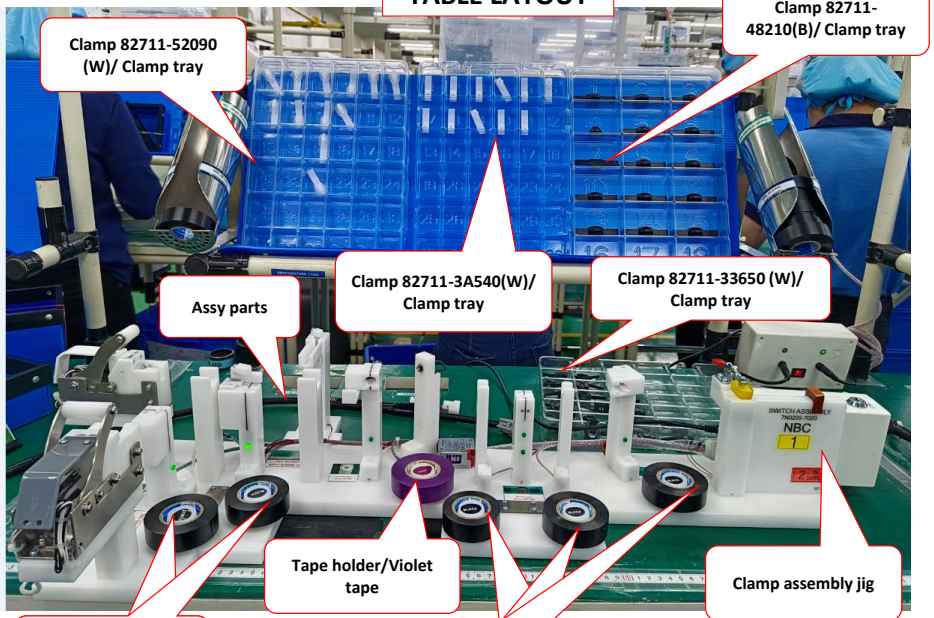
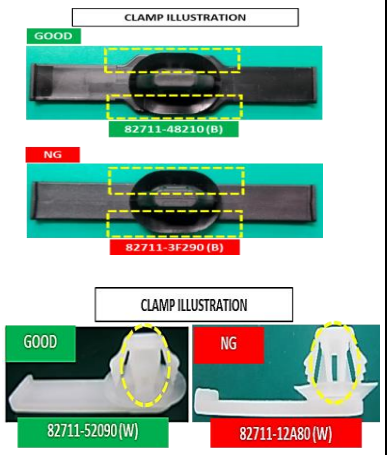
NBC	WORK INSTRUCTION			Effectivity Date:	February 7, 2024
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number: 930B / 7N0205-7020A	Customer: TRJ	Car Model: TOYOTA-4RUNNER	Document No.:	WI-ENG-PDE-827
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	Page No.: 1 of 8

PARTS:	1. Assy parts; Clamp 82711-52090 (W); Clamp 82711-48210(B); Clamp 82711-3A540(W); Clamp 82711-33650 (W); Black tape [5pcs]; Violet tape	JIG:	1. Clamp Assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	n/a	Table layout	**TABLE LAYOUT**  	**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 excess parts/tools ***Important reminders/Notes:*** ***1. Please check the clamp first before start of assembly to avoid wrong use of clamp.*** 

Revision History							Prepared by	Reviewed by	Approved by	Noted by
02/07/24	0	Initial issue. Excluded process from **WI-ENG-PDE-782.** Change purpose from Pre-launch to Masspro. Change document title from **TAPING ASSEMBLY PROCESS** to **CLAMP ASSEMBLY PROCESS**. Additional table lay-out.	M. Ariola	C.Villanueva	A. Arañes	n/a	M. Ariola	C.Villanueva	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	February 7, 2024		

