



WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:

June 22, 2021

Process Name/Title:

Validity Date:

n/a

Product Name/Code:

100B

/

7M0594-7020D

Customer:

TRJ

Document No.:

WI-ENG-PDE-286A

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

4

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PARTS:

1. Connector 6188-0066 (GR)
2. AVSSf 0.3 Y/OR wire L=376±2mm

JIG:

1. Insertion jig with switch cover

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

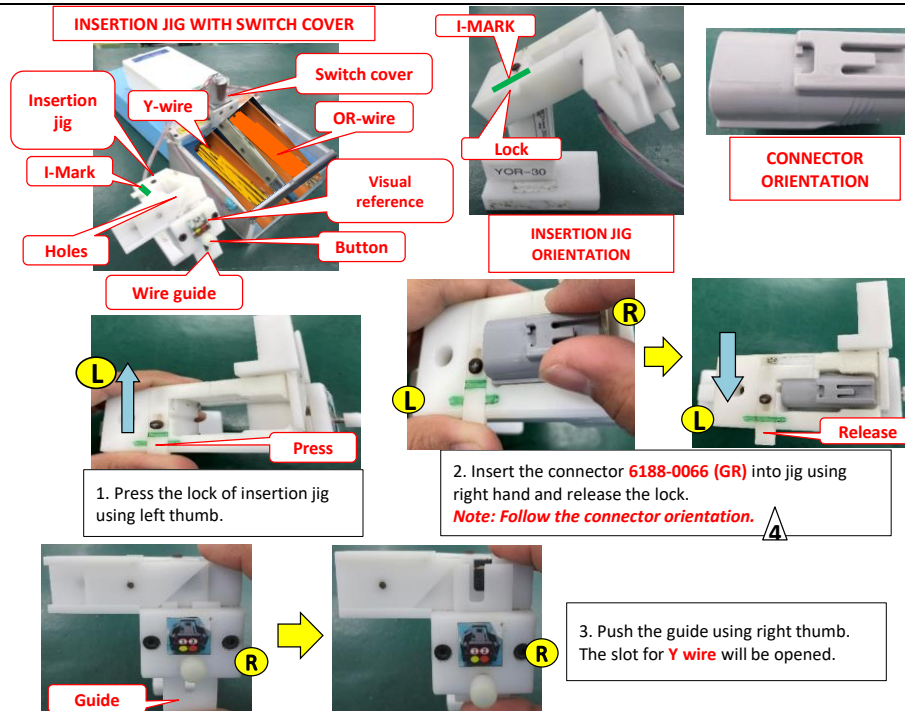
TOOLS/PPE

QUALITY POINTERS

1

P1

Connector setting to
insertion jig
6188-0066 (GR)

**Safety Instruction**

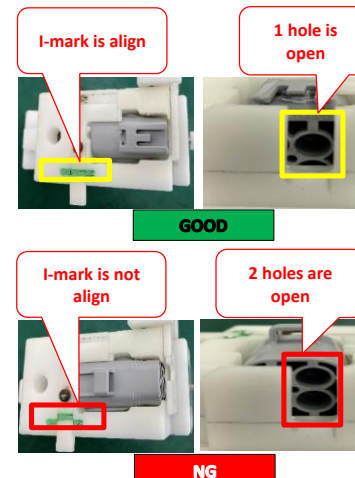
Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)

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

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
06/22/21	4	Transfer process owner from Production (WI-PRO-ASY-122A) to Engineering (WI-ENG-PDE-286A). Change connector color in accordance with color standardization for plastic parts (Refer to GL-COM-003). Apply some improvements and update picture in all process.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes				
03/17/20	3	Include insertion jig/change illustration of coupler	J. Silang	A. Morcozo	O. Merin					
04/10/18	n/a	Previously established as Engineering instruction (EI-ENG-PDE-030). Initial issue	D. Castillo	R. Alcantara	A. Arañes	n/a	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
							Est. Date:	April 10, 2018		

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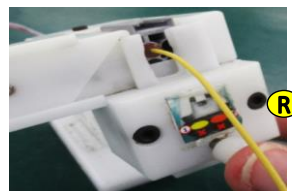
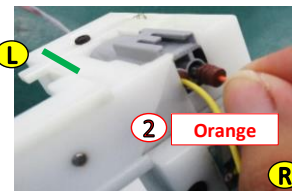
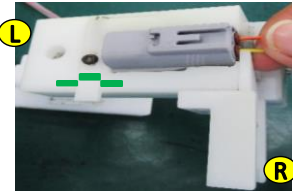


