



## WORK INSTRUCTION

Process Name/Title:

## CLAMP ASSEMBLY PROCESS

Model code/Part number:

320B / 7L0052-7024A

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

October 01, 2024

Validity Date:

n/a

Document No.:

WI-ENG-PDE-1066

Revision No.:

1

Page No.:

1 of 6

## PARTS:

1. Assy parts; Clamp 82711-48210 (B); Clamp 82711-3A640 (B); Clamp 82711-48070 (GR); Clamp 82711-52090 (W); Black tape 20mm [5pcs.]

JIG:

1. Clamp assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

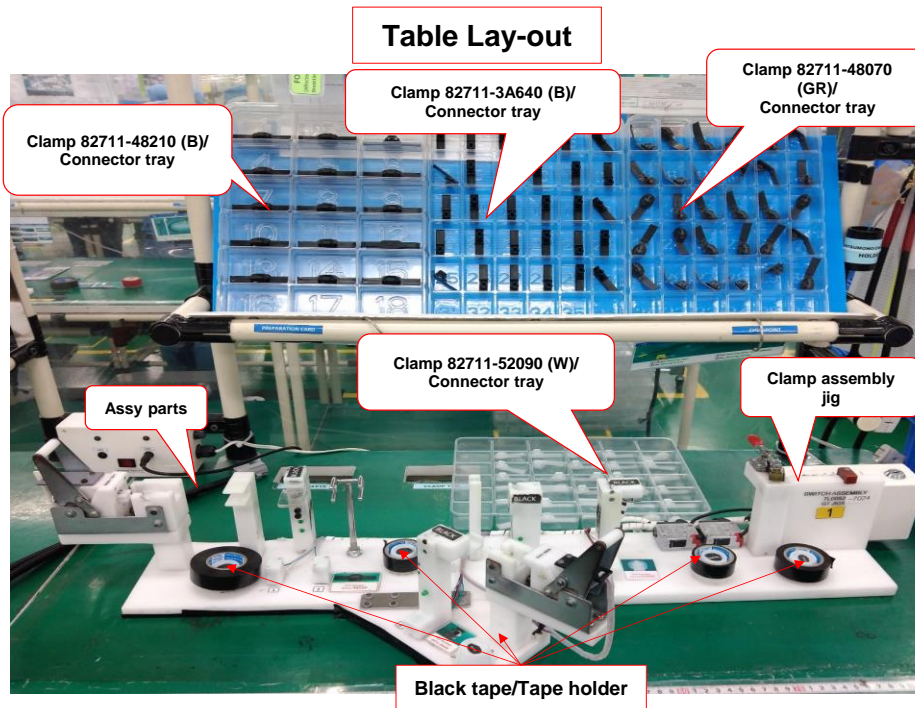
TOOLS/PPE

QUALITY POINTERS

1

CLAMP  
ASSY

Table 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.

**Document reference/s:**




1. Refer to **WI-ENG-PDE-409A-B** for Taping assembly process

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

CLAMP ILLUSTRATION



## Revision History

							Prepared by	Reviewed by	Approved by	Noted by
							 A. Hernandez	 C. Villanueva	 A. Arañes	n/a
10/01/24	1	Change from Pre-launch to Masspro.	A. Hernandez	C. Villanueva	A. Arañes	n/a				
09/24/24	0	Initial issue.	A. Hernandez	C. Villanueva	A. Arañes	n/a				
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	September 24, 2024		

**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**

Process Name/Title:

**CLAMP ASSEMBLY PROCESS**

Effectivity Date:

October 01, 2024

Validity Date:

n/a

Model code/Part number:

**320B / 7L0052-7024A**

Customer:

**TRQSS**

Car Model:

**TOYOTA-RAV4**

Document No.:

**WI-ENG-PDE-1066**

Purpose:

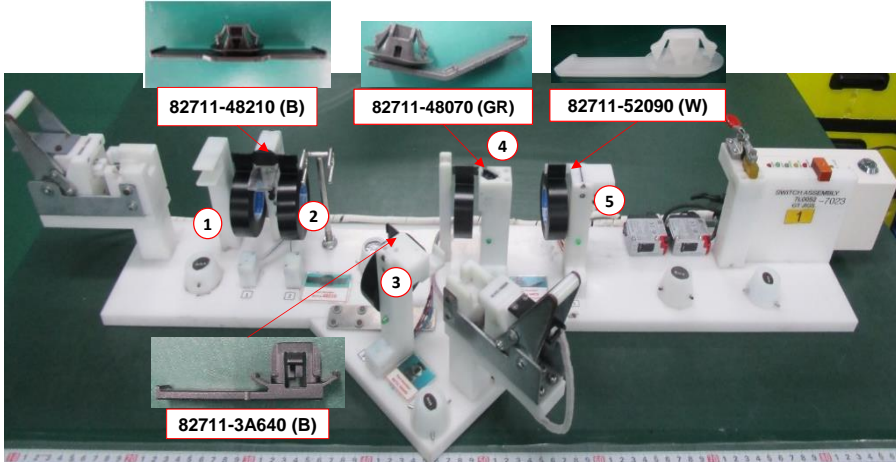
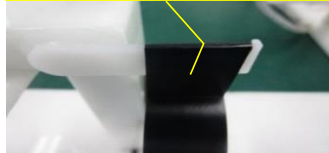


☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

2 of 6

PARTS:		1. Clamp 82711-48210 (B) 2. Clamp 82711-48070 (GR) 3. Clamp 82711-3A640 (B) 4. Clamp 82711-52090 (W) 5. Black tape 20mm [5pcs.]		JIG:	1.Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	CLAMP ASSY  Clamp setting	<div></div> <div>1. Get 1 pc. of clamp <b>82711-48210 (B)</b> using right hand then insert to clamp location <b>1 and 2</b> using both hands.</div> <div>2. Get 1 pc. of clamp <b>82711-3A640 (B)</b> using right hand then insert to clamp location <b>3</b> using both hands.</div> <div>3. Get 1 pc. of clamp <b>82711-48070 (GR)</b> using right hand then insert to clamp location <b>4</b> using both hands.</div> <div>4. Get 1 pc of clamp <b>82711-52090 (W)</b> using right hand then insert to clamp location <b>5</b> using both hands.</div> <div>5. Get the <b>Black tape</b> then initially attach to clamp location <b>1, 2, 3, 4 and 5</b> using both hands.</div>		n/a	<div>STANDARD TAPING FOR CLAMP</div> <div>One wind for under tape</div> <div></div> <div>Important reminders/Note/s: <b>1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.</b></div> <div>1. No damaged clamp 2. No wrong use of clamp 3. No wrong use of tape 4. No missing clamp</div> <div>CLAMP ILLUSTRATION</div> <div><div>GOOD</div><div></div><div>82711-52090 (W)</div></div> <div><div>NG</div><div></div><div>82711-12A80 (W)</div></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

Process Name/Title:

## CLAMP ASSEMBLY PROCESS

Effectivity Date:

October 01, 2024

Validity Date:

n/a

Model code/Part number:

320B / 7L0052-7024A

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1066

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

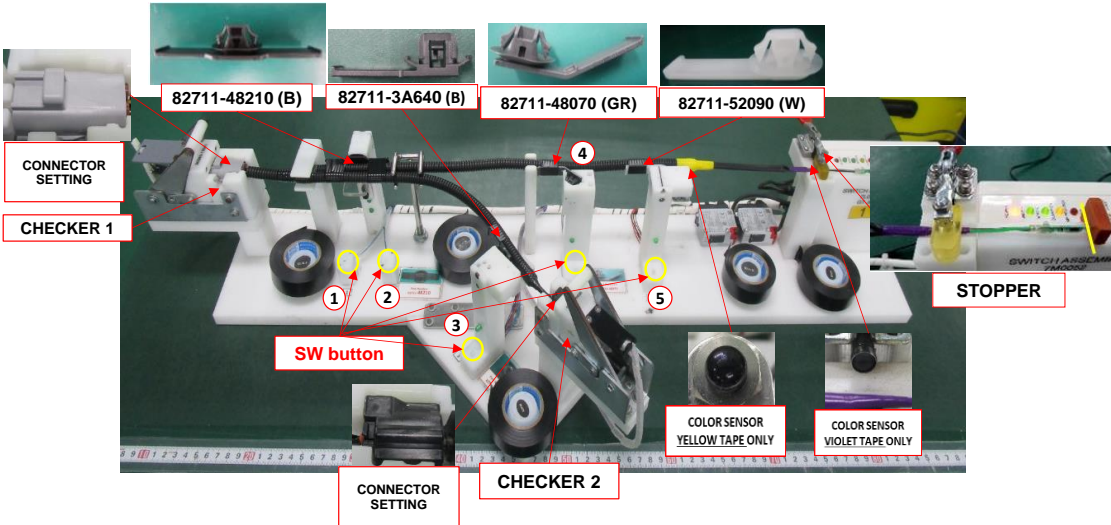



☒ MASSPRO

Revision No.:

1

Page No.:

3 of 6

PARTS:		1. Assy parts 2. Black tape 20mm		JIG:	1.Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	CLAMP ASSY  Clamp Assembly	<div></div> <div>1. Get the assy parts and set into jig. <i>(See above picture for correct setting of harness)</i>. First, set the connector <b>6188-0066 (GR)</b> to <b>Checker 1</b> then pull the checker fixture for continuity checking. Second, set the connector <b>6189-1161 (B)</b> to <b>Checker 2</b> then pull the checker fixture for continuity checking. Continue to set the harness in jig. Last, set the PCB within the stopper then press by <b>Toggle clamp</b>. Continue if the sequence light of location <b>1</b> was <b>ON</b>.</div> <div>2. Check if all LED light for <b>Power On, Clamp On, Wire1 &amp; Wire2</b> was <b>ON</b>. If encountered abnormality, <b>STOP</b> and immediately <b>CALL</b> the attention of the leader. <b>WAIT</b> for further instruction then continue the process.</div> <div>3. Hold the tape on clamp location <b>1</b>, make <b>3 windings</b> of tape then cut the tape using both hands. Press the <b>SW button</b> after taping. Continue the process if sequence light on clamp location <b>2</b> was <b>ON</b>.</div>		<div><p><b>STOPPER</b></p><p><b>Important reminders/Note/s:</b> <b>1. Make sure no gap between stopper and terminals</b> <b>2. Make 2-3 windings for clamp taping</b></p><p>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</p><div><p>CLAMP ILLUSTRATION</p><div><p>GOOD 82711-52090 (W)</p></div><div><p>NG 82711-12A80 (W)</p></div></div></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

Process Name/Title:

## CLAMP ASSEMBLY PROCESS

Effectivity Date:

October 01, 2024

Validity Date:

n/a

Model code/Part number:

320B / 7L0052-7024A

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1066

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

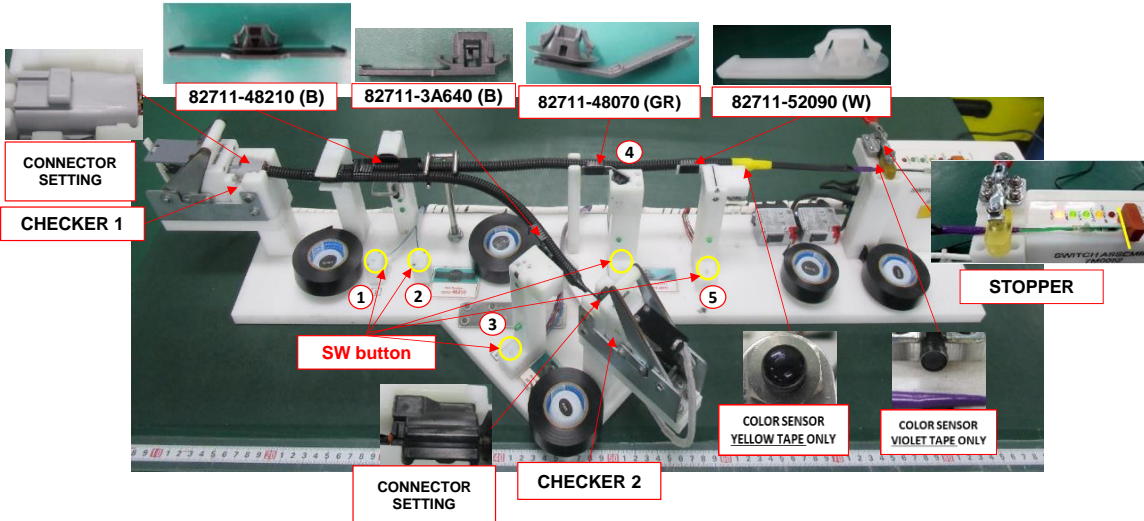

☒ MASSPRO

Revision No.:

1

Page No.:

4 of 6

PARTS:		1. Assy parts 2. Black tape 20mm		JIG:	1.Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	CLAMP ASSY  Clamp Assembly (Continuation)	<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 the process if sequence light on clamp location 3 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. Continue the process if sequence light on clamp location 5 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 the process if sequence light on clamp location 4 was ON.</div><div>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. Go sound will be heard.</div><div>8. After taping, CONDUCT POINT CHECKING before removing the harness from jig.</div></div>			<div><div>STOPPER</div><p><b>Important reminders/Note/s:</b> 1. Make sure no gap between stopper and terminals 2. Make 2-3 windings for clamp taping</p><div>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</div><div><div>CLAMP ILLUSTRATION</div><div><div>GOOD</div><div>NG</div></div><div><div>82711-52090 (W)</div><div>82711-12A80 (W)</div></div></div></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

Process Name/Title:

## CLAMP ASSEMBLY PROCESS

Effectivity Date:

October 01, 2024

Validity Date:

n/a

Model code/Part number:

320B / 7L0052-7024A

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1066

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

Page No.:

5 of 6

PARTS:		1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	CLAMP ASSY	Measurement	<div></div>	<div><b>MEASURING TAPE</b></div>	<p><b>Important reminders and note/s:</b></p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>2. For Hatsumono, Nakamono and Owarimono.</p> <p><b>Document reference/s:</b></p> <p>1. Refer to <b>WI-PRO-ASY-056</b> for Sub-assembly Hatsumono Nakamono Owarimono Inspection</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**

Process Name/Title:

**CLAMP ASSEMBLY PROCESS**

Effectivity Date:

October 01, 2024

Validity Date:

n/a

Model code/Part number:

320B / 7L0052-7024A

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1066

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

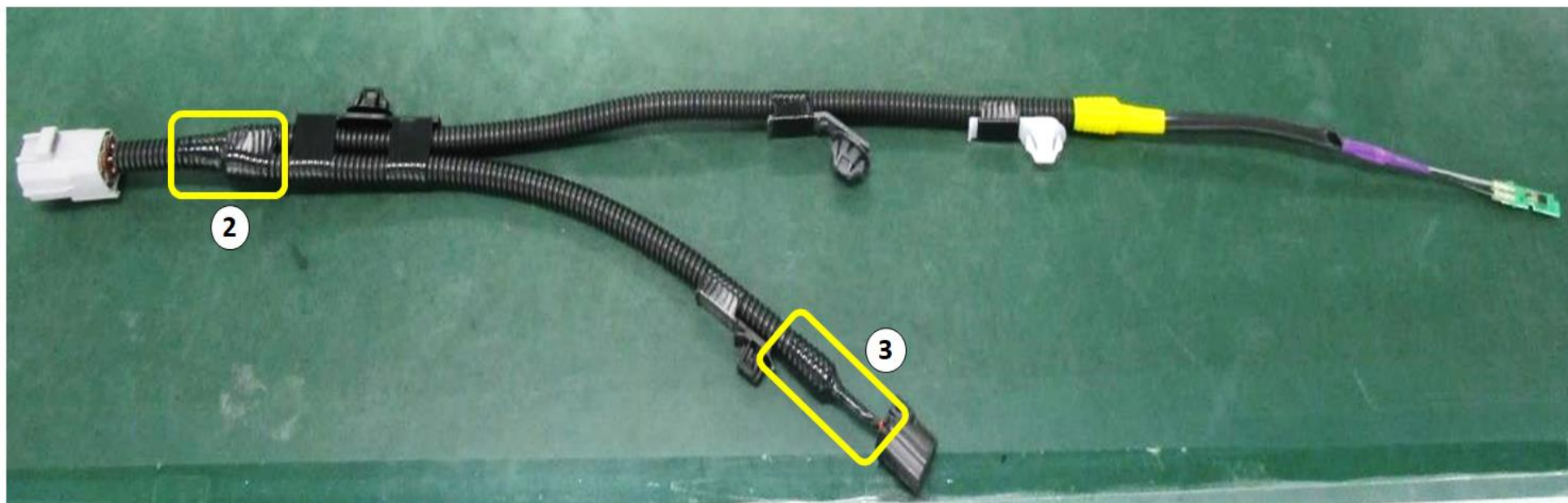
6 of 6

**PARTS:**

1. Assy parts

JIG:

n/a

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****CLAMP ASSY****7L0052-7024A****1** No Wrong facing of clamp**2 3** No Missing Tape (Black 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