



WORK INSTRUCTION

Process Name/Title:

CLAMP ASSEMBLY PROCESS

Effectivity Date:

September 13, 2024

Model code/Part number:

922B / 7L0124-7022A

Customer:

TRQSS

Car Model:

LEXUS NX

Document No.:

WI-ENG-PDE-1045

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

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PARTS:

1. Assy parts; Clamp 82711-52090(W); Clamp 82711-48070 (GR); Black 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

Clamp tray/ Clamp
82711-52090 (W)Clamp tray/ Clamp
82711-48070 (GR)

Clamp Assembly jig

Locking jig

Black tape/ Tape holder

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 reference/s:

1. Refer to **WI-ENG-PDE-1054A-D** for Offline assembly process

1. No missing parts/tools
2. No excess parts/tools
3. No wrong positions of parts/tools

Revision History

| Eff. Date | Rev. No | Details of Change | Revised | Reviewed | Approved | Noted | Prepared by | Reviewed by | Approved by | Noted by |
|------------|---------|------------------------------------|------------|--------------|-----------|-------|--------------------|-------------|-------------|----------|
| 09/13/24 | 1 | Change from Pre-launch to Masspro. | D.Castillo | C.Villanueva | A. Arañes | n/a | | | | n/a |
| 09/10/24 | 0 | Initial issue. | D.Castillo | C.Villanueva | A. Arañes | n/a | | | | |
| Est. Date: | | | | | | | September 10, 2024 | | | |

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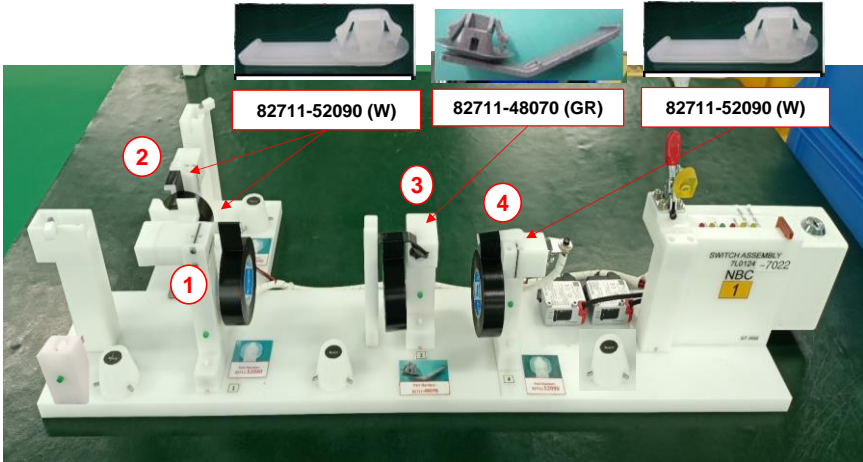
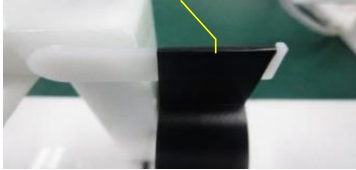


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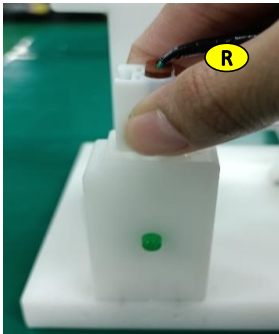
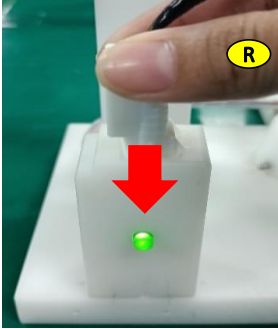
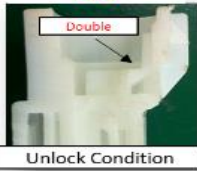
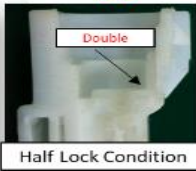
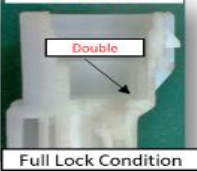


