



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Process Name/Title:

Product Name/Code:

011B / 7M0512-7020D

Customer:

TRJ

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Effectivity Date:

May 04, 2021

Validity Date:

n/a

Document No.:

WI-ENG-PDE-134A

Revision No.:

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PARTS: 1. Connector 6188-0066 (GR)

JIG:

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P1	<p>Connector setting to insertion jig 6188-0066 (GR)</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 guide using left hand. The slot for Y wire will be opened.</p>	<p>Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	<p>Connector Orientation Illustration</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>

Revision History

Eff. Date	Rev. No	Details of Change	Prepared by	Reviewed by	Approved by	Noted by
05/04/21	3	Removal of validity date. Apply some improvements.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
10/22/20	2	Change effectivity and validity date. Remove cycle time.	M. Catapang	R. Peñaloza	A. Shimamura	A. Arañes
03/06/18	n/a	Previously established as Engineering Instruction (EI-ENG-PDE-021). Initial issue.	S. Manalo	R. Alcantara	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted
			Est. Date:	July 16, 2018		

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PARTS:	1. Pre-assembled parts from Kitting: Connector 6189-0249 (GR); AVSSf 0.3 Y-OR L=387±2mm; Black COT (no slit) Φ7 L=113±3mm, Φ7 L=211±3mm)			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1	Wire insertion to connector 6188-0066 (GR)		n/a	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing <div data-bbox="1780 975 2123 1121">Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div>
		1. Get the Y wire then insert to terminal slot 1 using right hand.	2. After insertion of Y wire press the button using right hand. The slot for OR wire will be opened.		
		3. Get the OR wire then insert to terminal slot 2 using right hand.	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. Set aside the assy parts.		

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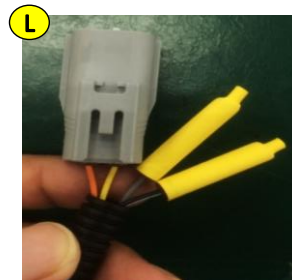

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PARTS:		JIG		
1. Assy parts 2. AVSSf 0.3 MRSW CP 7M0365-M040 GR-B/W L=830±3mm		1. Terminal cover jig / 3		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P1 Wire insertion to assy parts	 <p>1. Get the terminal cover jig using right hand then insert to both terminals (GR-B/W wires) using right hand.</p>  <p>2. Hold the COT $\phi 7 L=211\pm 3mm$ using left hand then insert the GR-B/W wires using right hand.</p>  <p>3. After insertion, remove the cover jig using right hand.</p>	<p>TERMINAL COVER JIG</p> 	<p>1. No wrong usage of parts 2. No damaged rubber seal</p>

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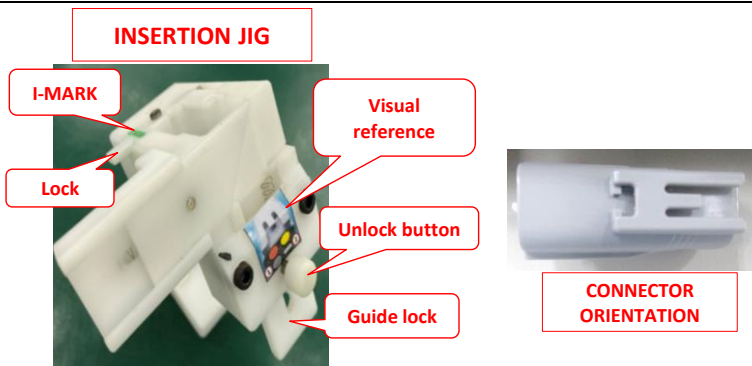
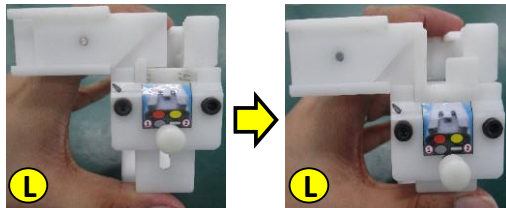
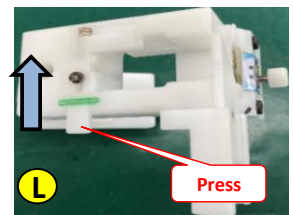
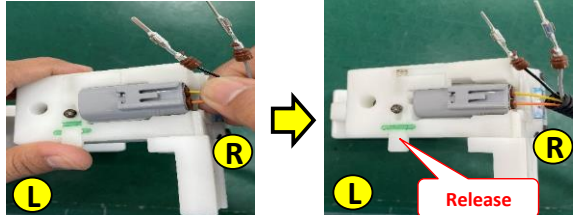
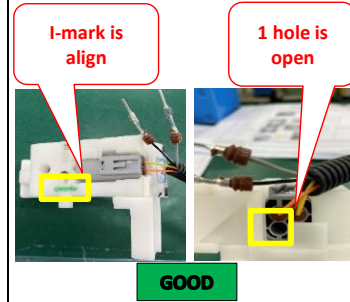
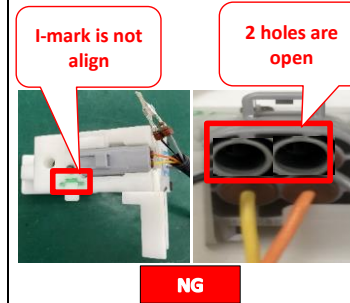
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PARTS:		1. Assy parts			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
4	P1	<p>Connector setting to insertion jig (Assy parts) 6188-0066 (GR)</p>     <p>1. Push the guide lock using left thumb. The holes for GR wire will be opened.</p> <p>2. Press the lock of insertion jig using left thumb.</p> <p>3. Insert the connector 6188-0066 (GR) into jig using right hand and release the lock.</p>			n/a	<p>Connector Orientation Illustration</p>  <p>GOOD</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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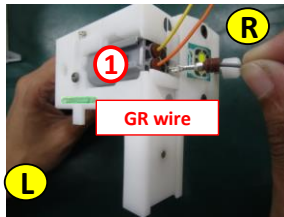

