



WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:

April 17, 2021

Process Name/Title:

TAPING ASSEMBLY PROCESS

Validity Date:

n/a

Product Name/Code:

100B / 7M0593-7020B

Customer:

TRJ

Document No.:

WI-ENG-PDE-154A

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

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PARTS:

3

1. Connector 6098-3802 (W)
2. AVSSf 0.3 Y/OR wires L=438±2mm

JIG:

1. Insertion jig with switch cover

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

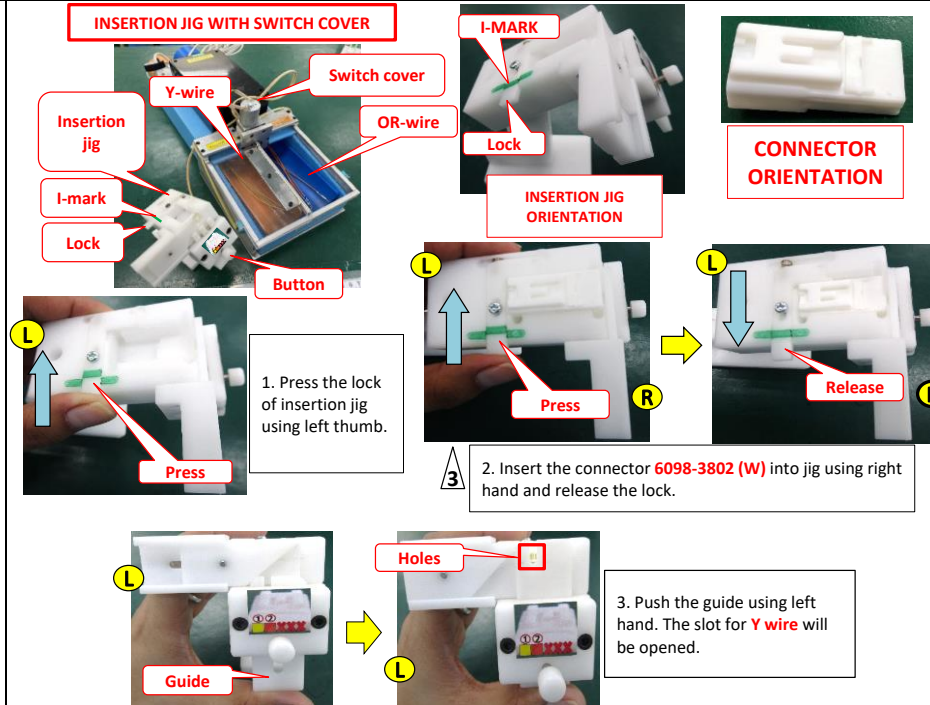
TOOLS/PPE

QUALITY POINTERS

1

P1

Connector setting to
insertion jig
6098-3802 (W)

**Safety Instruction**

Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)

Housekeeping

1. Maintain and always practice 5's.
2. Personal things on the workplace is prohibited. Keep it in your locker.

Alert level

For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.

Connector Orientation Illustration

I-mark is align

2 Holes are open

GOOD

I-mark is not align

4 holes are open

NG

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

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
04/17/21	3	Revise due to standardize the color of connector in accordance with color standardization of plastic parts (Please refer to GL-COM-003 for Color Standardization for Plastic Parts). Removal of GOOD and NG illustration of cover jig. Apply some improvements.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
09/30/20	2	Changed effectivity and validity date. Revised due to connector lock process from locking jig to sequential manual process.	M. Catapang	R. Peñaloza	A. Shimamura	A. Arañes	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
04/10/18	0	Previously established as Engineering instruction. Initial issue	J. Loterte	R. Alcantara	A. Arañes	n/a	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes

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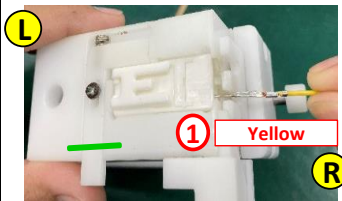

