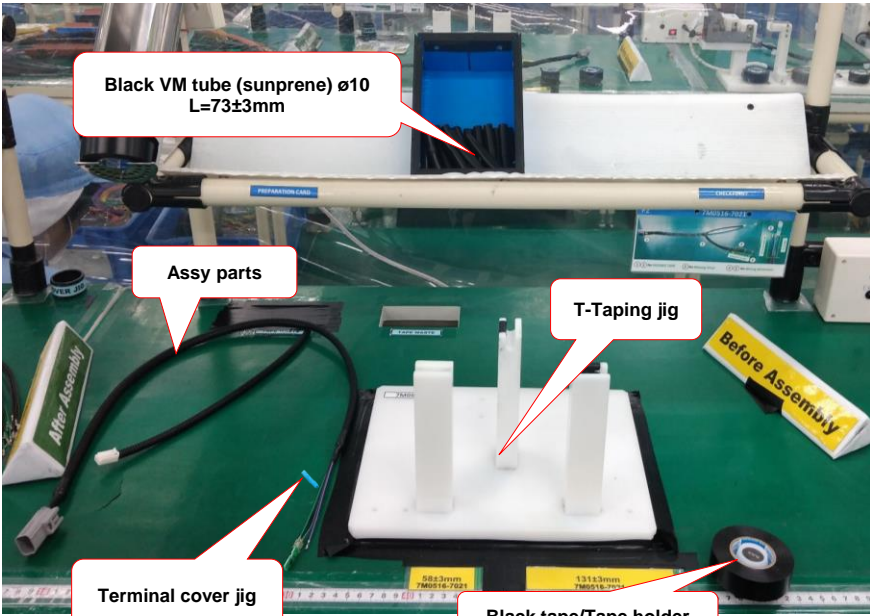


	WORK INSTRUCTION				Effectivity Date:	February 28, 2024			
	TAPING ASSEMBLY PROCESS				Validity Date:	n/a			
	Process Name/Title:		Model code/Part number: 240B / 7M0516-7021		Customer: TRJ	Car Model: LEXUS ES	Document No.:	WI-ENG-PDE-387C	
	Purpose:		<input type="checkbox"/> PROTOTYPE	<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO	Revision No.:	3	Page No.:	1 of 9

PARTS:	1. Assy part; Black VM tube (Sunprene) ø10 L=73±3mm; Black tape [2pcs.]				JIG:	1. Terminal cover jig 2. T-Taping jig			
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS		
1	P3	<div style="border: 1px solid red; padding: 5px; display: inline-block; margin-bottom: 10px;">TABLE LAY-OUT</div> 				<div style="border: 1px dashed red; padding: 5px; margin-bottom: 10px;"> Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.) </div> <div style="border: 1px dashed red; padding: 5px; margin-bottom: 10px;"> Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker. </div> <div style="border: 1px dashed red; padding: 5px;"> Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action. </div>			
				Revision History					
02/28/24	3	Additional Important reminders/Note/s in Process 2 (Page 2) due to customer claim countermeasure.				D.Castillo	C. Villanueva	A. Arañes	n/a
06/28/23	2	Excluded process from P2 to P3 due to new process distribution. Inclusion of Quality Checkpoints (page 9); Changed Table lay-out. Standardized tube description: VM tube (Sunprene); Removed and transferred process of Clamp setting, Clamp assembly, Visual/By two's inspection and measurement from P3 to CLAMP ASSEMBLY PROCESS (Refer to WI-ENG-PDE 688) due to new process distribution.				M. Ariola	J. Loterte	C. Villanueva	A. Arañes
09/23/22	1	Improve Quality pointers and notes in: process no.2,3, 4 and 5 due to document improvement. Work procedure and Illustration in process no. 4- Visual/by two's inspection.				M. Catapang	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
						 D. Castillo	 C. Villanueva	 A. Arañes	n/a
						Est. Date:	February 14, 2022		

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WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Model code/Part number:

240B / 7M0516-7021

Customer: TRJ

Car Model:

LEXUS ES

Purpose:

