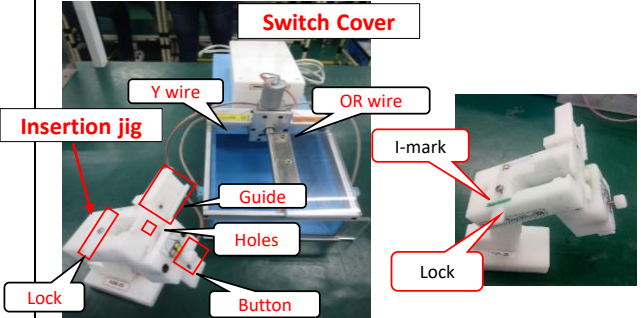

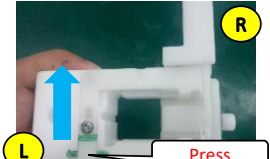
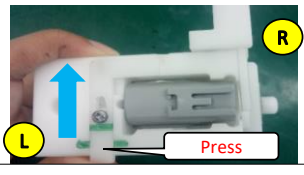

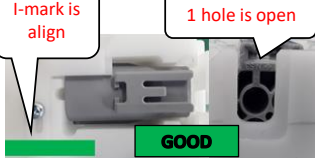

	<b>WORK INSTRUCTION</b> <b>TAPING ASSEMBLY PROCESS</b>				Effectivity Date: <b>July 19, 2021</b>	
	Process Name/Title:				Validity Date: <b>n/a</b>	
	Product Name/Code: <b>310B / 7M0522-7020C</b>		Customer: <b>TRJ</b>		Document No.: <b>WI-ENG-PDE-166A</b>	
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		Revision No.: <b>4</b>		Page No.: <b>1 of 7</b>	

<b>PARTS:</b> 1. Connector 6188-0066 (GR)		<b>JIG:</b> 1. Insertion jig w/ switch cover	
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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P1 Connector setting to insertion jig 6188-0066 (GR)	  <p><b>CONNECTOR ORIENTATION</b></p>  <p>1. Press the lock of insertion jig using left thumb.</p>  <p>2. Insert the connector 6188-0066 (GR) into jig using right hand and release the lock.</p>  <p>3. Push the wire guide upward, slot for Yellow wire will be open.</p>	<p><b>Safety Instruction</b> Be sure to wear prescribed 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: Please refer to WI-ENG-PDE-165 for insertion process</b></p> <p><b>Connector Orientation Illustration</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>

Revision History				Prepared by:	Checked by:	Approved by:	Noted by:
07/19/21	4	Remove validity date and add tape quantity.	D. Castillo	C. Villanueva	A. Shimamura	A. Arañes	
01/20/21	3	Change part number due to design change. Change connector color in accordance with color standardization for plastic parts. Change from 2x pulling to Pull-Push-Pull-Push insertion quality pointers. Remove cycle time.	D. Castillo	R. Peñaloza	A. Shimamura	A. Arañes	
09/08/20	2	Change Process owner from Production to Engineering. Improved process and add cycle time. Updated pictures. Change part number due to removal of VT to wire near connector taping (6188-0066). Transferred process no. 1,2,4,5 & 6 from Kitting assembly process to Taping assembly process.	D. Castillo	R. Peñaloza	A. Shimamura	A. Arañes	
07/12/18	n/a	Previously established Engineering Instruction (EI-ENG-PDE-051). Initial issue.	D. Castillo	R. Alcantara	A. Arañes	n/a	
Eff. Date	Rev. No	Details of Change	Revise	Check	Approve	Noted	Est. Date: October 23, 2018

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# WORK INSTRUCTION

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PROTOTYPE



PRE-LAUNCH



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### PARTS:

1. Pre-assy parts (Connector 6189-0451; AVSSf 0.3 Y L=333, OR L=333; Black Vinyl tube Ø7 L=57±3mm & Ø7 L=207±3mm)

### JIG

1. Insertion jig w/ switch cover

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

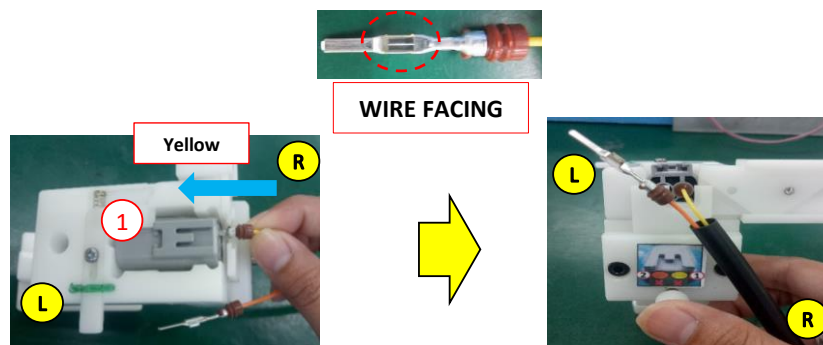
### TOOLS/PPE

### QUALITY POINTERS

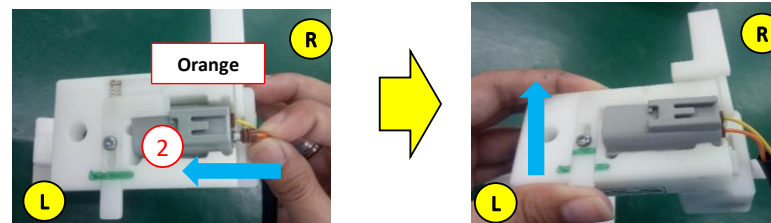
2

P1

Wire Insertion to  
Connector  
6188-0066 (GR)



1. Hold the insertion jig using left hand, get **Yellow wire** using right hand and insert to connector. Press the button after insertion. Slot for **Orange wire** will be open.



2. Hold the insertion jig using left hand, get **Orange wire** using right hand and insert to connector. Press the insertion jig lock using left hand and slowly remove the harness from jig using right hand.

N/A

**Note:** Please hold the wire near terminal during insertion.

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

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

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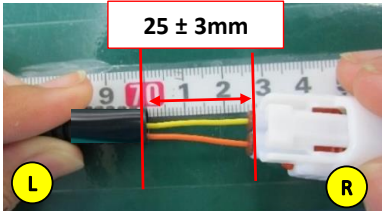
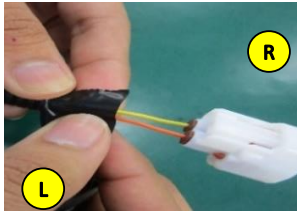
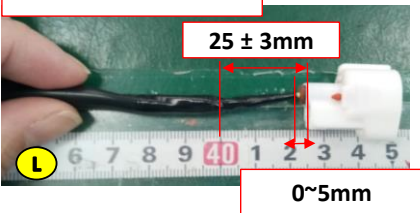

WORK INSTRUCTION  
TAPING ASSEMBLY PROCESS

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Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS: 4 1. Black tape [1pc]

JIG N/A

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P1 Taping 1 Vinyl tube to wire near Connector	<div><p>25 ± 3mm</p><p>1. Hold the assy parts and measure from end of Vinyl tube to connector 25mm using both hands.</p></div> <div><p>2. Hold the assy parts using left hand, get Black tape using right hand and begin taping process. <i>Refer to WI-PRO-ASY-001 for taping procedure.</i></p></div> <div><p>25 ± 3mm</p><p>0~5mm</p><p>3. After taping, check the measurement and taping condition.</p></div> <div><p><b>Note:</b> 0 -5mm → End tape up to connector (includes rubber seal)</p></div>	<p><b>Note:</b> Please use calibrated/verified measuring tape when getting the measurement.</p> <p><b>Measuring tape</b></p> 	<ol style="list-style-type: none"><li>1. No loose tape</li><li>2. No peel-off tape</li><li>3. No flip-out tape</li><li>4. No wrong dimension</li><li>5. No wrong use of tape</li><li>6. No missing tape</li></ol>