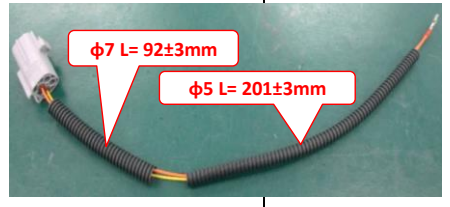
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PARTS:		1. Assy parts 2. Black Corrugated tube (no slit) $\phi 7$ L=92 \pm 3mm 3. Black Corrugated tube (no slit) $\phi 5$ L=201 \pm 3mm		JIG	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Wire insertion to connector 4 6188-0066 (GR) P1	   <p>1. Get the Y wire then insert to terminal slot 1 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 then 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	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing 4 Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.
3	Wire insertion to Black Corrugated tube (no slit) $\phi 7$ L=92 \pm 3mm $\phi 5$ L=201 \pm 3mm	 <p>1. Get the corrugated tube (no slit) $\phi 7$ L= 92\pm3mm using right hand then insert the yellow wire and orange wire by using left hand.</p>  <p>2. Get the corrugated tube (no slit) $\phi 5$ L= 201\pm3mm using right hand then insert the yellow wire and orange wire by using left hand.</p> 		n/a	1. No wrong use of parts 2. No deformed terminal

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Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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PARTS:

