

**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

January 5, 2022

Model Code/Part Number:

010B

/ 3

7L0032-7023

Customer:

TRQSS

Document No.:

WI-ENG-PDE-168A

Purpose:













☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. All parts: Connector 6188-0407 (W); TVSSf 0.3 wires GR-B/W L=571mm; Black Corrugated tube Ø5 L=376±4mm (no slit); Black Sunprene tube Ø5 L=125±3mm				JIG:		1. Insertion jig with flip cover 2. Locking Jig 3. Terminal Cover Jig																																											
NO.		PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE		QUALITY POINTERS																																									
1		P1		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 work place 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>1. No missing parts/tools 2. No excess parts/tools</div> <div>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</div> <div>3</div>																																									
<div>Revision History</div> <table><tr><td>01/05/22</td><td>3</td><td>Change part number from 7L0032-7022 to 7L0032-7023 due to additional of clamp (82711-52090 (W) (Refer to WI-ENG-PDE-168B). Improve work procedure in all process. Additional table lay-out, checkpoint in checking of wire tolerance (Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance). Additional quality pointers in Pull-push-pull-push process (Refer to GL-PRO-ASY-029 for Pull-Push procedure.)</td><td>K. Doria</td><td>J. Loterte</td><td>C. Villanueva</td><td>A. Arañes</td><td>Prepared by</td><td>Reviewed by</td><td>Approved by</td><td>Noted by</td></tr><tr><td>03/11/21</td><td>2</td><td>Change connector color in accordance with color standardization for plastic parts(GL-COM-003) Change 2x pulling to Pull-Push-Pull-Push on wire insertion quality pointers; Put assy parts on Pg.3-5 parts section; Change illustration of wire insertion to corrugated tube; Remove cycle time;</td><td>J. Loterte</td><td>C. Villanueva</td><td>A. Shimamura</td><td>A. Arañes</td><td rowspan="2"> K. Doria</td><td rowspan="2"> J. Loterte</td><td rowspan="2"> C. Villanueva</td><td rowspan="2"> A. Arañes</td></tr><tr><td>07/10/17</td><td>0</td><td>Initial issue.</td><td>J. Motealto</td><td>O. Merin</td><td>T. Sugiyama</td><td>n/a</td></tr><tr><td>Eff. Date</td><td>Rev. No</td><td>Details of Change</td><td>Revised</td><td>Checked</td><td>Approved</td><td>Noted</td><td colspan="2">Established Date:</td><td colspan="2">July 10, 2017</td></tr></table>												01/05/22	3	Change part number from 7L0032-7022 to 7L0032-7023 due to additional of clamp (82711-52090 (W) (Refer to WI-ENG-PDE-168B). Improve work procedure in all process. Additional table lay-out, checkpoint in checking of wire tolerance (Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance). Additional quality pointers in Pull-push-pull-push process (Refer to GL-PRO-ASY-029 for Pull-Push procedure.)	K. Doria	J. Loterte	C. Villanueva	A. Arañes	Prepared by	Reviewed by	Approved by	Noted by	03/11/21	2	Change connector color in accordance with color standardization for plastic parts(GL-COM-003) Change 2x pulling to Pull-Push-Pull-Push on wire insertion quality pointers; Put assy parts on Pg.3-5 parts section; Change illustration of wire insertion to corrugated tube; Remove cycle time;	J. Loterte	C. Villanueva	A. Shimamura	A. Arañes	 K. Doria	 J. Loterte	 C. Villanueva	 A. Arañes	07/10/17	0	Initial issue.	J. Motealto	O. Merin	T. Sugiyama	n/a	Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted	Established Date:		July 10, 2017	
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WORK INSTRUCTION

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TAPING ASSEMBLY PROCESS

Model Code/Part Number: **010B** / 3 **7L0032-7023**

Customer: **TRQSS**

Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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n/a

