



WORK INSTRUCTION

Process Name/Title:

CLAMP ASSEMBLY PROCESS

Model code/Part number:

930B

/

7N0203-7020A

Customer: TRJ

Car Model: TOYOTA-4RUNNER

Document No.:

Effectivity Date:

February 6, 2024

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

0

Page No.:

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PARTS:

1. Assy parts; Clamp 82711-33650 (B); Clamp 82711-3A540(W); Clamp 82711-48210(B); Black tape [3pcs]; Light Green

JIG:

1. Clamp assembly jig
2. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

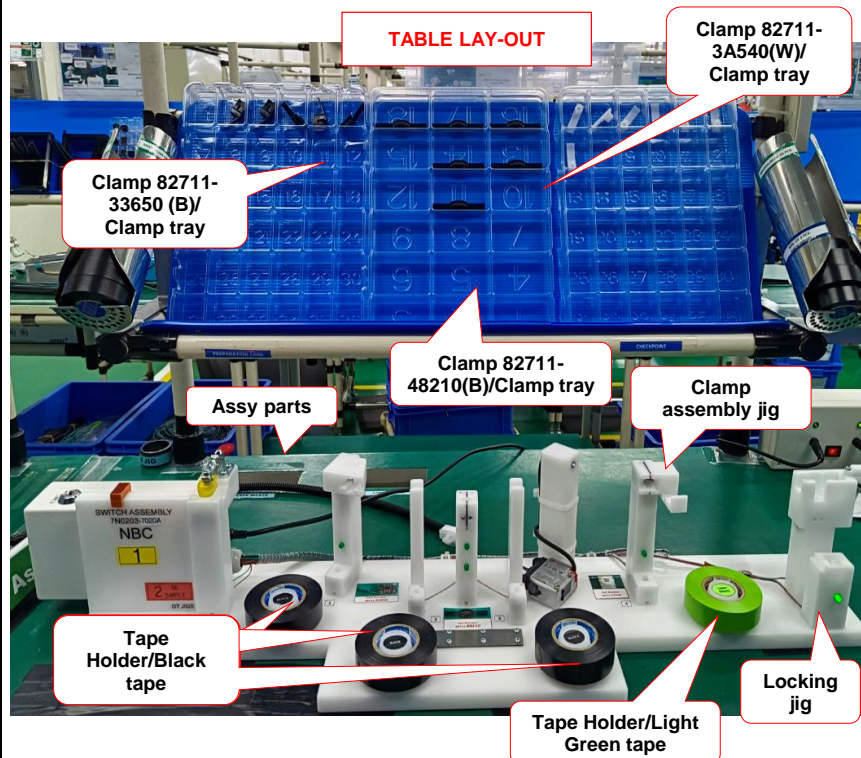
TOOLS/PPE

QUALITY POINTERS

1

n/a

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

Prepared by

Reviewed by

Approved by

Noted by

02/06/24

0

Initial issue

Change form purpose from pre-launch to Masspro. Excluded process from **WI-ENG-PDE-773**. Change process name from **TAPING ASSEMBLY PROCESS** to **CLAMP ASSEMBLY PROCESS**. Additional Table lay-out; Improve work procedure/illustration from pages 1 to 5. Integration of locking jig to Clamp assembly jig

M. Ariola

C. Villanueva

A. Arañes

n/a

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Eff. Date

Rev. No

Details of Change

Revised

Reviewed

Approved

Noted

Est. Date:

February 6, 2024

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WI-ENG-PDE-826

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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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PARTS:

1. Clamp 82711-48210 (B)
2. Clamp 82711-33650 (B)

3. Clamp 82711-3A540 (W)
4. Black tape [3pcs]
5. Light green tape

JIG:

1. Clamp assembly jig
2. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

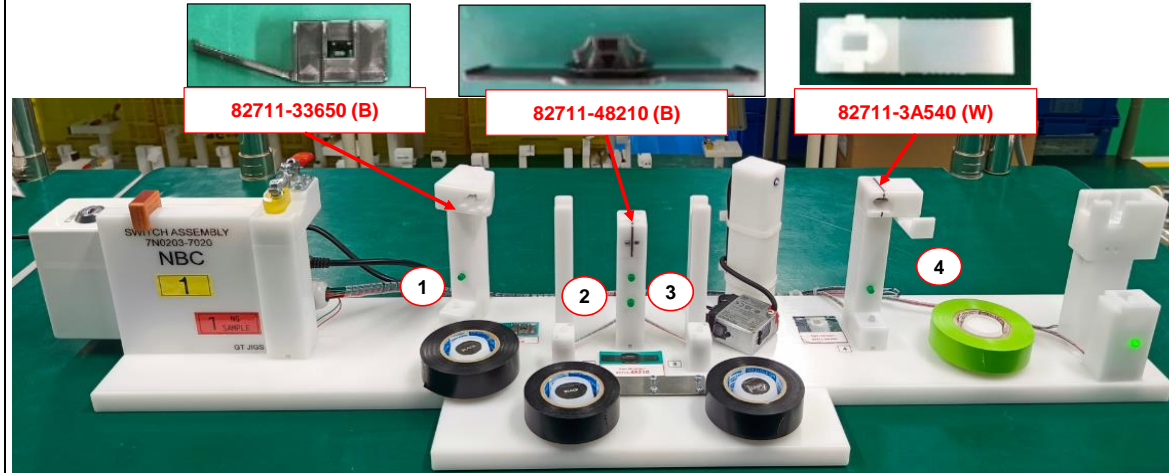
TOOLS/PPE

QUALITY POINTERS

2

n/a

Clamp setting



1. Get **1pc** of clamp **82711-33650 (B)** using right hand then set to Clamp location no. **1** using both hands.

2. Get **1pc** of clamp **82711-48210 (B)** using right hand then set to Clamp location no. **2 and 3** using both hands.

3. Get **1pc** of clamp **82711- 3A540 (W)** using right hand then set to Clamp location no. **4** using both hands.

4. Initially attach **GREEN TAPE** to **location 4** using both hands.

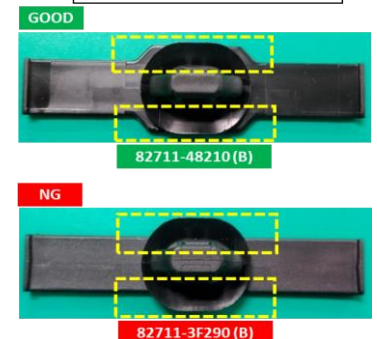
5. Initially attach **BLACK TAPE** to **location 1, 2, and 3** using both hands.

Important reminders/Notes

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

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

CLAMP ILLUSTRATION



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Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

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PARTS:	1. Assy parts		JIG:	1. Clamp assembly jig 2. Locking jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
3	n/a	Connector lock	<div><div><div><div><div>CONNECTOR CROSS SECTIONAL VIEW</div><div><div>NG</div><div>NG</div><div>GOOD</div></div><div><div><div><div>Double</div></div><div><div>Double</div></div><div><div>Double</div></div></div><div><div>Unlock Condition</div><div>Half Lock Condition</div><div>Full Lock Condition</div></div></div></div><div><div><div><div>Before lock</div></div><div><div>After lock</div></div></div></div></div></div><div><div>1. Put the connector into locking jig using right hand then press to lock 2x. Check the connector lock if properly locked.</div></div></div>		1. Use the provided locking per model 2. No unlock/half-locked connector

