



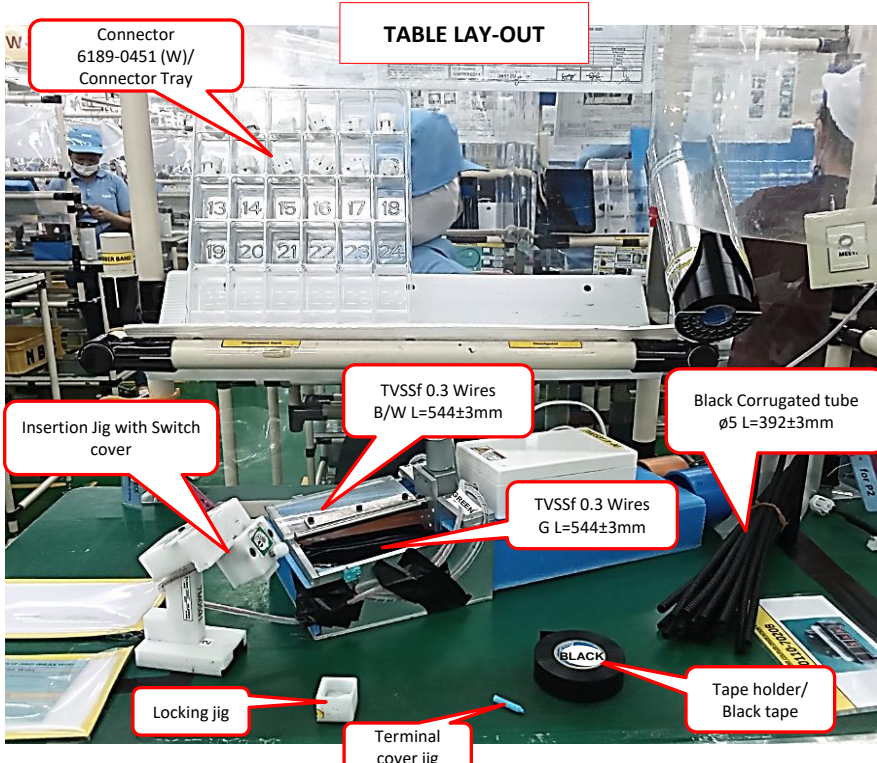
# WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:	February 16, 2023		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-394A		
Revision No.:	1	Page No.:	1 of 7

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

Model Code/Part Number: **164B / 7M0531-7021** Customer: **TRJ**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

<b>PARTS:</b>		1. All parts; Connector 6189-0451 (W); TVSSf 0.3 G-B/W L=544±3mm; Black corrugated tube Ø5 L= 392±3mm (no slit); Black tape		JIG:	1. Insertion jig with switch cover 2. Terminal cover jig 3. Locking jig
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>		<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
1	P1			<div><b>Safety Instruction</b> Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</div> <div><b>Housekeeping</b> 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div><b>Alert level</b> For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>	<div>1. No missing parts/tools 2. No excess parts/tools 3. No wrong positions of parts/tools</div> <div><b>Document references:</b> <b>1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</b></div>

Revision History				Prepared by	Reviewed	Approved by	Noted by
02/16/23	1	Work instruction improvement. Improved quality pointers and inclusion of Quality checkpoints (Page 7).	D.Castillo	J. Loterte	C. Villanueva	A.Arañes	
02/10/22	0	Initial Issue. PCB 2 chips (61C619-0002) to 1 chip (7N0994-7060). Wire color of Gray (GR) to Green (G)	A. Ariola	J. Loterte	C. Villanueva	A.Arañes	
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Established Date: February 10, 2022

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PROTOTYPE



PRE-LAUNCH



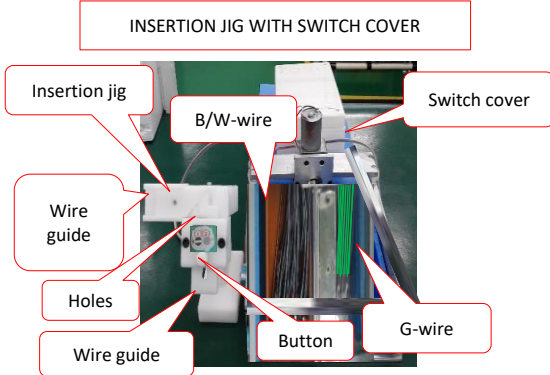

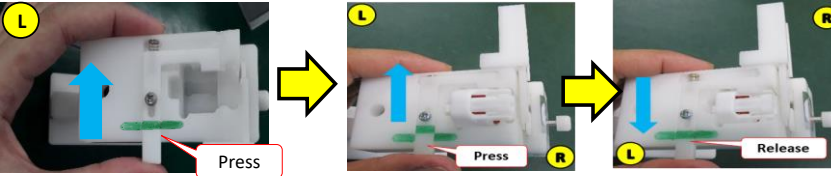
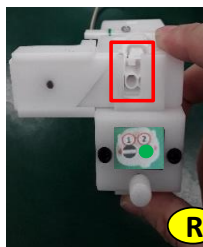


