



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Process Name/Title:

Model code/Part number:

310D / 7N0190-7020A

Customer: TRJ

Car Model: TOYOTA RAV4

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

February 28, 2024

Validity Date:

n/a

Document No.:

WI-ENG-PDE-804A

Revision No.:

1

Page No.:

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PARTS:

1. Connector 6098-5668(W)
2. AVSSf 0.3 wires B-B L=200±2mm
3. Assy parts

4. Black SV tube (vinyl) ø5 L=18±3mm

JIG:

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

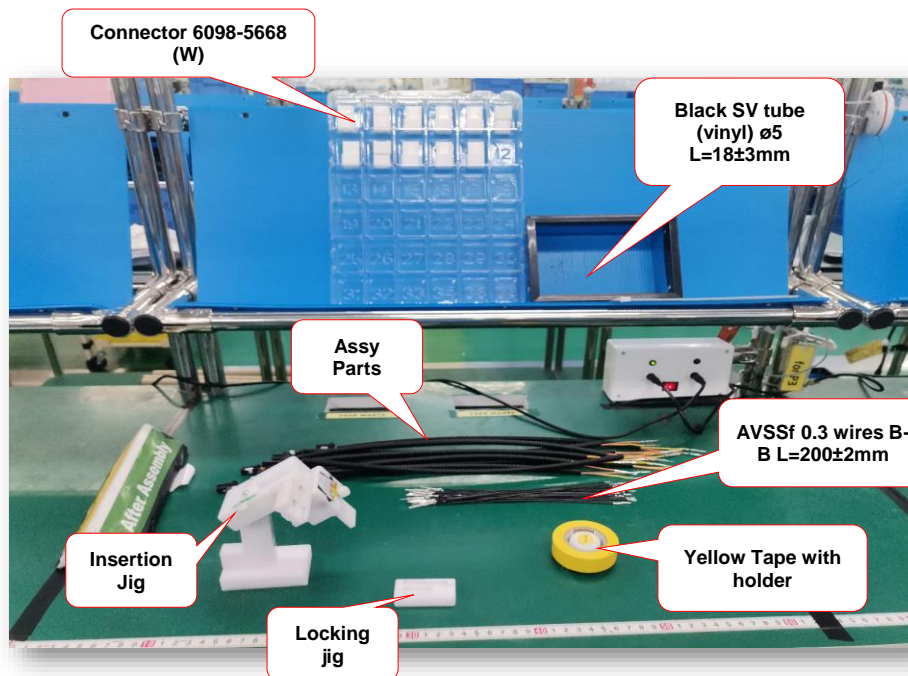
TOOLS/PPE

QUALITY POINTERS

1

P1

Table Lay-out

**Safety Instruction**

Be sure to wear required 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

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
02/28/24	1	Change Pre-launch to Mass pro. Inclusion of table lay-out.	A.Hernandez	C.Villanueva	A. Arañes	n/a	A.Hernandez	C.Villanueva	A. Arañes	n/a
01/17/24	0	Initial issue	A.Hernandez	C.Villanueva	A. Arañes	n/a	A.Hernandez	C.Villanueva	A. Arañes	n/a

