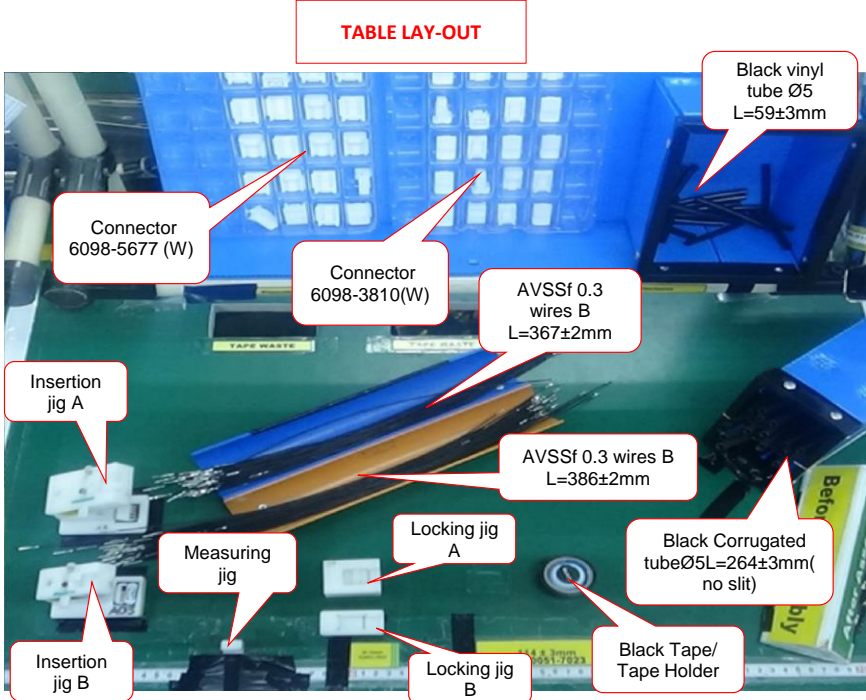
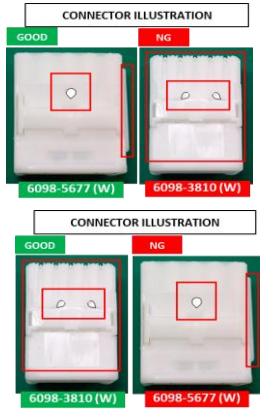
	WORK INSTRUCTION				Effectivity Date:	August 13, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
	Model code/Part number: 241B / 7L0051-7023		Customer: TRQSS	Car Model: LEXUS ES	Document No.:	WI-ENG-PDE-179A		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	7	Page No.:	1 of 10

PARTS:	1. Connector 6098-5677 (W); Connector 6098-3810(W); AVSSf 0.3 wires B L=367±2mm; AVSSf 0.3 wires B L=386±2mm; Black vinyl tube Ø5 L=59±3mm; Black Corrugated tube Ø5L=264±3mm(no slit); Black Tape			JIG:	1. Insertion jig 2. Locking jig 3. Measuring jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
1	P1 Table lay-out		<p>Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	<p>Document references 1. Please refer to WI-PRO-CNC-017 for the Wire and Strip Length tolerance.</p> <p>1. No missing parts/ tools 2. No excess parts/ tools</p> 	

Revision History						Prepared by	Reviewed by	Approved by	Noted by
08/13/24	7	Change process sequence. Separate P2 (Table) process to P2 (taping assembly process and Improve visual inspection on page 10.				A.Hernandez	C. Villanueva	A. Arañes	n/a
1/19/203	6	Inclusion of Batching quantity [10pcs.] as Countermeasure for audit findings. Inclusion of Table 1 and Table 2 in process name. Transfer table lay-out 2 to pg. 12. Inclusion of Quality Checkpoints.				M. Ariola	J. Loterte	C. Villanueva	A. Arañes
10/11/22	5	Change process sequences due to process improvement. Improve Quality pointers; Reminders/Notes and reference on pg.1,3,4,6,7,8,10,12,13,14,15,16,17;Work procedure/Illustration of process no.4 and 9-Connector lock ansd process no. 20-Visual/ by two's inspection.				M. Ariola	J. Loterte	C. Villanueva	A. Arañes
07/12/22	4	Merge P1 and P2 due to process improvement. Improve Work Procedure/ Illustration. Additional notes for Wire and Strip length tolerance (Please refer to WI-PRO-CNC-017). Additional notes for Pull-Push procedure (Please refer to GL-PRO-ASY-029). Additional Table Lay-out.				M. Ariola	J. Loterte	C. Villanueva	A. Arañes
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted

Prepared by	Reviewed by	Approved by	Noted by
A.Hernandez	C. Villanueva	A. Arañes	n/a
Est. Date:	September 24, 2018		

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WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

August 13, 2024

Process Name/Title:

Model code/Part number: **241B / 7L0051-7023**

Customer: **TRQSS**

Car Model: **LEXUS ES**

Validity Date:

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Purpose:

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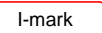
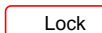



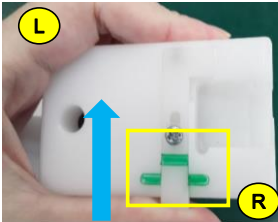
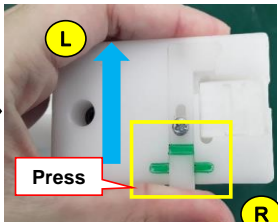
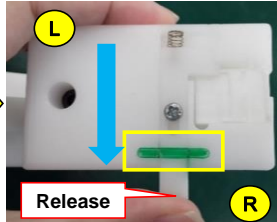
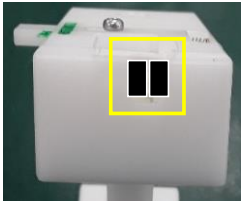
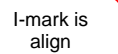
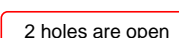

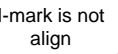
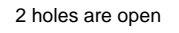

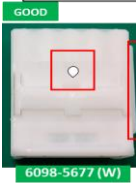

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PARTS:	1. Connector 6098-5677 (W)		JIG:	1. insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1 Connector setting to insertion jig 6098-5677 (W)	<div><div><div><div>Insertion jig</div></div><div><div>I-mark</div></div><div><div>Lock</div></div><div><div>Visual reference</div></div><div><div>Insertion jig Orientation</div></div><div><div>Connector Orientation</div></div></div><div><div><div>L</div><div>R</div></div><div><div>L</div><div>R</div></div><div><div>L</div><div>R</div></div></div><div><div><p>1. Press the lock of insertion jig using left thumb.</p></div><div><p>2. Insert the connector 6098-5677 (W) into jig using right hand then release the lock.</p></div><div><div>3. Check the holes/terminal slot for B-B wires.</div></div></div></div>	n/a	<div><p>1. Use provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector</p></div> <div><div><div><div>CONNECTOR ORIENTATION</div><div><div>I-mark is align</div><div><div>2 holes are open</div></div><div><div>GOOD</div></div></div><div><div>I-mark is not align</div></div><div><div>2 holes are open</div></div><div><div>NG</div></div></div><div><div>CONNECTOR ILLUSTRATION</div><div><div><div>GOOD</div><div>6098-5677 (W)</div></div><div><div>NG</div><div>6098-3810 (W)</div></div></div></div></div></div>

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Process Name/Title:

Effectivity Date:

August 13, 2024

Model code/Part number: **241B / 7L0051-7023**Customer: **TRQSS**Car Model: **LEXUS ES**

Validity Date:

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Purpose:

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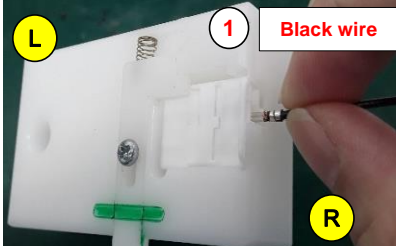

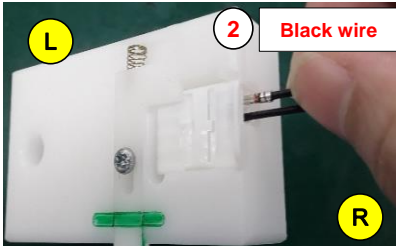
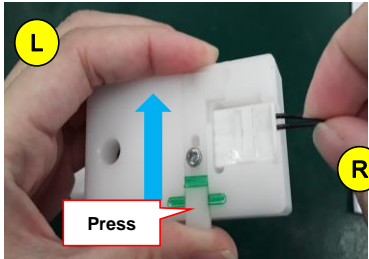
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PARTS:		1. Connector 6098-5677 (W) 2.AVSSf 0.3 wires B L=367±2mm [2pcs]		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P1 Wire insertion to connector 6098-5677 (W)	<div><div>Wire Facing</div></div> <div><div><div><div>L</div><div>1</div><div>Black wire</div></div><div>R</div></div><div></div><div><div><div>L</div><div>2</div><div>Black wire</div></div><div>R</div></div></div> <div><div><div>L</div><div>Press</div><div>R</div></div><div>3. After insertion, push the lock using left thumb then hold the wires and gently pull out the connector from jig using right hand.</div></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:</div> <div>1. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force. 2. Please hold the wire near terminal during insertion. 3. Insertion of wire must be from left to right.</div> <div>Document references:</div> <div>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Please refer to WI-PRO-CNC-017 for the Wire and Strip Length tolerance.</div>

