

	<b>WORK INSTRUCTION</b>					Effectivity Date:		May 22, 2024	
	<b>OFFLINE ASSEMBLY PROCESS</b>					Validity Date:		n/a	
	Process Name/Title:		Model code/Part number: <b>150B / 7N0003-7023</b>		Customer: <b>TRMX</b>	Car Model: <b>TOYOTA COROLLA</b>	Document No.: <b>WI-ENG-PDE-051</b>		
	Purpose:		<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		Revision No.:		5	Page No.:	1 of 6

<b>PARTS:</b> <span style="border: 1px solid black; padding: 2px;">5</span> 1. All parts: Black corrugated tube Ø5 L=39+2mm; Connector 6098-5668 (W); AVSSf 0.3 Black wires L=193+2mm			JIG:		1. Insertion jig 2. Locking jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS		
1	<span style="border: 1px solid black; padding: 2px;">5</span> Offline Table Lay-out	<div style="border: 1px solid red; padding: 5px; text-align: center; margin-bottom: 10px;"> <b>TABLE LAY-OUT</b> </div>	<div style="border: 1px solid red; padding: 5px; margin-bottom: 10px;"> <b>Safety Instruction</b>          Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)       </div> <div style="border: 1px solid red; padding: 5px; margin-bottom: 10px;"> <b>Housekeeping</b>          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;"> <b>Alert level</b>          For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.       </div>	1. No missing parts/tools 2. No excess parts/tools		


  

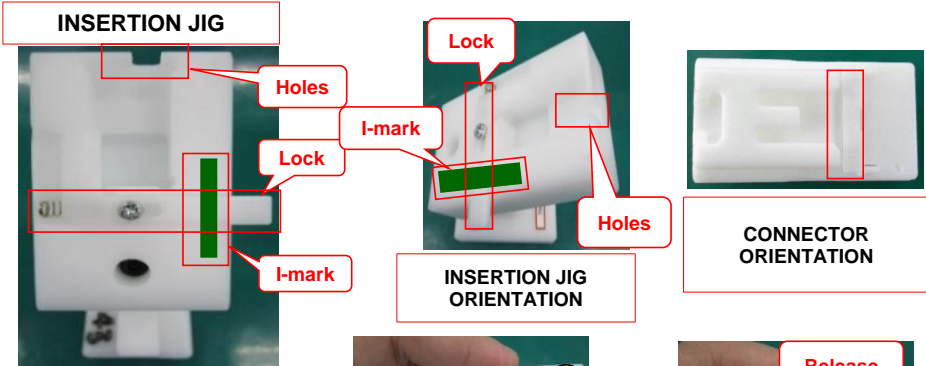
Revision History							Prepared by	Reviewed by	Approved by	Noted by
05/22/24	5	Transfer of Wire insertion to black corrugated tube process due to process improvement. Inclusion of Table lay-out; important reminders and note/s; Document references; Quality checkpoints. Improve work procedure / illustration on process connector lock and By two's inspection. Change assembly proces name from Kitting assembly to Offline assembly. Inclusion of Car model "TOYOTA-COROLLA".	D.Castillo	C. Villanueva	A. Arañes	n/a	 D. Castillo	 C. Villanueva	 A. Arañes	n/a
07/13/21	4	Revised due to applied some improvements in insertion process.	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes				
03/22/21	3	Revise due to standardize the color of connector in accordance with color standardization of plastic parts (Please refer to GL-COM-003 for Color Standardization for Plastic Parts). Apply some improvements	M. Catapang	C. Villanueva	A. Shimamura	A. Arañes				
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	October 17, 2018		

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	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO			Revision No.:	5	Page No.:	2 of 6

<b>PARTS:</b>	1. Connector 6098-5668 (W)			JIG:	1. Insertion jig			
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>			<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>		
2	Offline Connector setting to insertion jig 6098-5668 (W)	<div><p><b>INSERTION JIG</b></p><p><b>Lock</b></p><p><b>Holes</b></p><p><b>I-mark</b></p><p><b>Lock</b></p><p><b>I-mark</b></p><p><b>Lock</b></p><p><b>Holes</b></p><p><b>CONNECTOR ORIENTATION</b></p><p><b>INSERTION JIG ORIENTATION</b></p><p><b>Release</b></p><p><b>Press</b></p><p><b>Press</b></p><p>1. Press the lock of insertion jig using left thumb.</p><p>2. Insert the Connector <b>6098-5668 (W)</b> into jig using right hand and release the lock.</p><p>3. Check the holes/terminal slot for <b>B-B wires</b>.</p></div>			n/a	<div><p>1. Use the provided jig per model</p><p>2. No wrong orientation of connector</p><p>3. No wrong use of connector</p><p>4. No damaged connector</p></div> <div><p><b>Connector Orientation Illustration</b></p><p>I-mark is align</p><p>2 Holes are open</p><p><b>GOOD</b></p><p>I-mark is not align</p><p>All holes are open</p><p><b>NG</b></p></div>		

