



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:	May 21, 2021		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-180B		
Revision No.:	3	Page No.:	1 of 7

Process Name/Title:

Product Name/Code: **100B / 7M0595-7020B**Customer: **TRJ**

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

PARTS:

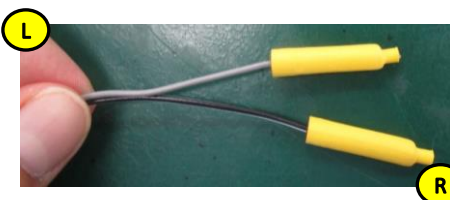
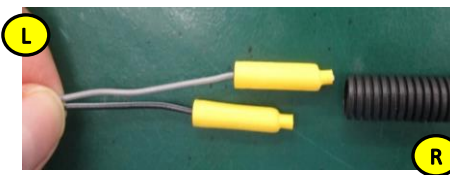


1. Assy parts

2. Black Corrugated tube (no slit) $\phi 7$ L=231 \pm 3mm

JIG:

3

1. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P2 Wire insertion to Black Corrugated tube (no slit) $\phi 7$ L=231 \pm 3mm	 <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= 231\pm3MM 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>Safety Instruction</p> <p>Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping</p> <p>1. Maintain and always practice 5's.</p> <p>2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p>Alert level</p> <p>For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p> <p>TERMINAL COVER JIG</p> 	<p>1. No wrong usage of parts</p> <p>2. No damaged rubber seal</p>

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
05/21/21	3	Revise due to standardize the color of connector in accordance with color standardization of plastic parts (Please refer to GL-COM-003 for Color Standardization for Plastic Parts). Apply some improvements.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes				
10/20/20	2	Transfer process owner from Production (WI-PRO-ASY-120B) to Engineering (WI-ENG-PDE-180B). Apply some improvements/update pictures.	M. Catapang	R. Peñaloza	A. Shimamura	A. Arañes				
05/02/18	0	Previously established as Engineering instruction (EI-ENG-PDE-034). Initial issue	D. Castillo	R. Alcantara	A. Arañes	n/a	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
							Est. Date:	May 02, 2018		

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PARTS:

1. Connector 6188-0407 (W)

JIG

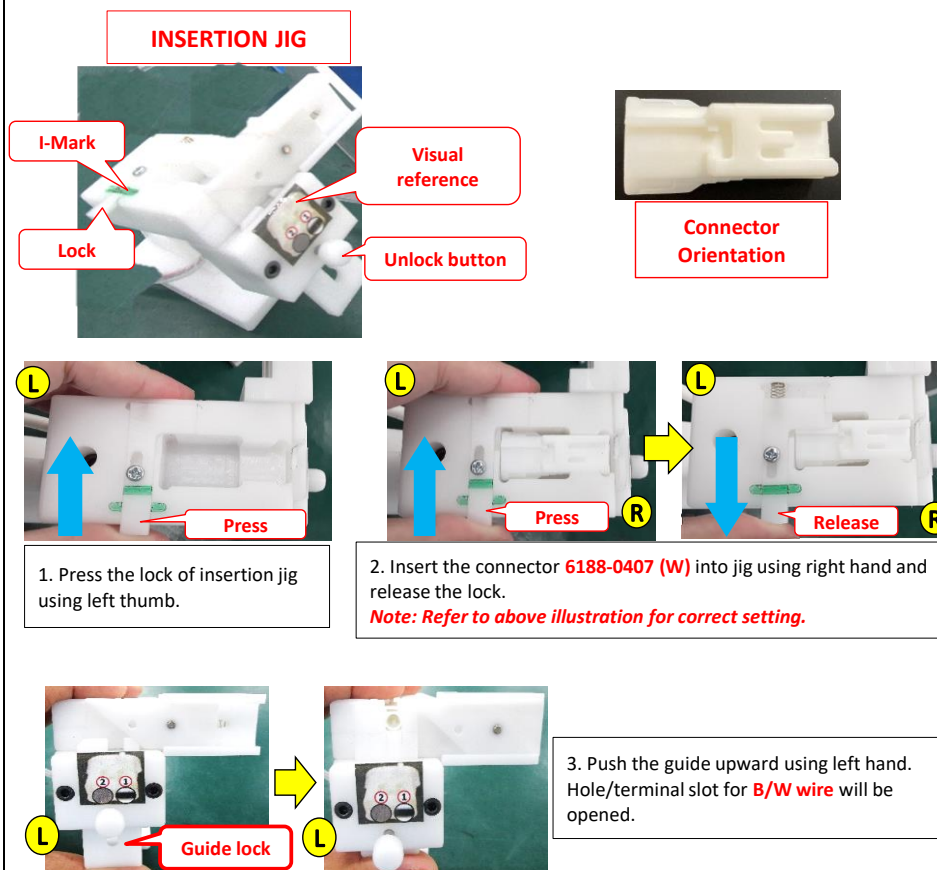
1. Insertion jig

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

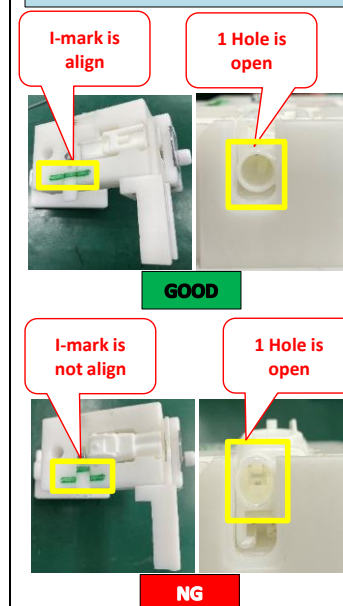
2

P2

Connector setting to
insertion jig
3 6188-0407 (W)



n/a

Connector Orientation Illustration

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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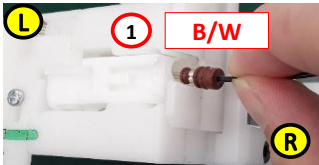

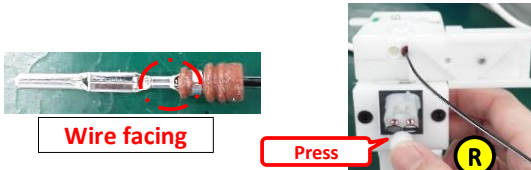

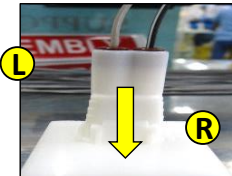
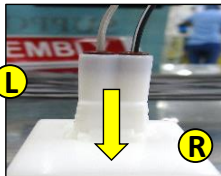
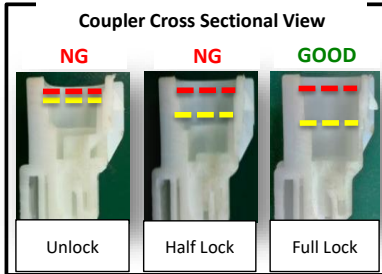

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PARTS:		1. Assy parts			JIG	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
3	P2	<div><div></div><div>1. Get the B/W wire then insert to terminal slot 1 using right hand.</div></div> <div><div></div><div>3. Get the GR wire then insert to terminal slot 2 using right hand.</div></div> <div><div></div><div>2. Push the button after insertion. Hole for GR wire will be opened.</div></div> <div><div></div><div>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.</div></div>			n/a	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.
4		<div><div></div><div>BEFORE PRESSING</div></div> <div><div></div><div>AFTER PRESSING</div></div> <div>Put the connector into locking jig using both hands then press 2x using both hands. Check if properly lock.</div> <div><div></div><div>Coupler Cross Sectional View</div><div>NG NG GOOD</div><div>Unlock Half Lock Full Lock</div></div>			<div>LOCKING JIG</div> 	Note: MANUAL LOCKING MAY CAUSED DAMAGED LOCK. 1. Use the provided locking jig 2. No unlock/half-locked connector

