
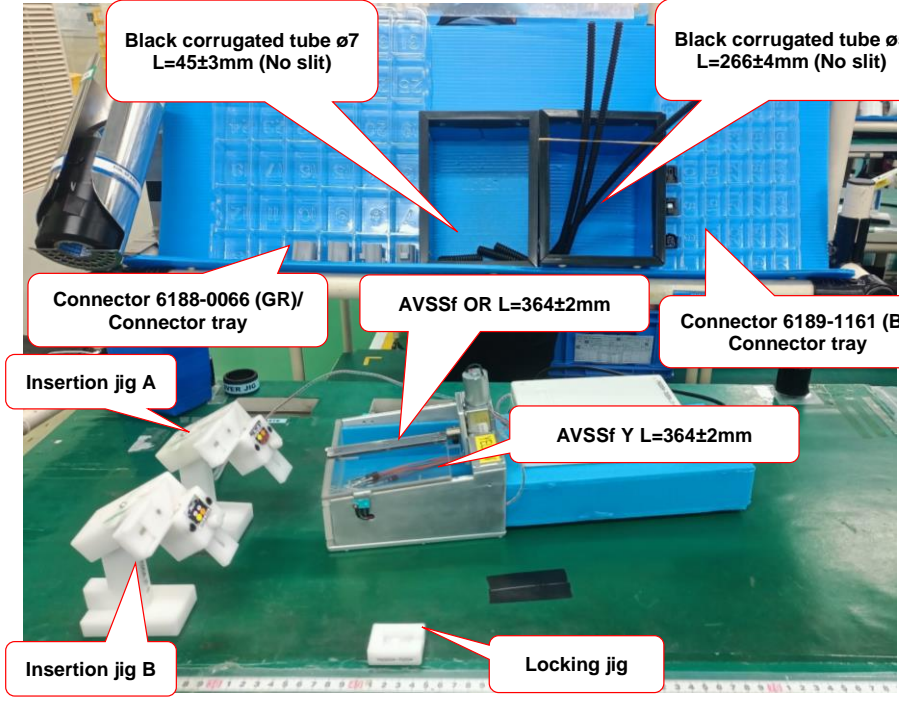






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|  | WORK INSTRUCTION | | | | Effectivity Date: | November 18, 2024 | | |
| | Process Name/Title: OFFLINE ASSEMBLY PROCESS | | | | Validity Date: | n/a | | |
| | Model code/Part number: 930B / 7N0204-7020C | | Customer: TRJ | Car Model: TOYOTA-4 RUNNER | Document No.: | | WI-ENG-PDE-874 | |
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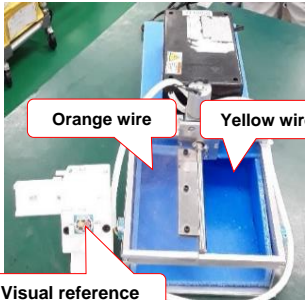
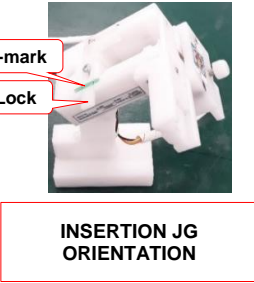
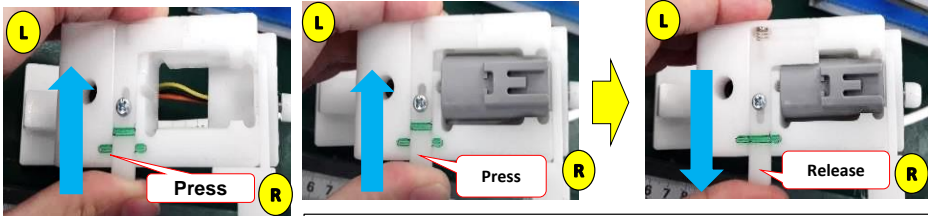
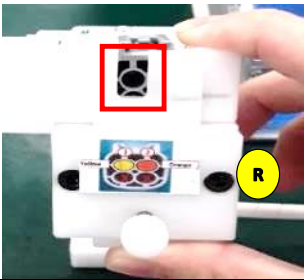
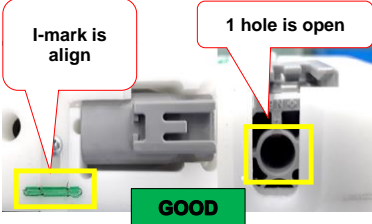
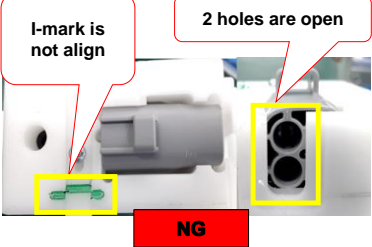
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|---------------|--|--|--|------|---|--|--|--|
| PARTS: | 1. All parts: Connector 6188-0066 (GR); AVSSf Y-OR L=364±2mm; Black corrugated tube ø7 L=45±3mm (No slit); Black corrugated tube ø5 L=266±4mm (No slit); Connector 6189-1161 (B) | | | JIG: | 1. Insertion jig with switch cover 2. Insertion jig 3. Locking jig | | | |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | | TOOLS/PPE | QUALITY POINTERS | | |
| 1 | Offline | <div><div>TABLE LAY-OUT</div></div> | | | <div>Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</div> <div>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div> | <div>Document references: 1. Refer to WI-PRO-CNC-017 for Wire and Strip length tolerance.</div> <div>1. No missing parts/tools 2. No excess parts/tools</div> | | |

