



## WORK INSTRUCTION

## OFFLINE ASSEMBLY PROCESS

Effectivity Date:

June 11, 2024

Process Name/Title:

Validity Date:

n/a

Model code/Part number:

700B / 7N0099-7020

Customer: TRJ

Car Model: Toyota-Land Cruiser

Document No.:

WI-ENG-PDE-733

Purpose:

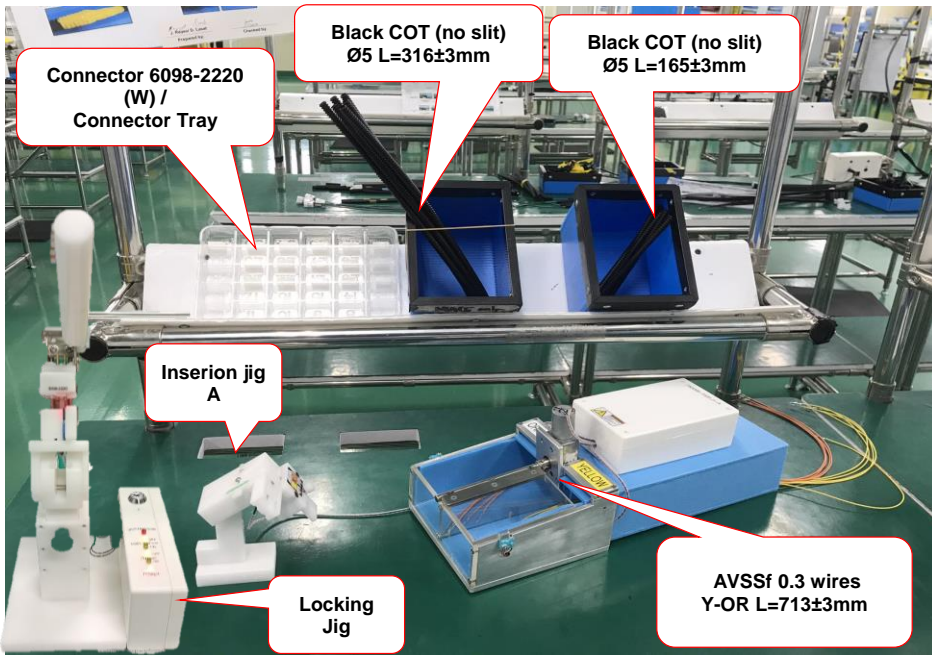
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:	1.Connector 6098-2220(W) 2. AVSSf 0.3 Y L=713±3mm 3. AVSSf 0.3 OR L=713±3mm		4. Black Corrugated Tube Ø5 L=316±3mm (No Slit) 5. Black Corrugated Tube Ø5 L=165±3mm (No Slit)		JIG:	1. Insertion jig with switch cover 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
1	n/a	<p>TABLE LAY-OUT</p> 		<p><b>Safety Instruction</b> Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p><b>Housekeeping</b> 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p><b>Alert level</b> For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	<p><b>Document reference/s:</b> 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p> <p>1. No missing parts/tools 2. No excess parts/tools</p>	

## Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
06/11/24	1	Additional Work procedure/Illustration and notes on page 4 as countermeasure for the customer claim(Broken lock of Connector 6098-2220 (W) ).	A.Hernandez	C.Villanueva	A. Arañes	n/a	A.Hernandez	C. Villanueva	A. Arañes	n/a
9/12/23	0	Initial issue.	A.Hernandez	J.Loterte	C.Villanueva	A. Arañes	A.Hernandez	C. Villanueva	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	September 12, 2023		