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☐ PRE-LAUNCH

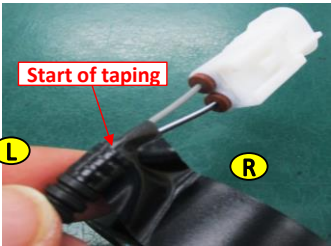
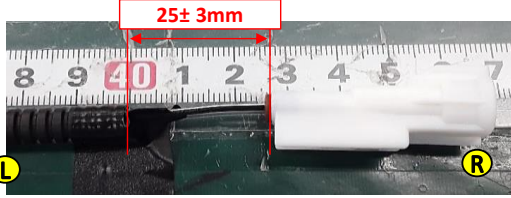
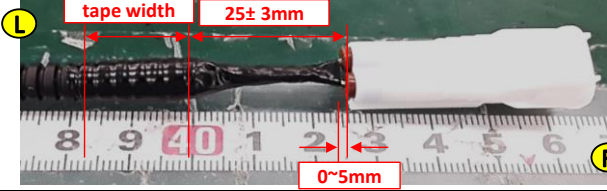

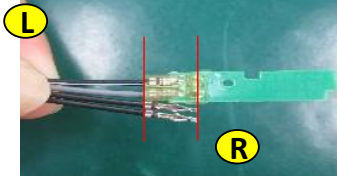
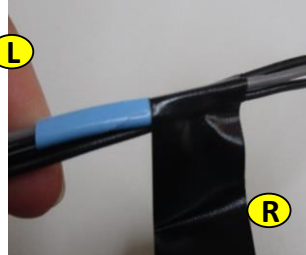
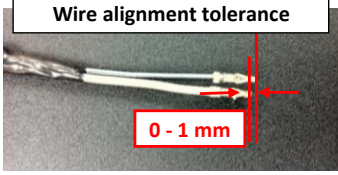
☒ MASSPRO

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PARTS:		JIG		
1. Assy parts 2. Black tape		n/a		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	Taping 1 Black corrugated tube to wire near connector	 <p>1. Hold the corrugated tube using left hand, get the black tape then start pre-taping at the middle of COT and wires using both hands.</p>  <p>2. Measure from end of corrugated tube up to end of connector 25mm then continue the taping process using both hands. <i>Note: Refer to WI-PRO-ASY-001 for taping procedure</i></p>  <p>3. After taping, check the measurement and taping condition.</p>	 <p>MEASURING TAPE</p>	<p><i>Note:</i> Please use calibrated/verified measuring tape when getting the measurement.</p> <ol style="list-style-type: none"> No flip out tape No tape peeling No loose tape No wrong use of tape No wrong dimension
6	Spot taping	 <p>1. Align the terminal pointed tip of hotmelted wires to B/B wires.</p>  <p>2. Hold wires using left hand and begin taping using right hand. Tape location must be beside the GR-B/W wire tape (Sky blue tape). Make 2 winds then cut the tape.</p>	n/a	<p>Wire alignment tolerance</p>  <p>0 - 1 mm</p> <ol style="list-style-type: none"> No flip out tape No tape peeling No loose tape No wrong use of tape

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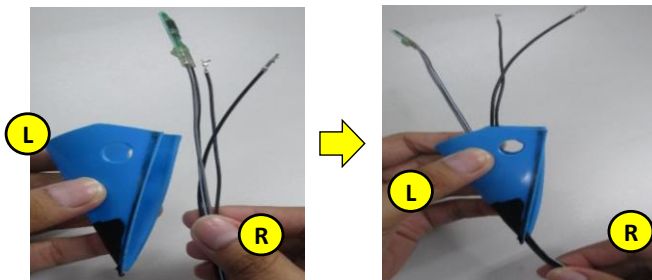
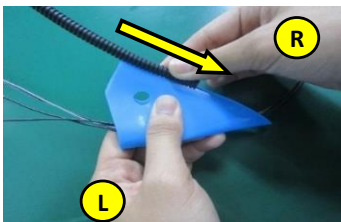

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5 of 7**PARTS:**

1. Assy parts
2. Black corrugated tube (w/slit) $\phi 5$ L=226 \pm 3mm

JIG**n/a**

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P2 Wire insertion to Black Corrugated tube (w/slit) $\phi 5$ L=226 \pm 3mm	 <div>1. Hold the COT adaptor using left hand and insert the wires using right hand.</div>  <div>2. Hold the COT using left hand and COT adaptor using right hand. Push the adaptor and pull the COT in same timing. Make sure all wires are inserted.</div>	<div>COT Adaptor</div> 	<ol style="list-style-type: none">1. No wrong use of parts2. No wires left in between the COT with slit

