



WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:	August 19, 2021		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-164A		
Revision No.:	4	Page No.:	1 of 8

Process Name/Title:	TAPING ASSEMBLY PROCESS		
Product Name/Code:	310B / 7M0521-7020A	Customer:	TRJ
Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS:		1. Connector 6188-0066 (GR) 2. AVSSf 0.3 Y/OR wire L=396±2mm		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
1	P1 Connector setting to insertion jig 6188-0066 (GR)	<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 and release the lock. Note: Follow the connector orientation</p> <p>3. Push the guide using left hand. The slot for Y wire will be opened.</p>		<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>Connector Orientation Illustration</div> <div>GOOD I-mark is align 1 hole is open</div> <div>NG I-mark is not align 2 holes are open</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>

Revision History

Eff. Date	Rev. No	Details of Change	Prepared by	Reviewed by	Approved by	Noted by
08/19/21	4	Apply notes in quality pointers. Improve and change the illustration in insertion and taping process.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
04/20/21	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). Removal of GOOD and NG illustration of cover jig. Apply some improvements.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
07/02/18	n/a	Initially established as Engineering instruction (EI-ENG-PDE-043) . Initial issue.	S. Manalo	R. Alcantara	A. Arañes	n/a
Details of Change			Revised	Checked	Approved	Noted
			Est. Date:	July 02, 2018		

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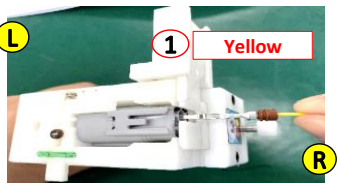

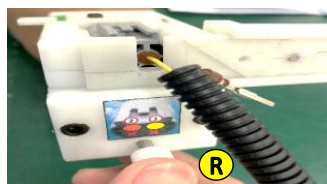
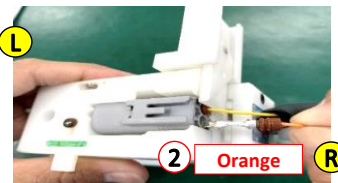




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PARTS:		1. Black Corrugated tube (no slit) $\phi 7$ L= 45 \pm 3mm 2. Black Corrugated tube (no slit) $\phi 7$ L= 295 \pm 3mm			JIG	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	P1 Wire insertion to connector 6188-0066 (GR)	   <p>1. Get the Y wire then insert to terminal slot 1 using right hand.</p> <p>2. Press the button using right thumb. Slot for OR wire will be opened.</p>   <p>3. Get the OR wire then insert to terminal slot 2 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>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: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p>
3	Wire insertion to Black Corrugated tube (no slit) $\phi 7$ L= 45 \pm 3mm $\phi 7$ L= 295 \pm 3mm	  <p>1. Get the corrugated tube (no slit) $\phi 7$ L= 45\pm3mm using right hand then insert the yellow wire and orange wire by using left hand.</p> <p>2. Get the corrugated tube (no slit) $\phi 7$ L= 295\pm3mm using right hand then insert the yellow wire and orange wire by using left hand.</p> 			n/a	<p>1. No wrong usage of parts 2. No damaged rubber seal 3. No damaged terminal</p>

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PARTS:		1. Connector 6189-1161 (B)		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1	<p>Connector setting to insertion jig 6189-1161 (B)</p> <p>INSERTION JIG</p> <p>I-MARK</p> <p>Lock</p> <p>Visual reference</p> <p>INSERTION JIG ORIENTATION</p> <p>CONNECTOR ORIENTATION</p> <p>Press</p> <p>1. Press the insertion jig lock using left thumb.</p> <p>Release</p> <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> <p>Guide</p> <p>3. Press the guide using left thumb. The slot for Y wire will be opened.</p>		n/a	<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>1 hole is open</p> <p>NG</p> <p>1. Use the provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector</p>

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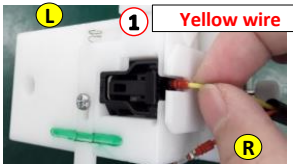


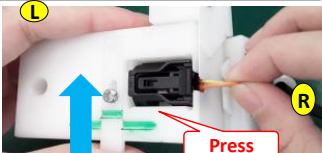





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PARTS:		1. Assy parts		JIG	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1	<div>4</div> <div>Wire insertion to connector 6189-1161 (B)</div> <div><p>WIRE FACING</p><p>1. Hold the insertion jig using left hand. Get the Y wire and insert to connector using right hand.</p><p>2. Press the button using right thumb. slot for OR wire will be open.</p><p>3. Get the OR wire and insert to connector 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></div>		n/a	<div>4</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>Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> <div>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>
6		<div>Connector Lock</div> <div><p>1. Put the connector into locking jig using right hand then press 2x using both hands. Check the connector if properly locked.</p><p>BEFORE PRESSING</p><p>AFTER PRESSING</p><p>NG NG GOOD</p><p>Unlock Condition Half Lock Condition Full Lock Condition</p></div>		<div>LOCKING JIG</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>

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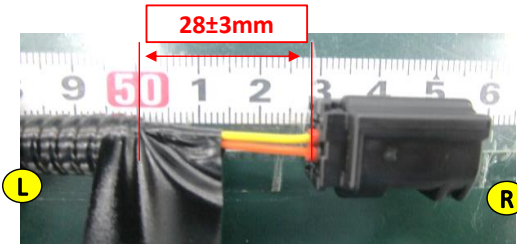
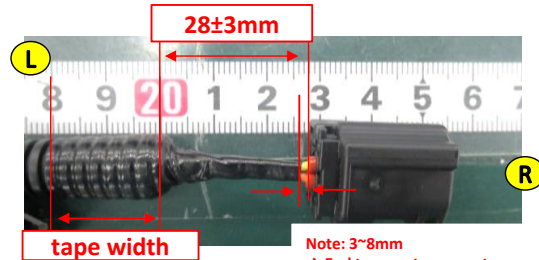

