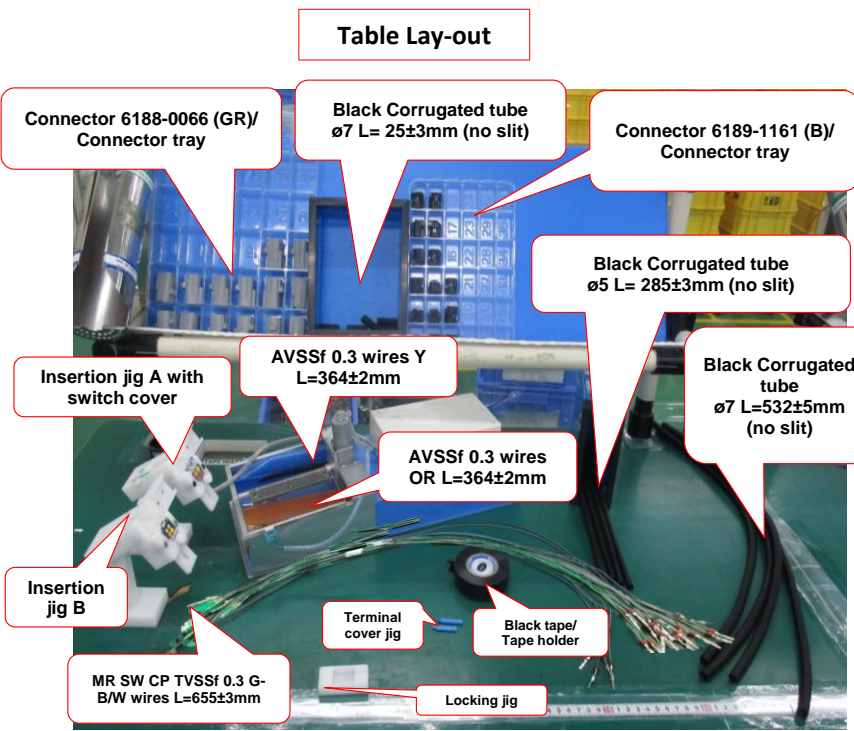


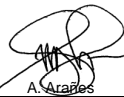
	WORK INSTRUCTION						Effectivity Date: July 4, 2024	
	Process Name/Title: TAPING ASSEMBLY PROCESS						Validity Date: n/a	
	Model code/Part number: 178D / 7N0128-7021A		Customer: TRQSS		Car Model: TOYOTA-COROLLA		Document No.: WI-ENG-PDE-419A	
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO						Revision No.: 4 Page No.: 1 of 10	

PARTS:		1. Connector 6188-0066 (GR); AVSSf 0.3 wires Y-OR L=364±2mm; Black Corrugated tube ø7 L=25±3mm (no slit); Connector 6189-1161 (B); Black Corrugated tube ø5 L=285±3mm (no slit); Black Corrugated tube ø7 L=532±5mm (no slit); Black tape; MRSW CP TVSSf 0.3 G-B/W wires L=655±3mm				JIG:		1. Insertion jig with flip cover 2. Locking jig 3. Terminal cover jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE		QUALITY POINTERS	
1	P1	<div style="text-align: center;">  </div>				<div style="border: 1px solid red; padding: 5px;"> Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.) </div> <div style="border: 1px solid red; padding: 5px; margin-top: 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 solid red; padding: 5px; margin-top: 10px;"> Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action. </div>		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								Prepared by		Reviewed by		Approved by		Noted by	
07/04/24	4	Inclusion of car model "TOYOTA-COROLLA".				D.Castillo	C.Villanueva	A. Arañes	n/a	 D. Castillo	 C.Villanueva	 A. Arañes	n/a		
10/13/22	3	Change Wire length MRSW CP TVSSf G-B/W from L=654±3mm to L=655±3mm; COT length from ø7 L=27±3mm to L=25±3mm due to encountered minimum dimension after assembly.				M. Ariola	J. Loterte	C. Villanueva	A. Arañes						
09/20/22	2	Change of tolerance of 26mm+/-3mm to +3/-1 as immediate action for encountered NG dimension from end of tape to PCB on process no.9. Improve quality pointers on page 1, 3, 6, 7, 8 and 9. Improve work procedure/ Illustration on pg.no 8				M. Ariola	J. Loterte	C. Villanueva	A. Arañes						
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted	Est. Date:	February 19, 2022				