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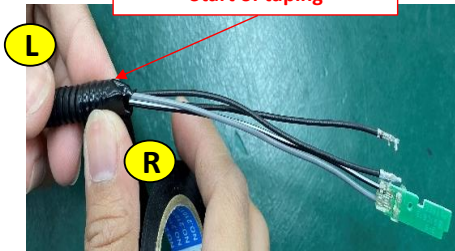

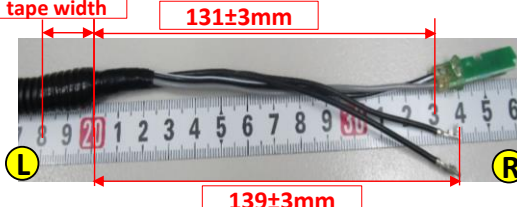

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6 of 7**PARTS:**

1. Assy parts
2. Black tape

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
8	P2 Taping 2 Black corrugated tube (with slit) to wire near terminal and hotmelted wire	<p>Start of taping</p>  <p>1. Hold the corrugated tube using left hand and conduct pre-taping between COT and wires using right hand.</p> <p>131±3mm</p>  <p>2. Measure from COT up to the hotmelted wire 131mm and continue the taping process. <i>Note: Please refer to WI-PRO-ASY-001 for taping procedure.</i></p> <p>tape width</p>  <p>3. After taping, check the measurement and taping condition.</p>	<p>MEASURING TAPE</p> 	<p><i>Note:</i> Please use calibrated/verified measuring tape when getting the measurement.</p> <ol style="list-style-type: none">1. No flip out tape2. No tape peeling3. No loose tape4. No wrong use of tape5. No wrong dimension

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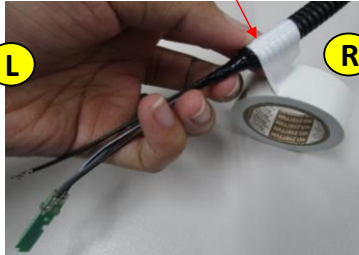
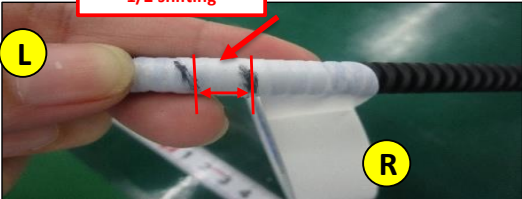
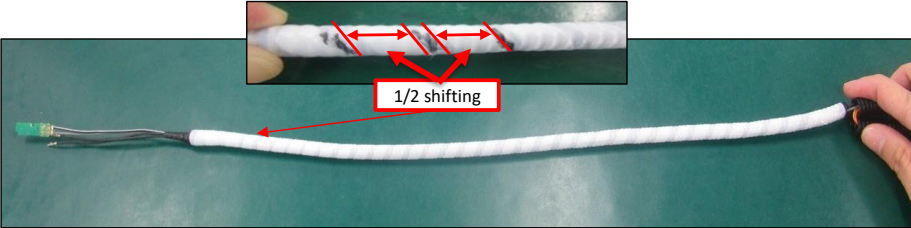
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PARTS:		1. Assy parts 2. Black tape	JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	P2 Half-wrap taping	<div><div>Start of taping</div><div>1. Hold the corrugated tube using left hand and begin taping using right hand.</div><div>1/2 shifting</div><div>2. Make 1/2 shifting. Repeat the process until the end of corrugated tube. Make 3 winds and then cut the tape.</div><div>3. Check the taping condition.</div></div>	n/a	<div>3</div> <div>NOTE: USE WHITE TAPE FOR EASY VISUALIZATION OF SHIFTING LINES, BUT ACTUAL SHOULD BE <u>BLACK TAPE</u>.</div> <div>1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No wrong use of tape 5. No exposed COT</div>

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