



WORK INSTRUCTION

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

Product Name/Code: **291B / 7L0035-7020**

Customer: **TRQSS**

Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Effectivity Date:

March 22, 2021

Validity Date:

n/a

Document No.:

WI-ENG-PDE-196A

Revision No.:

2

Page No.:

1 of 7

PARTS:



- Connector 6188-0066 (GR)
- AVSSf 0.3 wires Y L=1066±3mm, OR L=1066±3mm

JIG:

1. Insertion jig with switch cover

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

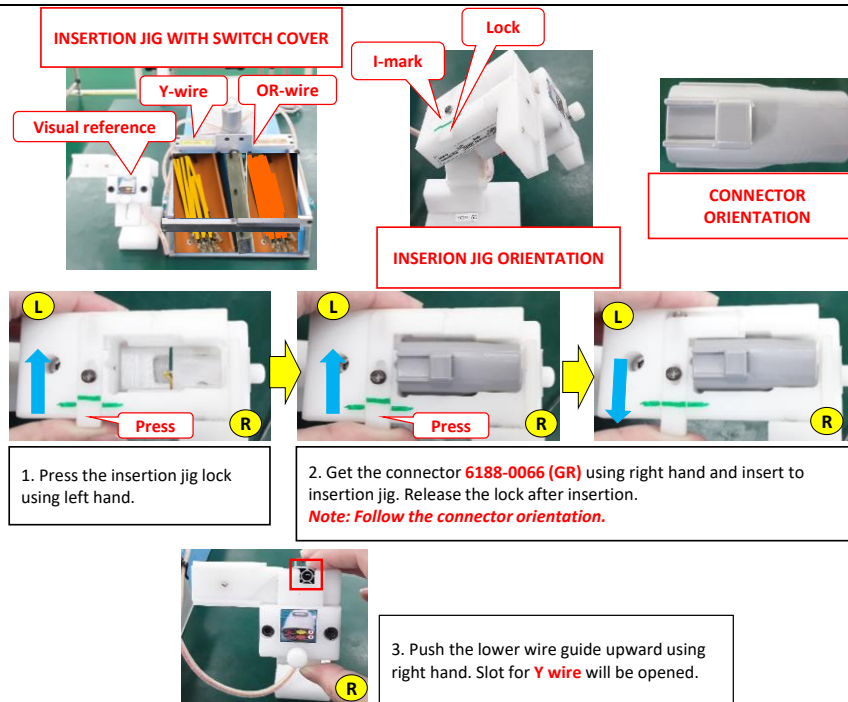
TOOLS/PPE

QUALITY POINTERS

1

P1

Connector setting to
insertion jig
6188-0066 (GR)



Safety Instruction

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

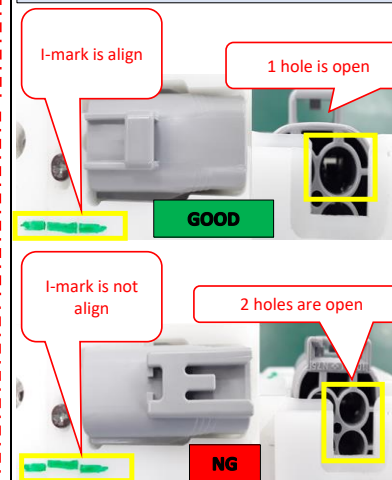
Housekeeping

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

Prepared by

Reviewed by

Approved by

Noted by

03/22/21 2 Apply some improvements.

M. Catapang C. Villanueva A. Shimamura A. Arañes

11/12/20 1 Change process owner from Production (WI-PRO-ASY-047) to Engineering (WI-ENG-PDE-196A), Apply some improvements, include insertion jig, Update pictures.

