



WORK INSTRUCTION

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

September 21, 2024

Model code/Part number:

310B / 7M0529-7020C

Customer:

TRJ

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-085

Purpose:

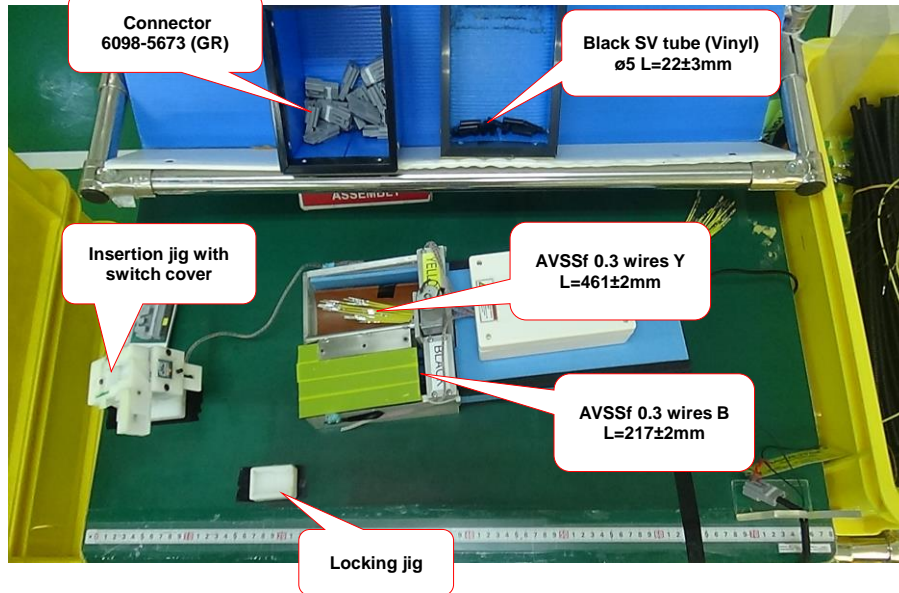
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Revision No.:

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PARTS:		1. Connector 6098-5673 (GR) 2. AVSSf 0.3 wires B L=217±2mm; Y L=461±2mm				3. Black SV tube (Vinyl) ø5 L=22±3mm				JIG:		1. Insertion jig with switch cover 2. Locking jig			
NO.		PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION						TOOLS/PPE		QUALITY POINTERS			
1		Offline <div>5</div> Table Lay-out		<div>Table Lay-out</div> 						<div>Safety Instruction</div> <p>Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <div>Housekeeping</div> <p>1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <div>Alert level</div> <p>For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>		1. No missing parts/tools 2. No excess parts/tools <div>Document reference/s:</div> <p>1. Refer to WI-PRO-CNC-017 for Wire and Strip Length tolerance.</p>			
Revision History															
09/21/24		5		Change table lay-out illustration. Transfer Wire insertion to black corrugated tube process to P1. Inclusion of measurement process. Improvement of Visual Inspection/Quality Checkpoint.				A. Hernandez		C. Villanueva		A. Arañes		n/a	
06/10/23		4		Inclusion of table lay-out; improvement of document reference/s and important reminders/note/s; standardize SV tube (Vinyl) term; improvement of locking process				J. Loterte		C. Villanueva		A. Arañes		n/a	
02/15/21		3		Revise due to standardize the color of connectors in accordance with color standardization of plastic parts. Apply some improvements. Remove cycle time in every process. Conduct semi-annual review of documents.				M. Catapang		R. Peñaloza		A. Shimamura		A. Arañes	
08/10/20		2		Changed effectivity and validity date. Changed/updated cycle time in every process. Changed total cycle time from 38.25 sec's to 23.3 sec's.				M. Catapang		R. Peñaloza		A. Shimamura		A. Arañes	
Eff. Date		Rev. No		Details of Change				Revised		Reviewed		Approved		Noted	
								A. Hernandez		C. Villanueva		A. Arañes		n/a	