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**TAPING ASSEMBLY PROCESS**

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Customer: **TRJ**

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

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**PARTS:**

1. Assy parts

**JIG**

1. Insertion jig

**NO.**

**PROCESS NAME**

**WORK PROCEDURE/ ILLUSTRATION**

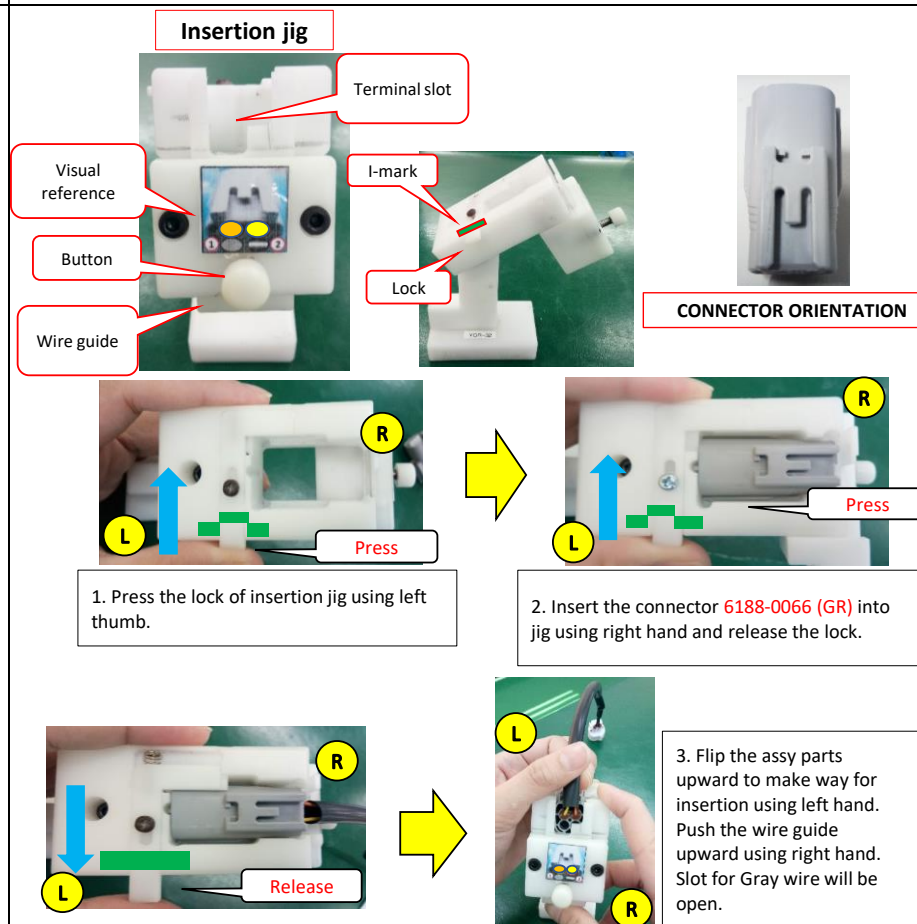
**TOOLS/PPE**

**QUALITY POINTERS**

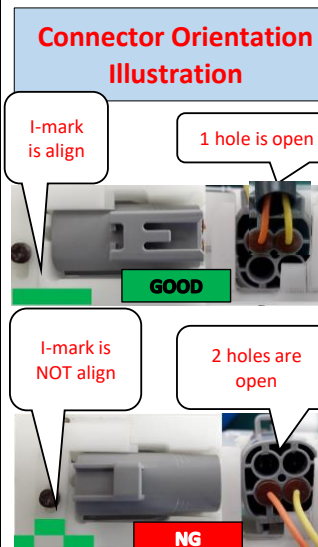
4

P1

Connector setting to  
insertion jig  
6188-0066 (GR)  
with assy parts



N/A



1. Use provided jig per model
2. No wrong usage of parts
3. No wrong orientation of connector
4. No damaged connector

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Purpose:


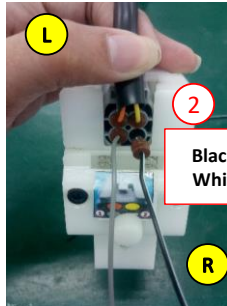
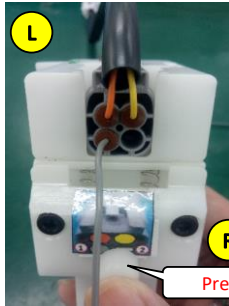
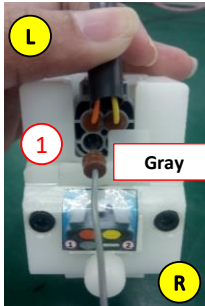



☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. TVSSf 0.3 wires GR L=801mm; B/W L=801mm			<b>JIG</b>	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
5	P1	<div><b>WIRE FACING</b></div> <div><div>1. Hold the assy parts upward using left hand. Get the <b>Gray wire</b> and insert to connector using right hand. Press the button after insertion. Slot for <b>Black/White wire</b> will be open.</div><div>2. Get the <b>Black/White wire</b> using right hand and insert to connector.</div></div>			N/A	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform terminal 5. No wrong wire facing.  Make sure wires are properly inserted. Conduct <b>Pull-Push-Pull-Push</b> after insertion. Do not exert extra force.
6		<div><div>1. Hold the assy parts upward using left hand. Insert the <b>Gray and Black/White wires</b> to Vinyl tube using right hand.</div><div>2. Press the insertion jig lock using left hand and slowly remove the harness from jig using right hand.</div></div>			N/A	1. No wrong insertion 2. No deformed terminal

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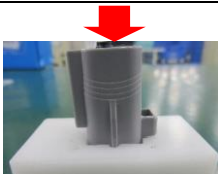
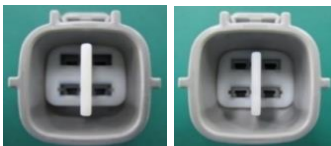
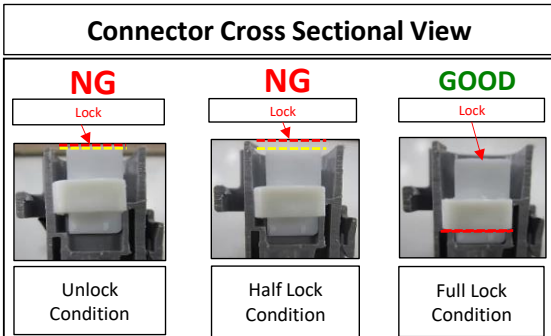





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### PARTS:

1. Black Corrugated tube (No slit) Ø5 L=436±4mm

### JIG

1. Locking jig
2. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	Connector Lock	 <p>Put the connector into locking jig using right hand then press <b>2x</b> to lock. Touch the connector lock to confirm if properly pressed.</p>  <p>Before Pressing After Pressing</p>  <p>Connector Cross Sectional View</p> <p>NG Lock NG Lock GOOD Lock</p> <p>Unlock Condition Half Lock Condition Full Lock Condition</p>	 <p>Locking jig</p>	<p><b>NOTE: MANUAL LOCKING MAY CAUSED DAMAGED LOCK</b></p> <ol style="list-style-type: none"><li>1. No unlock/half-locked connector</li><li>2. No damage connector</li></ol>
8	Wire Insertion to Corrugated tube Ø5 L=436±4mm	 <p>1. Get the terminal cover jig using right hand then insert to wires.</p>  <p>2. Get the corrugated tube <math>\phi 5</math> L=436±4mm using right hand and insert to wires.</p>  <p>3. Remove the terminal cover jig after insertion.</p>	 <p>Terminal Cover jig</p>	<ol style="list-style-type: none"><li>1. No wrong use of parts</li><li>2. No wrong insertion</li></ol>

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PARTS:

4

1. Black tape [1pc]

JIG

N/A

NO.

PROCESS NAME

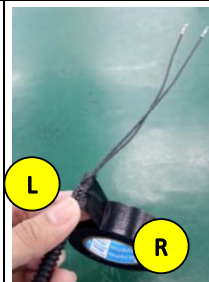
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

9

P1

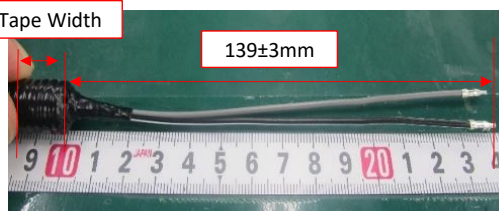
Taping 2  
COT to wire near  
terminal

1. Get **Black tape**,  
hold corrugated  
tube using left  
hand then start  
pre-taping.



2. Measure the end of the corrugated tube up to the tip of  
terminal **139±3mm**. Then continue taping using right hand.  
*Refer to WI-PRO-ASY-001 for taping procedure.*

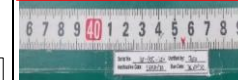
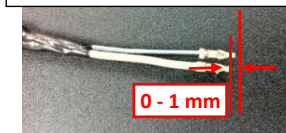
Tape Width



3. After taping,  
check the  
dimension, taping  
condition and wire  
alignment.

**Note:**

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

**Measuring tape****Wire alignment tolerance**

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

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