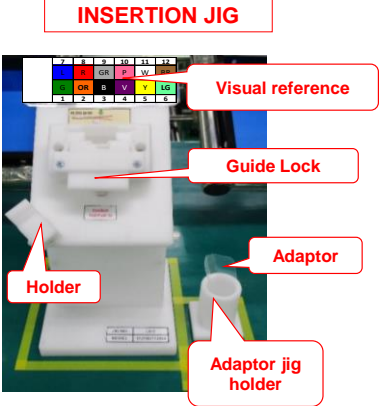

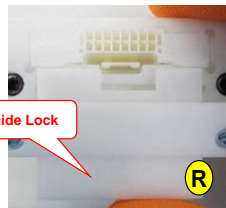
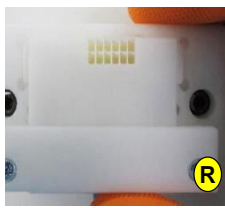
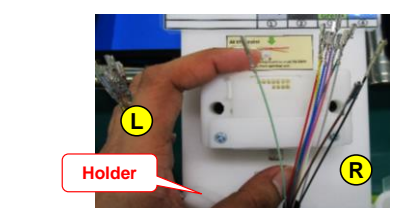







	WORK INSTRUCTION			Effectivity Date:	March 12, 2025		
	Process Name/Title: TAPING ASSEMBLY PROCESS			Validity Date:	n/a		
	Model code/Part number: 560B / 17L544-7050	Customer: TRP	Car Model: TOYOTA-INNOVA	Document No.:	WI-ENG-PDE-268C		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/>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

PARTS:		1. Connector 4F1640-000 (W) 2. Assy parts [Group 1 wires, Connector with Black VM Tube (Sunprene)]		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
1	<div style="text-align: center;"> <div>8</div> <div>HIGH</div> </div> <p>Connector setting to insertion jig (Group 1 wires) 4F1640-0000 (W)</p>	<div style="display: flex; justify-content: space-around;"> <div> <p>INSERTION JIG</p>  </div> <div> <p>CONNECTOR ORIENTATION</p>  <p>1. Get the connector 4F1640-000□ (W) using right hand then set to insertion jig.</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div> <p>BEFORE PRESSING</p>  </div> <div> <p>AFTER PRESSING</p>  </div> <div> <p>Holder</p>  </div> </div> <p>2. Press the guide lock using right thumb.</p> <p>3. Hold the Group 1 wires [12pcs. with Black VM tube (Sunprene)] using right hand then put the Group 2 wires [11pcs.] in holder using left hand.</p>		<p>Safety Instruction Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p> <p>FINGER COTS</p> 	<p>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</p> <p>Important reminders/Note/s: <i>1. Automatically dispose and replace the unit if once encountered Bend terminal, Difficulty of insertion, Half-locked connector.</i> <i>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.</i> <i>3. Follow the connector orientation.</i></p> <p>Connector must be no damaged/half-locked/locked</p> <div style="display: flex; justify-content: space-around;"> <div> <p>GOOD</p>  <p>UNLOCK</p> </div> <div> <p>NG</p>  <p>HALF-LOCKED</p> </div> </div>

Revision History							Prepared by	Checked by	Reviewed by	Approved by
03/12/25	8	Inclusion of Quality improvement measures (based on Mizen Boshi activity).	D.Castillo	J. Loterte	C. Villanueva	A. Arañes	 D. Castillo	 J. Loterte	 C. Villanueva	 A. Arañes
09/01/23	7	Correction of process no. from P4 no P3.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
08/15/23	6	Update template; Inclusion of CAR MODEL "TOYOTA-INNOVA" . (Please refer to ENGDRR-146 for Document revision request). Transfer process of Connector lock from P3 to P5 due to TPS improvement.	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

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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	L	R	GR	P	W	BR
	187	184	179	177	183	178
FIRST ROW TO INSERT	G	OR	B	V	Y	LG
	191	181	181	177	180	176

