



WORK INSTRUCTION

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

Product Name/Code: **101D / 7N0096-7020** Customer: **TRJ**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

Effectivity Date:

June 07, 2021

Validity Date:

n/a

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PARTS:

- Connector 6098-2220 (W)
- AVSSf 0.3 Y/OR wires L=713±3mm

JIG:

1. Insertion jig with switch cover

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

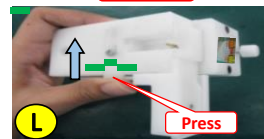
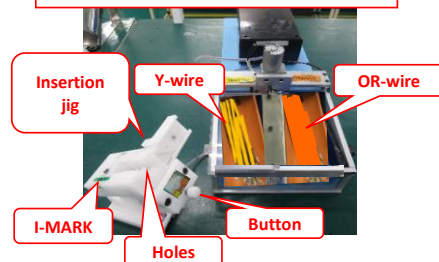
QUALITY POINTERS

1

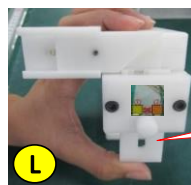
P1

Connector setting to
insertion jig
6098-2220 (W)

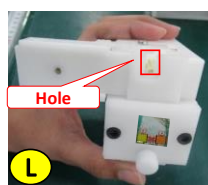
INSERTION JIG WITH SWITCH COVER



1. Press the lock of insertion jig using left thumb.



Guide



Hole



CONNECTOR ORIENTATION



Release

2. Insert the connector **6098-2220 (W)** into jig using right hand and release the lock.

Note: Follow the connector orientation.



3. Push the guide using left hand. The slot for **Y wire** will be opened.

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 was align

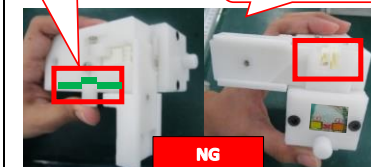
1 hole is open



GOOD

I-mark was not align

All holes were 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
06/07/21	1	Removal of validity date. Apply additional note in connector insertion process.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
03/06/21	0	Initial issue	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes

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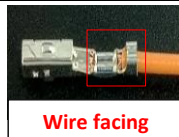
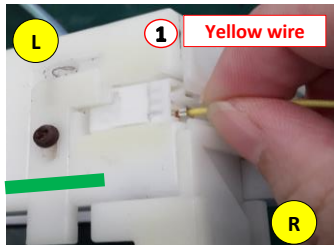
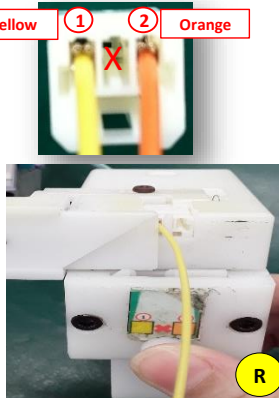
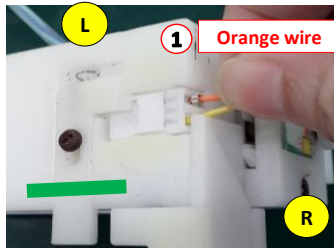
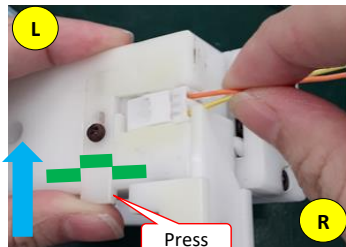
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PARTS:		n/a		JIG	1. Insertion jig with switch cover
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1	Wire insertion to connector 6098-2220 (W)	<div><p>Wire facing</p></div> <div><p>1. Hold the insertion jig using left 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>	n/a	<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>Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div>

