



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Model code/Part number:

241B / 7L0049-7023A

Customer:

TRQSS

Car Model:

LEXUS ES

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

October 01, 2024

Validity Date:

n/a

Document No.:

WI-ENG-PDE-1067B

Revision No.:

1

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PARTS:

1. Assy parts; Black Corrugated tube Ø5 L=49±3mm; Connector 6098-3810 (W); AVSSf 0.3 B L=692±3mm; Black tape

JIG:

1. Insertion jig
2. Locking jig
3. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

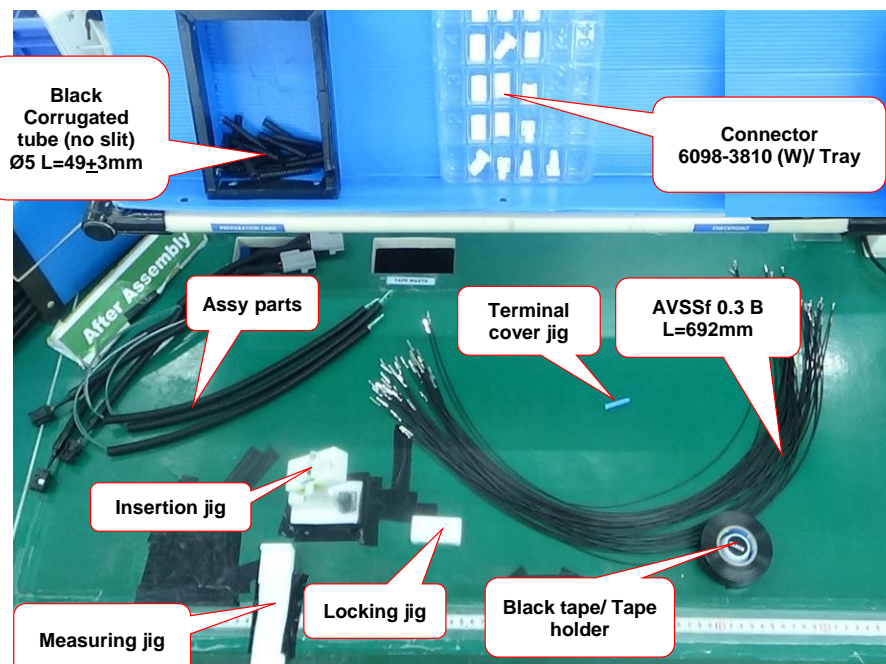
QUALITY POINTERS

1

P2

Table Lay-out

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.

Document reference/s:

1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance

1. No missing parts/tools
2. No excess parts/tools

Revision History

Revision History							Prepared by	Reviewed by	Approved by	Noted by
										n/a
10/01/24	1	Change from Pre-launch to Masspro.	A.Hernandez	C. Villanueva	A. Arañes	n/a				
09/24/24	0	Initial issue.	A.Hernandez	C. Villanueva	A. Arañes	n/a				
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	September 24, 2024		

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☐ PRE-LAUNCH

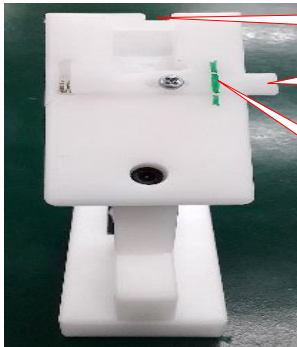
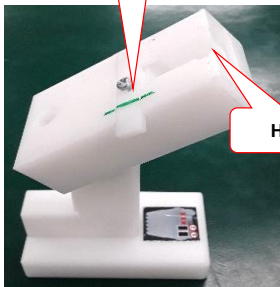

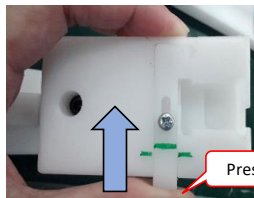
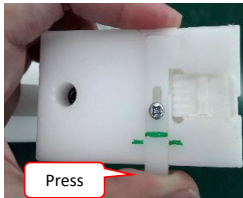
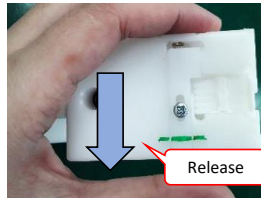