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PARTS:		1. Clamp 82711-48210 (B) 2. Clamp 82711-33650 (B) 3. Clamp 82711-3A540 (W) 4. Black tape [3pcs] 5. Light green tape		JIG:	1. Clamp assembly jig 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	n/a Clamp setting	<div></div> <div>1. Get the assy part and set to jig. (See above picture for the correct setting). First, set the connector 6189-0407 (W) to Receiver base 1 and lock. Continue to set the harness in jig. Last, set B/W-G wires with PCB end together within stopper then press by toggle clamp.</div> <div>2. Check if LED light for POWER ON and CLAMP ON was ON. Check also the clamp location 1 sequence light is ON. If encountered abnormality, STOP and immediately CALL the attention of the leader, WAIT for further instruction then continue the process.</div> <div>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 if sequence on clamp location 2 was ON.</div> <div>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 if sequence on clamp location 3 was ON.</div> <div>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 if sequence on clamp location 4 was ON.</div> <div>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. Go sound will be heard.</div> <div>7. Conduct POINT CHECKING before removing the harness from jig.</div>			<div>Important reminders/Notes</div> <div>1. Please check the clamp first before start of clamp assembly to avoid wrong use of clamp.</div> <div>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</div> <div>CLAMP ILLUSTRATION</div> <div>GOOD 82711-48210 (B)</div> <div>NG 82711-3F290 (B)</div>

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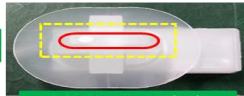



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PARTS:		1. Assembled parts 2. Master sample		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	n/a	<div><div><p>ASSEMBLED PARTS</p></div><div><p>MASTER SAMPLE</p></div><div><p>1. Conduct alignment of harness (Master sample vs. Assembled parts) using both hands.</p></div><div><p>2. Check the connector lock condition, insertion, terminal and the presence of clip-type clamp</p></div><div><p>3. Check the presence of all clamp attachment and taping condition. Conduct slightly bending of parts with wing-type clamp.</p></div><div><p>4. Check the hotmelted wires (B/W-G) appearance. Must be no deformed terminal.</p></div></div>			<p>1. No skip checking during inspection.</p> <div>ENGINEERING SAMPLE</div> <div><p>MASTER SAMPLE</p></div> <div>CLIP CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div><p>82711-1E360 (W)</p></div><div>NG</div><div><p>82711-12B10 (W)</p></div><div>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div><p>82711-48210 (B)</p></div><div>NG</div><div><p>82711-3F290 (B)</p></div></div></div>

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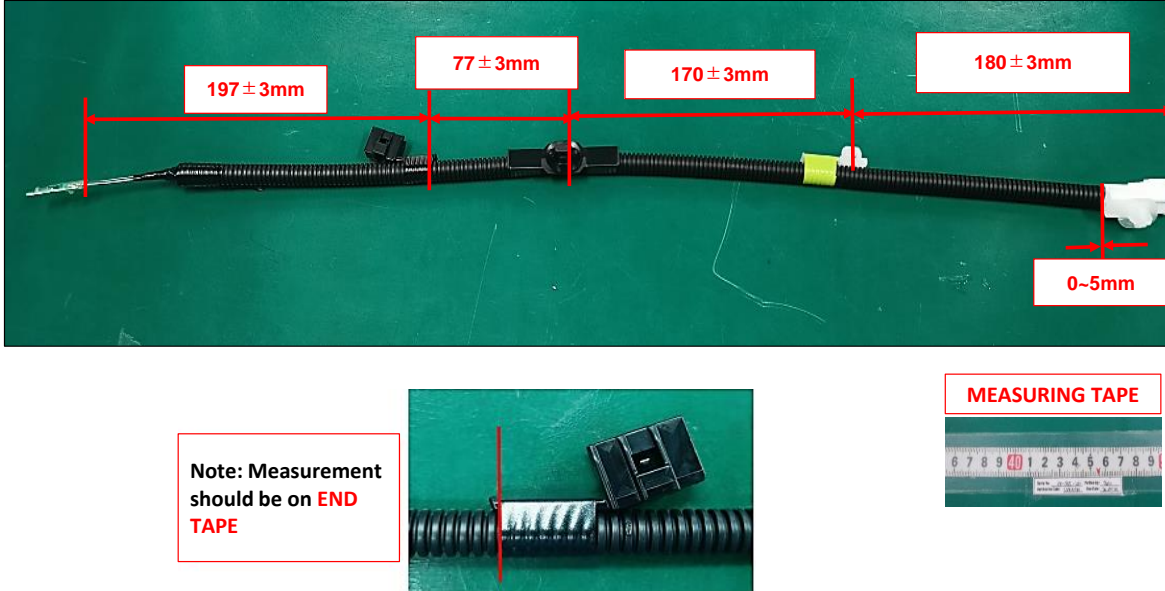
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:	n/a			JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	n/a	Measurement			<p>1. No wrong dimension</p> <p>Important reminders/Notes</p> <p>1. Please use calibrated/verified measuring tape when fetting the measurement.</p> <p>2. For Hatsumono, Nakamono and Owarimono</p> <p>Document reference/s:</p> <p>1. Please refer to WI-PRO-ASY-056 for Sub-Assy Hatsumono, Nakamono and Owarimono inspection.</p>

