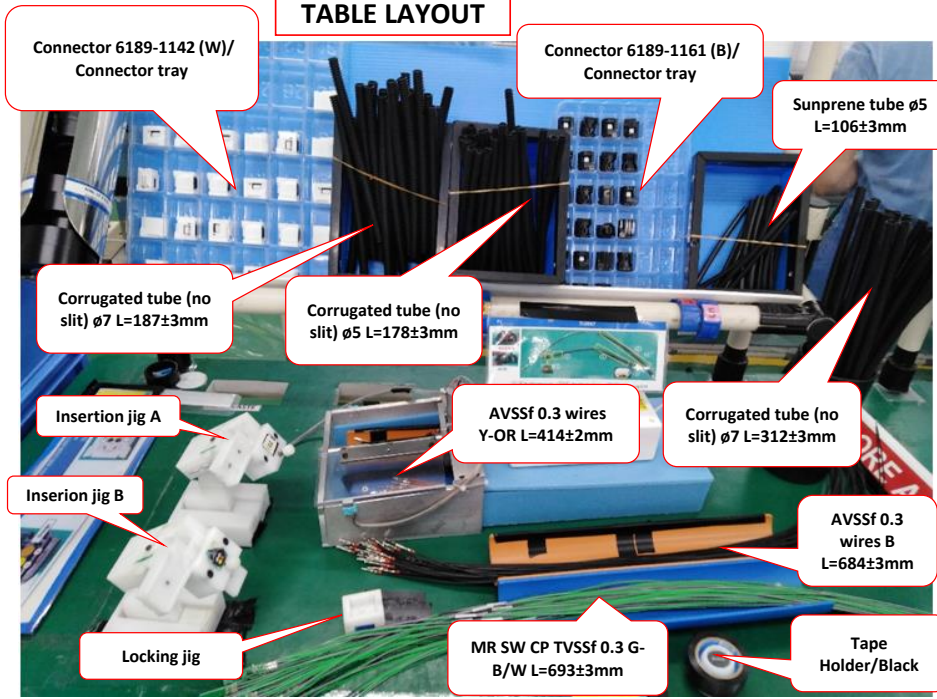




	WORK INSTRUCTION TAPING ASSEMBLY PROCESS				Effectivity Date:		December 22, 2022	
	Process Name/Title:				Validity Date:		n/a	
	Model Code/Part Number: 370B / 7L0047-7024		Customer: TRQSS		Document No.:		WI-ENG-PDE-421A	
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:		1	Page No.: 1 of 10

PARTS:		All parts: Connector 6189-1142(W); Connector 6189-1161(B); AVSSf 0.3 wires Y L=414±2mm; AVSSf 0.3 wires OR L=414±2mm; Corrugated tube (no slit) ø7 L=312±3mm; Corrugated tube (no slit) ø7 L=187±3mm; Corrugated tube (no slit) ø5 L=178±3mm; MR SW CP TVSSf 0.3 G-B/W L=693±3mm; Sunprene tube ø5 L=106±3mm; Black tape [1pc.]		JIG:		1. Insertion jig with switch cover 2. Locking jig 3. Terminal cover jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE		1 QUALITY POINTERS	
1	P1	TABLE LAYOUT 		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.		Document reference/s: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to WI-PRO-KIT-005 for Wire Taping without Vinyl Tube 1. No missing parts/tools 2. No excess parts/tools	

Revision History								Prepared by		Reviewed by		Approved by		Noted by					
12/22/22	1	Improve quality pointers: Reminders/notes and references. Inclusion of Quality checkpoints						M. Catapang	J. Loterte	C. Villanueva	A. Arañes								
02/22/22	0	Initial issue						M. Catapang	J. Loterte	C. Villanueva	A. Arañes	M. Catapang		J. Loterte		C. Villanueva		A. Arañes	
Eff. Date	Rev. No	Details of Change						Revised	Reviewed	Approved	Noted	Est. Date:		February 22, 2022					

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Model Code/Part Number:

370B / 7L0047-7024

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Document No.:

WI-ENG-PDE-421A

Purpose:

☐ PROTOTYPE

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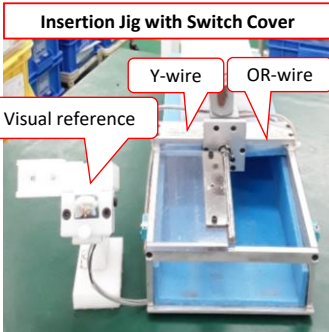
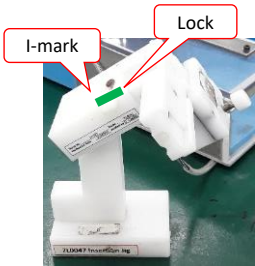

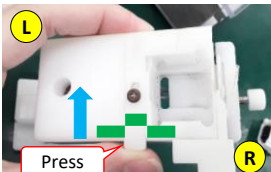
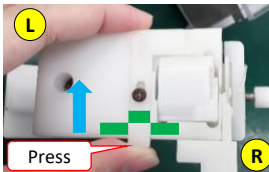
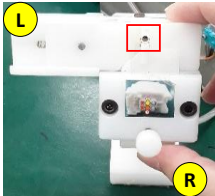
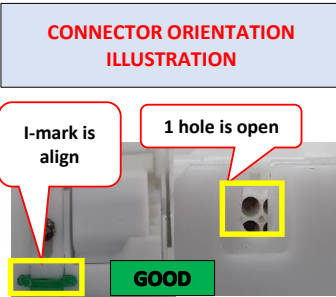
☒ MASSPRO

Revision No.:

1

Page No.:

2 of 10

PARTS:		1. Connector 6189-1142 (W)		JIG	1. Insertion jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1	Connector setting to Insertion jig 6189-1142 (W)	<div><div><p>Visual reference</p><p>Y-wire</p><p>OR-wire</p></div><div><p>I-mark</p><p>Lock</p><p>Insertion Jig Orientation</p></div><div><p>Connector Orientation</p></div></div> <div><div><p>Press</p></div><div><p>Press</p></div><div><p>Release</p></div></div> <div><p>1. Press the insertion jig lock using left hand.</p><p>2. Get the connector 6189-1142 (W) using right hand and insert to insertion jig. Release the lock after insertion. Note: Follow the connector orientation.</p><p>3. Push the lower wire guide upward using right hand. Slot for yellow wire will be opened.</p></div>	n/a	<div><div><p>I-mark is align</p><p>1 hole is open</p><p>GOOD</p></div><div><p>1. Use the provided jig per model</p><p>2. No wrong orientation of connector</p><p>3. No wrong use of connector</p><p>4. No damaged connector</p></div></div>

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December 22, 2022

Model Code/Part Number:

370B / 7L0047-7024

Customer:

TRQSS

Document No.:

WI-ENG-PDE-421A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

Page No.:

3 of 10

PARTS:

1. AVSSf 0.3 wires Y L=414±3mm, OR L=414±3mm

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

1 QUALITY POINTERS

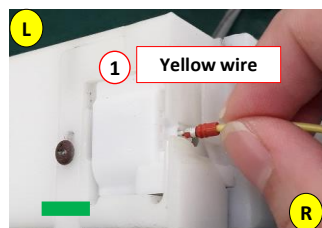
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P1

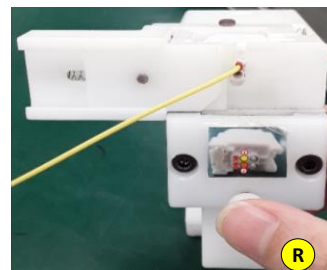
Wire Insertion to
connector
6189-1142 (W)



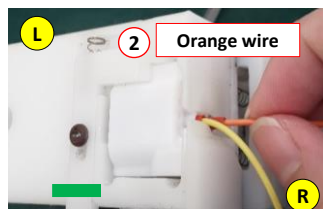
Wire facing



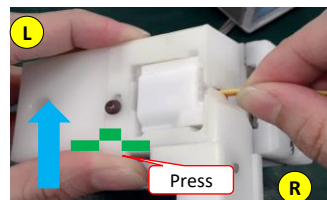
1. Hold the insertion jig using left hand.
Get the **Yellow wire** then insert to terminal
slot **1** using right hand.



2. Press the button using right thumb. The
slot for **Orange wire** will be opened.



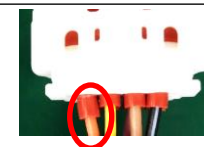
3. Get the **Orange wire** then insert to
terminal slot **2** using right hand.