| | | | | | | | | | | | |
|------------------|---------|------------------------------------|--|--|--|--|---------|--|--|--|----------|
| Revision History | | | | | | | | Prepared by | Reviewed by | Approved by | Noted by |
| 11/18/24 | 1 | Change from Pre-launch to Masspro. | | | | | |  D. Castillo |  C. Villanueva |  A. Arañes | n/a |
| 04/16/24 | 0 | Initial issue | | | | | | | | | |
| Eff. Date | Rev. No | Details of Change | | | | | | | | | |
| | | | | | | | Revised | Reviewed | Approved | Noted | |

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| | OFFLINE ASSEMBLY PROCESS | | | | Validity Date: | n/a | | | | |
| | Process Name/Title: | | Model code/Part number: 930B / 7N0204-7020C | | Customer: TRJ | Car Model: TOYOTA-4 RUNNER | | Document No.: | WI-ENG-PDE-874 | |
| | Purpose: | | <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO | | Revision No.: | | 1 | Page No.: | 2 of 9 | |

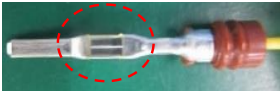
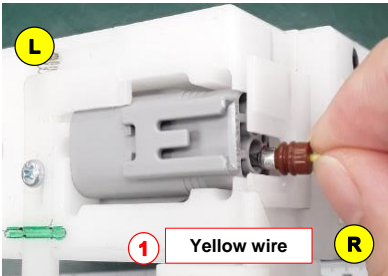
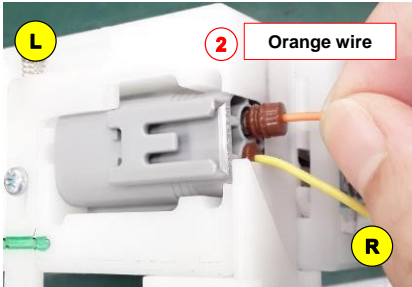
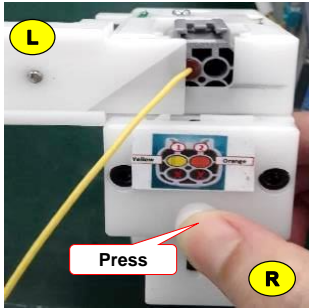
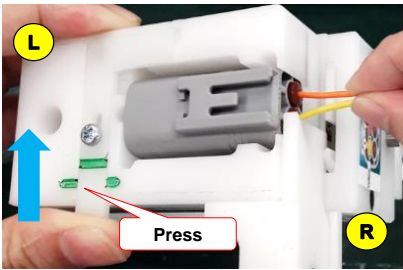
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|---------------|--|---|------------------|---|------------------------------------|--|
| PARTS: | | 1. Connector 6188-0066 (GR) | | JIG: | 1. Insertion jig with switch cover | |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | TOOLS/PPE | QUALITY POINTERS | | |
| 2 | Offline Connector setting to insertion jig 6188-0066 (GR) | <div><p>Insertion jig with switch cover</p><p>Orange wire Yellow wire</p><p>I-mark Lock</p><p>Visual reference</p><p>Visual reference</p><p>CONNECTOR ORIENTATION</p><p>Press Press Release</p><p>1. Press the lock using left hand.</p><p>2. Get the connector 6188-0066 (GR) using right hand and insert to insertion jig. Release the lock after insertion.</p><p>3. Push the lower wire guide upward using right hand. Slot for Yellow wire will be opened.</p></div> | n/a | <div><p>CONNECTOR ORIENTATION ILLUSTRATION</p><p>I-mark is align 1 hole is open</p><p>GOOD</p><p>I-mark is not align 2 holes are open</p><p>NG</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><p>Important reminders/Note/s: 1. Follow the connector orientation</p></div> | | |

