



WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:	August 12, 2021		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-317A		
Revision No.:	1	Page No.:	1 of 8

Process Name/Title:

Product Name/Code: D01L / 7M0649-7020B

Customer: TRJ

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

PARTS:

1

1. Connector 4G5400-000 (W)
2. AVSSf 0.3 Y-OR wires L=153mm

JIG:

1. Insertion jig with switch cover

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P1 Connector setting to insertion jig 4G5400-000 (W)	<p>INSERTION JIG WITH SWITCH COVER</p> <p>Insertion jig, Y-wire, OR-wire, I-MARK, Button, Holes</p> <p>CONNECTOR ORIENTATION</p> <p>INSERTION JIG ORIENTATION</p> <p>1. Press the lock of insertion jig using left thumb.</p> <p>2. Insert the connector 4G5400-000 (W) using right hand then release the lock using left thumb. <i>Note: Follow the connector orientation.</i></p> <p>3. Push the guide using left thumb the slot for Yellow wire will be opened.</p> <p>Wire guide, Hole</p>	<p>Safety Instruction</p> <p>Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping</p> <ol style="list-style-type: none">1. Maintain and always practice 5's.2. Personal things on the workplace is prohibited. Keep it in your locker. <p>Alert level</p> <p>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</p> <p>GOOD</p> <p>I-mark is NOT align, 1 hole is open</p> <p>NG</p> <ol style="list-style-type: none">1. Use the provided jig per model2. No wrong orientation of connector3. No wrong use of connector4. No damaged connector

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
08/12/21	1	Transfer process owner from Production (WI-PRO-ASY-177A) to Engineering (WI-ENG-PDE-317A). Change connector color in accordance with color standardization for plastic parts (Refer to GL-COM-003). Update and improve process illustration and description.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
12/06/19	0	Previously established as production work instruction (WI-PRO-ASY-177A). Initial issue	J. Silang	A. Morcoso/ W. Carillano	O. Merin	n/a	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes

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Revision No.:

1

Page No.:

2 of 8

PARTS:		1. Assy parts 2. Black vinyl tube $\varnothing 7$ L=111 \pm 3mm	JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Wire insertion to connector 4G5400-000□ (W) P1	<div>1. Hold the insertion jig using left hand, get Yellow wire then insert to terminal slot 1 using right hand.</div> <div>2. Press the button using right thumb, 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 then hold the wires and gently pull out the connector from jig using right hand.</div>	n/a	<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>
3	Wire insertion to Black vinyl tube $\varnothing 7$ L=111 \pm 3mm	<div>2. Hold the assy parts using left hand, get the vinyl tube $\varnothing 7$ L=111\pm3mm using right hand then insert the wires using left hand.</div>		1. No wrong use of parts

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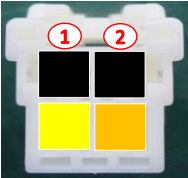

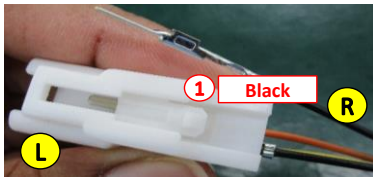

3 of 8

PARTS:

1. Assy parts
2. AVSSf 0.3 B/B wire L=850mm [2pcs.]

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	<div>1</div> <div>Wire insertion to Assy part</div>	<div>Vinyl tube $\varnothing 7$ L=111\pm3mm</div> <div></div> <div>1. Hold the assy part using left hand then insert the B/B wires using right hand.</div>		<div>1. No wrong usage of parts</div> <div>2. No deformed terminal</div> <div>3. No wrong insertion of parts</div>
5	<div>P1</div> <div>1</div> <div>Wire insertion to connector 4G5400-000□ (W)</div>	<div></div> <div>CONNECTOR ORIENTATION</div> <div></div> <div>VISUAL REFERENCE</div> <div></div> <div>WIRE FACING</div> <div></div> <div>1 Black</div> <div></div> <div>2 Black</div> <div>1. Hold the connector using left hand, get the 1st Black wire then insert to terminal slot 1 using right hand. Note: Insertion of wire must be from left to right.</div> <div>2. Hold the 2nd Black wire then insert to terminal slot 2 using right hand.</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>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>

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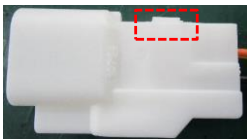