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.

n/a

Note: During insertion, hold
the wire not **rubber seal** to
prevent sagging.



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

Important reminders/Note/s:

1. Please hold the wire near terminal.
 2. Make sure wires are properly inserted.
- Conduct Pull-Push-Pull-Push after
insertion.
Do not exert extra force.

Document references:

1. Refer to GL-PRO-ASY-029 for Pull-Push
procedure.
2. Refer to WI-PRO-KIT-005 for Wire
Taping without Vinyl Tube

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370B / 7L0047-7024

Customer:

TRQSS

Document No.:

WI-ENG-PDE-421A

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

4 of 10

PARTS:

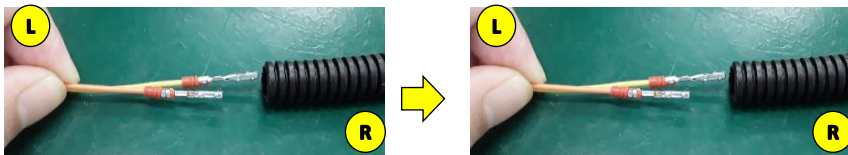
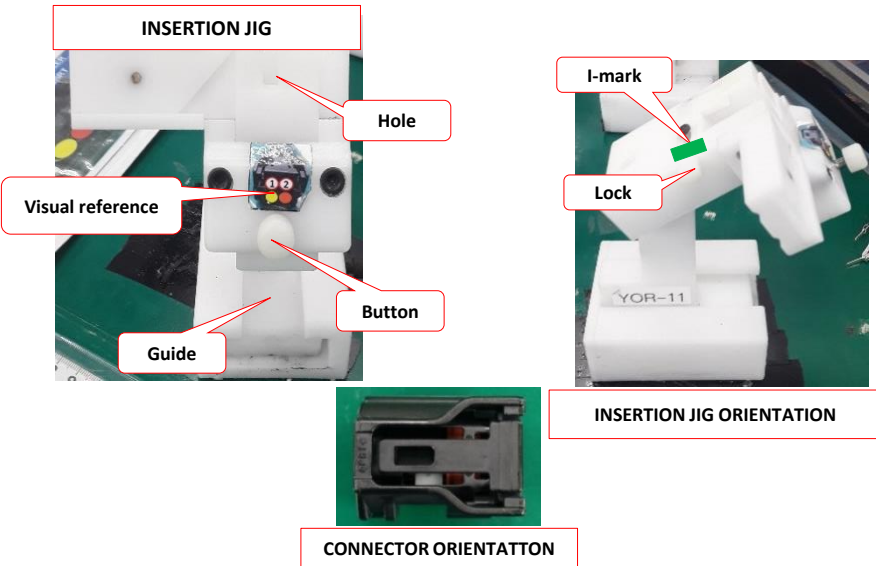
1. Assy parts

2. Black corrugated tube (no slit) $\phi 7$ L=187 \pm 3mm3. Black corrugated tube (no slit) $\phi 5$ L=178 \pm 3mm

4. Connector 6189-1161 (B)

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Wire insertion to Black corrugated tube (no slit) $\phi 7$ L= 187 \pm 3mm (1ST) $\phi 5$ L= 178 \pm 3mm (2ND)	 1. Hold the wires using left hand. Get the Corrugated tube (no slit) $\phi 7$ L=187\pm3mm using right hand then insert then Y-OR wires using left hand. 2. Hold the wires using left hand. Get the Corrugated tube (no slit) $\phi 5$ L=178\pm3mm using right hand then insert then Y-OR wires using left hand.	n/a	1. No wrong use of parts 2. No deformed terminal
5	Connector setting to insertion jig 6189-1161 (B)		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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Customer:

TRQSS

Document No.:

WI-ENG-PDE-421A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

Page No.:

5 of 10

PARTS:

n/a

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

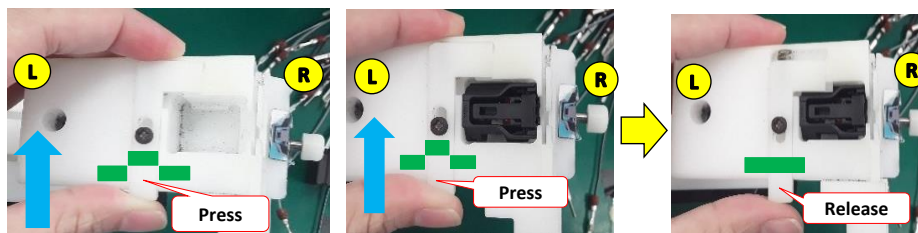
TOOLS/PPE

QUALITY POINTERS

5

P1

Connector setting to
insertion jig
6189-1161 (B)
(Continuation)



1. Press the lock using left thumb.

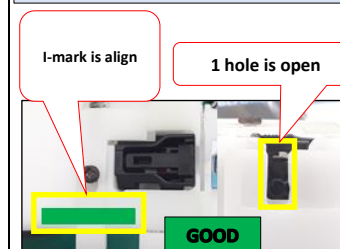
2. Get the connector **6189-1161 (B)** using right hand and insert to insertion jig. Release the lock after insertion.
Note: Follow the connector orientation.



3. Push the lower wire guide upward using right hand. Slot for **Yellow wire** will be opened.

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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Process Name/Title:

Model Code/Part Number: **370B / 7L0047-7024**

Customer:

TRQSS

Document No.:

WI-ENG-PDE-421A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

Page No.:

6 of 10

PARTS:

1. Assy parts

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

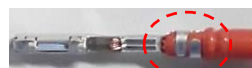
TOOLS/PPE

1 QUALITY POINTERS

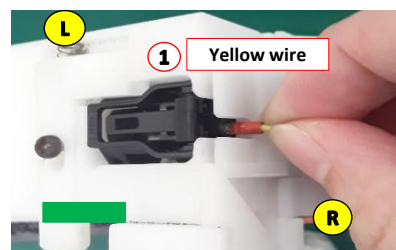
6

P1

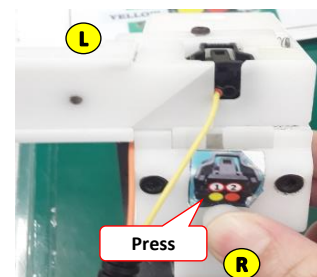
Wire insertion to connector
6189-1161 (B)



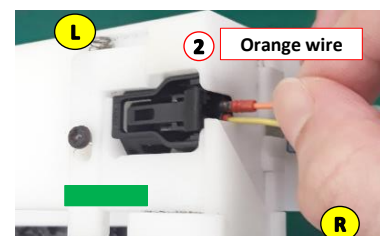
WIRE FACING



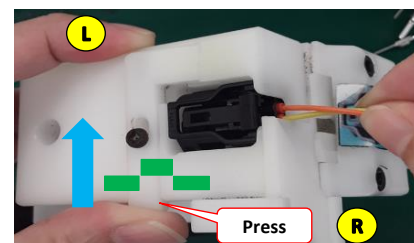
1. Hold the insertion jig using left hand.
Get the **Yellow wire** then insert to terminal
slot **1** using right hand.



2. Press the button using right thumb. The
slot for **Orange wire** will be opened.



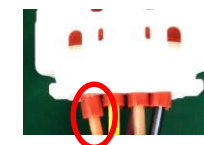
3. Get the **Orange wire** then insert to
terminal slot **2** using right hand.



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.

n/a

Note: During insertion, hold the
wire not **rubber seal** to prevent
sagging.



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

Important reminders/Note/s:

1. Please hold the wire near terminal.
2. Make sure wires are properly inserted.
Conduct Pull-Push-Pull-Push after
insertion.
Do not exert extra force.

Document references:

1. Refer to GL-PRO-ASY-029 for Pull-Push
procedure.

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Model Code/Part Number:

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Customer:

TRQSS

Document No.:

WI-ENG-PDE-421A

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

7 of 10

PARTS:

1. Assy parts
2. Black tape

JIG

1. Locking jig

NO.

PROCESS NAME

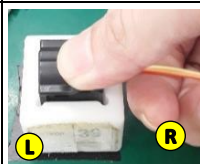
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

1 QUALITY POINTERS

7

Connector lock



1. Put the connector into locking jig and push down **2x** using both hands. Check the connector lock if properly locked.



