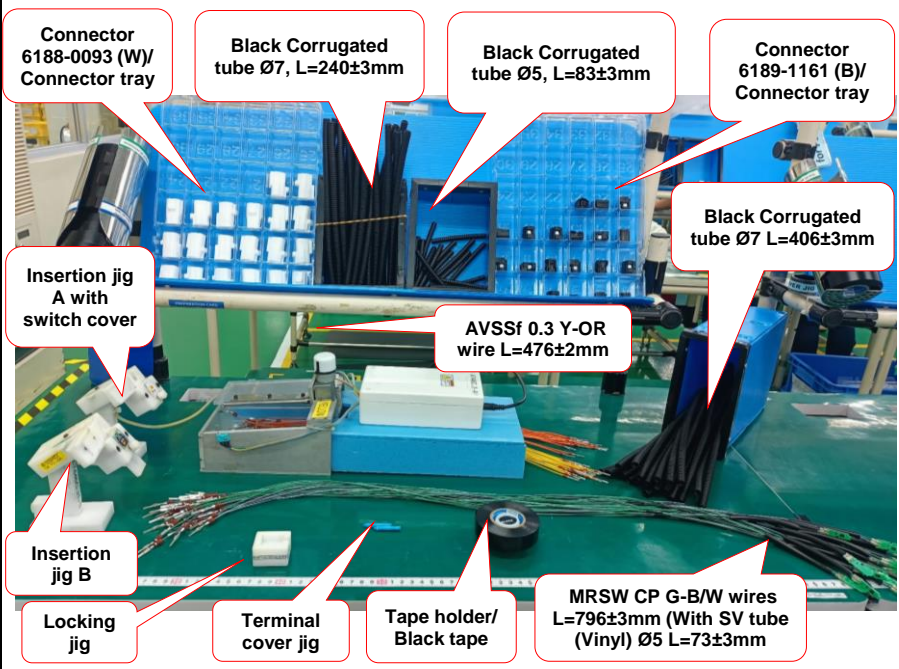


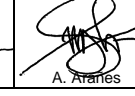
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	Process Name/Title:				Validity Date:	n/a		
	Model code/Part number: 420/440 / A7446C		Customer: TRQSS	Car Model: TOYOTA-LAND CRUISER	Document No.:	WI-ENG-PDE-872A		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		Revision No.:		1	Page No.:	1 of 11	


PARTS:	1. Connector 6188-0093 (W); AVSSf 0.3 Y-OR wire L=476±2mm; Black Corrugated tube Ø7, L=240±3mm (No slit); Black Corrugated tube Ø5, L=83±3mm (No slit); Connector 6189-1161 (B); MRSW CP G-B/W wires L=796±3mm (With SV tube (Vinyl) Ø5, L=73±3mm; Black Corrugated tube Ø7 L=406±3mm (No slit); Black tape			JIG:	1. Insertion jig with switch cover 2. Insertion jig 3. Locking jig 4. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
1	P1	<p>TABLE LAY-OUT</p> 	<p>Safety Instruction Be sure to wear prescribed 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>	<p>1. No missing parts/tools 2. No excess parts/tools</p> <p>Document references: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p>	

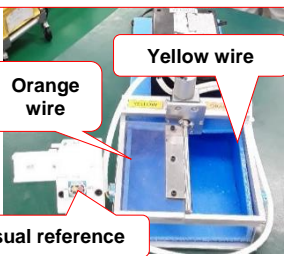
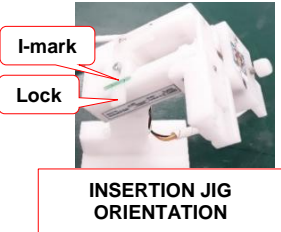

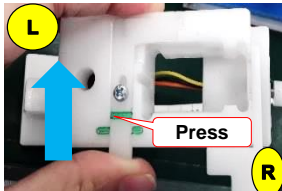
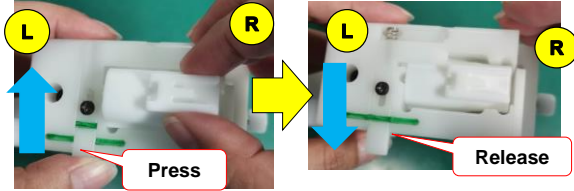
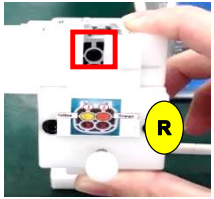
Revision History						Prepared by	Reviewed by	Approved by	Noted by	
04/20/24	1	Change from Pre-launch to Masspro. Update the measurement. Inclusion of Table lay-out.	D.Castillo	C. Villanueva	A. Arañes	n/a	 D. Castillo	 C. Villanueva	 A. Arañes	n/a
04/16/24	0	Initial Issue.	D.Castillo	C. Villanueva	A. Arañes	n/a				
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	April 16, 2024		