1. Connector 6189-1161 (B)

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

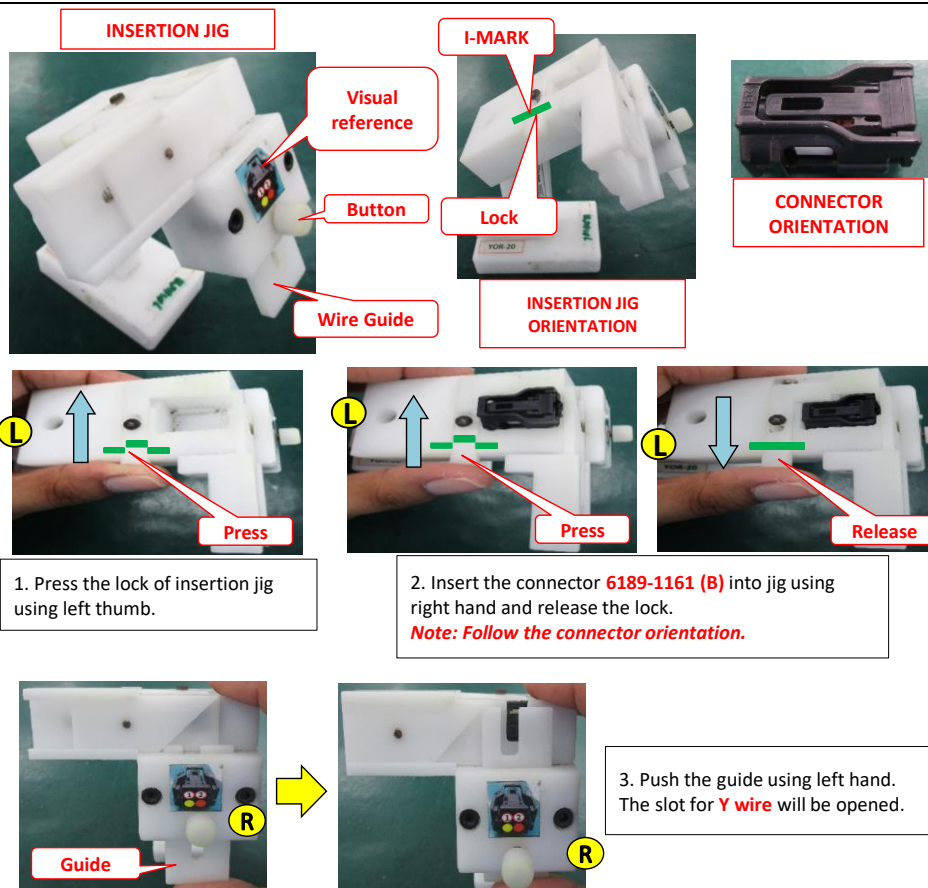
TOOLS/PPE

QUALITY POINTERS

4

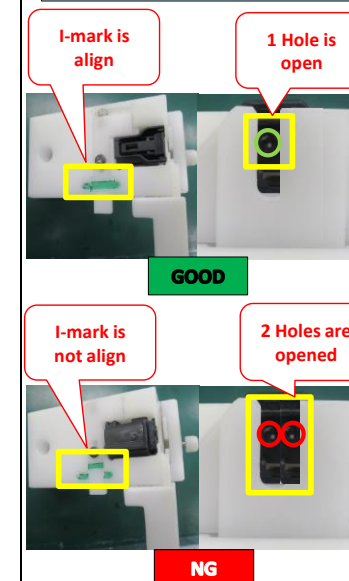
P1

Connector setting to
insertion jig
6189-1161 (B)



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 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	Wire insertion to connector 6189-1161 (B)	<p>1 Yellow</p> <p>1. Hold the Y wire then insert to terminal slot 1 using right hand.</p> <p>2 Orange</p> <p>2. Press the button using right thumb. The slot for OR wire will be opened.</p> <p>3. Hold the OR wire then 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	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.
6	Connector Lock	<p>BEFORE PRESSING</p> <p>AFTER PRESSING</p> <p>1. Put the connector into locking jig using both hands and then press 2x. Check the connector if properly locked.</p> <p>NG NG GOOD</p> <p>Unlock Condition Half Lock Condition Full Lock Condition</p>		LOCKING JIG	NOTE: MANUAL LOCKING MAY CAUSED DAMAGED LOCK 1. Use the provided locking jig per model 2. No unlock/half-locked connector

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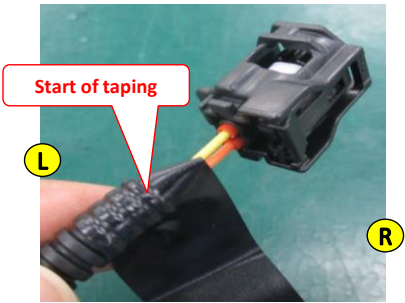

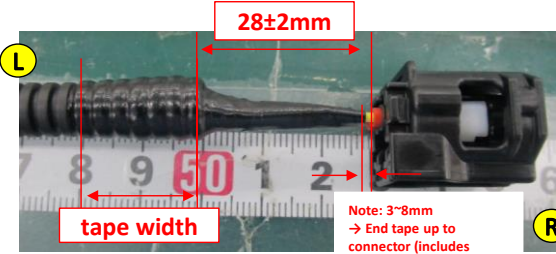

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PARTS:		1. Assy parts 2. Black tape	JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P1 Taping 1 Black Corrugated tube to wire near connector	<p>4</p>  <p>1. Hold the corrugated tube using left hand then start taping using both hands.</p>  <p>2. Measure from end of the corrugated tube up to connector 28±2mm. <i>Note: Refer to WI-PRO-ASY-001 for taping procedure</i></p>  <p>3. After taping, check the measurement and tape condition.</p> <p><i>Note: 3~8mm → End tape up to connector (includes rubber seal)</i></p>	<p>MEASURING TAPE</p> 	<p>4</p> <p><i>Note:</i> <i>Please use calibrated/verified measuring tape when getting the measurement.</i></p> <p>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</p>

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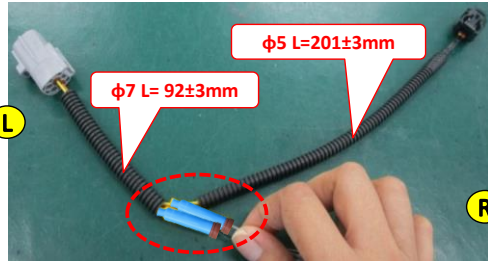


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PARTS:

1. MRSW CP 7M0593-7050A GR-B/W wires L=685±3mm
2. Assy parts

JIG

1. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
8	P1 Wire insertion to assy parts	<div></div> <div></div> <div></div>	<div></div>	<ol style="list-style-type: none">1. No wrong usage of parts2. No damaged rubber seal3. No exposed rubber seal during insertion