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PARTS:

n/a

JIG:

n/a

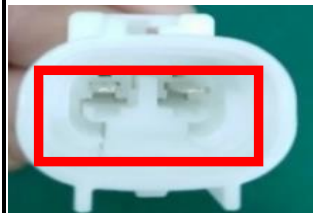
QUALITY CHECKPOINTS

CLAMP
ASSY

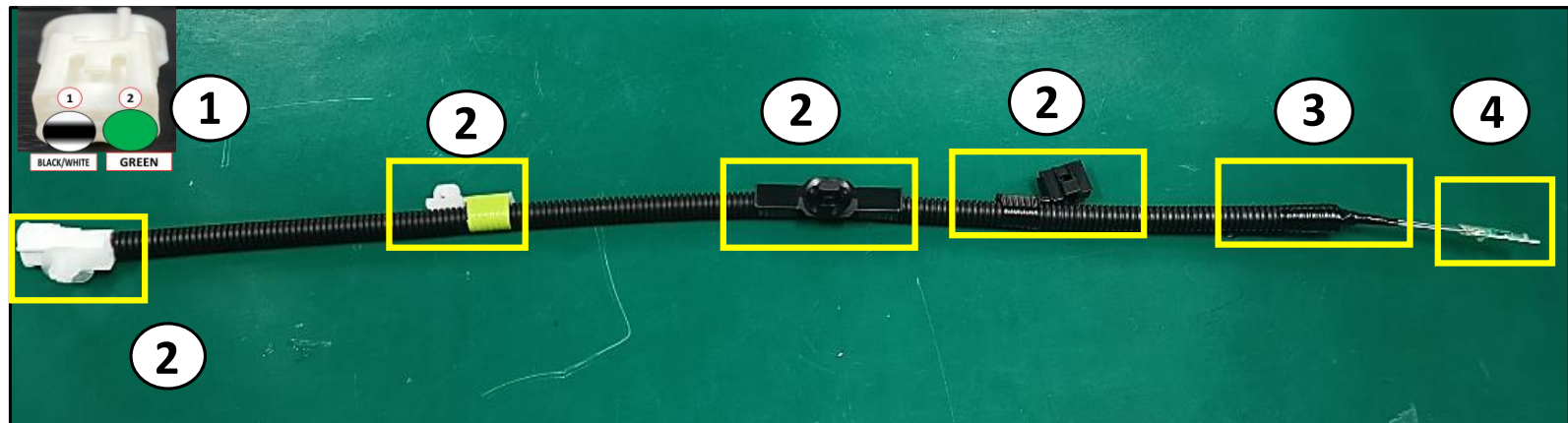
7N0203-7020A



GOOD



NO GOOD



① No **WRONG INSERT**
No **UNLOCKED/HALFLOCKED**
NO **TBO**

② NO **Missing Clamp**

No **Wrong color of tape**

③ No **Missing Tape**

④ No **DEFORMED
TERMINAL/PCB**

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