



WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:	August 2, 2021		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-311A		
Revision No.:	2	Page No.:	1 of 10

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

Product Name/Code: **100B / 7M0592-7020B** Customer: **TRJ**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:		1. Connector 6189-0451 (W)		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
1	P1	<p>Connector setting to insertion jig 6189-0451 (W)</p> <p>INSERTION JIG WITH SWITCH COVER</p> <p>Insertion jig, Y-wire, Switch cover, I-Mark, Lock, OR-wire, Wire guide, Holes, Wire guide, Button</p> <p>INSERTION JIG ORIENTATION</p> <p>1. Press the lock of insertion jig using left thumb.</p> <p>2. Insert the connector 6189-0451 (W) into jig using right hand then release the lock using left thumb. <i>Note: Follow the connector orientation.</i></p> <p>3. Push the guide using right thumb. The slot for Yellow wire will be opened.</p> <p>CONNECTOR ORIENTATION</p> <p>Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p> <p>CONNECTOR ORIENTATION ILLUSTRATION</p> <p>I-mark is align, 1 hole is open (GOOD)</p> <p>I-mark is NOT align, 1 hole is open (NG)</p> <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>			

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
08/02/21	2	Transfer process owner from Production (WI-PRO-ASY-116A) to Engineering (WI-ENG-PDE-311A). Change connector color in accordance with color standardization for plastic parts (Refer to GL-COM-003). Apply some improvements and update picture/illustration in all process.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes				
07/18/19	1	Include insertion jig	J. Silang	W. Carbillon	O. Merin					
04/10/18	n/a	Previously established as Engineering instruction (EI-ENG-PDE-027). Initial issue	S. Manalo	R. Alcantara	A. Arañes	n/a	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes

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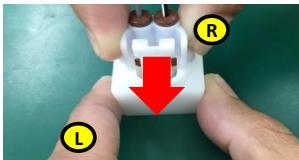








PARTS:

2

1. Assy parts
2. Black corrugated tube (no slit) $\varnothing 7$ L=32 \pm 3mm
3. Black corrugated tube (no slit) $\varnothing 7$ L=125 \pm 3mm

JIG

1. Locking jig
2. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Connector lock	 <div>1. Put the connector into locking jig using right hand then press 2x. Touch the connector lock if properly locked.</div>  	<div>LOCKING JIG</div> 	<div>NOTE: MANUAL LOCKING MAY CAUSE DAMAGED LOCK.</div> <ol style="list-style-type: none">1. Use the provided locking jig per model2. No unlock/half-lock connector
4	P1 Wire insertion to Black corrugated tube (no slit) $\varnothing 7$ L=32 \pm 3mm $\varnothing 7$ L=125 \pm 3mm	 <div>1. Get the cover jig then insert to Y-OR wires using right hand.</div>  <div>2. Get the corrugated tube (no slit) $\varnothing 7$ L=32\pm3mm using right hand then insert the Y-OR wires using left hand.</div>  <div>2. Get the corrugated tube (no slit) $\varnothing 7$ L=125\pm3mm using right hand then insert the Y-OR wires using left hand.</div>  <div>3. After insertion, remove the cover jig using right hand.</div>	<div>TERMINAL COVER JIG</div> 	<ol style="list-style-type: none">1. No wrong usage of parts2. No damaged rubber seal

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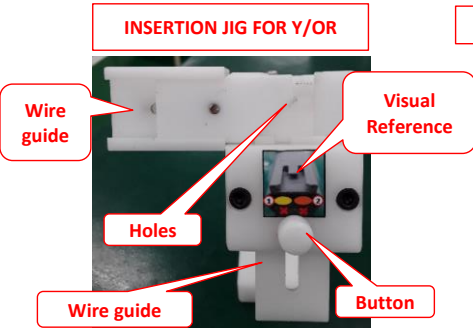
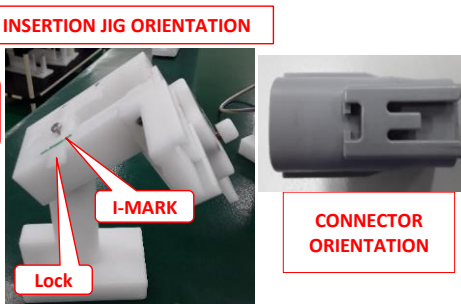

