

	WORK INSTRUCTION					Effectivity Date:		March 12, 2025		
	TAPING ASSEMBLY PROCESS					Validity Date:		n/a		
	Process Name/Title:		Model code/Part number: 560B / 17L544-7050		Customer: TRP	Car Model: TOYOTA-INNOVA	Document No.:		WI-ENG-PDE-268D	
	Purpose:		<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		Revision No.:		8	Page No.:	1 of 5	

PARTS:	1. Connector 4F1640-000□ (W) 2. Assy parts				JIG:	1. Insertion jig				
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS			
1	<div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">8</div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px; text-align: center;">HIGH</div> </div> <p>Connector setting to insertion jig (Group 2 wires) 4F1640-0000 (W)</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>INSERTION JIG</p> </div> <div style="text-align: center;"> <p>CONNECTOR ORIENTATION</p> </div> </div> <div style="margin-top: 10px;"> <p>Visual reference Unlock lever</p> </div> <div style="margin-top: 10px;"> <p>Holder</p> </div> <div style="margin-top: 10px;"> <p>Guide Lock</p> </div> <div style="margin-top: 10px;"> <p>BEFORE PRESSING AFTER PRESSING</p> </div> <div style="margin-top: 10px;"> <p>Holder</p> </div>				<div style="border: 1px solid red; padding: 5px; margin-bottom: 10px;"> Safety Instruction Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.) </div> <div style="border: 1px solid red; padding: 5px; margin-bottom: 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;"> Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action. </div>		<div style="margin-bottom: 10px;"> 1. Use the provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector 5. No half-locked connector </div> <div style="margin-bottom: 10px;"> Important reminders/Note/s: 1. <i>Automatically dispose and replace the unit if once encountered Bend terminal, Difficulty of insertion, Half-locked connector.</i> 2. <i>If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process. Do not attempt to repair.</i> 3. <i>Follow the connector orientation.</i> </div> <div style="border: 1px solid red; padding: 5px; text-align: center; margin-bottom: 10px;"> Connector must be no damaged/half-locked/locked </div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>GOOD</p> </div> <div style="text-align: center;"> <p>NG</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>UNLOCK</p> </div> <div style="text-align: center;"> <p>HALF-LOCKED</p> </div> </div>		
Revision History										
03/12/25	8	Inclusion of Quality improvement measures (based on Mizen Boshi activity).	D.Castillo	J. Loterte	C. Villanueva	A. Arañes	Prepared by	Checked by	Reviewed by	Approved by
02/13/24	7	Update connector lock work procedure/illustration.	D. Castillo	C. Villanueva	A. Arañes	n/a	 D. Castillo	 J. Loterte	 C. Villanueva	 A. Arañes
08/15/23	6	Update Template; Inclusion of CAR MODEL "TOYOTA-INNOVA" . Transfer process of Connector lock from P2 to P4 (Please refer to ENGDRR-146) due to TPS improvements; Additional procedure for Connector lock- "Conduct checking of Connector lock side by side (left to right)" (Refer to ENGDRR-142 for Document revision request).	M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
Eff. Date	Rev. No	Details of Change		Revised	Checked	Reviewed	Approved	Est. Date:	May 14, 2021	

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WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

Process Name/Title:

Model code/Part number: 560B / 17L544-7050

Customer: TRP

Car Model: TOYOTA-INNOVA

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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8

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PARTS:

1. Assy parts

JIG:

1. Insertion jig

NO.

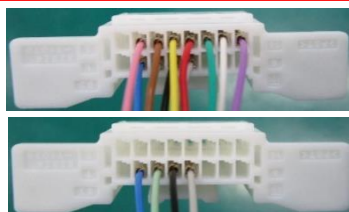
PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

WIRE INSERTION ILLUSTRATION



SECOND ROW TO INSERT	P	BR	Y	R	G	W	V
	175	176	178	178	184	188	188
FIRST ROW TO INSERT	L	LG	B	GR			
	175	176	177	179			

Standard hold in wire



TERMINAL FACING

5mm

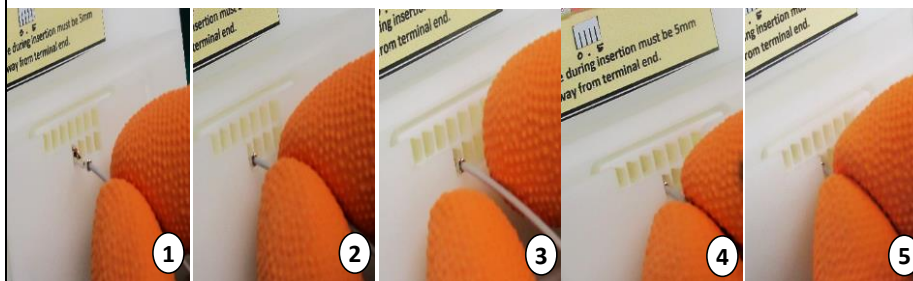
Finger COTS



8

MEDIUM

Wire insertion to connector
(Group 2 wires)
4F1640-0000 (W)