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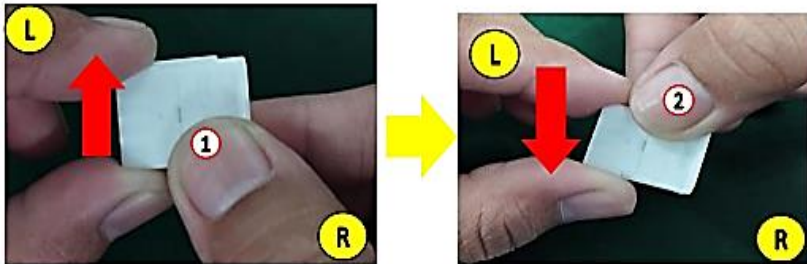

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PARTS:	1. Assy parts			JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1 Connector lock	<div></div> <div></div> <div>1. Put the connector into locking jig using both thumb then press to lock 2x.</div> <div></div> <div>2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</div>		<div>LOCKING JIG</div> 	<p><i>Important reminders/Note/s:</i></p> <p>1. Manual locking may cause damaged connector lock.</p>

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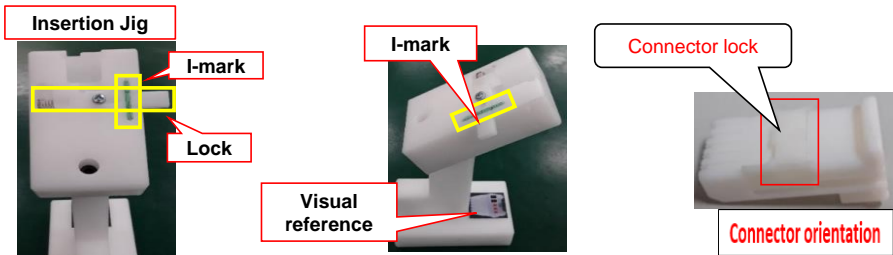
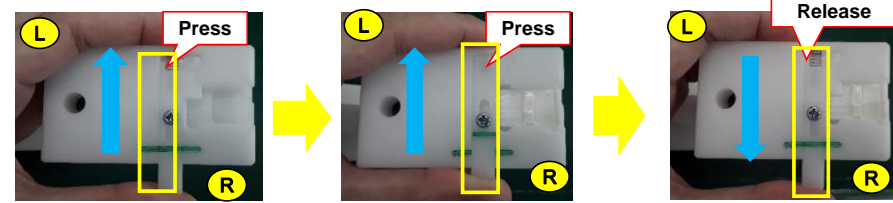
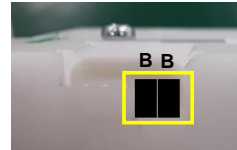
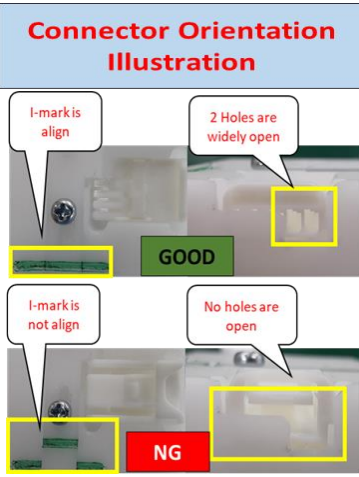
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PARTS:	1. Connector 6098-3810 (W)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	P1 Connector setting to insertion jig 6098-3810 (W)	<div><div></div><div><div><div>1. Press the lock of insertion jig using left thumb.</div><div>2. Insert the connector 6098-3810 (W) into jig using right hand then release the lock.</div><div><div>3. Check the holes/terminal slot for B-B wires</div></div></div></div></div>	n/a	<div><div>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</div><div><div>Connector Orientation Illustration</div><div></div></div></div>

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PARTS:		1.Corrugated tube Ø5 L=264±3mm 2.AVSSf 0.3 wires B L=386±2mm [2pcs]		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P1	<div>Wire insertion to corrugated tube Ø5 L=264±3mm (no slit)</div> <div></div> <div>1.Get black corrugated tube Ø5 L=264±3mm using left hand and insert Black wires L=386mm using right hand.</div>		n/a	1.No wrong use of parts 2.No deformed terminal