Before pressing



After Pressing



LOCKING JIG



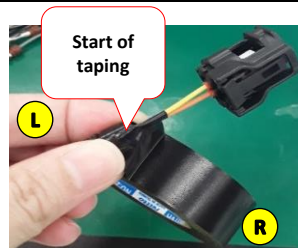
Important reminders/Note/s:

1. **MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR**

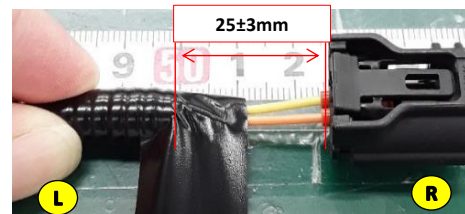
1. No unlock/half-locked connector
2. No damaged lock

8

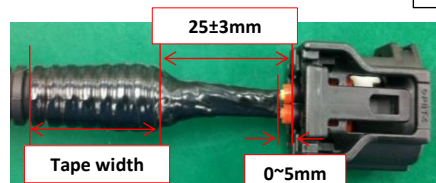
P1

Taping 1
COT to wire near
connector

1. Hold the assy parts using left hand, get **Black tape** then conduct pre-taping using both hands.



2. Hold the assy parts using left hand and measure from COT to connector **25±3mm** using both hands. Continue taping process using both hands.



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

MEASURING TAPE



Important reminders/Note/s:

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

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

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Customer:

TRQSS

Document No.:

WI-ENG-PDE-421A

Purpose:


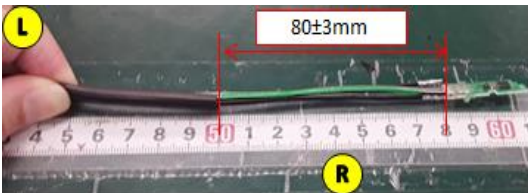
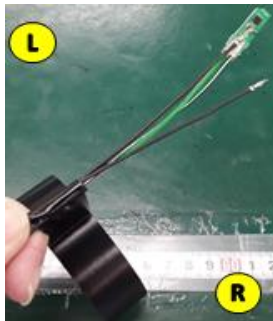
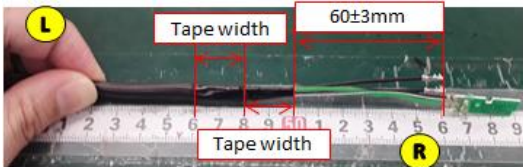

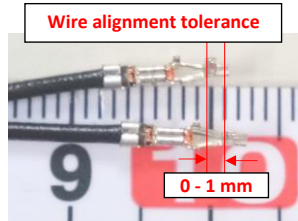
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

8 of 10

PARTS:		1. AVSSf 0.3 wires B L=684±3mm [2pcs] 2. MR SW CP TVSSf 0.3 G-B/W L=693±3mm			3. Black Sunprene tube ø5 L=106±3mm 4. Black tape		JIG	n/a
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE		1 QUALITY POINTERS
9		Wire Insertion to Sunprene tube ø5 L=106±3mm	<div><div></div><div>1. Hold the G-B/W and 2 Black wires using left hand. Get the Sunprene tube ø5 L= 106±3mm using right hand. Insert the wires using left hand. Insertion must be 2 wires at a time.</div></div>			n/a	1. No wrong use of parts 2. No deformed terminal	
10	P1	Taping 2 Sunprene tube to wire near terminal/hotmelted wire	<div><div><div></div><div>1. Measure from end of sunprene tube up to end of terminal pointed tip and edge of hotmelted wire 80±3mm using both hands.</div></div><div><div></div><div>2. Hold the vinyl tube using left hand, get the Black tape then start taping using both hands.</div></div><div><div></div><div>3. After taping, check the measurement, wire alignment & tape condition.</div></div></div>			<div>MEASURING TAPE </div> <div></div> <div>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</div> <div>Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</div>		

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Customer:

TRQSS

Document No.:

WI-ENG-PDE-421A

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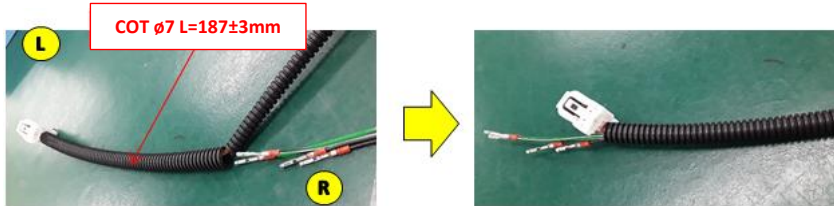
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

