



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

January 06, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number: 178D / 7N0129-7020

Customer:

TRJ

Document No.:

WI-ENG-PDE-339A

Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

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PARTS:

1

1. All parts: Connector 6188-0066 (GR); AVSSf 0.3 wires Y-OR L=384±2mm; Black Corrugated tube ø7 L=214±3mm (no slit); Black Corrugated tube ø7 L=116±3mm (no slit); Connector 6189-0451 (W); MRSW CP TVSSf 0.3 GR-B/W L=822±3mm; Black Corrugated tube ø7 L=517±5mm (no slit); Black tape [1pc.]

JIG:

1. Insertion jig with switch cover
2. Locking jig
3. Terminal cover jig

NO.

PROCESS NAME

1

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

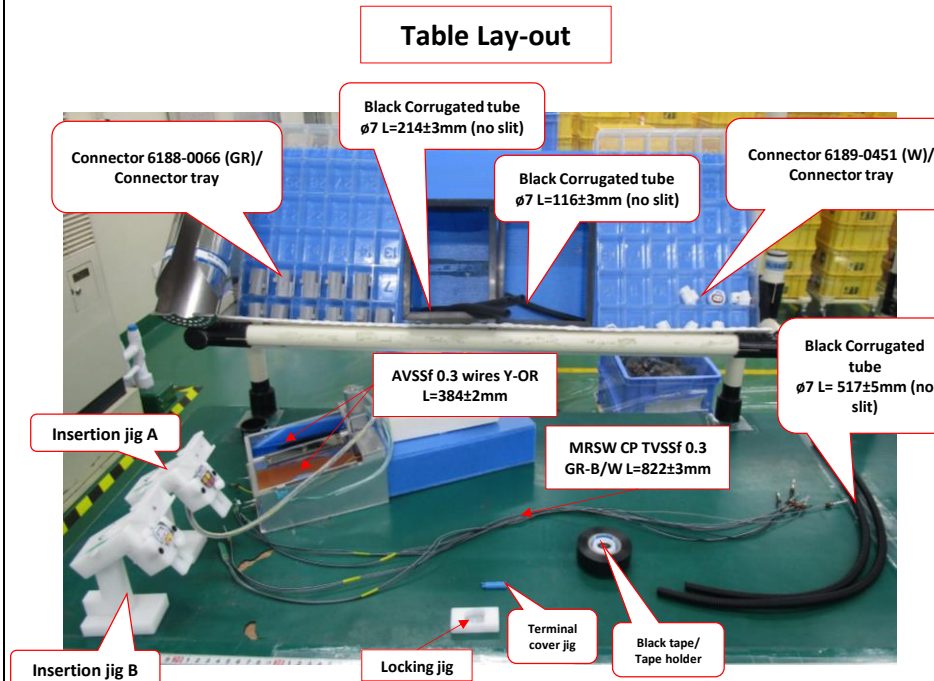
QUALITY POINTERS

1

P1

1 Table Lay-out

Table Lay-out



Safety Instruction

Be sure to wear required 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.

1 Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance

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

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
01/06/22	1	Change from Pre-launch to Masspro. Improve work procedure/illustration and quality pointers; Additional Table Lay-out; checkpoint in checking of wire tolerance (Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance.)	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	M. Catapang	J. Loterte	C. Villanueva	A. Arañes
09/20/21	0	Initial issue	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	M. Catapang	J. Loterte	C. Villanueva	A. Arañes

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PARTS:

1. Connector 6188-0066 (GR)

JIG

1. Insertion jig with switch cover

NO.	PROCESS NAME	1 WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1 Connector setting to insertion jig 6188-0066 (GR)	<div><p>Insertion jig with switch cover</p><p>Orange wire</p><p>Yellow wire</p><p>Visual reference</p><p>I-mark</p><p>Lock</p><p>INSERTION JG ORIENTATION</p><p>CONNECTOR ORIENTATION</p><p>1</p><p>Press</p><p>Release</p><p>Hole</p><p>1. Press the lock using left thumb.</p><p>2. Get the connector 6188-0066 (GR) using right hand and insert to insertion jig. Release the lock after insertion. <i>Note: Follow the connector orientation.</i></p><p>3. Push the lower wire guide upward using left thumb. Slot for Yellow wire 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><p>I-mark is not align</p><p>2 holes are open</p><p>NG</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></div>