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	Model code/Part number: 420/440 / A7446C		Customer: TRQSS	Car Model: TOYOTA-LAND CRUISER	Document No.:	WI-ENG-PDE-872A		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	1	Page No.:	2 of 11

PARTS:	1. Connector 6188-0093 (W)			JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1 Connector setting to insertion jig 6188-0093 (W)	<div><p>Insertion jig with switch cover</p><p>Orange wire</p><p>Yellow wire</p><p>Visual reference</p></div> <div><p>I-mark</p><p>Lock</p><p>INSERTION JIG ORIENTATION</p></div> <div><p>CONNECTOR ORIENTATION</p></div> <div><p>1. Press the lock using left hand.</p></div> <div><p>2. Get the connector 6188-0093 (W) using right hand then insert to insertion jig. Release the lock after insertion. Note: Follow the connector orientation.</p></div> <div><p>3. Push the lower wire guide upward using right hand. Slot for Yellow wire will be opened.</p></div>		n/a	1. No wrong orientation of connector 2. No wrong use of connector 3. No damaged connector

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TAPING ASSEMBLY PROCESS

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420/440

/ A7446C

Customer:

TRQSS

Car Model:

TOYOTA-LAND CRUISER

Document No.:

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Purpose:


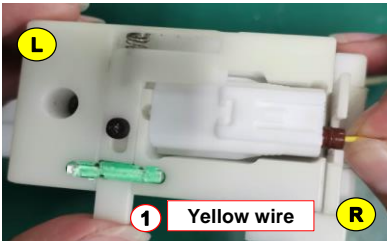
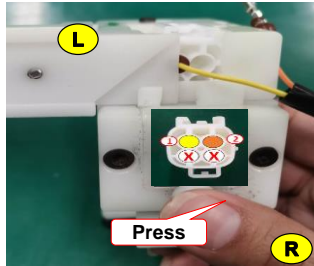
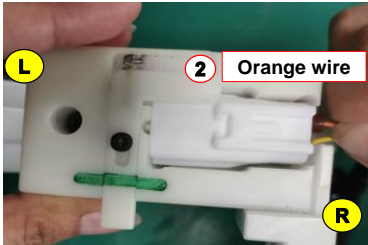
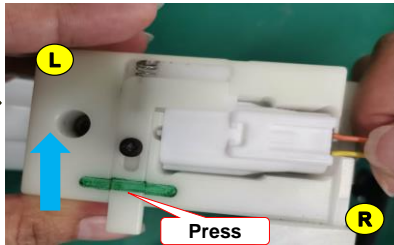
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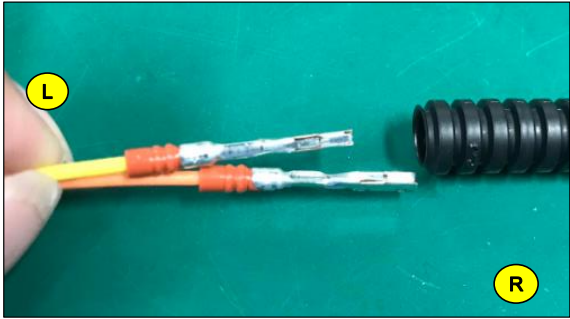
PARTS:		1. AVSSf 0.3 Y-OR wire L=476±2mm		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P1	<div><p>WIRE FACING</p></div> <div><p>1. Hold the insertion jig using left hand. Get the Yellow wire then insert to terminal slot 1 using right 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 wrong insertion of wires 2. No loose insertion 3. No wrong insertion 4. One by one insertion 5. No deformed terminal 6. 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				Effectivity Date:	April 20, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
	Model code/Part number: 420/440 / A7446C		Customer: TRQSS	Car Model: TOYOTA-LAND CRUISER	Document No.:	WI-ENG-PDE-872A		
	Purpose: <input type="checkbox"/> PROTOTYPE		<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO	Revision No.:	1	Page No.:	4 of 11