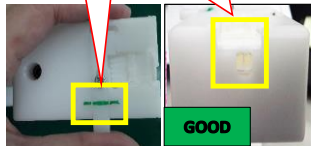

☒ MASSPRO

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PARTS:	1. Connector 6098-3810 (W)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P2 Connector insertion to insertion jig 6098-3810 (W)	<div><div>INSERTION JIG</div><div></div><div></div><div>Connector orientation</div><div></div><div>Holes</div><div>Insertion jig orientation</div><div></div><div>Press</div><div></div><div>Press</div><div></div><div>Release</div><div>1. Press the lock of insertion jig using left thumb.</div><div>2. Insert the connector 6098-3810 (W) into jig using right hand and release the lock.</div><div></div><div>3. Check the holes/terminal slot for B-B wires.</div></div>	N/A	<div>Connector Orientation Illustration</div> <div><div>I-mark is align</div><div>2 holes are open</div><div></div><div>GOOD</div><div>I-mark is not align</div><div>All holes are open</div><div></div><div>NG</div></div> <div>1. Use provided jig per model 2. No wrong orientation of connector</div>

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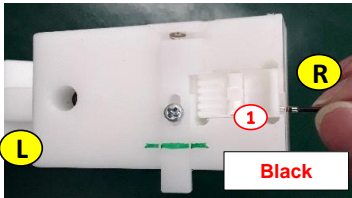
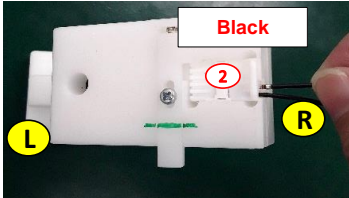
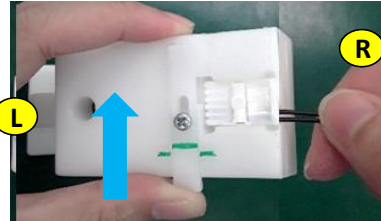
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PARTS:		1. AVSSf 0.3 B L=692±3mm 2. Corrugated tube ø5 L=49±3mm (No slit)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P2	Wire insertion to Corrugated tube ø5 L= 49±3mm (no slit)	<div></div> <div>1. Get the corrugated tube ø5 L=49±3mm using left hand and get two (2) of Black wires then insert using right hand.</div>	N/A	1. No wrong use of parts
4		Wire insertion to connector 6098-3810 (W)	<div></div> <div>1. Get the first Black wire and insert to terminal slot ① using right hand.</div> <div></div> <div>2. Get the 2nd Black wire and insert to terminal slot ② using right hand.</div> <div></div> <div>3. After insertion, push the lock using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</div>	N/A	<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</div> <div>Important reminders/Note/s: 1. Insertion sequence starts from left to right. 2. Please hold the wire near terminal. 3. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> <div>Document references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>

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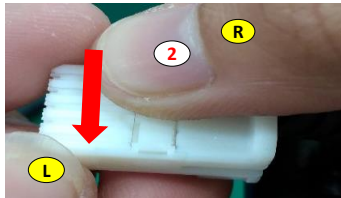
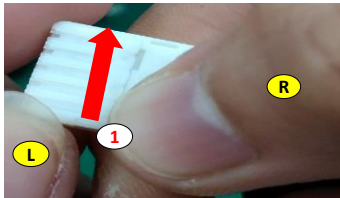
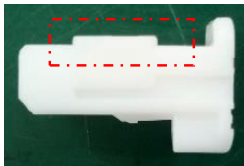
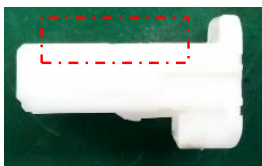

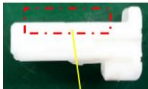
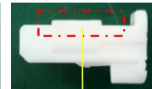
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PARTS:	1. Assy parts		JIG:	1. Locking Jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
5	P2	Connector Lock	<div><div><div>1. Put the connector into locking jig using right hand then press 2x using both hands. Touch the connector lock to confirm if properly locked.</div></div><div><div><div>2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</div></div><div><div><div>Before Pressing</div></div><div><div>After Pressing</div></div></div></div></div>	<div><div>Locking jig</div></div>	<div>Important reminders/Note/s: 1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR</div> <div>CONNECTOR LOCK CONDITION</div> <div><div><div>GOOD</div><div>Fully Locked</div></div><div><div>NG</div><div>UnLocked</div></div></div> <div>1. Use the provided locking jig per model 2. No unlock/half-locked connector</div>