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PARTS:		1. Connector 6098-2220(W)		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	n/a	<p>Connector setting 6098-2220(W)</p> <p><b>INSERTION JIG WITH SWITCH COVER</b></p> <p>Insertion jig, Y-wire, OR-wire, I-MARK, Button, Holes</p> <p><b>CONNECTOR ORIENTATION</b></p> <p>1. Press the lock of insertion jig using left thumb.</p> <p>2. Insert the connector <b>6098-2220 (W)</b> into jig using right hand and release the lock. <b>Note: Follow the connector orientation.</b></p> <p>3. Push the guide using left hand. The slot for <b>Y wire</b> will be opened.</p>		N/A	<p><b>Connector Orientation Illustration</b></p> <p>I-mark is align, 1 hole is open</p> <p><b>GOOD</b></p> <p>I-mark is not align, All holes were open</p> <p><b>NG</b></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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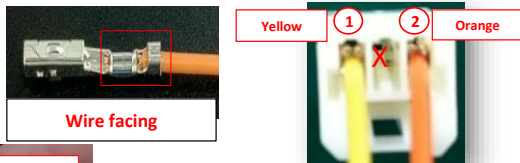
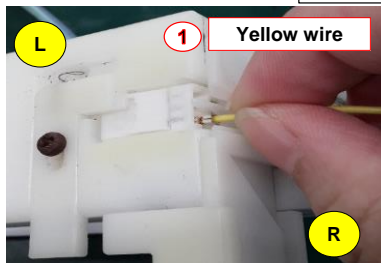
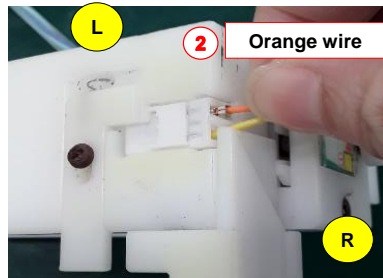
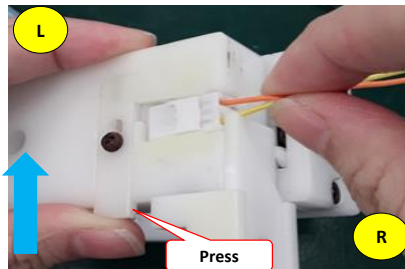
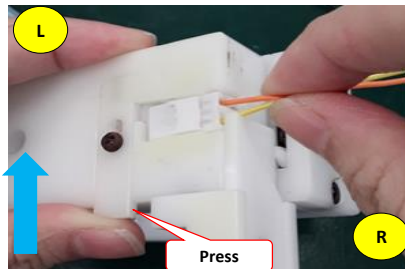
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PARTS:		1. AVSSf 0.3 Y L=713±3mm 2. AVSSf 0.3 OR L=713±3mm		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	n/a	<div><div><p>Wire facing</p></div><div><p>1. Hold the insertion jig using left hand. Get the <b>Y wire</b> and insert to connector using right hand.</p></div><div><p>2. Press the button using right thumb the slot for <b>OR wire</b> will be opened.</p></div><div><p>3. Get the <b>OR wire</b> and insert to connector using right hand.</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> <div>N/A</div> <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><b>Important reminders/Note/s:</b> <b>1. Please hold the wire near terminal.</b> <b>2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</b></p><p><b>Document references:</b> <b>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</b> <b>2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</b></p></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><b>Important reminders/Note/s:</b> <b>1. Please hold the wire near terminal.</b> <b>2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</b></p> <p><b>Document references:</b> <b>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</b> <b>2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</b></p>	