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PARTS:		1. Assy parts 2. Black tape	JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P1 Taping 1 Black Corrugated tube to wire near connector	<div><p>1. Hold the corrugated tube using left hand, make 2 windings of pre-taping at the middle of COT and wire using right hand.</p></div> <div><p>2. Measure from end of the corrugated tube up to connector 28±3mm then continue the taping process. <i>Note: Refer to WI-PRO-ASY-001 for taping procedure.</i></p></div> <div><p>3. After taping, check the measurement and tape condition.</p><p><i>Note: 3~8mm → End tape up to connector (includes rubber seal)</i></p></div>	<div><p>MEASURING TAPE</p></div>	<p><i>Note:</i> <i>Please use calibrated/verified measuring tape when getting the measurement.</i></p> <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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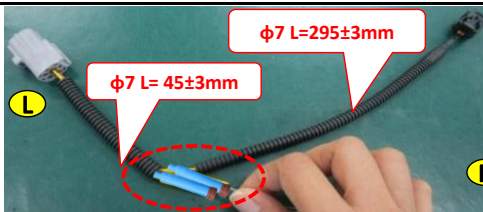


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PARTS:		1. Black Corrugated tube (no slit) $\phi 7$ L=460 \pm 4mm 2. MRSW CP 7M0521-7040 TVSSf 0.3 GR-B/W wires L=658 \pm 3mm 3. Assy parts	JIG	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
8	Wire insertion to Black Corrugated tube (no slit) $\phi 7$ L=460 \pm 4mm	  1. Get the terminal cover jig using right hand then insert to both terminals (GR-B/W wires) using right hand. 2. Get the corrugated tube $\phi 7$, L=460 \pm 4mm using right hand then insert the GR-B/W wires using left hand.		
9	Wire insertion to Assy parts	  1. Hold the COT $\phi 7$ L=45 \pm 3mm using left hand then insert the GR-B/W wires using right hand. 2. After insertion, remove the cover jig using right hand.	TERMINAL COVER JIG 	1. No wrong usage of parts 2. No damaged rubber seal 3. No exposed rubber seal during insertion

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PARTS:		1. Assy parts		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
10	P1 Connector setting to insertion jig (Assy parts) 6188-0066 (GR)	<p>4</p> <p>INSERTION JIG</p> <p>I-MARK</p> <p>Lock</p> <p>Visual reference</p> <p>Unlock button</p> <p>Guide lock</p> <p>CONNECTOR ORIENTATION</p> <p>Connector setting to insertion jig (Assy parts) 6188-0066 (GR)</p> <p>1. Push the guide lock using left thumb. The holes for GR wire will be opened.</p> <p>2. Press the lock of insertion jig using left thumb.</p> <p>3. Insert the connector 6188-0066 (GR) into jig using right hand and release the lock.</p> <p>Note: Follow the connector orientation</p>		n/a	<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 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</p>

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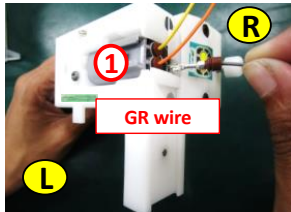

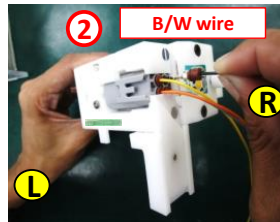
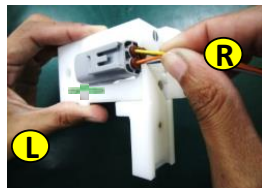
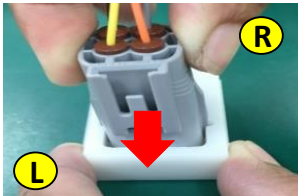





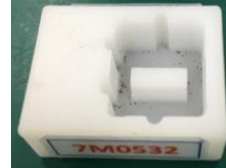






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PARTS:		1. Assy parts		JIG	1. Insertion jig 2. Locking jig						
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS						
11	P1	<div><div><p>1. Hold the GR wire then insert to terminal slot ① using right hand.</p></div><div><p>2. After insertion of GR wire press the button using right thumb. The slot for B/W wire will be opened.</p></div><div><p>3. Hold the B/W wire then insert to terminal 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></div> <div>n/a</div> <td><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>Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div><div>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div></td>		<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>Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> <div>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>							
		12	Connector Lock	<div><div><p>1. Put the connector into locking jig then press 2x using right hand. Check if properly locked.</p></div><div><p>Before pressing</p></div><div><p>After pressing</p></div><div><p>Connector Cross Sectional View</p><table><tr><td>NG</td><td>NG</td><td>GOOD</td></tr><tr><td></td><td></td><td></td></tr><tr><td>Unlock Condition</td><td>Half Lock Condition</td><td>Full Lock Condition</td></tr></table></div><div><p>LOCKING JIG</p></div></div> <div>NOTE: MANUAL LOCKING MAY CAUSE DAMAGED LOCK.</div> <div>1. Use the provided jig per model 2. No half-lock/unlock connector</div>	NG	NG	GOOD				Unlock Condition
NG	NG	GOOD									
											
Unlock Condition	Half Lock Condition	Full Lock Condition									

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