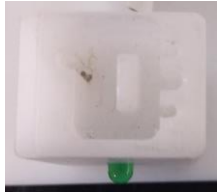
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|--------|--------------|--|--|----------------------|--|-----------|--|
| PARTS: | | 1. Clamp 82711-48070 (GR) 2. Clamp 82711-52090 [3pcs] | | 3. Black tape [4pcs] | | JIG: | 1. Clamp asssembly jig |
| NO. | PROCESS NAME | | WORK PROCEDURE/ ILLUSTRATION | | | TOOLS/PPE | QUALITY POINTERS |
| 2 | CLAMP ASSY | Clamp Setting | <div></div> <div>1. Get 3pcs of clamp 82711-52090 (W) using right hand then set to clamp location 1, 2 and 4 using both hands.</div> <div>2. Get 1pc of clamp 82711-48070 (GR) using right hand then set to clamp location 3 using both hands.</div> <div>3. Initially attach Black tape to clamp location 1, 2, 3 and 4 using both hands.</div> | | | n/a | <div>STANDARD TAPING FOR CLAMP</div> <div>One wind for under tape</div>  <div>Important reminders/Note/s: 1. Check the Clamp first before start of assembly to avoid wrong use of clamp.</div> <div>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</div> <div>CLAMP ILLUSTRATION</div> <div></div> |

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| | Model code/Part number: 922B / 7L0124-7022A | | Customer: TRQSS | Car Model: LEXUS NX | Document No.: WI-ENG-PDE-1045 | | |
| | Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO | | | Revision No.: | 1 | Page No.: | 3 of 7 |

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|--------|---------------|---|--|------|--|--|--|--|
| PARTS: | 1. Assy parts | | | JIG: | 1. Locking jig | | | |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | | TOOLS/PPE | QUALITY POINTERS | | |
| 3 | CLAMP ASSY | <div><div>1. Put the connector into locking jig using right hand then press 2x to lock using both hands. Check the lock if properly locked.</div></div> <div><p>Coupler Cross Sectional View</p><div><div>NG</div><p>Unlock Condition</p></div><div><div>NG</div><p>Half Lock Condition</p></div><div><div>GOOD</div><p>Full Lock Condition</p></div></div> <div></div> | | | <div>LOCKING JIG</div>  | <p>Important reminders/Note/s:</p> <p>1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR.</p> <p>1. Use the provided locking jig per model 2. No unlock/half-locked connector 3. No skip of locking process</p> | | |


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|---------------|---------------------|-------------------------------------|------------------|-------------------------|--|
| PARTS: | 1. Assy parts | | JIG: | 1. Clamp Assembly jig | |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | TOOLS/PPE | QUALITY POINTERS | |
| 4 | CLAMP ASSY | Clamp Assembly | | | |




Receiver base 2




82711-52090 (W)



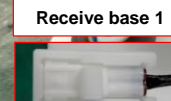
82711-48070 (GR)




82711-52090 (W)




Stopper




Receive base 1




Connector orientation



Y-taping Orientation



Color Sensor (Blue tape)




Color Sensor (Red tape)

1. Get the assy parts and set into jig. (See above picture for correct setting of harness). First, set the connector 6189-0407 (W) to Receiver base 1 then lock. Second, set the Y-taping into Y-taping guide. Third, set the connector 6098-3810 (W) to Receiver base 2 then lock. Continue to set the harness in jig. Color sensor 1 will beep/buzz if sensor detects Blue tape. Color sensor 2 will beep/buzz if sensor detects Red tape. Last, set the hotmelted wires and terminal end together within the stopper then press by Toggle clamp.

2. Check if all LED light for Power On, Clamp On, Wire1 & Wire2, Color sensor 1 and Color sensor 2 was ON. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction then continue the process. Check if the sequence light of location 1 was ON.

