



## WORK INSTRUCTION

Process Name/Title:

## TAPING ASSEMBLY PROCESS

Effectivity Date:

October 18, 2024

Validity Date:

n/a

Model code/Part number:

310D

/

7N0195-7020E

Customer: TRJ

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1028A

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

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## PARTS:

1. Connector 6189-0451 (W)  
2. MR SW CP (TVSSf 0.3 G wires L=613±3mm; TVSSf 0.3 B/W wires L=613±3mm)  
3. Black Corrugated tube (No slit) ø7, L=297±3mm

JIG:

1. Insertion jig  
2. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

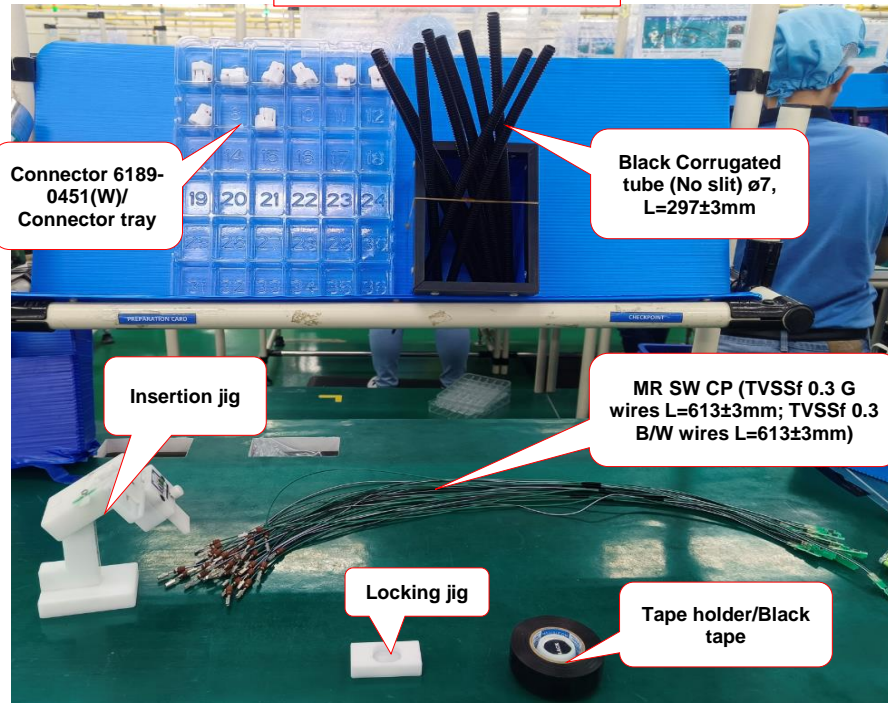
QUALITY POINTERS

1

P1

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.

1. No missing parts/tools
2. No excess parts/tools

## Revision History

Prepared by

Reviewed by

Approved by

Noted by

10/18/24 1 Change from Pre-launch to Masspro; Update the Visual Inspection/ Quality checking.

M. Ariola

C. Villanueva

A. Arañes

n/a

09/10/24 0 Initial Issue.

M. Ariola

C. Villanueva

A. Arañes

n/a

Eff. Date

Rev. No

Details of Change

Revised

Reviewed

Approved

Noted

Est. Date:

September 10, 2024

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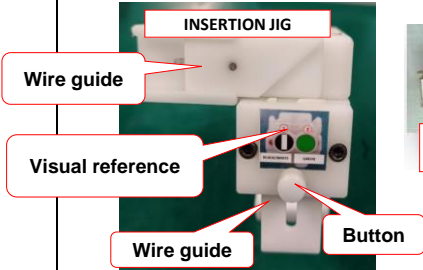


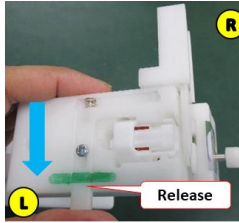
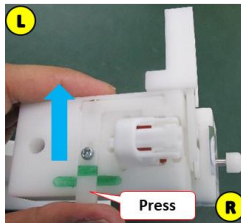
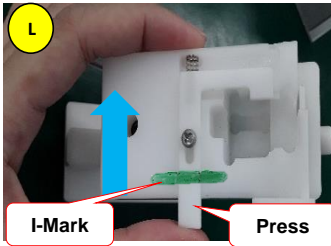
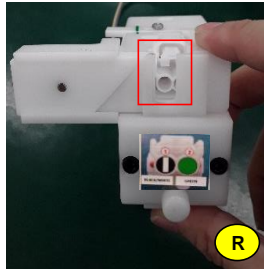


