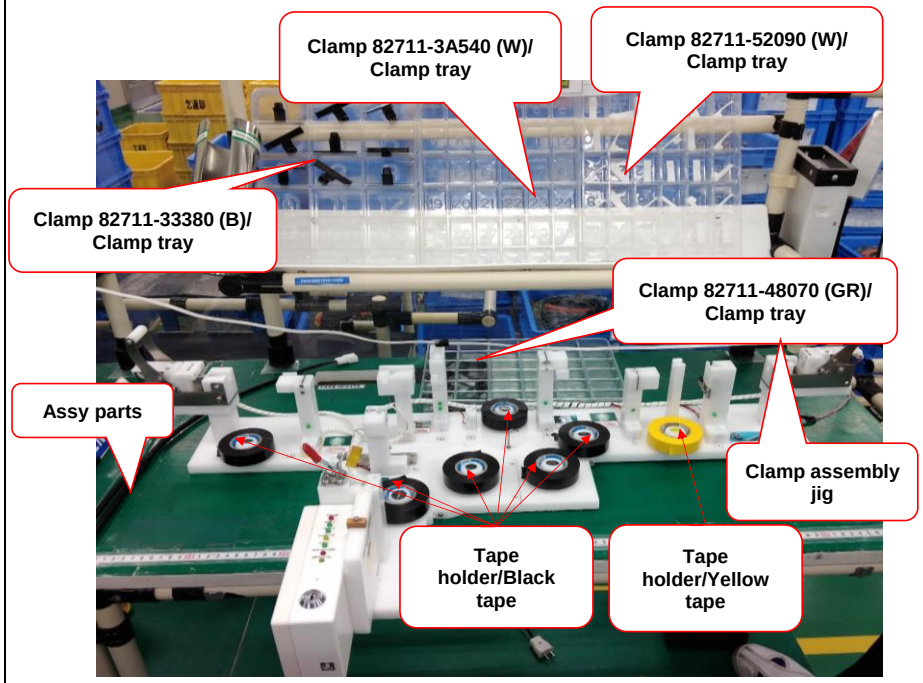
	WORK INSTRUCTION				Effectivity Date:	June 18, 2024		
	Process Name/Title:	CLAMP ASSEMBLY PROCESS			Validity Date:	n/a		
	Model code/Part number: 096D / 7L0118-7021A	Customer: TRQSS	Car Model: TOYOTA-HIGHLANDER		Document No.:	WI-ENG-PDE-811		
	Purpose: ☐ PROTOTYPE	☐ PRE-LAUNCH	■ MASSPRO		Revision No.:	0	Page No.:	1 of 7

PARTS:	1. Assy parts; Clamp 82711-33380 (B); Clamp 82711-52090 (W); Clamp 82711-48070 (GR); Clamp 82711-3A540 (W); Black tape [6pcs.];Yellow tape	JIG:	1. Clamp assembly jig

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.	***Document references:*** ***1. Refer to WI-ENG-PDE-392A-B Taping Assembly Process*** 1. No missing parts/tools 2. No excess parts/tools

Revision History							Prepared by	Reviewed by	Approved by	Noted by
06/18/24	0	Initial issue.	D. Castillo	C. Villanueva	A. Arañes	n/a	D. Castillo	C. Villanueva	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	June 18, 2024		