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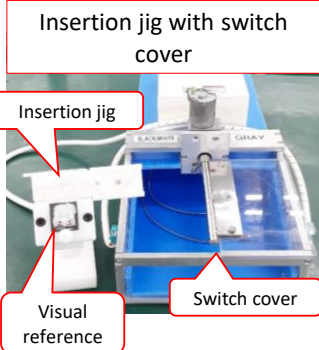
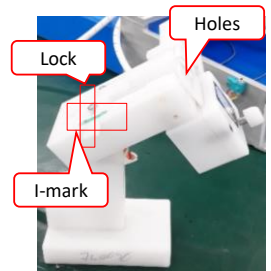
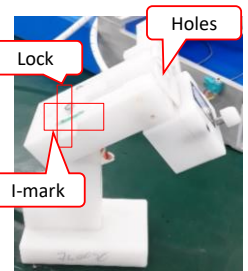

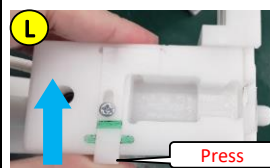


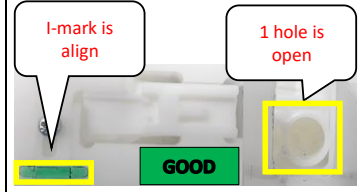
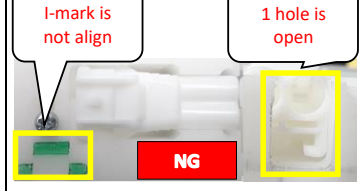
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PARTS:

1. Connector 6188-0407 (W)

JIG

1. Insertion jig with flip cover

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1 Connector setting to Insertion jig 6188-0407 (W)	<div><p>Insertion jig with switch cover</p><p>Insertion jig</p><p>Visual reference</p><p>Switch cover</p></div> <div><p>Lock</p><p>I-mark</p></div> <div><p>Holes</p></div> <div><p>Connector orientation</p></div> <div><p>L</p><p>Press</p><p>1. Press the lock of insertion jig using left thumb.</p></div> <div><p>L</p><p>Press</p><p>R</p><p>2. Insert the connector 6188-0407 (W) into jig using right hand and release the lock.</p></div> <div><p>L</p><p>Release</p><p>R</p><p>3. Check the holes/terminal slot for B/W wire.</p></div>	n/a	<div><h4>Connector Orientation Illustration</h4></div> <div><p>I-mark is align</p><p>1 hole is open</p><p>GOOD</p></div> <div><p>I-mark is not align</p><p>1 hole is open</p><p>NG</p></div> <p>1. Use the provided jig per model 2. No wrong orientation of connector</p>

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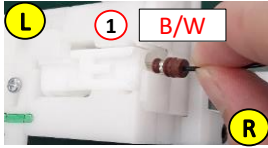
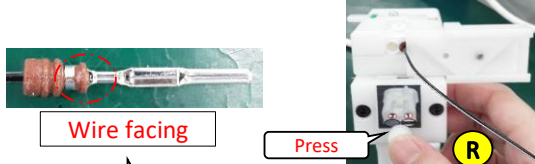




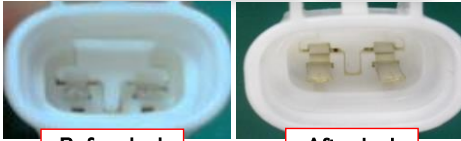
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PARTS:		1. TVSSf 0.3 wires GR L=571mm, B/W L=571mm			JIG	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
3	Wire Insertion to connector 6188-0407 (W)	<div><div></div><div></div><div></div><div></div></div> <p>1. Get Black and white wire then insert to terminal slot ① using right hand.</p> <p>2. Push the button after insertion. Hole for Gray wire will be open.</p> <p>3. Get Gray wire then insert to terminal slot ② using right hand.</p> <p>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.</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>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p><i>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</i></p> <p><i>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</i></p>
4	Connector lock	<div></div> <div><p>1. Put the connector into locking jig using right hand then press 2x to lock.</p></div> <div></div> <div></div>			LOCKING JIG	<p>NOTE: MANUAL LOCKING MAY CAUSED DAMAGED LOCK</p> <p>1. Use the provided locking per model 2. No unlock/half-locked connector</p>

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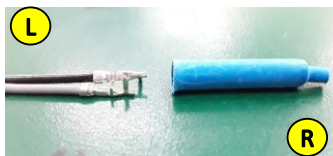




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PARTS:		1. Corrugated tube Ø5 L=376±4mm (no slit) 2. Assy parts			3. Sunprene tube Ø5 L=125±3mm		JIG	1. Terminal Cover jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE		QUALITY POINTERS
5	P1	Wire Insertion to Corrugated tube Ø5 L=376±4mm (no slit)	<div><div><p>1. Get the terminal cover jig using right hand then insert the GR and B/W wires.</p></div><div><p>2. Get the Corrugated Ø5 L=376±4mm (no slit) using right hand and insert the GR and B/W wires</p></div><div><p>3. After insertion, remove the terminal cover jig using right hand.</p></div></div>			<div>LOCKING JIG</div> 		1. No wrong use of parts 2. No deformed terminal
6		Wire insertion to Sunprene tube Ø5 L=125±3mm	<div><p>1. Get the Sunprene tube Ø5 L=125±3mm using right hand then insert the Gray and Black/White wire.</p></div>			n/a		1. No wrong use of parts 2. No deformed terminal

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PARTS:

1. Black tape
2. Assy parts

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

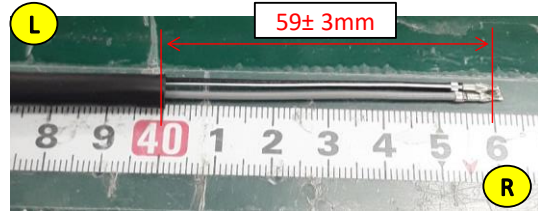
TOOLS/PPE

QUALITY POINTERS

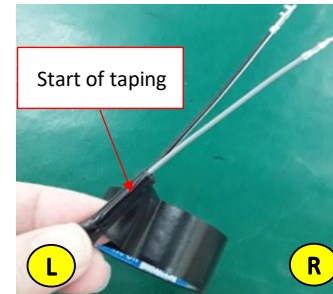
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P1

Taping (1)
Sunprene tube to wire
near terminal

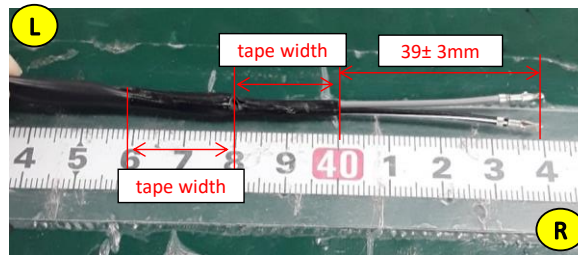


1. Measure the end of the sunprene tube up to the end of the terminal pointed tip 59mm using both hands.



2. Hold the sunprene tube using left hand then start taping using right hand.

Note: Refer to WI-PRO-ASY-001 for taping procedure



3. After taping, check the measurement, alignment and tape condition.

MEASURING TAPE



1. No loose tape
2. No peel-off tape
3. No flip-out tape
4. No wrong use of tape
5. No wrong dimension

*Note:
Please use calibrated/verified
measuring tape when getting the
measurement.*

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PARTS:

1. Black tape
2. Assy parts

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

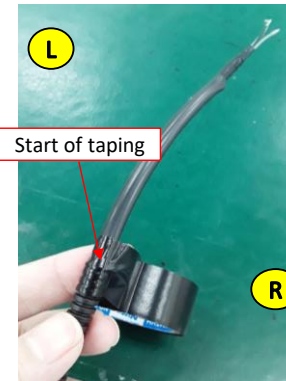
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P1

Taping (2)
Corrugated tube to
sunrene tube

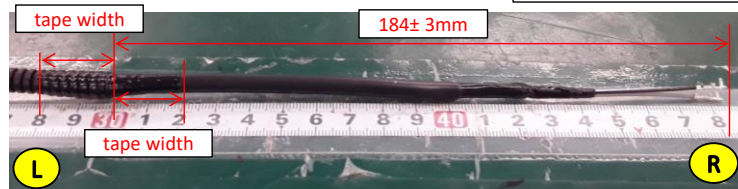


1. Measure the end of the corrugated tube up to the end of the terminal pointed tip **184mm**.



2. Hold corrugated tube using left hand then start taping using right hand.

Note: Refer to WI-PRO-ASY-001 for taping procedure



3. After taping, check the measurement, alignment and tape condition.

MEASURING TAPE



- Note:
Please use calibrated/verified
measuring tape when getting the
measurement.*
1. No loose tape
 2. No peel-off tape
 3. No flip-out tape
 4. No wrong use of tape
 5. No wrong dimension

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