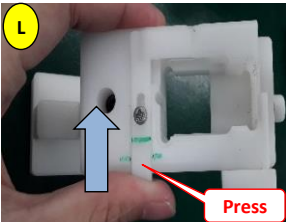
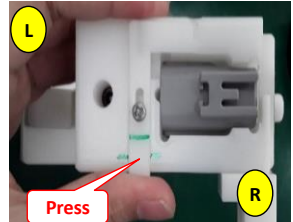
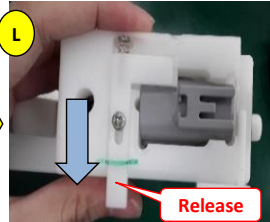


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PARTS:

1. Connector 6188-0066 (GR)

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	P1 Connector setting to insertion jig 6188-0066 (GR)	<div><p>INSERTION JIG FOR Y/OR</p><p>INSERTION JIG ORIENTATION</p><p>CONNECTOR ORIENTATION</p></div> <div><p>Connector setting to insertion jig 6188-0066 (GR)</p><p>Press</p><p>Press</p><p>Release</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. Push the guide using right thumb. The slot for Y wire will be opened.</p></div>	n/a	<div><p>Connector Orientation Illustration</p><p>GOOD</p><p>NG</p><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></div>

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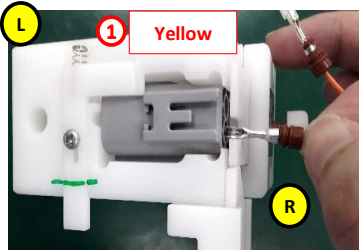
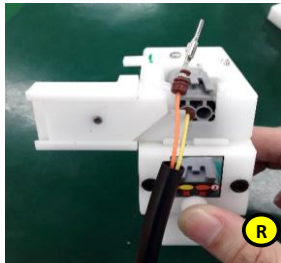
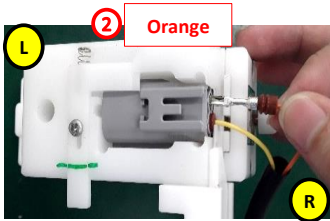
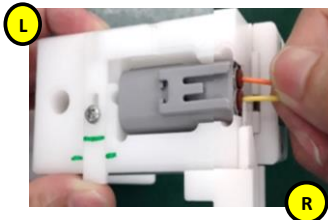
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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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 6188-0066 (GR)	<div><p>WIRE FACING</p></div> <div><p>1. Hold the insertion jig using left hand. Get the assy parts, insert the Yellow wire to connector slot 1 using right hand.</p></div> <div><p>2. Press the button using right thumb, slot for Orange wire will be opened.</p></div> <div><p>3. Get Orange wire then insert to connector slot 2 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	<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>Note: Please hold the wire near terminal during insertion.</p> <p>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p>	

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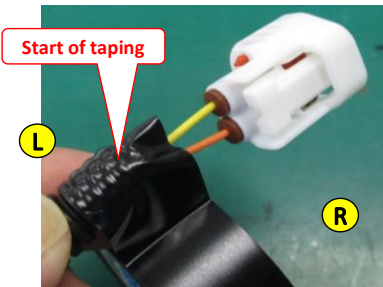
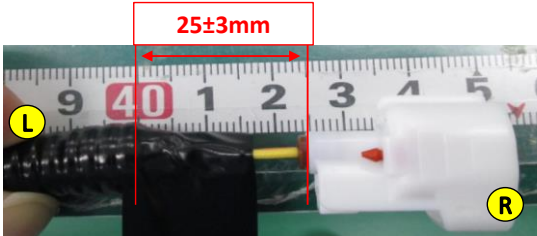
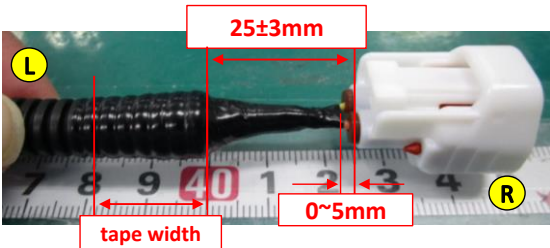

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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P1 Taping 1 Black corrugated tube (no slit) to wire near connector	<p>1. Hold the corrugated tube using left hand then start taping using right hand.</p>  <p>2. Measure from end of the corrugated tube up to connector 25±3mm 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>Note: Please use calibrated/verified measuring tape when getting the measurement.</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>