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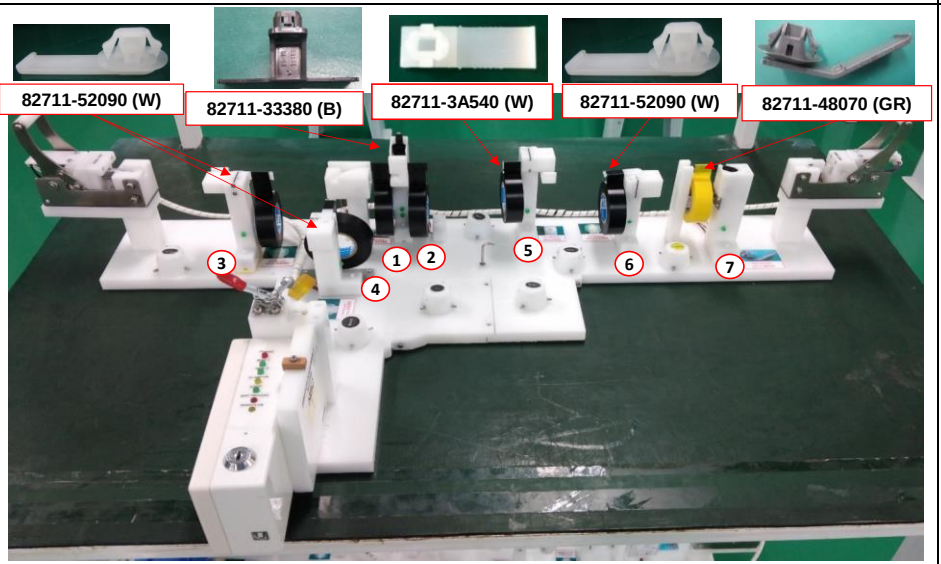
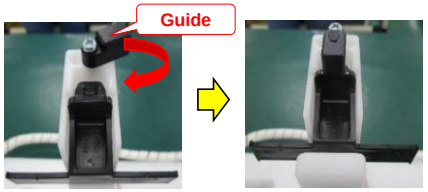
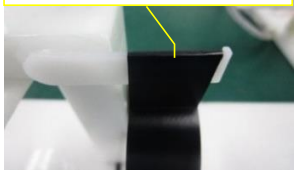
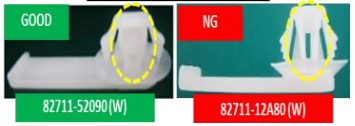
DCC Stamp

	WORK INSTRUCTION			Effectivity Date:	June 18, 2024		
	Process Name/Title:	CLAMP ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number: 096D / 7L0118-7021A	Customer: TRQSS	Car Model: TOYOTA-HIGHLANDER	Document No.:	WI-ENG-PDE-811		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.:	2 of 7

PARTS:	1. Clamp 82711-33380 (B) 2. Clamp 82711-52090 (W) [3pcs.] 3. Clamp 82711-3A540 (W)	4. Clamp 82711-48070 (GR) 5. Black tape [6pcs] 6. Yellow tape [1pc]	JIG:	1. Clamp assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Clamp assy	Clamp Setting	 1. Get 1pc. of clamp **82711-33380 (B)** using right hand then set to clamp location **1** and **2** using both hands. *(See below illustration for correct setting)*  2. After setting of clamp **82711-33380 (B),** hold the guide lock then lock using right hand. 3. Get 3pcs. of clamp **82711-52090 (W)** using right hand then set to clamp location **3, 4 and 6** using both hands. 4. Get 1pc. of clamp **82711-3A540 (W)** using right hand then set to clamp location **5** using both hands. 5. Get 1pc. of clamp **82711-48070 (GR)** using right hand then set to clamp location **7** using both hands. 6. Initially attach **Yellow tape** on clamp location **7** using both hands. 7. Initially attach **Black tape** on clamp location **1, 2, 3, 4, 5 and 6** using both hands.	n/a	**Important reminders/Note/s:** ***1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.*** **STANDARD TAPING FOR CLAMP** One side tape under 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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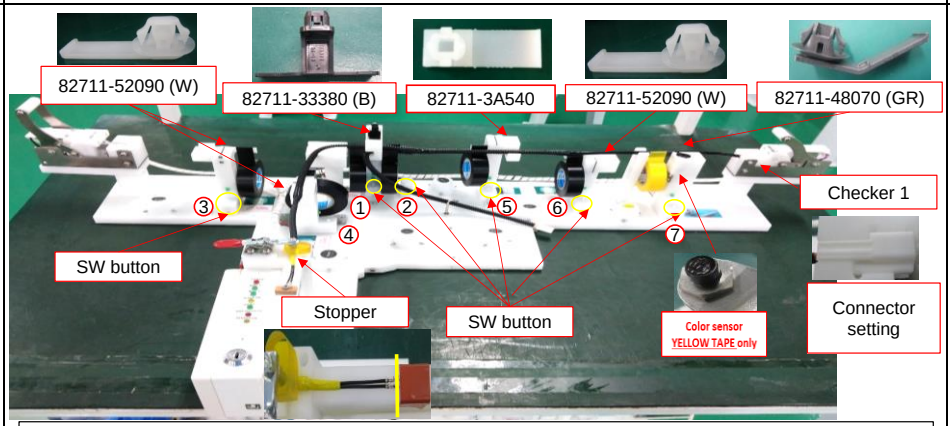
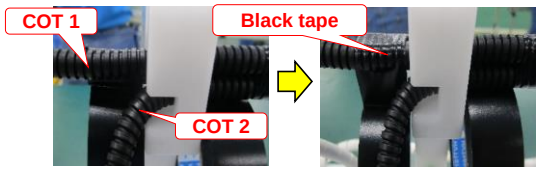
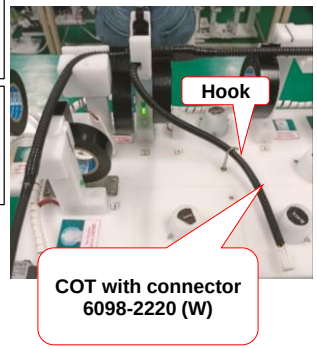
	Model code/Part number: 096D / 7L0118-7021A	Customer: TRQSS	Car Model: TOYOTA-HIGHLANDER	Document No.:	WI-ENG-PDE-811		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.:	3 of 7