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| | Model code/Part number: 930B / 7N0204-7020C | | Customer: TRJ | Car Model: TOYOTA-4 RUNNER | Document No.: | WI-ENG-PDE-874 | | |
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| | | | | | |
|---------------|---|--|--|------------------|--|
| PARTS: | 1. AVSSf Y-OR L=364±2mm | | | JIG: | 1. Insertion jig with switch cover |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS |
| 3 | Offline Wire Insertion to connector 6188-0066 (GR) | <div><p>WIRE FACING</p></div> <div><p>1. Hold the insertion jig using left hand. Get the Yellow wire then insert to terminal slot 1 using right hand.</p></div> <div><p>2. Orange wire</p><p>3. Get the Orange wire then insert to terminal slot 2 using right hand.</p></div> <div><p>Press</p><p>2. Press the button using right thumb. The slot for Orange wire will be opened.</p></div> <div><p>Press</p><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> | | n/a | <p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p> <p>Important reminders/Note/s:</p> <p>1. Please hold the wire near terminal. 2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>Document references:</p> <p>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p> |

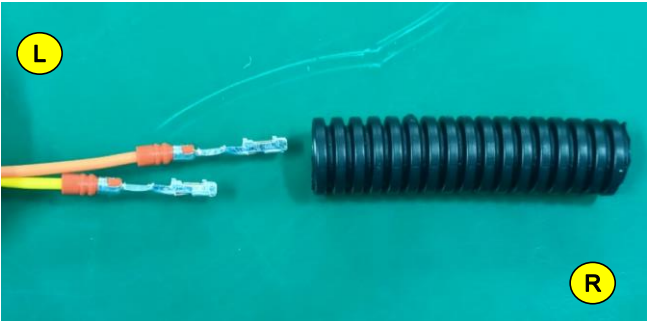

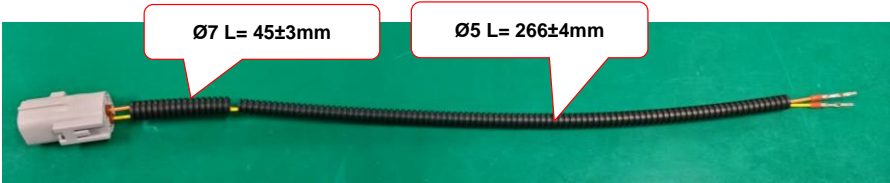
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| | Model code/Part number: 930B / 7N0204-7020C | | Customer: TRJ | Car Model: TOYOTA-4 RUNNER | Document No.: | WI-ENG-PDE-874 | | |
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| | | | | | | | |
|---------------|--------------|--|--|--|-----|------------------|---|
| PARTS: | | 1. Assy parts 2. Black corrugated tube $\varnothing 7$ L=45 \pm 3mm (No slit) | | 3. Black corrugated tube $\varnothing 5$ L=266 \pm 4mm (No slit) | | JIG: | n/a |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | | QUALITY POINTERS | |
| 4 | Offline | Wire insertion to Black corrugated tube $\varnothing 7$ L=45 \pm 3mm (No slit) |  <div> <p>1. Get the Black corrugated tube $\varnothing 7$ L=45\pm3mm (No slit) using right hand and insert Yellow wire and Orange wire by using left hand.</p> </div> | | n/a | | 1. No wrong use of parts 2. No deformed terminal |
| 5 | | Wire insertion to Black corrugated tube $\varnothing 5$ L=266 \pm 4mm (No slit) |  <div> <p>1. Get the Black Corrugated Tube $\varnothing 5$ L=266\pm4mm (No Slit) using left hand and insert Yellow wire and Orange wire by using left hand.</p> </div>  | | n/a | | |