1. Get the wire and hold it 5mm away from terminal.
2. Half insert the wire.
3. Release wire to check the color.
4. Conduct point checking in visual
5. Hold again 5mm away from terminal
6. Fully inserted wires (avoid bending during insertion)

1. No wrong wire insertion
2. No terminal backing out
3. No deformed terminal
4. Make sure wires are properly inserted.
5. Must have slight MOVEMENT after insertion
6. No bend terminal/wires

Important reminders/Note/s:

1. Automatically dispose and replace the unit if once encountered Bend terminal, Difficulty of insertion, Half-locked connector.
2. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process. Do not attempt to repair.
3. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.
4. Follow the insertion sequence based on the visual reference
5. Hold on wire during insertion must be 5mm away from terminal end.

Document references:

1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.

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PARTS:	1. Assy parts			JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P4 8 MEDIUM Wire insertion to connector (Group 2 wires) 4F1640-0000 (W) (Continuation)	<p>7. Release the Group 1 wires [12pcs.] (Assy parts) using left hand.</p> <p>UNLOCK LEVER</p> <p>BEFORE PRESSING</p> <p>AFTER PRESSING</p> <p>8. Press the unlock lever using right thumb.</p> <p>9. Hold the wires using right hand then gently pull out the connector from jig. Check the insertion condition.</p>			<p>1. No wrong wire insertion 2. No terminal backing out 3. No deformed terminal 4. Make sure wires are properly inserted. 5. Must have slight MOVEMENT after insertion 6. No bend terminal/wires</p> <p>Important reminders/Note/s:</p> <p>1. Automatically dispose and replace the unit if once encountered Bend terminal, Difficulty of insertion, Half-locked connector.</p> <p>2. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process. Do not attempt to repair.</p> <p>3. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>4. Follow the insertion sequence based on the visual reference 5. Hold on wire during insertion must be 5mm away from terminal end.</p> <p>Document references:</p> <p>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p> <p>2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p>

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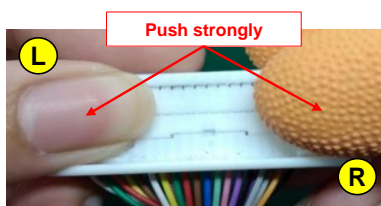
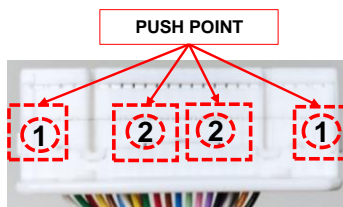
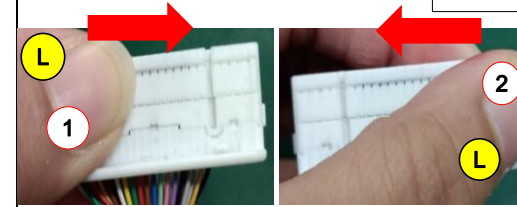
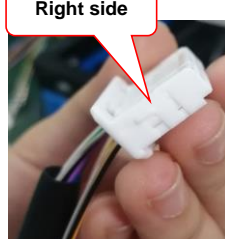
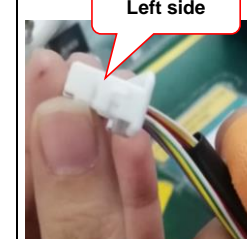
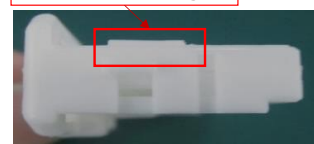
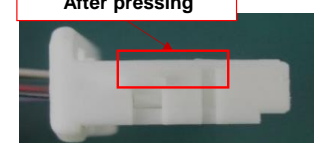
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Model code/Part number: **560B / 17L544-7050**

Customer: **TRP**

Car Model: **TOYOTA-INNOVA**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:	1. Assy parts		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P4 <div>8</div> <div>LOW</div> Connector lock	<div></div> <div><p>Sequence of Pressing the Double Lock: ① - ① ~ ② - ② Method: Press same timing using both thumbs</p></div> <div><p>1. Push the double lock using left & right thumb ①-① (Same timing) and press the center using left and right thumb ②-② (Same timing). 2. Check the connector lock after locking.</p></div> <div></div> <div><p>3. Ensure that connector is in locked condition by slide touching the connector lock from left to right based on the sequence illustrated.</p></div> <div></div> <div><p>4. Conduct visual checking of connector (1827842-1) (W) from side to side (Left to right).</p></div>	n/a	<div><p>Before pressing</p></div> <div><p>After pressing</p></div> <p>1. No damaged double lock. 2. No half-locked connector</p>

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☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:	1. Assy parts			JIG:	1. WIP Holder
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P4 Pass WIP to P5	<div>3 PIECES FLOW</div> <div></div> <div>1. Pass WIP to WIP Holder. Note: Three pieces flow.</div>		<div>WIP HOLDER</div> <div></div>	1. No WIP overflow

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