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☐ PRE-LAUNCH

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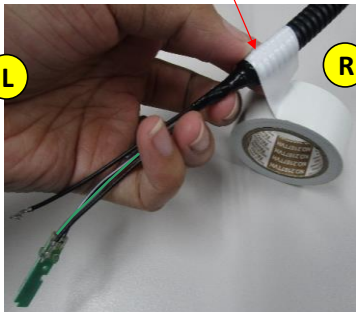
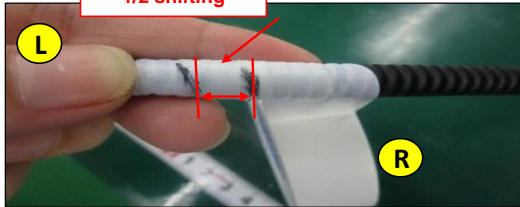
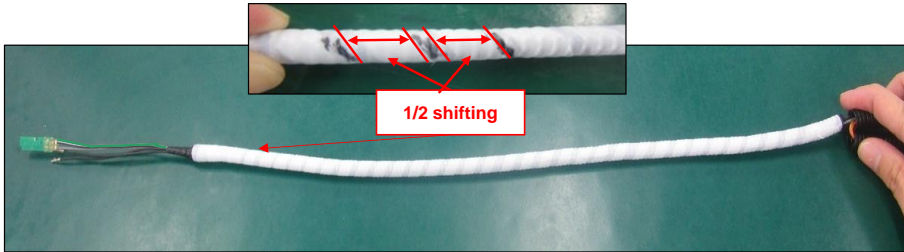

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PARTS:	1. Black tape 2. Assy parts			JIG:	N/A
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P3 Taping 1 Half wrap taping	<div><div>Start of taping</div><div></div><div>1. Hold the corrugated tube using left hand and begin taping using right hand.</div></div> <div><div>1/2 shifting</div><div></div><div>2. Make 1/2 shifting. Repeat the process until the end of corrugated tube. Make 3 windings and then cut the tape.</div></div> <div><div></div><div>1/2 shifting</div><div>3. Check the taping condition.</div></div>		<div>MEASURING TAPE</div> <div></div>	<div>Important reminders/Note/s</div> <div>1. Please use calibrated/verified measuring tape when getting the measurement.</div> <div>2. Used WHITE TAPE to easily visualize the tape shifting, but actual should be BLACK TAPE.</div> <div>3. Internal tolerance for halfwrap taping shifting should be 0~14mm only.</div> <div>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 wrong dimension</div>

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PARTS:		1. Black tape 2. Black VM tube (sunprene) ø10 L=73±3mm		3. Assy parts	JIG:	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
3	P3	<div><div></div><div>1. Hold the wires using left hand and insert the terminal cover jig using right hand.</div></div>			<div><div>TERMINAL COVER JIG</div></div>	1. No wrong use of parts 2. No wrong insertion to assy 3. No deformed terminal
		<div><div></div><div>2. Hold the wires using left hand and insert the VM tube (sunprene) ø10 L=73±3mm using right hand.</div></div>				
		<div><div></div><div>3. After insertion, remove the terminal cover jig using right hand.</div></div>				

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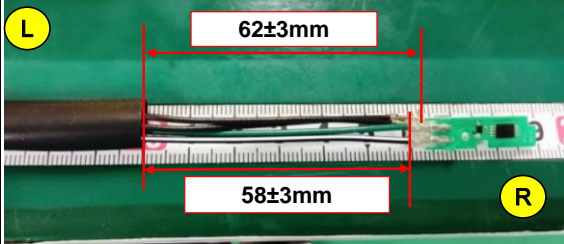

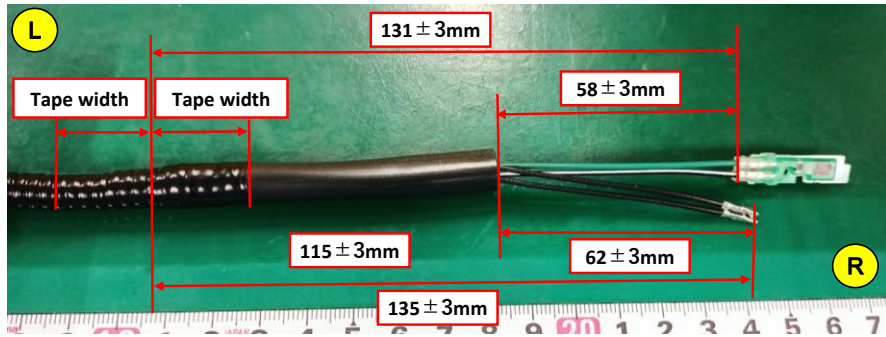

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PARTS:		1. Black tape 2. Assy parts		JIG:	N/A
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P3 Taping 2 Corrugated tube to VM tube (Sunprene)	<div><div><p>1. Hold the assy parts using left hand and measure from end of sunprene tube up to hotmelt 58±3mm, VM tube (sunprene) up to terminal tip 62±3mm using both hands.</p></div><div><p>2. Hold the assy parts using left hand and begin taping using both hands.</p></div><div><p>3. After taping, check the dimension, terminal appearance and taping condition.</p></div></div> <div><div>MEASURING TAPE</div></div> <div><p>Important reminders/Note/s:</p><p>1. Please use calibrated/verified measuring tape when getting the measurement.</p><p>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 wrong dimension</p></div>			

