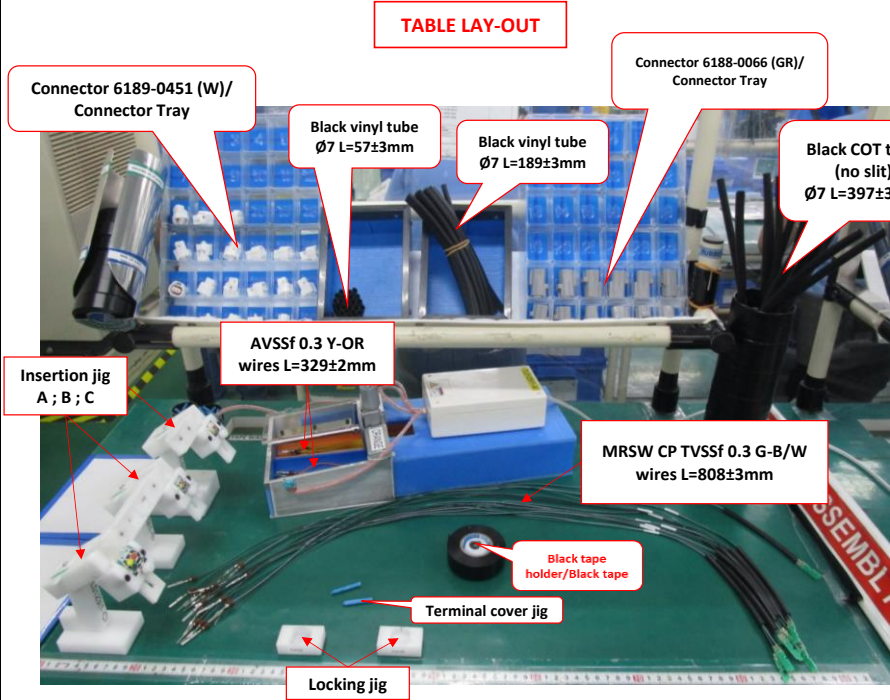
	WORK INSTRUCTION TAPING ASSEMBLY PROCESS				Effectivity Date:	April 26, 2023		
	Process Name/Title:				Validity Date:	n/a		
	Model Code/Part Number: 500B / 7L0084-7023		Customer: TRQSS		Document No.:	WI-ENG-PDE-426A		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	3	Page No.:	1 of 13

PARTS:	1. All parts: Connector 6189-0451 (W); AVSSf 0.3 Y-OR wires L=329±2mm; Black vinyl tube Ø7 L=57±3mm; Black vinyl tube Ø7 L=189±3mm; Connector 6188-0066 (GR); Black COT tube (no slit) Ø7 L=397±3mm; MRSW CP TVSSf 0.3 G-B/W wires L=808±3mm; Black tape [1pc.]			JIG:	1. Insertion jig with switch cover 2. Insertion jig 3. Locking jig 4. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
1	P1			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-006 Wire Taping with Vinyl tube 1. No missing parts/tools 2. No excess parts/tools 3. No wrong position of parts/tools

Revision History				Prepared by	Reviewed by	Approved by	Noted by
04/26/23	3	Inclusion of quality checkpoints	J. Loterte	C. Villanueva	A. Arañes	n/a	
11/12/22	2	Improve quality pointers: Reminders/notes and references in process no.1,3,4,6,9,13,14 and 15 due to document improvement.	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	
03/23/22	1	Change document purpose from Pre-launch to masspro	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	
03/21/22	0	Initial issue	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date: March 21, 2022

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.	NBC (Philippines) MASTER COPY	DCC Stamp



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Process Name/Title:

Model Code/Part Number: **500B / 7L0084-7023**

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:

2 of 13

PARTS:

1. Connector 6189-0451 (W)

JIG

1. Insertion jig with switch cover

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

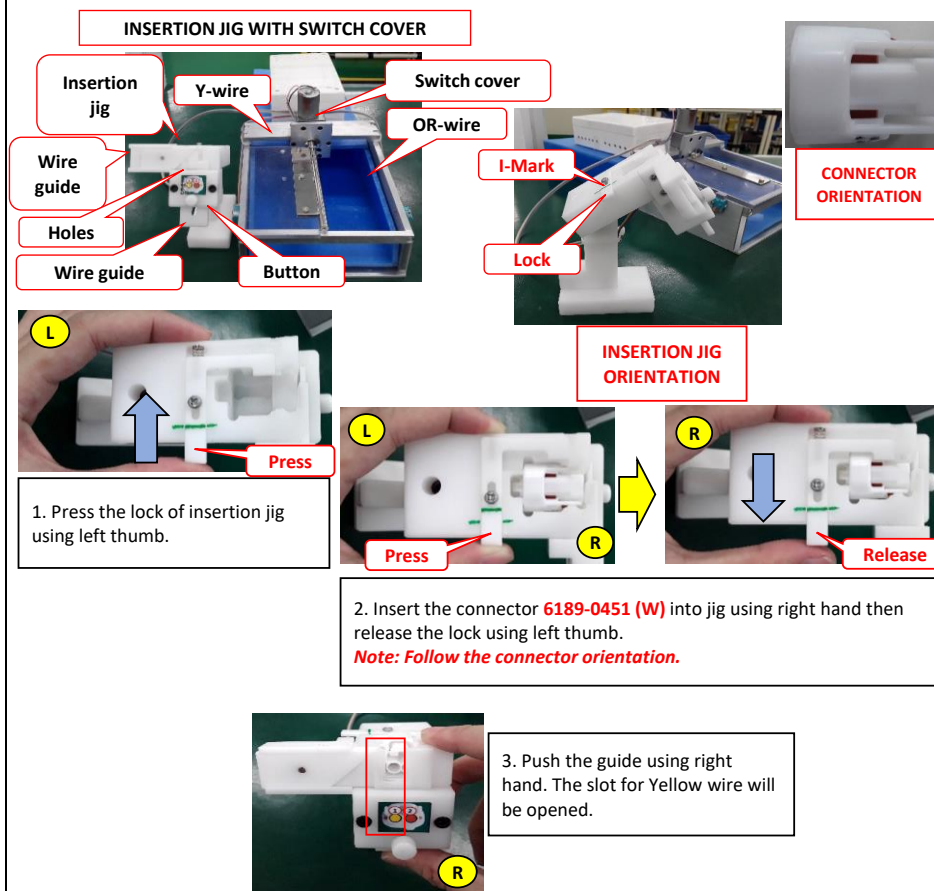
TOOLS/PPE

QUALITY POINTERS

2

P1

Connector setting to
insertion jig
6189-0451 (W)



n/a

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Process Name/Title:

Model Code/Part Number: **500B / 7L0084-7023**

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:

3 of 13

PARTS:

1. AVSSf wires Y and OR L=329±2mm

JIG

1. Insertion jig with switch cover

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION


TOOLS/PPE

QUALITY POINTERS

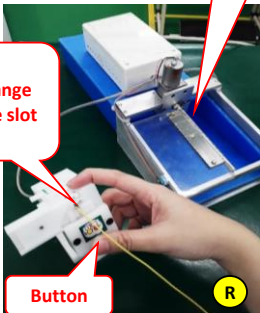
3

P1

Wire insertion to connector
6189-0451 (W)



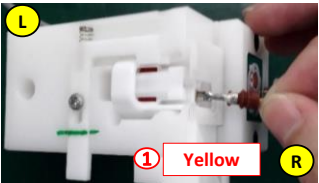
WIRE FACING



Orange wire


Orange wire slot

Button



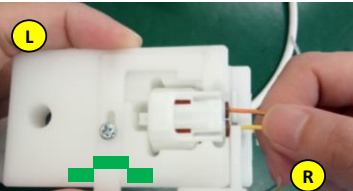
Yellow

1. Hold the insertion jig using left hand, get **Yellow wire** and insert to connector slot **1** using right hand.



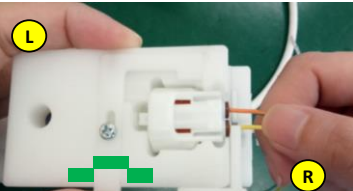
Orange

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



Orange

3. Hold the insertion jig using left hand, get **Orange wire** and insert to connector 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

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-CNC-017 for Wire and Strip Length Tolerance

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Effectivity Date:

April 26, 2023

Process Name/Title:

TAPING ASSEMBLY PROCESS

Validity Date:

n/a

Model Code/Part Number:

500B / 7L0084-7023

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

Page No.:

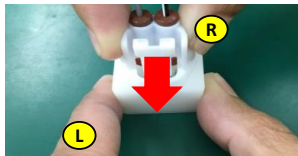







4 of 13

PARTS:

1. Assy parts
2. Black vinyl tube $\varnothing 7$ L=57 \pm 3mm

JIG

1. Locking jig
2. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Connector lock	 <div>1. Put the connector into locking jig using right hand then press 2x. Touch the connector lock if properly locked.</div>  <div>Before pressing</div>  <div>After pressing</div>	<div>LOCKING JIG</div> 	Important reminders/Note/s: 1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR 1. Use the provided locking jig per model 2. No unlock/half-lock connector
5	Wire insertion to Black vinyl tube $\varnothing 7$ L=57 \pm 3mm	 <div>1. Get the cover jig then insert to Y-OR wires using right hand.</div>  <div>2. Get the vinyl tube $\varnothing 7$ L=57\pm3mm using right hand then insert the Y-OR wires using left hand.</div>  <div>3. After insertion, remove the cover jig using right hand.</div>	<div>TERMINAL COVER JIG</div> 	1. No wrong usage of parts 2. No damaged rubber seal

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Model Code/Part Number:

500B / 7L0084-7023

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

Page No.:

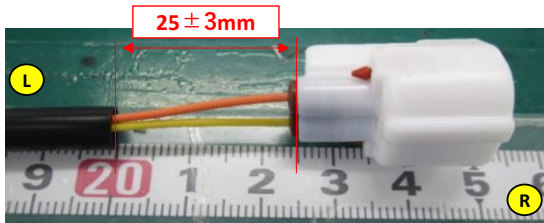
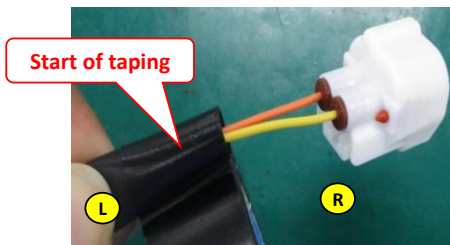
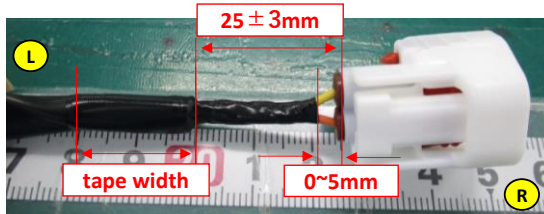

5 of 13

PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	P1 Taping 1 Black vinyl tube to wire near connector	 <p>1. Measure from end of vinyl tube up to edge of connector 25±3mm using both hands.</p>  <p>2. Get the Black tape using right hand then start taping process using both hands. <i>Note: Please refer to WI-PRO-ASY-001 for taping procedure.</i></p>  <p>3. After taping, check the measurement, wire alignment and taping condition.</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 <p>Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</p>

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION****TAPING ASSEMBLY PROCESS**

Effectivity Date:

April 26, 2023

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number:

500B

/

7L0084-7023

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Revision No.:

3

Page No.:

6 of 13

PARTS:

1. Black vinyl tube $\varnothing 7$ L=189 \pm 3mm
2. Connector 6188-0066 (GR)

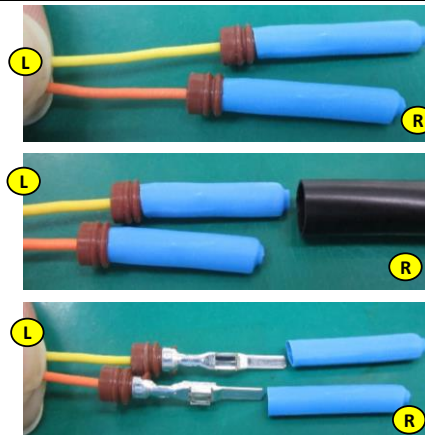
JIG

1. Insertion jig

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

7

Wire insertion to
Black vinyl tube
 $\varnothing 7$ L=189 \pm 3mm



1. Get the cover jig then insert to **Y-OR wires** using right hand.

2. Get the vinyl tube $\varnothing 7$ L=189 \pm 3mm using right hand then insert the **Y-OR wires** using left hand.

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

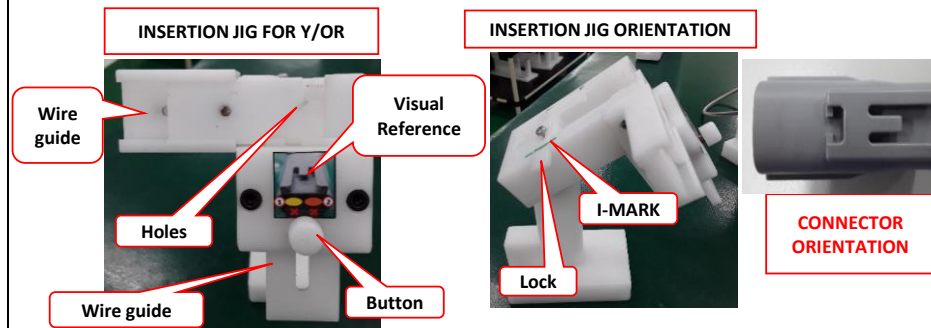
TERMINAL COVER JIG

1. No wrong usage of parts
2. No damaged rubber seal

8

P1

Connector setting to
insertion jig
6188-0066 (GR)



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

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Process Name/Title:

Model Code/Part Number:

500B

/

7L0084-7023

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:

7 of 13

PARTS:

n/a

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

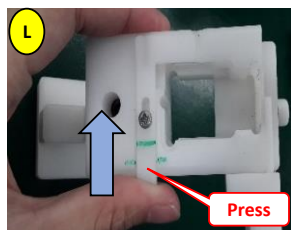
TOOLS/PPE

QUALITY POINTERS

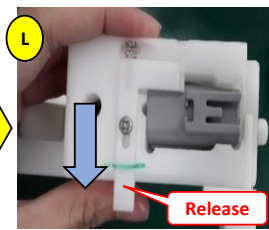
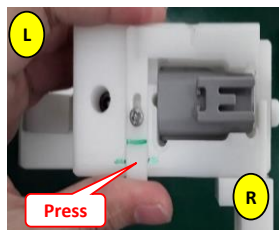
8

P1

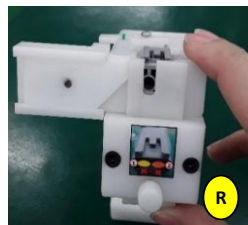
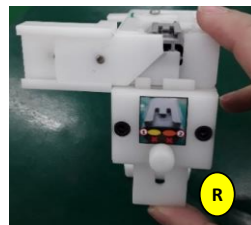
Connector setting to
insertion jig
6188-0066 (GR)
(Continuation)



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



2. Insert the connector **6188-0066 (GR)** into jig using right hand then
release the lock.
Note: Follow the connector orientation.



3. Push the guide using right
thumb. The slot for **Y wire** will be
opened.

n/a

Connector Orientation Illustration

I-mark
is align

1 hole is open

GOOD

I-mark is
NOT align

2 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

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Process Name/Title:

Model Code/Part Number: **500B / 7L0084-7023**

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:


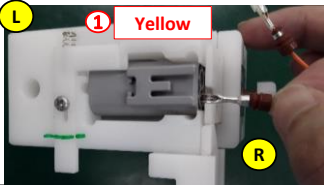
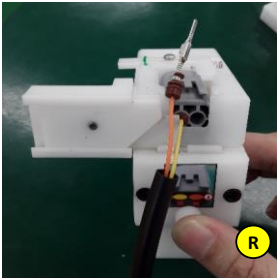
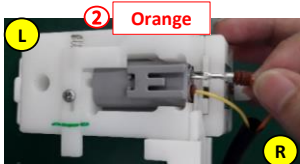
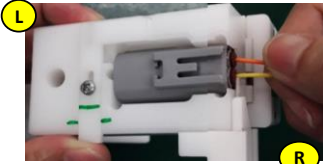

8 of 13

PARTS:

1. Assy parts

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	P1 Wire insertion to Connector 6188-0066 (GR)	<div><p>WIRE FACING</p></div> <div><p>1. Hold the insertion jig using left hand. Get the assy parts, insert the Yellow wire to connector slot 1 using right hand.</p></div> <div><p>2. Press the button using right thumb, slot for Orange wire will be opened.</p></div> <div><p>3. Get Orange wire then insert to connector 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><p>NOTE: SET ASIDE THE ASSY PARTS</p></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> <p>Important reminders/Note/s:</p> <p>1. Please hold the wire near terminal.</p> <p>2. Make sure wires are properly inserted.</p> <p>Conduct Pull-Push-Pull-Push after insertion.</p> <p>Do not exert extra force.</p> <p>Document references:</p> <p>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p>

