	WORK INSTRUCTION				Effectivity Date:	April 17, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
	Model code/Part number: 466D / 75V098-0040		Customer: TRJ	Car Model: LAND CRUISER	Document No.:	WI-ENG-PD-823		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	1	Page No.:	1 of 20

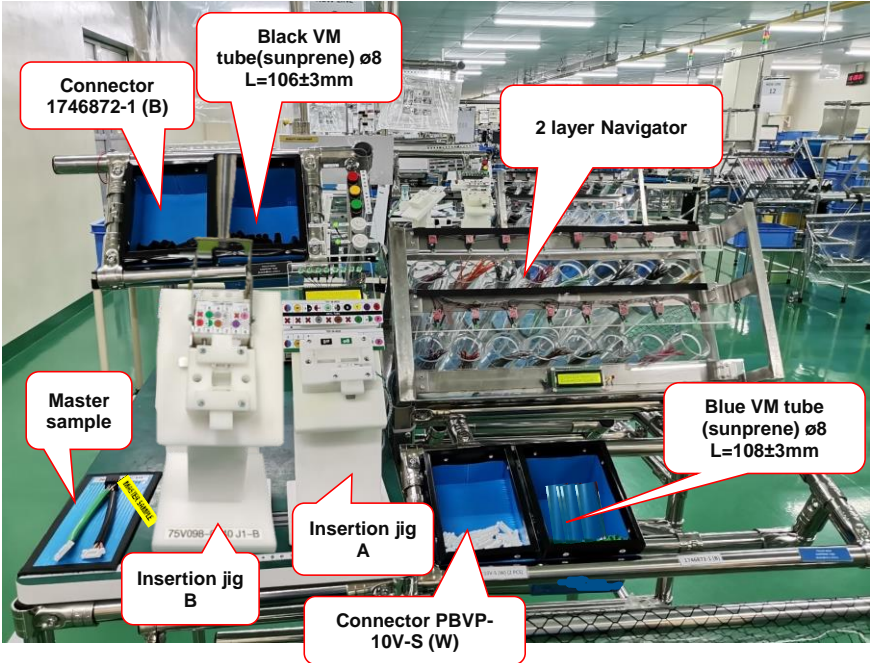
PARTS:




1

1. Connector PBVP-10V-S (W) [2pcs.]; Connector 1746872-1 (B); AVSS 0.3 R L=149±2mm; V, Y, B, GR/B L=148±2mm; W/G, BR, G, GR L=150±2mm; P L=151±2mm; LG, R/L, B/W, R/W, OR L=273±2mm; Black VM tube (Sunprene) ø8 L=106±3mm; Blue VM tube (Sunprene) ø8 L=108±3mm

JIG:

1. Insertion jig
2. Insertion with locking jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P1	<div>Table Lay-out</div> 	<div>Safety Instruction</div> <div>Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)</div> <div>Housekeeping</div> <div>1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div>Alert level</div> <div>For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>	1. No deformed terminal 2. No wrong usage of parts

Revision History							Prepared by	Reviewed by	Approved by	Noted by		
							 D. Castillo	 C. Villanueva	 A. Arañes	n/a		
04/17/24	1	Change from Pre-launch to Masspro. Provide insertion jig and locking jig. Inclusion of Table lay-out. Change wire length. Update Wire harness arrangement, Measurement and quality checkpoints.			D. Castillo	C. Villanueva					A. Arañes	n/a
02/06/24	0	Initial issue			C.Hernandez	C. Villanueva					A. Arañes	n/a
Eff. Date	Rev. No	Details of Change			Revised	Reviewed					Approved	Noted
							Est. Date:	February 6, 2024				

