

**WORK INSTRUCTION****OFFLINE ASSEMBLY**

Effectivity Date:

January 15, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number: **320B / 2 7L0053-7025**

Customer:

TRQSS

Document No.:

WI-ENG-PDE-306

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:

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PARTS:		1. All parts (Connector 6189-0451 (W); AVSSf 0.3 wires Y L=326±2mm; OR L=326±2mm; Black Vinyl tube Ø7 L=57±3mm; Black Vinyl tube Ø7 L=213±3mm; Connector 6188-0066 (GR)				JIG:	1. Insertion jig with flip cover 2. Terminal cover jig										
NO.		PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE		QUALITY POINTERS							
1		n/a		Table Lay-out				<div><div><div>Safety Instruction</div><div>Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</div></div><div><div>Housekeeping</div><div>1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div></div><div><div>Alert level</div><div>For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div></div></div>		<div>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</div> <div>1. No missing parts/tools 2. No excess parts/tools</div>							
<div>Table Lay-out</div> <div><div>Connector 6189-0451 (W)/ Connector Tray</div><div>Connector 6188-0066 (GR)/ Connector Tray</div><div>Black vinyl tube φ7 L=57±3mm</div><div>Black vinyl tube φ7 L=213±3mm</div><div>Insertion jig A</div><div>Insertion jig B</div><div>Y wire L=326±2mm</div><div>OR wire L=326±2mm</div><div>Locking jig</div><div>Terminal cover jig</div></div>																	
Revision History										Prepared by		Reviewed by		Approved by		Noted by	
01/15/22		2		Change part number from 7L0053-7024 to 7L0053-7025 due to change of PCB from 2 chip (61C619-0002) to 1 chip (7N0994-7060); Change wire color from Gray (GR) to Green (G) (Refer to CL-ENG-PDE-020; WI-ENG-PDE-139A). Additional checkpoint in checking of Pull-push-pull-push procedure. Change of document title from Kitting Assembly Process to Offline Assembly.				M. Catapang		J. Loterte		C. Villanueva		A. Arañes			
10/22/21		1		Change part number from 7L0053-7023 to 7L0054-7024 due to additional of clamp (82711-52090 (W)) (Refer to WI-ENG-PDE-139C). Improve work procedure and illustration. Additional table lay-out, checkpoint in checking of wire tolerance.				M. Catapang		J. Loterte		C. Villanueva		A. Arañes			
07/17/21		0		Initial issue				J. Loterte		C. Villanueva		A. Shimamura		A. Arañes			
Eff. Date		Rev. No		Details of Change				Revised		Reviewed		Approved		Noted			
														Est. Date: July 17, 2021			

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PARTS:		1. Connector 6189-0451 (W)			JIG	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	n/a	<div><p>Connector setting to insertion jig 6189-0451 (W)</p><p>INSERTION JIG WITH SWITCH COVER</p><p>Insertion jig, Y-wire, Switch cover, OR-wire, I-Mark, Lock, Wire guide, Holes, Wire guide, Button</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 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 hand. The slot for Yellow wire will be opened.</p></div>			n/a	<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>

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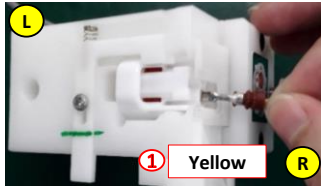
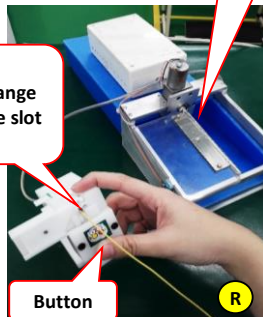
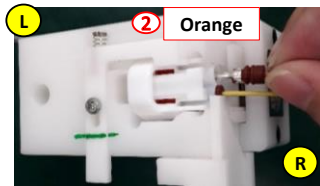
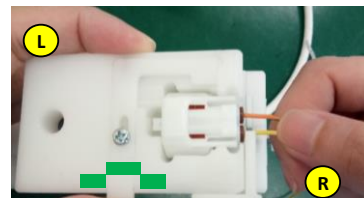
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PARTS:		1. AVSSf 0.3 wires Y L=326±2mm; OR L=326±2mm			JIG	1. Insertion jig w/switch cover
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	n/a	Wire Insertion to Connector 6189-0451 (W)	<div><p>WIRE FACING</p></div> <div><p>1. Hold the insertion jig using left hand, get Yellow wire and insert to connector slot 1 using right hand.</p></div> <div><p>Orange wire slot</p><p>2. Press the button using right thumb, slot for Orange wire will be opened.</p><p>Button</p></div> <div><p>3. Hold the insertion jig using left hand, get Orange wire and 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><i>Note: Please hold the wire near terminal during insertion.</i></p> <p><i>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</i></p> <p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform terminal 5. No wrong wire facing</p> <p>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>² <i>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</i></p>