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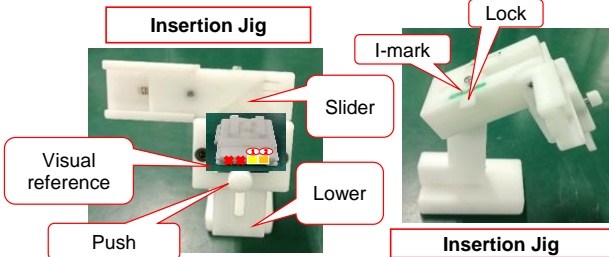
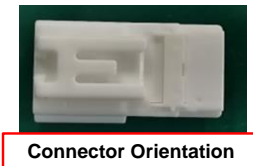
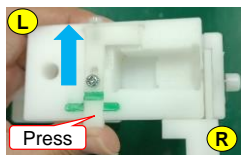
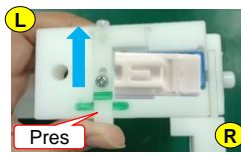
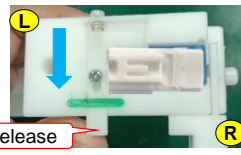
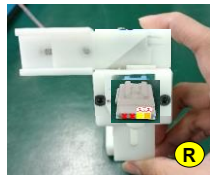
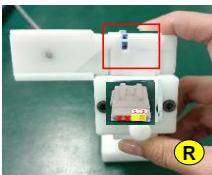
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. Assy parts 2. Black SV tube (vinyl) ø5 L=18±3mm		3. Connector 6098-5668 (W)	JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	Wire Insertion to Black SV tube (vinyl) ø5 L=18±3mm	<div><div></div><div>1. Get the Black Vinyl tube ø5 L=18±3mm using right hand then insert the Y-OR wires using left hand.</div></div>			n/a	1. No wrong use of parts
3	P1 Connector setting to insertion jig 6098-5668 (W) (Assy parts)	<div><div><div><div></div><div></div></div><div><div></div><div></div><div></div></div><div><div></div><div></div></div><div>1. Press the insertion jig lock using left hand.</div><div>2. Get the connector 6098-5668 (W) using right hand and insert to insertion jig. Release the lock after insertion.</div><div>3. Push the lower wire guide upward using right hand. Slot for yellow wire will be open.</div></div></div>			n/a	<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</div> <div>Important reminders/Note/s: 1. Please hold the wire near terminal. 2. Make sure wires are properly inserted. Conduct <u>Pull-Push-Pull-Push</u> after insertion. Do not exert extra force.</div> <div>Document references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>

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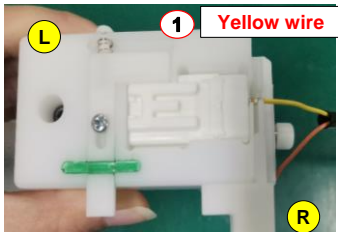
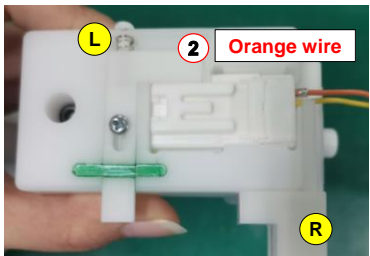
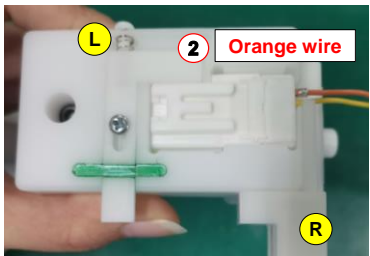
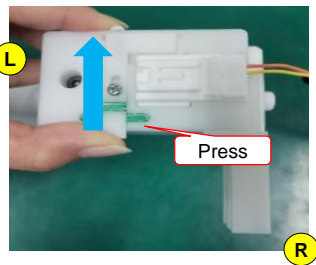
☒ MASSPRO

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PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1 Wire insertion to connector 6098-5668 (W)	<div><div>Wire Facing</div></div> <div><div>1. Hold the insertion jig using left hand. Get the assy part and hold the Yellow wire then insert to connector using right hand.</div></div> <div><div>2. Press the button using right thumb. slot for Orange wire will be open.</div></div> <div><div>3. Hold the Orange wire and insert to connector using right hand.</div></div> <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>		n/a	<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform terminal 5. No wrong wire facing.</div> <div>Important reminders/Note/s: 1. Please hold the wire near terminal during insertion. 2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force. Document References: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>

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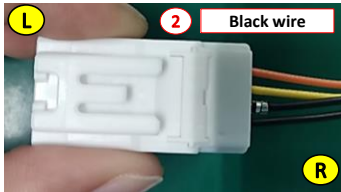
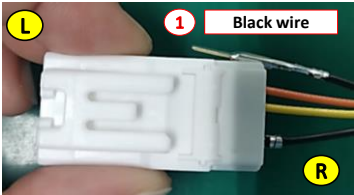
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PARTS:		1. Assy parts 2. AVSSf 0.3 wire B-B L=200±2mm		3. Connector 6098-5668 (W)	JIG:	n/a	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS	
5	P1	Wire insertion to Black Vinyl tube ø5 L=18±3mm (Assy parts)	<div></div> <div>1. Get the B-B wires and insert to Black Vinyl tube ø5 L=18±2mm (Assy parts) using right hand.</div>			n/a	1. No wrong use of parts
6		Wire insertion to connector 6098-5668 (W) (Assy parts)	<div></div> <div></div> <div>1. Hold the connector 6098-5668 (W) then get the Black wire and insert to terminal slot 1 using right hand. Conduct 2x push-pull after wire insertion.</div> <div>2. Get the Black wire and insert to terminal slot 2 using right hand. Conduct 2x push-pull after wire insertion.</div>			n/a	<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</div> <div>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.</div> <div>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.</div>

