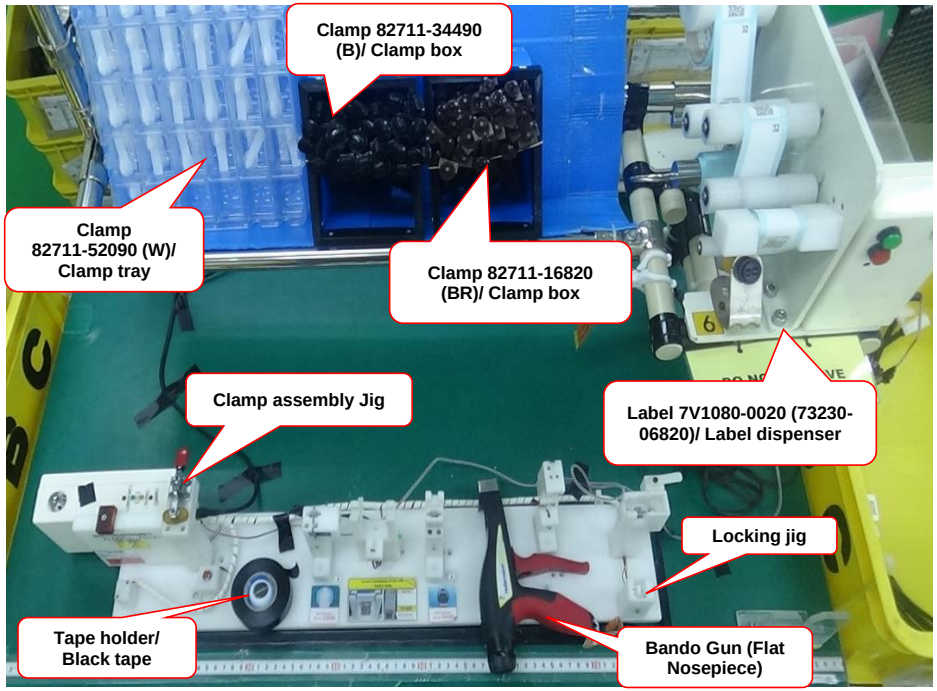
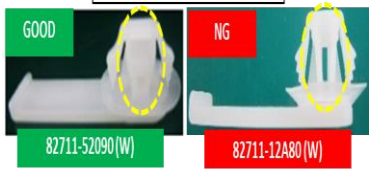
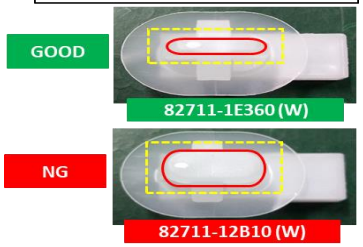
	WORK INSTRUCTION			Effectivity Date:	May 29, 2024	
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a	
	Model code/Part number: 010B / 7L0032-7024	Customer: TRQSS	Car Model: TOYOTA AVALON	Document No.:	WI-ENG-PDE-813	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.: 1 of 8

PARTS:	1. Assy parts: Clamp 82711-34490 (B); Clamp 82711-16820 (BR); Label 7V1080-0020 (73230-06B20 Passenger power); Clamp 82711-52090 (W)	JIG:	1. Clamp Assembly jig 2. Locking jig 3. Label dispenser

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
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** 	1. No missing parts/tools 2. No excess parts/tools CLAMP ILLUSTRATION  CLIP CLAMP ILLUSTRATION 

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted
05/29/24	0	Initial release. Improve measurement and visual inspection/ quality checkpoints.	A.Hernandez	C. Villanueva	A. Arañes	n/a

Prepared by	Reviewed by	Approved by	Noted by
A.Hernandez	C. Villanueva	A. Arañes	n/a
Est. Date:	May 29, 2024		