3. Hold the tape on clamp location 1. 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 2 was ON.



Important reminders/Note/s:

1. Make sure no gap between stopper jig and PCB

2. Make 2-3 windings for clamp taping


1. No damaged clamp
2. No wrong usage of parts
3. No missing clamp
4. No missing tape

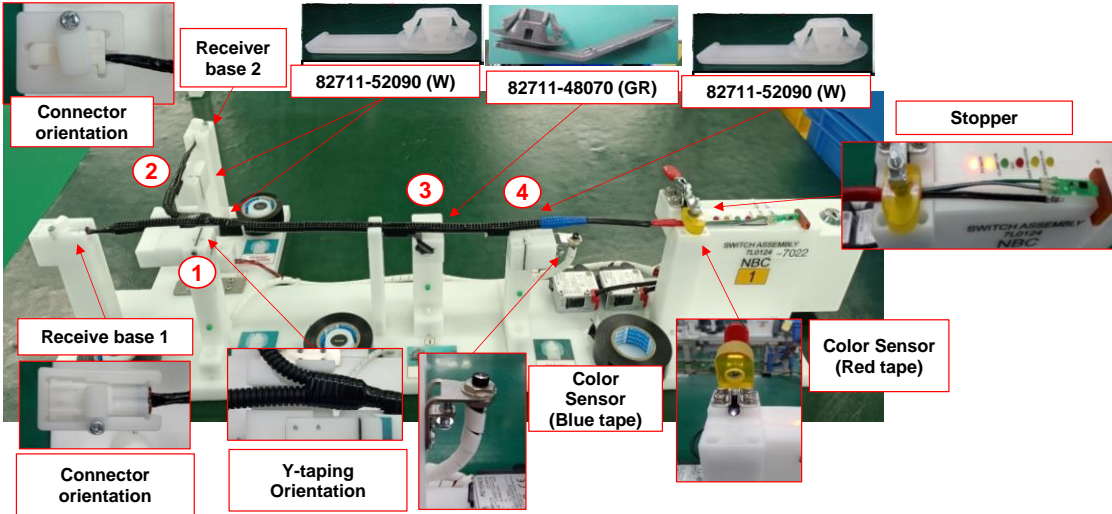

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|--------|---------------|--|--|------|-----------------------|--|--|
| PARTS: | 1. Assy parts | | | JIG: | 1. Clamp Assembly jig | | |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | | TOOLS/PPE | QUALITY POINTERS | |
| 4 | CLAMP ASSY | <div>Clamp Assembly (Continuation)</div> <div></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 in clamp location 3 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 in clamp location 4 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. GO sound will be heard.</div> <div>7. After taping, CONDUCT POINT CHECKING before removing the harness from jig.</div> <div>8. For removal of harness from jig. First, remove the connector to Receiver base 1 and 2. Then, release the wire to toggle clamp. Last, remove the harness to Y-taping guide.</div> | | | | <div></div> <div>Important reminders/Note/s:</div> <div>1. Make sure no gap between stopper jig and PCB</div> <div>2. Make 2-3 windings for clamp taping</div> <div>1. No damaged clamp</div> <div>2. No wrong usage of parts</div> <div>3. No missing clamp</div> <div>4. No missing tape</div> | |

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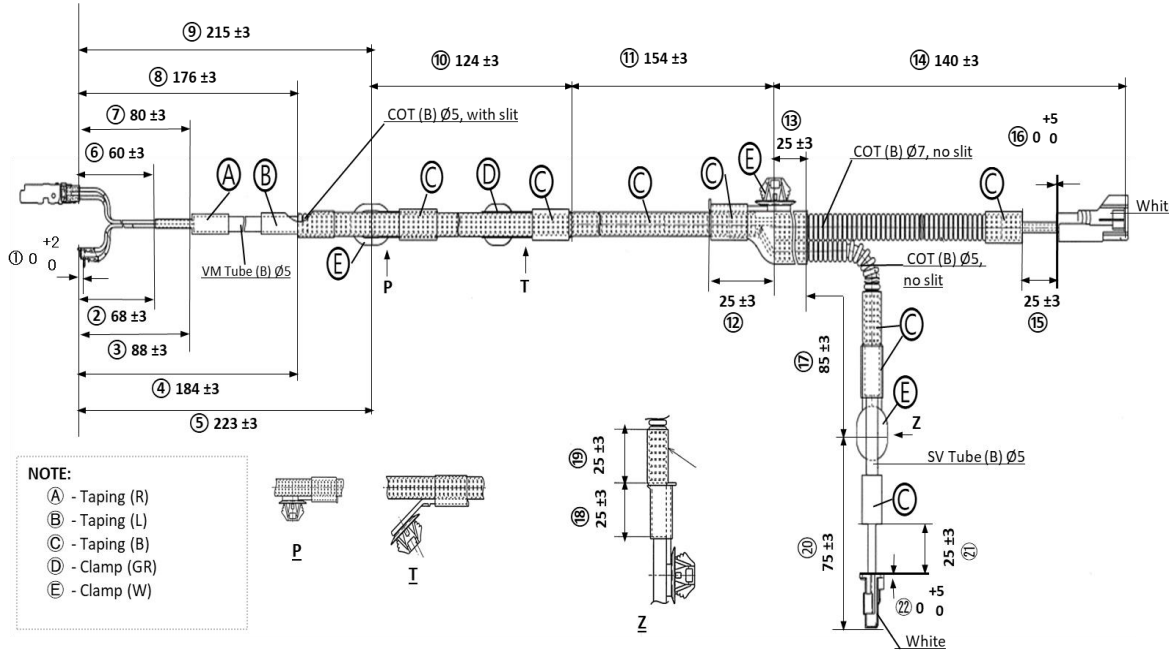