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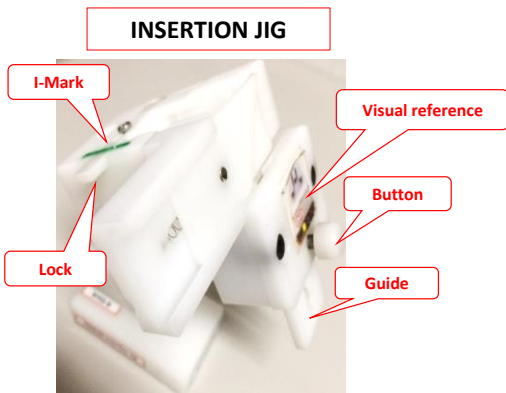
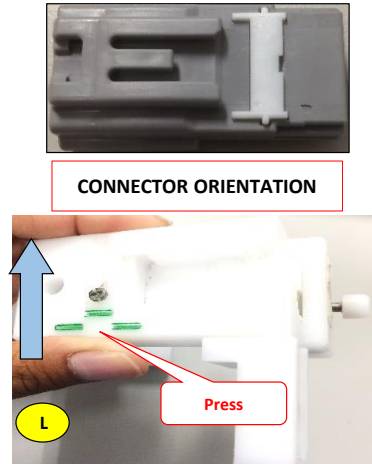
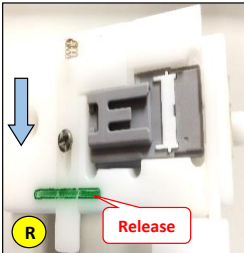
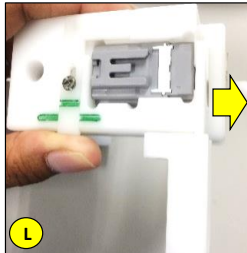
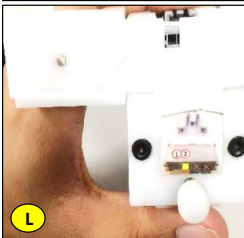
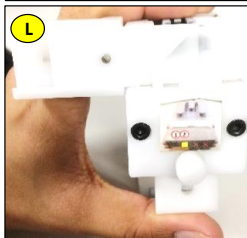
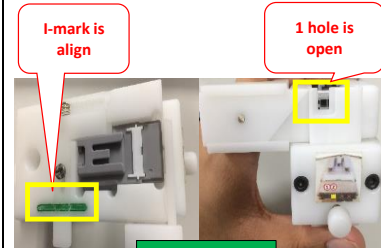
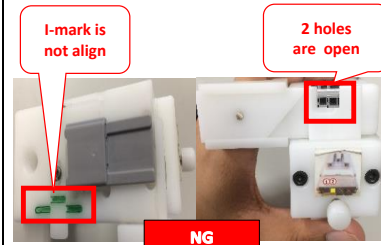
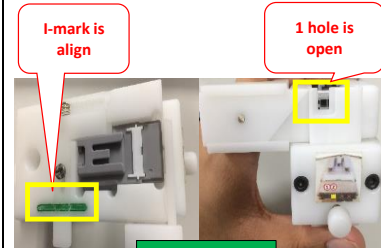
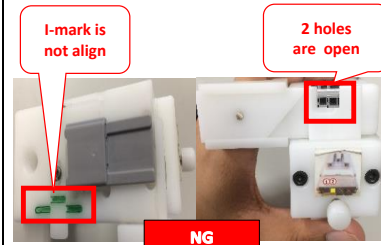
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PARTS:		1. Connector 6098-5673 (GR)		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Offline	<div><div><div>INSERTION JIG</div><div></div></div><div><div>CONNECTOR ORIENTATION</div><div></div></div><div><div></div><div></div></div><div><div>1. Press the lock of insertion jig using left thumb.</div><div>2. Insert the connector 6098-5673 (GR) into jig using right hand and release the lock.</div><div>3. Push the guide using left hand. The slot for B wire will be opened.</div></div></div> <div>n/a</div> <td><div><div>Connector Orientation Illustration</div><div></div><div>GOOD</div><div></div><div>NG</div><div><div>1. Use the provided jig per model</div><div>2. No wrong orientation of connector</div><div>3. No wrong use of connector</div><div>4. No damaged connector</div></div></div></td>		<div><div>Connector Orientation Illustration</div><div></div><div>GOOD</div><div></div><div>NG</div><div><div>1. Use the provided jig per model</div><div>2. No wrong orientation of connector</div><div>3. No wrong use of connector</div><div>4. No damaged connector</div></div></div>	