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☐ PROTOTYPE

☐ PRE-LAUNCH

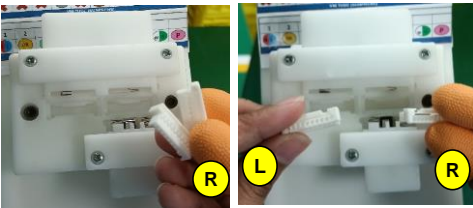

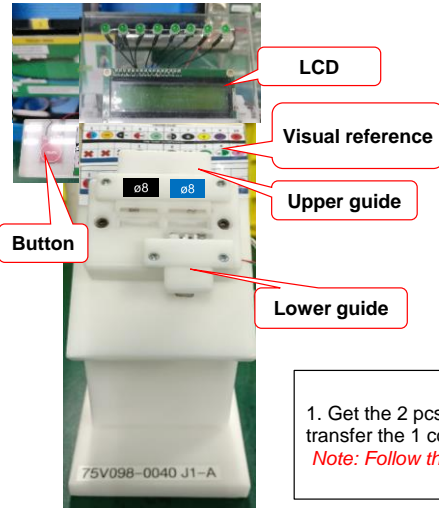
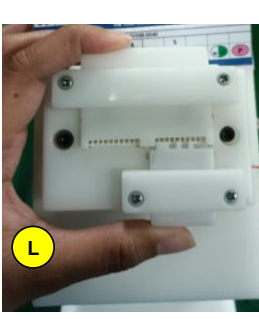
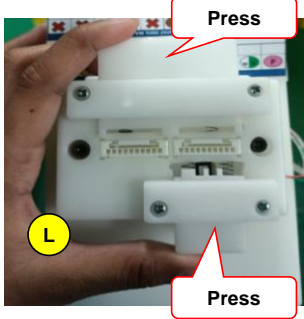
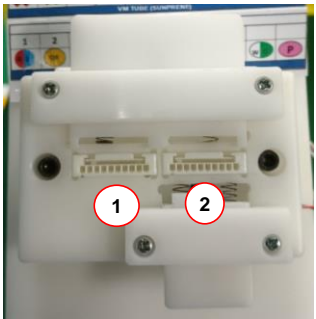
☒ MASSPRO

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PARTS:	1. Connector PBVP-10V-S (W) [2pcs]			JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1 Connector setting to insertion jig PBVP-10V-S (W)	<div><p>1. Get the 2 pcs of PBVP-10V-S (W) connector using right hand then transfer the 1 connector to left hand then insert to insertion jig. <i>Note: Follow the connector orientation.</i></p><p>2. Press the upper and lower guide using left hand in same timing. Holes that need to be insert are only open.</p></div>		N/A	1. Use the provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector

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☐ PROTOTYPE

☐ PRE-LAUNCH

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PARTS:



1. AVSS 0.3 R L=149±2mm; V, Y, B, GR/B L=148±2mm; LG, R/L, B/W, R/W, OR L=273±2mm

JIG:

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

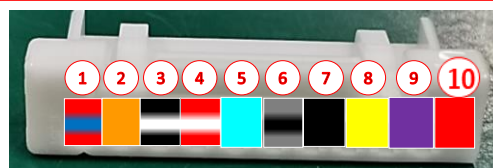
QUALITY POINTERS

3

P1

Wire insertion to
Connector
PBVP-10V-S (W)

INSERTION SEQUENCE FROM LEFT TO RIGHT

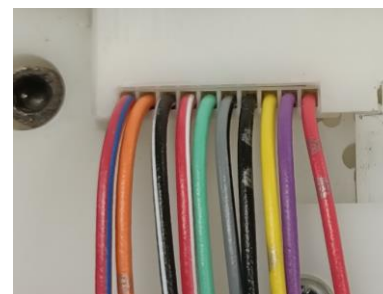
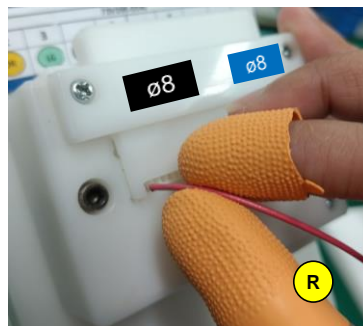


WIRE FACING



WIRE INSERTION ILLUSTRATION

1	2	3	4	5	6	7	8	9	10
R/L	OR	B/W	R/W	LG	GR/B	B	Y	V	R
273	273	273	273	273	148	148	148	148	149



1. Get the **R/L wire** using right hand and insert to connector. Repeat the process for **OR-B/W-R/W-LG-GR/B-B-Y-V-R wires**.

Note: Follow the insertion sequence based on the illustration.