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| PARTS: | | 1. Assy parts | | JIG: | n/a |
|--------|--------------|------------------------------|---|---|-----------------------|
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS |
| 5 | CLAMP ASSY | Measurement | <div><div>MEASURING TAPE</div></div>  <div>NOTE: (A) - Taping (R) (B) - Taping (L) (C) - Taping (B) (D) - Clamp (GR) (E) - Clamp (W)</div> | <div><div>MEASURING TAPE</div></div> <div>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</div> | 1. No wrong dimension |

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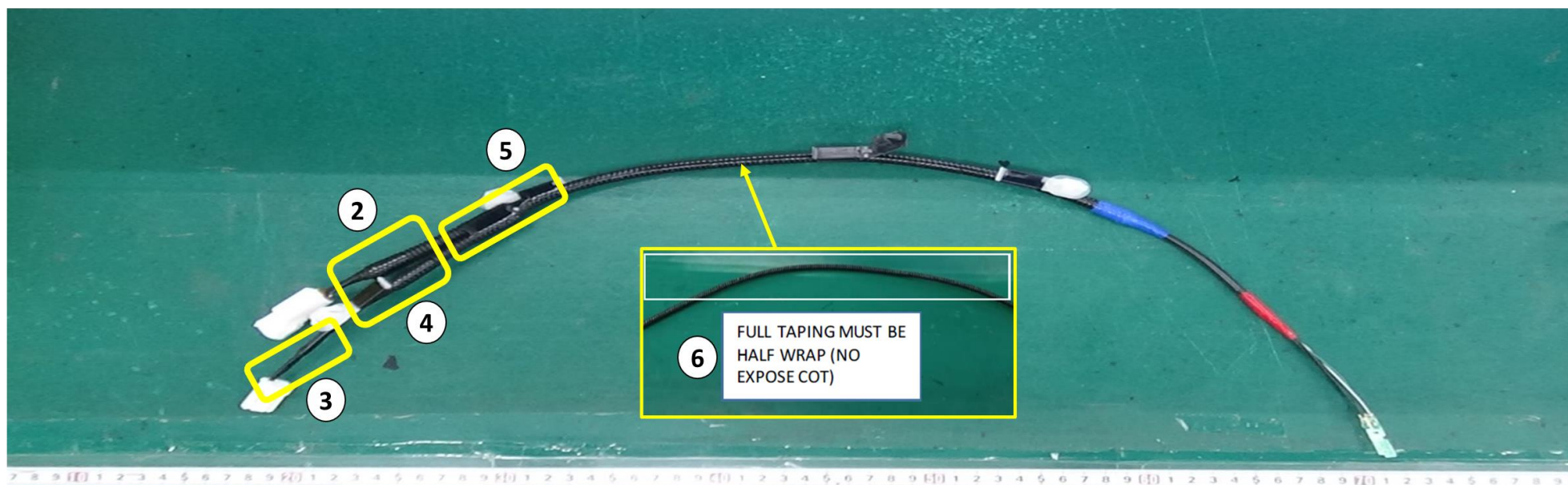
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PARTS:

1. Assy parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**CLAMP ASSY****7L0124-7022A****① No Wrong facing of clamp****② ③ ④ ⑤ No Missing Tape (Black tape)**

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