



WORK INSTRUCTION

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

November 04, 2024

Process Name/Title:

Validity Date:

n/a

Model code/Part number:

178D / 7N0127-7021C

Customer: TRJ

Car Model: TOYOTA-COROLLA

Document No.:

WI-ENG-PDE-1158

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

1 of 6

PARTS:

1. Connector 6189-0451 (W); TVSSf 0.3 G-B/W L=539mm±3mm; Black corrugated tube ø7 L= 469±3mm (no slit)

JIG:

1. Insertion jig with flip cover
2. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

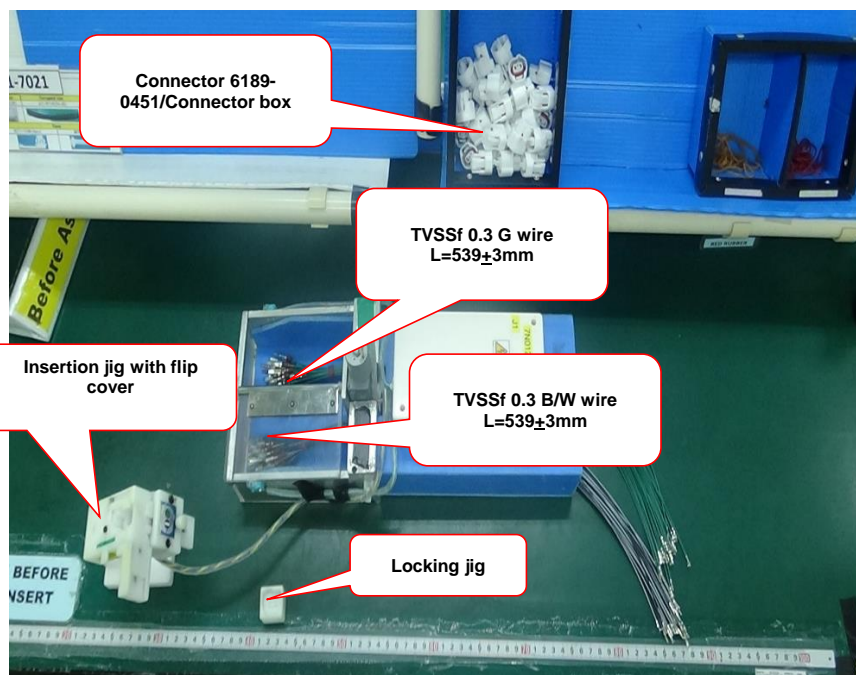
QUALITY POINTERS

1

Offline

Table Lay-out

TABLE LAY-OUT



Safety Instruction

Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)

Housekeeping

1. Maintain and always practice 5's.
2. Personal things on the workplace is prohibited. Keep it in your locker.

Alert level

For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.

Document references:

1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance

1. No missing parts/tools
2. No excess parts/tools
3. No wrong positions of parts/tools

Revision History

Prepared by

Reviewed by

Approved by

Noted by

11/04/24 1 Change pre launch to mass pro.

A.Hernandez C.Villanueva A. Arañes N/A

10/29/24 0 Initial issue.

A.Hernandez C.Villanueva A. Arañes N/A

Eff. Date Rev. No Details of Change

Revised Reviewed Approved Noted

Est. Date:

October 29, 2024

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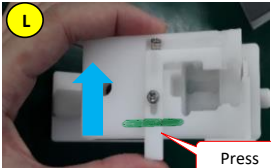
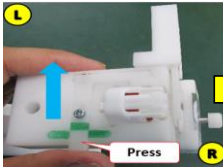

