
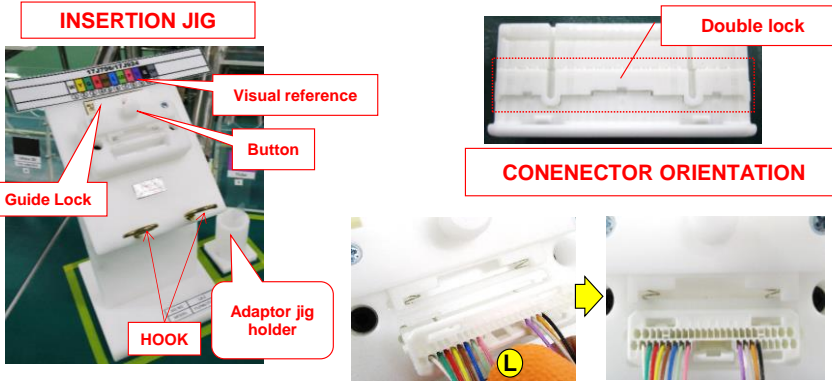
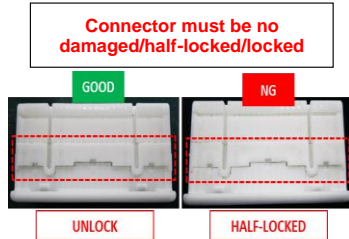
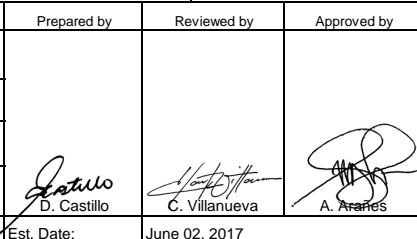


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|---|---|--|-------------------------------------|---------------|---|------------------|-----------------|----|------------------|
|  | WORK INSTRUCTION TAPING ASSEMBLY PROCESS | | | | Effectivity Date: | December 4, 2024 | | | |
| | Process Name/Title: | | | | Validity Date: | n/a | | | |
| | Model code/Part number: 350B/320B/014B/360B/150B/ | | 17J796-7051 | Customer: TRP | Car Model: TOYOTA-COROLLA/RAV-4/ HIGHLANDER | Document No.: | WI-ENG-PDE-091B | | |
| | Purpose: <input type="checkbox"/> PROTOTYPE | | <input type="checkbox"/> PRE-LAUNCH | | <input checked="" type="checkbox"/> MASSPRO | | Revision No.: | 20 | Page No.: 1 of 5 |

| | | | | | | |
|--------|---|--|--|--|---|--|
| PARTS: | | 1. Assy parts | | JIG: | 1. Insertion jig | |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS | |
| 1 | P2 Connector setting to insertion jig (Assy parts) 1827842-1 (W) | <div>  <p>1. Get the connector 1827842-1 (W) (Assy parts) using left hand then set to insertion jig.</p> <p>2. Press the guide lock using left index finger.</p> </div> | | <div> <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> </div> | <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: 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. Follow the connector orientation. </p> <div> <p>Connector must be no damaged/half-locked/locked</p>  </div> | |

| | | | | | | | |
|------------------|---------|---|------------|---------------|--------------|-------------|---|
| Revision History | | | | Prepared by | Reviewed by | Approved by | Noted by |
| 12/04/24 | 20 | Inclusion of Quality improvement measures (based on Mizen Boshi activity). Inclusion of Car model "TOYOTA-COROLLA/RAV-4/ HIGHLANDER" | D.Castillo | C. Villanueva | A. Arañes | n/a |  |
| 07/25/23 | 19 | Transfer process of Connector lock to P4 due to TPS improvements. | M. Ariola | J. Loterte | C.Villanueva | A. Arañes | |
| 03/02/23 | 18 | Change WIP flow quantity from [1pc] flow to [3pcs] flow due to process improvement. | M. Ariola | J. Loterte | C.Villanueva | A. Arañes | |
| 01/19/23 | 17 | Update Work procedure and illustration in process no.4 (Connector lock) as document process improvement. Change term from Black Sunprene tube to Black VM tube (Sunprene) | D.Castillo | J. Loterte | C.Villanueva | A. Arañes | |
| Eff. Date | Rev. No | Details of Change | Revised | Reviewed | Approved | Noted | Est. Date: June 02, 2017 |