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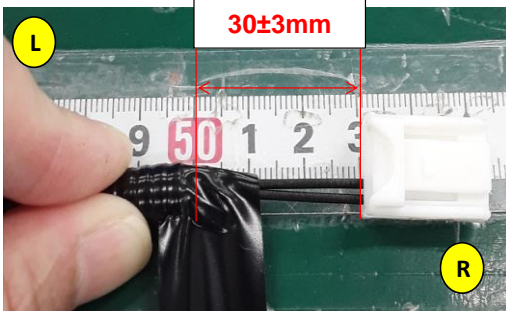
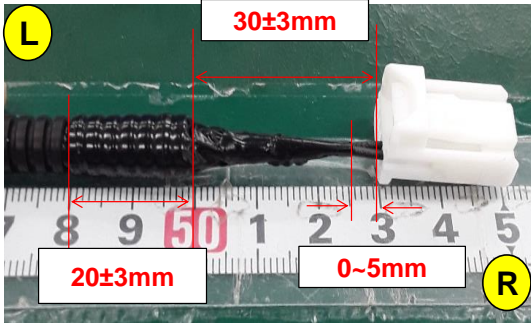

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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P2 Taping 2 COT to wire near Connector	<div><p>Start taping</p></div> <div><p>30±3mm</p></div> <div><p>2. Measure the end of the corrugated tube up to the edge of connector 30±3mm using both hands. Continue taping process.</p></div> <div><p>30±3mm</p><p>20±3mm</p><p>0~5mm</p></div> <div><p>3. After taping, check the measurement and tape condition.</p></div>		<div><p>MEASURING TAPE</p></div> 	<p>Important reminders and Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>Document reference/s: 1. Refer to WI-PRO-ASY-001 for taping procedure.</p> <ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong dimension6. No wrong use of tape

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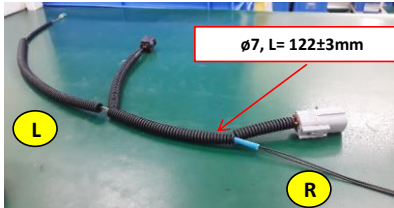



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PARTS:		1. Assy parts 2. Black Corrugated tube $\phi 7$ L-122 \pm 3mm 3. Black Corrugated tube $\phi 7$ L-312 \pm 3mm		JIG:	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P2 Wire insertion to COT $\phi 7$ L-122 \pm 3mm and COT $\phi 7$, L= 312 \pm 3mm (Assy part) (Combine)	<div></div> <div>1. Get the terminal cover jig using left hand. Hold the 2 Black wires and insert to terminal cover jig using right hand.</div> <div></div> <div>2. Get the assy parts using left hand. Insert the 2 Black wires in COT (no slit) $\phi 7$, L= 122\pm3mm and $\phi 7$, L= 312\pm3mm.</div> <div></div> <div>3. Remove the terminal cover jig after insertion.</div>		<div>TERMINAL COVER JIG</div> 	1. No wrong insertion to corrugated 2. No deformed terminal

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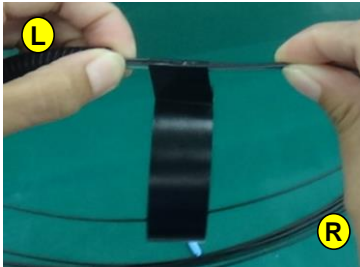

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PARTS:		1. Black tape 2. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
8	P2	Wire insertion to VM tube (Sunprene) Ø5 L=106±3mm (Assy parts)	 <div>1. Hold the VM tube (Sunprene) Ø5 L=106±3mm using left hand and insert the 2 Black wires using right hand.</div>	N/A	1. No wrong insert 2. No deformed terminal
9		Spot taping	 <div>1. Hold the assy parts using left hand, get Black tape and attach in the middle of COT and VM tube (Sunprene) then start taping using both hand. Make 2 windings then cut the tape.</div>  <div>2. After taping, check the wire alignment and taping condition.</div>	N/A	1. No loose tape 2. No missing tape

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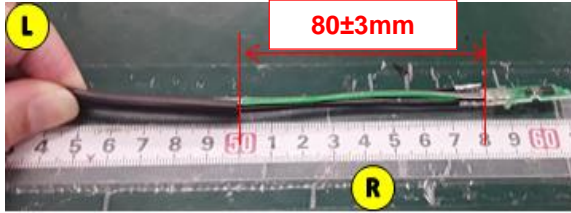
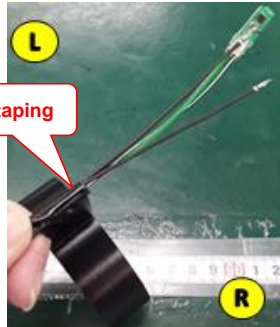
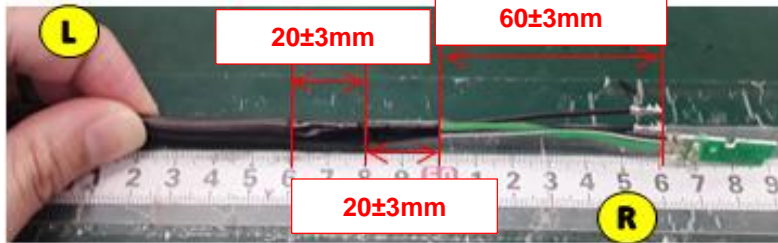