STEERING
NAVIGATION(2 layer)



CONTROLLER



1. Use provided jig per model
2. No wrong usage of parts
3. One by one insertion
4. No wrong insertion
5. No deformed terminal
6. No stuck of terminal tip

Important reminders/Note/s:

1. Make sure wires are properly inserted. Conduct **Pull-Push-Pull-Push** after insertion. Do not exert extra force.
2. Please hold the wire near terminal during insertion.
3. Follow the insertion sequence based on the illustration.

Document references:

1. Refer to **GL-PRO-ASY-029** for Pull-Push procedure.
2. Refer to **WI-ENG-PDE-044** for Steering Navigation Controller procedure.

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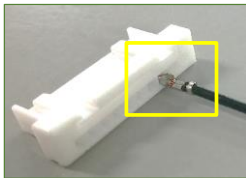



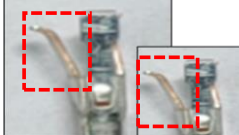
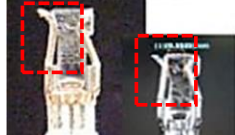
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS: <div>1</div>		1. AVSS 0.3 R L=149±2mm; V, Y, B, GR/B L=148±2mm; LG, R/L, B/W, R/W, OR L=273±2mm		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P1 <div>Wire insertion to connector PBVP-10V-S (W) (Continuation)</div>	<div><div>Proper alignment of terminal to connector</div><div></div><div><div>BACK VIEW OF TERMINAL</div><div></div><div>GOOD Terminal condition</div></div><div><div>FRONT OF TERMINAL</div><div></div><div>GOOD Terminal condition</div></div></div> <div><div>Improper alignment of terminal to connector</div><div></div><div><div>BACK VIEW OF TERMINAL</div><div><div>Damaged terminal</div></div><div>NO GOOD Terminal condition</div></div><div><div>FRONT VIEW OF TERMINAL</div><div></div><div>NO GOOD Terminal condition</div></div></div> <div><div>Note:</div><div><div>*Make sure the terminal was in proper alignment before insert.</div><div>*Avoid hitting the terminal into the connector during wire insertion, if encountered abnormality stop the process and call the attention of Immediate superior and Automatically disposed and replace the unit.</div></div></div>			<div>1. Use provided jig per model</div> <div>2. No wrong usage of parts</div> <div>3. No wrong insertion</div> <div>4. No deformed terminal</div> <div>5. No stuck of terminal tip</div> <div>6. One by one insertion</div> <div><div>Important reminders/Note/s:</div><div><div>1. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div><div>2. Please hold the wires near terminal during insertion.</div><div>3. Automatically dispose and replace the unit if once encountered bend terminal, difficulty of insertion and half-locked connector.</div><div>4. Insertion of wires must be from left to right.</div></div><div><div>Document reference/s:</div><div><div>1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance.</div><div>2. Refer to WI-ENG-PDE-044 for Steering Navigation Controller procedure..</div><div>3. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div><div>4. Refer to GL-PRO-ASY-025 for Inspection Standard for connector insertion.</div></div></div></div>

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☐ PROTOTYPE

☐ PRE-LAUNCH

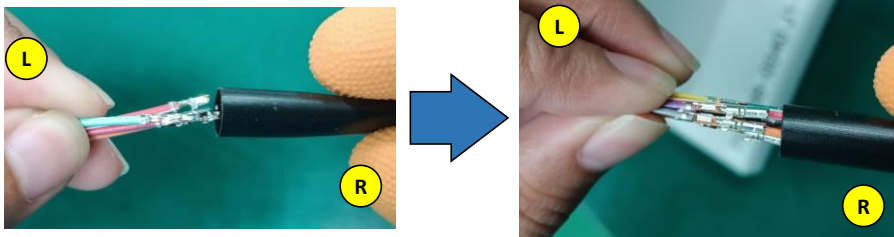

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PARTS:		1. Black VM tube (Sunprene) ø8 L=106±3mm		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1	<div><div><div>1</div><div>Wire insertion to Black VM tube (sunprene) ø8 L=106±3mm</div></div><div><div>1. Get the Black VM tube (Sunprene) ø8 L=106±3mm using right hand. Hold the wires using left hand and insert the wires using right hand.</div></div></div>		n/a	1. No wrong usage of parts 2. No deformed terminal 3. No tangled wires