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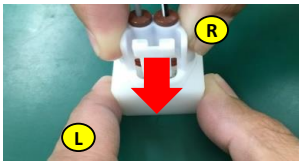










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PARTS:		1. Assy parts 2. Black Vinyl tube Ø7 L=57±3mm 3. Black Vinyl tube Ø7 L=213±3mm			JIG	1. Locking jig 2. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
4		 1. Put the connector into locking jig using right hand then press 2x . Touch the connector lock if properly locked.			 LOCKING JIG	<i>NOTE: MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR LOCK</i> 1. Use the provided locking jig per model 2. No unlock/half-lock connector
		 Before pressing  After pressing Check the double lock deformation  GOOD  NG				
5	P1	 1. Get the cover jig then insert to Y-OR wires using right hand.  2. Get the vinyl tube Ø7 L=57±3mm using right hand then insert the Y-OR wires using left hand.  3. Get the vinyl tube Ø7 L=213±3mm using right hand then insert the Y-OR wires using left hand.  4. After insertion, remove the cover jig using right hand.			 TERMINAL COVER JIG	1. No wrong usage of parts 2. No damaged rubber seal

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PARTS:		1. Connector 6188-0066 (GR)		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	n/a	<div><div><div>INSERTION JIG FOR Y/OR</div><div><div>Wire guide</div><div>Holes</div><div>Wire guide</div><div>Visual Reference</div><div>Button</div></div></div><div><div>INSERTION JIG ORIENTATION</div><div><div>I-MARK</div><div>Lock</div></div><div>CONNECTOR ORIENTATION</div></div><div><div><div>L</div><div>Press</div></div><div><div>L</div><div>Press</div></div><div><div>L</div><div>Release</div></div></div><div><div>1. Press the lock of insertion jig using left thumb.</div><div><div>2. Insert the connector 6188-0066 (GR) into jig using right hand then release the lock. <i>Note: Follow the connector orientation.</i></div><div><div>3. Push the guide using right thumb. The slot for Y wire will be opened.</div></div></div></div></div>		n/a	<div><div>Connector Orientation Illustration</div><div><div>I-mark is align</div><div>1 hole is open</div><div>GOOD</div></div><div><div>I-mark is NOT align</div><div>2 holes are open</div><div>NG</div></div></div> <div><div>1. Use provided jig per model</div><div>2. No wrong usage of parts</div><div>3. No wrong orientation of connector</div><div>4. No damaged connector</div></div>

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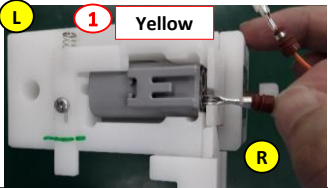
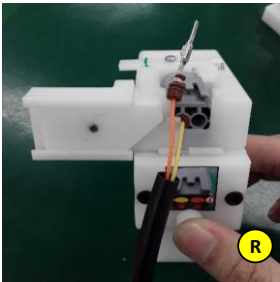
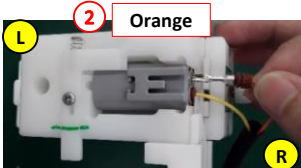
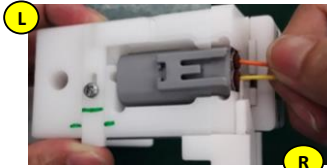

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PARTS:	1. Assy parts			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	n/a Wire Insertion to Connector 6188-0066 (GR)	<div><div>WIRE FACING</div></div> <div><div>1. Hold the insertion jig using left hand. Get the assy parts, insert the Yellow wire to connector slot 1 using right hand.</div></div> <div><div>2. Press the button using right thumb, slot for Orange wire will be opened.</div></div> <div><div>3. Get Orange wire then insert to connector slot 2 using right hand.</div></div> <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>		n/a	<p><i>Note: Please hold the wire near terminal during insertion.</i></p> <p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform terminal 5. No wrong wire facing</p> <p>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>² <i>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</i></p>

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