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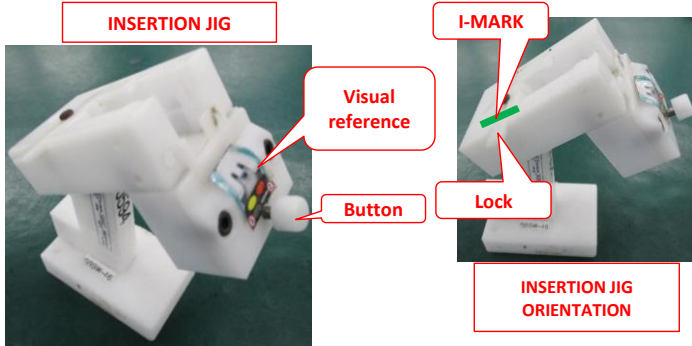
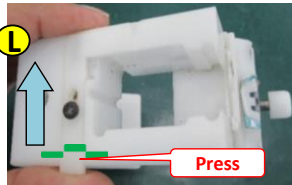
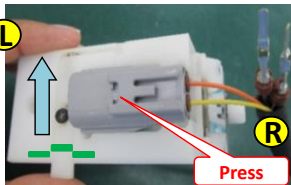

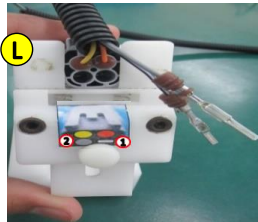
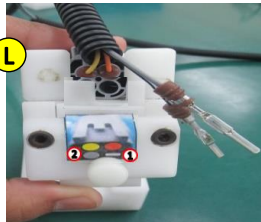
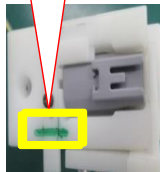
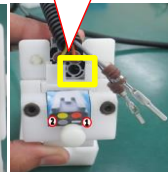

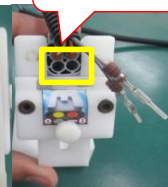
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PARTS:		1. Assy parts		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
10	P1	<div><div><div><div>4</div><div></div></div><div></div><div></div><div></div><div><p>1. Press the lock of insertion jig using left thumb.</p></div><div></div><div></div><div><p>3. Press the guide using left thumb. The slot for B/W wire will be opened.</p></div></div><div><p>2. Insert the connector 6188-0066 (GR) with inserted Y/OR wire using right hand. <i>Note: Follow the connector orientation.</i></p><div>4</div></div></div>		n/a	<div><h3>Connector Orientation Illustration</h3><div><div><p>I-mark is align</p></div><div><p>1 Hole is open</p></div></div><div><p>GOOD</p></div><div><div><p>I-mark is NOT align</p></div><div><p>2 Holes are opened</p></div></div><div><p>NG</p></div></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></div>

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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
11	Wire insertion to connector 6188-0066 (GR) (Assy parts)	<p>1. Hold the B/W wire then insert to terminal slot 1 using right hand.</p> <p>2. Press the button using right thumb. The slot for GR wire will be opened.</p> <p>3. Hold the GR wire then insert to terminal slot 2 using right hand.</p> <p>4. After insertion, push the lock using left thumb 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>
12	Connector Lock	<p>1. Put the connector into locking jig using both hands and then press 2x. Check the connector if properly locked.</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 jig per model2. No unlock/half-locked connector

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PARTS:

1. Assy parts

2. Black tape

3. Black Corrugated tube (no slit) $\phi 5$ L=163 \pm 3mm

4. AVSSf 0.3 B/B wires L=749 \pm 3mm

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
12	Wire insertion to connector 6188-0066 (GR)	<p>1. Hold the corrugated tube using left hand then start taping using right hand.</p> <p>2. Measure from end of the corrugated tube up to connector 28\pm2mm. <i>Note: Refer to WI-PRO-ASY-001 for taping procedure</i></p> <p>3. After taping, check the measurement and tape condition.</p> <p><i>Note: Set aside the assy parts after assembly.</i></p>	<p>MEASURING TAPE</p>	<p><i>Note:</i> <i>Please use calibrated/verified measuring tape when getting the measurement.</i></p> <ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong dimension6. No wrong use of tape
13	Wire insertion to Black Corrugated tube (no slit) $\phi 5$ L=163 \pm 3mm	<p>1. Get the COT (no slit) $\phi 5$ L=163\pm3mm using right hand then insert the B/B wires L=749mm using left hand.</p>	n/a	<ol style="list-style-type: none">1. No wrong use of parts2. No deformed terminal