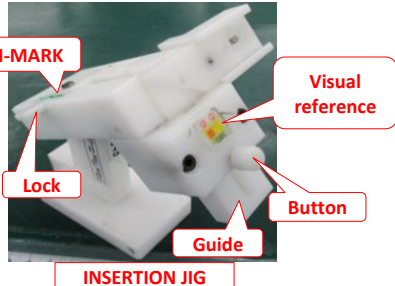

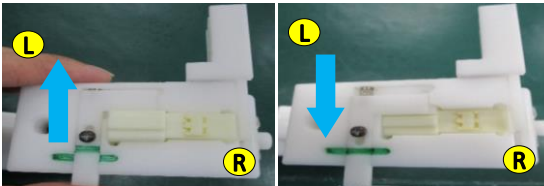

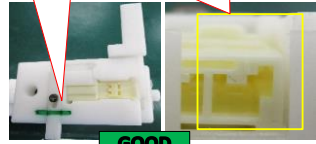
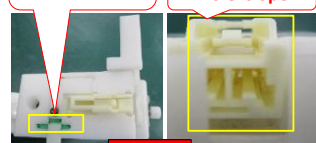
4 of 8

PARTS:

1. Assy parts
2. Connector 7282-1027 (W)

JIG

1. Locking jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	Connector lock	 1. Put the connector into locking jig using both hands then press 2x . Touch the connector lock if properly lock.  BEFORE PRESSING  AFTER PRESSING	LOCKING JIG 	NOTE: MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR <ol style="list-style-type: none">1. Use provided jig tool per model to avoid damaged lock.2. No unlock/half-locked connector
7	Connector setting to insertion jig 7282-1027 (W)	  1. Press the lock of insertion jig using left thumb.  2. Insert the connector 7282-1027 (W) using right hand then release the lock using left thumb. Note: Follow the connector orientation.  CONNECTOR ORIENTATION	n/a	Connector Orientation Illustration  GOOD  NG <ol style="list-style-type: none">1. Use the provided jig per model2. No wrong orientation of connector3. No wrong use of connector4. No damaged connector

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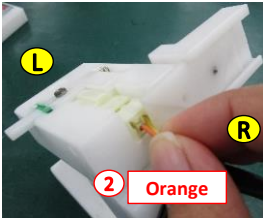
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Revision No.:

1

Page No.:

5 of 8

PARTS:		1. Assy parts			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
7	Connector setting to insertion jig 7282-1027 (W) (Continuation)	 <p>3. Push the guide using right thumb the slot for Yellow wire will be opened.</p>			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
8	Wire insertion to connector 7282-1027 (W)	 <p>1. Hold the insertion jig using left hand, get Yellow wire then insert to terminal slot 1 using right hand.</p>  <p>3. Hold the insertion jig using left hand, get Orange wire then insert to terminal slot 2 using right hand.</p> <p>2. Press the button using right thumb, slot for Orange wire will be opened.</p> <p>4. After insertion, push the lock using left thumb then hold the wires and gently pull out the connector from jig using right hand.</p>			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. Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.

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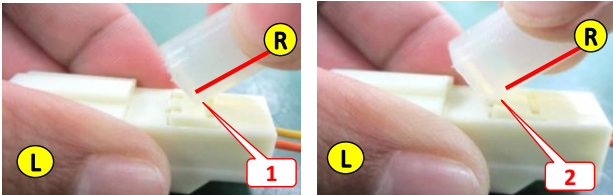

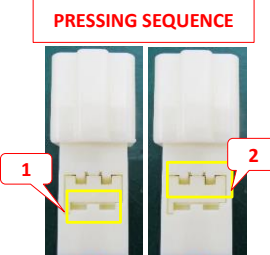

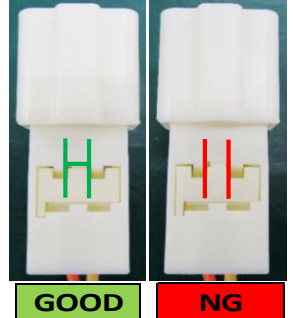

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Revision No.:

1

Page No.:

6 of 8

PARTS:		1. Assy parts 2. Black vinyl tube $\phi 5$ L=650 \pm 6mm	JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	Connector Lock	<div><p>PRESSING SEQUENCE</p><p>BEFORE PRESSING AFTER PRESSING</p></div> <p>1. Place the connector on the table while holding using left hand. Get the glue stick using right hand and start the sequential locking based on above illustration. Push the lower part of the connector lock first and then push the upper part <i>Note: Position of pushing jig during locking must be slanted.</i></p>		<p>1. No wrong usage of parts 2. No deformed terminal</p> 
10	Wire insertion to Black vinyl tube $\phi 5$ L=650 \pm 6mm	<div><p>1. Get the vinyl tube $\phi 5$ L=650\pm6mm using right hand then insert B/B wires using left hand.</p></div>	n/a	<p>1. No wrong use of parts 2. No deformed terminal</p>

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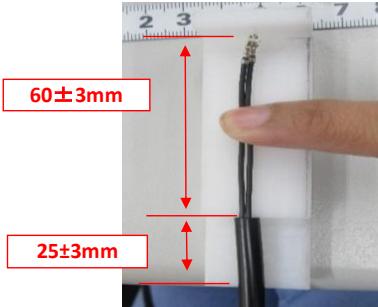
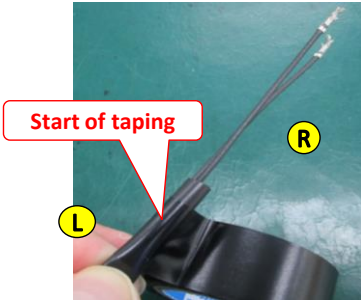
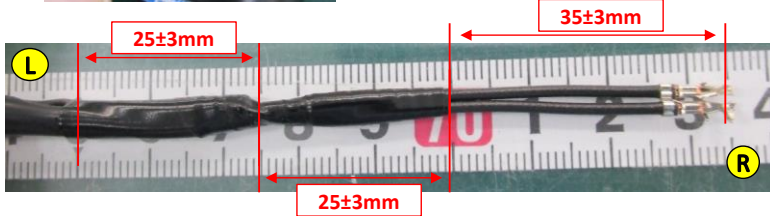

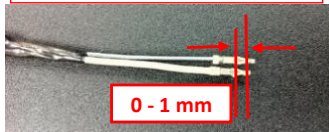
WI-ENG-PDE-317A

Revision No.:

1

Page No.:

7 of 8

PARTS:		JIG		
1. Assy parts 2. Black tape		1. Measuring jig		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
11	P1 Taping 1 Black vinyl tube to wire near terminal	<div><p>60±3mm</p><p>25±3mm</p></div> <div><p>Start of taping</p><p>(L)</p><p>(R)</p></div> <div><p>25±3mm</p><p>35±3mm</p><p>25±3mm</p><p>(L)</p><p>(R)</p></div> <div><p>1. Hold the vinyl tube using left hand then measure from end of tube up terminal tip 60±3mm. Then, measure 25±3mm on vinyl tube using measuring jig.</p><p>2. Hold the vinyl tube using left hand, get the Black tape then start taping using right hand.</p><p>3. After taping, check the measurement, taping condition and terminal appearance.</p></div>	<div><p>MEASURING TAPE</p></div>	<div><p>1</p></div> <div><p>NOTE: USED YELLOW TAPE FOR EASY VISUALIZATION OF SHIFTING LINES, BUT ACTUAL SHOULD BE BLACK TAPE.</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 use of tape 6. No wrong dimension</p></div> <div><p>Note: Please use calibrated/verified measuring tape when getting the measurement.</p></div> <div><p>Wire alignment tolerance</p><div><p>0 - 1 mm</p></div></div>

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Revision No.:

1

Page No.:

8 of 8

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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
12	P1 Taping 2 Vinyl tube to wire near assy parts	<div><div>SV tube ø7 L=111±3mm</div><div>20mm</div><div>SV tube ø5 L=650±3mm</div><div>1. Measure from vinyl tube to combined Connector and tube 20mm using both hands.</div><div>Start of taping</div><div>91±3mm</div><div>3. Measure from end of tube up to end of tape 91±3mm using both hands.</div><div>20mm</div><div>20mm</div><div>5. After taping, check the measurement and taping condition.</div><div>2. Hold the vinyl tube using left hand, get the Black tape then start taping using both hands.</div><div>4. Continue the taping process then make 3 windings of tape before cut.</div></div>	<div>MEASURING TAPE</div>	<div>1</div> <div>NOTE: USED YELLOW TAPE FOR EASY VISUALIZATION OF SHIFTING LINES, BUT ACTUAL SHOULD BE BLACK TAPE.</div> <div>1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong use of tape 6. No wrong dimension</div> <div>Note: Please use calibrated/verified measuring tape when getting the measurement.</div>

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