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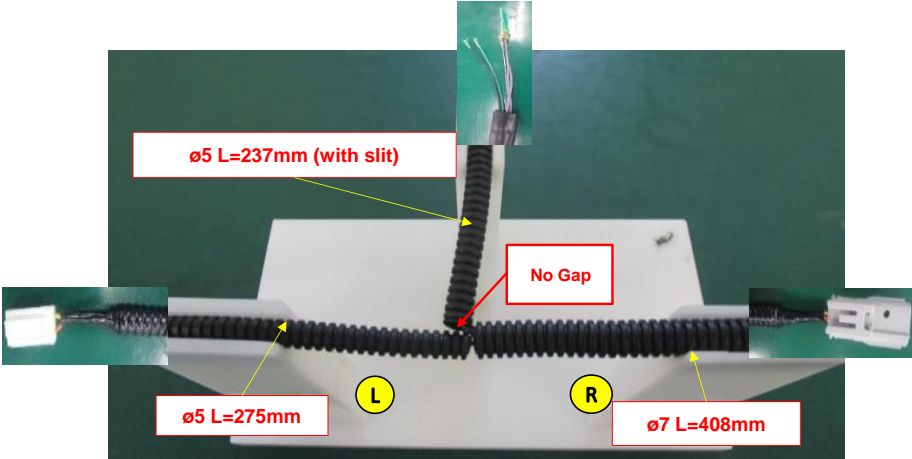
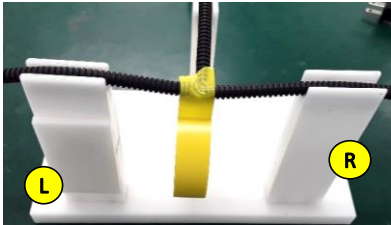
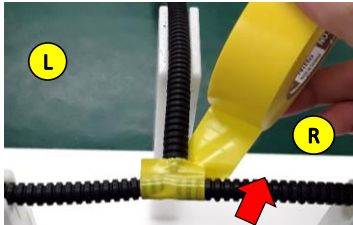
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PARTS:	1. Black tape 2. Assy parts		JIG:	1. T-taping jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	P3 T-Taping	<div><p>1. Arrange the 3 corrugated tube to form inverted T using left and right hand.</p><p>2. Start taping at the middle to fix the 3 corrugated tubes using both hands.</p><p>3. Wind the tape from front to back at the right side.</p></div>	N/A	<p>Important reminders/Note/s:</p> <p>1. Use YELLOW TAPE for easy visualization of shifting lines, but actual should be BLACK TAPE.</p> <p>2. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No gap between the COT 5. No exposed wire</p>

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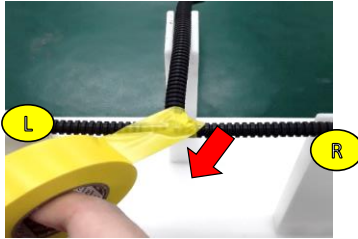
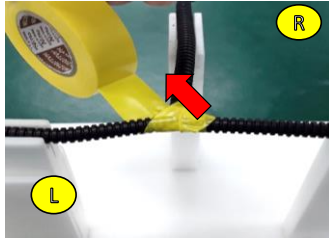
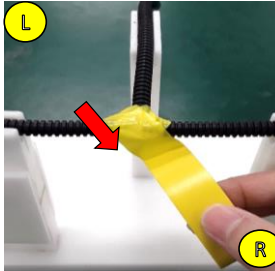
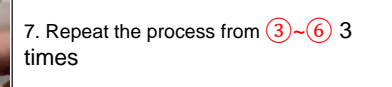
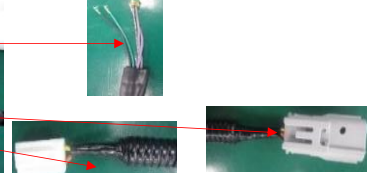
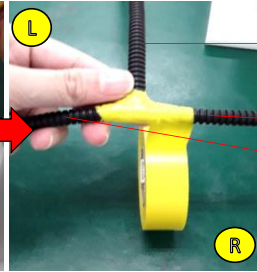
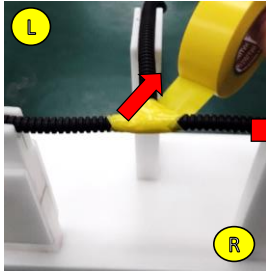
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PARTS:		1. Black tape 2. Assy parts		JIG:	1. T-taping jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P3 T-Taping (continuation)	<div><div><p>4. Wind the tape from back to front (cross pattern)</p></div><div><p>5. Wind the tape from front to back at the left side</p></div><div><p>6. Wind the tape from back to front (cross pattern)</p></div><div><p>7. Repeat the process from ③~⑥ 3 times</p></div><div><div><p>8. Remove the harness for T-taping jig then tape the right side corrugated tube (3 winds), width must be same as tape (19mm)</p></div></div></div>		N/A	<p>Important reminders/Note/s:</p> <p>1. Use YELLOW TAPE for easy visualization of shifting lines, but actual should be BLACK TAPE.</p> <p>2. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No gap between the COT 5. No exposed wire</p>

