



# WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:	November 26, 2021		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-138A		
Revision No.:	6	Page No.:	1 of 8

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

Model Code/Part Number: **320B / 6 7L0052-7023** Customer: **TRQSS**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

**PARTS:** 6 1. All parts: Connector 6188-0066 (GR); Black COT  $\phi 7$  L=52 $\pm$ 3mm (no slit); Black COT  $\phi 7$  L=290 $\pm$ 3mm (no slit); Connector 6189-1161 (B); AVSSf 0.3 wires Y-OR L=396 $\pm$ 2mm; MRSW CP TVSSf 0.3 wires GR L=663 $\pm$ 3mm; B/W L=663 $\pm$ 3mm with inserted Black sunprene tube  $\phi 5$  L=135 $\pm$ 3mm; Black COT  $\phi 7$  L= 415 $\pm$ 4mm (no slit); Black tape [1pc.]; Violet tape [1pc.]

JIG: 1. Insertion jig with switch cover  
2. Locking jig  
3. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P1 6 Table Lay-out	<p><b>Table Lay-out</b></p>	<p><b>Safety Instruction</b> Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)</p> <p><b>Housekeeping</b> 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p><b>Alert level</b> For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	<p><b>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</b></p> <p>1. No missing parts/tools 2. No excess parts/tools</p>

## Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
11/26/21	6	Change part number from 7L0052-7022 to 7L0052-7023 due to additional clamp (82711-52090 (W)) (Refer to WI-ENG-PDE-138C). Improve work procedure and illustration 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)	M. Catapang	J. Loterte	C. Villanueva	A. Arañes				
05/18/21	5	Change connector colors in accordance with color standardization for plastic parts refer to GL-COM-003. Add tape quantity. Change from 2x pulling to Pull-Push-Pull-Push insertion quality pointers. Transfer process taping of corrugated tube to wire near connector from P2 to P1. Remove cycle time.	D. Castillo	C. Villanueva	A. Shimamura	A. Arañes				
07/17/20	4	Changed process owner from Production to Engineering. Changed control number form WI-PRO-ASY-119A to WI-ENG-PDE-138A. Added cycle time and remove taping of COT to wire near connector (6188-0066).	D. Castillo	R. Peñaloza	A. Shimamura	A. Arañes	M. Catapang	J. Loterte	C. Villanueva	A. Arañes

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Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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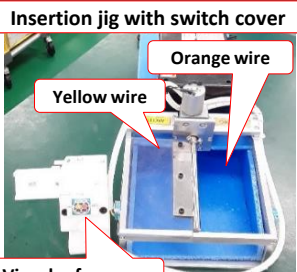
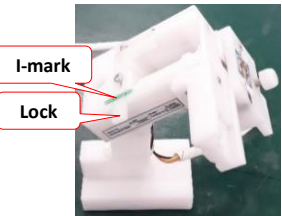

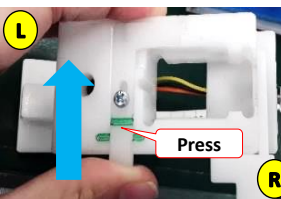
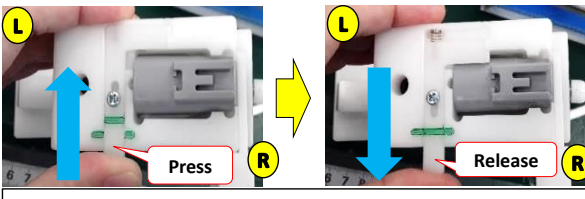
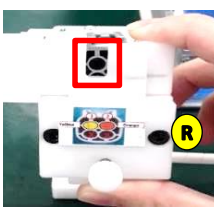
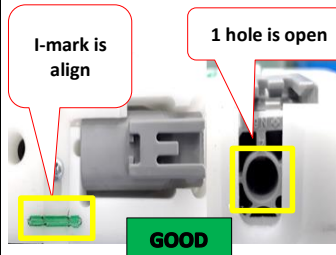
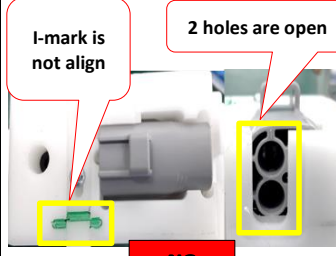
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PARTS:		1. Connector 6188-0066 (GR)		JIG	1. Insertion jig with switch cover
NO.	PROCESS NAME	6 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1	<p>Connector setting to insertion jig 6188-0066 (GR)</p> <div>  <p>Insertion jig with switch cover</p> <p>Orange wire</p> <p>Yellow wire</p> <p>Visual reference</p> </div> <div>  <p>I-mark</p> <p>Lock</p> <p>INSERTION JG ORIENTATION</p> </div> <div>  <p>CONNECTOR ORIENTATION</p> </div> <div>  <p>1. Press the lock using left hand.</p> </div> <div>  <p>2. Get the connector <b>6188-0066 (GR)</b> using right hand and insert to insertion jig. Release the lock after insertion. <i>Note: Follow the connector orientation.</i></p> </div> <div>  <p>3. Push the lower wire guide upward using right hand. Slot for <b>Yellow wire</b> will be opened.</p> </div>		n/a	<div> <p><b>CONNECTOR ORIENTATION ILLUSTRATION</b></p> <div>  <p>I-mark is align</p> <p>1 hole is open</p> <p><b>GOOD</b></p> </div> <div>  <p>I-mark is not align</p> <p>2 holes are open</p> <p><b>NG</b></p> </div> </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>