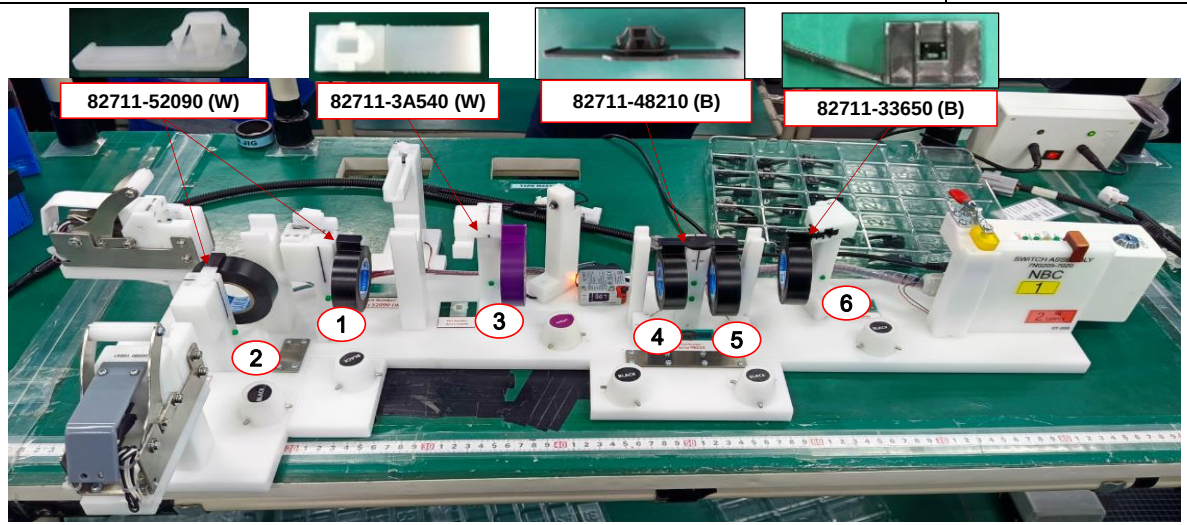
CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

	WORK INSTRUCTION			Effectivity Date:	February 7, 2024	
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a	
	Model code/Part number: 930B / 7N0205-7020A	Customer: TRJ	Car Model: TOYOTA-4RUNNER	Document No.:	WI-ENG-PDE-827	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.: 2 of 8

PARTS:	1. Clamp 82711-33650 (B) 2. Clamp 82711-48210 (B) 3. Clamp 82711-3A540 (W)	4. Clamp 82711-52090 (W) 5. Violet tape 6. Black tape [5pcs]	JIG:	1. Clamp Assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	n/a	Clamp setting			***Important reminders/Notes:*** ***1. Please check the clamp first before start of assembly to avoid wrong use of clamp.*** 1. No loose/tight clamp attachment. 2. No damaged clamp. 3. No missing tape. 4. No missing spot tape. 5. No missing parts 6. Make sure there is no clearance between the PCB and the stopper jig

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

2. Get 1pc of clamp **82711-3A540 (W)** using right hand and set to clamp location **3** using both hands.

3. Get 1pc of clamp **82711-48210 (B)** using right hand and set to clamp location **4 and 5** using both hands.

4. Get 1pc of clamp **82711-33650 (B)** using right hand and set to clamp location **6** using both hands.

5. Initially attach **Violet tape** to clamp location **3** using both hands.

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

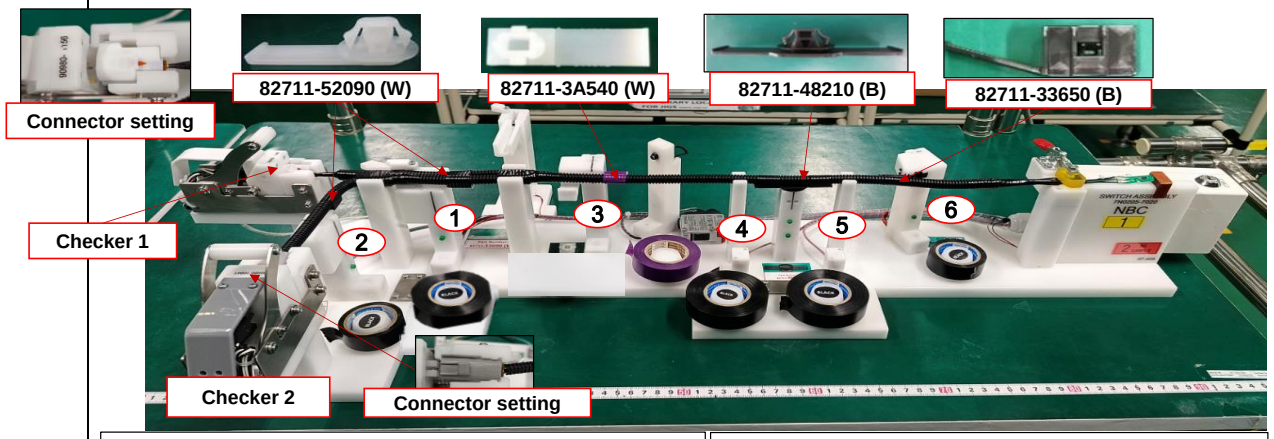
CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