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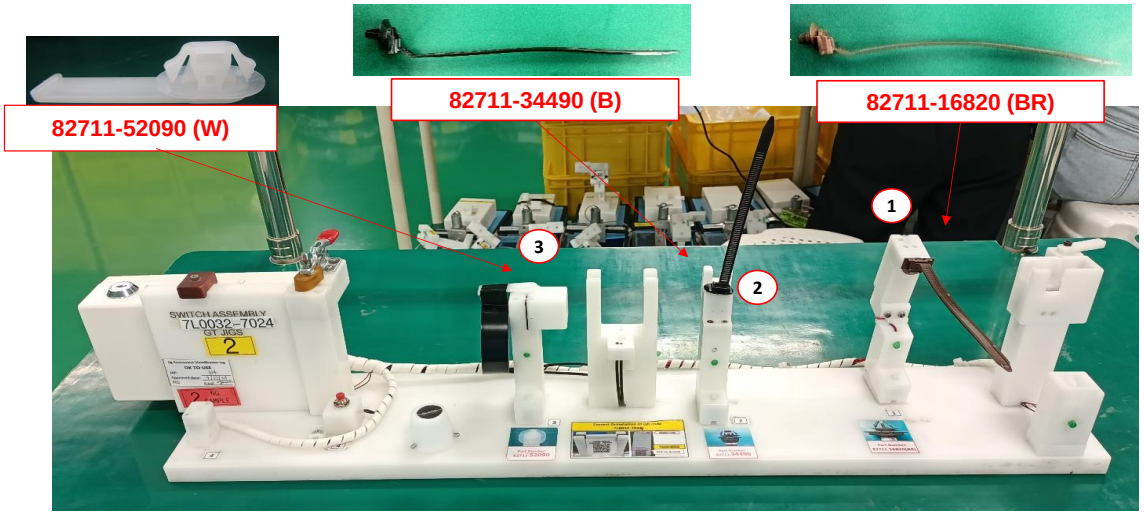
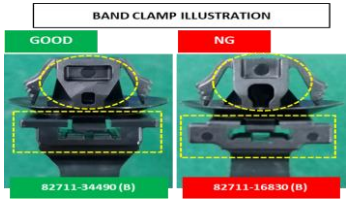
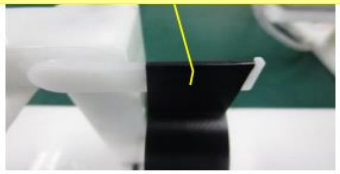
	WORK INSTRUCTION			Effectivity Date:	May 29, 2024	
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a	
	Model code/Part number: 010B / 7L0032-7024	Customer: TRQSS	Car Model: TOYOTA AVALON	Document No.:	WI-ENG-PDE-813	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.: 2 of 8

PARTS:	1. Clamp 82711-34490 (B) 2. Clamp 82711-16820 (BR) 3. Clamp 82711-52090 (W)	JIG:	1. Clamp assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Clamp Assy	Clamp setting	 1. Get 1pc of band clamp **82711-16820 (BR)** then attach to clamp location **1.** 2. Get 1pc of band clamp **82711-34490 (B)** then attach to clamp location **2.** 3. Get 1 pc of Clamp **82711-52090 (W)** then attach to clamp location 3. 4. Initially attach black tape on clamp location **3**.  		1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong use of tape 6. No damaged clamp 7. No wrong use of clamp 8. No missing clamp **STANDARD TAPING FOR CLAMP** One wind for under Tape  ***Important reminders/Note/s:*** *1. Check the clamp first before start of assembly to avoid wrong use of clamp.* *2. Must be no gap between terminal and stopper jig.* *3. Make 2-3 windings for clamp taping*

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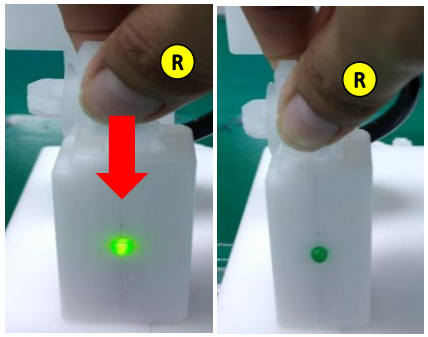
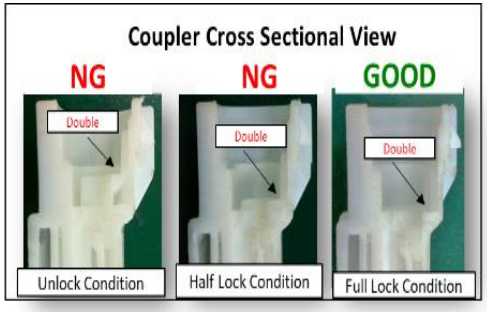
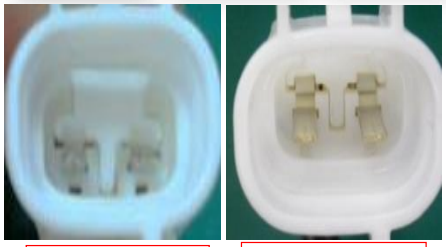
	Model code/Part number: 010B / 7L0032-7024	Customer: TRQSS	Car Model: TOYOTA AVALON	Document No.:	WI-ENG-PDE-813	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.: 3 of 8

PARTS:	1. Assy parts	JIG:	1. Locking jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Clamp Assy	Connector lock	 1. Put the connector into locking jig using right hand then press **2x** to lock using both hands. Check the lock if properly locked.   **Before lock** **After lock**	**LOCKING JIG** 	1. Use the provided locking jig per model 2. No unlock/half-locked connector 3. No skip of locking process ***Important reminders/Note/s:*** *1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR.*

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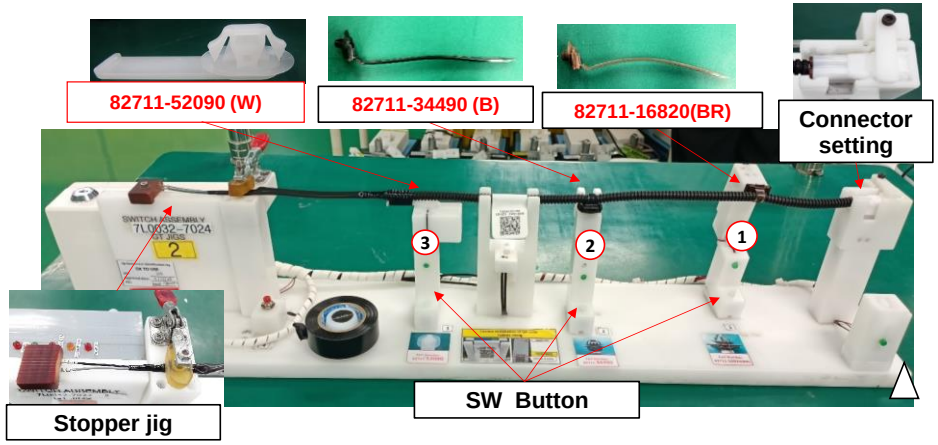
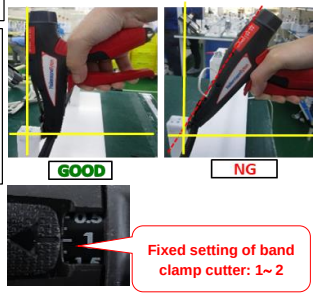
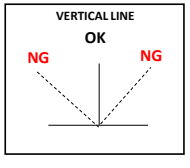
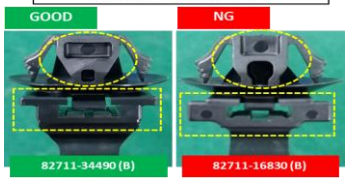
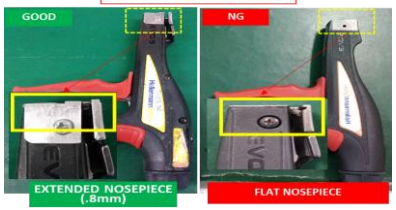
	Model code/Part number: 010B / 7L0032-7024	Customer: TRQSS	Car Model: TOYOTA AVALON	Document No.:	WI-ENG-PDE-813	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.: 4 of 8

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

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy	Clamp assembly	 1. Put the assy parts into jig using both hands. First put the connector into receiver base using left hand and lock using right hand. Second, put the terminal to stopper jig using left hand and pull down the toggle clamp using right hand. *Refer to above illustration for the correct setting.* 2. Check if the LED light for POWER and CLAMP is ON. If encountered abnormality, STOP the process, CALL the attention of the Leader and WAIT for instruction. 3. Initially tighten the two clamp **82711-34490 (B)** and **82711-16820 (BR)** using right hand. 4. Get the bando gun using right hand then cut the band clamp on Location **1.** Press the switch button after cutting of band clamp. Continue if the sequence light in location **2** was ON. **BAND CLAMP CUT POSITION FOR LOCATION 1**  **BANDO GUN ALIGNMENT** 	**BANDO GUN** 	1. No wrong setting of clamp 2. No wrong use of clamp 3. No Loose attachment of clamp 4. No wrong setting of Bando gun ***Important reminders/note/s:*** *1. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range* ***(0~2mm).*** *2. Make sure no gap between the terminal and stopper jig.* **BAND CLAMP ILLUSTRATION**  **BANDO GUN ILLUSTRATION** 

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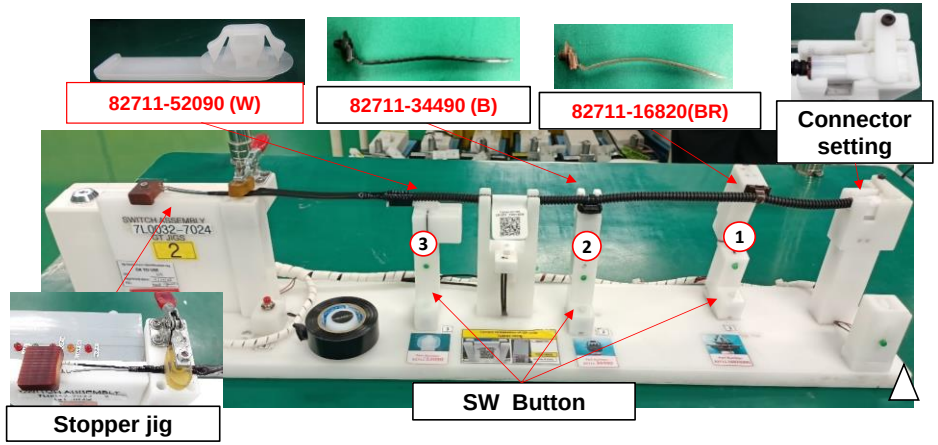
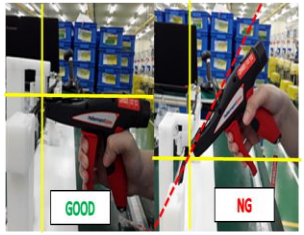
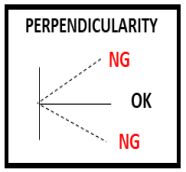
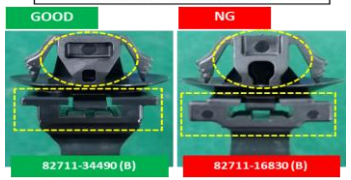
	Model code/Part number: 010B / 7L0032-7024	Customer: TRQSS	Car Model: TOYOTA AVALON	Document No.:	WI-ENG-PDE-813	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.: 5 of 8

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

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Clamp Assy	Clamp assembly (Continuation)	 5. Cut the band clamp on Location **2.** Press the switch button after cutting of band clamp. Continue if the sequence light in location **3** was ON. 6. Hold the tape on clamp location 3 then start taping using both hands. Make 3 windings of tape then cut the tape. Proceed to label attachment. BAND CLAMP CUT POSITION FOR LOCATION 2  Fixed setting of band clamp cutter: 1~ 2 BANDO GUN ALIGNMENT 	BANDO GUN 	1. No wrong setting of clamp 2. No wrong use of clamp 3. No Loose attachment of clamp 4. No wrong setting of Bando gun ***Important reminders/note/s:*** *1. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range* ***(0~2mm).*** *2. Make sure no gap between the terminal and stopper jig.* BAND CLAMP ILLUSTRATION  BANDO GUN ILLUSTRATION

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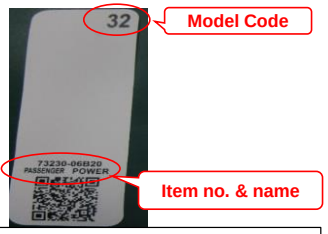
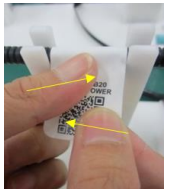
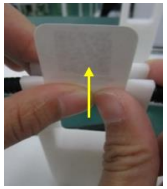
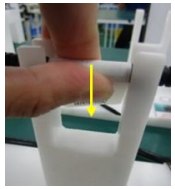
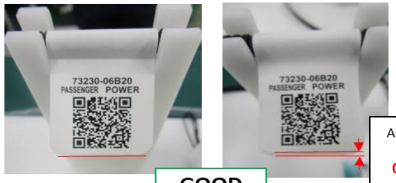
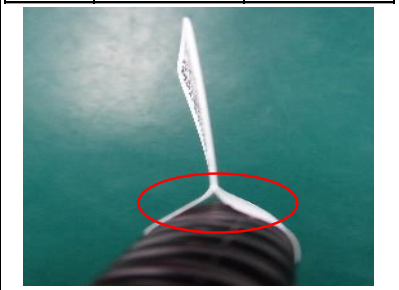
	Model code/Part number:	010B / 7L0032-7024	Customer: TRQSS / Car Model: TOYOTA AVALON	Document No.:	WI-ENG-PDE-813	
	Purpose:	☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO		Revision No.:	0	Page No.: 6 of 8

PARTS:	1. Label 7V1080-0020 (73230-06B20 Passenger power)	JIG:	1. Clamp assembly jig 2. Label dispenser

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	Clamp Assy	Clamp assembly Label Attachment	 1. Get the label. **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. Make sure it was attach properly.   6. Press the label upside down using finger.  7. Press the SW button after label attachment. Conduct **POINT CHECKING** and remove the harness from jig.	N/A	1. No bubbles 2. No damage 3. No peel off 4. No wrong use of label 5. No missing parts 6. No loose attachment Model / Item no. / Item name 7L0030 / 73230-06750 / Passenger Manual 7L0031 / 73230-06740 / Driver Manual 7L0032 / 73230-06B20 / Passenger Power 7L0033 / 73230-06760 / Driver Power  NG

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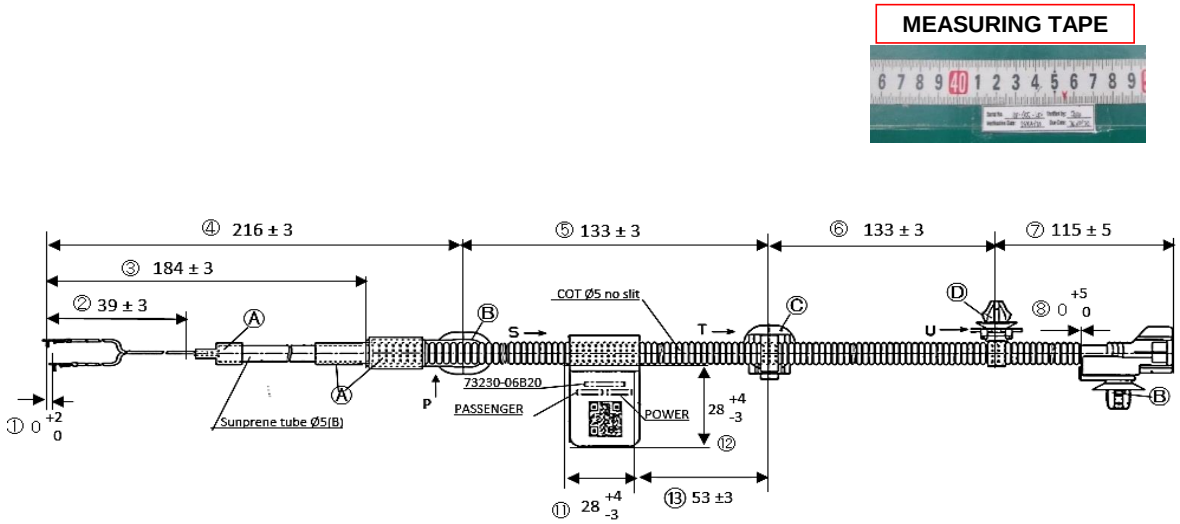
	Model code/Part number:	010B / 7L0032-7024	Customer: TRQSS / Car Model: TOYOTA AVALON	Document No.:	WI-ENG-PDE-813
	Purpose:	☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO		Revision No.:	0 / Page No.: 7 of 8