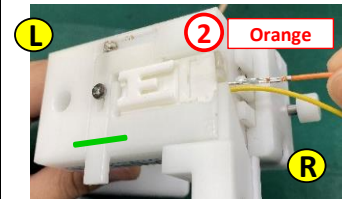
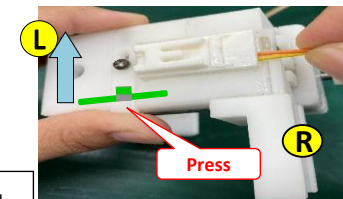


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PARTS:		1. Black corrugated tube (no slit) $\Phi 7$ L=163 \pm 3mm; $\Phi 5$ L=201 \pm 3mm			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	P1	<div><div><p>1. Hold the insertion jig using left hand. Get the Y wire and insert terminal slot 1 using right hand.</p></div><div><p>2. Press the button using right thumb the slot for OR wire will be opened.</p></div><div><p>3. Get the OR wire and 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>n/a</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>Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div></div>				
3		Wire insertion to Black corrugated tube (no slit) $\Phi 7$ L=163 \pm 3mm $\Phi 5$ L=201 \pm 3mm	<div><div><p>1. Get the Black corrugated tube (no slit) $\Phi 7$ L=163\pm3mm using right hand and insert the wires using left hand.</p></div><div><p>2. Get the Black corrugated tube (no slit) $\Phi 5$ L=201\pm3mm using right hand and insert the wires using left hand.</p></div></div> <div>n/a</div> <div><p>1. No wrong use of parts 2. No deformed terminal</p></div>			

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Process Name/Title:	TAPING ASSEMBLY PROCESS		
Product Name/Code:	100B / 7M0593-7020B	Customer:	TRJ
Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS: 3 1. Connector 6098-2220 (W)		JIG	1. Insertion jig		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1 3 Connector setting to insertion jig 6098-2220 (W)	<div>INSERTION JIG</div> <div><div>I-MARK</div><div>Button</div><div>Holes</div></div> <div><div>Connector Orientation</div></div> <div><div>1. Press the lock of insertion jig using left thumb.</div><div><div>L</div><div>Press</div></div></div> <div><div>2. Insert the connector 6098-2220 (W) into jig using right hand and release the lock.</div><div><div>3</div><div>Release</div></div></div> <div><div>3. Push the guide using left hand. The slot for Y wire will be opened.</div><div><div>L</div><div>Guide</div></div><div><div>Hole</div></div></div>		n/a	<div>Connector Orientation Illustration</div> <div><div>I-mark was align</div><div>1 hole is open</div><div>GOOD</div></div> <div><div>I-mark was not align</div><div>All holes were open</div><div>NG</div></div> <div>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</div>

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TAPING ASSEMBLY PROCESS

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

Product Name/Code: **100B / 7M0593-7020B** Customer: **TRJ**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:		1. Assy parts			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
5	P1	<p>Wire insertion to connector 6098-2220 (W)</p> <p>1. Hold the insertion jig using left hand. Get the Y wire and insert to connector using right hand.</p> <p>2. Press the button using right thumb the slot for OR wire will be opened.</p> <p>3. Get the OR wire and insert to connector using right hand.</p> <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>			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>Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p>

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n/aPurpose: ☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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5 of 10**PARTS:**

1. Assy parts

JIG

n/a

NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

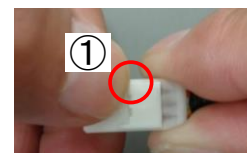
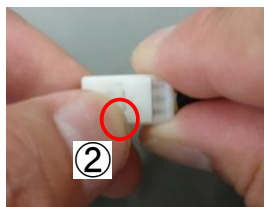
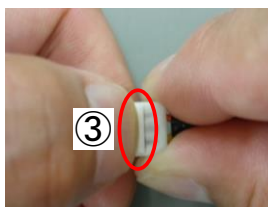
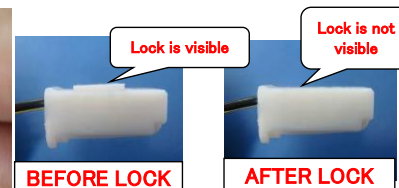
6