Standard hold in wire

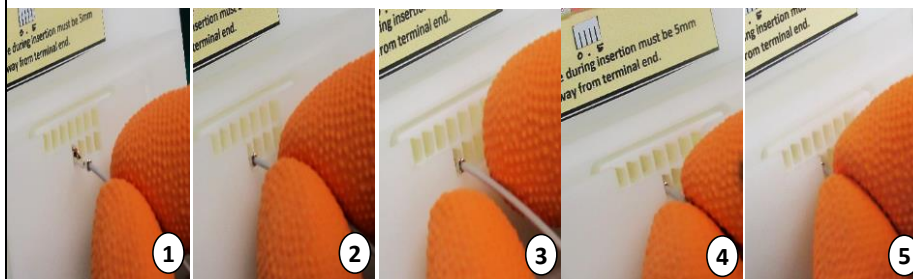


5mm

MEDIUM

Wire insertion to connector
(Group 1 wires)
4F1640-000 (W)

Finger COTS



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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560B / 17L544-7050Customer: **TRP**Car Model: **TOYOTA-INNOVA**

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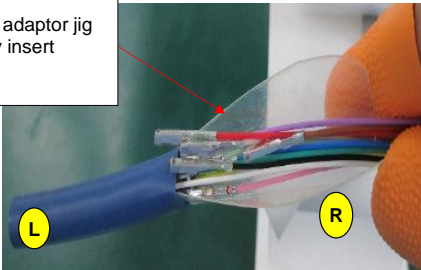
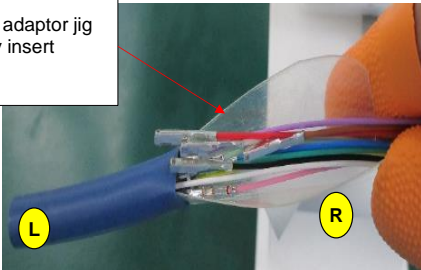
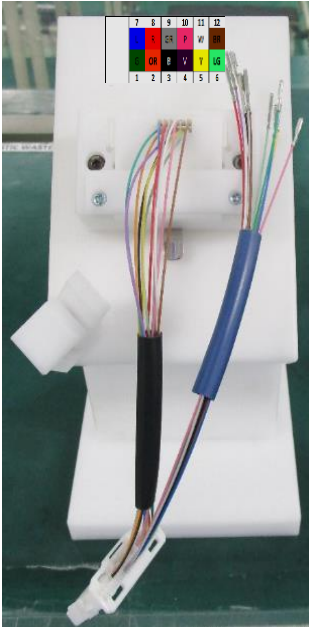
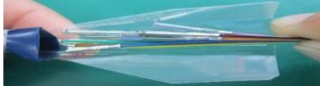
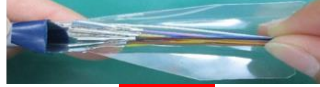


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PARTS:		1. Assy parts 2. Blue VM Tube (Sunprene) $\phi 7$ L=55 \pm 5mm		JIG:	1. Insertion jig 2. Adaptor jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P3 <div>Wire insertion to Blue VM Tube (Sunprene) $\phi 7$ L=55\pm5mm</div> <div>MEDIUM</div>	<div><div><div><div><div>L</div><div>R</div></div></div><div><div>1. Get the Blue VM Tube (Sunprene) $\phi 7$ L=55\pm5mm using left hand then insert the adaptor jig using right hand.</div></div></div><div><div><div><div>L</div><div>R</div></div></div><div><div>2. Release the Group 2 wires [12pcs.] using right hand.</div></div></div><div><div><div><div>L</div><div>R</div></div></div><div><div>3. Insert the wires to Blue VM Tube (Sunprene) using right hand.</div></div></div><div></div></div>		<div>Adaptor jig</div> <div>Finger COTS</div>	<div><div>GOOD</div><div>NG</div><div>Wires must not be inserted at the same time</div></div> <div><div>1. No wrong use of parts. 2. No remaining wires outside Blue sunprene tube 3. No cut tube 4. Wires must not be inserted at the same time</div></div> <div><div>STANDARD TUBE APPEARANCE</div><div><div>GOOD</div><div>NG</div><div>MUST BE NO CUT/DAMAGED TUBE</div></div></div>