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Process Name/Title:

Model Code/Part Number:

500B

/

7L0084-7023

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:



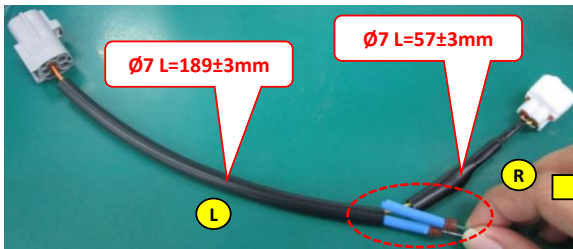
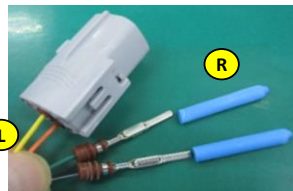

9 of 13

PARTS:

1. Assy parts
2. MRSW CP TVSSf 0.3 wires G-B/W wires L=808±3mm; Black sunprene tube Ø5 L=106±3mm
3. Black corrugated tube (no slit) Ø7 L=397±3mm

JIG

1. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
10	Wire insertion to Black corrugated tube (no slit) Ø7 L=397±3mm	  <ol style="list-style-type: none">1. Get the cover jig then insert to G-B/W wires using right hand.2. Get the corrugated tube Ø7 L=397±3mm (no slit) using right hand then insert the G-B/W wires using left hand.		
11	Wire insertion to assy parts	  <ol style="list-style-type: none">1. Hold the vinyl tube Ø7 L=189±3mm using left hand then insert the assy parts using right hand.2. After insertion, remove the terminal cover jig using right hand.	 TERMINAL COVER JIG	<ol style="list-style-type: none">1. No wrong usage of parts2. No damaged rubber seal

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Model Code/Part Number:

500B / 7L0084-7023

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:

10 of 13

PARTS:

1. Assy parts

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

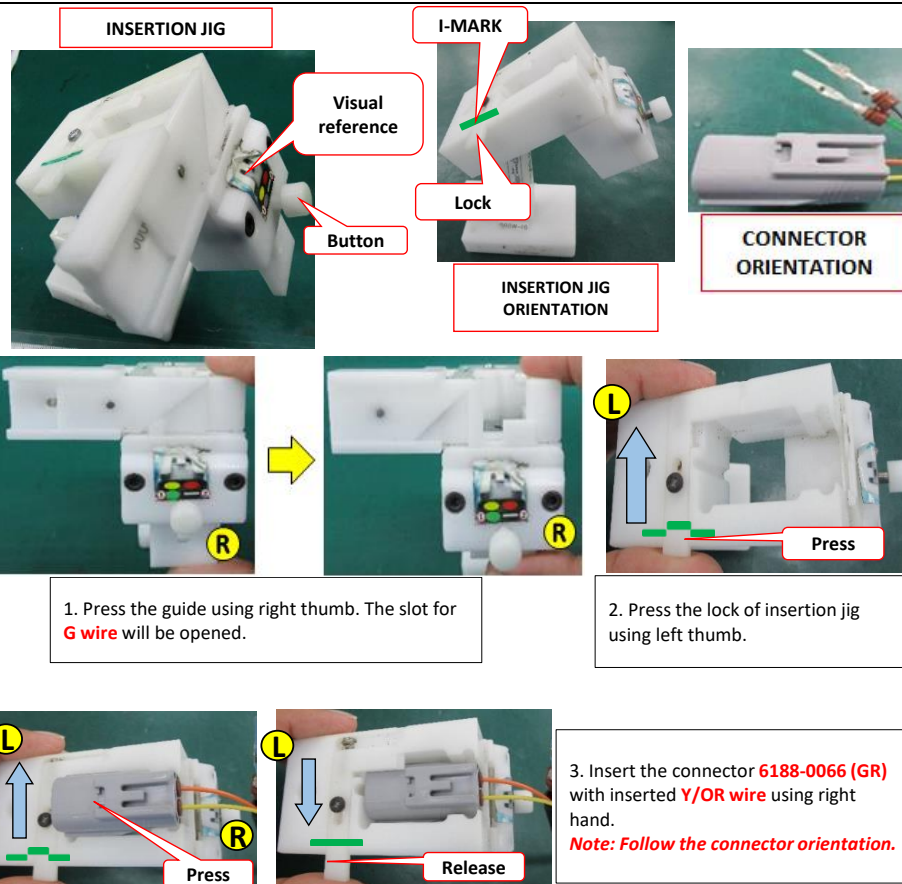
TOOLS/PPE

QUALITY POINTERS

12

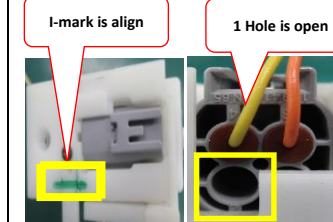
P1

Connector setting to
insertion jig
6188-0066 (GR)
(Assy parts)



n/a

Connector Orientation Illustration



GOOD



NG

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

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Process Name/Title:

Model Code/Part Number: **500B / 7L0084-7023**

Customer:

TRQSS

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:


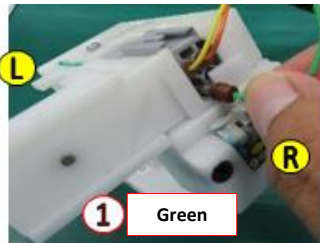
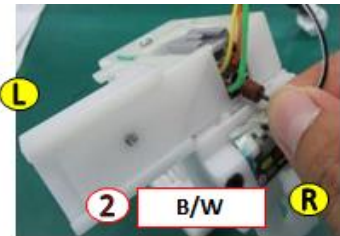
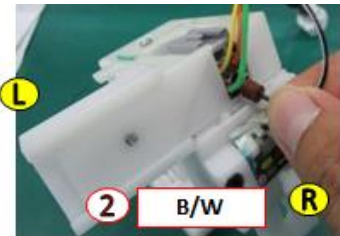

11 of 13

PARTS:

1. Assy parts

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
13	P1 Wire insertion to connector 6188-0066 (GR) (Assy parts)	 <p>WIRE FACING</p>  <p>1. Hold the insertion jig using left hand, get G wire then insert to connector slot 1 using right hand.</p>  <p>2. Press the button using right hand, slot for B/W wire will be opened.</p>  <p>3. Hold the insertion jig using left hand, get B/W wire then insert to connector 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	<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>Important reminders/Note/s:</p> <p>1. Please hold the wire near terminal.</p> <p>2. Make sure wires are properly inserted.</p> <p>Conduct Pull-Push-Pull-Push after insertion.</p> <p>Do not exert extra force.</p> <p>Document references:</p> <p>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p>

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Process Name/Title:

Model Code/Part Number: **500B / 7L0084-7023**

Customer:

TRQSS

Validity Date:

n/a

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:

12 of 13

PARTS:

1. Assy parts
2. Black tape

JIG

1. Locking jig

NO.

PROCESS NAME

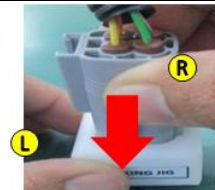
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

14

Connector Lock



1. Put the connector into locking jig using both hands and then press **2x using both hands**. Check the connector if properly locked.



Before pressing



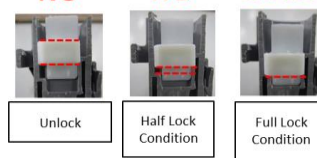
After pressing

Coupler Cross Sectional View

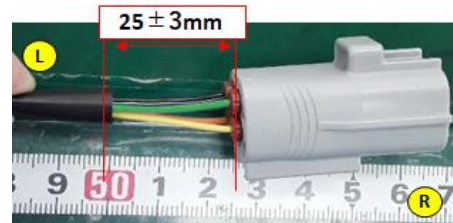
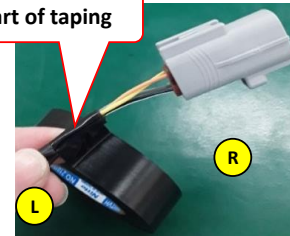
NG

NG

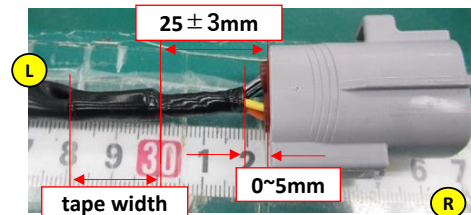
GOOD



Start of taping



1. Measure from end of the vinyl tube up to connector **25±3mm** using both hands.



2. Get the Black tape then start taping process using both hands.

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

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

LOCKING JIG



Important reminders/Note/s:
1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR

1. Use the provided locking jig per model
2. No unlock/half-locked connector
3. No damage connector

15

P1

Taping 2
Black vinyl tube to wire
near connector

MEASURING TAPE



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

Important reminders/Note/s:
1. Please use calibrated/verified measuring tape when getting the measurement.