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PARTS:	1. Connector 6189-0451 (W)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1  Connector setting to insertion jig Connector 6189-0451 (W)	<div><div></div><div></div><div></div><div></div><div>1. 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>3. Push the guide using right hand. The slot for B/W wire will be open.</div></div>	n/a	<div><div>Connector Orientation Illustration</div><div></div></div> <div>1. Use provided jig per model 2. No wrong orientation of connector</div>

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PARTS:		1. Assy parts 2. Black Corrugated tube (No slit) $\varnothing 7$ , L=297 $\pm$ 3mm		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P1	<div><div>1. Get the <b>Black Corrugated tube (No slit) <math>\varnothing 7</math>, L=297<math>\pm</math>3mm</b> using right hand then insert the wire using left hand.</div></div>		n/a	<div>1. No wrong used of parts. 2. No deformed terminal.</div> <div><b>Document reference/s:</b>  <b>1. Please refer to WI-PRO-CNC-017 for Wire and Strip length tolerance.</b></div>

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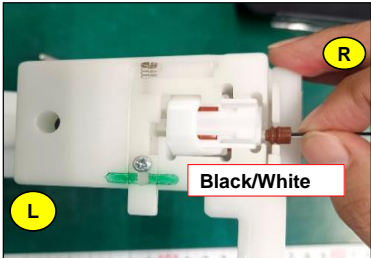
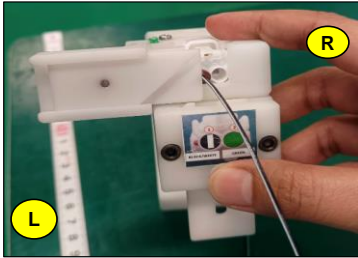


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PARTS:		1. Assy parts 2. MR SW CP (TVSSf 0.3 G wires L=613±3mm; TVSSf 0.3 B/W wires L=613±3mm)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1  Wire insertion to Connector 6189-0451 (W)	<div><div></div><div>1. Get the <b>B/W wire</b> then insert to terminal <b>slot no.1</b> using right hand.</div><div></div><div>2. After insertion of <b>B/W wire</b> press the button using right hand. The slot for <b>Green wire</b> will be open.</div><div></div><div>3. Get the <b>B/W wire</b> then insert to terminal <b>slot no.1</b> using right hand.</div><div></div><div>4. After insertion, push the lock of insertion jig using left thumb and then hold the wires and gently pull-out the connector from the jig using right hand</div></div>		n/a	<div>1. No wrong use of connector 2. No damaged connector 3. No wrong insertion 4. One by one insertion 5. No deformed terminal 6. No wrong wire facing</div> <div>Important reminder/Notes/:</div> <div>1. Please hold the wire near terminal during insertion.</div> <div>2. Make sure wires are properly inserted. Conduct <u>Pull-Push-Pull-Push</u> after insertion. Do not exert extra force.</div> <div>Document reference/s:</div> <div>1. Please refer to WI-PRO-CNC-017 for Wire and Strip length tolerance. 2. Please refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>

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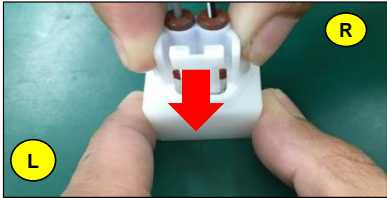

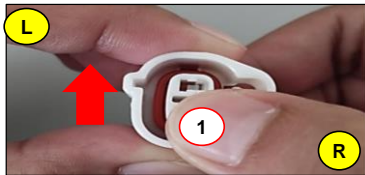





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PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1	Connector lock	<div><div>1. Put the connector into locking jig using right hand. Then press to lock 2x using both hands.</div></div> <div><div>2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</div></div> <div><div><div>BEFORE PRESSING</div></div><div><div>AFTER PRESSING</div></div><div><div>Check the double lock deformation</div></div></div>	<div>LOCKING JIG</div> 	<b>Important reminders/Notes</b> <b>1. Manual locking may cause damaged connector lock</b>  1. Use the provided jig per model 2. No unclocked/half-locked connector.