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PARTS:		1. Black tape 2. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
10	P2 Taping 3 Corrugated tube to VM tube (Sunprene)	<div><p>80±3mm</p></div> <div><p>Start taping</p></div> <div><p>20±3mm 60±3mm 20±3mm</p></div> <p>1. Measure from end of VM tube (Sunprene) up to end of terminal pointed tip and edge of hotmelted wire 80±3mm using both hands.</p> <p>2. Hold the VM tube (Sunprene) using left hand, get the Black tape then start taping using both hands.</p> <p>3. After taping, check the measurement, wire alignment & tape condition.</p>		<div>MEASURING TAPE</div> 	<p>Important reminders and Note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-ASY-001 for taping procedure.</p> <p>1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No wrong use of tape</p>

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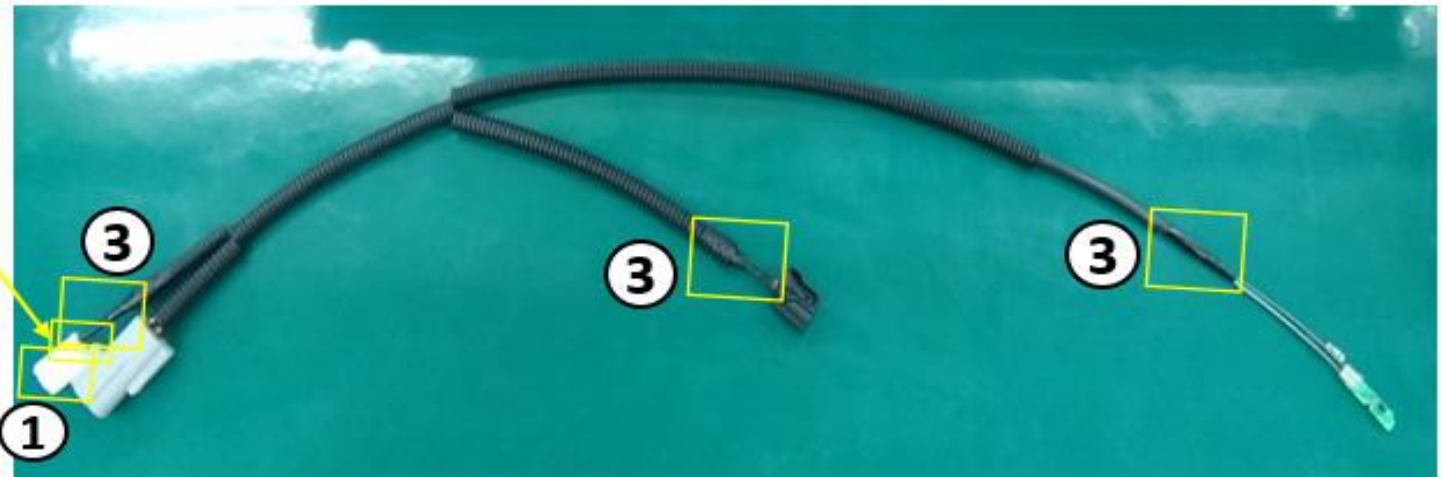
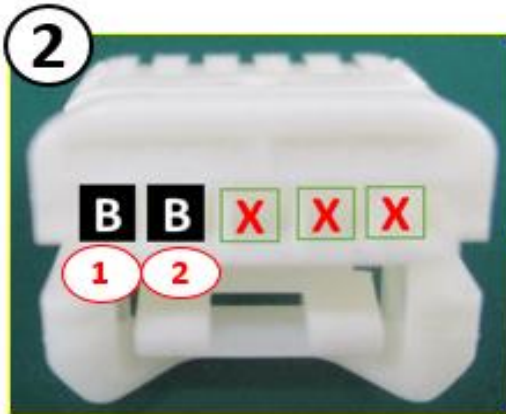
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PARTS:

1. Assy parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**TAPING - P2****7L0049-7023A****① No Unlocked/Half-locked Connector****② No Wrong Insert****③ No Missing tape(BLACK)**

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