



WORK INSTRUCTION

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

March 12, 2025

Process Name/Title:

Validity Date:

n/a

Model code/Part number:

559D / 7N0238-7020B

Customer: TRJ

Car Model: TOYOTA HI-ACE

Document No.:

WI-ENG-PDE-1223

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

0

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PARTS:

1, Connector 6098-5677; Black COT (no slit) $\phi 5$ L=329 \pm 3; Black COT (no slit) $\phi 7$ L=110 \pm 3; Black COT (no slit) $\phi 7$ L=290 \pm 3; AVSSf 0.3 wires G L=810 \pm 3mm; AVSSf 0.3 wires W L=810 \pm 3mm ; AVSSf 0.3 wires P L=810 \pm 3mm

JIG:

1. Insertion jig with switch cover
2. Insertion jig
3. Locking Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

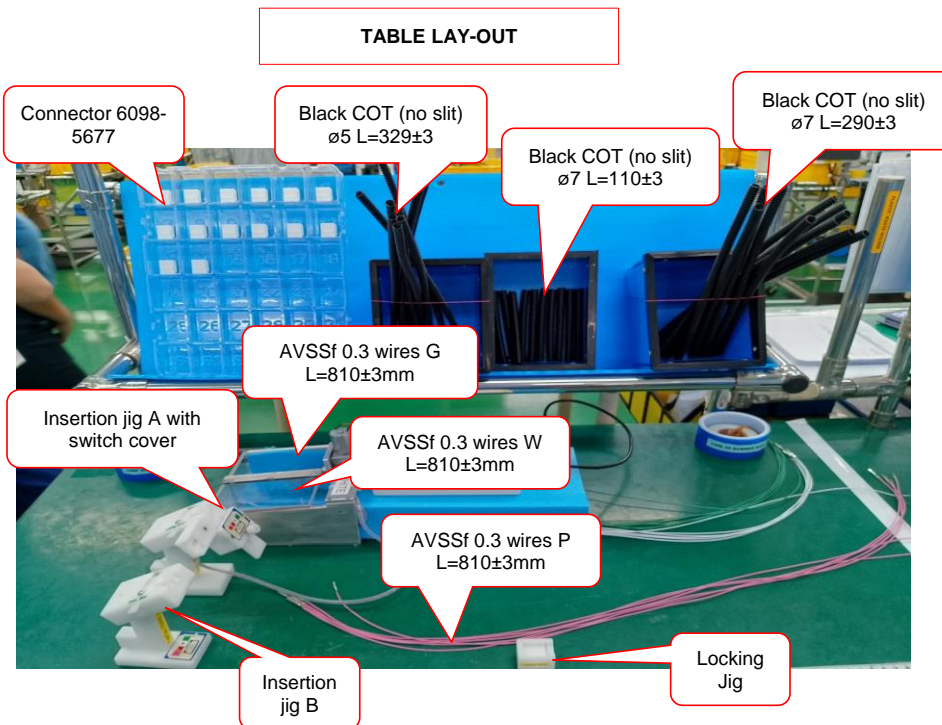
TOOLS/PPE

QUALITY POINTERS

1

Offline

Table-Lay-out

**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.

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

Revision History

Prepared by

Checked by

Reviewed by

Approved by

03/12/25 0 Initial issue.

A.Hernandez

J.Loterte

C.Villanueva

A.Arañes

A.Hernandez

J.Loterte

C.Villanueva

A.Arañes

Eff. Date

Rev. No

Details of Change

Revised

Checked

Reviewed

Approved

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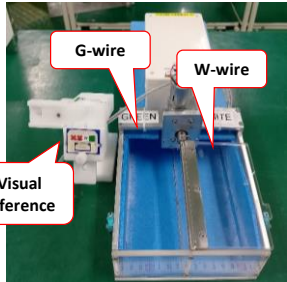
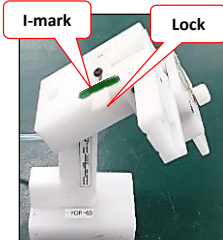
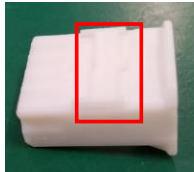
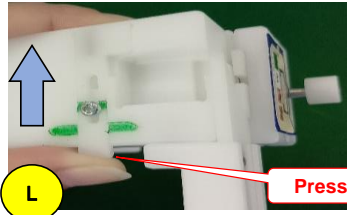
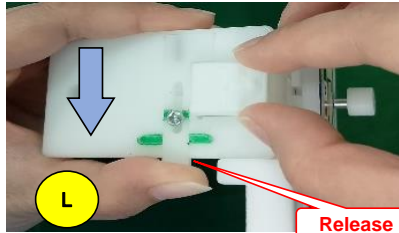

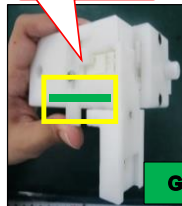
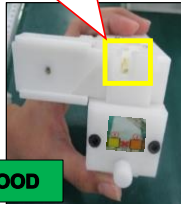
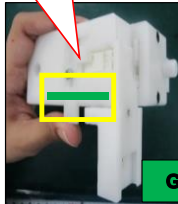
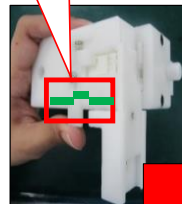
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PARTS:		1. Connector 6098-5677 (W)		JIG:	1. Insertion Jig with switch cover	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	Offline Connector setting to insertion jig 6098-5677(W)	<div><div>INSERTION JIG ILLUSTRATION</div><div></div><div></div><div>CONNECTOR ORIENTATION</div><div></div><div>INSERTION JIG ORIENTATION</div><div></div><div>Press</div><div>1. Press the lock of insertion jig using left thumb.</div><div></div><div>Release</div><div>2. Insert the connector 6098-5677 (W) into jig using right hand and release the lock. <i>Note: Follow the connector orientation.</i></div><div></div><div>3. Push the guide using left hand. The slot for W wire will be opened.</div></div> <div>n/a</div> <td><div>Connector Orientation Illustration</div><div></div><div>I-mark is align</div><div>1 hole is open</div><div>GOOD</div><div></div><div>I-mark is not align</div><div>All holes were open</div><div>NG</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></td>			<div>Connector Orientation Illustration</div> <div></div> <div>I-mark is align</div> <div>1 hole is open</div> <div>GOOD</div> <div></div> <div>I-mark is not align</div> <div>All holes were open</div> <div>NG</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>	

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Purpose:



PROTOTYPE



PRE-LAUNCH





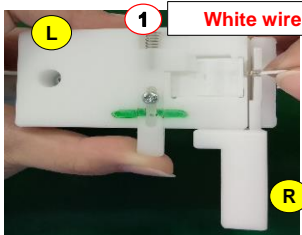
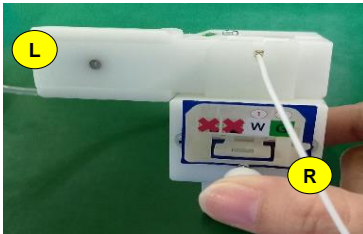
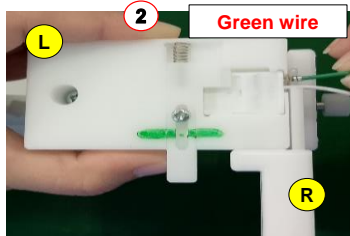
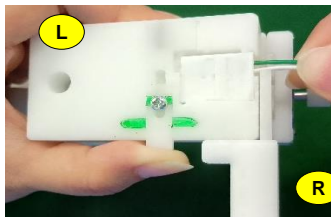
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PARTS:		1. Wire avssf 0.3 W-G L=810mm 2. Connector 6098-5677 (W)		JIG:	1. Insertion Jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Offline Wire insertion to connector 6098-5677(W)	<div><div><p>Visual reference</p></div><div><p>Wire facing</p></div><div><p>1. Hold the insertion jig using left hand. Get the Yellow wire and insert to connector using right hand. Conduct 2x push-pull after wire insertion.</p></div><div><p>2. Press the button using right thumb. Slot for Green wire will be open.</p></div><div><p>3. Get the Green wire and insert to connector using right hand. Conduct 2x push-pull after wire insertion.</p></div><div><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> <td>n/a</td> <td><p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform 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 references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p></td>		n/a	<p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform 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 references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p>

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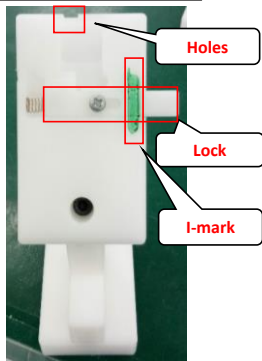




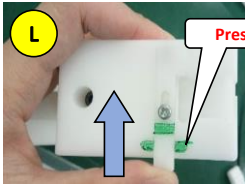

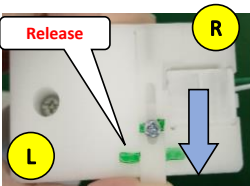



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PARTS:		1. Connector 6098-5677 (W)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	Offline Connector Setting to Insertion jig 6098-5677 (W)	<div><div><div>Insertion Jig</div></div><div><div>Insertion Jig Orientation</div></div><div><div>Connector Orientation</div></div></div> <div><div><div><div>L</div></div><div><div>Press</div></div><div><div>L</div></div><div><div>Press</div></div><div><div>Release</div></div><div><div>R</div></div><div><div>L</div></div></div><div><div></div><div><div>3. Check the holes/terminal slot for P wire.</div></div></div></div>		n/a	<div><div>Connector Orientation Illustration</div><div><div>I-mark is align</div><div>2 Holes are widely open</div><div></div><div>GOOD</div></div><div><div>I-mark is align</div><div>2 holes are partially open.</div><div></div><div>NG</div></div><div><div>1. Use provided jig per model</div><div>2. No wrong usage of parts</div><div>3. No wrong orientation of connector</div><div>4. No damaged connector</div></div></div>

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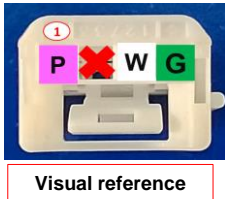


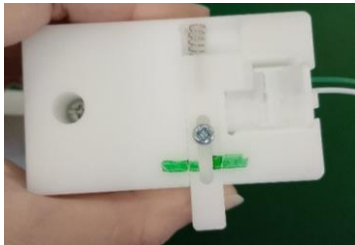
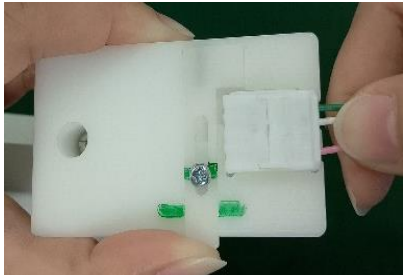
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PARTS:		1. Assy Parts 2. Wire avssf 0.3 P L=810mm		JIG:	1. Insertion Jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	Offline Wire insertion to connector 6098-5677(W)	<div><p>Visual reference</p><p>Wire facing</p><p>1. Hold the insertion jig using left hand. Get the Pink wire and insert to connector using right hand. Conduct 2x push-pull after wire insertion.</p><p>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.</p></div>		n/a	<p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform 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 references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p>

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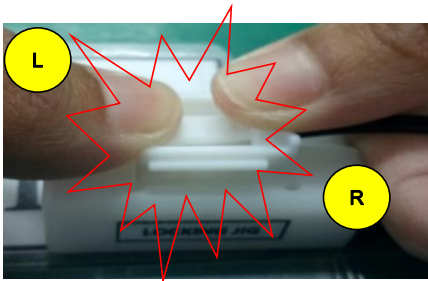
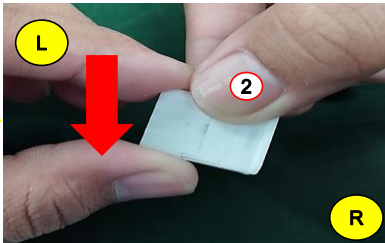
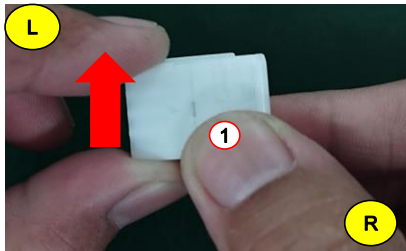

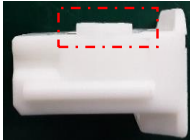
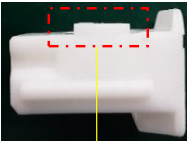
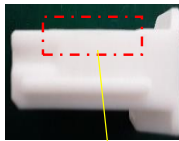

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PARTS:		1. Assy parts		JIG:	1. Locking Jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	Offline Connector Lock	<div></div> <div>1. Put the connector into locking jig using right hand then press 2x to lock. Touch the connector lock to confirm if properly pressed.</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><p>BEFORE PRESSING AFTER PRESSING</p></div><div><p>GOOD NG</p><p>Fully Locked UnLocked</p></div></div>		<div>LOCKING JIG</div> 	<p>Important reminders/Note/s:</p> <p>1. Manual Locking may caused damaged connector lock.</p> <p>Document references:</p> <p>1. Refer to GL-PRO-ASY-017 for verification of connector lock.</p> <p>1. Use the provided jog per model 2. No unlocked/half-locked connector</p>

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PARTS:		1. Assy Parts 2. Black Corrugated tube $\varnothing 5$ L=329 \pm 3mm (no slit) 3. Black Corrugated tube $\varnothing 7$ L=110 \pm 3mm (no slit)		4. Black Corrugated tube $\varnothing 7$ L=290 \pm 3mm (no slit)	JIG:	n/a
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	Offline	Wire Insertion to Black Corrugated tube $\varnothing 5$ L=329 \pm 3mm (no slit)	<div></div> <div>1. Get the P-W-G wire using right hand then insert the Black Corrugated tube $\varnothing 5$ L=329\pm3mm using right hand.</div>		n/a	1. No wrong use of parts 2. No deformed terminal
8		Wire Insertion to Black Corrugated tube $\varnothing 7$ L=110 \pm 3mm (no slit)	<div></div> <div>1. Get the P-W-G wire using right hand then insert the Black Corrugated tube $\varnothing 7$ L=110\pm3mm using right hand.</div>		n/a	1. No wrong use of parts 2. No deformed terminal
9		Wire Insertion to Black Corrugated tube $\varnothing 7$ L=290 \pm 3mm (no slit)	<div></div> <div>1. Get the P-W-G wire using right hand then insert the Black Corrugated tube $\varnothing 7$ L=290\pm3mm using right hand.</div>		n/a	1. No wrong use of parts 2. No deformed terminal

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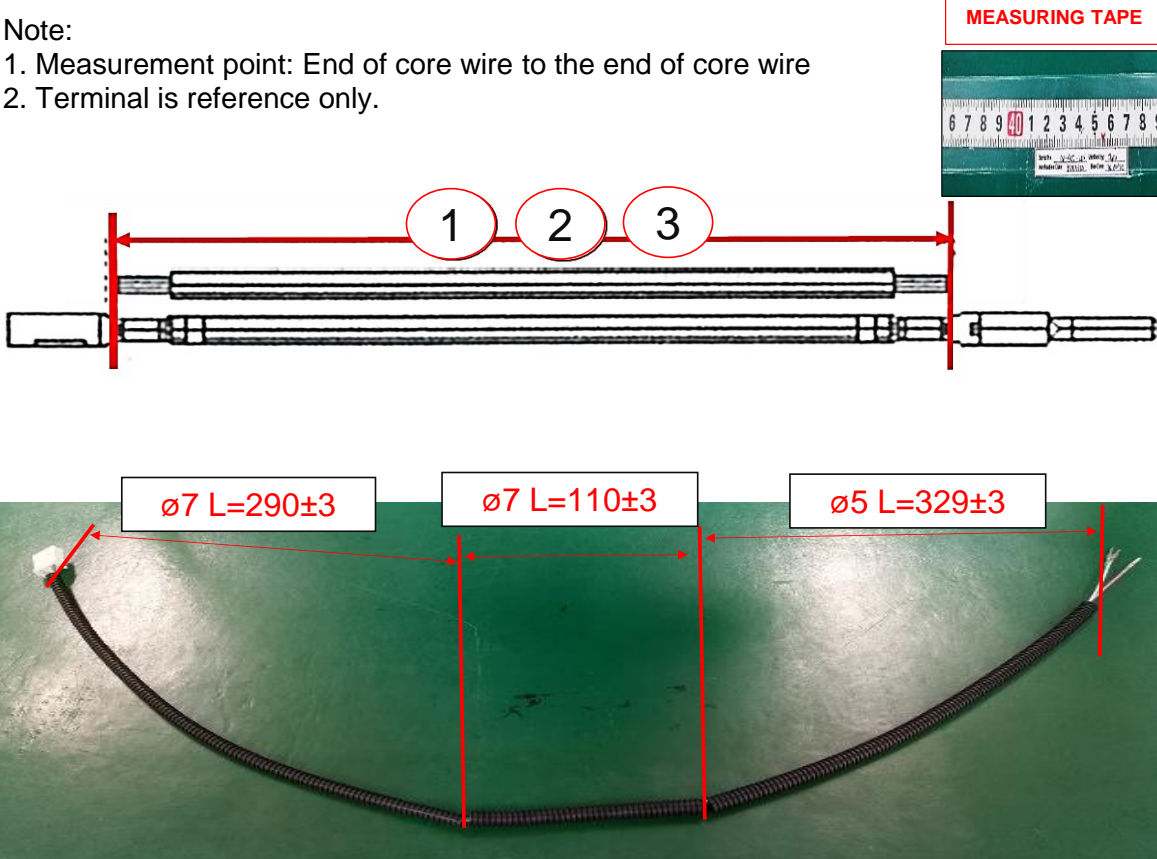

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PARTS:	1. Assy parts		JIG:	n/a	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
10	Offline	Measurement	<div>Note: 1. Measurement point: End of core wire to the end of core wire 2. Terminal is reference only.</div> <div></div>	<div>MEASURING TAPE</div> <div></div>	<div>1. No wrong dimension</div> <div>Important reminders and note/s: 1. Please use calibrated/verified measuring tape when getting the measurement. 2. For Hatsumono, Nakamono and Owarimono.</div> <div>Document reference/s: 1. Refer to WI-PRO-ASY-056 for Sub-assembly Hatsumono Nakamono Owarimono Inspection</div>

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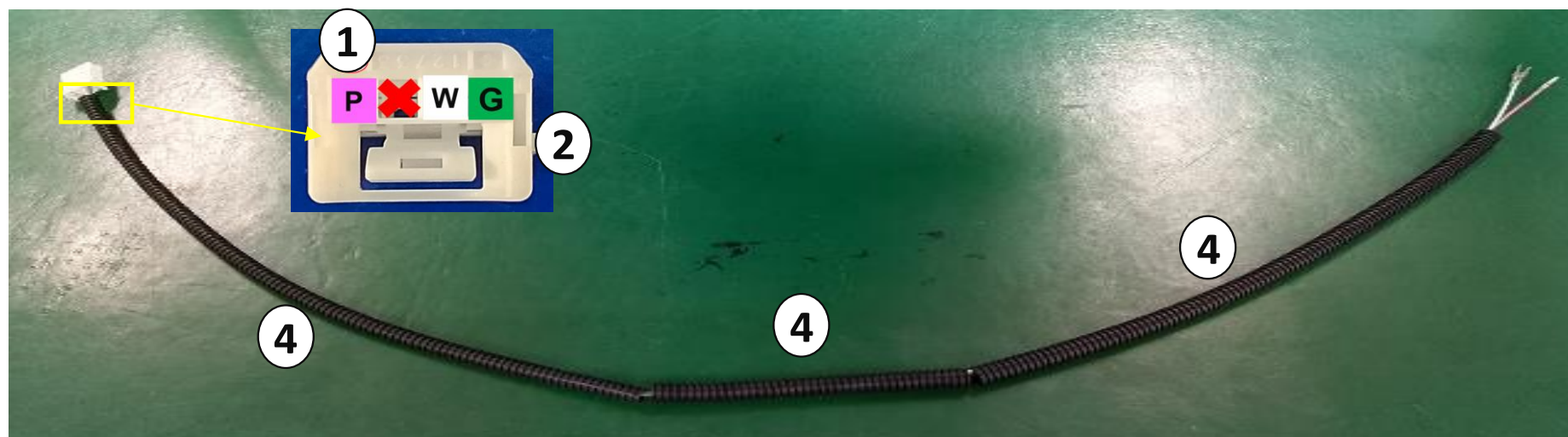
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PARTS:

n/a

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**OFFLINE INSERTION****7N0238-7020B**

- | | | |
|---|------------------------|------------------------------|
| ① No Unlocked/
Half-locked connector | ③ No Wrong Used of COT | ⑤ No Deformed terminal |
| ② No Wrong Insert | ④ No Missing COT | ⑥ No Terminal backing
out |

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