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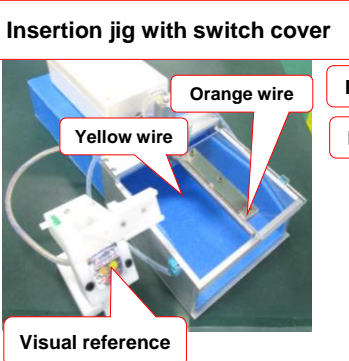
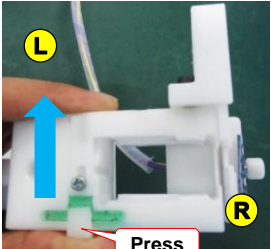
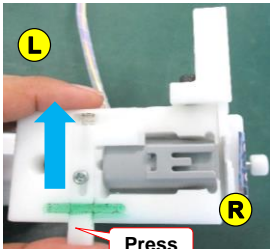
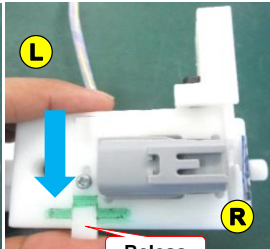
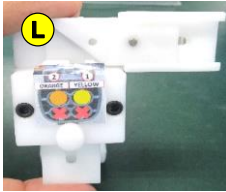
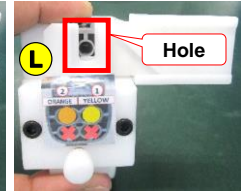


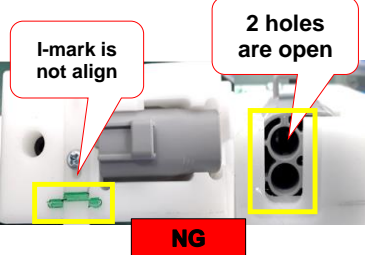
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PARTS:		1. Connector 6188-0066 (GR)		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1	<p>Connector setting to insertion jig 6188-0066 (GR)</p>  <p>Visual reference</p>  <p>Press</p>  <p>Press</p>  <p>Releas</p> <p>1. Press the lock using left thumb.</p> <p>2. Get the connector 6188-0066 (GR) using right hand and insert to insertion jig. Release the lock after insertion. Note: Follow the connector orientation.</p>   <p>Hole</p> <p>3. Push the lower wire guide upward using left thumb. Slot for Y wire will be opened.</p>  <p>CONNECTOR ORIENTATION</p>		n/a	<p>CONNECTOR ORIENTATION ILLUSTRATION</p>  <p>GOOD</p>  <p>NG</p> <p>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</p>

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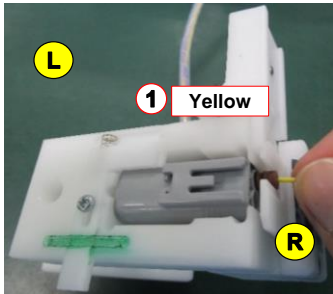
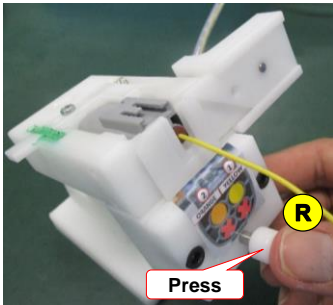
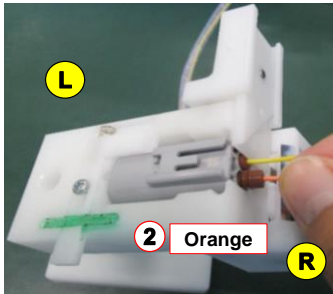
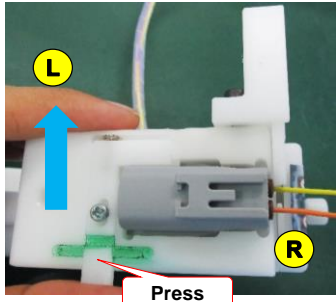
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PARTS:	1. AVSSf 0.3 wires Y L=364±2mm; OR L=364±2mm		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P1 Wire Insertion to connector 6188-0066 (GR)	<div><div>WIRE FACING</div></div> <div><div>1 Yellow</div></div> <div><div>Press</div></div> <div><div>2 Orange</div></div> <div><div>Press</div></div> <div><p>1. Hold the insertion jig using left hand. Get the Y wire then insert to terminal slot 1 using right hand.</p><p>2. Press the button using right thumb. The slot for OR wire will be opened.</p><p>3. Get the OR wire then insert to terminal slot 2 using right hand.</p><p>4. After insertion, push the lock using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</p></div> <td>n/a</td> <td><p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p><p>Important reminders/Note/s: 1. Please hold the wire near terminal. 2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p><p>Document reference/s: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p></td>	n/a	<p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p> <p>Important reminders/Note/s: 1. Please hold the wire near terminal. 2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>Document reference/s: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p>

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PARTS:		1. Assy parts 2. Black corrugated tube (no slit) Ø7 L=25±3mm 3. Black corrugated tube (no slit) Ø5 L=285±3mm		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1	Wire Insertion to Corrugated tube (no slit) Ø7 L=25±3mm	 <div>1. Hold the wires using left hand. Get the Corrugated tube (no slit) Ø7 L=25±3mm using right hand then insert the Yellow- Orange wires using left hand.</div>	n/a	1. No wrong use of parts 2. No deformed terminal
5		Wire insertion to Black corrugated tube (no slit) Ø5 L=285±3mm	 <div>1. Hold the wires using left hand. Get the Corrugated tube (no slit) Ø5 L=285±3mm using right hand then insert the Y-OR wires using left hand.</div>	n/a	1. No wrong use of parts 2. No deformed terminal

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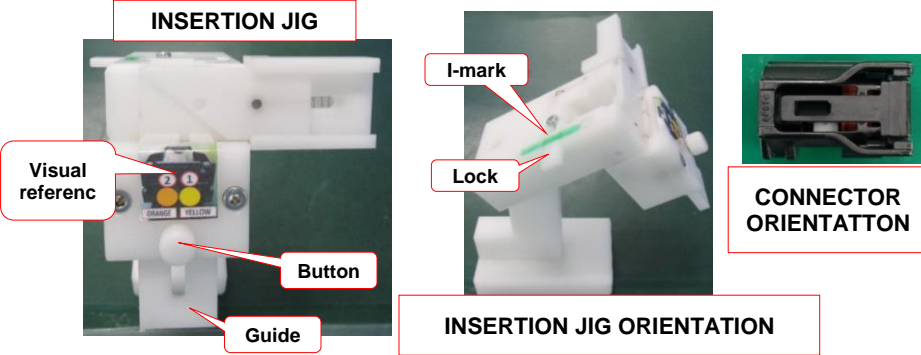
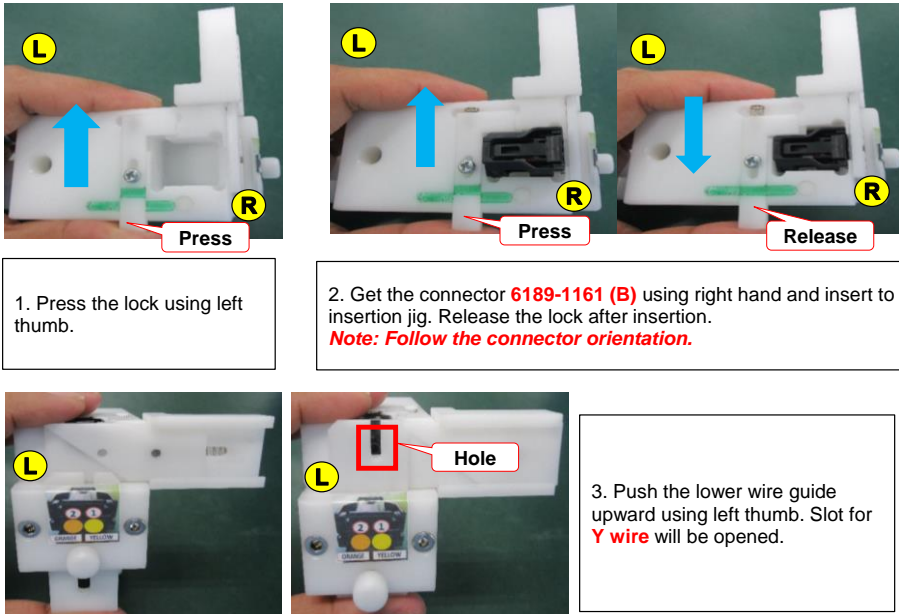
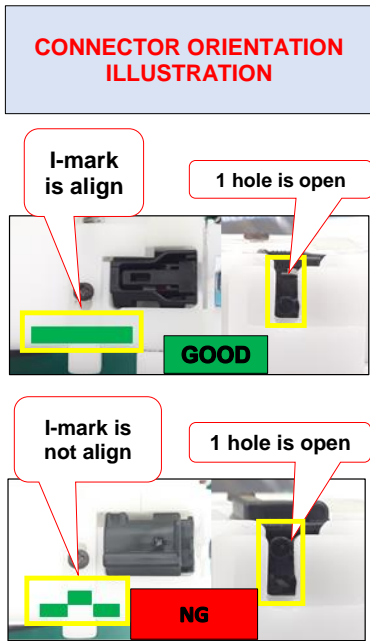
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PARTS:		1. Connector 6189-1161 (B)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P1	<p>Connector setting to insertion jig 6189-1161 (B)</p>  <p>INSERTION JIG ORIENTATION</p> 		n/a	<p>CONNECTOR ORIENTATION ILLUSTRATION</p>  <p>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</p>

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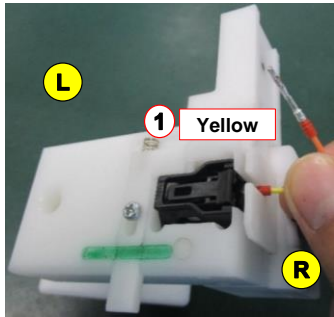
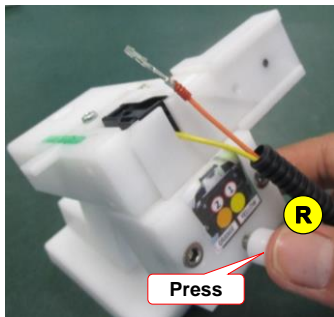
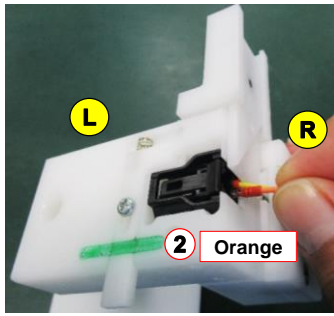
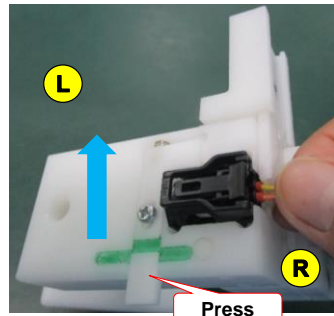
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PARTS:	1. Assy parts		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P1	<div><div><div></div><div></div><div></div><div></div><div></div></div><div><p>1. Hold the insertion jig using left hand. Get the Y wire then insert to terminal slot 1 using right hand.</p><p>2. Press the button using right thumb. The slot for Y wire will be opened.</p><p>3. Get the OR wire then insert to terminal slot 2 using right hand.</p><p>4. After insertion, push the lock using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</p></div></div>	n/a	<p>Important reminders /Note/s:</p> <p>1. Make sure wires are properly inserted. Conduct <u>Pull-Push-Pull-Push</u> after insertion. Do not exert extra force.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p> <p>2. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p> <p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p>

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PARTS:	1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
8	P1	Connector lock	n/a	<div><p>Important reminders /Note/s:</p><p>1.Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p><p>2.Make sure wires are properly inserted.</p><p>Conduct Pull-Push-Pull-Push after insertion.</p><p>Do not exert extra force.</p></div> <div><p>1. No loose insertion</p><p>2. No wrong insertion</p><p>3. One by one insertion</p><p>4. No deformed terminal</p><p>5. No wrong wire facing</p></div>

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	Purpose: <input type="checkbox"/> PROTOTYPE		<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO	Revision No.:		4	Page No.: 8 of 10


PARTS:		1. MRSW CP TVSSf 0.3 G-B/W wires L=655±3mm 2. Black Corrugated tube Ø7 L=532±5mm (no slit)		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
9	P1 Wire insertion to Black Corrugated tube (no slit) Ø7 L=532±5mm	<div></div> <div></div> <div></div> <div>1. Get the MRSW CP TVSSf 0.3 G-B/W wires L=655±3mm using left hand, then get the terminal cover jig using right hand then insert to both terminals (G-B/W wires) using right hand.</div> <div>2. Get the corrugated tube Ø7 L=532±5mm using right hand then insert the G-B/W wires using left hand.</div> <div>3. After insertion, remove the cover jig using right hand.</div>		<div>TERMINAL COVER JIG</div> 	1. No wrong usage of parts 2. No damaged rubber seal

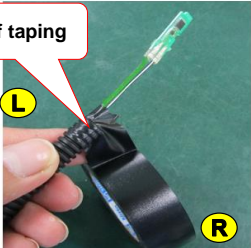
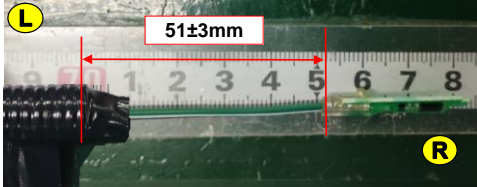
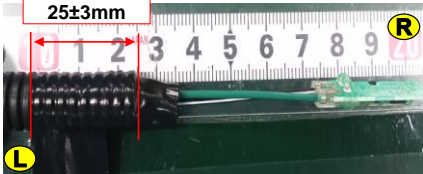
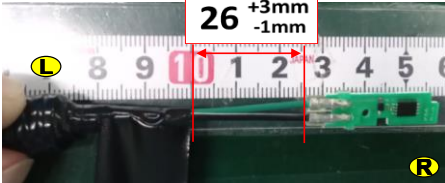
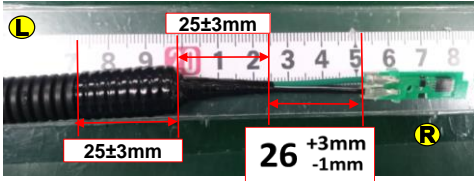
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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
10	P1 Taping 1 COT to wire near hotmelted wire	<div><div><p>Start of taping</p></div><div><p>51±3mm</p></div><div><p>1. Hold the assy parts using left hand, get Black tape then conduct pre-taping using both hands.</p></div><div><p>2. Measure from end of COT up to edge of hotmelted wires 51±3mm then continue the taping process using both hands</p></div><div><p>25±3mm</p></div><div><p>3. Confirm measurement of 25±3mm from end of tape up to end of COT then continue the taping process using both hands.</p></div><div><p>26 +3mm -1mm</p></div><div><p>4. Confirm measurement of 26+3/-1mm from end of tape up to edge of PCB then continue the taping process using both hands.</p></div><div><p>25±3mm 26 +3mm -1mm</p></div><div><p>5. After taping, check the measurement and taping condition.</p></div></div> <td>n/a</td> <td colspan="2"><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><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></td>		n/a	<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> <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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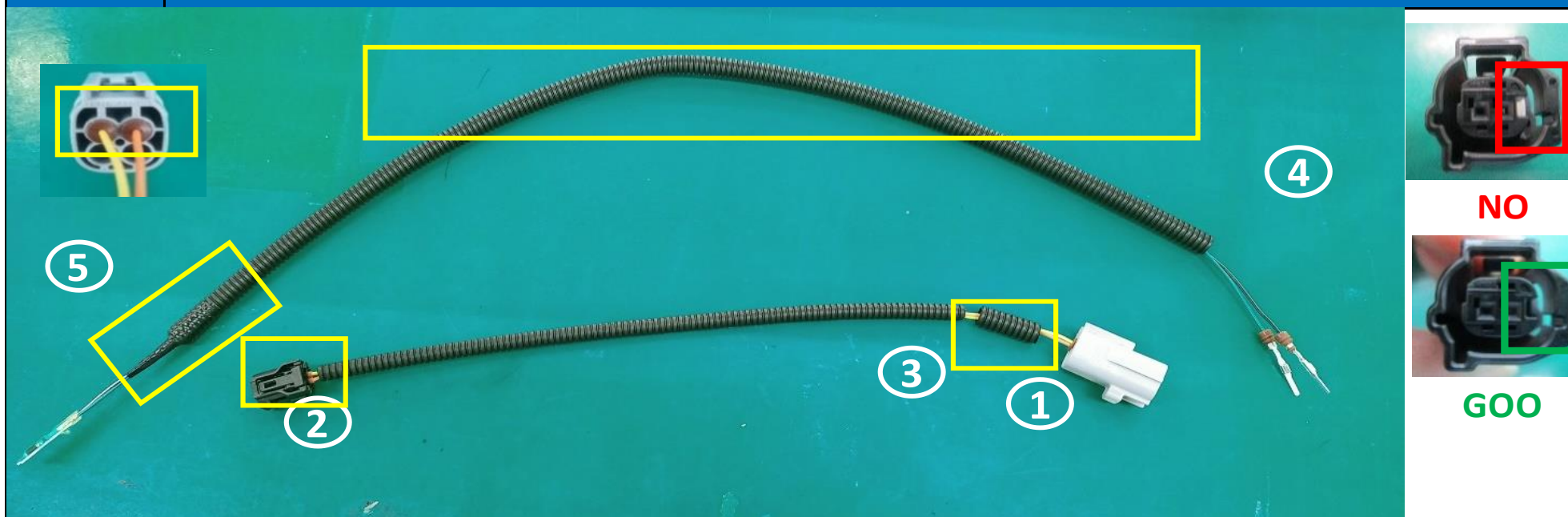
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PARTS:

1. Assy parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**P1****7N0128-7021A****①****No WRONG INSERT****②****No TERMINAL BACKING OUT****NO UNLOCK CONNECTOR****③****④****No MISSING COT****⑤****No MISSING TAPE**

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