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PARTS:		1. Connector 6189-0451 (W)		JIG	1. Insertion jig with flip cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1	<p>Connector setting to insertion jig 6189-0451 (W)</p>    <p>1. Press the lock of insertion jig using left thumb.</p> <p>2. Insert the connector 6189-0451 (W) into jig using right hand and release the lock.</p> <p>3. Push the guide using right hand. The slot for B/W wire will be open.</p> 		n/a	<p><b>Connector Orientation Illustration</b></p>  <p><b>GOOD</b></p>  <p><b>NG</b></p> <p>1. Use 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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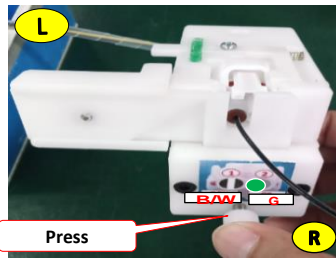

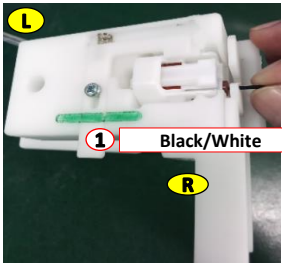
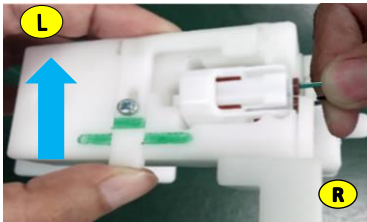

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PARTS:		1. TVSSf 0.3 Wires G L=544±3mm; B/W L=544±3mm			JIG	1. Insertion jig with flip cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
3	P1	<div><div></div><div><div><p>1. Get the B/W wire then insert to terminal slot ① using right hand.</p></div><div></div><div><p>3. Get the G 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>				<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><div>1</div><div>Important reminder/ Note/s:</div><div>1. Make sure wires are properly inserted. Conduct <u>Pull-Push-Pull-Push</u> after insertion. Do not exert extra force.</div></div><div><div>1</div><div>Document references:</div><div>1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div></div></div>

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PARTS:		1. Assy parts		JIG	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1	Connector lock			
		<div><div></div><div><p>1. Put the connector into locking jig using right hand. Then press to lock 2x using both hands.</p></div><div><div></div><div></div><div><p>2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</p></div><div><div></div><div><p>BEFORE PRESSING</p></div><div></div><div><p>AFTER PRESSING</p></div><div><div></div><div><p>GOOD</p></div><div></div><div><p>NG</p></div><div><p>Check the double lock deformation</p></div></div></div></div></div>		<div><p>LOCKING JIG</p></div>	<div><p>1. No wrong usage of parts</p><p>2. No deformed terminal</p><div><div><p>1</p></div><p>Document references:</p><p>1. Manual locking may cause damaged connector lock</p></div></div>

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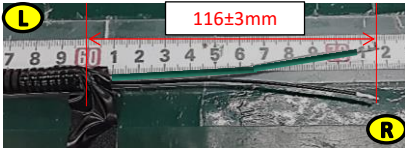
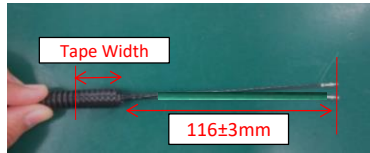



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PARTS:		1. Black Corrugated tube $\phi 5$ L= 392 $\pm$ 3mm (no slit) 2. Black tape	3. Assy Parts	JIG	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1	Wire insertion to corrugated tube $\phi 5$ L= 392 $\pm$ 3mm (no slit)	<div><p>1. Get the terminal cover jig using right hand then insert the <b>Green-Black/white wires</b> using left hand</p></div> <div><p>2. Get the Corrugated tube <math>\phi 5</math> L= 392<math>\pm</math>3mm using right hand and insert the <b>Green-Black/White</b> wires using left hand .</p></div> <div><p>3. After insertion, remove the terminal cover jig using right hand.</p></div>	<div><b>TERMINAL COVER JIG</b> </div>	1. No wrong use of corrugated tube 2. No deformed terminal
6			<div><p>Start of taping</p></div> <div><p>1. Get the <b>Black tape</b> using right hand then start taping process using both hand.</p><p>116<math>\pm</math>3mm</p></div> <div><p>Tape Width</p><p>116<math>\pm</math>3mm</p></div> <div><p>2. Measure from end of COT up to terminal pointed tip <b>L=116<math>\pm</math>3mm</b> then continue the taping process using both hands.</p><p>3. After taping, check the measurement, wire alignment and taping condition.</p></div>	<div><b>MEASURING TAPE</b> </div> <div><p>Wire alignment tolerance</p><p>0 - 1 mm</p></div>	<div>1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No wrong use of tape 5. No wrong dimension 6. No missing tape</div> <div><b>Important reminders/ Note/s:</b> <b>1. Please use calibrated/verified measuring tape when getting the measurement.</b> <b>2. Refer to WI-PRO-ASY-001 for taping procedure.</b></div> <div></div>

