



WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

Process Name/Title:

Model Code/Part Numb **240B / 7M0514-7021**

Customer: **TRJ**

Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Effectivity Date:

March 31, 2023

Validity Date:

n/a

Document No.:

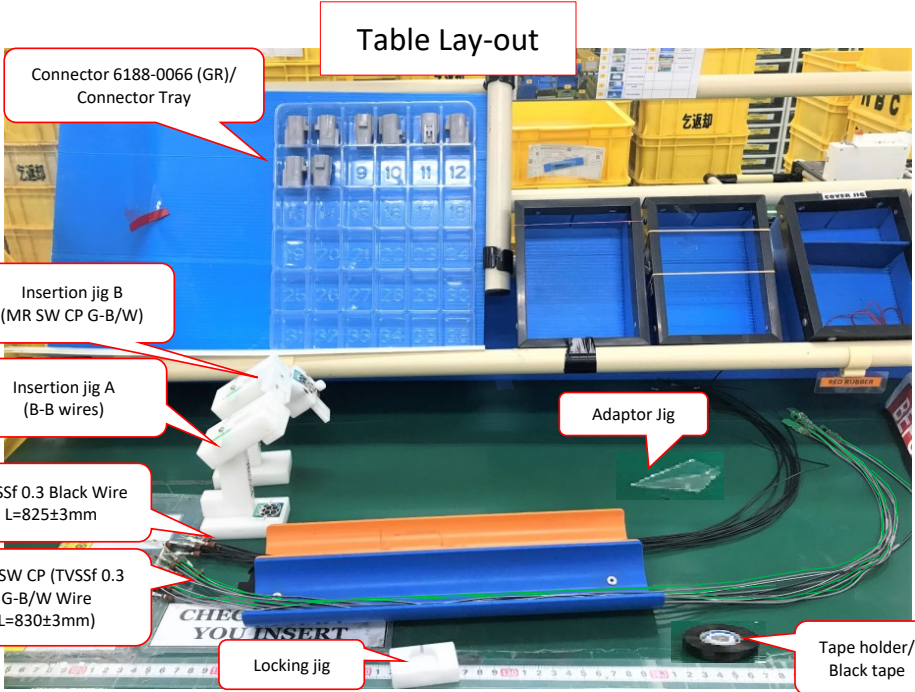




WI-ENG-PDE-440A

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PARTS:		1. All parts (Connector 6188-0066 (GR); AVSSf 0.3 Black wire L=825±3mm; MR SW CP (TVSSf 0.3 G-B/W wire L=830±3mm) ; Black Tape)						JIG:		1. Insertion Jig 2. Locking Jig		3. Adaptor			
NO.		PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION						TOOLS/PPE		QUALITY POINTERS			
1		P1		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>Document references: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to WI-PRO-KIT-005 for Wire Taping without Vinyl tube</div> <div>1. No missing parts/tools 2. No excess parts/tools</div>			
															
Revision History															
03/31/23	3	Work instruction improvement. Inclusion of quality checkpoints (Page 9).				D.Castillo	J. Loterte	C. Villanueva	A. Arañes	 D. Castillo	 J. Loterte	 C. Villanueva	 A. Arañes		
09/21/22	2	Merged Offline assembly process (WI-ENG-PDE-439) to P1 due to improvement. Transfer Half-warp and Taping 2 (Black Corrugated tube to wire near connector 6188-0066 (GR) process to P2. Update the Table Lay-out.				D.Castillo	J. Loterte	C. Villanueva	A. Arañes						
03/31/22	1	Change Pre-launch to Masspro.				K. Doria	J. Loterte	C. Villanueva	A. Arañes						
03/29/22	0	Initial issue.				K. Doria	J. Loterte	C. Villanueva	A. Arañes						
Eff. Date	Rev. No	Details of Change				Revised	Checked	Approved	Noted	Est. Date:		March 29, 2022			