J. Loterte R. Peñaloza A. Shimamura A. Arañes

Eff. Date Rev. No Details of Change

Revised Checked Approved Noted

Est. Date: July 10, 2017

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


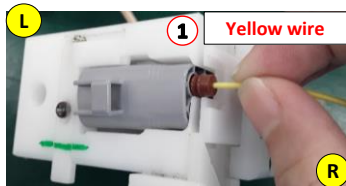
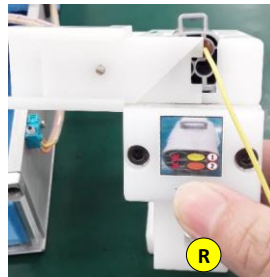
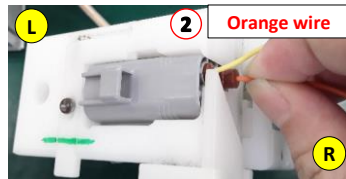

DCC Stamp



WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

| | | | |
|-------------------|-----------------|-----------|--------|
| Effectivity Date: | March 22, 2021 | | |
| Validity Date: | n/a | | |
| Document No.: | WI-ENG-PDE-196A | | |
| Revision No.: | 2 | Page No.: | 2 of 7 |

| | | | |
|---------------------|--|-----------|-------|
| Process Name/Title: | TAPING ASSEMBLY PROCESS | | |
| Product Name/Code: | 291B / 7L0035-7020 | Customer: | TRQSS |
| Purpose: | <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO | | |

| | | | | | |
|--------|--|---|--|-----------|--|
| 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 6188-0066 (GR) | <div><div>WIRE FACING</div></div> <div><div><div>1. Hold the insertion jig using left hand. Get the Yellow wire and insert to connector using right hand.</div></div><div><div>2. Press the button using right thumb. Slot for Orange wire will be opened.</div></div></div> <div><div><div>3. Get the Orange wire and insert to connector using right hand.</div></div><div><div>4. After insertion, push the lock button using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</div></div></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>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> |

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


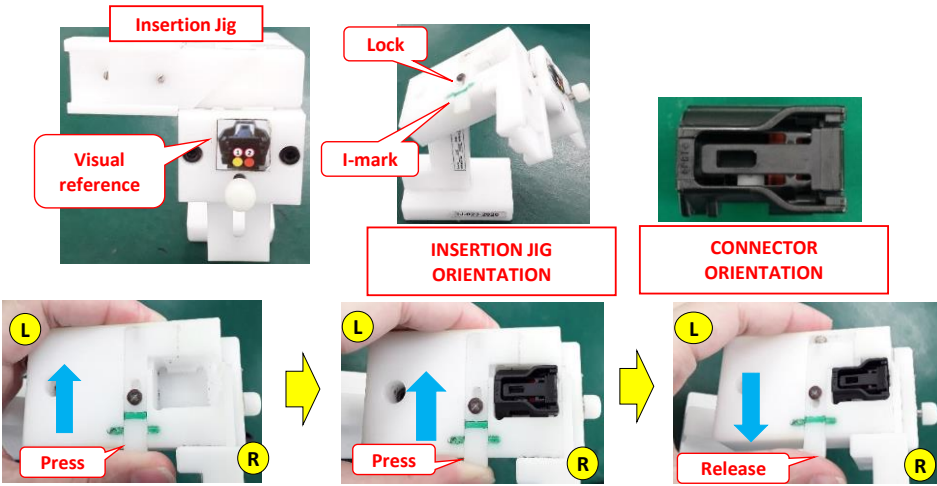
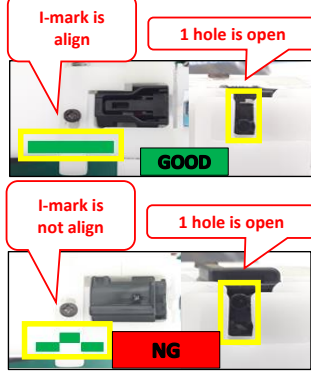
DCC Stamp



WORK INSTRUCTION TAPING ASSEMBLY PROCESS

| | | | |
|-------------------|-----------------|-----------|--------|
| Effectivity Date: | March 22, 2021 | | |
| Validity Date: | n/a | | |
| Document No.: | WI-ENG-PDE-196A | | |
| Revision No.: | 2 | Page No.: | 3 of 7 |

| | | | |
|---------------------|--|-----------|-------|
| Process Name/Title: | TAPING ASSEMBLY PROCESS | | |
| Product Name/Code: | 291B / 7L0035-7020 | Customer: | TRQSS |
| Purpose: | <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO | | |

| PARTS: | | 1. Black Vinyl tube $\phi 10$ L= 869 \pm 5mm 2. Black Vinyl tube $\phi 5$ L= 166 \pm 3mm 3. Connector 6189-1161 (B) 4. Assy parts | | | JIG | 1. Insertion jig |
|--------|---|--|--|--|-----------|--|
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | | TOOLS/PPE | QUALITY POINTERS |
| 3 | Wire insertion to Black Vinyl tube $\phi 10$ L= 869 \pm 5mm $\phi 5$ L= 166 \pm 3mm |  <div> <p>1. Get the Vinyl tube $\phi 10$ L= 869\pm5mm using right hand then insert the Y-OR wires by using left hand.</p> <p>2. Get the Vinyl tube $\phi 5$ L= 166\pm3mm using right hand then insert the Y-OR wires by using left hand.</p> </div> | | | n/a | 1. No wrong use of parts 2. No deformed terminal |
| 4 | P1 Connector setting to Insertion jig 6189-1161 (B) |  <div> <p>1. Press the insertion jig lock using left hand.</p> <p>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.</p> </div> | | | n/a | <div> <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> </div> |

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

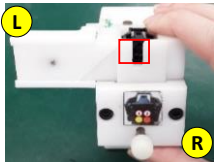
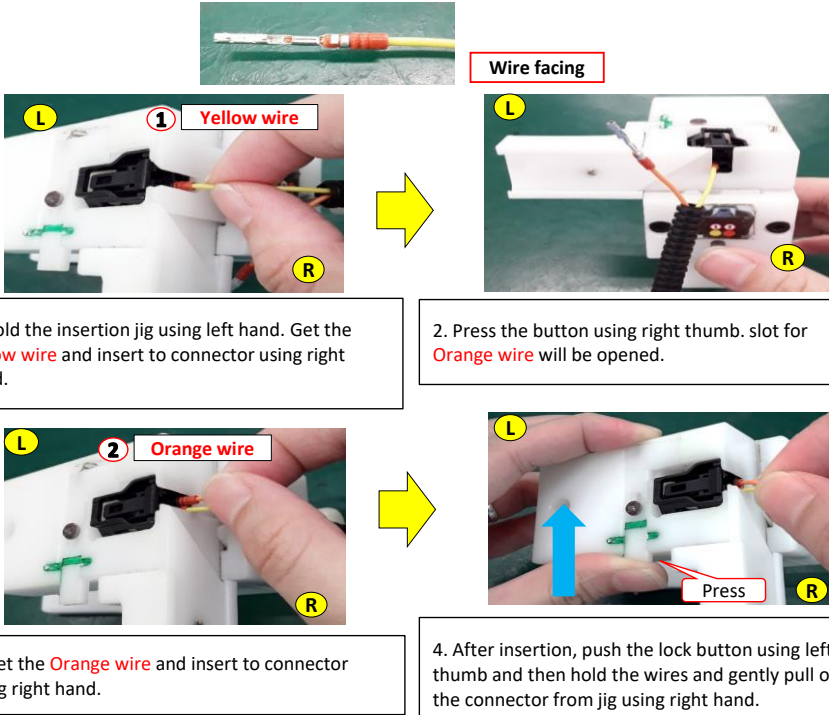
DCC Stamp



WORK INSTRUCTION TAPING ASSEMBLY PROCESS

| | | | |
|-------------------|-----------------|-----------|--------|
| Effectivity Date: | March 22, 2021 | | |
| Validity Date: | n/a | | |
| Document No.: | WI-ENG-PDE-196A | | |
| Revision No.: | 2 | Page No.: | 4 of 7 |

| | | | |
|---------------------|--|-----------|-------|
| Process Name/Title: | TAPING ASSEMBLY PROCESS | | |
| Product Name/Code: | 291B / 7L0035-7020 | Customer: | TRQSS |
| Purpose: | <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO | | |

| PARTS: | 1. Assy parts | | | JIG | 1. Insertion jig |
|--------|---|---|--|-----------|--|
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS |
| 4 | Connector setting to Insertion jig 6189-1161 (B) (continuation) |  <p>3. Push the lower wire guide upward using right hand. Slot for Y wire will be opened.</p> | | n/a | <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> |
| 5 | Wire insertion to connector 6189-1161 (B) | <p>P1</p>  <p>1. Hold the insertion jig using left hand. Get the Yellow wire and insert to connector using right hand.</p> <p>2. Press the button using right thumb. slot for Orange wire will be opened.</p> <p>3. Get the Orange wire and insert to connector using right hand.</p> <p>4. After insertion, push the lock button 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</p> <p>2. No wrong insertion</p> <p>3. One by one insertion</p> <p>4. No deformed terminal</p> <p>5. No wrong wire facing</p> <p>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</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

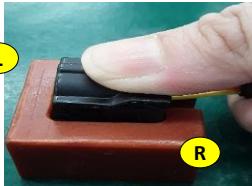




DCC Stamp



WORK INSTRUCTION TAPING ASSEMBLY PROCESS

| | | | |
|-------------------|-----------------|-----------|--------|
| Effectivity Date: | March 22, 2021 | | |
| Validity Date: | n/a | | |
| Document No.: | WI-ENG-PDE-196A | | |
| Revision No.: | 2 | Page No.: | 5 of 7 |

| | | | |
|---------------------|--|-----------|-------|
| Process Name/Title: | TAPING ASSEMBLY PROCESS | | |
| Product Name/Code: | 291B / 7L0035-7020 | Customer: | TRQSS |
| Purpose: | <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO | | |

| PARTS: | | 1. MRSW CP A7475-7L00350 (Hot melted wires AVSSf 0.3 GR L=1242mm, B/W L=1242mm) 2. Black Vinyl tube $\phi 10$ L= 300 \pm 3mm | | | JIG | 1. Locking jig |
|---------------|--------------|--|--|--|---|---|
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | | TOOLS/PPE | QUALITY POINTERS |
| 6 | P1 |  <p>1. Put the connector into locking jig using right hand then press 2x using both hands. Check the connector lock if properly locked.</p>   | | | Locking Jig  | <p>Note: MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR LOCK.</p> <p>1. No unlock/Half-locked connector 2. No damaged lock</p> |
| 7 | |  <p>1. Get the hotmelted wires MRSW CP A7475-7L00340 (GR and B/W) using left hand then get the Vinyl tube $\phi 10$ L= 300\pm3mm using right hand and insert the PCB using left hand.</p> | | | n/a | 1. No wrong use of parts |

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:

March 22, 2021

Process Name/Title:

Validity Date:

n/a

Product Name/Code:

291B / 7L0035-7020

Customer:

TRQSS

Document No.:

WI-ENG-PDE-196A

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:

6 of 7

PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

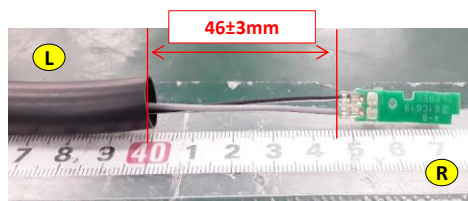
TOOLS/PPE

QUALITY POINTERS

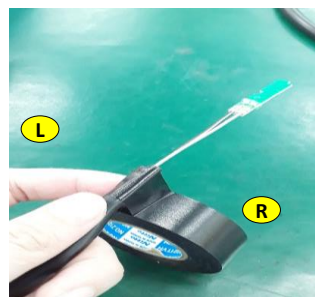
8

P1

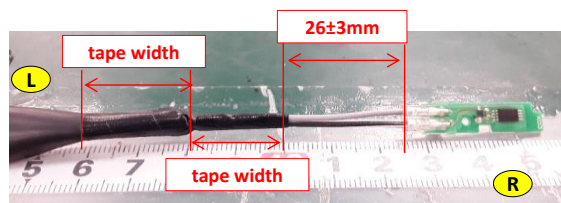
Taping
Vinyl tube to wire near
PCB



1. Measure from Vinyl tube to edge of PCB **46±3mm** using both hands.



2. Hold the Vinyl tube using left hand, get **Black tape** using right hand and start taping process using both hands.
Refer to WI-PRO-ASY-001 for taping procedure.