PARTS:	1. Assy parts 2. Black Corrugated tube Ø7, L=240±3mm (No slit)			3. Black Corrugated tube Ø5, L=83±3mm (No slit)	JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
4	Wire insertion to Black Corrugated tube Ø7, L=240±3mm (No slit)	<div>  </div> <div> 1. Get the Black corrugated tube (No slit) Ø7, L=240±3mm using right hand then insert the Y-OR wire using right hand. </div>			n/a	1. No wrong use of parts 2. No deformed terminal
5	Wire insertion to Black Corrugated tube Ø5, L=83±3mm	<div>  </div> <div> 1. Get the Black corrugated tube (No slit) Ø5, L=83±3mm using right hand then insert the Y-OR wire using right hand. </div>			n/a	1. No wrong use of tape. 2. No deformed terminal

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WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 20, 2024

Model code/Part number:

420/440

/ A7446C

Customer:

TRQSS

Car Model:

TOYOTA-LAND CRUISER

Document No.:

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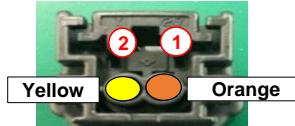
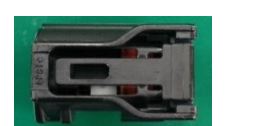

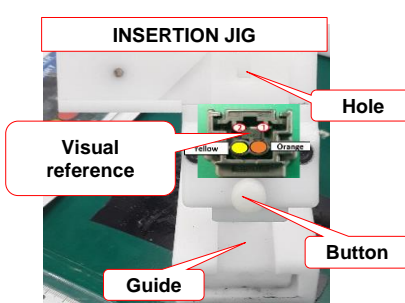
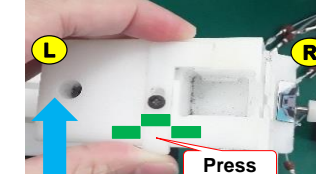
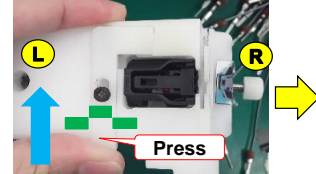
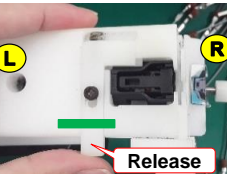
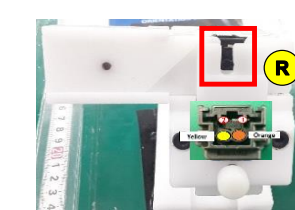
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PARTS:	1. Connector 6189-1161 (B)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	P1 Connector setting to insertion jig 6189-1161 (B)	<div><p>Yellow Orange</p><p>VISUAL REFERENCES</p></div> <div><p>CONNECTOR ORIENTATION</p></div> <div><p>Wire facing</p></div> <div><p>INSERTION JIG</p><p>I-mark</p><p>Lock</p><p>Hole</p><p>Visual reference</p><p>Guide</p><p>Button</p><p>INSERTION JIG ORIENTATION</p></div> <div><p>L R</p><p>Press</p><p>1. Press the lock using left thumb.</p></div> <div><p>L R</p><p>Press</p><p>2. Get the connector 6189-1161 (B) using right hand then insert to insertion jig. Release the lock after insertion.</p><p>Note: Follow the connector orientation.</p></div> <div><p>L R</p><p>Release</p><p>3. Push the lower wire guide upward using right hand. Slot for Orange wire will be opened.</p></div> <div><p>R</p></div>	n/a	<div>1. No wrong orientation of connector</div> <div>2. No wrong use of connector</div> <div>3. No damaged connector</div> <div>4. No wrong insertion of wires</div> <div>5. No loose insertion</div> <div>6. No wrong insertion</div> <div>7. One by one insertion</div> <div>8. No deformed terminal</div> <div>9. No wrong wire facing</div> <div>Important reminders/Note/s:</div> <div>1. Please hold the wire near terminal.</div> <div>2. Make sure wires are properly inserted.</div> <div>Conduct Pull-Push-Pull-Push after insertion.</div> <div>Do not exert extra force.</div> <div>Document references:</div> <div>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>

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WORK INSTRUCTION

Effectivity Date:

April 20, 2024

Process Name/Title:

TAPING ASSEMBLY PROCESS

Validity Date:

n/a

Model code/Part number:

420/440

/ A7446C

Customer:

TRQSS

Car Model:

TOYOTA-LAND CRUISER

Document No.:

WI-ENG-PDE-872A

Purpose:

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☐ PRE-LAUNCH


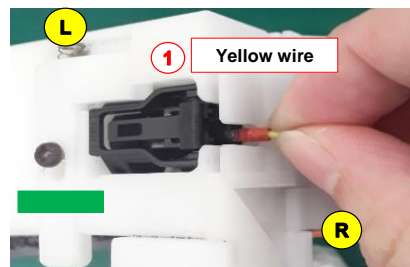
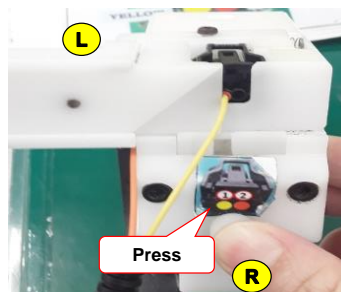
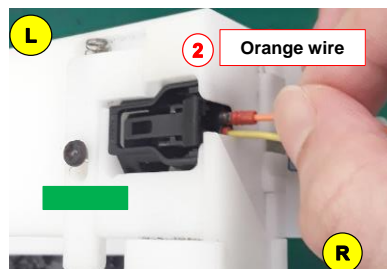
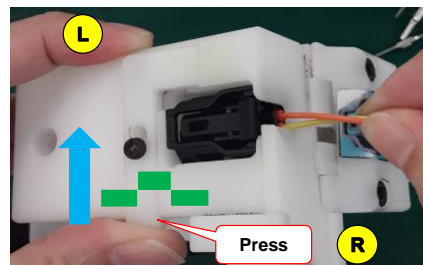
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PARTS:	1. Assy parts		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P1	<div><div></div><div>WIRE FACING</div><div></div><div><p>1. Hold the insertion jig using left hand. Get the Yellow wire then insert to terminal slot 1 using right hand.</p></div><div></div><div><p>2. Press the button using right thumb. The slot for Orange wire will be opened.</p></div><div></div><div><p>3. Get the Orange wire then insert to terminal slot 2 using right hand.</p></div><div></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></div> <td>n/a</td> <td><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.</p></td>	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.</p>

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Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 20, 2024

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n/a

Model code/Part number:

420/440 / A7446C

Customer:

TRQSS

Car Model:

TOYOTA-LAND CRUISER

Document No.:

WI-ENG-PDE-872A

Purpose:

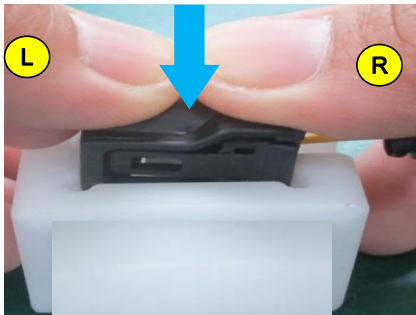




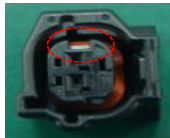

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PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
8	P1	<div><div>1. Put the connector into locking jig using both hands and then press 2x. Check the connector if properly locked.</div></div> <div><div>Connector lock appearance</div><div><div> Unlock Condition</div><div> Half Lock Condition</div><div> Full Lock Condition</div></div><div><div> BEFORE PRESSING</div><div> AFTER PRESSING</div></div></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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WORK INSTRUCTION

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Purpose:

☐ PROTOTYPE

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PARTS:

1. Assy parts
2. Black tape

JIG:

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

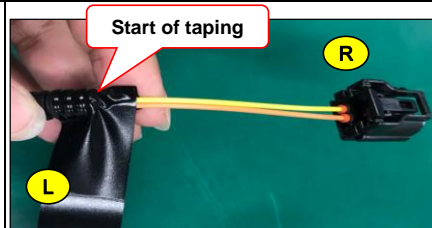
TOOLS/PPE

QUALITY POINTERS

9

P1

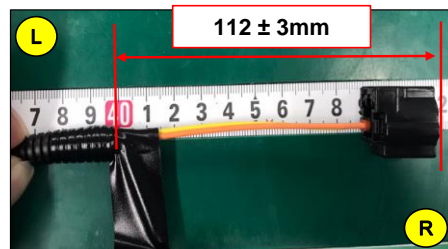
Taping 1
Black Corrugated tube
to Wire near connector



1. Hold the assy parts using left hand then conduct pre-taping using both hands.



2. Confirm **20±3mm** measurement from end of tape up to end of corrugated tube then continue the taping process using both hand.