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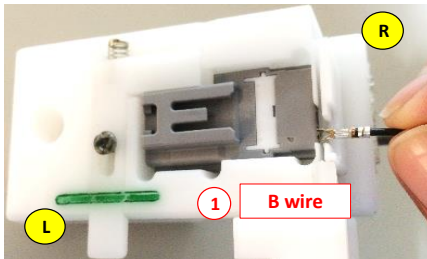
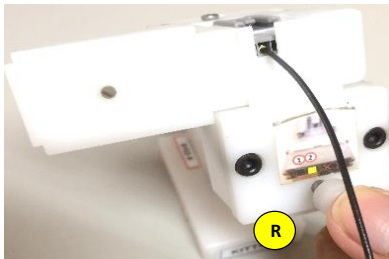
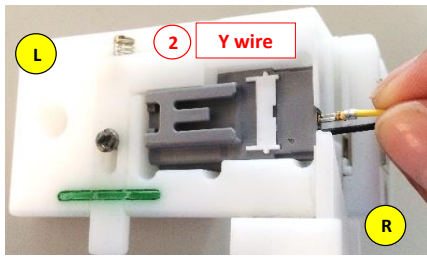
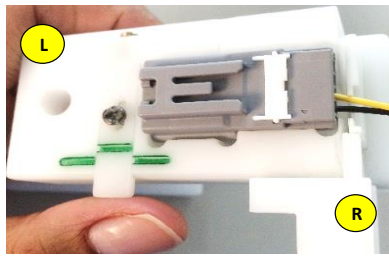
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PARTS:	1. AVSSf 0.3 B L=217±2mm; Y L=461±2mm 2. Connector 6098-5673 (GR)		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Offline Wire insertion to connector 6098-5673 (GR)	<div><div>WIRE FACING</div></div> <div><div>1. Get the B wire then insert to terminal slot 1 using right hand.</div></div> <div><div>2. After insertion of B wire, press the button using right thumb. The slot for Y wire will be opened.</div></div> <div><div>3. Get the Y wire then insert to terminal slot 2 using right hand.</div></div> <div><div>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.</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 and Note/s; 1. Make sure wires are properly inserted. Conduct <u>Pull-Push-Pull-Push</u> after insertion. Do not exert extra force.</div> <div>Document reference/s: 1. Refer to <u>GL-PRO-ASY-029</u> for <u>Pull-push</u> procedure.</div>

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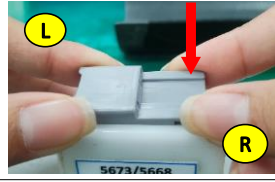