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PARTS:

2

1. AVSS 0.3 W/G, BR, G, GR L=150±2mm; P L=151±2mm

JIG:

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

5

P1

Wire insertion to
Connector
PBVP-10V-S (W)

INSERTION SEQUENCE FROM LEFT TO RIGHT



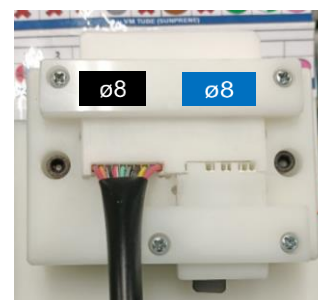
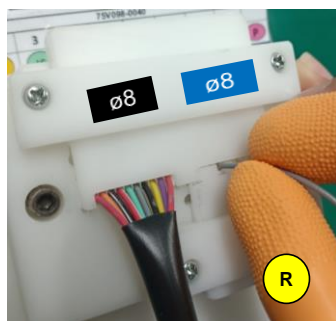
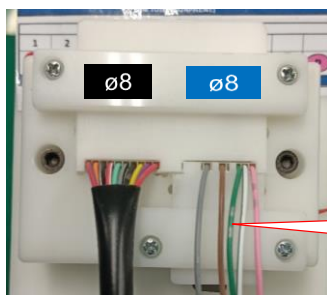
WIRE FACING

WIRE INSERTION ILLUSTRATION

1	2	3	4	5	6	7	8	9	10
X	X	X	GR	X	BR	X	G	W/G	P
150	150	150	150	150	150	150	150	150	151

Note: Holes that need to be insert are only open.

Lower guide



1. Get the **GR wire** using right hand and insert to connector. Repeat the process for **BR-G-W/G-P** wires.

Note: Follow the insertion sequence based on the illustration.

STEERING
NAVIGATION(2 layer)



CONTROLLER



1. Use provided jig per model
2. No wrong usage of parts
3. One by one insertion
4. No wrong insertion
5. No deformed terminal
6. No stuck of terminal tip

Important reminders/Note/s:

1. Please hold the wire near terminal during insertion.
2. Refer to **GL-PRO-ASY-029** for Pull-Push procedure.
3. Make sure wires are properly inserted. Conduct **Pull-Push-Pull-Push** after insertion. Do not exert extra force.
4. Follow the insertion sequence based on the above illustration.

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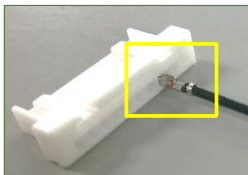
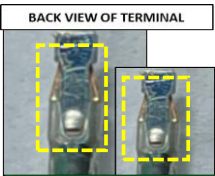
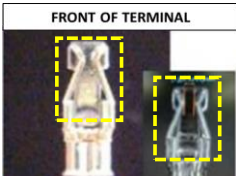
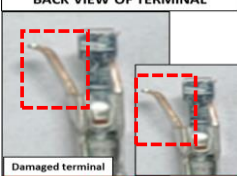

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PARTS: 1. AVSS 0.3 W/G, BR, G, GR L=150±2mm; P L=151±2mm

JIG:

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	P1 Wire insertion to connector PBVP-10V-S (W) (Continuation)	<p>Proper alignment of terminal to connector</p>  <p>BACK VIEW OF TERMINAL</p>  <p>GOOD Terminal condition</p> <p>FRONT OF TERMINAL</p>  <p>GOOD Terminal condition</p> <p>BACK VIEW OF TERMINAL</p>  <p>Damaged terminal NO GOOD Terminal condition</p> <p>FRONT VIEW OF TERMINAL</p>  <p>NO GOOD Terminal condition</p> <p>Note: *Make sure the terminal was in proper alignment before insert. *Avoid hitting the terminal into the connector during wire insertion, if encountered abnormality stop the process and call the attention of Immediate superior and Automatically disposed and replace the unit.</p>		<p>1. Use provided jig per model 2. No wrong usage of parts 3. No wrong insertion 4. No deformed terminal 5. No stuck of terminal tip 6. One by one insertion</p> <p>Important reminders/Note/s:</p> <p>1. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force. 2. Please hold the wires near terminal during insertion. 3. Automatically dispose and replace the unit if once encountered bend terminal, difficulty of insertion and half-locked connector. 4. Insertion of wires must be from left to right.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance. 2. Refer to WI-ENG-PDE-044 for Steering Navigation Controller procedure.. 3. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 4. Refer to GL-PRO-ASY-025 for Inspection Standard for connector insertion.</p>