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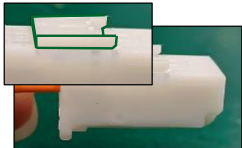
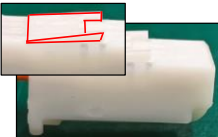
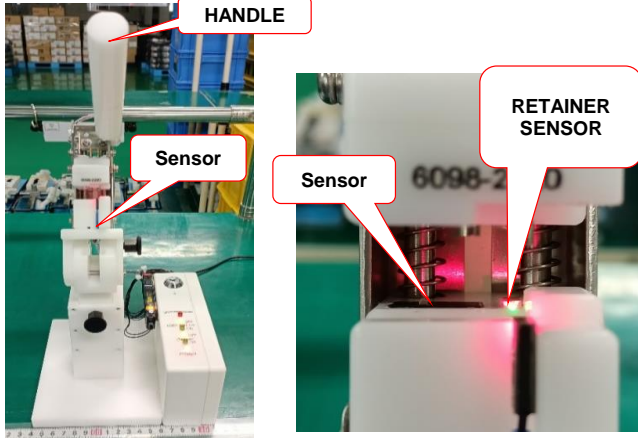
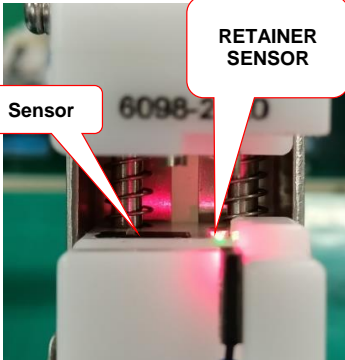
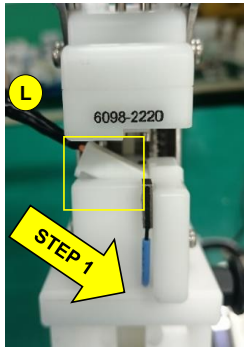
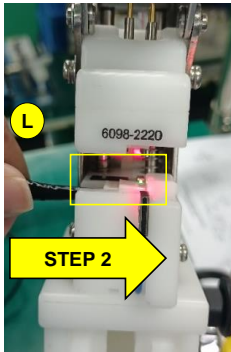
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PARTS:	1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	n/a	Connector lock	<div><div><div>CONNECTOR RETAINER ILLUSTRATION</div><div>SIDE VIEW</div><div></div><div>GOOD</div><div></div><div>NG</div></div><div></div><div></div><div></div><div></div><div>2. Hold the assy parts using left hand and insert into connector locking jig based on the direction of arrow. Make sure the connector touch the sensor. Sound will be heard if properly lock. <b>NOTE: CONNECTOR LOCKING JIG WILL NOT FUNCTION IF CONNECTOR NOT REACH THE SENSOR.</b></div></div>	<div>1. Check the Retainer lock of connector before insertion to locking jig. <i>Note: Must be <b>NO</b> half-locked condition prior connector locking.</i></div> <div>1. Please ensure that Connector lock/retainer will not touch or hit by any object prior insertion into locking jig to avoid half-lock connector. 2. Maintain 10mm proper holding of wire to connector 3. Connector must be fully inserted to connector slot. 4. Make sure no offset setting before locking process. 5. No wrong setting of connector. 6. No damaged connector lock 7. No unlocked/ half-locked connector.</div> <div><b>Important reminders/Note/s:</b> <b>1. Incomplete locking process will alarm the jig.</b> <b>2. No retainer in connector cannot proceed.</b> <b>3. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process.</b></div>