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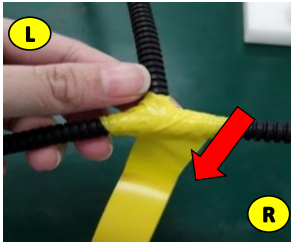
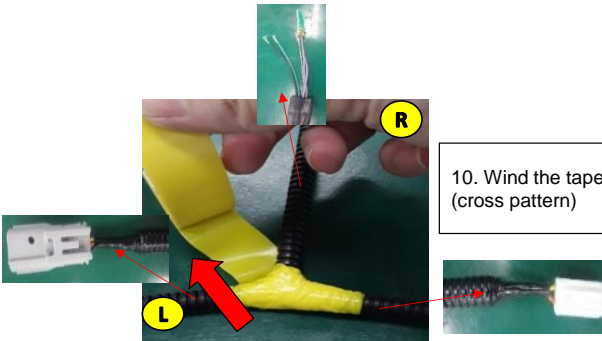
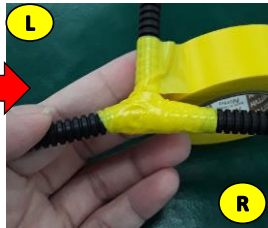
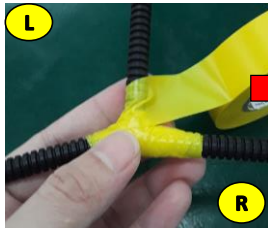
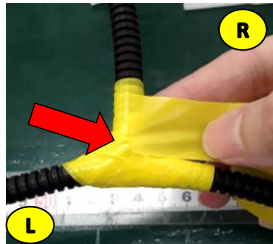
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PARTS:		1. Black tape 2. Assy parts		JIG:	1. T-taping jig	
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P3	T-Taping (continuation)	<div><div></div><div><p>9. From the right side, wind the tape 2/3 shifting going to center</p></div><div></div><div><p>10. Wind the tape from front to back side (cross pattern)</p></div><div></div><div><p>11. Tape the top side corrugated tube (3 winds), width must be same as tape (19mm)</p></div><div></div><div><p>12. From the top side, wind the tape 2/3 shifting going to center</p></div></div> <td>N/A</td> <td><p>Important reminders/Note/s:</p><p>1. Use YELLOW TAPE for easy visualization of shifting lines, but actual should be BLACK TAPE.</p><p>2. Please use calibrated/verified measuring tape when getting the measurement.</p><p>1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No gap between the COT 5. No exposed wire</p></td>		N/A	<p>Important reminders/Note/s:</p> <p>1. Use YELLOW TAPE for easy visualization of shifting lines, but actual should be BLACK TAPE.</p> <p>2. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No gap between the COT 5. No exposed wire</p>

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TAPING ASSEMBLY PROCESS

Effectivity Date:

February 28, 2024

Model code/Part number:

240B / 7M0516-7021

Customer:

TRJ

Car Model:

LEXUS ES

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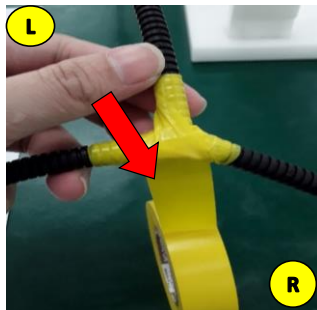
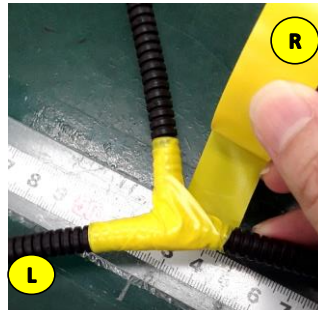
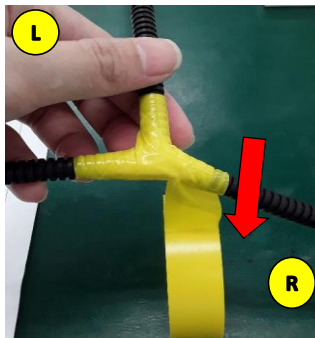
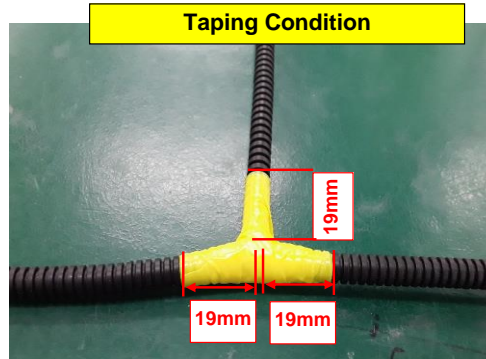
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PARTS:		1. Black tape 2. Assy parts		JIG:	1. T-taping jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P3 T-Taping (continuation)	<div><div></div><div>13. Wind the tape going to front side (cross pattern)</div><div></div><div>14. Wind the tape from front to back side (cross pattern)</div><div></div><div>15. Tape the right side corrugated tube (3 winds), width must be same as tape (19mm)</div><div><div>Taping Condition</div></div><div>16. After taping, check the measurement and condition of tape.</div></div>		N/A	Important reminders/Note/s: <i>1. Use YELLOW TAPE for easy visualization of shifting lines, but actual should be BLACK TAPE.</i> <i>2. Please use calibrated/verified measuring tape when getting the measurement.</i> 1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No gap between the COT 5. No exposed wire

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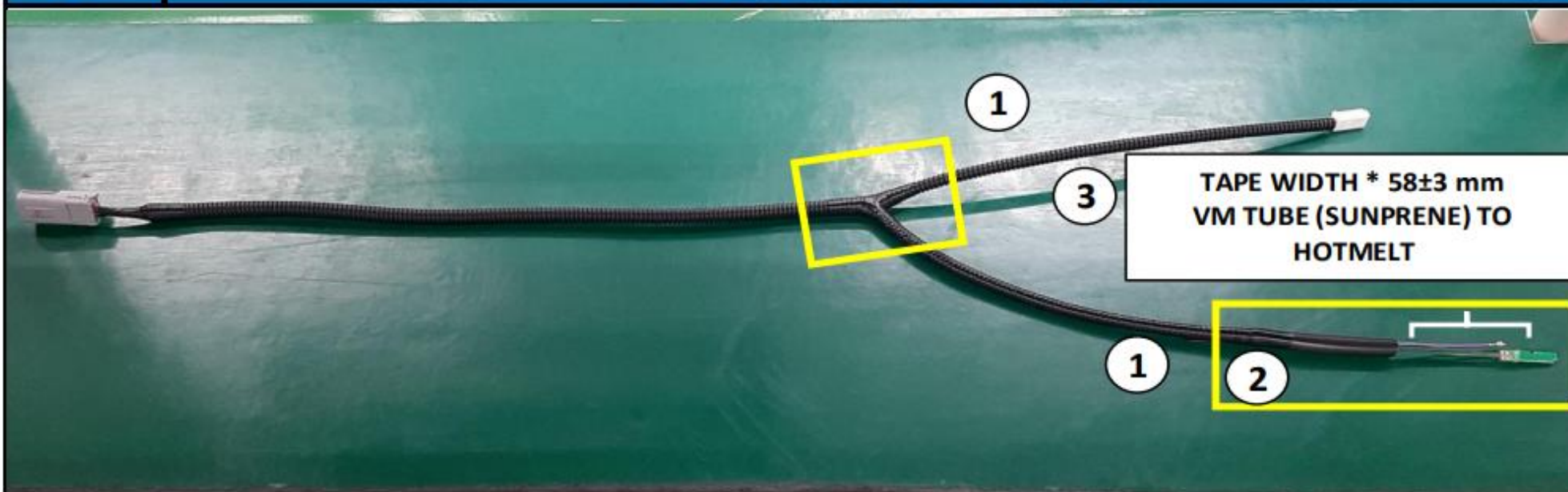
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PARTS:

1. Assy parts

JIG:

N/A

QUALITY CHECKPOINTS**P3****7M0516-7021****① No Missing tape****③ No NG dimension****② No Missing VM tube (Sunprene)**

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