9 of 10

PARTS:		1. Black Corrugated tube $\phi 7$ L=312 \pm 3mm (no slit) 2. Assy parts			JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
11	P1	Wire insertion to Corrugated tube $\phi 7$ L=312 \pm 3mm	 <div>1. Get the corrugated tube $\phi 7$ L=312\pm3mm using right hand then insert the Black(n=2), G-B/W wires using left hand.</div>	n/a	1. No wrong use of parts 2. No deformed terminal	
12		Wire insertion to Assy parts	 <div>1. Get the assembled part set aside earlier using left hand then insert the 4 wires on COT $\phi 7$ L= 187\pm3mm using right hand.</div>	n/a	1. No wrong insertion 2. No deformed terminal	

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Process Name/Title:

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Validity Date:

n/a

Document No.:

WI-ENG-PDE-421A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

Page No.:

10 of 10

PARTS:

1. Assy parts

JIG

n/a

1 QUALITY CHECKPOINTS

P1

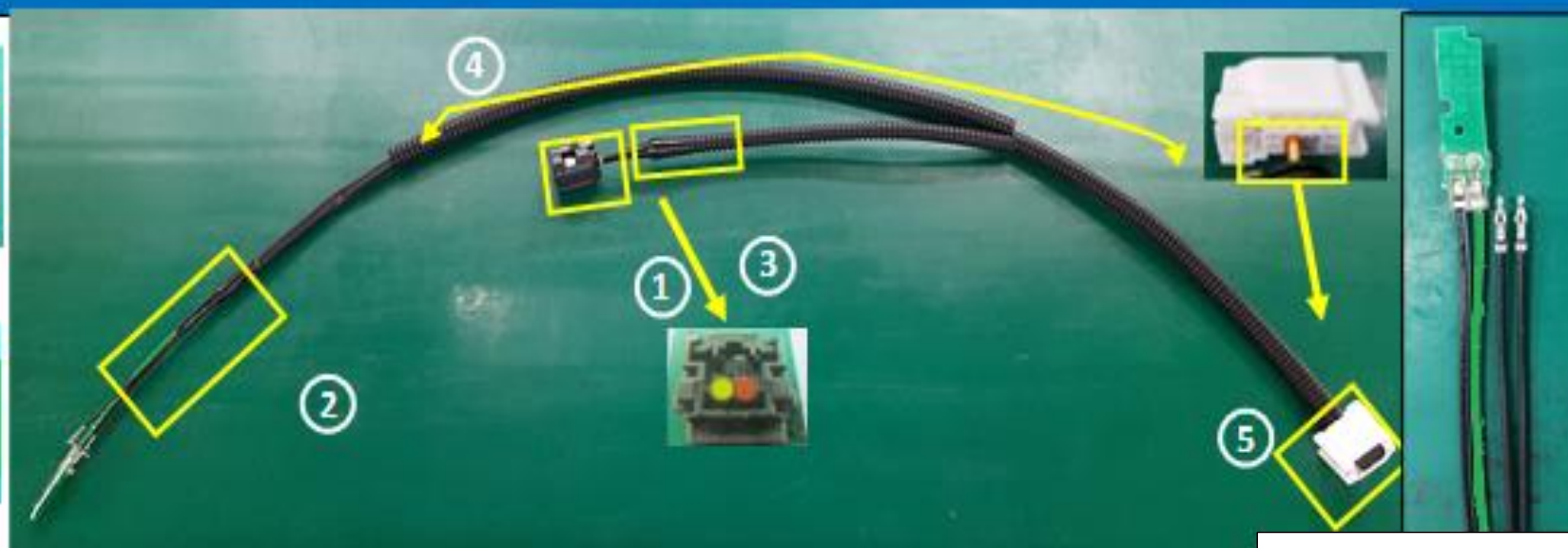
7L0047-7024



NO GOOD



GOOD



Proper alignment of
B-B wires and PCB

- ① ⑤ No Wrong Insert/ No TBO ② ③ No Missing Tape
① No UNLOCKED/HALFLOCKED CONNECTOR ④ No Missing COT

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