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Model code/Part number: **241B / 7L0051-7023**Customer: **TRQSS**Car Model: **LEXUS ES**

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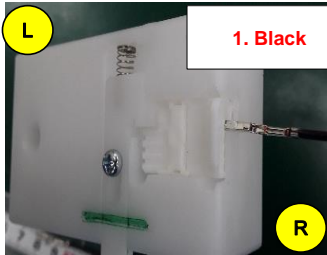
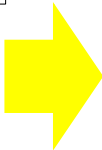

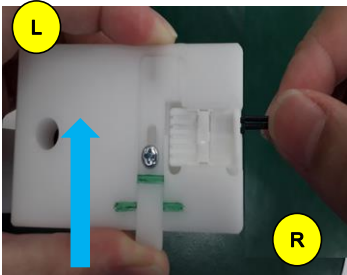
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PARTS:		1. AVSSf 0.3 wires B L=386±2mm [2pcs] 2.Connector 6098-3810 (W)		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P1 Wire insertion to connector 6098-3810 (W)	<div><div>Wire facing</div></div> <div><div><div>1. Black</div></div><div></div><div><div><div>2. Black</div></div><div><div><div>3.</div></div></div><div><div>1. Get the first Black wire and insert to Slot 1 of connector using right hand. NOTE: Conduct Pull-Push-Pull-Push after insertion</div><div>2. Get the second Black wire and insert to Slot 2 of connector using right hand. Conduct Pull-Push-Pull-Push after insertion</div><div>3. After insertion, press the lock using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</div></div></div></div>		n/a	<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform terminal 5. No wrong wire facing.</div> <div>Important reminders/Note/s: inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force. 2. Please hold the wire near terminal during insertion. 3. Insertion of wire must be from left to right.</div> <div>Document references: 1. Please refer to WI-PRO-CNC-017 for the Wire and Strip Length tolerance. 2. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>

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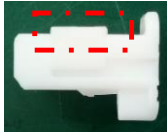

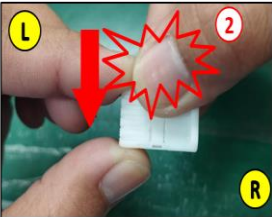
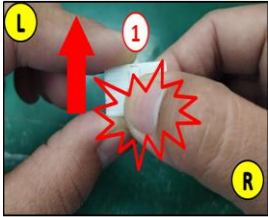


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PARTS:	1. Assy parts 1. Black SV tube (Vinyl) $\varnothing 5$ L= 59 \pm 3mm			JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
8	P1 Connector lock	<div></div> <div>1. Put the connector into locking jig using right hand then press to lock 2x. NOTE: Manual locking may cause damaged connector lock.</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>LOCKING JIG</div> 	Important reminders/Note/s: 1. Manual locking may cause damaged connector lock. 1. No Unlock 2. No Half-locked 3. Use provided jig tool per model to avoid damaged lock.	
9	Wire insertion to SV tube (vinyl) $\varnothing 5$ L=59 \pm 3mm	<div></div> <div>1. Hold assy part using left hand then get and insert SV tube (vinyl) $\varnothing 5$ L= 59\pm3mm to B-B wires using right hand.</div>	n/a	1. No wrong use of parts 2. No deformed terminal	

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WORK INSTRUCTION

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Model code/Part number: **241B / 7L0051-7023**

Customer: **TRQSS**

Car Model: **LEXUS ES**

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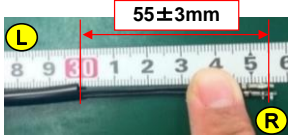
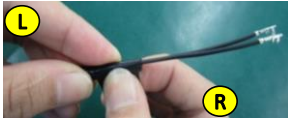
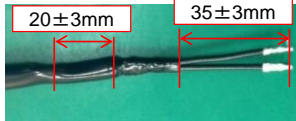

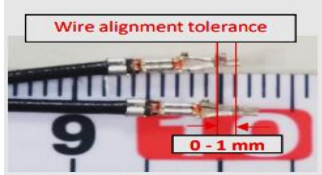
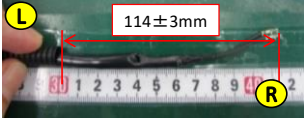
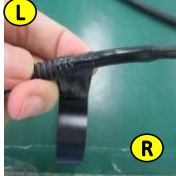