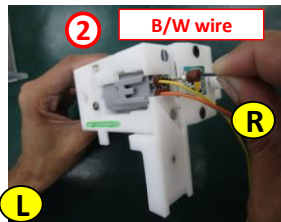
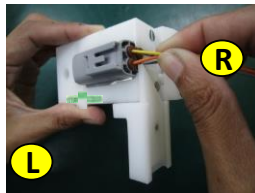
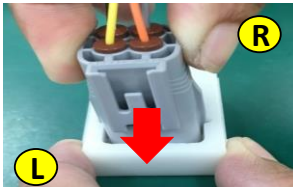


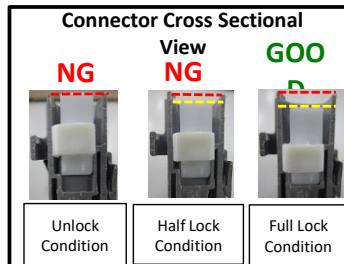

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PARTS:		Assy parts		JIG	1. Insertion jig 2. Locking jig	
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1	Wire insertion to connector 6188-0066 (GR)	<div><p>1. Hold the GR wire then insert to terminal slot ① using right hand.</p></div> <div><p>Wire facing</p></div> <div><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. Hold the B/W 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>		n/a	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing <div>Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div>
6		Connector Lock	<div><p>1. Put the connector into locking jig then press 2x using right hand. Check if properly locked.</p></div> <div><p>Before pressing</p><p>After pressing</p></div> <div><p>Connector Cross Sectional View</p><p>NG NG GOO</p><p>Unlock Condition Half Lock Condition Full Lock Condition</p></div> <div><p>LOCKING JIG</p></div>		<div>Note: MANUAL LOCKING MAY CAUSE DAMAGED LOCK.</div> 1. Use the provided jig per model 2. No half-lock/unlock connector	

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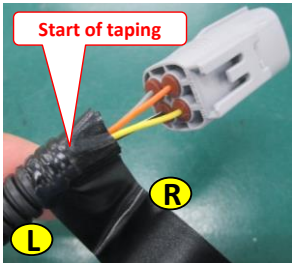
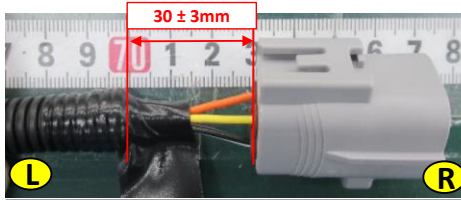
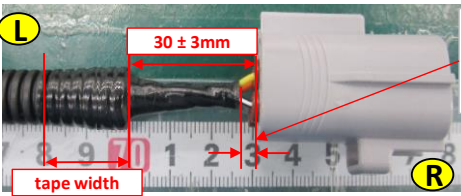