PARTS:	1. Assy parts	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	Clamp Assy	Measurement		MEASURING TAPE	***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

NOTE:

Ⓐ - Taping (B)
Ⓑ - Clamp (W)
Ⓒ - Clamp (B)
Ⓓ - Clamp (BR)

WIRE TYPE TABLE		
No.	Color	Wire Type
1	G	TVSS 0.3f
2	B/W	TVSS 0.3f

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				Page No.:	8 of 8

PARTS:	1. Assy parts	JIG:	N/A

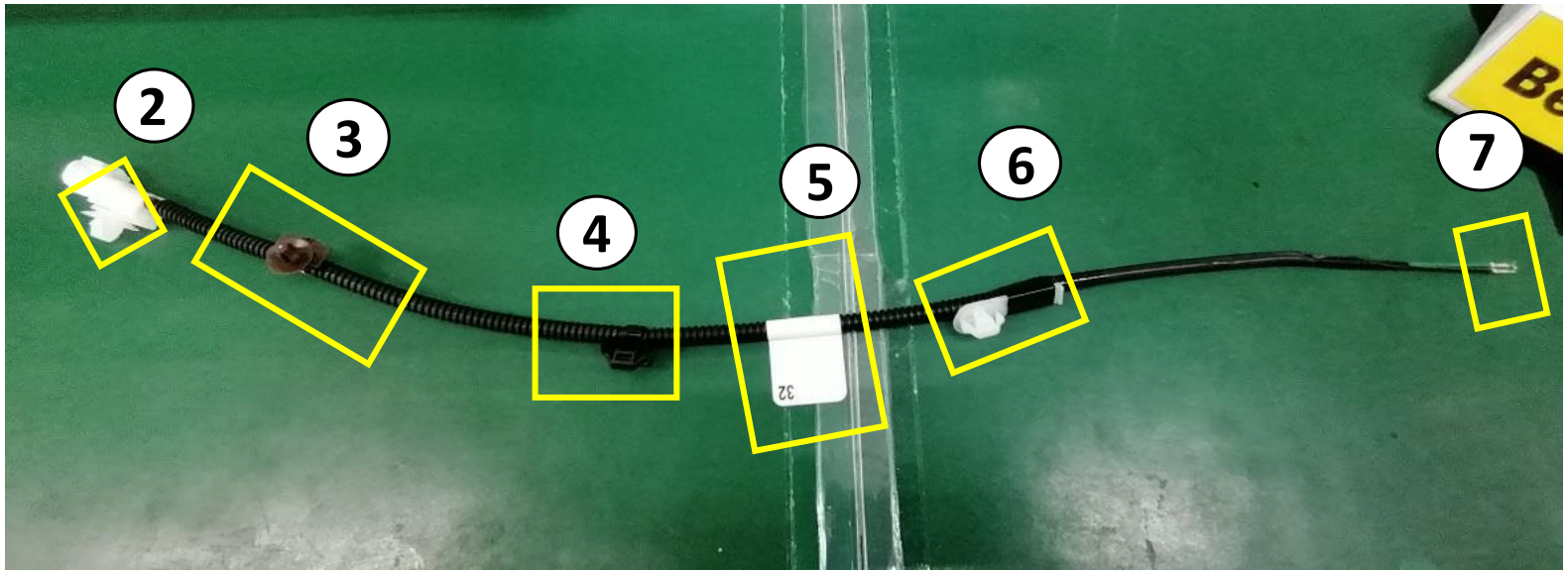
VISUAL INSPECTION/ QUALITY CHECKPOINTS

CLAMP ASSY 7L0032-7024

1

GOOD

NO GOOD



1 No Unlocked/ Half Locked Connector

2 3 4 6 No Missing Clamp

5 No Missing/Wrong use of Barcode

7 No Deformed Terminal

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