

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

Effectivity Date:

December 22, 2022Model Code/Part Number: **370B / 7L0047-7024**Customer: **TRQSS**

Valid:

n/aPurpose: ☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

WI-ENG-PDE-421C

Revision No.:

1

Page No.:

1 of 11**PARTS:** 1. Assy parts: Clamp 82711-52090 (W); Clamp 82711-16820 (BR); Label (7V2200-0020); Black tape [3pcs.]

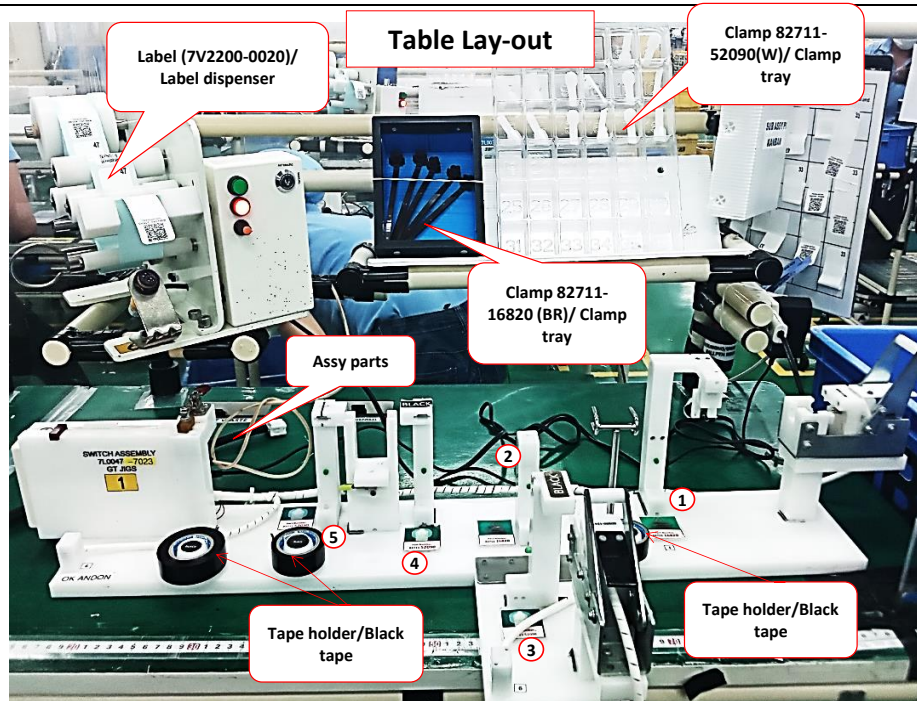
JIG:

1. Clamp assembly jig
2. Label Dispenser**NO.****PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

1

P3

Table Lay-out

**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.

1. No missing parts/tools
2. No excess parts/tools

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
12/22/22	1	Improve quality pointers: Reminders/notes, references and by two's inspection. Inclusion of Quality checkpoints	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	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

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2 of 11**PARTS:**

1. Clamp 82711-52090(W) [3pcs] 2. Clamp 82711-16820(B) [2pcs] 3. Black tape [3pcs]

JIG

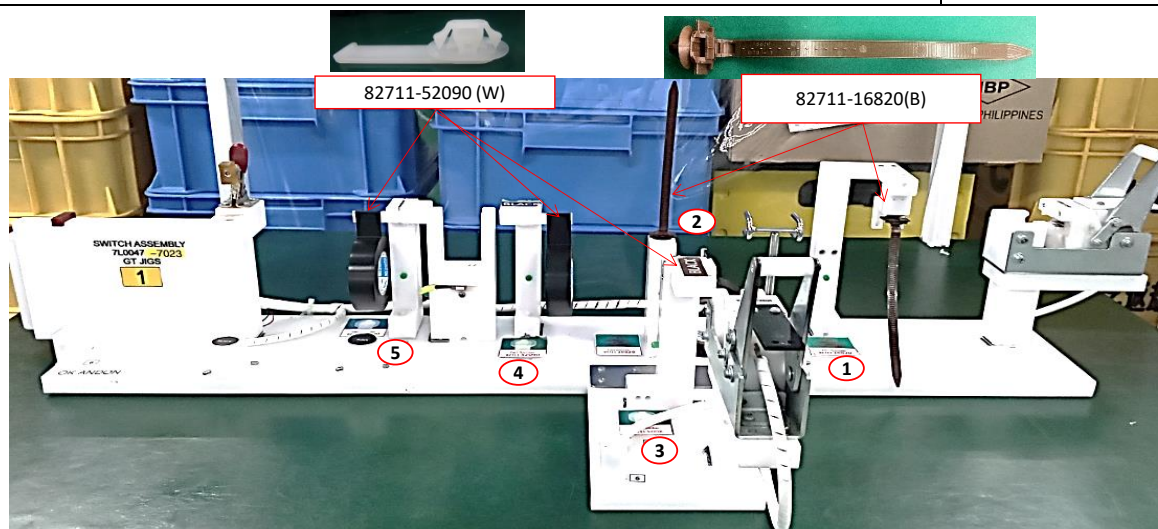
1. Clamp Assembly jig

NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****1 QUALITY POINTERS**

2

P3

Clamp setting



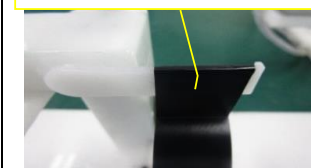
1. Get 3pcs. of clamp **82711-52090 (W)** using both hands and insert to **location 5, 4 and 3** using both hands.

2. Get 2pcs. of clamp **82711-16820 (BR)** using both hands and insert to **location 2 and 1** using both hands.

3. Get Black tape using right hand and conduct pre-taping on clamp in **location 5, 4 and 3** using both hands.

STANDARD TAPING FOR CLAMP

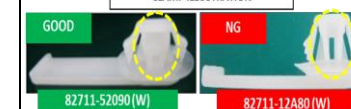
One side tape under clamp



1. No damaged clamp
2. No wrong use of parts
3. No wrong use of tape
4. No wrong insertion of clamp

Important reminders/Note/s:

1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.

CLAMP ILLUSTRATION**BAND CLAMP ILLUSTRATION**

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PARTS:

1. Assy parts

JIG

1. Clamp Assembly jig

NO.

PROCESS NAME

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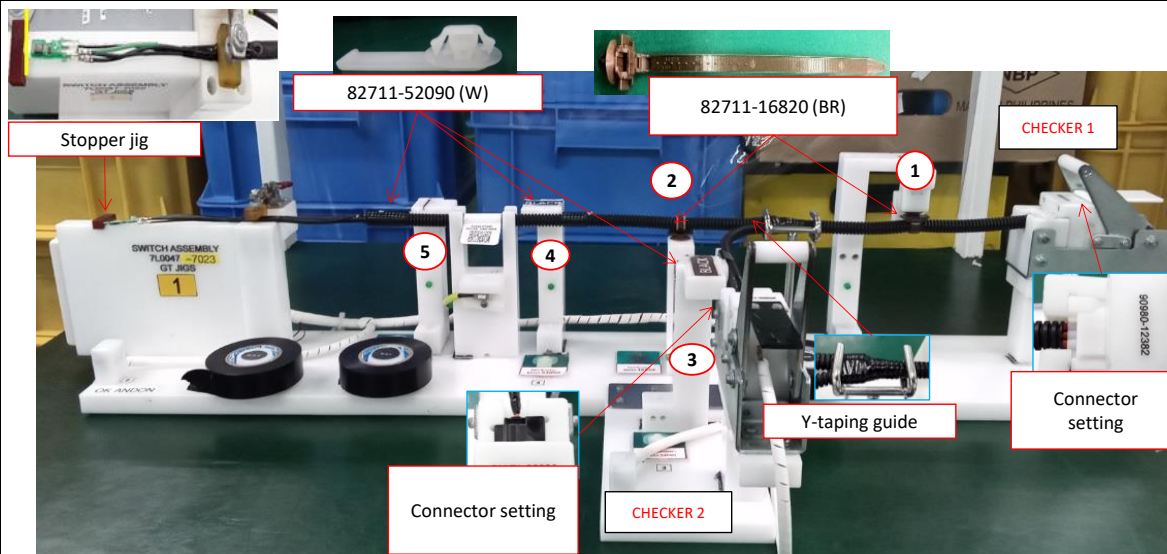
TOOLS/PPE

1 QUALITY POINTERS

3

P3

Clamp Assembly



1. Get the assy parts and set into jig. (*See above picture for correct setting*). First, set the connector **6189-1142 (W)** to **Checker 1** then pull the checker fixture for continuity checking. Second, set the connector to **6189-1161 (B)** to **Checker 2** then pull the checker fixture for continuity checking. Last, set the end of **B-B-G/BW hotmelted wire** together within the stopper then press by **Toggle clamp**. Continue if the sequence light in location **1** was **ON**.

2. Check if all **LED light** for **POWER ON, WIRE1, WIRE2 and CLAMP ON** was **ON**. If encountered abnormality, **STOP** and immediately **CALL** the attention of the leader. **WAIT** for further instruction and continue the process.



Important reminders/Note/s:

1. Make sure no gap between stopper and PCB

1. No wrong setting of clamp
2. No wrong use of clamp
3. No Loose attachment of clamp
4. No wrong setting of Bando gun
5. No wrong use of tape
6. No peel off tape
7. No missing tape

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1. Assy parts

JIG

1. Clamp Assembly jig

NO.

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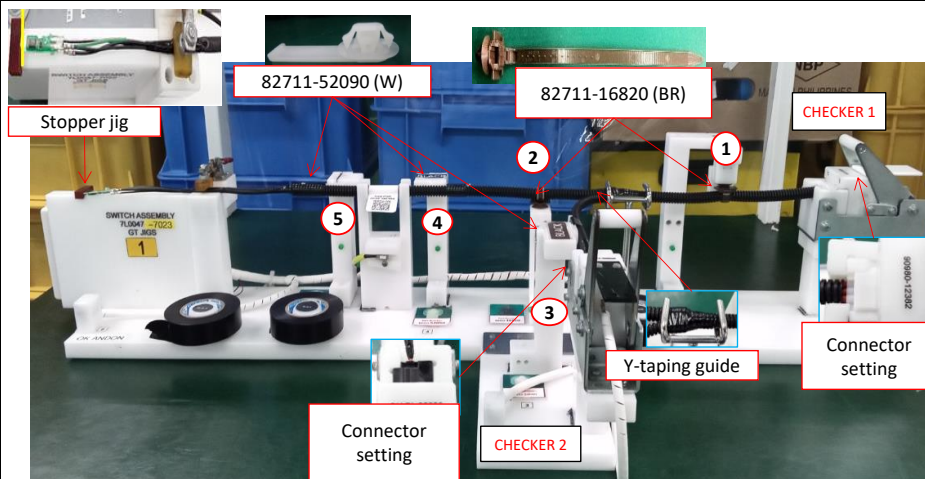
TOOLS/PPE

1 QUALITY POINTERS

3

P3

Clamp Assembly
(Continuation)



3. Initially tighten the band clamp on location **1 and 2** using both hands.

4. Get the bando gun using right hand then cut the band clamp on location **1** using both hands. Press the **SW button** after cut. Continue if the sequence light on clamp location **2** was **ON**.

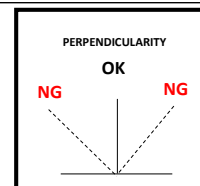
BANDO GUN POSITION ON CLAMP
LOCATION 1



Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube.
For: $\phi 5 - 1 \sim 2$, $\phi 7 - 3 \sim 4$



BANDO GUN ALIGNMENT



Important reminders/Note/s:

1. Make sure no gap between stopper and PCB

1. No wrong setting of clamp
2. No wrong use of clamp
3. No Loose attachment of clamp
4. No wrong setting of Bando gun
5. No wrong use of tape
6. No peel off tape
7. No missing tape

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PARTS:

1. Assy parts

JIG

1. Clamp Assembly jig

NO.

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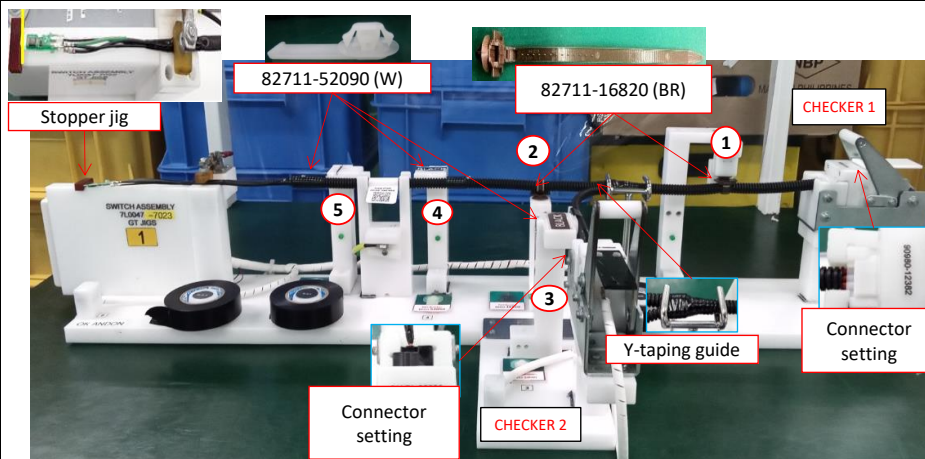
TOOLS/PPE

1 QUALITY POINTERS

3

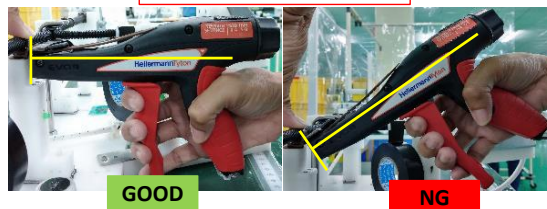
P3

Clamp Assembly
(Continuation)



5. Cut the band clamp on location **2** using both hands. Press the **SW button** after cut. Continue if the sequence light on clamp location **3** was **ON**.

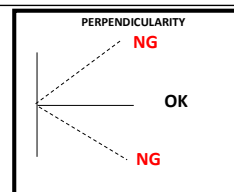
BANDO GUN POSITION ON CLAMP
LOCATION 2



Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube.
For: $\phi 5 - 1 \sim 2$, $\phi 7 - 3 \sim 4$

Fixed setting of
band clamp
cutter: 3 ~ 4

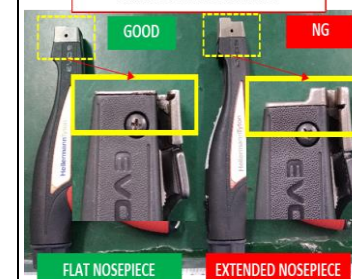
BANDO GUN ALIGNMENT



BANDO GUN



BANDO GUN ILLUSTRATION



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1. Assy parts

JIG

1. Clamp Assembly jig

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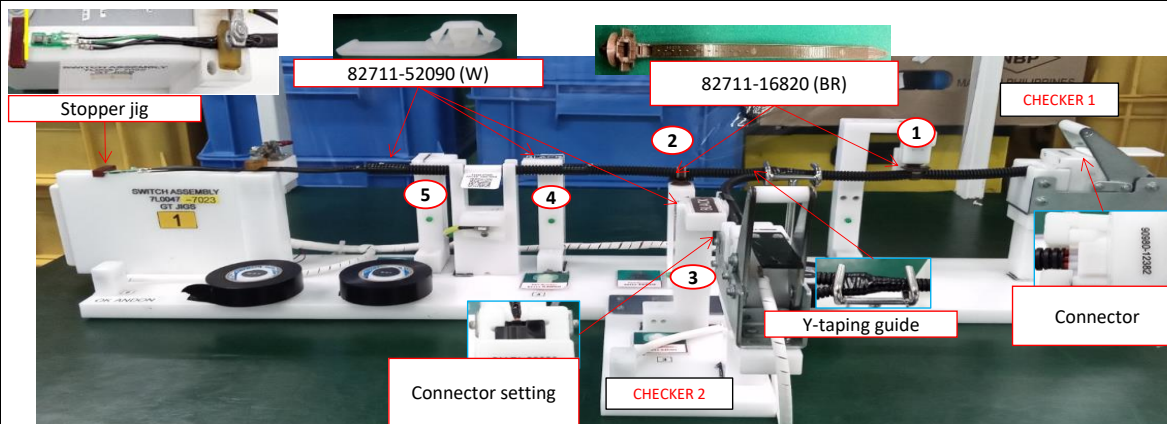
TOOLS/PPE

1 QUALITY POINTERS

3

P3

Clamp Assembly
(Continuation)



6. Hold the Black tape on clamp location **3** using right hand then start taping using both hands. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **4** was **ON**.

7. Hold the Black tape on clamp location **4** using right hand then start taping using both hands. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue if the sequence light on location **5** was **ON**.

8. Hold the Black tape on clamp location **5** using right hand then start taping using both hands. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue on label attachment (*Refer to next page for label attachment procedure*)

9. For label attachment, **color sensor** will light if detects the **label code**. After attachment, press the **SW button** using both index finger (**same timing**). **Go** sound will be heard.



10. Conduct **POINT CHECKING** before removing the harness from jig.



Important reminders/Note/s:

1. Make sure no gap between stopper and PCB

1. No wrong setting of clamp
2. No wrong use of clamp
3. No Loose attachment of clamp
4. No wrong setting of Bando gun
5. No wrong use of tape
6. No peel off tape
7. No missing tape

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7 of 11**PARTS:**

1. Label 7V2200-0020 (73230-07060 Driver PWR+MEM)

JIG

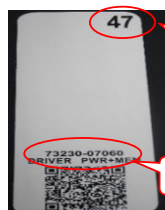
1. Clamp Assembly jig

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

4

P2

Label Attachment



Part number

Item no. & name

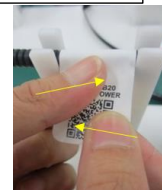


Item no. & name

1. Get the label.

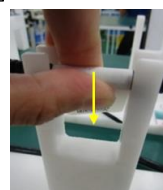
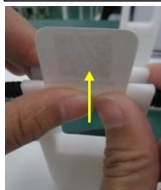
Check the part number, item no. & name

2. Align the end part of label in the jig.



3. Fold the center part of the label

4. Align both end part of label .

5. After alignment , Press the label with both fingers.
Make sure it was attach properly.

6. Press the label upside down using finger.

7. Press the SW button after label attachment. Conduct **POINT CHECKING** and remove the harness from jig.**GOOD**Acceptable overlap
0~1mm**Label Dispenser**

Model	Item no.	Item name
7L0030	73230-06750	Passenger Manual
7L0031	73230-06740	Driver Manual
7L0032	73230-06B20	Passenger Power
7L0033	73230-06760	Driver Power
7L0047	73230-07060	Driver PWR+MEM

1. No bubbles
- 2.No damage
- 3.No peel off
- 4.No wrong use of label
5. No missing parts
6. No loose attachment

**NG**

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n/a

JIG

n/a

NO.

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WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE



QUALITY POINTERS


5

P3

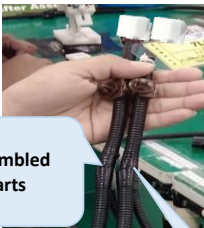
Visual/By two's inspection




1 **ACTUAL PRODUCT**



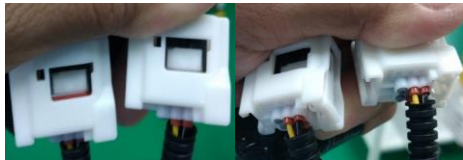
Assembled parts




Master sample




5. Check the **terminal, connector lock** condition and **insertion**.



1. Conduct **alignment of harness (Master sample vs. assembled parts)** using both hands.



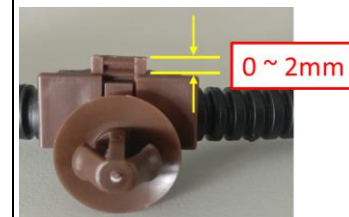
3. Check the **Y-Taping condition, presence of all clamp attachment, taping condition** and **band clamp cut condition**.



MASTER SAMPLE



1. No skip checking during inspection



Important reminders/Note/s:

1. Using a steel rule, check if the band cut measurement is within the required dimension (0~2mm) and should not exceed the maximum value.

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TOOLS/PPE



QUALITY POINTERS

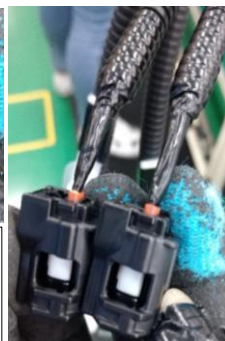
5

P3

Visual/By two's inspection
(Continuation)



4. Check the **connector lock, terminal, insertion and taping condition.**



5. Check the **Y-Taping condition, presence of all clamp attachment, taping condition and band clamp cut condition.**



6. Check the **presence of QR code and its part number.**



7. Check the **taping condition.**

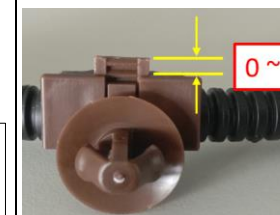


8. Check the **terminal and PDB appearance.** Must be **no deformed terminal.**

MASTER SAMPLE



1. No skip checking during inspection



0 ~ 2mm

Important reminders/Note/s:

1. Using a steel rule, check if the band cut measurement is within the required dimension (0~2mm) and should not exceed the maximum value.

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JIG

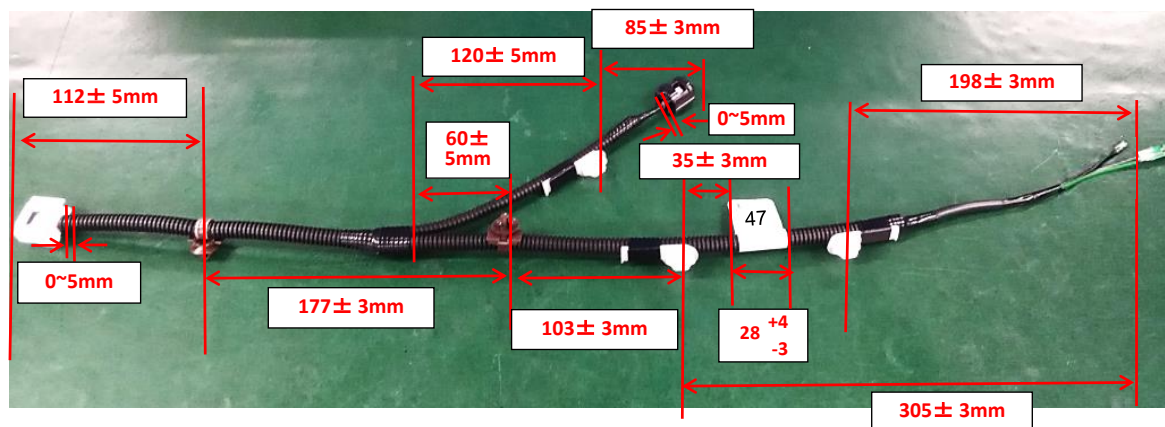
n/a

NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****1 QUALITY POINTERS**

6

P3

Measurement

MEASURING TAPE**Note:***Please use calibrated/verified measuring tape when getting the measurement.***Important reminders/Note/s:****1. FOR HATSUMONO AND OWARIMONO**

1. No wrong dimension

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JIG

n/a

1 QUALITY CHECKPOINTS

P3

7L0047-7024



NO GOOD



GOOD



GOOD



NO GOOD

- ① ② NO UNLOCKED/ HALFLOCKED CONNECTOR ③ ⑤ ⑥ ⑦ No Missing Clamp/Band Clamp
⑧ No Missing QR code ④ ⑨ ⑩ No Missing Tape

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