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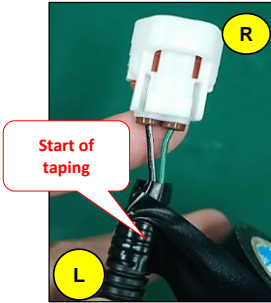
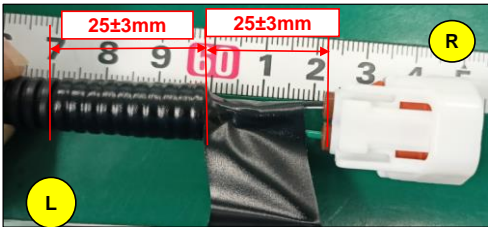
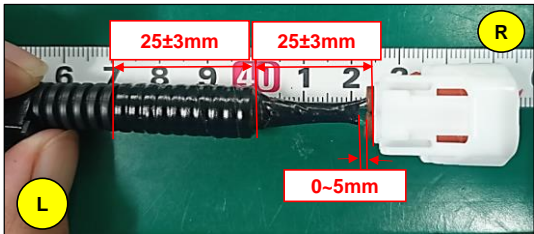

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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P1 Taping 1 Black Corrugated tube to Wire near connector	<div><p>1. Hold the Corrugated tube using left hand, Get the <b>Black tape</b> and start pre-taping using right hand.</p></div> <div><p>2. Measure from end of Corrugated tube up to edge of connector <b>25±3mm</b> then continue the taping process using both hands</p></div> <div><p>3. After taping, check the measurement and taping condition</p></div>		<div><b>MEASURING TAPE</b></div> 	<p><b>Important reminders/Notes</b></p> <p><b>1. Please use calibrated/verified measuring tape when fetting the measurement.</b></p> <ol style="list-style-type: none"><li>1. No peel-off tape</li><li>2. No flip out tape</li><li>3. No loose tape</li><li>4. No wrong use of tape</li><li>5. No wrong dimension</li><li>6. No missing tape</li></ol>

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PARTS:

n/a

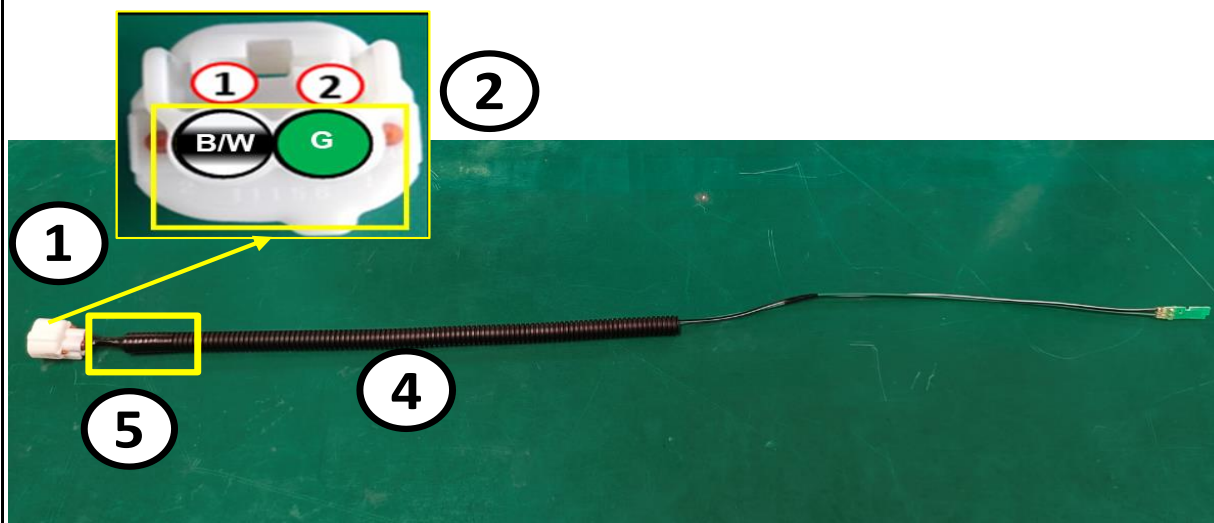
JIG:

n/a

### QUALITY CHECKPOINTS

## TAPING - P1

# 7N0195-7020E



- ① No **UNLOCK/HALF-LOCKED CONNECTOR**
- ② No **WRONG INSERT**
- ③ No **TERMINAL BACKING OUT**
- ④ No **MISSING COT (NO SLIT)**
- ⑤ No **MISSING TAPE**

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