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

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Clamp assy	Clamp Assembly	 1. Get the assy parts and set into jig. ***(See above picture for correct setting of harness).*** First, set the connector **6098-3802 (W)** to **Checker 1** then pull the checker fixture. Continue to set the harness in jig. Second, set the terminal end together within the stopper then press by **Toggle clamp**. Initially put the other side of harness **(COT with connector 6098-2220 (W))** in **Hook** ***(See above picture for correct setting of harness).*** 2. Check if all LED light for Power On was On. If encountered abnormality, **STOP** and immediately **CALL** the attention of the leader. **WAIT** for further instruction then continue the process. Continue the process if sequence light in clamp **location 1** was **ON.** 3. Hold the tape on clamp location **1**, make **2 spot windings** on **COT 1** and do not cut the tape. ***(See illustration.)*** Press the **SW button** after taping. Blinking sequence ligth will shown as continuous process. ***Note: Jig will alarm if spot taping was skipped.***  	n/a	***Important reminders/Note/s:*** ***1. Make sure no gap between stopper jig and terminals.*** 1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position

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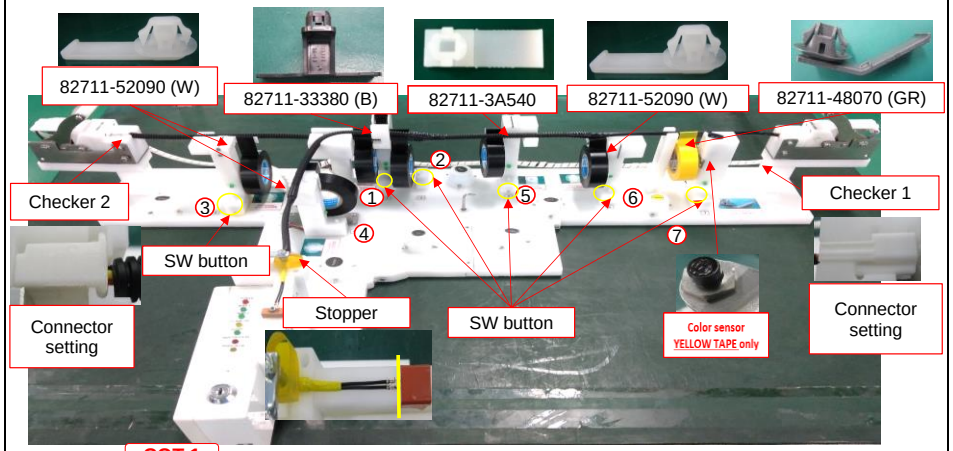
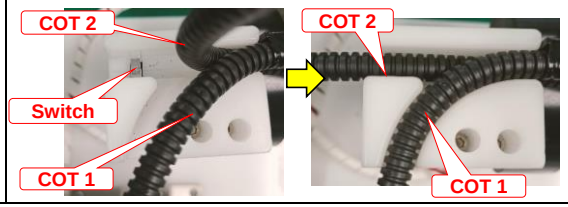
PARTS:	1. Assy parts	JIG:	1. Clamp assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Clamp assy	Clamp Assembly (Continuation)	 4. Remove the assy parts (COT 1) from Y-taping guide then remove the assy parts (COT 2 with connector 6098-2220 (W)) in **Hook** using right hand then set the connector **6098-2220 (W)** to **Checker 2** then pull the checker fixture for continuity checking. Make sure the switch will press by COT 2 with connector 6098-2220 (W). ***Note: Assembly jig will not continue if the switch is not pressed by the COT 2 (See illustration below).***  5. Check if all LED light for **Power On, Wire1** was **On.** Continue the process if sequence light in clamp location **1** was **ON.**	n/a	***Important reminders/Note/s:*** ***1. Make sure no gap between stopper jig and terminals.*** 1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position