3. Measure from end of COT up to Connector **112±2mm** then continue the taping process using both hand.



4. After taping, check the measurement and tape condition.

MEASURING TAPE



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

Important reminders/Note/s:

1. Please use calibrated and verified measuring tape when getting the measurement.

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/ A7446C

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Document No.:

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Purpose:

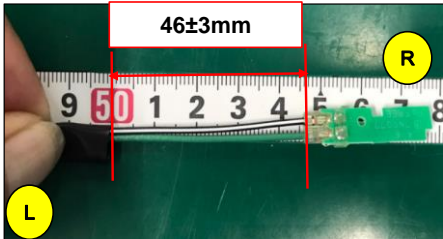
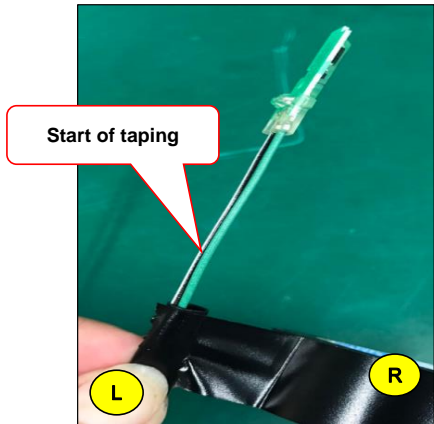
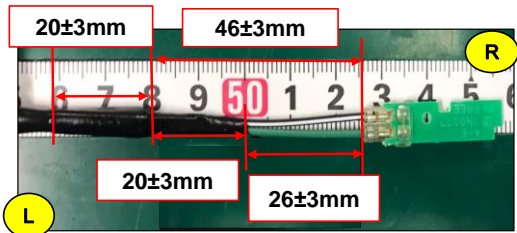

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PARTS:		1. Assy parts 2. Black tape		3. MRSW CP G-B/W wires L=796±3mm (With SV tube (Vinyl) Ø5, L=73±3mm)		JIG:	n/a
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
10	P1	Taping 2 Black SV tube (Vinyl) to wire near hotmelted wires	<div><div></div><div></div><div></div></div> <div><p>1. Get the hotmelted G-B/W wires with Black SV tube (Vinyl) then measure from end of SV tube (Vinyl) up to the edge of hotmelted wires 46±3mm using both hands.</p><p>2. Hold the assy parts using left hand, get the black tape using right hand and then continue the taping process using both hands.</p><p>3. After taping, Check the measurement and taping condition.</p></div> <div><div>MEASURING TAPE</div></div>			<p>Document references: 1. Refer to WI-PRO-ASY-001 for Taping process</p> <p>Important reminders/Note/s: 1. Please use calibrated and verified measuring tape when getting the measurement.</p> <p>1. No flip-out tape 2. No peel-of tape 3. No loose tape 4. No missing tape 5. No wrong use of tape 6. No wrong dimension</p>	

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	WORK INSTRUCTION				Effectivity Date:	April 20, 2024				
	TAPING ASSEMBLY PROCESS				Validity Date:	n/a				
	Process Name/Title:		Model code/Part number: 420/440 / A7446C		Customer: TRQSS	Car Model: TOYOTA-LAND CRUISER		Document No.:	WI-ENG-PDE-872A	
	Purpose:		<input type="checkbox"/> PROTOTYPE		<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO		Revision No.:	1	Page No.:

PARTS:		1. Assy parts 2. Black Corrugated tube Ø7 L=406±3mm (No slit)		JIG:	1. Terminal cover jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
11	P1	<div><div>1. Get the terminal cover jig left hand then insert to both terminals (Hotmelted wires G-B/W) using both hands.</div></div> <div><div>2. Hold the Black corrugated tube Ø7 L=406±5mm (No slit) using left hand then insert the (Hotmelted wires G-B/W) using right hand.</div></div> <div><div>3. After insertion, remove the terminal cover jig using right hand.</div></div>		<div>TERMINAL COVER JIG</div> 	1. No wrong usage of parts 2. No damaged rubber seal	