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WORK INSTRUCTION

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

November 18, 2024

Model code/Part number:

930B

/

7N0204-7020C

Customer:

TRJ

Car Model:

TOYOTA-4 RUNNER

Document No.:

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Purpose:

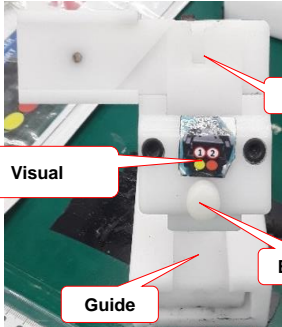
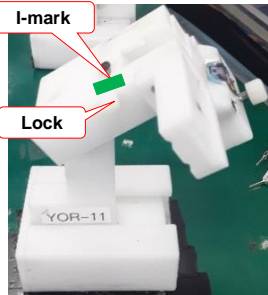

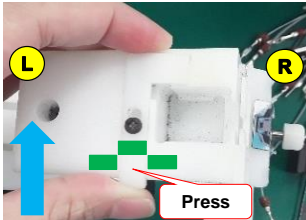
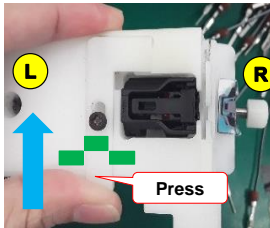
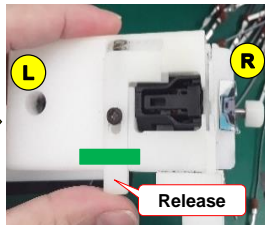





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|--------|--------------|--|--|------|---|------------------|
| PARTS: | | 1. Connector 6189-1161 (B) | | JIG: | 1. Insertion jig | |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | | TOOLS/PPE | QUALITY POINTERS |
| 6 | Offline | <div><div>INSERTION JIG</div><div></div><div>INSERTION JIG ORIENTATION</div><div></div><div></div><div>CONNECTOR ORIENTATION</div><div></div><div>1. Press the lock using left thumb.</div><div></div><div>2. Get the connector 6189-1161 (B) using right hand and insert to insertion jig. Release the lock after insertion.</div><div></div><div>3. Push the lower wire guide upward using right hand. Slot for Yellow wire will be opened.</div><div></div></div> <div>n/a</div> <td><div>CONNECTOR ORIENTATION ILLUSTRATION</div><div></div><div>GOOD</div><div></div><div>NG</div><div>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</div><div>Important reminders/Note/s: 1. Follow the connector orientation</div></td> | | | <div>CONNECTOR ORIENTATION ILLUSTRATION</div> <div></div> <div>GOOD</div> <div></div> <div>NG</div> <div>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</div> <div>Important reminders/Note/s: 1. Follow the connector orientation</div> | |

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Effectivity Date:

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Model code/Part number:

930B

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7N0204-7020C

Customer:

TRJ

Car Model:

TOYOTA-4 RUNNER

Document No.:

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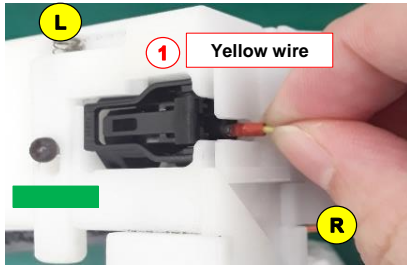
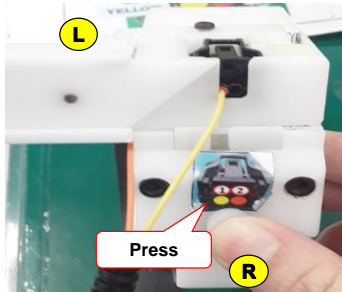
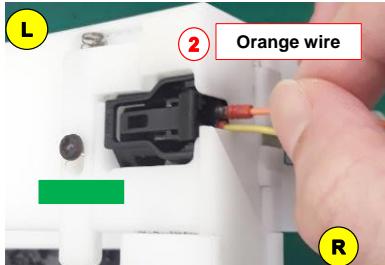
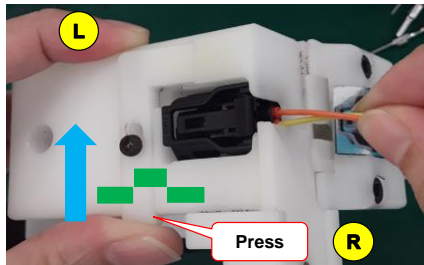
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|--------|---|---|--|-----------|--|
| PARTS: | | 1. Assy parts | | JIG: | 1. Insertion jig |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS |
| 7 | Offline Connector setting to insertion jig 6189-1161 (B) | <div><p>WIRE FACING</p></div> <div><p>1. Hold the insertion jig using left hand. Get the Yellow wire then insert to terminal slot 1 using right hand.</p></div> <div><p>2. Press the button using right thumb. The slot for Orange wire will be opened.</p></div> <div><p>3. Get the Orange wire then insert to terminal slot 2 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> | | n/a | <p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p> <p>Important reminders/Note/s: 1. Please hold the wire near terminal. 2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>Document references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p> |