P1

Connector Lock

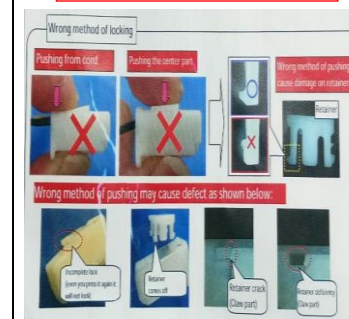
Sequence of Pressing the Double Lock:**① - ② - ③****Method:** Press one by one using one thumb

1. Hold the 6098-2220 connector using right hand

2. Press location **1** of the connector lock using your left thumb3. Press location **2** of the connector lock using your left thumb4. Press location **3** of connector near terminal insertion side with your left thumb

5. Check the locking condition

n/a

Wrong Locking Method

1. No unlocked/half-locked connector
2. No one time pressing of double lock
3. Make sure not to hit the portion **③** (bottom side) when pressing **①** & **②**

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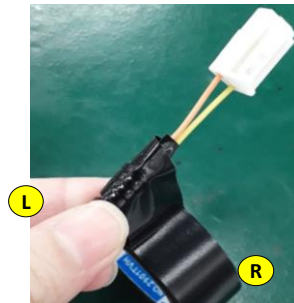
1. Assy parts
2. Black tape

JIG

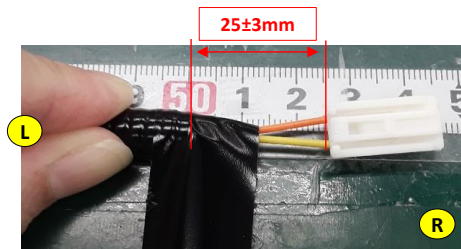
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NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS****7****P1**

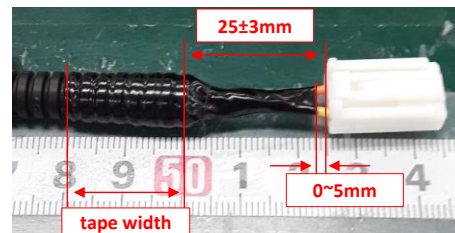
Taping 1
Black corrugated tube to
wire near connector



1. Hold the assy parts using left hand.
Get Black tape using right hand and start
pre-taping.



2. Measure from COT to Connector **25±3mm**
using both hands and continue the taping
process.
*Refer to WI-PRO-ASY-001 for taping
procedure.*



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

Measuring tape

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

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PARTS:

1. Black corrugated tube (no slit) $\Phi 7$ L=96 \pm 3mm
2. TVSSf 0.3 MR Switch CP 7M0593-7040A GR-B/W L=685 \pm 3mm

3

JIG

1. Terminal cover jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

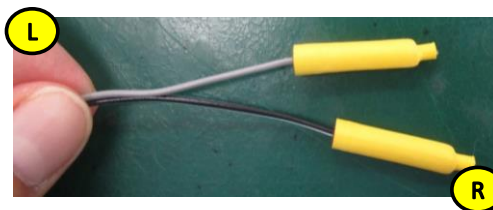
TOOLS/PPE

QUALITY POINTERS

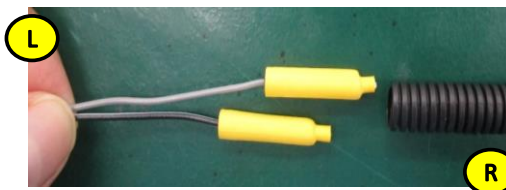
8

P1

Wire insertion to
Black corrugated tube
(no slit)
 $\Phi 7$ L=96 \pm 3mm



1. Get the cover jig using right hand then insert to both terminals (GR-B/W wires) using right hand.



2. Get the corrugated tube $\Phi 7$, L=96 \pm 3mm using right hand then insert the GR-B/W wires using left hand.

TERMINAL COVER JIG



3. After insertion, remove the cover jig using right hand.

3

1. No wrong usage of parts
2. No damaged rubber seal
3. No exposed rubber seal during insertion

3

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PARTS: 3 1. Connector 6188-0407 (W)