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Process Name/Title:

Model Code/Part Number: **500B / 7L0084-7023**

Customer:

TRQSS

Validity Date:

n/a

Document No.:

WI-ENG-PDE-426A

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:

13 of 13

PARTS:

1. Assy parts

JIG

n/a



QUALITY CHECKPOINTS

P1

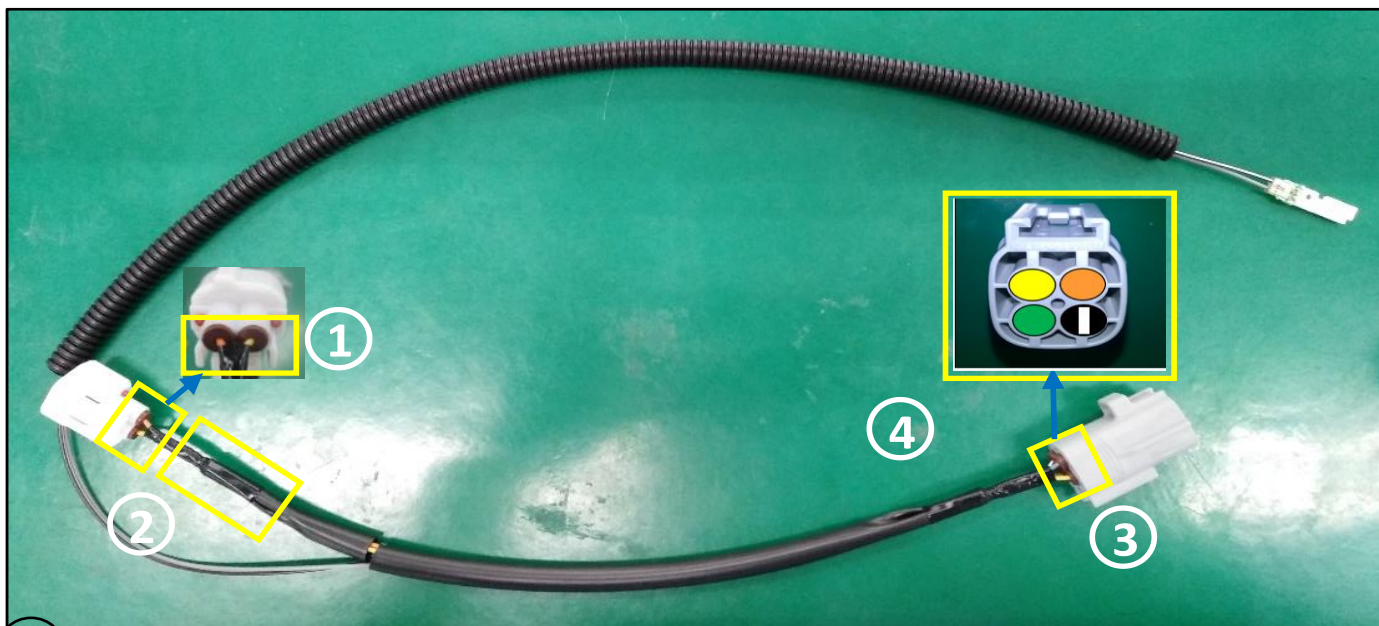
7L0084-7023



GOOD



NO GOOD



1

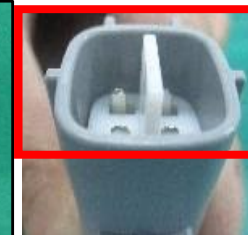
3

No **WRONG INSERT**
No **TERMINAL BACKING OUT**

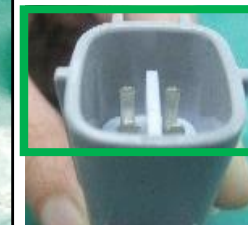
2

4

No **MISSING** tape



NO GOOD



GOOD

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp