



WORK INSTRUCTION

CLAMP ASSEMBLY PROCESS

Effectivity Date:

October 04, 2024

Process Name/Title:

Model code/Part number:

310D / 7N0201-7020B

Customer: TRJ

Car Model: TOYOTA RAV 4

Validity Date:

n/a

Document No.:

WI-ENG-PDE-1106

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Revision No.:

0

Page No.:

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PARTS:

1. Assy parts ; Clamp 82711-34490 (B); Black tape [6 pcs.; Clamp 82711-52090 (W) ; Clamp 82711-33650 (B); Sky Blue [1 pc.]; Clamp 82711-3A540 (W); Clamp 82711-48210 (B)

JIG:

1. Clamp Assembly jig

NO.

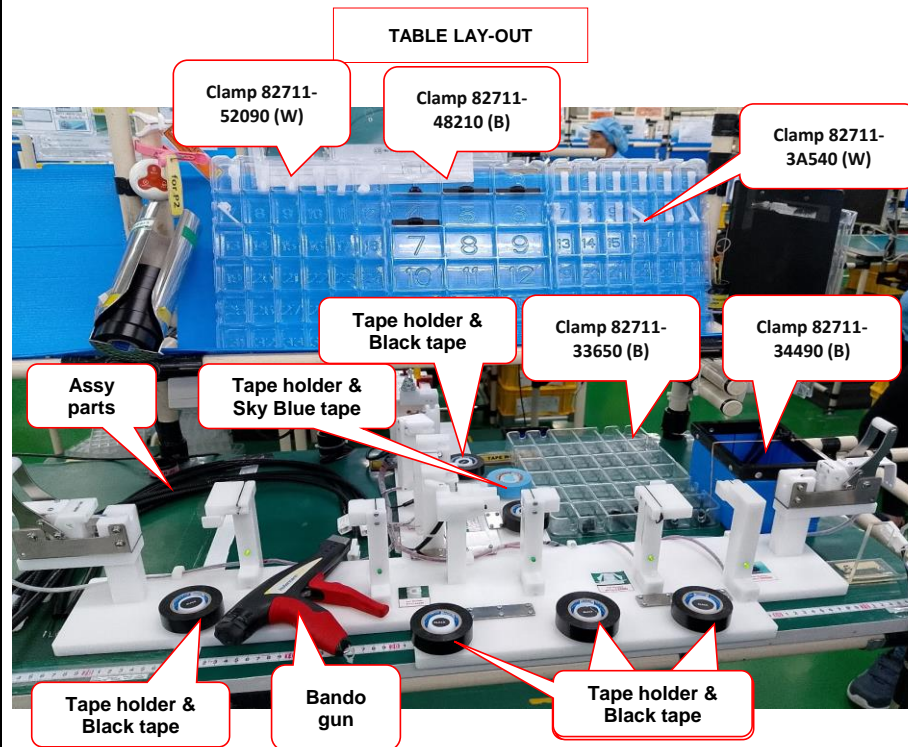
PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

1

Clamp
AssyTable
Lay-out**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.

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

CLAMP ILLUSTRATION



BAND CLAMP ILLUSTRATION



Revision History

| Eff. Date | Rev. No | Details of Change | Revised | Reviewed | Approved | Noted | Prepared by | Reviewed by | Approved by | Noted by |
|-----------|---------|-------------------|-------------|--------------|-----------|-------|-------------|--------------|-------------|----------|
| 10/04/24 | 0 | Initial issue. | A.Hernandez | C.Villanueva | A. Arañes | n/a | A.Hernandez | C.Villanueva | A.Arañes | n/a |

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PARTS:

1. Assy parts

[6 pcs.]

2. Clamp 82711-52090 (W) [2 pcs.]

4. Clamp 82711-34490 (B)

7. Black tape

5. Clamp 82711-33650 (B)

8. Sky Blue [1 pc.]

JIG:

1. Clamp Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

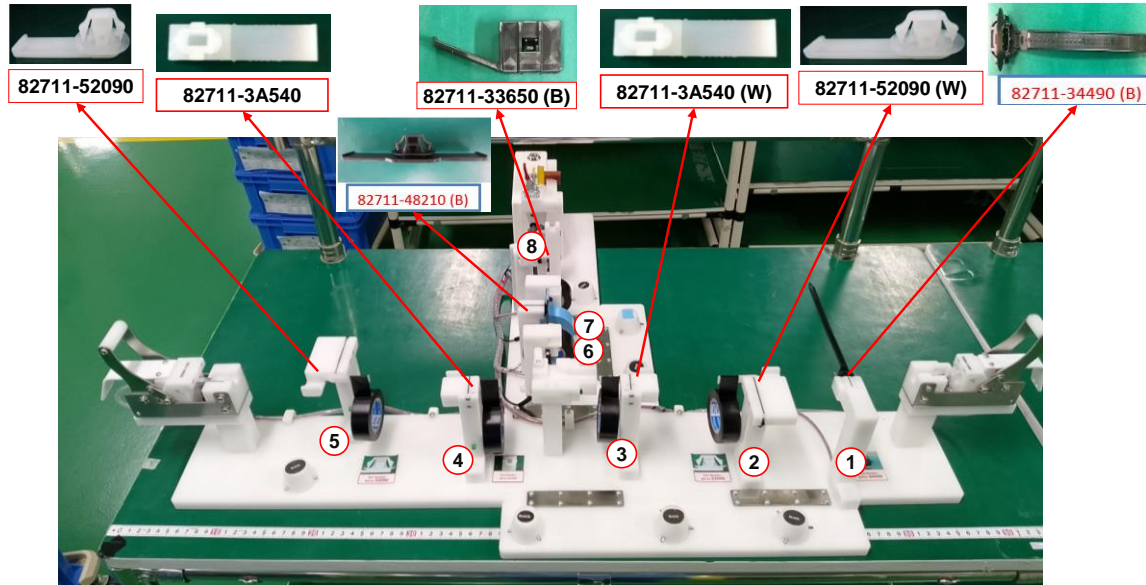
TOOLS/PPE

QUALITY POINTERS

2

Clamp
Assy

Clamp Setting



1. Get 1pc. of clamp **82711-34490 (B)** using right hand and set to clamp location **1** using both hands.

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

3. Get 2pc. of clamp **82711-3A540 (W)** using right hand and set to clamp location **3 and 4** using both hands.

4. Get 2pcs. of clamp **82711-48210 (B)** using right hand and set to clamp location **6 and 7** using both hands.

5. Get 1pcs. of clamp **82711-33650 (B)** using right hand and set to clamp location **8** using both hands.

6. Initially attach **Sky Blue tape** to clamp location **7** using both hands.

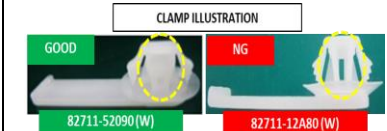
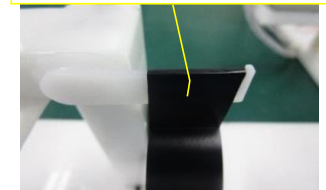
7. Initially attach **Black tape** to clamp location **2, 3, 4, 5, 6, and 8** using both hands.

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.

One wind for under clamp



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|--------|--------------|---|--|-----------|-----------------------|
| PARTS: | | 1. Assy parts | | JIG: | 1. Clamp Assembly jig |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS |
| 3 | Clamp Assy | <div><div><div></div><div>82711-52090</div></div><div><div></div><div>82711-3A540</div></div><div><div></div><div>82711-33650 (B)</div></div><div><div></div><div>82711-3A540 (W)</div></div><div><div></div><div>82711-52090 (W)</div></div><div><div></div><div>82711-34490 (B)</div></div><div><div></div><div>82711-48210 (B)</div></div><div></div></div> <div><div><p>1. Put the assy into jig. (<i>See above picture for the correct setting</i>). First, set the connector 6098-3802 (W) to Receiver base 1. Second, set the next connector 6098-2220 (W) to Receiver base 2. Continue to set the harness in jig. Last, set the B-B wires together within stopper then press by toggle clamp.</p><p>2. Initially tighten the band clamp on location 1 using both hands. Get the bando gun using right hand then cut the band clamp using both hands. Continue the process if the sequence light on location 2 was ON.</p></div><div><div><div><p>PROPER CUTTING POSITION OF BANDO GUN</p></div><div><p>IMPROPER CUTTING POSITION OF BANDO GUN</p></div></div><div><div><p>BANDO GUN ALIGNMENT</p></div><div><p>Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube. For: ø5 - 1~2, ø7 - 3~4</p><div><p>Fixed setting of band clamp cutter: 1~ 2</p></div></div></div></div><div><div><p>1. No flip-out tape</p><p>2. No peel-off tape</p><p>3. No loose tape</p><p>4. No missing tape</p><p>5. No wrong dimension</p><p>6. No wrong use of tape</p></div><div><p>Important reminders/Note/s:</p><p>1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.</p><p>2. Make sure no gap between terminal and stopper jig</p></div><div><div><p>One side tape under clamp</p></div><div><p>CLAMP ILLUSTRATION</p><div><div><p>GOOD</p></div><div><p>NG</p></div></div></div></div></div></div> | | | |

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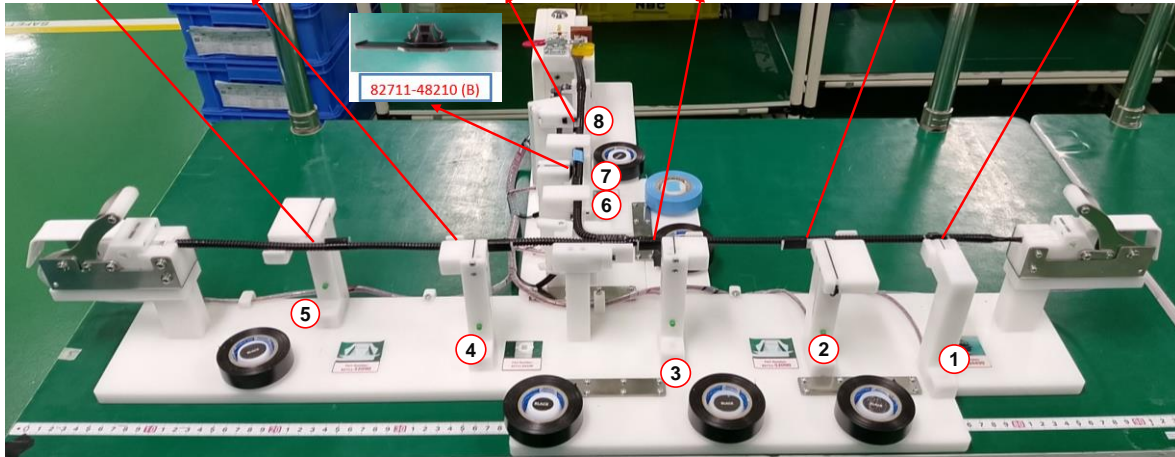




MASSPRO

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|--------|--|---|--|------|--|---|
| PARTS: | | 1. Assy parts | | JIG: | 1. Clamp Assembly jig | |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | | TOOLS/PPE | QUALITY POINTERS |
| 3 | Clamp Assy Clamp Assembly (Continuation) | <div><div> 82711-52090</div><div> 82711-3A540</div><div> 82711-33650 (B)</div><div> 82711-3A540 (W)</div><div> 82711-52090 (W)</div><div> 82711-34490 (B)</div><div> 82711-48210 (B)</div></div> | | |   | <div>1. No wrong use of tape 2. No wrong clamp position 3. No damaged clamp 4. No missing clamp</div> <div></div> <div><p>Important reminders/Note/s:</p><p>1. Must be no gap between terminal and stopper jig.</p><p>2. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).</p><p>3. Setting of band clamp cutter depends on the size of the COT/SV tube (Vinyl) ø5- 1~2, ø7- 3~4</p><div></div></div> |
| | | <div>3. On clamp location 2, hold the tape then make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if the sequence light on location 3 was ON.</div> <div>4. On clamp location 3, hold the tape then make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if the sequence light on location 4 was ON.</div> <div>5. On clamp location 4, hold the tape then make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if the sequence light on location 5 was ON.</div> <div>6. On clamp location 5, hold the tape then make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if the sequence light on location 6 was ON.</div> | | | | |

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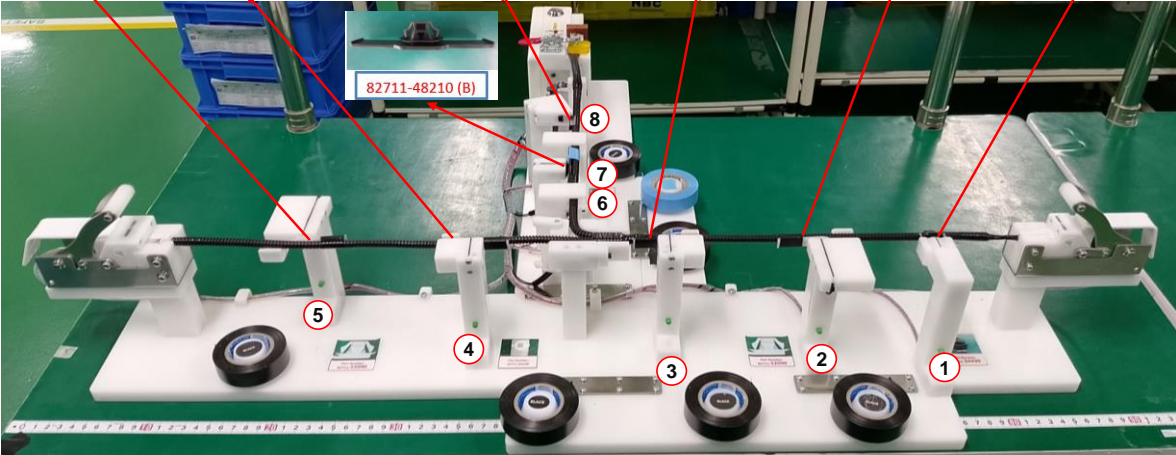

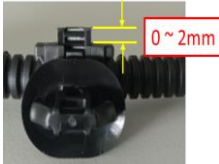
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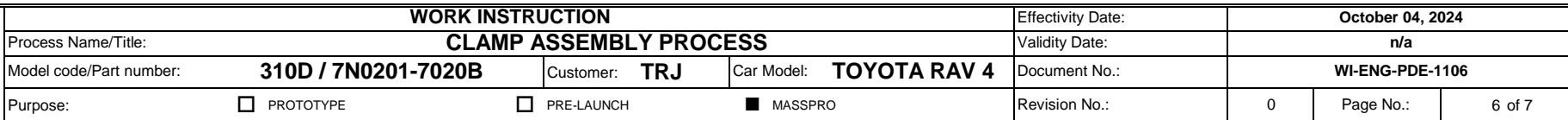
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| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | | TOOLS/PPE | QUALITY POINTERS | |
| 3 | Clamp Assy | <div><div><div>82711-52090</div></div><div><div>82711-3A540</div></div><div><div>82711-33650 (B)</div></div><div><div>82711-3A540 (W)</div></div><div><div>82711-52090 (W)</div></div><div><div>82711-34490 (B)</div></div></div> | | |  | | |
| | | <p>7. On clamp location 6, hold the tape then make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if the sequence light on location 7 was ON.</p> | | | | <p>Important reminders/Note/s:</p> <p>1. Must be no gap between terminal and stopper jig.</p> | |
| | | <p>8. On clamp location 7, hold the tape then make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if the sequence light on location 8 was ON.</p> | | | | <p>2. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).</p> | |
| | | <p>9. On clamp location 8, hold the tape then make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. GO sound will be heard.</p> | | | | <p>3. Setting of band clamp cutter depends on the size of the COT/SV tube (Vinyl) ø5- 1~2, ø7- 3~4</p> | |
| | | <p>10. Conduct POINT CHECKING before removing the harness from jig. First, remove from the Toggle Clamp up to checker 1 to checker 2.</p> | | | |  | |

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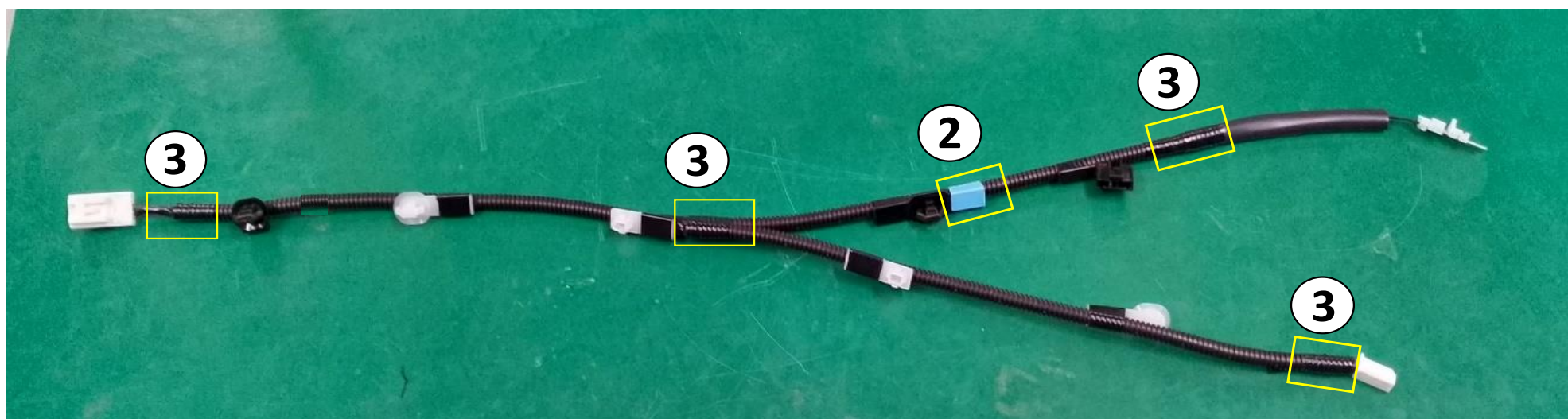
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PARTS:

n/a

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**CLAMP ASSY****7N0201-7020B****1****Checked the
Clamp Alignment****2****No Wrong used of
Clamp taping
(Sky Blue Tape)****3****No Missing Tape**

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