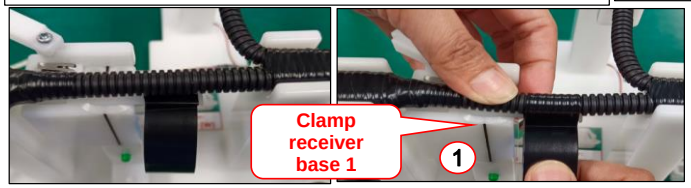
NBC	WORK INSTRUCTION			Effectivity Date:	February 7, 2024
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number: 930B / 7N0205-7020A	Customer: TRJ	Car Model: TOYOTA-4RUNNER	Document No.:	WI-ENG-PDE-827
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0 / Page No.: 3 of 8

PARTS:	1. Assy parts 2. Violet tape 3. Black tape [5pcs]	JIG:	1. Clamp Assembly jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	n/a — Clamp Assembly			1. No loose/tight clamp attachment. 2. No damaged clamp. 3. No missing tape. 4. No missing spot tape. 5. No missing parts 6. Make sure there is no clearance between the PCB and the stopper jig

1.Put the assy parts into jig. ***(See above picture for the correct setting)***. *First, set the* ***connector 6189-0451 (W)*** *to* ***Checker 1****, Second set the* ***Connector 6188-0066 (GR)*** *to* ***Checker 2****,* Third, set the connector **6098-3810 (W)**. Last, set the **hotmelted wire** and **B-B wires** together within stopper then press by toggle clamp.

2. Check if all **LED** light for **Wire 1** and **Wire 2** was **ON**. If encountered abnormality, **STOP** and immediately **CALL** the attention of the leader. **WAIT** for further instruction and continue the process. Continue the process if the sequence light on **location 1** was **ON**.



3. On clamp **location 1** conduct **spot taping** using both hands. Make **2 windings** of tape. Press the **SW button** after taping. Sequence light will be **OFF**.
(NOTE: DO NOT CUT THE TAPE)

4. Remove the **connector 6098-3810 (W)** using right hands and set to **clamp receiver base 1** using both hands then lock. Sequence light will be **ON**.

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.