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PARTS:		1. Assy parts 2. Black Corrugated tube (no slit) $\phi 5$ L=59 \pm 3mm 3. Black tape 4. AVSSf 0.3 B L=667 \pm 3mm [2pcs.]			JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
7	P1	<p>Taping 1 Black Corrugated tube to wire near connector</p>  <p>1. Hold the corrugated tube using left hand and start taping using right hand.</p>  <p>2. Measure from end of the corrugated tube up to the edge of connector 30mm and then continue the taping process. <i>Note: Refer to WI-PRO-ASY-001 for taping procedure.</i></p>  <p><i>Note: 0 - 5mm → End tape up to coupler (includes rubber seal)</i></p> <p>3. After taping, check the tape condition & measurement. Then set aside the assy parts.</p>  <p>MEASURING TAPE</p>			 <p>MEASURING TAPE</p>	<p><i>Note:</i> Please use calibrated/verified measuring tape when getting the measurement.</p> <p>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</p>
8		<p>Wire insertion Black corrugated tube (no slit) $\phi 5$ L=59\pm3mm</p>  <p>1. Get the corrugated tube $\phi 5$ L=59\pm3mm using left hand then insert the Black wires (n=2) wires using right hand.</p>			n/a	1. No wrong use of parts

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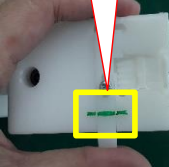
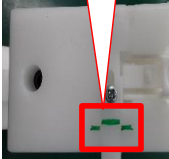
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PARTS:	1. Connector 6098-3810 (W)			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
9	P1	Connector insertion to insertion jig 6098-3810 (W)		n/a	<div data-bbox="1812 432 2096 496">Connector Orientation Illustration</div> <div data-bbox="1816 544 1890 576">I-mark is align</div> <div data-bbox="1995 544 2092 592">2 holes are open</div> <div data-bbox="1783 632 1951 799"></div> <div data-bbox="1973 743 2047 783">GOOD</div> <div data-bbox="1816 831 1890 871">I-mark is not align</div> <div data-bbox="1973 831 2092 871">All holes are open</div> <div data-bbox="1783 911 1951 1070"></div> <div data-bbox="1973 1031 2024 1062">NG</div> <div data-bbox="1783 1166 2107 1267"><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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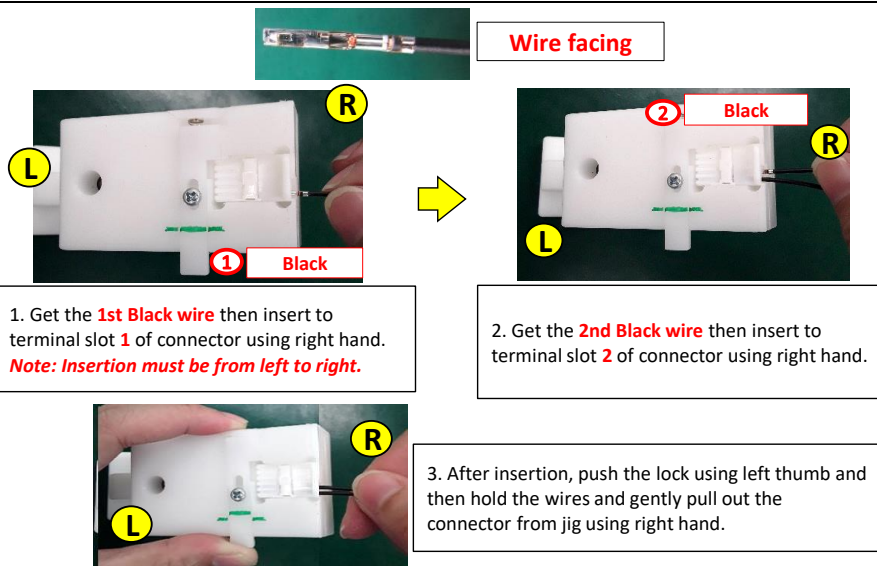
PARTS:

1. Assy parts

JIG1. Insertion jig
2. Locking jig**NO.****PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

10

P1

Wire insertion to
connector
6098-3810 (W)