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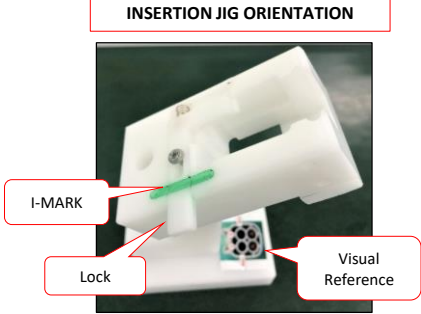
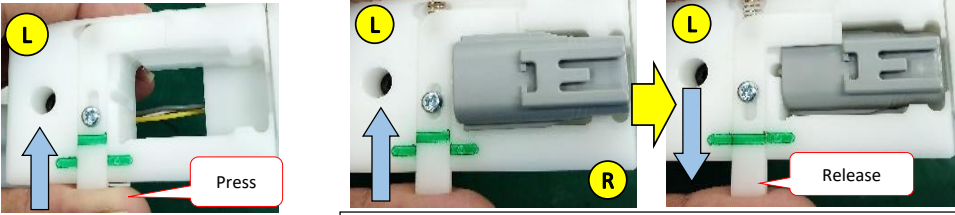
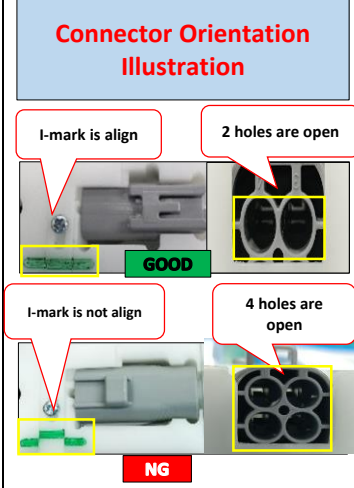
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PARTS:

1. Connector 6188-0066 (GR)

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1 Connector Setting 6188-0066 (GR)	<p>INSERTION JIG ORIENTATION</p>  <p>CONNECTOR ORIENTATION</p>  <p>1. Press the lock of insertion jig using left thumb.</p> <p>2. Insert the connector 6188-0066 (GR) into jig using right hand then release the lock. <i>Note: Follow the connector orientation.</i></p> <p>3. Check the holes/terminal slot for B-B wires.</p>	n/a	<p>Connector Orientation Illustration</p>  <p>1. Use the provided jig per model</p> <p>2. No wrong orientation of connector</p> <p>3. No wrong use of connector</p> <p>4. No damaged connector</p>

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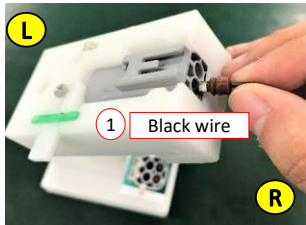
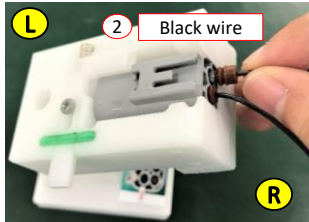
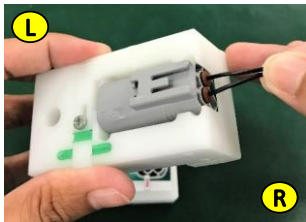
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PARTS:		1. AVSSf 0.3 Black wire L=825±3mm [2pcs.]		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P1	<div><p>CONNECTOR ORIENTATION</p></div> <div><p>VISUAL REFERENCE</p></div> <div><p>WIRE FACING</p></div> <div><p>1. Get the first Black wire then insert to terminal slot 1 using right hand. <i>(Note: Insertion of wires must be from left to right.)</i></p></div> <div><p>2. Get the 2nd Black wire then insert to terminal slot 2 using right hand.</p></div> <div><p>3. After insertion, push the lock using left thumb and then hold the wires and gently pull out the connector from the jig using right hand.</p></div>		n/a	<div>1. No wrong orientation of connector 2. No wrong use of connector 3. No damaged connector 4. No wrong insertion of wires 5. No loose insertion 6. No wrong insertion 7. One by one insertion 8. No deformed terminal 9. No wrong wire facing</div> <div>Important reminders/Note/s: 1. Please hold the wire near terminal. 2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> <div>Document references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</div>

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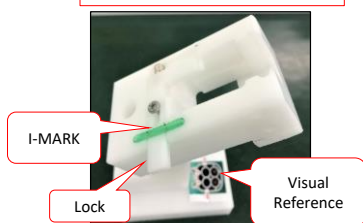


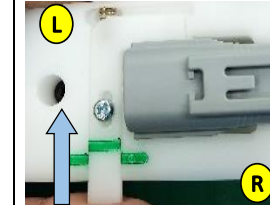
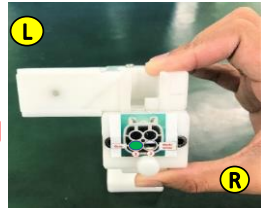
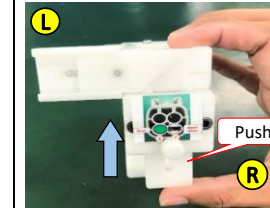