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Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH


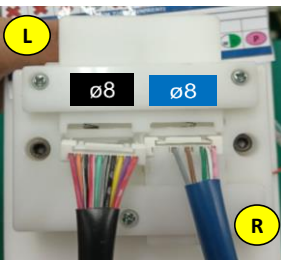
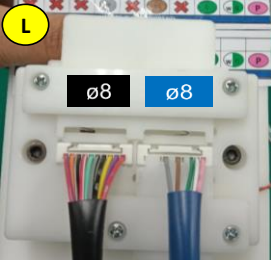
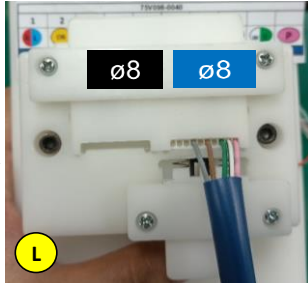
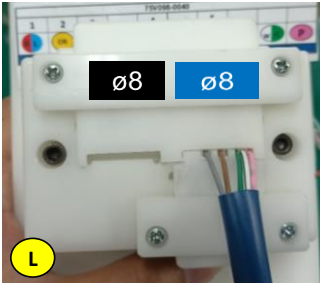
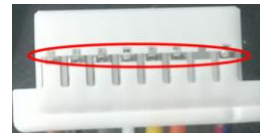
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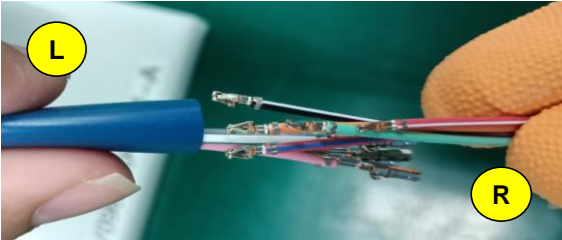
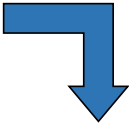
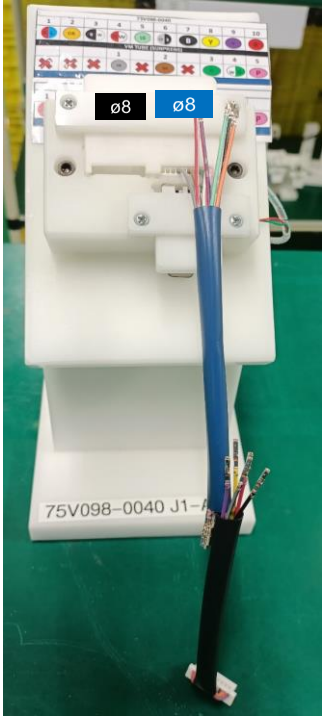
PARTS:		1. Assy parts 2. Blue VM tube (sunprene) $\varnothing 8$ L=108 \pm 3mm	JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	P1 Wire insertion to Blue VM tube (sunprene) $\varnothing 8$ L=108 \pm 3mm	<div><div><p>1. Get the Blue VM tube (Sunprene) $\varnothing 8$ L=108\pm3mm using right hand. Hold the wire using left hand then insert the wires.</p></div><div><p>2. Press the Upper button using left hand. Remove the 1st connector with inserted wires and Black VM tube (Sunprene) using right hand.</p><p>3. Press the upper guide using left hand. Check the wire insertion condition.</p><p>Note: Second connector with inserted wire and Blue VM tube (Sunprene) will stay in the jig.</p></div><div><p>4. Press the lower button using left hand. Holes that need to be inserted are only open.</p></div></div>	n/a	<div><p>Terminal tip must be visible</p><p>Document References:</p><ol style="list-style-type: none">1. Refer to GL-PRO-ASY-025 for Inspection Standard for Coupler Insertion.2. Refer to GL-PRO-ASY-043 for Verification of Fully Inserted Wires.</div>