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WORK INSTRUCTION

Process Name/Title: **TAPING ASSEMBLY PROCESS**

Effectivity Date:

April 20, 2024

Validity Date:

n/a

Model code/Part number: **420/440 / A7446C**

Customer: **TRQSS**

Car Model: **TOYOTA-LAND CRUISER**

Document No.:

WI-ENG-PDE-872A

Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

Page No.:

11 of 11

PARTS:

1. Assy parts

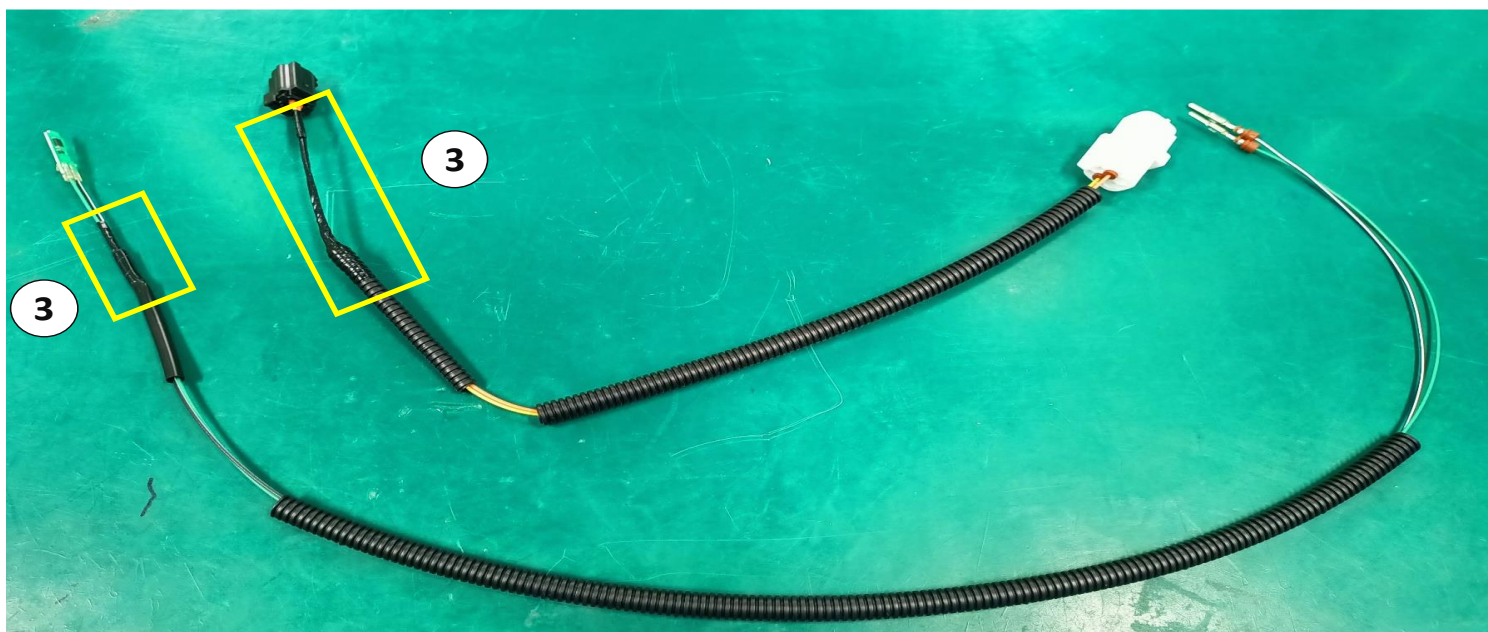
JIG:

n/a

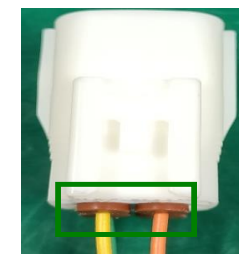
QUALITY CHECKPOINTS

TAPING - P1

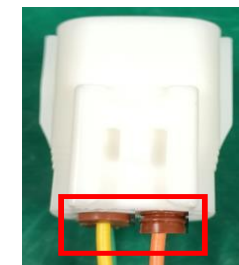
A7446C



1



GOOD



NO GOOD

1 No Terminal Backing Out

2 No Deformed terminal

3 No Missing tape

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