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WORK INSTRUCTION TAPING ASSEMBLY PROCESS

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Model Code/Part Number	240B / 7M0514-7021	Customer:	TRJ
Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS:	1. Assy parts			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1 Connector Setting 6188-0066 (GR) (Assy parts)	<div><div>INSERTION JIG ORIENTATION</div><div></div><div>CONNECTOR ORIENTATION</div><div></div><div></div><div>1. Push the guide lock of insertion jig using right thumb.</div><div>2. Insert the connector 6188-0066 (GR) with assy parts into jig using right hand then release the lock. <i>Note: Follow the connector orientation.</i></div><div>3. Check the holes/terminal slot for G wire is open.</div></div>		n/a	<div>Connector Orientation Illustration</div> <div><div>I-mark is align</div><div></div><div>GOOD</div><div>I-mark is not align</div><div></div><div>NG</div><div>1 hole is open</div><div>2 hole is open</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>

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PARTS:

1. MR SW CP (TVSSf 0.3 G-B/W wire L=830±3mm)

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

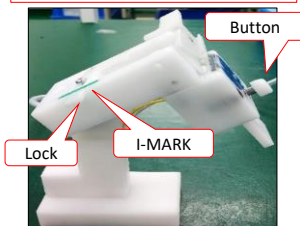
QUALITY POINTERS

5

P1

Wire insertion to
Connector
6188-0066 (GR)

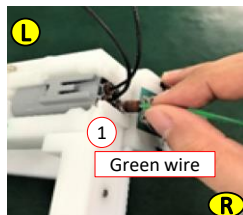
INSERTION JIG ORIENTATION



WIRE FACING



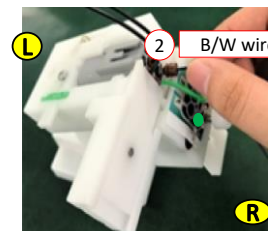
VISUAL REFERENCE



1

Green wire

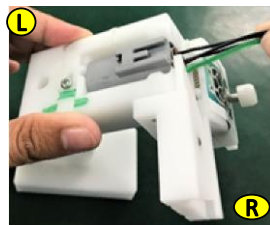
1. Get the MR SW CP wires then hold. Insert the G wire to terminal slot 1 using right hand. After insertion, press the button using right thumb and slot for B/W will be opened.



2

B/W wire

2. Get the MR SW CP Black/white wire then insert to terminal slot 2 using right hand.



3. After insertion, push the lock using left thumb and then hold the wires and gently pull out the connector from jig using right hand.

n/a

1. No wrong orientation of connector
2. No wrong use of connector
3. No damaged connector
4. No wrong insertion of wires
5. No loose insertion
6. No wrong insertion
7. One by one insertion
8. No deformed terminal
9. No wrong wire facing

Important reminders/Note/s:

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

Document references:

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

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PARTS:		1. Assy parts			JIG	1. Locking Jig	
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
6	P1	Connector Lock	<div><p>1. Put the connector into locking jig using right hand then press 2x. Check if properly locked.</p><div><p>Connector Cross Sectional View</p><div><p>NG</p><p>Unlock Condition</p></div><div><p>NG</p><p>Half Lock Condition</p></div><div><p>GOOD</p><p>Full Lock Condition</p></div></div></div>			<div><p>Before pressing</p><p>After pressing</p></div> <div><p>LOCKING JIG</p></div>	<p><i>Important reminders/Note/s:</i></p> <p>1. Manual locking may cause damage connector</p> <p>1. Use the provided locking jig per model 2. No unlock/half-locked connector</p>

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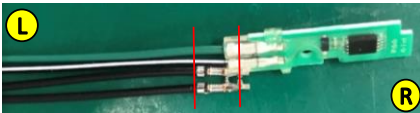


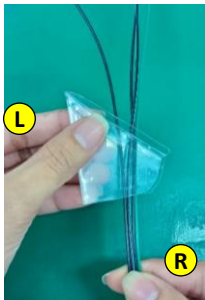
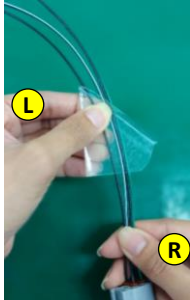
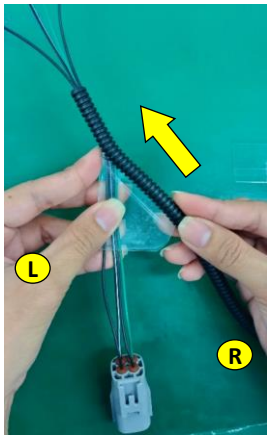