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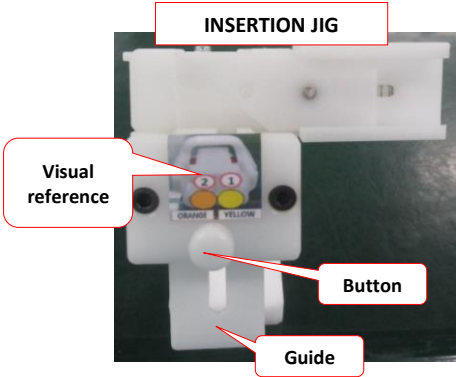
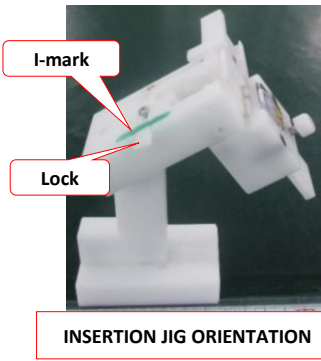

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PARTS:		1. Black Corrugated tube $\phi 7$ L= 214 \pm 3mm (no slit) 2. Black Corrugated tube $\phi 7$ L= 116 \pm 3mm (no slit)	3. Assy parts	JIG	1. Insertion jig
NO.	PROCESS NAME	1 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	Wire insertion to COT (no slit) $\phi 7$ L= 214 \pm 3mm (1ST) $\phi 7$ L= 116 \pm 3mm (2ND)	<div><p>1. Hold the wires using left hand. Get the Corrugated tube (no slit) $\phi 7$ L=214\pm3mm using right hand then insert the Y-OR wires using left hand.</p></div> <div><p>2. Hold the wires using left hand. Get the Corrugated tube (no slit) $\phi 7$ L=116\pm3mm using right hand then insert the Y-OR wires using left hand.</p></div>		n/a	1. No wrong use of parts 2. No deformed terminal
5	P1 Connector setting to insertion jig 6189-0451 (W)	<div><p>Visual reference</p><p>Button</p><p>Guide</p><p>INSERTION JIG</p></div> <div><p>I-mark</p><p>Lock</p><p>INSERTION JIG ORIENTATION</p></div> <div><p>CONNECTOR ORIENTATTON</p></div>		n/a	1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector

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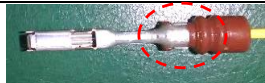
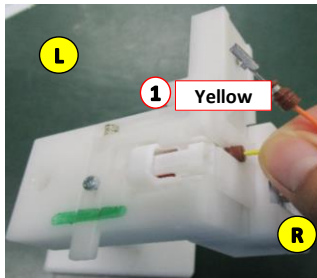
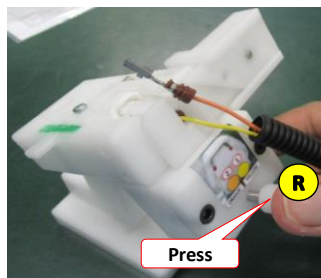
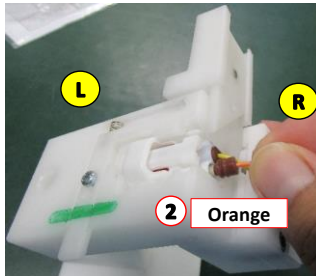
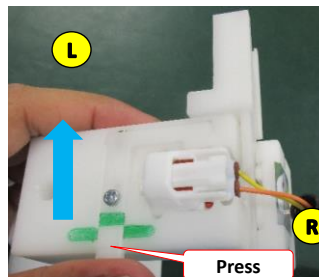
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:	1. Assy parts			JIG	1. Insertion jig
NO.	PROCESS NAME		1 WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	P1	Wire insertion to connector 6189-0451 (W)	<div><div><div>WIRE FACING</div></div><div><div><div>1 Yellow</div></div><div><div>Press</div></div><div><div><div>2 Orange</div></div><div><div>Press</div></div><div><div>1. Hold the insertion jig using left hand. Get the Yellow wire then insert to terminal slot 1 using right hand.</div><div>2. Press the button using right thumb. The slot for Orange wire will be opened.</div><div>3. Get the Orange wire then insert to terminal slot 2 using right hand.</div><div>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.</div></div></div></div></div>	n/a	<div>1</div> <div><div>1. No loose insertion</div><div>2. No wrong insertion</div><div>3. One by one insertion</div><div>4. No deformed terminal</div><div>5. No wrong wire facing</div></div> <div><div>Make sure wires are properly inserted.</div><div>Conduct Pull-Push-Pull-Push after insertion.</div><div>Do not exert extra force.</div></div> <div><div>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div></div>

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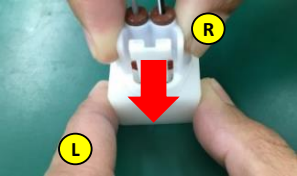