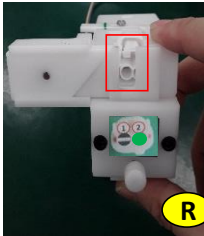
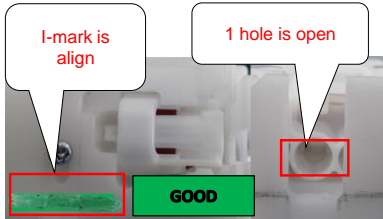
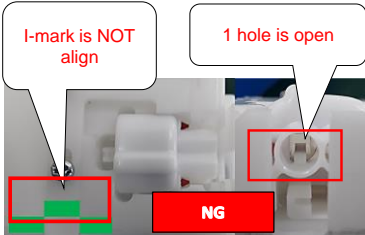
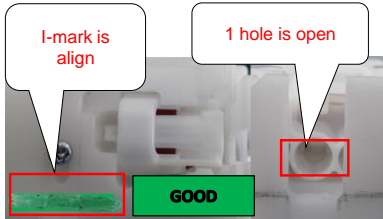
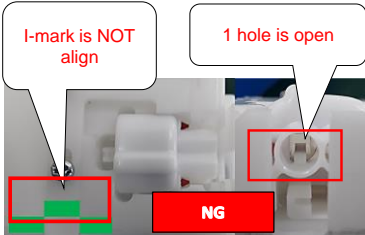
☒ MASSPRO

Revision No.:

1

Page No.:

2 of 6

PARTS:	1. Connector 6189-0451 (W)		JIG:	1. Insertion jig with flip cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Offline Connector setting to insertion jig 6189-0451 (W)	<div><div>INSERTION JIG WITH SWITCH COVER</div><div><div><div>Insertion jig</div><div>G-wire</div><div>Switch cover</div><div>Wire guide</div><div>Holes</div><div>Wire guide</div><div>Button</div><div>B/W-wire</div></div><div><div>Connector Orientation</div></div></div><div><div><div><div>L</div><div></div><div><div>L</div><div></div><div><div>R</div><div></div></div></div><div><div>1. Press the lock of insertion jig using left thumb.</div><div>2. Insert the connector 6189-0451 (W) into jig using right hand and release the lock.</div><div><div>3. Push the guide using right hand. The slot for B/W wire will be open.</div><div></div></div></div></div><div>n/a</div><td><div><div>Connector Orientation Illustration</div><div><div><div>I-mark is align</div><div>1 hole is open</div><div></div></div><div><div>I-mark is NOT align</div><div>1 hole is open</div><div></div></div></div><div><div>1. Use provided jig per model</div><div>2. No wrong usage of parts</div><div>3. No wrong orientation of connector</div><div>4. No damaged connector</div></div></div></td></div></div></div>	<div><div>Connector Orientation Illustration</div><div><div><div>I-mark is align</div><div>1 hole is open</div><div></div></div><div><div>I-mark is NOT align</div><div>1 hole is open</div><div></div></div></div><div><div>1. Use provided jig per model</div><div>2. No wrong usage of parts</div><div>3. No wrong orientation of connector</div><div>4. No damaged connector</div></div></div>	

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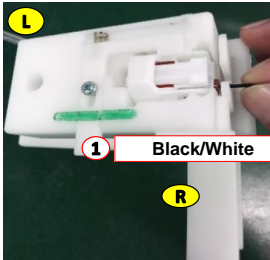
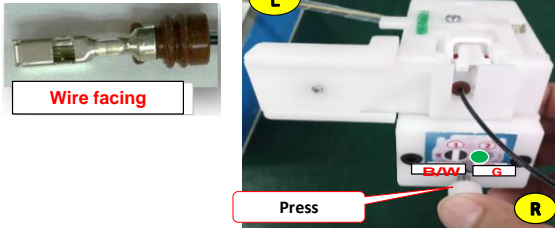
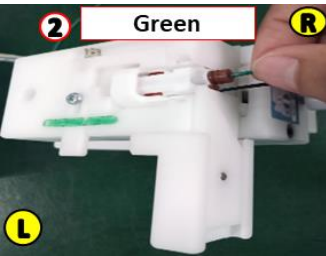

WI-ENG-PDE-1158

Revision No.:

1

Page No.:

3 of 6

PARTS:	1. TVSSf 0.3 Wires G L=539±3mm; B/W L=539±3mm		JIG:	1. Insertion jig with flip cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Offline Wire insertion to Connector 6189-0451 (W)	<div><div></div><div></div><div></div><div></div><div>1. Get the B/W wire then insert to terminal slot ① using right hand.</div><div>2. After insertion of B/W wire press the button using right hand. The slot for G wire will be open.</div><div>3. Get the G wire then insert to terminal slot ② using right hand.</div><div>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.</div></div> <td>n/a</td> <td><p>Important reminder/ Note/s:</p><p>1. 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 WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</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></td>	n/a	<p>Important reminder/ Note/s:</p> <p>1. 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 WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</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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Page No.:

4 of 6

PARTS: 1. Assy parts

JIG:

1. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

4

Offline

Connector lock



1. Put the connector into locking jig using right hand. Then press to lock 2x using both hands.



2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.