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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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PARTS:

n/a

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

3

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

①

2. Press location 1 of the connector lock using your left thumb

②

3. Press location 2 of the connector lock using your left thumb

③

4. Press location 3 of connector near terminal insertion side with your left thumb

Lock is visible

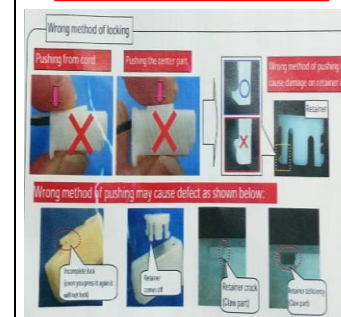
Lock is not visible

BEFORE LOCK

AFTER LOCK

5. Check the locking condition

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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PARTS:	1. Assy parts 2. Black corrugated tube (no slit) $\Phi 5$ L=316 \pm 3mm 3. Black corrugated tube (no slit) $\Phi 5$ L=171 \pm 3mm	4. Black vinyl tube $\Phi 5$ L=182 \pm 3mm	JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Wire insertion to Black corrugated tube (no slit) $\Phi 5$ L=316 \pm 3mm $\Phi 5$ L=171 \pm 3mm	 <p>1. Get the corrugated tube $\Phi 5$ L=316\pm3mm using right hand then insert the Y-OR wire using left hand.</p>  <p>2. Get the corrugated tube $\Phi 5$ L=171\pm3mm using right hand then insert the Y-OR wire using left hand.</p>	n/a	1. No wrong use of parts 2. No deformed terminal
5	Wire insertion to Black vinyl tube $\Phi 5$ L=182 \pm 3mm	 <p>1. Get the vinyl tube $\Phi 5$ L=182\pm3mm using right hand then insert the Y-OR wire using left hand.</p>	n/a	1. No wrong use of parts 2. No deformed terminal

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PARTS:

1. Connector 6098-3802 (W)

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

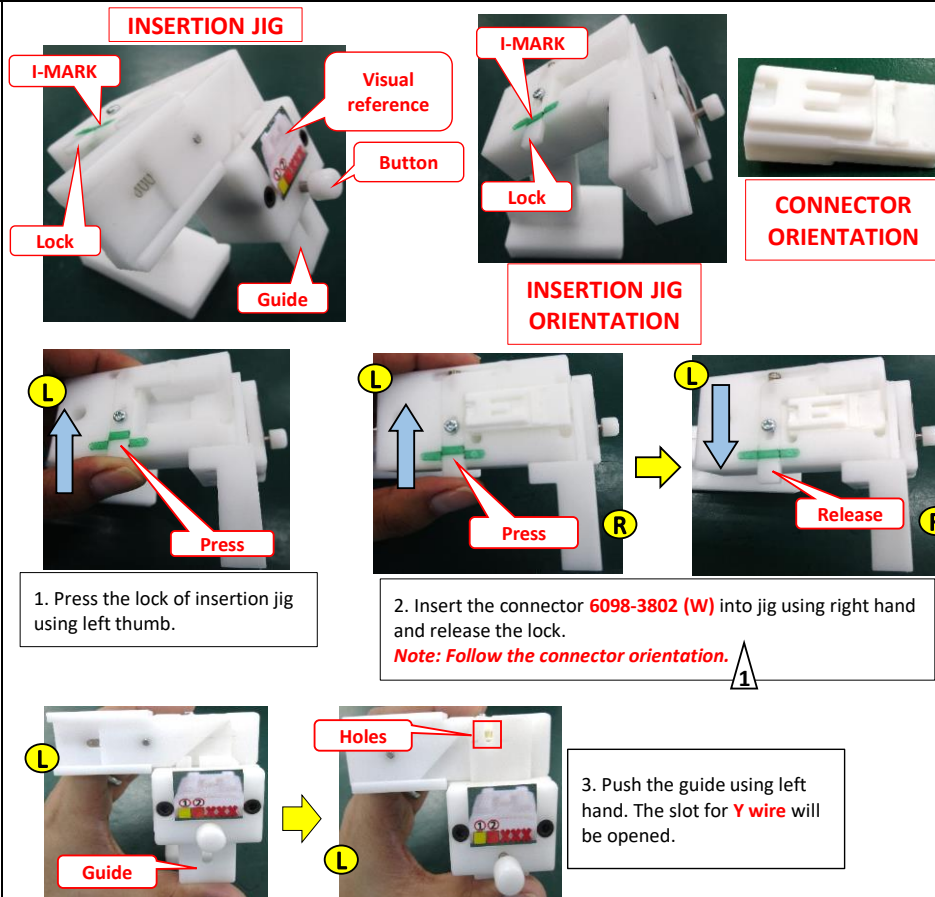
TOOLS/PPE

QUALITY POINTERS

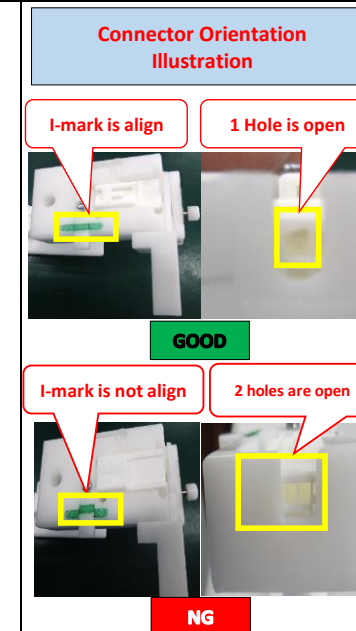
6

P1

Connector setting to
insertion jig
6098-3802 (W)



n/a



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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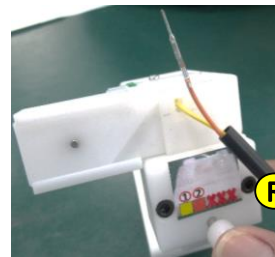
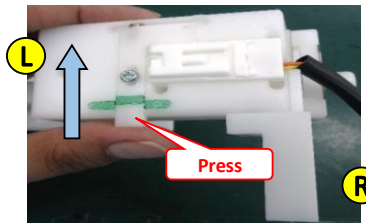
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PARTS:	1. Assy parts			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P1 Wire insertion to connector 6098-3802 (W)	<div>WIRE FACING</div> <div><p>1. Get the assy part and hold the Y wire then insert to terminal slot 1 using right hand.</p></div> <div><p>3. Get the OR wire then insert to terminal slot 2 using right hand.</p></div> <div><p>2. After insertion of Y wire press the button using right hand. Slot for OR wire will be opened.</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>NOTE: Set aside the assy parts.</div>		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> <div>Note: Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div>

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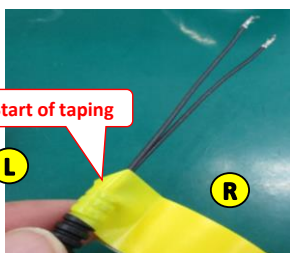
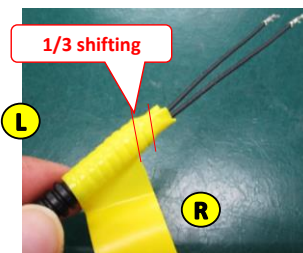

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. Assy parts 2. AVSSf 0.3 B/B wires L=791±3mm [2pcs.] 3. Black corrugated tube (no slit) Φ5 L=275±3mm 4. Black tape			JIG	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
8	Wire insertion to Black corrugated tube (no slit) Φ5 L=275±3mm	<div><div><p>1. Get the terminal cover jig using right hand and insert the B/B wires using left hand.</p></div><div><p>2. Get the corrugated tube (no slit) Ø5 L=275±3mm using right hand then insert the B/B wires using left hand.</p></div><div><p>3. Remove the terminal cover jig after insertion using right hand.</p></div></div> <div><div>TERMINAL COVER JIG</div></div>			1. No wrong usage of parts 2. No deformed terminal	
9	P1 Taping 1 Black corrugated tube to wire near terminal	<div><div><p>1. Get the Black tape using right hand then make 2 windings of tape at the middle of COT and wire using both hands.</p></div><div><p>2. Make 1/3 shifting using both hands going to the side of COT until it reach 25mm then make 2 windings of tape before shifting to other side.</p></div></div> <div><div>MEASURING TAPE</div></div>			<div>NOTE: USE YELLOW TAPE FOR EASY VISUALIZATION OF SHIFTING LINES, BUT ACTUAL SHOULD BE BLACK TAPE.</div> <div>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</div> <div>Note: Please use calibrated/verified measuring tape when getting the measurement.</div>	

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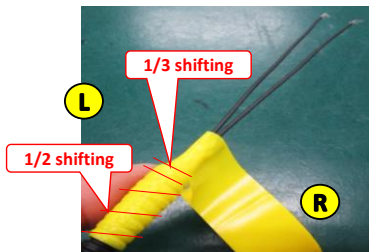