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

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

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

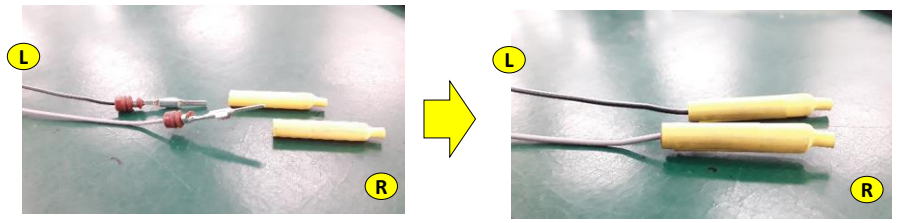
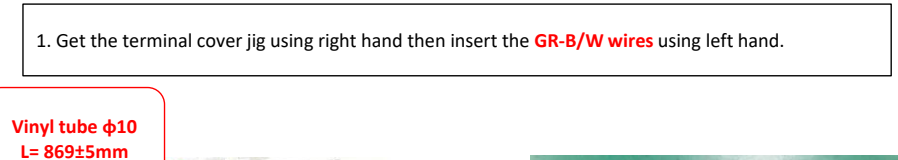
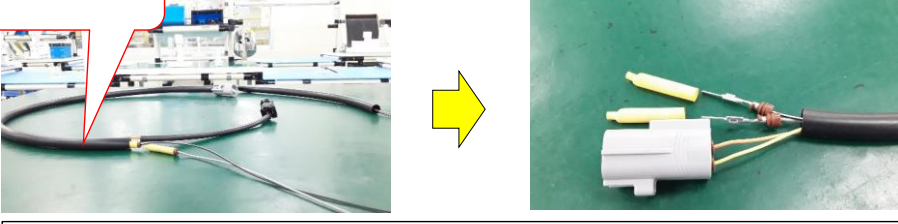
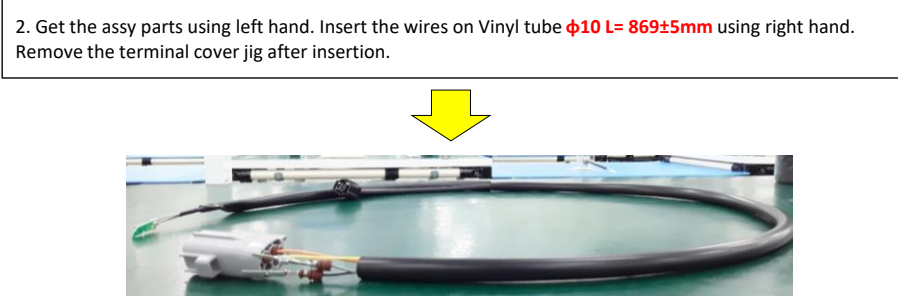

DCC Stamp



WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

| | | | |
|-------------------|-----------------|-----------|--------|
| Effectivity Date: | March 22, 2021 | | |
| Validity Date: | n/a | | |
| Document No.: | WI-ENG-PDE-196A | | |
| Revision No.: | 2 | Page No.: | 7 of 7 |

| | | | |
|---------------------|--|-----------|-------|
| Process Name/Title: | TAPING ASSEMBLY PROCESS | | |
| Product Name/Code: | 291B / 7L0035-7020 | Customer: | TRQSS |
| Purpose: | <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO | | |

| PARTS: | | 1. Assy parts | | JIG | 1. Terminal cover jig |
|--------|------------------------------------|---|--|---|--|
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS |
| 9 | P1 Wire insertion to assy parts |  <p>1. Get the terminal cover jig using right hand then insert the GR-B/W wires using left hand.</p>  <p>Vinyl tube $\phi 10$ L= 869\pm5mm</p>  <p>2. Get the assy parts using left hand. Insert the wires on Vinyl tube $\phi 10$ L= 869\pm5mm using right hand. Remove the terminal cover jig after insertion.</p>  | | <p>Terminal cover jig</p>  | <p>1. No wrong insertion 2. No damaged rubber seal 3. No deformed terminal 4. No exposed rubber seal</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