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PARTS:		1. Assy parts 2. Black tape 3. Black Corrugated tube Ø5 L=670±6mm (with slit)			JIG	1. Adaptor jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
7	P1 Spot Taping	 <p>1. Fix the hotmelted wire and terminal pointed tip using both hands.</p>  <p>2. Hold the wires using left hand, get the Black tape using right hand then make 2 windings of tape using both hands. <i>Note: Position of spot taping must be right beside Gray tape.</i></p> 			n/a	1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No wrong use of tape
8	P1 Wire insertion to Black Corrugated tube Ø5 L=670±6mm (w/slit)	   <p>1. Hold the COT adaptor using left hand. Combined the 2 assy parts and put inside the COT adaptor using right hand</p> <p>2. Hold the COT adaptor with wires using left hand, get the Black Corrugated tube (w/slit) Ø5 L=670±6mm using right hand and insert to COT adaptor. Pull the adaptor and push the COT (same timing) using both hands. Make sure all wires are inserted.</p>			<div>ADAPTOR JIG</div> 	1. No wrong use of parts 2. No wires left in between the COT with slit

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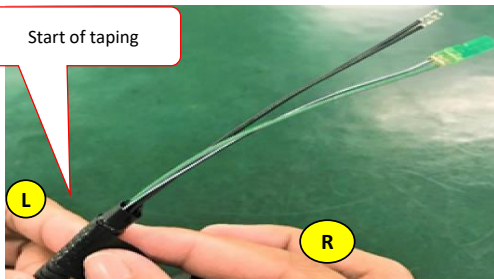
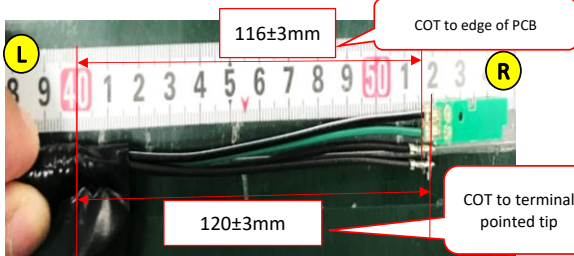

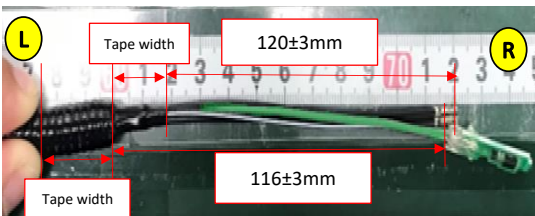

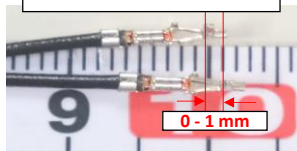
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PARTS:

1. Assy parts
2. Black tape [1pc]

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	P1 Taping 1 Black Corrugated tube to wire near terminal	<p>Start of taping</p>  <p>1. Hold the COT using left hand, get the Black tape using right then start pre-taping at the middle of COT and wires using both hands.</p> <p>116±3mm</p> <p>COT to edge of PCB</p>  <p>120±3mm</p> <p>COT to terminal pointed tip</p> <p>2. Measure from end of COT up to terminal 120±3mm and PCB 116±3mm then continue the taping process using both hands.</p> <p>MEASURING TAPE</p>  <p>3. After taping, check the measurement and taping condition.</p> <p>Tape width</p> <p>120±3mm</p> <p>116±3mm</p> 	<p>MEASURING TAPE</p> 	<p>Important reminder/Note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>Document references:</p> <p>1. Please refer to WI-PRO-ASY-001 for taping procedure.</p> <p>1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No wrong use of tape</p> <p>Wire alignment tolerance</p> 

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PARTS:

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JIG

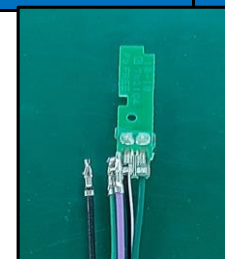
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QUALITY CHECKPOINTS

P1

7M0514-7021



Proper
alignment of
B-B wires
and hotmelt



NO GOOD



GOOD

①

No **WRONG INSERT**

No **Unlocked/halflocked connector**

No **TBO**

②

No **MISSING TAPE**

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