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## PARTS:

1. Black Tape
2. Assy Parts

JIG

N/A

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

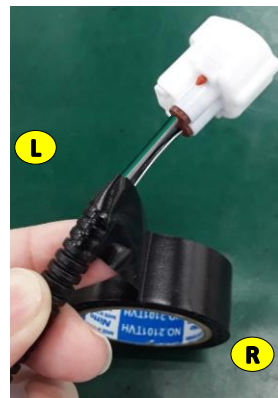
TOOLS/PPE

QUALITY POINTERS

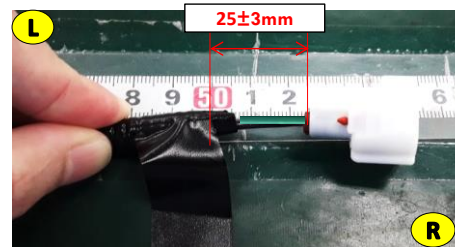
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P1

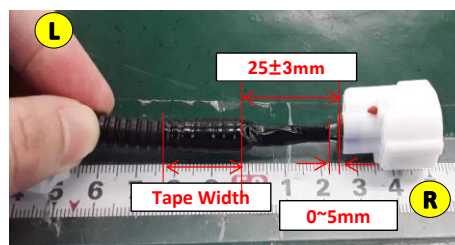
Taping 2  
COT to wire near  
connector



1. Hold the corrugated using left hand. Get **Black tape** using right hand and start pre-taping using both hands.



2. Measure the corrugated tube up to connector **25±3mm** using left hand then proceed to taping.



Note:  
0 - 5mm  
→ End tape up to connector  
(includes rubber seal)

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

MEASURING  
TAPE



1

**Important reminders/ Note/s:**

1. Please use calibrated/verified measuring tape when getting the measurement.
2. Refer to WI-PRO-ASY-001 for taping procedure.

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

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PROTOTYPE



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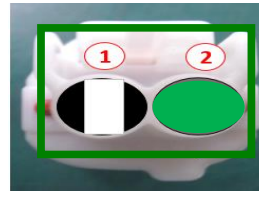
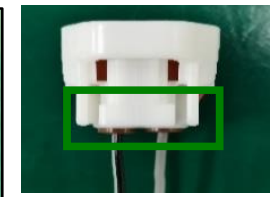
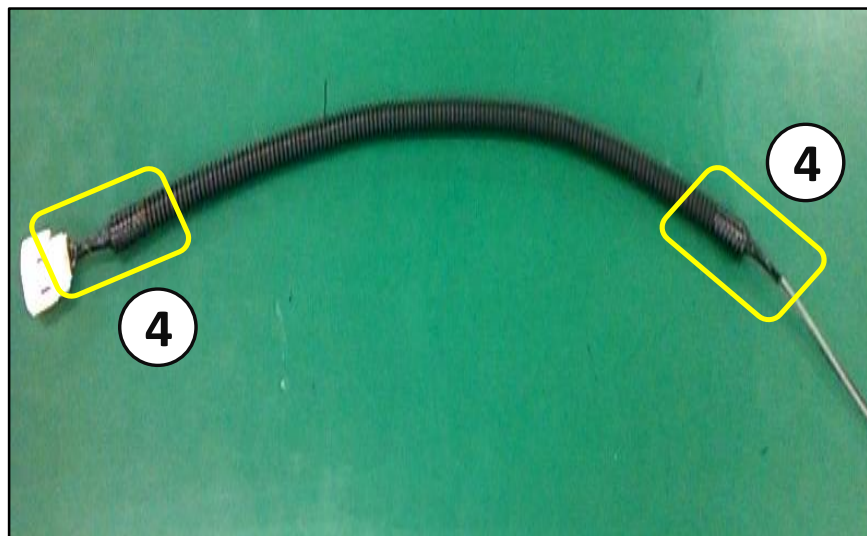
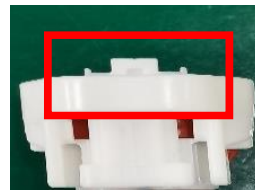
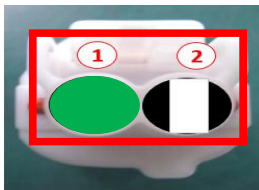
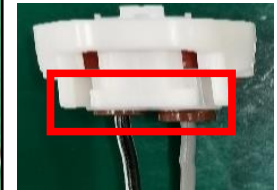
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PARTS:

n/a

JIG

n/a

**QUALITY CHECKPOINTS****P1****7M0531-7021****GOOD****GOOD****GOOD****GOOD****NO GOOD****NO GOOD****NO GOOD****NO GOOD****1** No **Unlock/Halflock Connector****2** Checking of **Double Lock Deformation****3** No **Wrong Insert****4** No **Missing Tape****5** No **Terminal Backing Out**

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