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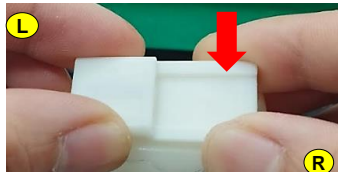




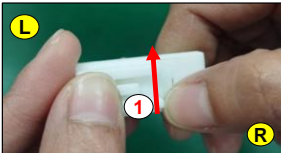

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PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P1	Connector lock	<div><p>1. Load the connector into the jig holding both side of the connector, tip first.</p></div> <div><p>2. Press the lower part of connector to fully insert into the locking jig.</p></div> <div><p>Right thumb-Lower Left thumb-middle</p><p>3. Press the lower parts of connector using right hand while left hand holding the middle.</p></div> <div><p>Right thumb-upper thumb-middle Left</p><p>4. Press the upper part of connector using right hand while left hand holding the middle.</p></div> <div><p>Right thumb-middle Left thumb-middle</p><p>5. Lift then press the connector in the middle using left and right hand.</p></div> <div><p>6. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</p></div>	<div></div>	<p>1. No Unlock and half-locked 2. Use provided jig tools per model to avoid damaged lock.</p> <p>Important reminders/Note/s: 1. Manual locking may cause damaged connector 2. Refer WI-PRO-KIT-001 Proper locking and checking of connector lock</p>

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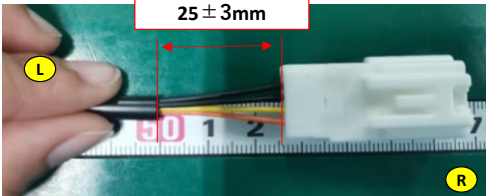
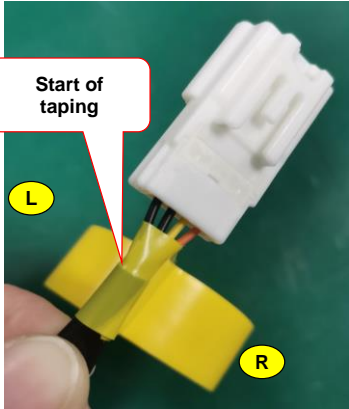
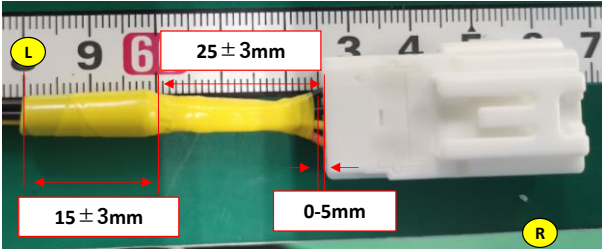

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PARTS:		1. Assy parts 2. Yellow tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
8	P1 Taping 1 Black SV tube (Vinyl) to wire near connector	 <p>1. Hold the Black vinyl tube using left hand and measure from end of vinyl tube up to connector 25±3mm. <i>Note: Without folding in Vinyl tube</i></p>  <p>1. Hold the tube using left hand, get the Yellow tape using right hand then start pre-taping using both hands.</p>  <p>4. After taping, check the measurement and taping condition.</p>		MEASURING TAPE 	Important reminders/Note/s: 1. Use YELLOW TAPE only 2. Please use calibrated/verified measuring tape when getting the measurement. 1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No wrong use of tape

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PARTS:

1. Assy parts
2. Yellow tape

JIG:

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

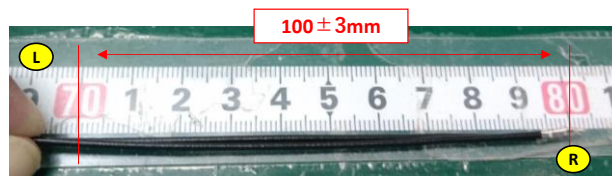
TOOLS/PPE

QUALITY POINTERS

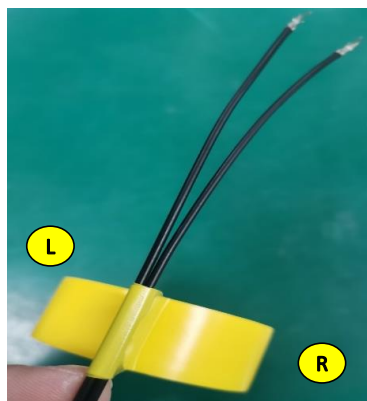
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P1