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**WORK INSTRUCTION**

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

November 18, 2024

Model code/Part number:

930B**/****7N0204-7020C**

Customer:

TRJ

Car Model:

TOYOTA-4 RUNNER

Document No.:

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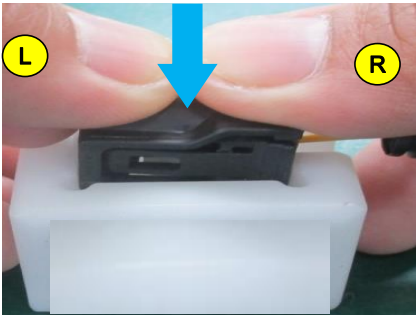
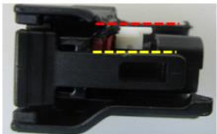



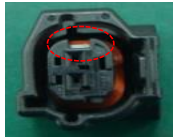

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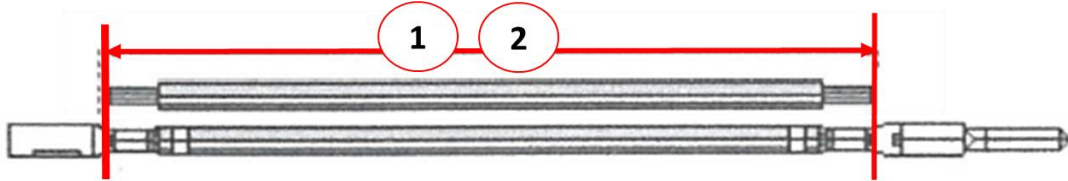
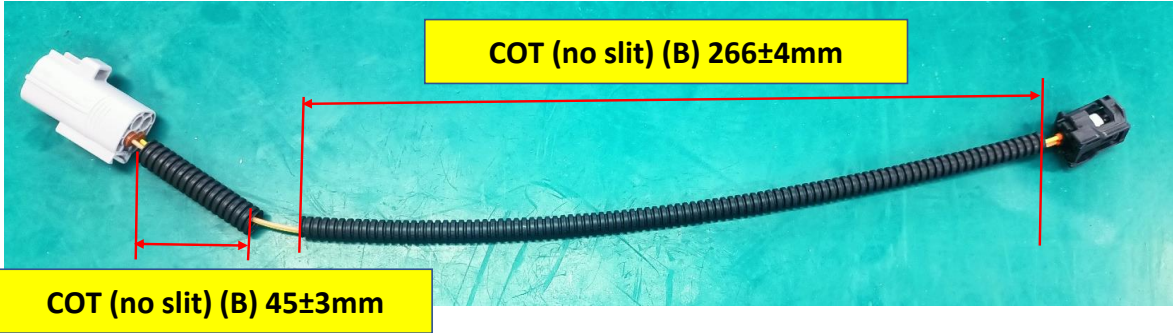

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|---------------|---------------------------|--|--|--|---|
| PARTS: | | 1. Assy parts | | JIG: | 1. Locking jig |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | | TOOLS/PPE | QUALITY POINTERS |
| 8 | Offline Connector lock | <div></div> <div>1. Put the connector into locking jig using both hands and then press 2x. Check the connector if properly locked.</div> <div>Connector lock appearance</div> <div><div>NG  Unlock Condition</div><div>NG  Half Lock Condition</div><div>GOOD  Full Lock Condition</div></div> <div> BEFORE PRESSING</div> <div> AFTER PRESSING</div> | | <div>LOCKING JIG</div> <div></div> | <p>Important reminders/Note/s: 1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR</p> <p>1. Use the provided jig tool to lock the connector. 2. No unlock/half-locked connector 3. No damaged lock</p> |

