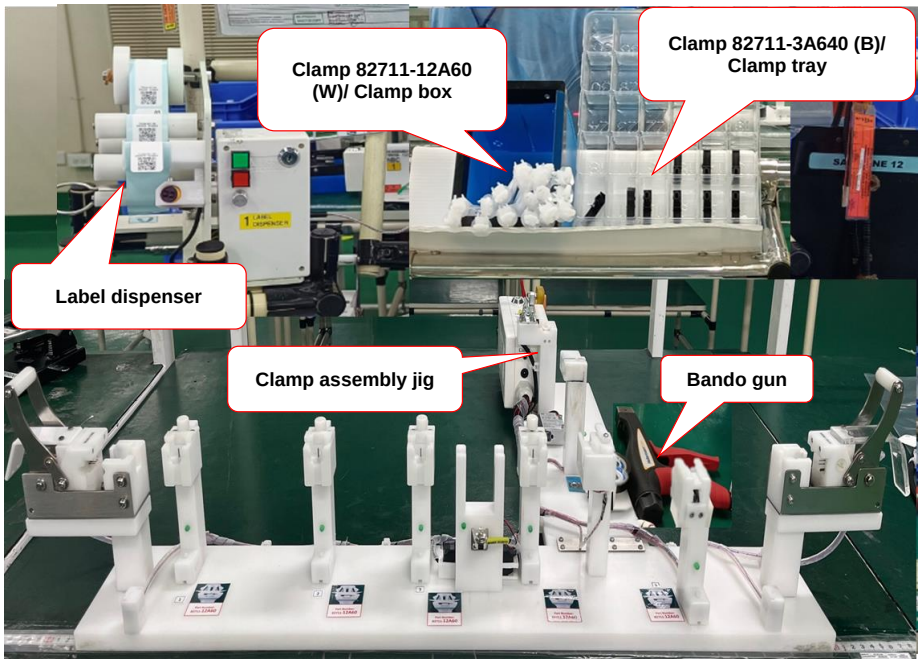
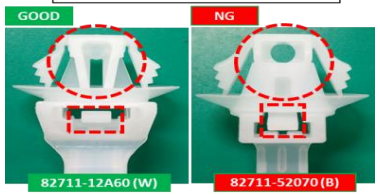
NBC	WORK INSTRUCTION			Effectivity Date:	September 10, 2024
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a
	Model code/Part number: 920B / 7R0118-7025	Customer: TRMX	Car Model: TOYOTA TACOMA	Document No.:	WI-ENG-PDE-997
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.: 1	Page No.: 1 of 7

PARTS:	1. Assy parts; Clamp 82711-12A60 (W) [5pcs.]; Clamp 82711-3A640 (B); Black tape; Label 7V4200-0020	JIG:	1. Clamp assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	1 Clamp Assy	Table lay-out	**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. **BANDO GUN**	***Document reference/s:*** *1. Refer to **WI-ENG-PDE-962A-C** for Taping assembly process* ***Important reminders/Note/s:*** *1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.* 1. No loose attachment of clamp 2. No damaged clamp 3. No missing parts BAND CLAMP ILLUSTRATION 

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted
09/10/24	1	Change from Pre-launch to Masspro. Change jig from Temporary to Permanent jig. Inclusion of Table lay-out. Update Visual inspection/Quality checkpoint.	D.Castillo	C.Villanueva	A. Arañes	N/A
08/12/24	0	Initial issue.	D.Castillo	C.Villanueva	A. Arañes	N/A

Prepared by	Reviewed by	Approved by	Noted by
D. Castillo	C.Villanueva	A. Arañes	N/A
Est. Date:	August 12, 2024		

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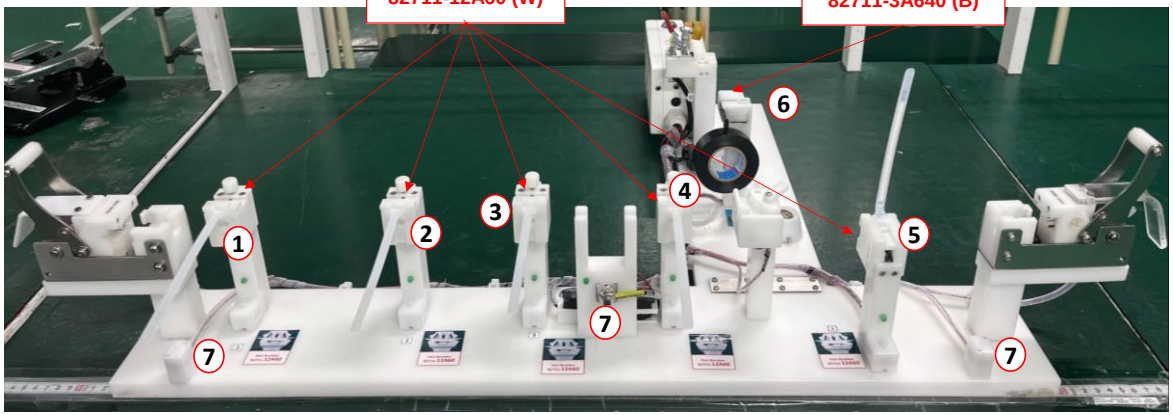
	Model code/Part number: 920B / 7R0118-7023	Customer: TRMX	Car Model: TOYOTA TACOMA	Document No.:	WI-ENG-PDE-997		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.:	2 of 7

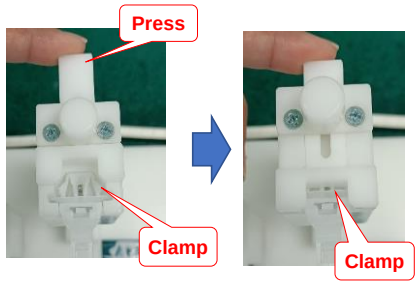
PARTS:	1. Clamp 82711-12A60 (W) [5pcs.] 2. Clamp 82711-3A640 (B)	3. Black tape	JIG:	1. Clamp assembly jig

NO.	PROCESS NAME		1 WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp setting			



1. Get **2pcs**. of clamp **82711-12A60 (W)** then set to clamp location 1 and 2 then lock using both hands.

2. Get **2pcs.** of clamp **82711-12A60 (W)** then set to clamp location **3 and 4** then lock using both hands.



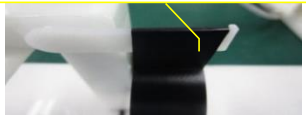
3. Get **1pc.** of clamp **82711-12A60 (W)** then set to clamp location **5** then lock using both hands.

4. Get **1pc**. of clamp **82711-3A640 (B)** then set to clamp location **6** using both hands.

5. Initially attach **Black tape** on clamp location **6** using both hands.

STANDARD TAPING FOR CLAMP

One wind for under clamp



Important reminders/Note/s:

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

1. No loose attachment of clamp
2. No damaged clamp
3. No missing parts

BAND CLAMP ILLUSTRATION

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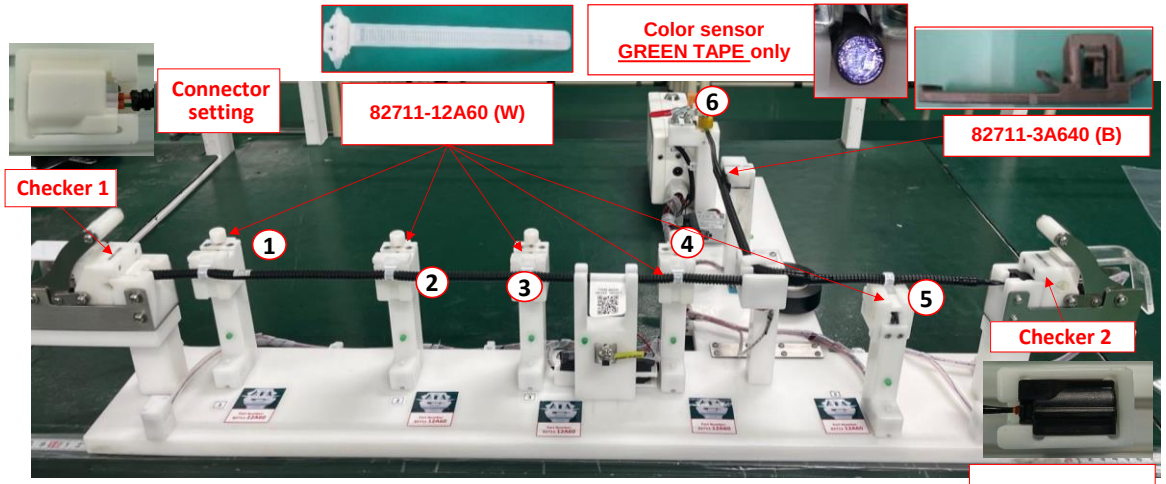
	Model code/Part number: 920B / 7R0118-7023	Customer: TRMX	Car Model: TOYOTA TACOMA	Document No.:	WI-ENG-PDE-997	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.: 3 of 7

PARTS:	1. Assy parts	JIG:	1. Clamp assembly jig

NO.	PROCESS NAME		1 WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	Clamp assembly			



1. Get the assy parts and set to jig using both hands. ***(See above picture for correct setting).*** First, set the connector **6189-1142 (W)** to **Checker 1** then pull the checker fixture for continuity checking. Set the connector **6189-1161 (B)** to **Checker 2** then push the checker fixture for continuity checking. Continue to set the harness in jig. **Color sensor light** will beep/buzz if sensor detects **Green tape.** Last, set the end of PCB within the stopper jig then press the toggle clamp. Continue if the clamp location **1** was **ON.**

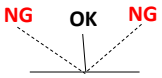
2. Initially tighten the band clamp on clamp location **1** using both hands. Press the **SW button**. Sequence light will moved to location **2.**

3. Get the **Bando gun** using right hand then cut the clamp on location **1, 2, 3, 4 and 5** using both hands.

BAND CLAMP CUT POSITION FOR LOCATION 1,2,3 & 4

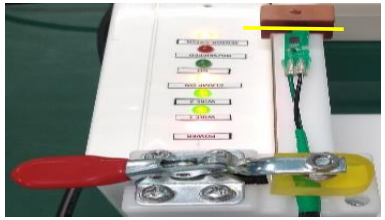
BANDO GUN ALIGNMENT

VERTICAL LINE



Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube.
For: ø5 - 1~2, ø7 - 3~4

Fixed setting of band clamp cutter: 1~ 2



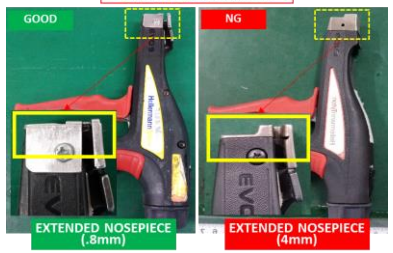
Important reminders/Note/s:

1. Make sure no gap between stopper and PCB

2. Make 2-3 windings for clamp taping..

BAND CLAMP ILLUSTRATION

BANDO GUN ILLUSTRATION



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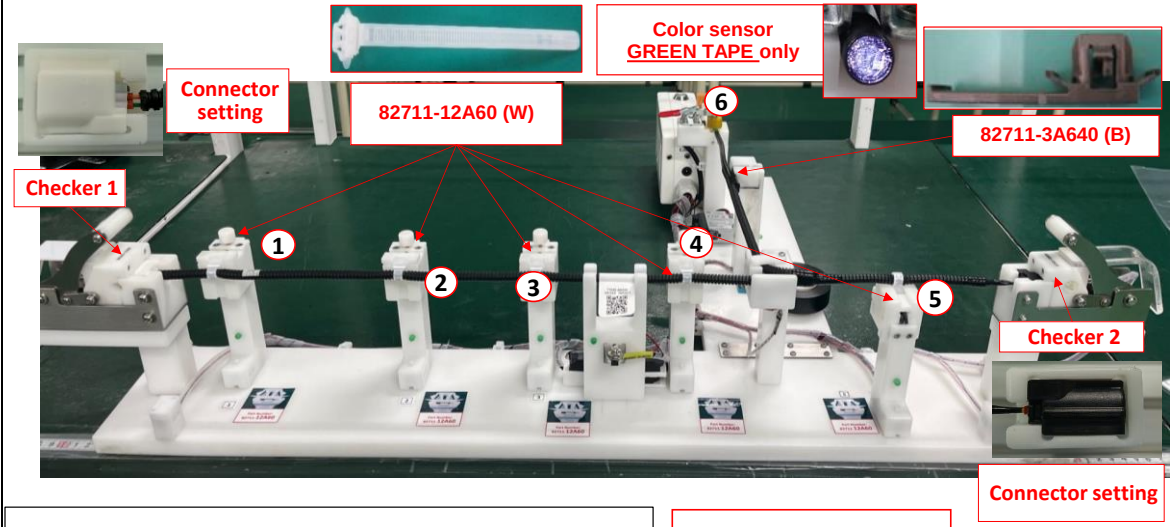
	Model code/Part number: 920B / 7R0118-7023	Customer: TRMX	Car Model: TOYOTA TACOMA	Document No.:	WI-ENG-PDE-997		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.:	4 of 7

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)			



4. Repeat the process 3 to location **2, 3, 4** and **5.**

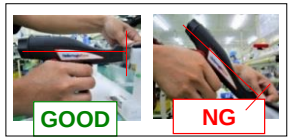
5. Hold the tape on clamp location **6.** Make **3 windings** of tape then cut the tape using both hands. Press **SW button**. Sequence light will moved to location **7.**

6. For label attachment, refer to the next page for label attachment.

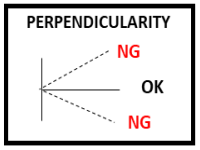
7. After Label attachment, **CONDUCT POINT CHECKING** before removing the harness from jig.

8. Remove the connector in checker 1 then unlock the clamp receiver base lock 1 by 1 from location 1 to 5. Next, remove connector to checker 2 and continue location 6 then toggle clamp using both hands.

BAND CLAMP CUT POSITION FOR LOCATION 5

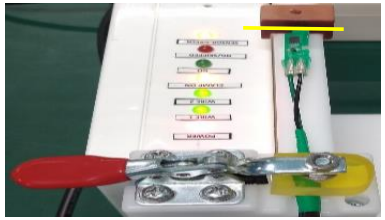


BANDO GUN ALIGNMENT



Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube.
For: ø5 - 1~2, ø7 - 3~4

Fixed setting of band clamp cutter: 1~ 2



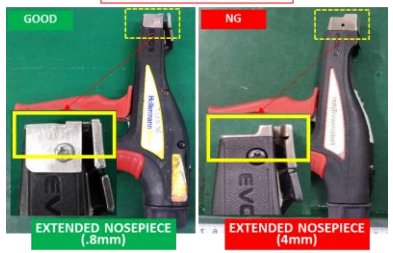
Important reminders/Note/s:

1. Make sure no gap between stopper and PCB

2. Make 2-3 windings for clamp taping..

BAND CLAMP ILLUSTRATION

BANDO GUN ILLUSTRATION



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	Model code/Part number: 920B / 7R0118-7025	Customer: TRMX	Car Model: TOYOTA TACOMA	Document No.:	WI-ENG-PDE-997	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.: 5 of 7

PARTS:	1. Assy parts 2. Label 7V4200-0020	JIG:	1. Clamp assembly jig

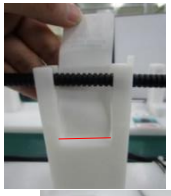
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy	Label attachment		n/a	1. No loose attachment of QR code label 2. No damaged QR code label 3. No missing QR code label

Model Code	Item No.	Item Name
7R0116-7022	73240-AK020	DRIVER PWR/ISO D
7R0117-7025	73240-AK010	DRIVER MANUAL
7R0118-7025	73240-AK020	DRIVE PWR/ISO D
7R0119-7021	73230-AK050	PASSENGER ISO D
7R0120-7022	73230-AK030	PASSENGER FOLD-FLAT

Model code

Item no. & name

1. Get the label. **Note: Check the model code, item no. & name**

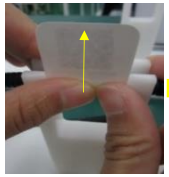


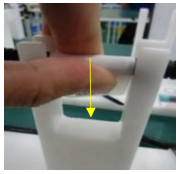
2. Align the end part of label in the jig.

3. Fold the center part of the label

4. Align both end part of label

5. After alignment , Press the label with both fingers .





6. Press the label upside down using finger.

7. After label. Press the **SW button. GO** buzzer will be heard.

Acceptable overlap

GOOD

NG

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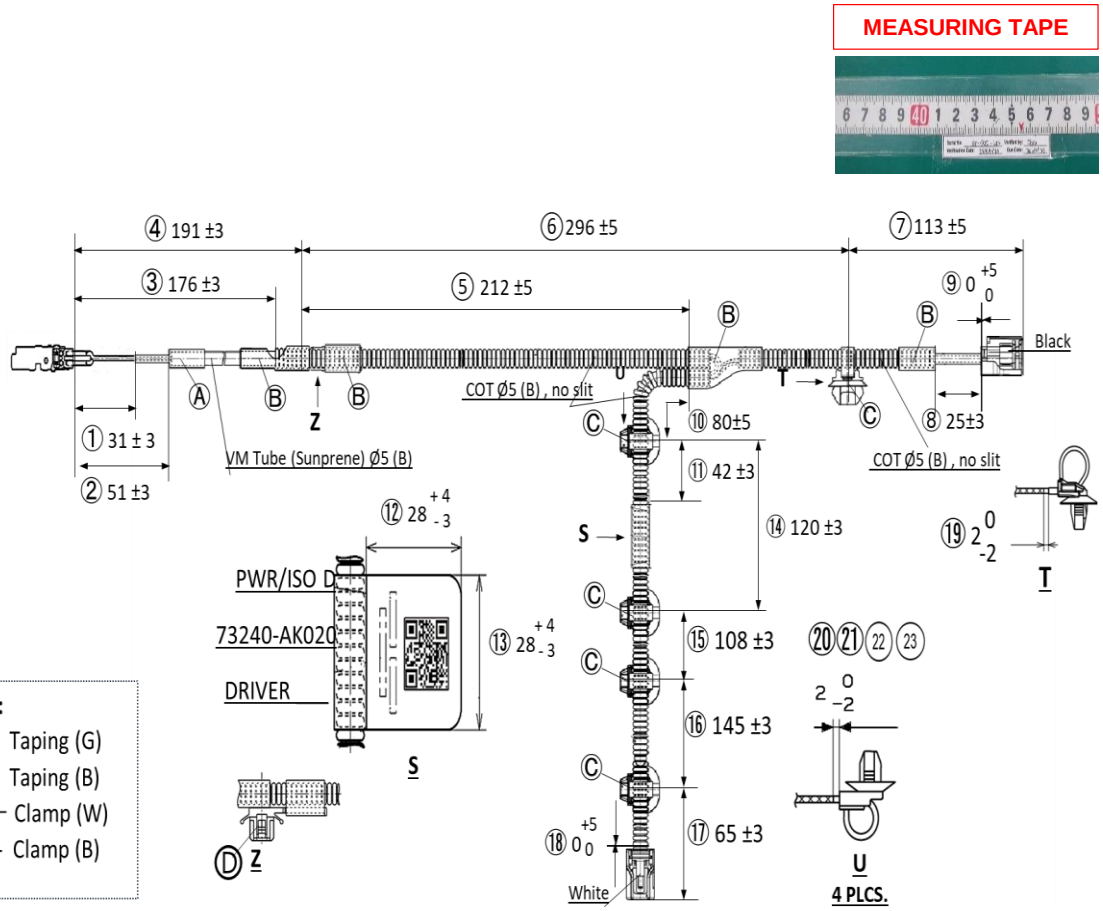
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	1	Page No.: 6 of 7

PARTS:	1.Assy Parts	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	Clamp Assy	Measurement			***Important reminders and note/s:*** ***1. Please use calibrated/verified measuring tape when getting the measurement.*** ***2. For Hatsumono, Nakamono and Owarimono.*** ***Document reference/s:*** *1. Refer to **WI-PRO-ASY-056** for Sub-assembly Hatsumono Nakamono Owarimono Inspection* 1. No wrong dimension

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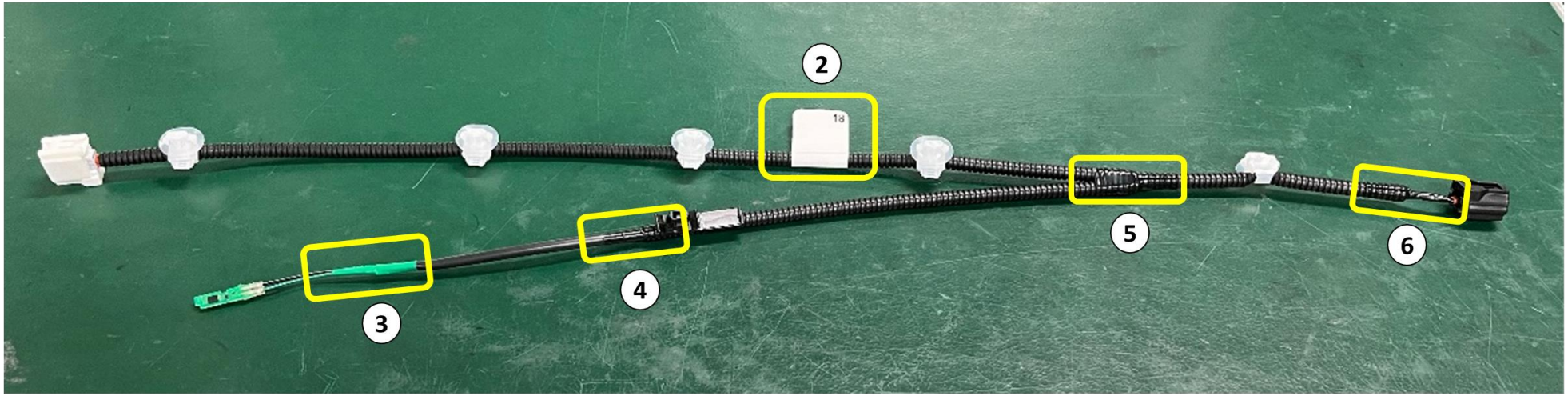
PARTS:	1. Assy parts	JIG:	n/a

1 **VISUAL INSPECTION/ QUALITY CHECKPOINTS**

CLAMP ASSY	**7R0118-7025**



1 **No Wrong facing of clamp**

2 **No Wrong facing QR code label**

3 4 5 6 **No Missing Tape**

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