BEFORE PRESSING



AFTER PRESSING



Check the double lock deformation



LOCKING JIG



Document references:

1. Manual locking may cause damaged connector lock

1. No wrong usage of parts
2. No deformed terminal

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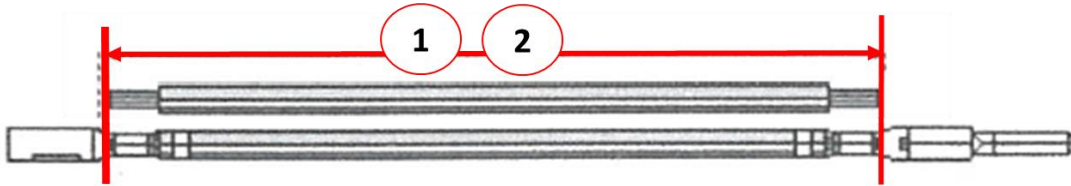


☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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Page No.:

5 of 6

PARTS:		1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	Offline	Measurement	<p>Note:</p> <ol style="list-style-type: none">Measurement point: End of core wire to the end of core wireTerminal 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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Page No.:

6 of 6

PARTS:

1. Assy Parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS

OFFLINE INSERTION

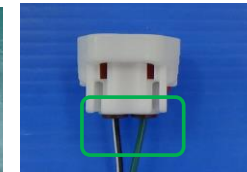
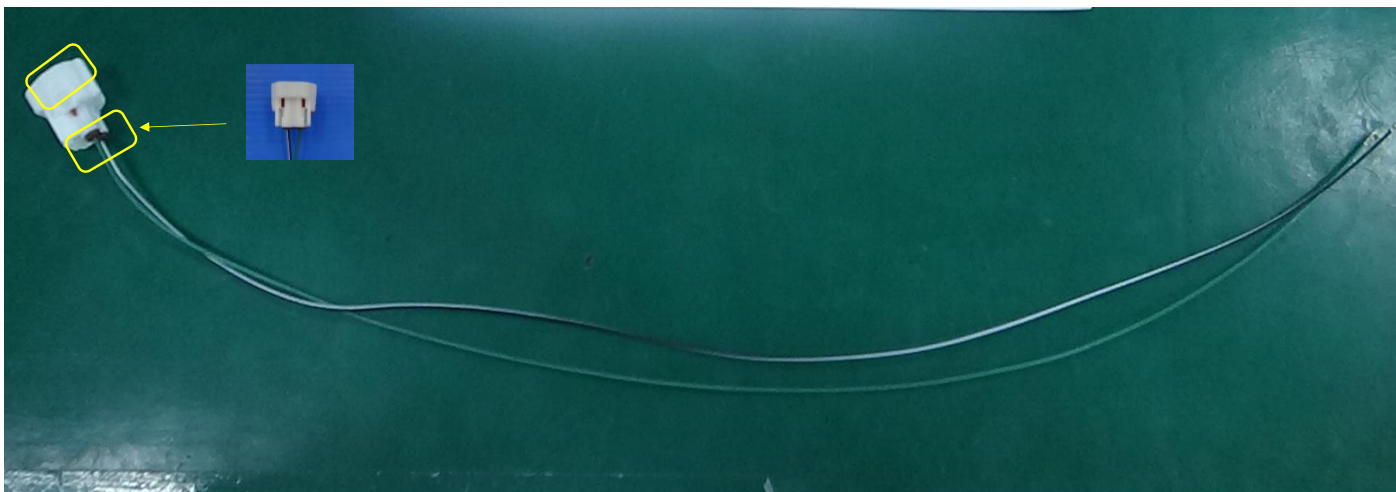
7N0127-7021C



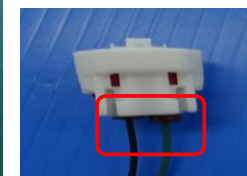
GOOD



NO GOOD



GOOD



NO GOOD

① No Unlocked/Half-locked connector

② No Wrong insert

③ No Terminal Backing Out

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