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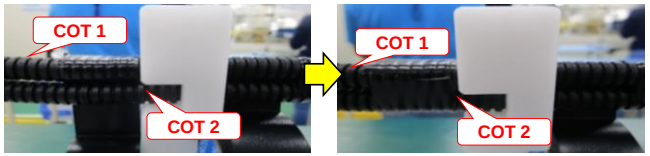
PARTS:	1. Assy parts	JIG:	1. Clamp assembly jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Clamp assy	Clamp Assembly (Continuation)	 6. Hold the tape on clamp location **1,** make **3 windings** of tape on combined **COT 1 and COT 2** then cut the tape using both hands. Press the **SW button** after taping. Continue the process if sequence light on clamp location **2** was **ON.** 7. Hold the tape on clamp location **2,** make **3 windings** 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.** 8. 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 in clamp location **4** was **ON.** 9. 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 in clamp location **5** was **ON.** 10. 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. Continue the process if sequence light in clamp location **6** was **ON.** 11. Hold the tape on clamp location **6.** Make **3 windings** of tape then cut the tape using both hands. Press the **SW button** after taping. Continue the process if sequence light in clamp location **7** was **ON.** 12. Hold the tape on clamp location **7.** Make **3 windings** of tape then cut the tape using both hands. **(Note: Color sensor light will beep or buzz if sensor detects Yellow tape during taping).** Press the **SW button** after taping. **Go** sound will be heard. 13. After taping, **CONDUCT POINT CHECKING** before removing the harness from jig.	n/a	***Important reminders/Note/s:*** ***1. Make sure no gap between stopper jig and terminals.*** 1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position