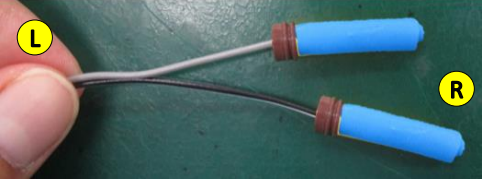
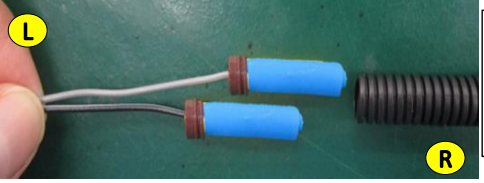


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PARTS:	1. Assy parts 2. MRSW CP TVSSf 0.3 GR-B/W L=822±3mm 3. Black Corrugated tube $\phi 7$ L=517±5mm (no slit)			JIG	1. Locking jig
NO.	PROCESS NAME	<div>1</div> WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
7	Connector lock	<div>1</div>  <p>1. Put the connector into locking jig using right hand then press 2x. Touch the connector lock if properly locked.</p>  <p>Before pressing</p>  <p>After pressing</p>	<p>LOCKING JIG</p> 	<p>NOTE: MANUAL LOCKING MAY CAUSE DAMAGED LOCK.</p> <p>1. Use the provided locking jig per model 2. No unlock/half-locked connector 3. No damaged lock</p>	
8	P1 Wire insertion to Black Corrugated tube (no slit) $\phi 7$ L=517±5mm	 <p>1. Get the terminal cover jig using right hand then insert to both terminals (GR-B/W wires) using right hand.</p>  <p>2. Get the corrugated tube $\phi 7$ L=517±5mm using right hand then insert the GR-B/W wires using left hand.</p>  <p>3. After insertion, remove the cover jig using right hand.</p>	<p>1</p> <p>TERMINAL COVER JIG</p> 	<p><div>1</div>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p> <p>1. No wrong usage of parts 2. No damaged rubber seal</p>	

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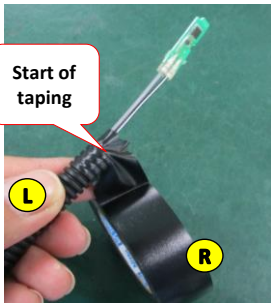
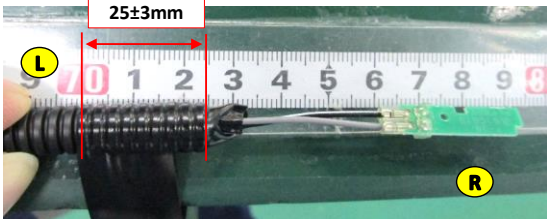
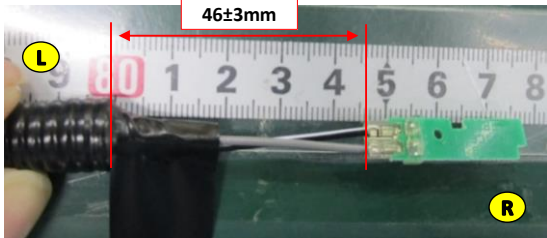
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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.	PROCESS NAME	1 WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	P1 Taping 1 Black corrugated tube to wire near PCB	<div><p>1</p><p>1. Hold the assy parts using left hand, get Black tape then conduct pre-taping using both hands.</p></div> <div><p>2. Confirm measurement of 25±3mm from end of tape up to end of COT then continue the taping process using both hands.</p></div> <div><p>3. Measure from end of COT up to edge of hotmelted wires 46±3mm then continue the taping process using both hands.</p></div>	n/a	<ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong dimension6. No wrong use of tape

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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.

PROCESS NAME

1

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

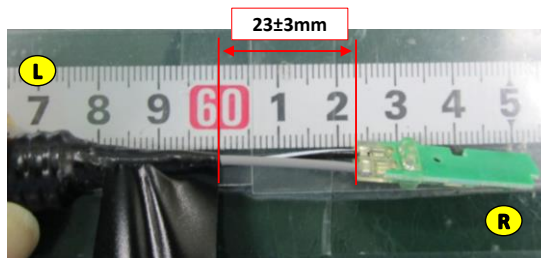
QUALITY POINTERS

10

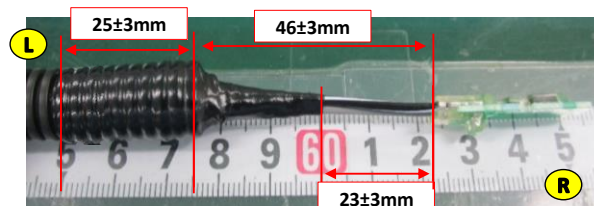
P1

Taping 1
Black corrugated tube to
wire near PCB
(Continuation)

1



4. Confirm measurement of **23±3mm** from end of tape up to edge of PCB then continue the taping process using both hands.



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

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

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