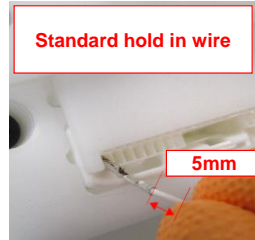

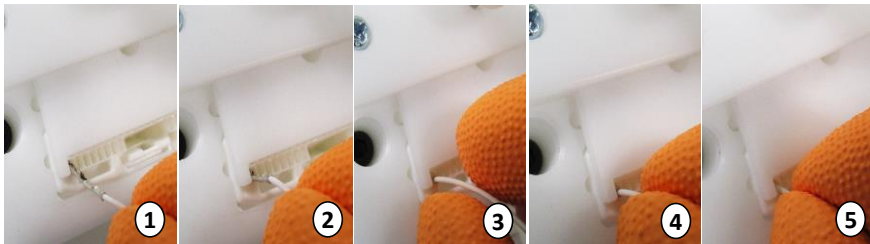
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WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

| | | | |
|-------------------|------------------|-----------|--------|
| Effectivity Date: | December 4, 2024 | | |
| Validity Date: | n/a | | |
| Document No.: | WI-ENG-PDE-091B | | |
| Revision No.: | 20 | Page No.: | 2 of 5 |

| | | | | |
|-------------------------|--|-------------|---------------|---|
| Process Name/Title: | TAPING ASSEMBLY PROCESS | | | |
| Model code/Part number: | 350B/320B/014B/ 360B/150B/ | 17J796-7051 | Customer: TRP | Car Model: TOYOTA-COROLLA/ RAV-4/ HIGHLANDER |
| Purpose: | <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO | | | |

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|---------------|--|--|-----|---------------|------------------|-----|-----|-----|-----|-----|--|--|--|--|---|---|---|---|----|---|----|---|---|---|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|---|---|---|---|---|---|---|----|----|---|
| PARTS: | | 1. Assy parts 2. CIVUS 0.13 W L=183±2mm; Y L=178±2mm; G L=181±2mm; R L=178±2mm; BR L=176±2mm; L L=175±2mm; LG L=176±2mm; P L=175±2mm; V L=185±2mm; B L=179±2mm; GR L=179±2mm; | | JIG: | 1. Insertion jig | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | P2 <div>20</div> <div>MEDIUM</div> <div>Wire insertion to connector (Group 2 wires) 1827842-1 (W)</div> | <div>WIRE INSERTION ILLUSTRATION</div> <div></div> <div><table><tr><td colspan="11">17J796/17J824</td></tr><tr><td>W</td><td>Y</td><td>G</td><td>R</td><td>BR</td><td>L</td><td>LG</td><td>P</td><td>V</td><td>B</td><td>GR</td></tr><tr><td>183</td><td>178</td><td>181</td><td>178</td><td>176</td><td>175</td><td>176</td><td>175</td><td>185</td><td>179</td><td>179</td></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td></tr></table></div> <div><div>GOOD SHORT terminal</div><div></div><div>NG LONG terminal</div></div> <div>Terminal facing</div> <div><div>Standard hold in wire</div><div></div><div>5mm</div></div> <div><div>Finger COTS</div><div></div></div> <div></div> <div><div>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)</div></div> | | 17J796/17J824 | | | | | | | | | | | W | Y | G | R | BR | L | LG | P | V | B | GR | 183 | 178 | 181 | 178 | 176 | 175 | 176 | 175 | 185 | 179 | 179 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | <div>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</div> <div><div>Important reminders/Note/s:</div><div>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.</div><div><div>Document references:</div><div>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</div></div></div> |
| 17J796/17J824 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| W | Y | G | R | BR | L | LG | P | V | B | GR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 183 | 178 | 181 | 178 | 176 | 175 | 176 | 175 | 185 | 179 | 179 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Effectivity Date:

December 4, 2024

Process Name/Title:

Validity Date:

n/a

Model code/Part number:

350B/320B/014B/
360B/150B/

17J796-7051

Customer: TRP

Car Model:

TOYOTA-COROLLA/
RAV-4/ HIGHLANDER

Document No.:

WI-ENG-PDE-091B

Purpose:

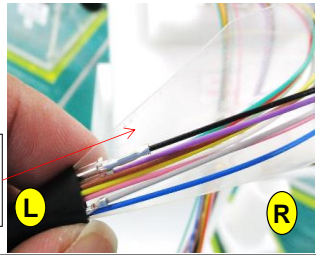

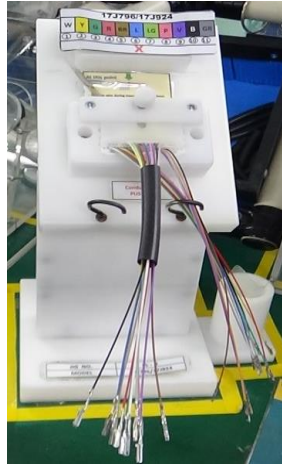





☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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| PARTS: | | 1. Assy parts 2. Black 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 | P2 Wire insertion to Black VM tube (Sunprene) $\phi 7$ L=55 \pm 5mm | <div><div></div><div><div>1. Get the Black VM tube (Sunprene) $\phi 7$ L=55\pm5mm using left hand then insert the adaptor jig using right hand.</div><div>2. Hold the Group 2 wires [11pcs.] using right hand.</div><div>3. Insert the wires to Black VM tube (Sunprene) using right hand.</div></div></div> <div><div></div></div> | | <div><div>Adaptor jig</div><div>Finger COTS</div></div> | <div><div></div><div>GOOD</div><div>NG</div><div>Wires must not be inserted at the same time</div><div>1. No wrong use of parts. 2. No remaining wires outside black sunprene tube 3. No cut tube 4. Wires must not be inserted at the same time</div><div>STANDARD TUBE APPEARANCE</div><div></div><div>GOOD</div><div>NG</div><div>MUST BE NO CUT/DAMAGED TUBE</div></div> |

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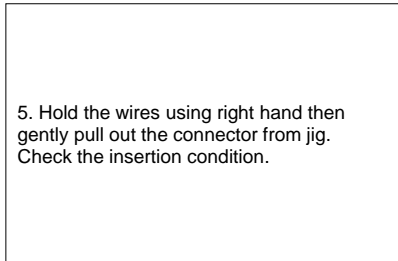



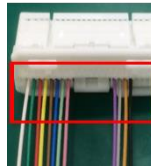
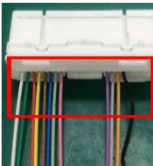
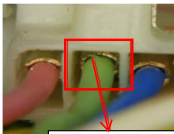
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| PARTS: | 1. Assy parts | | | JIG: | 1. Insertion jig |
|--------|--|--|--|---|--|
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS |
| 3 | P2 <div>20</div> <div>MEDIUM</div> <div>Wire insertion to Black VM tube (Sunprene) ø7 L=55±5mm (Continuation)</div> | <div><div><div>Button</div><div>L</div><div>R</div><div>BEFORE PRESSING</div></div><div><div>L</div><div>R</div><div>AFTER PRESSING</div></div><div><div>4. Press the button using left thumb.</div><div><div>R</div></div></div><div><div>5. Hold the wires using right hand then gently pull out the connector from jig. Check the insertion condition.</div><div><div>R</div></div></div></div> | | <div>Finger COTS</div> <div></div> | <div>1. No wrong use of parts 2. No remaining wires outside black sunprene tube 3. No cut tube</div> <div>STANDARD TUBE APPEARANCE</div> <div><div><div>GOOD</div></div><div><div>NG</div></div><div>MUST BE NO CUT/DAMAGED TUBE</div><div><div>No bend terminal/wires</div><div><div><div>GOOD</div></div><div><div>NG</div></div></div><div><div>No damaged/whitens</div><div><div></div></div></div></div></div> |

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**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

December 4, 2024

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Model code/Part number:

350B/320B/014B/
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Document No.:

WI-ENG-PDE-091B

Purpose:



PROTOTYPE



PRE-LAUNCH





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| | | | | | |
|---------------|----------------------|---|--|---|-------------------------|
| PARTS: | 1. Assy parts | | | JIG: | 1. WIP Holder |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS |
| 4 | P2 Pass WIP to P3 | <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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