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| | Model code/Part number: 930B / 7N0204-7020C | | Customer: TRJ | Car Model: TOYOTA-4 RUNNER | Document No.: | WI-ENG-PDE-874 | | |
| | Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO | | | | Revision No.: | 1 | Page No.: | 8 of 9 |

| | | | | | |
|---------------|---------------------|--|---|--|-----|
| PARTS: | 1. Assy parts | | | JIG: | n/a |
| NO. | PROCESS NAME | WORK PROCEDURE/ ILLUSTRATION | TOOLS/PPE | QUALITY POINTERS | |
| 9 | Offline Measurement | <p>Note:</p> <ol style="list-style-type: none"> Measurement point: End of core wire to the end of core wire Terminal is reference only.   | <div>MEASURING TAPE</div>  | <p>Important reminders and note/s:</p> <ol style="list-style-type: none"> Please use calibrated/verified measuring tape when getting the measurement. For Hatsumono, Nakamono and Owarimono. <p>Document reference/s:</p> <ol style="list-style-type: none"> Refer to WI-PRO-ASY-056 for Sub-assembly Hatsumono Nakamono Owarimono Inspection <p>1. No wrong dimension</p> | |

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**WORK INSTRUCTION**

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OFFLINE ASSEMBLY PROCESS

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930B**/****7N0204-7020C**

Customer:

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Document No.:

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Purpose:

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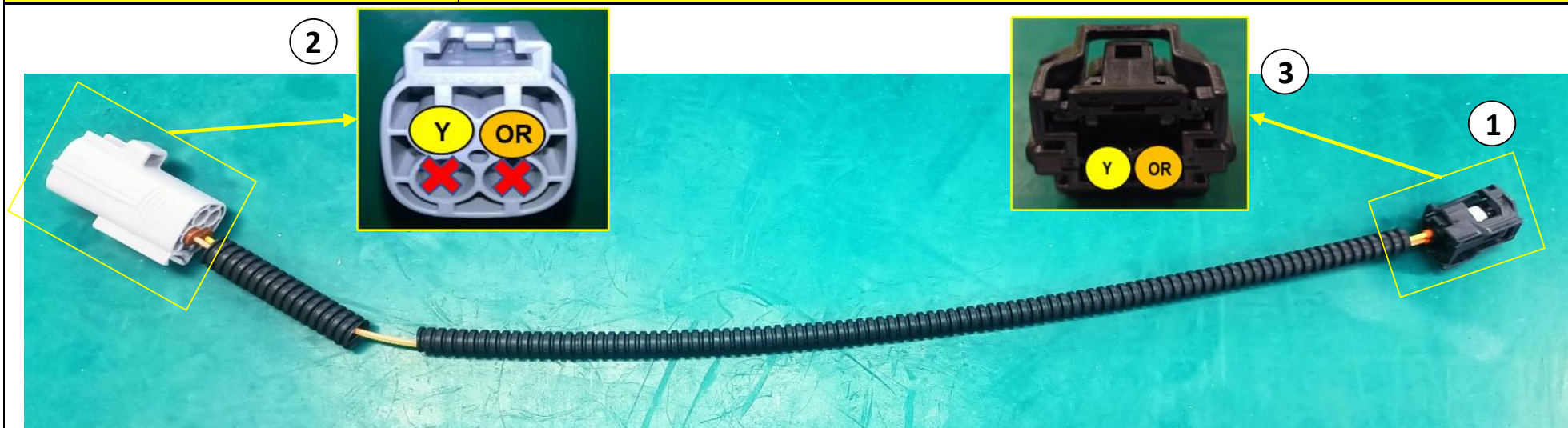
Page No.:

9 of 9**PARTS:**

1.. Assy parts

JIG:

n/a

QUALITY CHECKPOINT/ VISUAL INSPECTION**OFFLINE INSERTION****7N0204-7020C****1****No Unlocked /Half-locked Connector****4****No Deformed Terminal****2****3****No Wrong Insert****5****No Terminal Backing out**

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