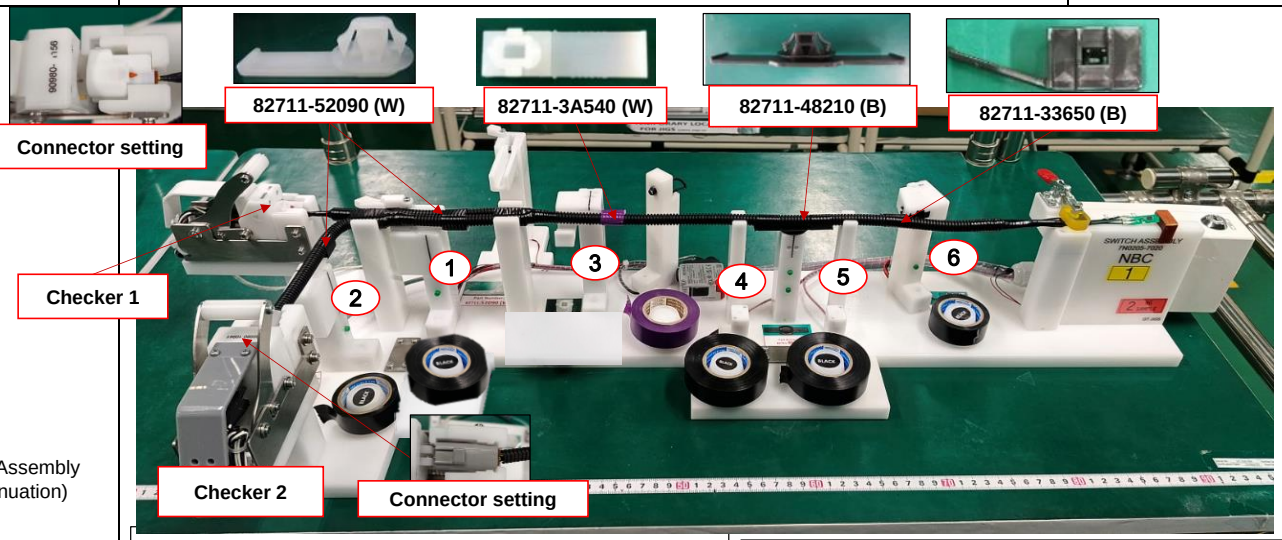
NBC (Philippines)
MASTER COPY

DCC Stamp

	WORK INSTRUCTION			Effectivity Date:	February 7, 2024
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number: 930B / 7N0205-7020A	Customer: TRJ	Car Model: TOYOTA-4RUNNER	Document No.:	WI-ENG-PDE-827
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0 / Page No.: 4 of 8

PARTS:	1. Assy parts 2. Violet tape 3. Black tape [5pcs]	JIG:	1. Clamp Assembly jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	n/a	Clamp Assembly (Continuation)		1. No loose/tight clamp attachment. 2. No damaged clamp. 3. No missing tape. 4. No missing spot tape. 5. No missing parts 6. Make sure there is no clearance between the PCB and the stopper jig



5. Combine the **2 COT** using both hands, Hold the **Black tape** using right hand then start taping using both hands on clamp **location 1**. Make **3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue the process if the sequence light on clamp **location 2** was **ON**.

6. On clamp **location 2** hold the **Black tape** using right hand. **Make 3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue the process if the sequence light on clamp **location 3** was **ON**.

7. On clamp **location 3** hold the **Black tape** using right hand. **Make 3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue the process if the sequence light on clamp **location 4** was **ON**.

8. On clamp **location 5** hold the **Black tape** using right hand. **Make 3 windings** of tape then cut the tape. Press the **SW button** after taping. Continue the process if the sequence light on clamp **location 6** was **ON**.

9. On clamp **location 6** hold the **Black tape** using right hand. **Make 3 windings** of tape then cut the tape. Press the **SW button** after taping. **GO** buzzer will be heard.

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

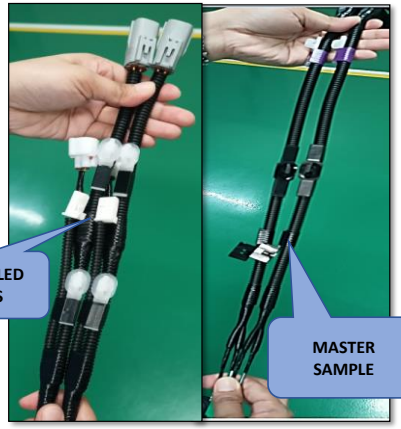
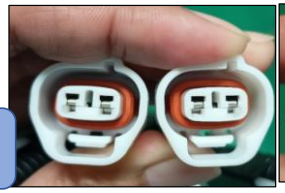
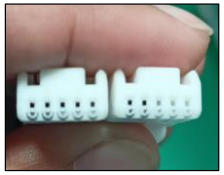
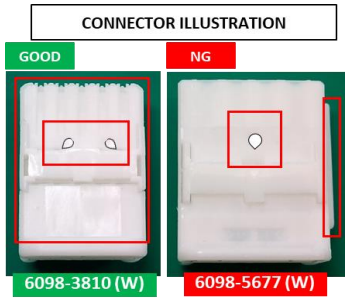
CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

NBC	WORK INSTRUCTION			Effectivity Date:	February 7, 2024
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number: 930B / 7N0205-7020A	Customer: TRJ	Car Model: TOYOTA-4RUNNER	Document No.:	WI-ENG-PDE-827
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0 / Page No.: 5 of 8

PARTS:	1. Assy parts 2. Master sample	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	n/a	Visual/By two's inspection	    1. Conduct **alignment of harness (Master sample vs Assembled part)** using both hands. 2. Check the **connector lock condition, wire insertion** and **terminal**.		 1. No skip checking during inspection

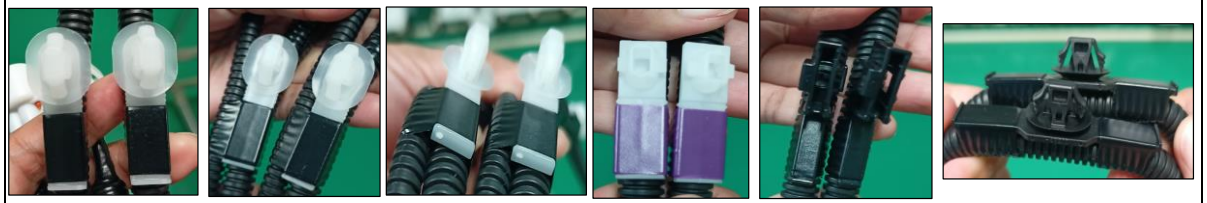
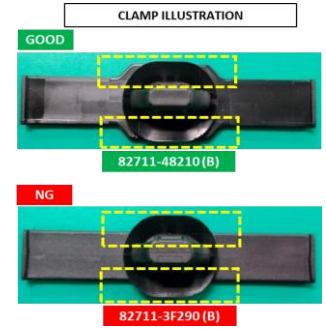
CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

NBC	WORK INSTRUCTION			Effectivity Date:	February 7, 2024
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number: 930B / 7N0205-7020A	Customer: TRJ	Car Model: TOYOTA-4RUNNER	Document No.:	WI-ENG-PDE-827
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0 / Page No.: 6 of 8

PARTS:	1. Assy parts 2. Engineering sample	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	n/a	Visual/By two's inspection (Continuation)	  3. Check **presence of all clamp attachment**, **taping condition** and **color of tape**. Conduct slightly bending of parts with Wing-type clamp. 4. Check the **Y-taping condition,** 5. Check the **taping condition from COT to SV tube (Vinyl).** 6. Check the **terminal condition** and **appearance of PCB.** Must be **no deformed terminal**		1. No skip checking during inspection 

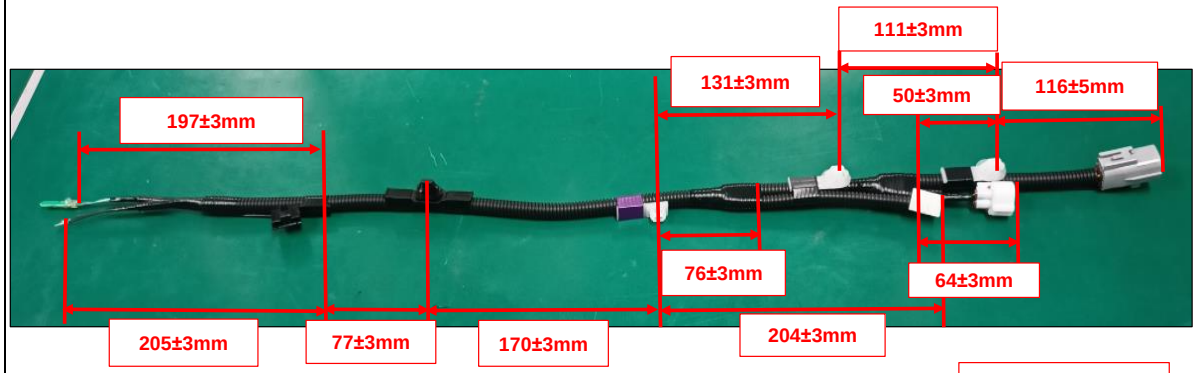
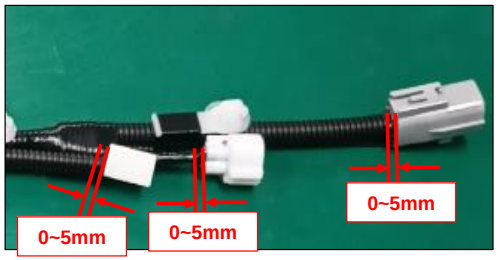
CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