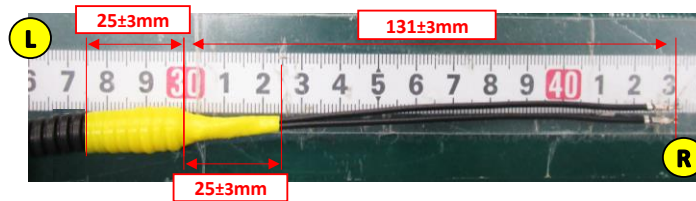

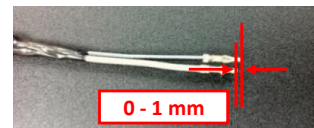
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PARTS:

1. Assy parts
2. Black tape

JIG


n/a

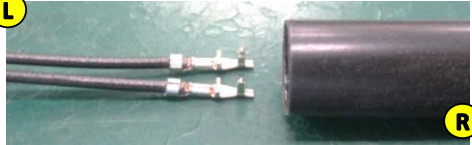
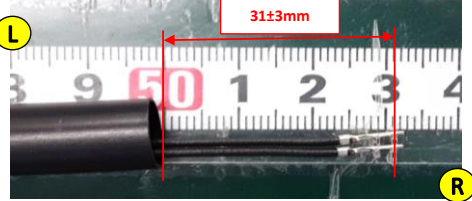

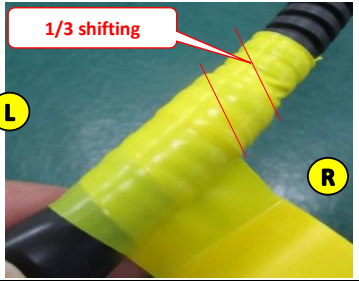

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	Taping 1 Black corrugated tube to wire near terminal (Continuation)	 <p>3. Make 1/2 shifting using both hands going to other side of COT and 1/3 shifting going to wires.</p>  <p>4. Measure from end of COT up to terminal pointed tip 131mm then continue the taping process using both hands.</p>  <p>5. After taping, check the taping condition, measurement and wire alignment.</p>	 <p>MEASURING TAPE</p>	<p>NOTE: USE YELLOW TAPE FOR EASY VISUALIZATION OF SHIFTING LINES, BUT ACTUAL SHOULD BE BLACK TAPE.</p> <ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong use of tape6. No wrong dimension <p>Note: Please use calibrated/verified measuring tape when getting the measurement.</p> <p>Wire alignment tolerance</p> 

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PARTS:	1. Assy parts 2. Black sunprene tube $\Phi 9$ L=120 \pm 3mm 3. Black tape			JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
10	Wire insertion to Black sunprene tube $\Phi 9$ L=120 \pm 3mm	 <p>1. Get the black sunprene tube $\Phi 9$ L=120\pm3mm using right hand then insert the assy parts using left hand.</p>	n/a	1. No wrong use of parts 2. No deformed terminal	
11	P1 Taping 2 Black sunprene tube to Black corrugated tube (no slit) near terminal	 <p>1. Measure from end of sunprene tube up to terminal pointed tip 31mm using both hands.</p>  <p>2. Get the Black tape using right hand then make 2 windings of tape at the middle of sunprene and COT using both hands.</p>  <p>3. Make 1/3 shifting using both hands going to the side of sunprene until it reach 25mm then make 2 windings of tape before shifting to other side.</p>	 <p>MEASURING TAPE</p>	<p>NOTE: USE YELLOW TAPE FOR EASY VISUALIZATION OF SHIFTING LINES, BUT ACTUAL SHOULD BE BLACK TAPE.</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	

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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

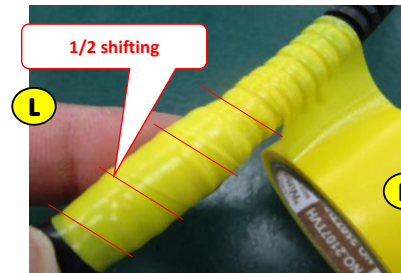
TOOLS/PPE

QUALITY POINTERS

11

P1

Taping 2
Black sunprene tube
to
Black corrugated tube
(no slit)
near terminal
(Continuation)



4. Make **1/2 shifting** using both hands going to other side of COT then make **3 windings** of tape and cut the tape.



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

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

Note:

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

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