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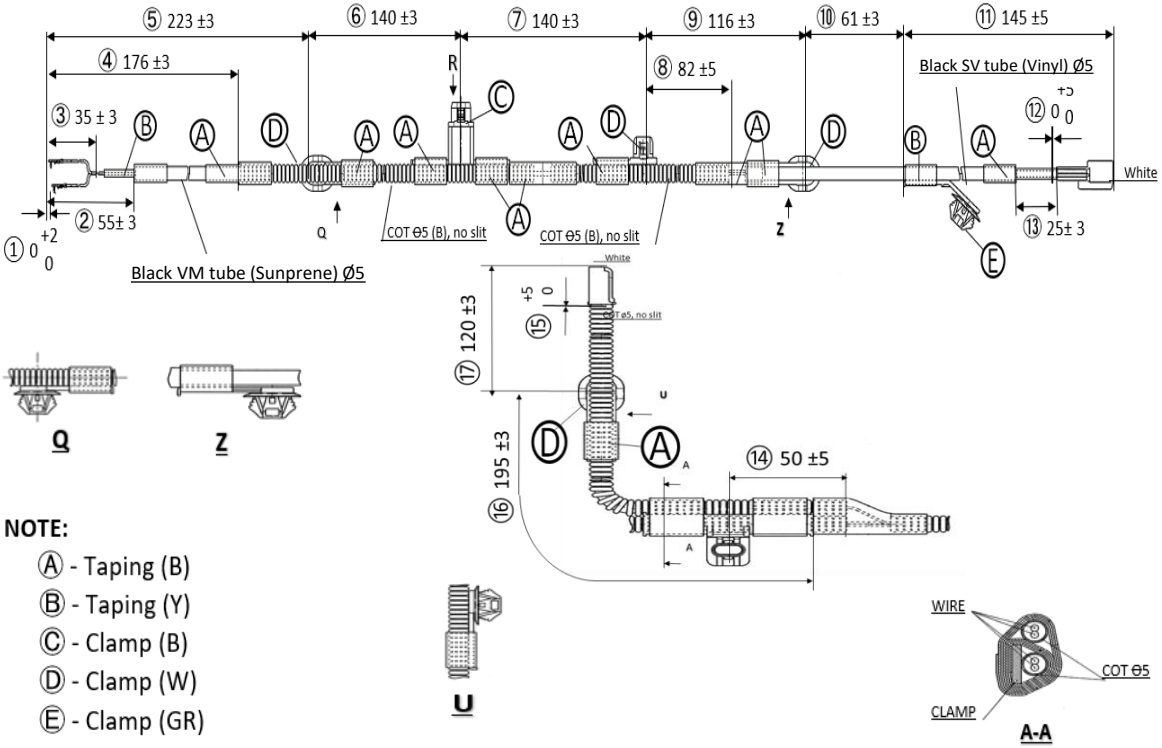
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	0	Page No.:	6 of 7

PARTS:	n/a	JIG:	n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Clamp assy	Measurement		MEASURING TAPE	1. No wrong dimension ***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*



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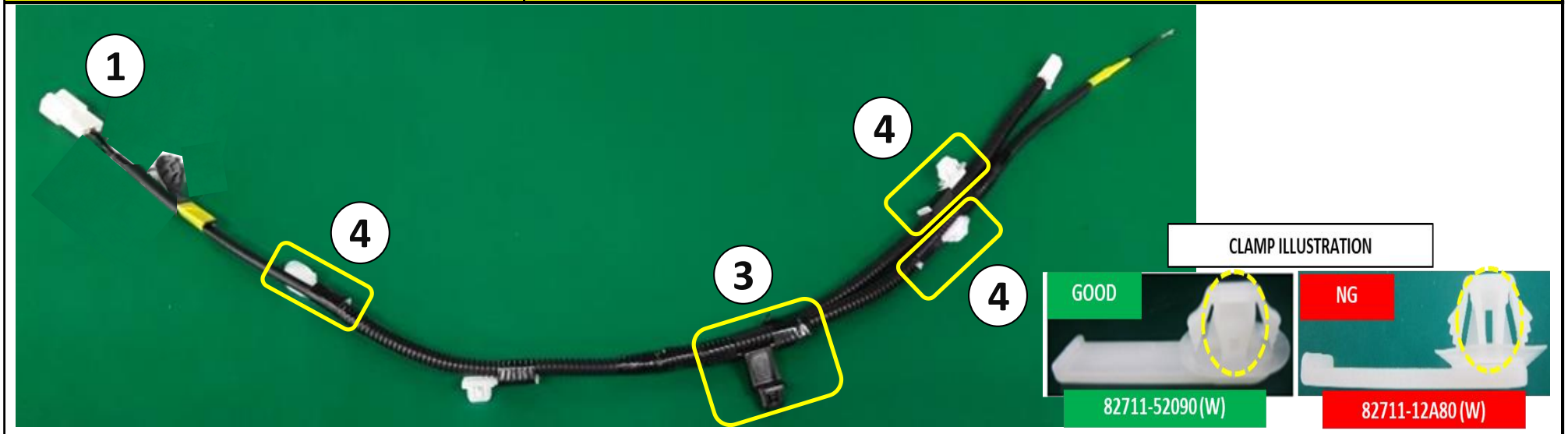
PARTS:	n/a		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS

CLAMP ASSY 7L0118-7021A



1. No Deformed Terminal
2. Check the Alignment
3. Conduct BENDING of 2 sides of wing clamp
4. Check the Clamp appearance

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