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	P1 Connector setting to insertion jig 6188-0407 (W)	<p>INSERTION JIG</p> <p>I-Mark Lock</p> <p>Visual reference</p> <p>Unlock button</p> <p>Connector orientation</p> <p>Press</p> <p>1. Press the lock of insertion jig using left thumb.</p> <p>2. Insert the connector 6188-0407 (W) into jig using right hand and release the lock.</p> <p>3. Push the guide using left hand. The slot for GR wire will be opened.</p>	n/a	<p>Connector Orientation Illustration</p> <p>I-mark is align</p> <p>1 Hole is open</p> <p>GOOD</p> <p>I-mark is not align</p> <p>1 Hole is open</p> <p>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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PARTS:

1. Assy parts

JIG

1. Insertion jig
2. Locking jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
10	Wire insertion to connector 6188-0407 (W)	<p>1. Get the GR wire and insert terminal slot 1 using right hand.</p> <p>2. After insertion of GR wire press the button using right hand. The slot for B/W wire will be opened.</p> <p>3. Get the B/W wire and insert to terminal slot 2 using right hand.</p> <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>	n/a	<ol style="list-style-type: none">1. No loose insertion2. No wrong insertion3. One by one insertion4. No deformed terminal5. No wrong wire facing <p>Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p>
11	Connector lock	<p>Put the connector into locking jig using both hands then press 2x using both hands. Check if properly lock.</p> <p>Coupler Cross Sectional View</p> <p>Unlock Half Lock Full Lock</p>	<p>LOCKING JIG</p>	<p>Note: MANUAL LOCKING MAY CAUSED DAMAGED LOCK.</p> <ol style="list-style-type: none">1. Use the provided locking jig2. No unlock/half-locked connector

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☐ PRE-LAUNCH

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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

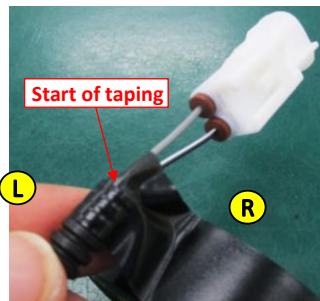
TOOLS/PPE

QUALITY POINTERS

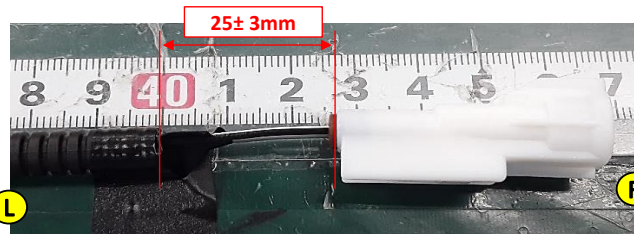
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P1

Taping 2
Black corrugated tube
(no slit) to wire near
connector

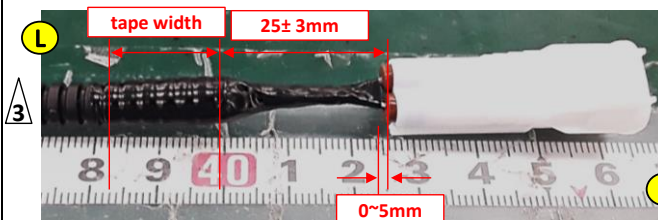


1. Hold the corrugated tube using left hand, get the **black tape** then start pre-taping at the middle of **COT and wires** using both hands.



2. Measure from end of corrugated tube up to end of connector **25mm** then continue the taping process using both hands.

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



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

MEASURING TAPE



1. No flip out tape
2. No tape peeling
3. No loose tape
4. No wrong use of tape
5. No wrong dimension

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