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**3 of 6****PARTS:**

1. AVSSf 0.3 B L=193±2mm [2pcs]
2. Black Corrugated tube Ø5 L=39+3mm

JIG:

**n/a****NO.****PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS****3**

Offline

Wire insertion to black  
corrugated tube (no slit)  
Ø5 L=39+3mm

1. Get black corrugated tube **Ø5 L=39+3mm** using left hand and insert **AVSSf 0.3 B L=193±2mm** using right hand.

**n/a**

1. No wrong usage of parts
2. No Deformed Terminal

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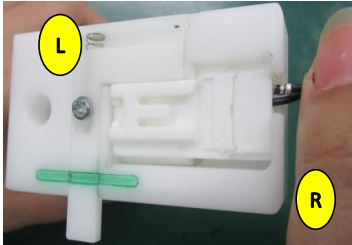
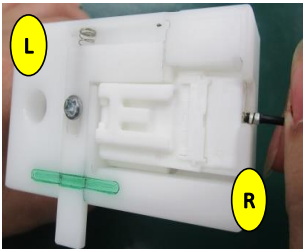
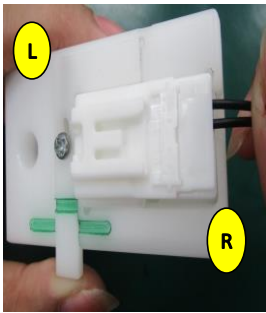
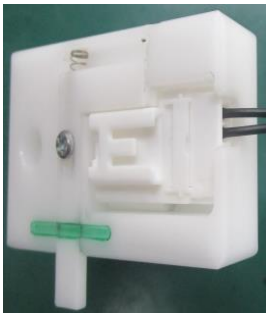
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<b>PARTS:</b>	1. Assy parts			JIG:	1. Insertion jig
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>		<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
4	Offline  Wire insertion to Connector 6098-5668 (W)	<div><b>WIRE FACING</b></div> <div></div> <div><p>1. Get <b>Black wire</b> then insert to terminal slot <b>1</b> using right hand. <b>Note: Make sure to hold the COT using right hand while insertion to prevent deformed in 7D0349 Terminal.</b></p></div> <div><p>2. Get <b>Black wire</b> then insert to terminal slot <b>2</b> using right hand.</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><b>Important reminders/Note/s:</b></p> <p>1. Please hold the wire near terminal.</p> <p>2. Make sure wires are properly inserted. Conduct <b>Pull-Push-Pull-Push</b> after insertion. Do not exert extra force.</p> <p><b>Document references:</b></p> <p>1. Refer to <b>GL-PRO-ASY-029</b> for Pull-Push procedure.</p> <p>2. Refer to <b>WI-PRO-CNC-017</b> for Wire and Strip Length Tolerance</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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Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH


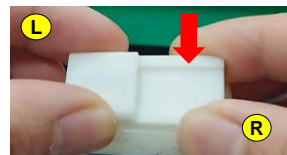



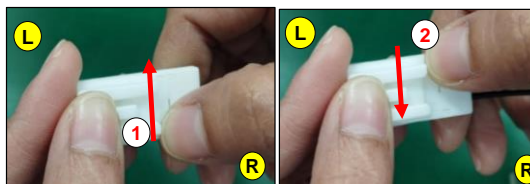





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PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	5 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	Offline Connector lock	<div><div><p>1. Load the connector into the jig holding both side of the connector, tip first.</p></div><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> <div><div>LOCKING JIG</div></div> <div><p>1. No Unlock and half-locked 2. Use provided jig tools per model to avoid damaged lock.</p><p><b>Important reminders/note/s:</b> 1. MANUAL LOCKING MAY CAUSED DAMAGED LOCK 2. Use provided jig tool per model to avoid damaged lock.</p><p><b>Document reference/s:</b> 1. Refer to GL-PRO-ASS-017 for the Verification of Coupler lock</p><div><p>Before pressing</p><p>After pressing</p></div><div><div>GOOD</div><p>Full Lock</p><div>NG</div><p>Half Lock</p></div></div>			

