not exert extra force.</div> <div>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>	
15		Connector lock	<div><p>Put the connector into locking jig using right hand then press <b>2x</b>. Check the connector lock if properly lock.</p></div> <div><div><p>BEFORE PRESSING</p></div><div><p>AFTER PRESSING</p></div></div> <div>Locking Jig</div> <div></div> <div><div>NOTE: MANUAL LOCKING MAY CAUSE DAMAGED LOCK.</div><div>1. Use the provided locking jig per model 2. No unlock/half-lock connector 3. No damaged connector</div></div>			

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