	WORK INSTRUCTION			Effectivity Date:	February 7, 2024
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number: 930B / 7N0205-7020A	Customer: TRJ	Car Model: TOYOTA-4RUNNER	Document No.:	WI-ENG-PDE-827
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0 / Page No.: 7 of 8

PARTS:	n/a	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	n/a	Measurement	  Note: Measurement should be onn END TAPE 	MEASURING TAPE 	***Important reminders/Notes:*** ***1. Please use calibrated/verified measuring tape when getting the measurement.*** ***2. For HATSUMONO, NAKAMONO AND OWARIMONO only.*** ***Document references:*** ***1. Refer to WI-PRO-ASY-056 for Sub-Assy Hatsumono , Nakamono and Owarinomo inspection.*** 1. No skip checking during inspection

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

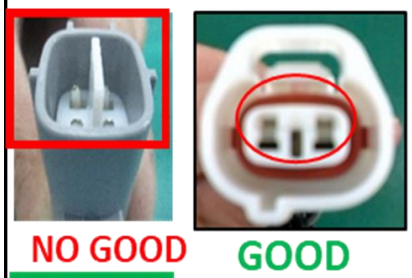
NBC	WORK INSTRUCTION				Effectivity Date:	February 7, 2024	
	Process Name/Title:	CLAMP ASSEMBLY PROCESS			Validity Date:	n/a	
	Model code/Part number: 930B / 7N0205-7020A	Customer: TRJ	Car Model: TOYOTA-4RUNNER		Document No.:	WI-ENG-PDE-827	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO				Revision No.:	0	Page No.: 8 of 8

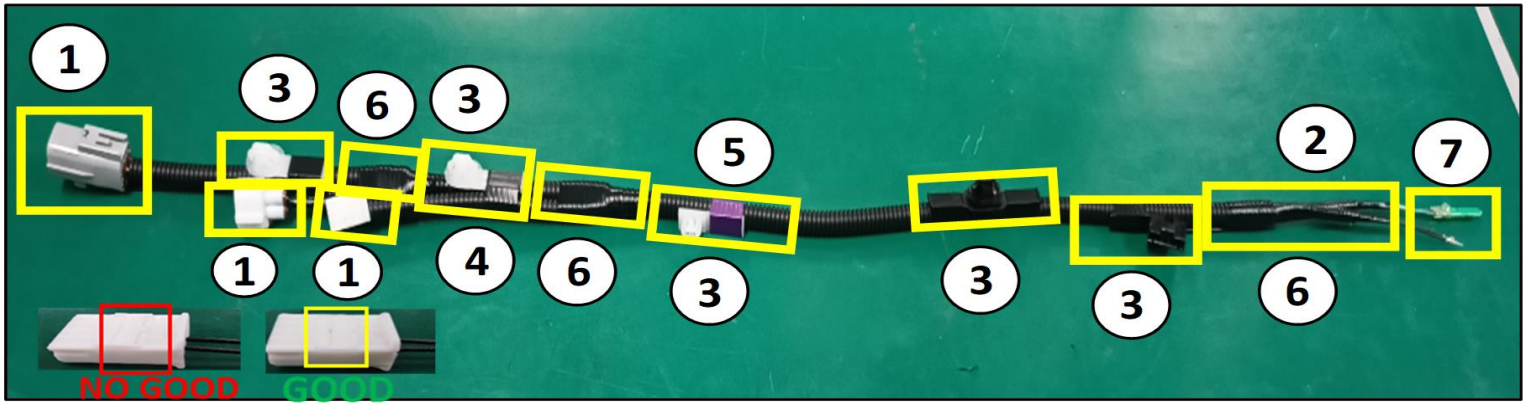
PARTS:	n/a	JIG:	n/a

QUALITY CHECKPOINTS

CLAMP ASSY

7N0205-7020A





1 No WRONG INSERT
No UNLOCKED/HALFLOCKED
NO TBO

2 NO Missing SV tube (Vinyl)

3 NO Missing Clamps

4 NO Missing inside spot

5 NO Wrong Used of Tape(VIOLET)

6 NO missing tape

7 NO Deformed terminal/PCB)

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