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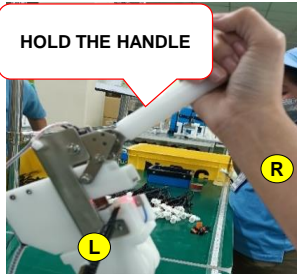
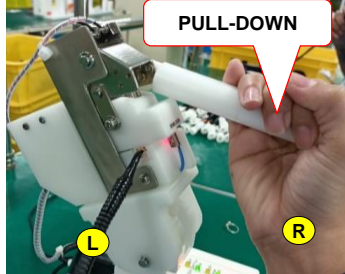
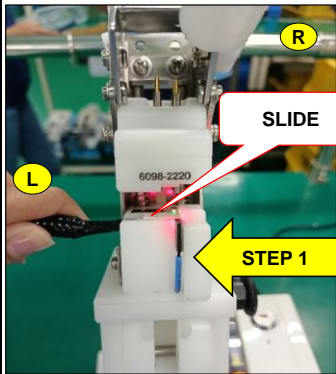
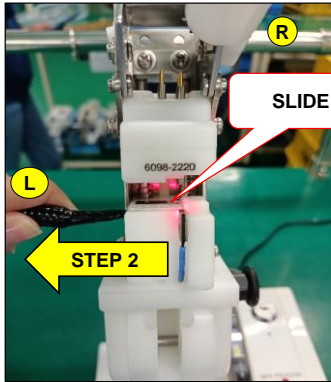
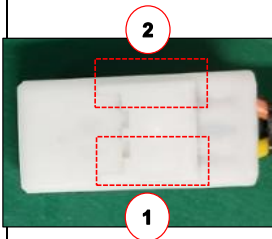
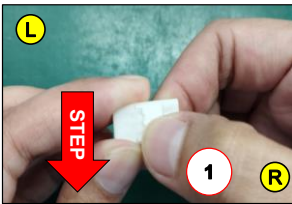
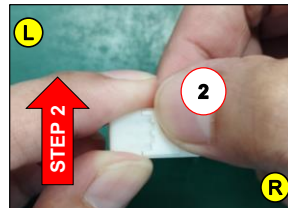
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PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION <sup>1</sup>		TOOLS/PPE	<sup>1</sup> QUALITY POINTERS
4	n/a	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		<p>3. Hold the handle of the connector locking jig using right hand then gently pull down and bring back to original position after locking. Note: Pull down one time only.</p> <p>4. Remove the locked connector using left hand based on the illustration, follow the direction of arrow.</p> <p>5. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</p>	<p>1. Please ensure that Connector lock/retainer will not touch or hit by any object prior insertion into locking jig to avoid half-lock connector.</p> <p>2. Maintain 10mm proper holding of wire to connector</p> <p>3.Connector must be fully inserted to connector slot.</p> <p>4. Make sure no offset setting before locking process.</p> <p>5.No wrong setting of connector.</p> <p>6. No damaged connector lock</p> <p>7. No unlocked/ half-locked connector.</p> <p><b>Important reminders/Note/s:</b></p> <p><b>1. Incomplete locking process will alarm the jig.</b></p> <p><b>2. No retainer in connector cannot proceed.</b></p> <p><b>3. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process.</b></p>

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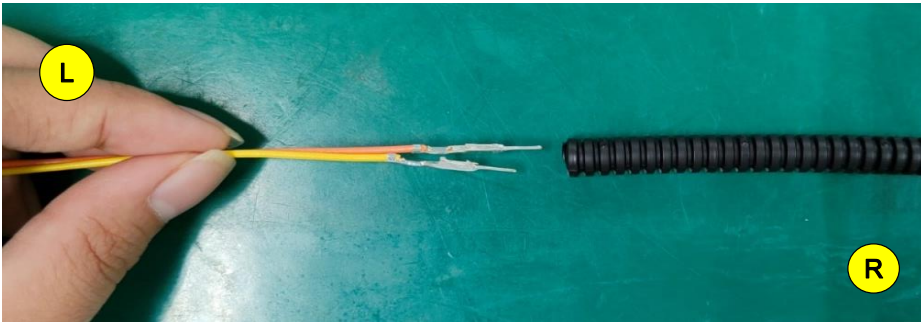
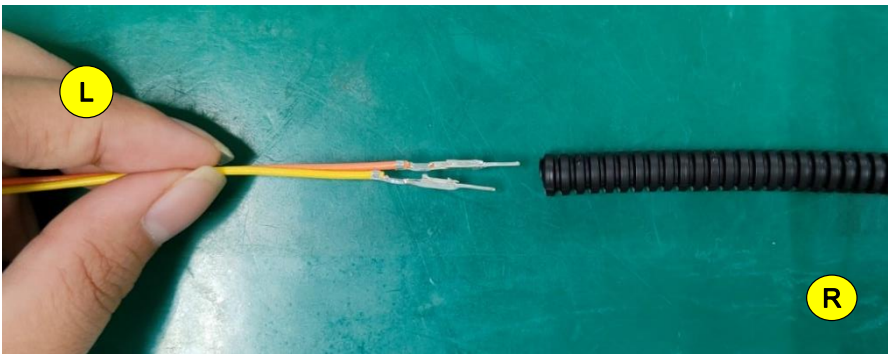
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<b>PARTS:</b>		1. Assy parts	3. Black Corrugated Tube Ø5 L=165±3mm (No Slit)	JIG:	n/a
		2.Black Corrugated Tube Ø5 L=316±3mm (No Slit)			
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>		<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
5		<div></div> <div>1.Get the Black COT <b>Ø5 L=316±3mm (No slit)</b> using right hand and insert <b>Y-OR wires</b> using left hand.</div>		N/A	1. No wrong use of parts 2. No deformed terminal
6	n/a	<div></div> <div>1.Get the Black Corrugated Tube <b>Ø5 L=165±3mm (No Slit)</b> using right hand then insert <b>Y-OR wires</b> using left hand.</div>		N/A	1. No wrong use of parts 2. No deformed terminal