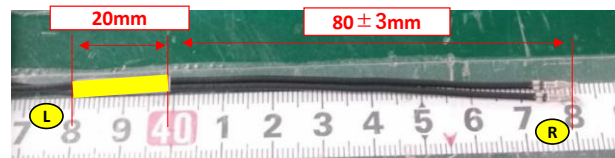
Spot taping



1. Hold the wires using left hand and measure from wire up to terminal pointed tip **100±3mm**.



2. Get the **Yellow tape** and start taping on the Black wires. Conduct **2x windings** of tape before cutting using both hands.

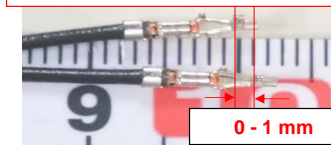


3. After taping, check the measurement and taping condition.

MEASURING TAPE



Wire alignment tolerance



1. No flip-out tape
2. No peel-off tape
3. No loose tape
4. No missing tape
5. No wrong dimension
6. No wrong use of tape

Important reminders/Note/s:

1. Use **Yellow TAPE** only
2. Please use **calibrated/verified measuring tape** when getting the measurement.

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PARTS:

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JIG:

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QUALITY CHECKPOINTS

P1

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GOOD



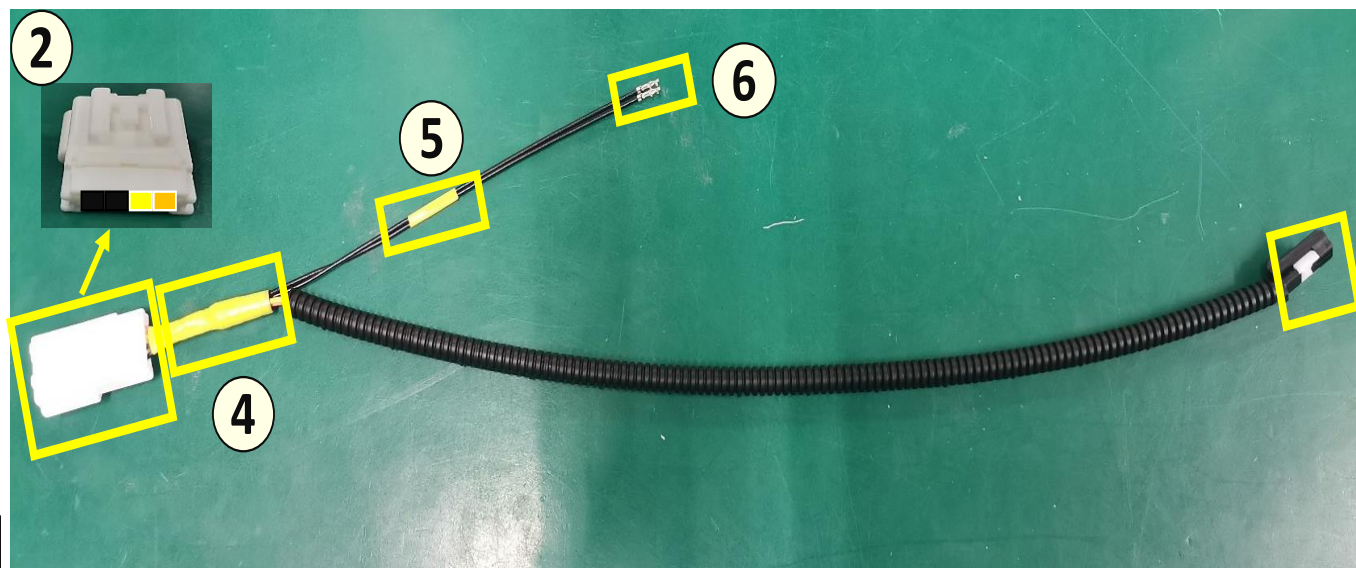
GOOD



NO GOOD



NO GOOD



GOOD



NO GOOD

1 No Unlock/Halflock Connector (2 connector)

2 No Wrong Insert

3 No Terminal Backing Out

4 No Wrong Used of Tape (Yellow Tape)

5 No Missing Tape (Spot tape)

6 No Deformed Terminal

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