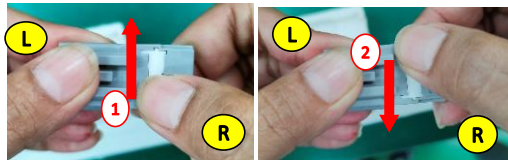





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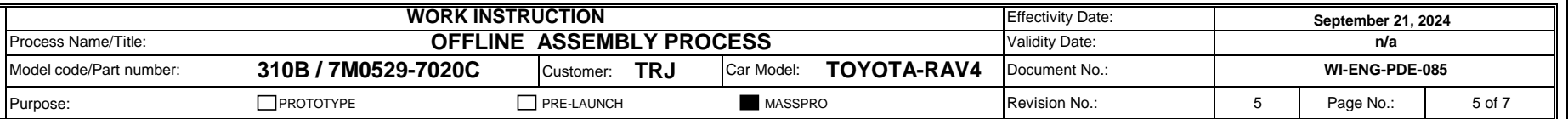
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PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	Offline Connector Lock	<div><p>1. Load the connector into the jig holding both side of the connector, tip first.</p></div> <div><p>2. Press the lower part of connector to fully insert into the locking jig.</p></div> <div><p>Right thumb-Lower Left thumb-middle</p><p>3. Press the lower parts of connector using right hand while left hand holding the middle.</p></div> <div><p>Right thumb-upper Left thumb-middle</p><p>4. Press the upper part of connector using right hand while left hand holding the middle.</p></div> <div><p>Right thumb-middle Left thumb-middle</p><p>5. Lift then press the connector in the middle using left and right hand.</p></div> <div><p>6. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</p></div>		<div><p>Locking jig</p></div>	<div><p>Before pressing</p></div> <div><p>After pressing</p></div> <div><div><p>GOOD</p><p>Full Lock</p></div><div><p>NG</p><p>Half Lock</p></div></div> <p>Important reminders and Note/s; 1. MANUAL LOCKING MAY CAUSED DAMAGED LOCK</p> <p>Document references; 1. Please refer to GL-PRO-ASSY-017 for the verification of connector lock.</p>

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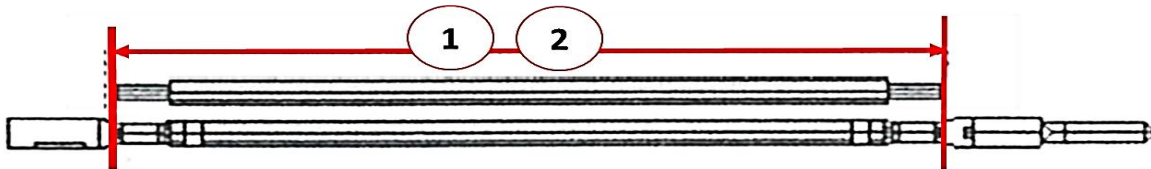


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PARTS:		1. Assy part		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	<div>5</div> OfflineMeasurement	<div>Note: 1. Measurement point: End of core wire to the end of core wire 2. Terminal is reference only.</div> <div></div> <div></div>			<div>1. No wrong dimension</div> <div>Important reminders and note/s:</div> <div>1. Please use calibrated/verified measuring tape when getting the measurement.</div> <div>2. For Hatsumono, Nakamono and Owarimono.</div> <div>Document reference/s:</div> <div>1. Refer to WI-PRO-ASY-056 for Sub-assembly Hatsumono Nakamono Owarimono Inspection</div> <div><div>MEASURING TAPE</div><div></div></div>

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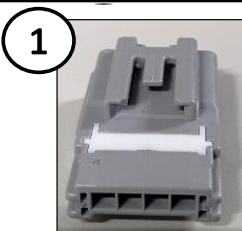
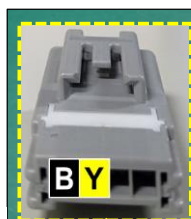
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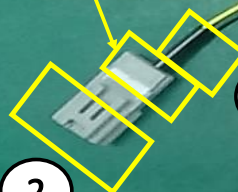
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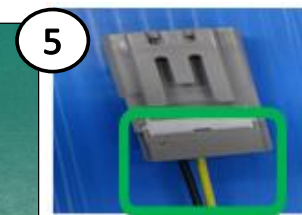
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**VISUAL INSPECTION QUALITY CHECKPOINTS****OFFLINE INSERTION****7M0529-7020C****GOOD****NO GOOD**

3



4



5

GOOD**NO GOOD**

- ① **No Unlock/Halflock Connector**
- ② **No Deformed Terminal**
- ③ **No Wrong Insertion**

- ④ **No Missing Black SV tube Vinyl**
- ⑤ **No Terminal Backing Out**
- ⑥ **Check the Wire Appearance**

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