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PARTS:

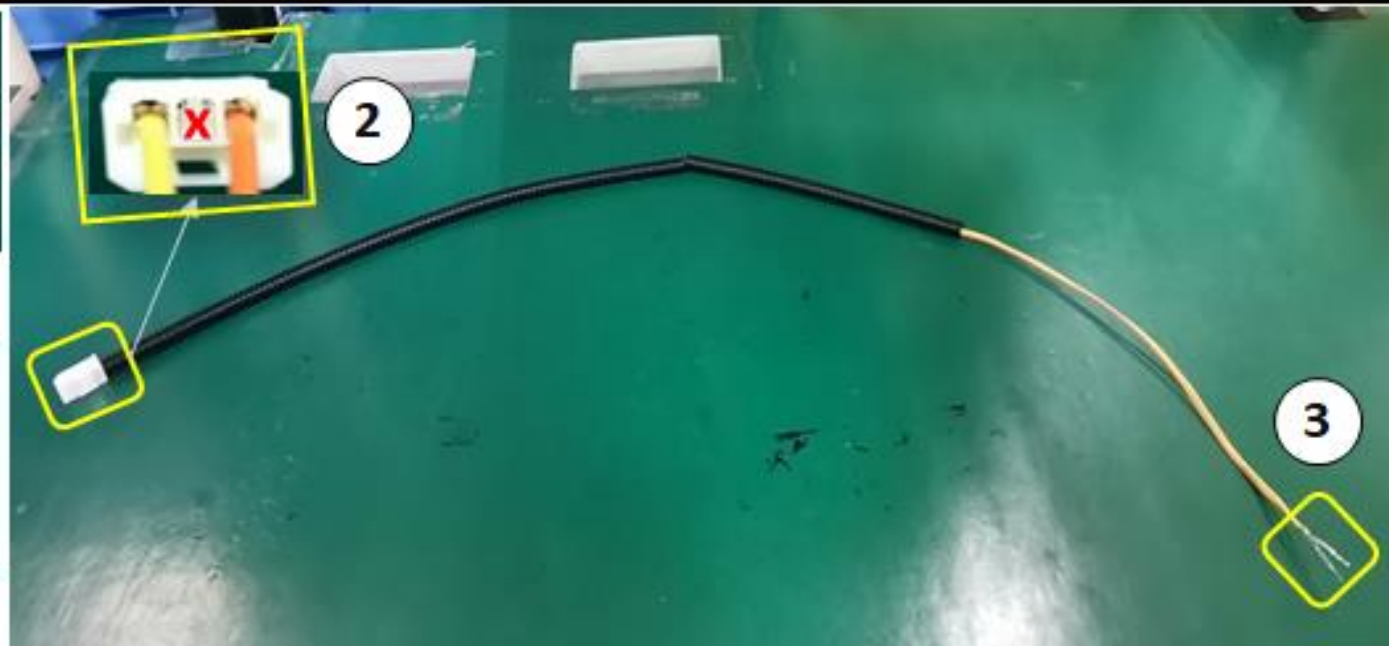
n/a

JIG:

n/a

**QUALITY CHECKPOINTS**

n/a

**7N0099-7020****GOOD****GOOD****NO GOOD****NO GOOD**

① **No Unlock/Halflock  
Connector**  
(on 2 connector)

② **No Wrong Insert**  
(on 2 connector)

③ **No Deformed  
Terminal**

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