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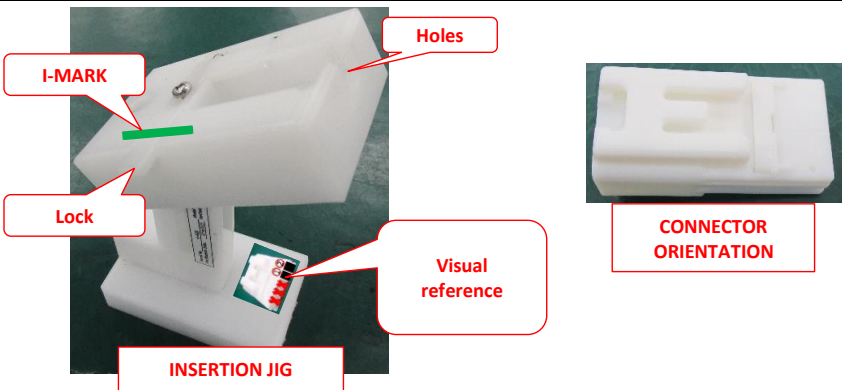
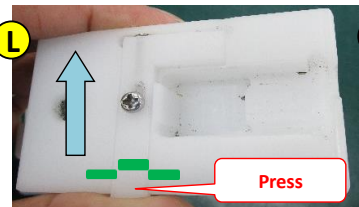
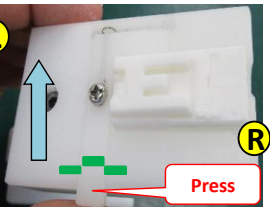
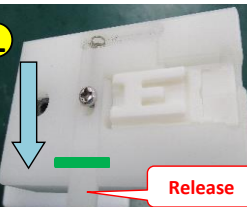
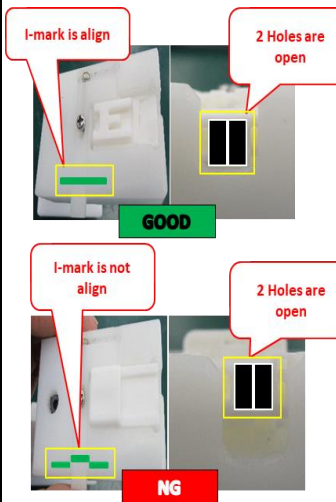
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PARTS:

1. Connector 6098-3802 (W)

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
14	P1 Connector setting to insertion jig 4 6098-3802 (W)	<div></div> <div><p>1. Press the lock of insertion jig using left thumb.</p></div> <div><p>2. Insert the connector 6098-3802 (W) into jig using right hand then release the lock. <i>Note: Follow the connector orientation.</i></p></div> <div><p>3. Check the holes for B/B wires.</p></div>	n/a	<div><h3>Connector Orientation Illustration</h3></div> <div></div> <div><ol style="list-style-type: none">1. Use the provided jig per model2. No wrong orientation of connector3. No wrong use of connector4. No damaged connector</div>



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PARTS:

n/a

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

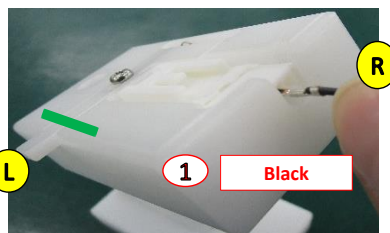
15

P1

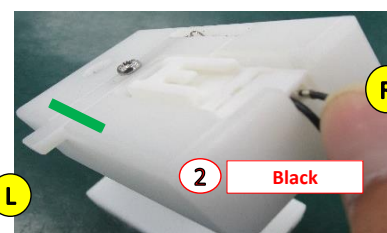
Wire insertion to
connector
4 6098-3802 (W)



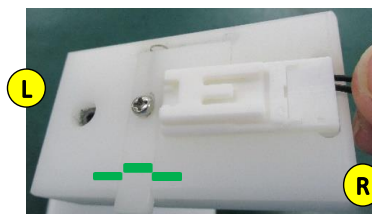
WIRE FACING



1. Get the **1st B wire** then insert to terminal slot **1** using right hand.
Note: Insertion of wire must be from left to right.



2. Get the **2nd B wire** then insert to terminal slot **2** using right hand.



3. After insertion, push the lock using left thumb 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

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

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