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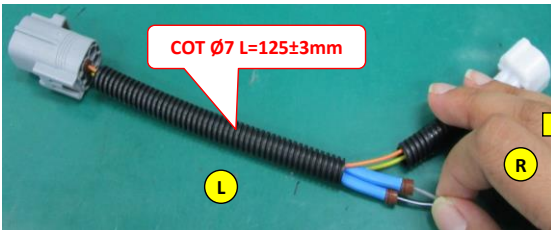


PARTS:

2

1. MRSW CP 7M0365-K050 GR-B/W wires L=830±3mm
2. Assy parts

JIG

1. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
8	<div>2</div> <div>Wire insertion to Black corrugated tube (no slit) Ø7 L=111±3mm</div>	<div></div> <div><ol style="list-style-type: none">1. Get the cover jig then insert to GR-B/W wires using right hand.2. Get the corrugated tube (no slit) Ø7 L=111±3mm using right hand then insert the GR-B/W wires using left hand.</div>		
9	<div>P1</div> <div>2</div> <div>Wire insertion to assy parts</div>	<div></div> <div><p>COT Ø7 L=125±3mm</p><ol style="list-style-type: none">1. Hold the corrugated tube (no slit) Ø7 L=125±3mm using left hand then insert GR-B/W wires using right hand.2. After insertion, remove the cover jig using right hand.</div> <div></div>	<div>TERMINAL COVER JIG</div> <div></div>	<ol style="list-style-type: none">1. No wrong usage of parts2. No damaged rubber seal

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PARTS:

1. Assy parts

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

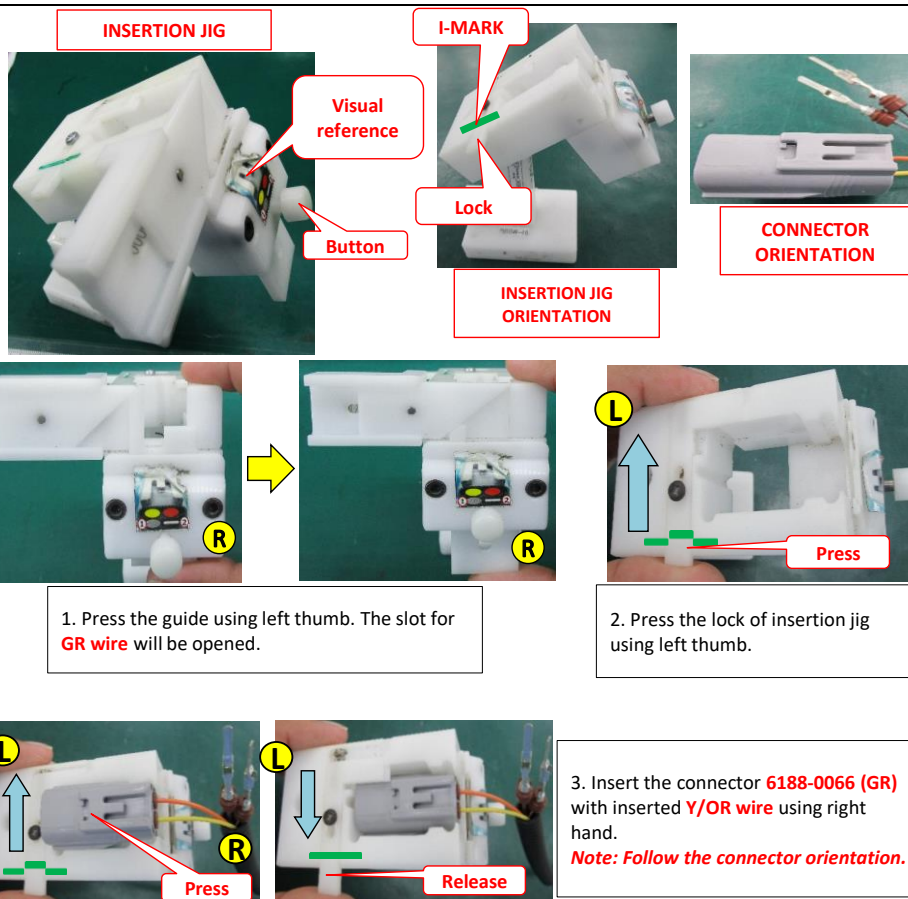
QUALITY POINTERS

10

P1

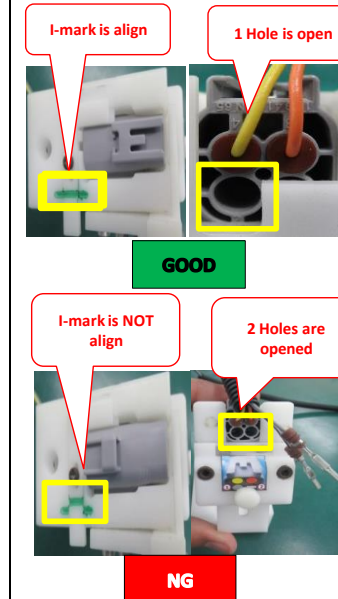
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Connector setting to
insertion jig
6188-0066 (GR)
(Assy parts)



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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PARTS:		1. Assy parts		JIG	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
11	<div><div>2</div><div>Wire insertion to connector 6188-0066 (GR) (Assy parts)</div></div> <div>P1</div>	<div><div><div><div>1</div><div>Gray</div></div><div>2</div><div>B/W</div></div><div>1 Hold the GR wire then insert to terminal slot 1 using right hand.</div><div>2. Press the button using right thumb. The slot for B/W wire will be opened.</div><div>3. Hold the B/W wire then insert to terminal slot 2 using right hand.</div><div>4. After insertion, push the lock using left thumb then hold the wires and gently pull out the connector from jig using right hand.</div></div>	n/a	<div><div>2</div><div>Note: Please hold the wire near terminal during insertion.</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>2</div><div>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div></div>	
12	<div><div>2</div><div>Connector Lock</div></div>	<div><div><div><div><div>Before pressing</div><div>After pressing</div></div><div>Coupler Cross Sectional View</div><div><div>NG</div><div>NG</div><div>GOOD</div></div><div><div>Unlock</div><div>Half Lock Condition</div><div>Full Lock Condition</div></div></div><div>1. Put the connector into locking jig using both hands and then press 2x. Check the connector if properly locked.</div></div></div>	<div><div>LOCKING JIG</div><div></div></div>	<div><div>NOTE: MANUAL LOCKING MAY CAUSED DAMAGED LOCK</div><div>1. Use the provided locking jig per model 2. No unlock/half-locked connector</div></div>	

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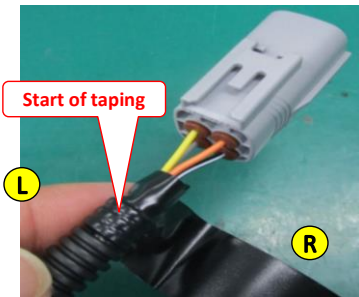
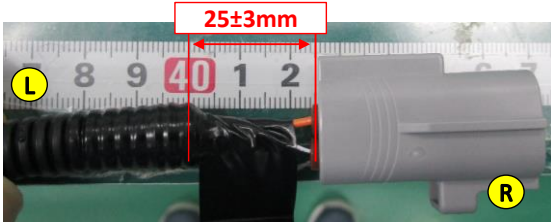
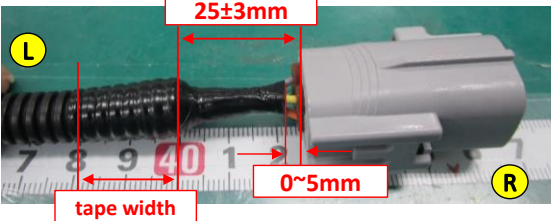

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PARTS:		1. Assy parts 2. Black tape	JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
13	P1 Taping 2 Black corrugated tube (no slit) to wire near connector	<div><p>Start of taping</p><p>1. Hold the corrugated tube using left hand then start taping using right hand.</p></div> <div><p>25±3mm</p><p>2. Measure from end of the corrugated tube up to connector 25±3mm then continue the taping process using both hands. <i>Note: Refer to WI-PRO-ASY-001 for taping procedure</i></p></div> <div><p>25±3mm</p><p>0~5mm</p><p>tape width</p><p>3. After taping, check the measurement and taping condition.</p></div>	<div><p>MEASURING TAPE</p></div>	<div><p>2</p><p><i>Note:</i> Please use calibrated/verified measuring tape when getting the measurement.</p></div> <div><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></div>

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