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WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

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Purpose:

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☐ PRE-LAUNCH

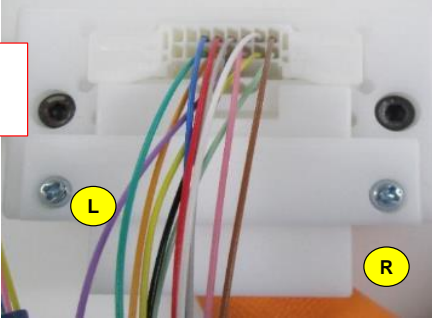
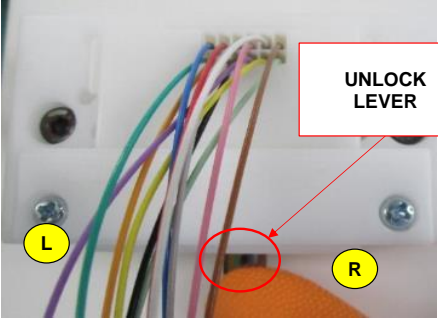
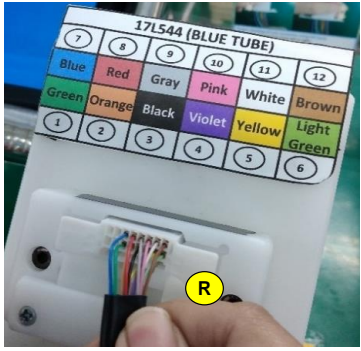





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PARTS:	1. Assy parts			JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	<div data-bbox="309 539 353 587">8</div> <div data-bbox="387 730 510 770">MEDIUM</div> <div data-bbox="338 818 544 906">Wire insertion to Blue VM Tube (Sunprene) ø7 L=55±5mm (Continuation)</div> <div data-bbox="286 850 320 866">P3</div>	<div data-bbox="589 395 1462 715"></div> <div data-bbox="651 722 954 762">BEFORE PRESSING</div> <div data-bbox="1106 722 1408 762">AFTER PRESSING</div> <div data-bbox="712 826 1167 898">4. Press the unlock lever using right thumb.</div> <div data-bbox="633 938 992 1289"></div> <div data-bbox="1048 986 1402 1249">5. Hold the wires using right hand then gently pull out the connector from jig. Check the insertion condition.</div>		<div data-bbox="1507 802 1682 882">Finger COTS</div> <div data-bbox="1491 898 1697 1010"></div>	<div data-bbox="1720 419 2105 523">1. No wrong use of parts 2. No remaining wires outside black sunprene tube 3. No cut tube</div> <div data-bbox="1742 555 2096 595">STANDARD TUBE APPEARANCE</div> <div data-bbox="1776 595 2040 866"><div data-bbox="1798 850 1910 866">GOOD</div><div data-bbox="1955 850 2022 866">NG</div></div> <div data-bbox="1742 882 2096 930">MUST BE NO CUT/DAMAGED TUBE</div> <div data-bbox="1753 962 2085 1018">NO BEND TERMINAL/WIRES</div> <div data-bbox="1749 1018 2101 1345"><div data-bbox="1850 1153 2000 1177">GOOD</div><div data-bbox="1917 1313 1977 1337">NG</div></div>

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PARTS:	1. Assy parts			JIG:	1. WIP Holder
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P3 Pass WIP to P4	<div>3 PIECES FLOW</div>  <div>1. Pass WIP to WIP Holder. Note: Three pieces flow.</div>		<div>WIP HOLDER</div> 	1. No WIP overflow

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