

**WORK INSTRUCTION**

Process Name/Title:

CLAMP ASSEMBLY PROCESS

Model Code/Part Number:

101D**/****7N0096-7020A**

Customer:

TRJ

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Effectivity Date:

August 15, 2023

Validity Date:

n/a

Document No.:

WI-ENG-PDE-690

Revision No.:

0

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PARTS:

1. Assy parts: Clamp 82711-52090 (W); Clamp 82711-33380 (B); Clamp 82711-48070 (GR) ; Black tape [6pc.]; Brown tape

JIG:

1. Clamp assembly jig

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

1

n/a

Table Lay-out

BATCHING**TABLE LAY-OUT**Clamp 82711-52090 (W)/
Clamp trayClamp 82711-33380 (B)/
Clamp trayClamp 82711-48070 (GR) /
Clamp tray

Clamp assembly jig

Assy parts

Black tape/Tape holder

Brown tape/Tape holder

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

Prepared by

Reviewed by

Approved by

Noted by

08/15/23

0

Initial Issue.
Excluded process from WI-ENG-PDE-535B; Changed Part Name/Title from "TAPING ASSEMBLY PROCESS" to **CLAMP ASSEMBLY PROCESS**; Changed Document control number from **WI-ENG-PDE-535B** to **WI-ENG-PDE-690** due to separation of process

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J. Loterte

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J. Loterte

C. Villanueva

A. Arañes

Eff. Date

Rev. No

Details of Change

Revised

Reviewed

Approved

Noted

Est. Date:

August 15, 2023

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PARTS:

1. Clamp 82711-52090 (W) [4pcs.]
2. Clamp 82711-33380 (B)
3. Clamp 82711-48070 (GR)

4. Black tape [6pcs.]
5. Brown tape [1pc.]

JIG

1. Clamp assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

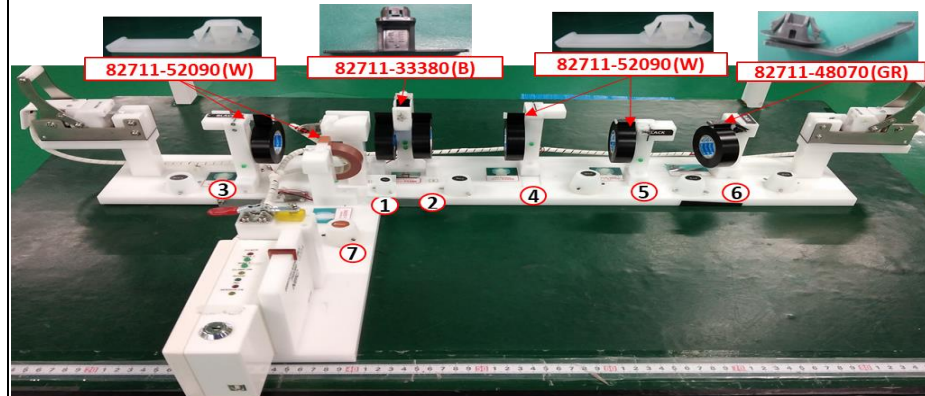
TOOLS/PPE

QUALITY POINTERS

2

n/a

Clamp Setting



1. Get 2pcs. of clamp **82711-52090 (W)** using right hand then set to clamp location **3 and 7** using both hands.

2. Get 2pcs. of clamp **82711-52090 (W)** using right hand then set to clamp location **4 and 5** using both hands.

3. Get 1pc. of clamp **82711-33380 (B)** using right hand then set to clamp location **1 and 2** using both hands.
(See below illustration for correct setting)

5. Get 1pc. of clamp **82711-48070 (GR)** using right hand then set to clamp location **6** using both hands.



4. After setting of clamp **82711-33380 (B)**, hold the guide lock then lock using right hand.

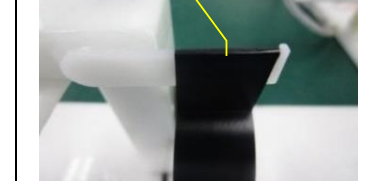
6. Initially attach **Brown tape** on clamp location **7** using both hands.

7. Initially attach **Black tape** on clamp location **1, 2, 3, 4, 5 and 6** using both hands.

n/a

STANDARD TAPING FOR CLAMP

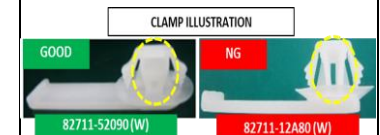
One side tape under clamp



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

Important reminders/Note/s:

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



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PARTS:

1. Assy parts
2. Black tape

JIG

1. Clamp assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

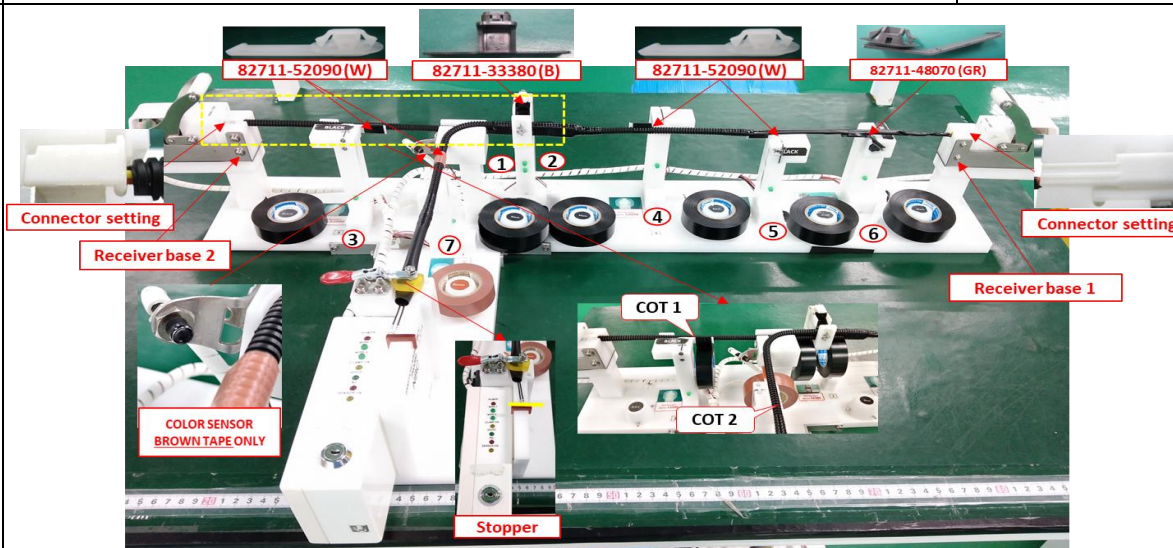
TOOLS/PPE

QUALITY POINTERS

5

n/a

Clamp Assembly



1. Get the assy parts and set into jig. (See above picture for correct setting of harness). First, set the connector 6098-3802 (W) to Receiver base 1 then pull the checker fixture for continuity checking. Second, set the connector 6098-2220 (W) to Receiver base 2 then pull the checker fixture for continuity checking. Last, set the terminal end together (with direct contact terminal to terminal to avoid sensor malfunction of clamp) within the stopper then press by Toggle clamp. Check if the sequence light of location 1 was ON.

2. Check if all LED light for Power On, Clamp On, Wire1 & Wire2 was On. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction then continue the process.

3. Hold the tape on clamp location 1. Make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if sequence light in clamp location 2 was ON.



Important reminders/Note/s:

1. Make sure no gap between stopper and terminals

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

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PARTS:

1. Assy parts
2. Black tape

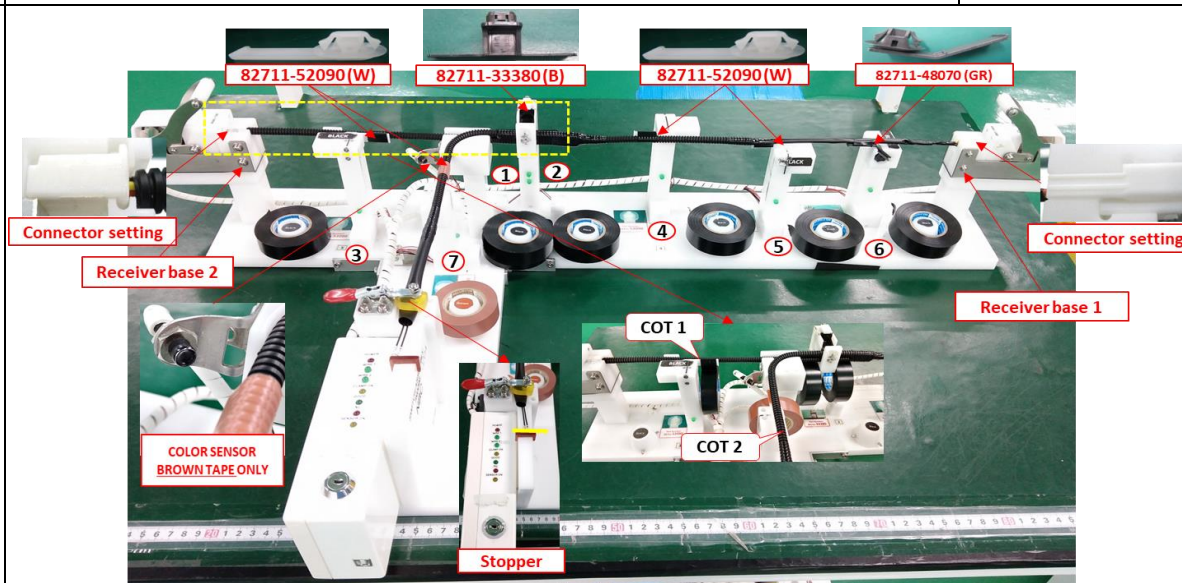
JIG

1. Clamp assembly jig

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

5

n/a

Clamp Assembly
(Continuation)

4. Hold the tape on clamp location **2**. Make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if sequence light in clamp location **3** was **ON**.

6. Hold the tape on clamp location **4**. Make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if sequence light in clamp location **5** was **ON**.

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

7. Hold the tape on clamp location **5**. Make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if sequence light in clamp location **6** was **ON**.



Important reminders/Note/s:
1. Make sure no gap between stopper and terminals

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

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PARTS:

1. Assy parts
2. Black tape

3. Brown tape

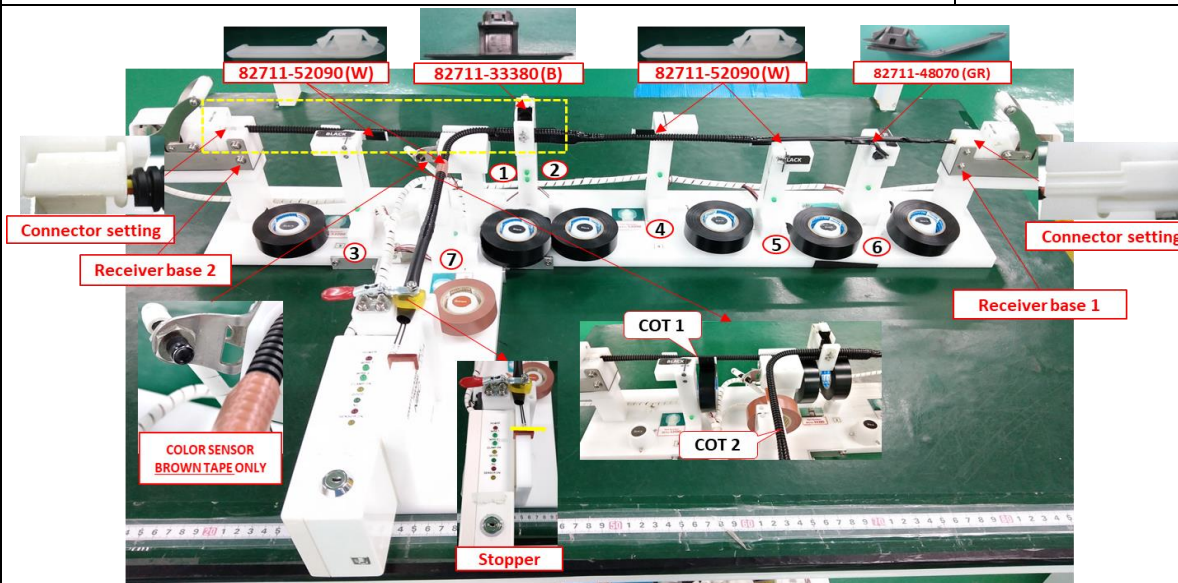
JIG

1. Clamp assembly jig

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

5

n/a

Clamp Assembly
(Continuation)

8. Hold the tape on clamp location **6**. Make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if sequence light in clamp location **7** was **ON**.

9. Hold the tape on clamp location **7**. Make **3 windings** of tape then cut the tape using both hands. **(Note: Color sensor light will beep/buzz if sensor detects Brown tape during taping)**. Press the **SW button** after taping. **Go** sound will be heard.

10. After taping, **CONDUCT POINT CHECKING** before removing the harness from jig.

**Important reminders/Note/s:**

1. Make sure no gap between stopper and terminals

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

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PARTS:

1. Assy parts

JIG

n/a

NO.

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TOOLS/PPE

QUALITY POINTERS

6

n/a

Visual/By Two's Inspection

ACTUAL PRODUCTS



Assembled parts



Master sample



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

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

3. Check the **presence of all clamp attachment and taping condition**

4. Check the **Taping condition.** Conduct **slightly pulling of VT** during bending of part with COT to SV ube (Vinyl) taping **to avoid overlook of missing tape.**

5. Check the **presence of wing -type clamp and taping condition.** Conduct **slightly bending of parts with wing-type clamp.**

MASTER SAMPLE

1. No skip checking during inspection

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7 of 9**PARTS:**

1. Assy parts

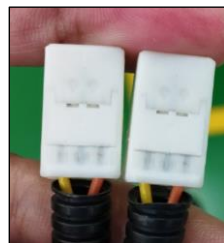
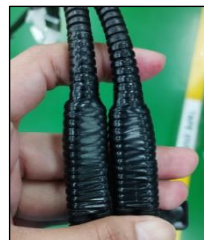
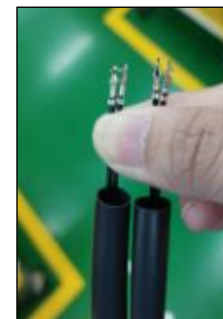
JIG

n/a

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

6

n/a

Visual/By Two's Inspection
(Continuation)6. Check the **connector lock, insertion** and **terminal**.7. Check the **Y-taping condition**.9. Check the **terminal appearance**. Must be **no deformed terminal**.8. Check the **taping condition** of COT to sunprene tube. Conduct **slightly bending**.**MASTER SAMPLE**

1. No skip checking during inspection

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PARTS:

n/a

JIG

n/a

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TOOLS/PPE

QUALITY POINTERS

7

n/a

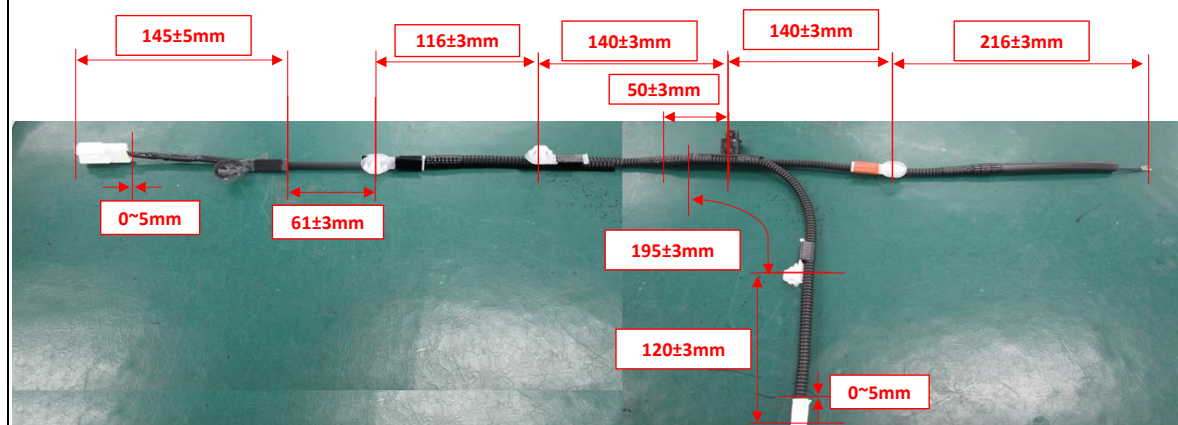
Measurement

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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1. Assy parts

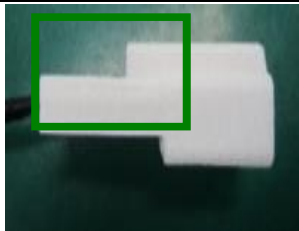
JIG

n/a

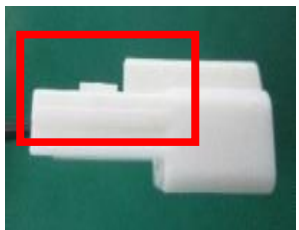
QUALITY CHECKPOINTS

n/a

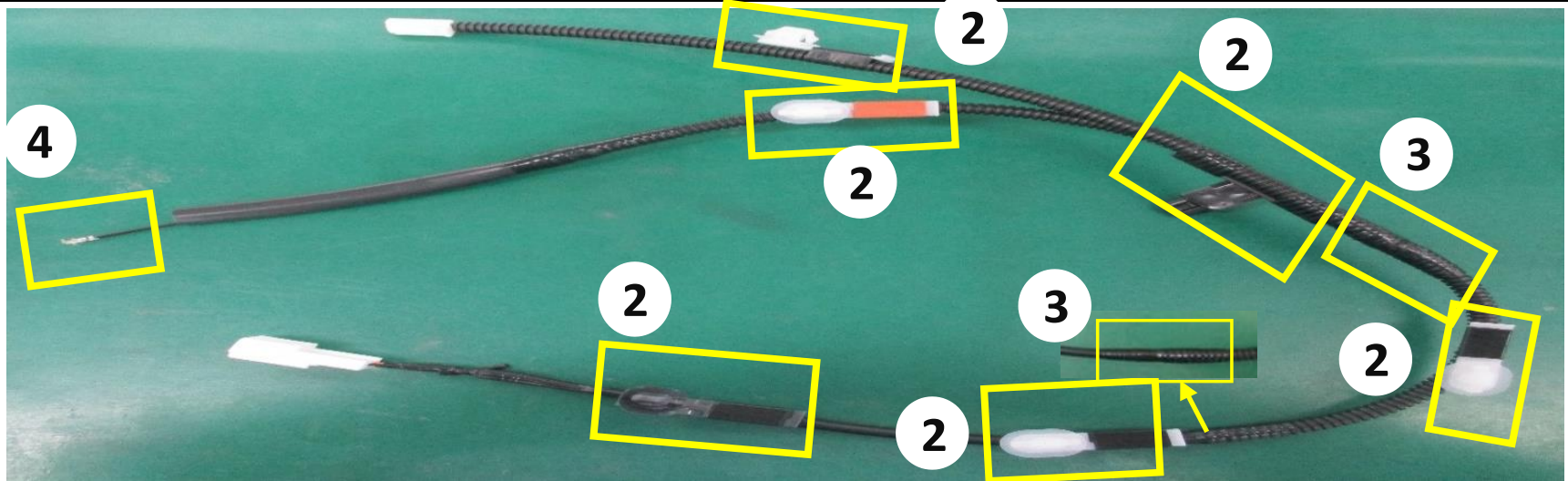
7N0096-7020A



GOOD



NO GOOD



1 No Unlock/
Halflocked Connector
(2 connector)

2 No Missing Clamp
(6pcs.) and BENDING
of 2 sides of wing
clamp

3 No Missing Tape

4 No Deformed
Terminal

5 Checking of
Clamp Alignment

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