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# WORK INSTRUCTION

Process Name/Title:

## TAPING ASSEMBLY PROPCESS

Effectivity Date:

November 26, 2021

Model Code/Part Number:

320B



7L0052-7023

Customer:

TRQSS

Validity Date:

n/a

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

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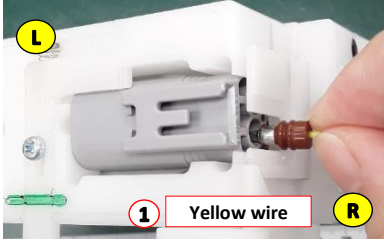
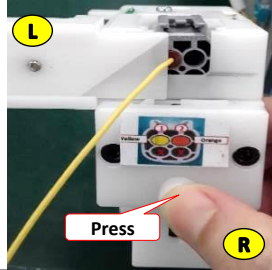
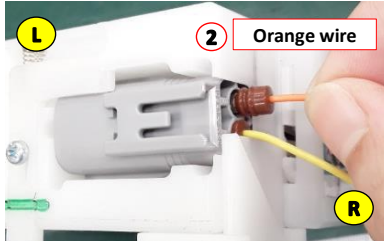
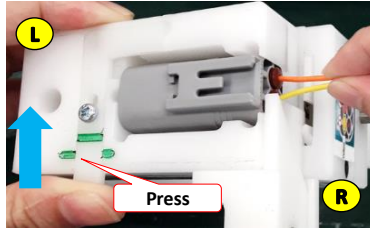


PARTS:



1. AVSSf 0.3 wires Y L=396±2mm; OR L=396±2mm

JIG

1. Insertion jig with switch cover

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	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 <b>Yellow wire</b> then insert to terminal slot <b>1</b> using right hand.</p></div> <div><p>2. Press the button using right thumb. The slot for <b>Orange wire</b> will be opened.</p></div> <div><p>3. Get the <b>Orange wire</b> then insert to terminal slot <b>2</b> 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	<div><p>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p></div> <div><p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p></div> <div><p>Make sure wires are properly inserted. Conduct <b>Pull-Push-Pull-Push</b> after insertion. Do not exert extra force.</p></div> <div><p>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p></div>

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**WI-ENG-PDE-138A**

Purpose:



PROTOTYPE



PRE-LAUNCH



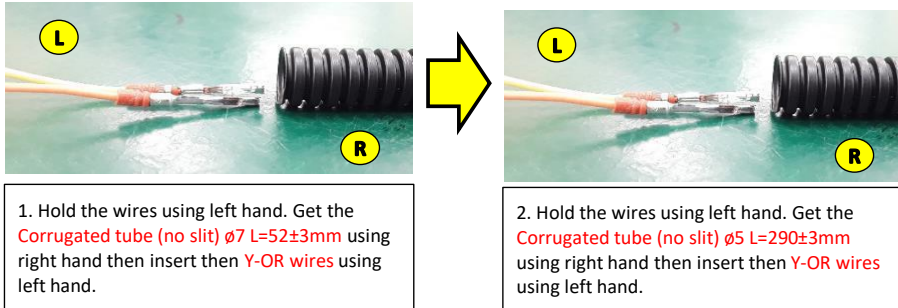
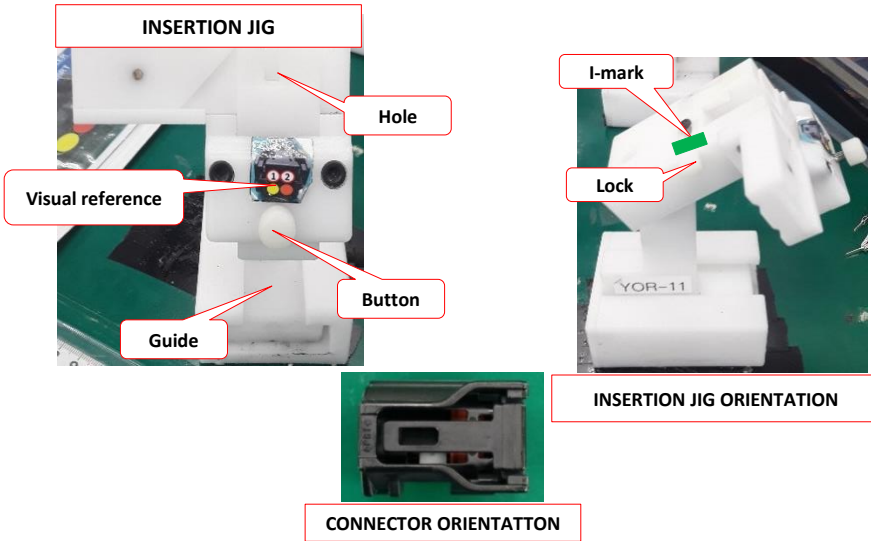
MASSPRO

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PARTS:		1. Black Corrugated tube $\phi 7$ L=52 $\pm$ 3mm (no slit) 2. Black Corrugated tube $\phi 7$ L=290 $\pm$ 3mm (no slit)			3. Assy parts	JIG	1. Insertion jig
NO.	PROCESS NAME	6 WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS	
4	Wire insertion to COT (no slit) $\phi 7$ L= 52 $\pm$ 3mm (1ST) $\phi 5$ L= 290 $\pm$ 3mm (2ND)				n/a	1. No wrong use of parts 2. No deformed terminal	
5	P1 Connector setting to insertion jig 6189-1161 (B)				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	

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PARTS:

1. Connector 6189-1161 (B)

JIG

1. Insertion jig

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

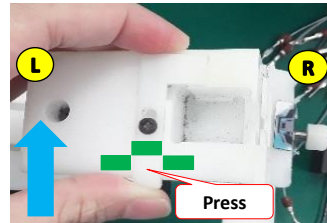
TOOLS/PPE

QUALITY POINTERS

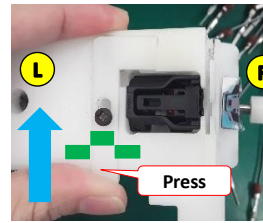
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P1

Connector setting to  
insertion jig  
6189-1161 (B)  
(Continuation)

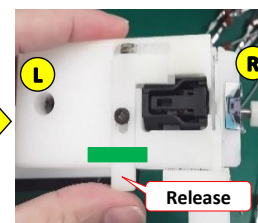


1. Press the lock using left thumb.



2. Get the connector **6189-1161 (B)** using right hand and insert to insertion jig. Release the lock after insertion.

**Note: Follow the connector orientation.**



3. Push the lower wire guide upward using right hand. Slot for **Yellow wire** will be opened.

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

## NO.

## PROCESS NAME

6

## WORK PROCEDURE/ ILLUSTRATION

## TOOLS/PPE

## QUALITY POINTERS

6

P1

Wire insertion to connector  
6189-1161 (B)

6

WIRE FACING

1 Yellow wire

1. Hold the insertion jig using left hand. Get the Yellow wire then insert to terminal slot 1 using right hand.

2 Orange wire

3. Get the Orange wire then insert to terminal slot 2 using right hand.

Press

2. Press the button using right thumb. The slot for Orange wire will be opened.

Press

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.

n/a

1. No loose insertion
2. No wrong insertion
3. One by one insertion
4. No deformed terminal
5. No wrong wire facing

Make sure wires are properly inserted. Conduct **Pull-Push-Pull-Push** after insertion. Do not exert extra force.

6 Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.

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### PARTS:

1. Assy parts
2. Black tape

### JIG

1. Locking jig

NO.

PROCESS NAME

6

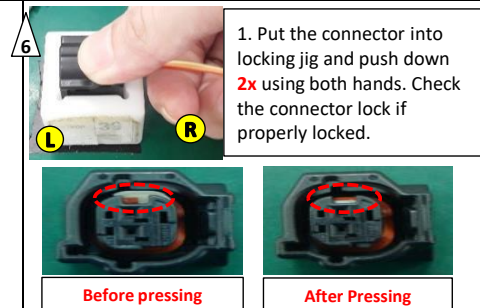
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

7

Connector lock

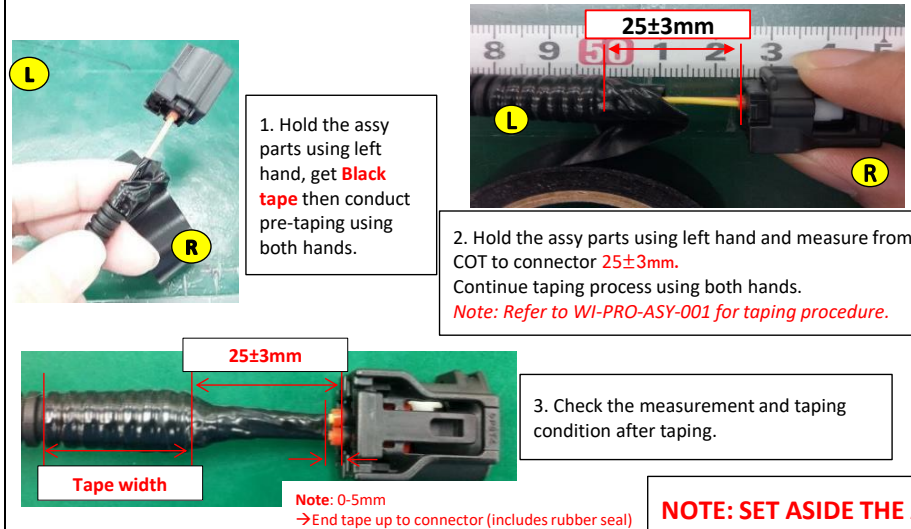


- Note:**  
**MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR LOCK.**
1. No unlock/half-locked connector
  2. No damaged lock

8

P1

Taping 1  
COT to wire near  
connector



**NOTE: SET ASIDE THE ASSY PARTS.**

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

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☐ PRE-LAUNCH

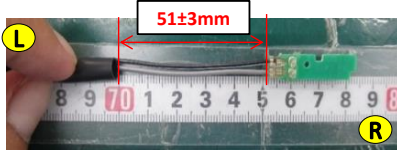
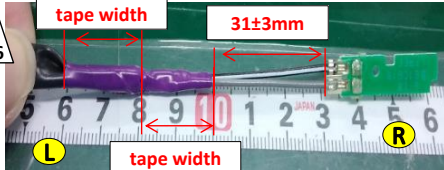





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PARTS:		1. Assy parts 2. Violet tape		3. MRSW CP (GR-B/W L=663±3mm with inserted sunprene tube ø5 L=135±3mm) 4. Black Corrugated tube ø7 L=415±4mm (no slit)		JIG	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE		QUALITY POINTERS	
9	P1 Taping 2 Black Sunprene tube to wire near hotmelted wires	 <p>1. Get the hotmelted <b>GR-B/W wires</b> with sunprene tube then measure from end of the sunprene tube up to the edge of hotmelt <b>51mm</b> using both hands.</p>  <p>2. Hold the sunprene tube using left hand, get the <b>Violet tape</b> using right hand and begin 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><b>Note:</b> <b>USE VIOLET TAPE ONLY</b></p> <p><b>MEASURING TAPE</b></p>  <p><b>Note:</b> Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p> <ol style="list-style-type: none"> <li>No flip-out tape</li> <li>No peel-off tape</li> <li>No loose tape</li> <li>No missing tape</li> <li>No wrong dimension</li> <li>No wrong use of tape</li> </ol> <p><i>Note:</i> Please use calibrated/verified measuring tape when getting the measurement.</p>		<ol style="list-style-type: none"> <li>No flip-out tape</li> <li>No peel-off tape</li> <li>No loose tape</li> <li>No missing tape</li> <li>No wrong dimension</li> <li>No wrong use of tape</li> </ol> <p><i>Note:</i> Please use calibrated/verified measuring tape when getting the measurement.</p>	
10	Wire insertion to Black Corrugated tube ø7 L=415±4mm (no slit)	 <p>1. Get the terminal cover jig using right hand then insert to both terminals <b>GR-B/W wires</b> using right hand.</p>  <p>2. Get the corrugated tube <b>ø7 L=415±4mm (no slit)</b> using right hand then insert the <b>GR-B/W wires</b> using left hand.</p>  <p>3. After insertion, remove the cover jig using right hand.</p>		<p><b>TERMINAL COVER JIG</b></p>  <ol style="list-style-type: none"> <li>No wrong use of parts</li> <li>No deformed terminal</li> </ol>		<ol style="list-style-type: none"> <li>No wrong use of parts</li> <li>No deformed terminal</li> </ol>	

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