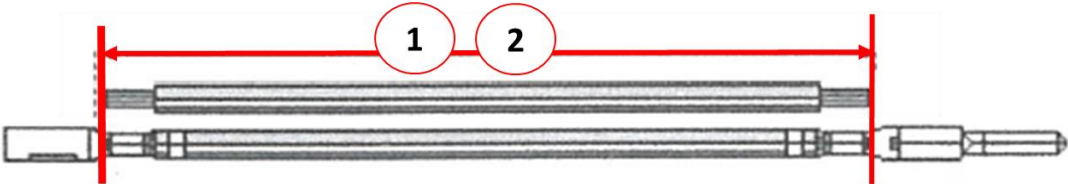
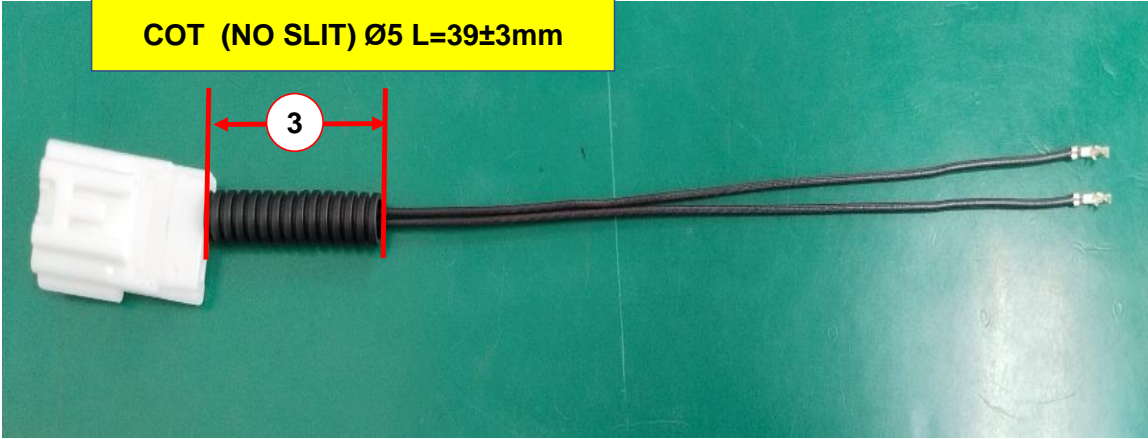

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<b>PARTS:</b>	1. Assy parts			JIG:	1. Locking jig
<b>NO.</b>	<b>PROCESS NAME</b>	<b>5</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>	<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
6	Offline	Measurement	<div>Note: 1. Measurement point: End of core wire to the end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

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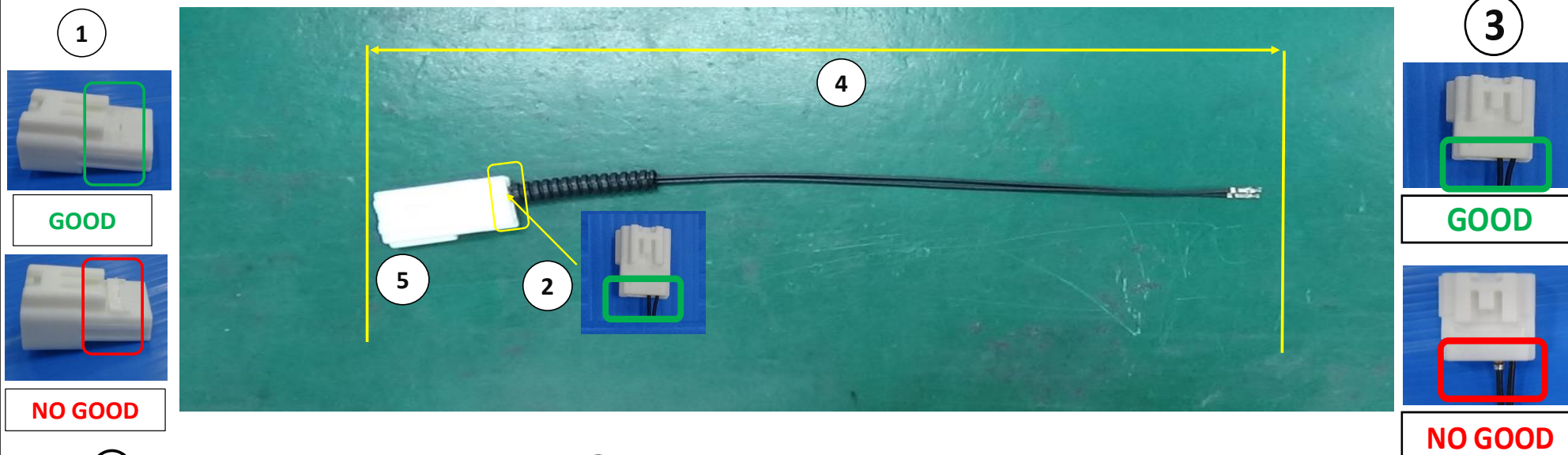
PARTS:

n/a

JIG:

n/a

5

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****OFFLINE INSERTION****7N0003-7023****1** No Unlocked/Half-locked connector**2** No Wrong insert**3** No Terminal Backing Out**4** Check the Alignment**5** No Deformed terminal

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