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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
10	P1 Taping 1 SV tube (vinyl) to wire near terminal	<div><div><p>1. Measure the end of the vinyl tube up to the terminal tip 55mm.</p></div><div><p>2. Hold the vinyl tube using left hand then start taping using right hand.</p></div><div><p>3. After taping, check the measurement, taping condition and terminal appearance. NOTE: Taping must be tape width 20±3mm</p></div></div>		<div><div>Measuring tape</div></div>	<div>1. No peel-off tape 2. No flip-out tape 3. No loose tape 4. No wrong use of tape</div> <div>Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</div> <div></div>
11	P1 Taping 2 Corrugated tube to vinyl tube	<div><div><p>1. Hold the corrugated tube using Left hand and measure from COT up to terminal pointed tip 114±3mm.</p></div><div><p>2. Hold the COT using left hand and begin taping using right hand.</p></div><div><p>3. After taping, check the measurement, taping condition and terminal appearance.</p></div></div>			<div>1. No peel-off tape 2. No flip-out tape 3. No loose tape 4. No wrong use of tape</div> <div>Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</div>

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**WORK INSTRUCTION**Process Name/Title: **TAPING ASSEMBLY PROCESS**

Effectivity Date:

August 13, 2024

Validity Date:

n/a

Model code/Part number: **241B / 7L0051-7023**Customer: **TRQSS**Car Model: **LEXUS ES**

Document No.:

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7

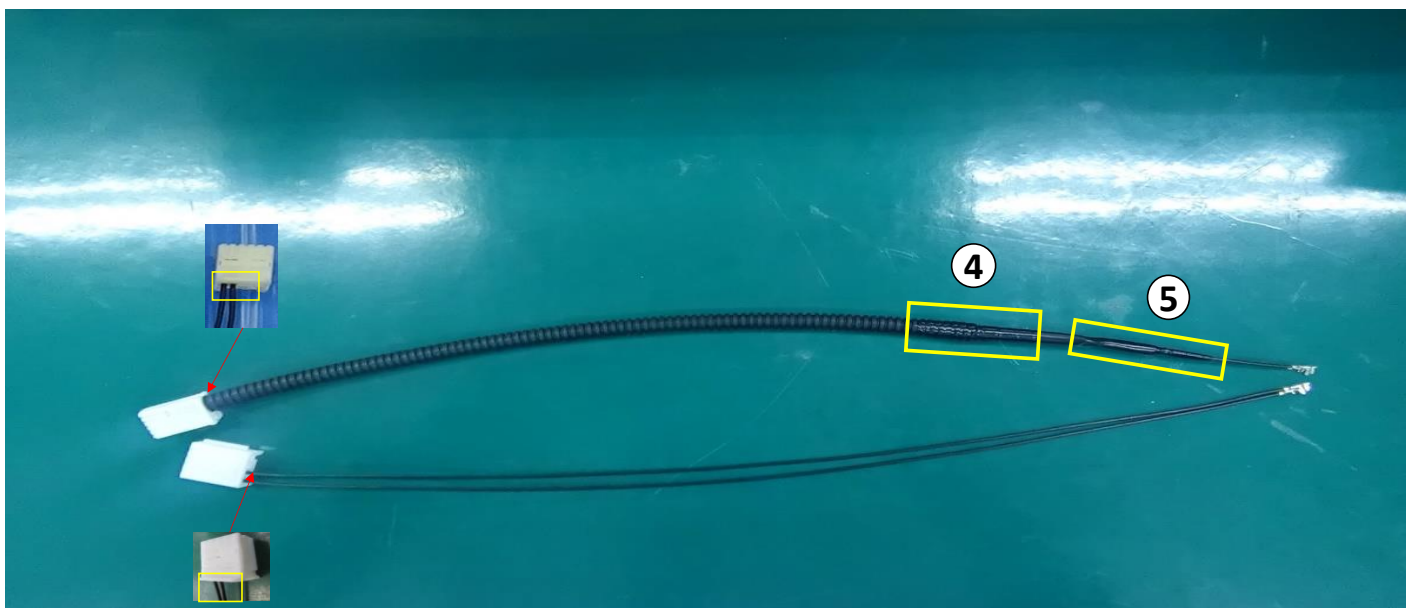
Page No.:

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PARTS: n/a

JIG:

n/a

**VISUAL INSPECTION/QUALITY CHECKPOINTS****P1****7L0051-7023****1****GOOD****NO GOOD****6****GOOD****NO GOOD****① No Unlock/ Halflock Connector****②③ No Wrong Insert****④⑤ No Missing Tape****⑥ No Terminal Backing Out**

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