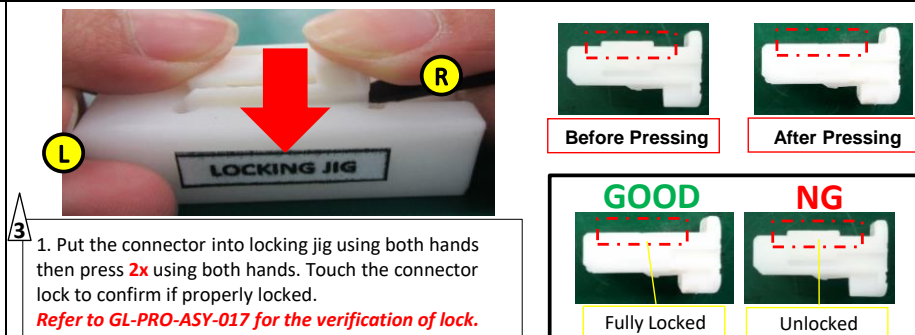
n/a

1. No loose insertion
2. No wrong insertion
3. One by one insertion
4. No deform 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.

11

Connector Lock

**LOCKING JIG**


NOTE: MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR LOCK

1. Use the provided jig per model
2. No half-locked/unlocked connector

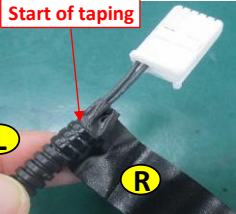
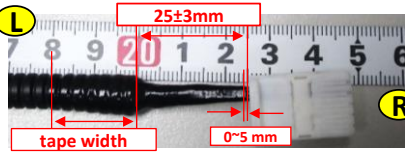
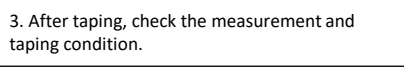



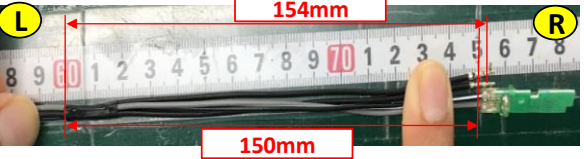

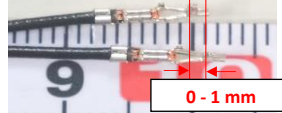
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PARTS:	1. Assy parts 2. Black tape		JIG	n/a
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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
12	Taping 2 Black corrugated tube to wire near connector	 <p>1. Hold corrugated tube using left hand then start taping using right hand.</p>  <p>2. Measure the end of the corrugated tube up to the edge of connector 25mm then continue the taping process. <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>Note: Please use calibrated/verified measuring tape when getting the measurement.</p> <p>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</p>
13	Spot taping	  <p>1. Hold and measure the B/B wires up to terminal end tip 154mm and GR-B/W wires up to the edge of hotmelted 150mm.</p> <p>2. Hold the wires using left hand and begin taping using right hand. <i>Note: Wind the tape 2-3 winds.</i></p>  <p>3. After taping, check the measurement, wire alignment (B/B wires) and taping condition.</p>		<p>Wire alignment tolerance</p>  <p>0 - 1 mm</p> <p>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</p> <p>Note: Please use calibrated/verified measuring tape when getting the measurement.</p>

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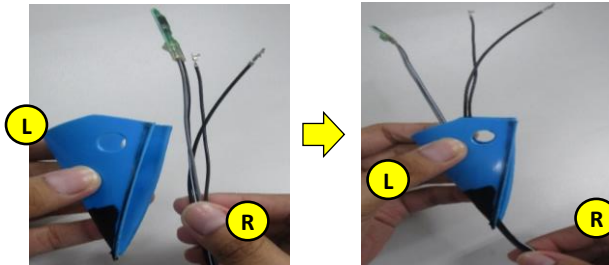
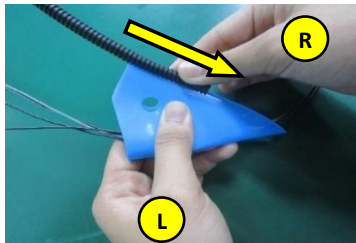

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PARTS:

1. Black Corrugated tube (with slit) $\phi 5$ L=460 \pm 4mm
2. Assy parts

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
14	P1 Wire insertion to Black corrugated tube (with slit) $\phi 5$ L=460 \pm 4mm	 <p>1. Hold the COT adaptor using left hand and insert the wires using right hand.</p>  <p>2. Hold the COT adaptor with wires using left hand, get the Black Corrugated tube (w/slit) $\phi 5$ L=460\pm4mm using right hand and then insert to COT adaptor. Push the adaptor and pull the COT in same timing. Make sure all wires are inserted.</p>	COT Adaptor 	<ol style="list-style-type: none">1. No wrong use of parts2. No wires left in between the COT slit.

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