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	Model code/Part number: 466D / 75V098-0040		Customer: TRJ	Car Model: LAND CRUISER	Document No.:	WI-ENG-PD-823		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	1	Page No.:	9 of 20

PARTS:	1. Assy parts			JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P1 1 Wire insertion to assy parts	<div></div> <div></div> <div></div> <div>1. Hold the Blue VM tube (Sunprene) using left hand and insert the wires from Black VM tube (Sunprene) using right hand.</div>		n/a	1. No wrong usage of parts 2. No deformed terminal 3. No tangled wires

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PARTS:

1. Assy parts

JIG:

1. Insertion jig

NO.

PROCESS NAME

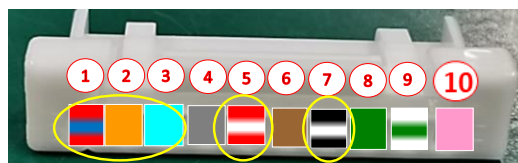
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

1

INSERTION SEQUENCE FROM LEFT TO RIGHT

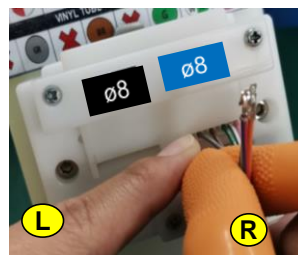
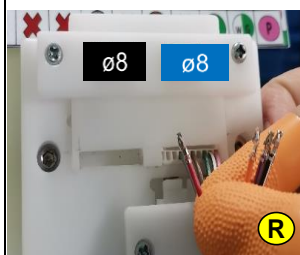


WIRE FACING



WIRE INSERTION ILLUSTRATION

1	2	3	4	5	6	7	8	9	10
R/L	OR	LG	GR	R/W	BR	B/W	G	W/G	P
273	273	273	150	273	150	273	150	150	151

Wire insertion to
Connector
PBVP-10V-S (W)

1. Hold the **R/L wire** using right hand and support the wire by left index finger then insert to connector using right hand. Repeat the process on **OR-LG-R/W-B/W wires**. Check the wire after insertion

Note: Follow the insertion sequence based on the above illustration.

STEERING
NAVIGATION(2 layer)

CONTROLLER



1. Use provided jig per model
2. No wrong usage of parts
3. One by one insertion
4. No wrong insertion
5. No deformed terminal
6. No stuck of terminal tip
7. No deformed terminals
8. No tangled wires
9. No wrong facing

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-ENG-PDE-044 for Steering Navigation Controller procedure.
2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance
3. Refer to GL-PRO-ASY-028 for Pull-Push procedure.



Terminal tip must be visible

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WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 17, 2024

Validity Date:

n/a

Model code/Part number:

466D

/ 75V098-0040

Customer: TRJ

Car Model:

LAND CRUISER

Document No.:

WI-ENG-PD-823

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

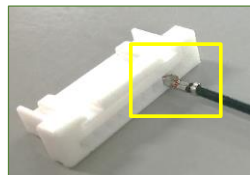
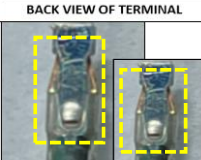
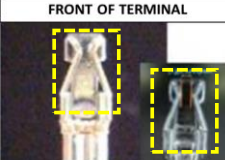

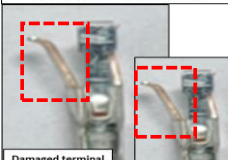
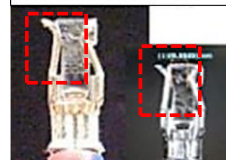
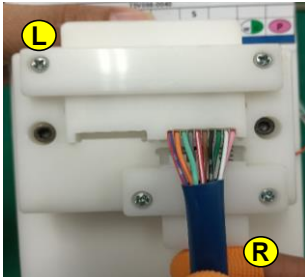
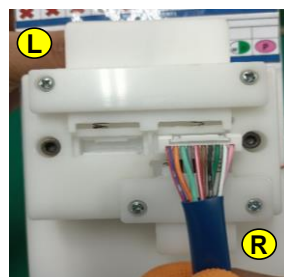
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1

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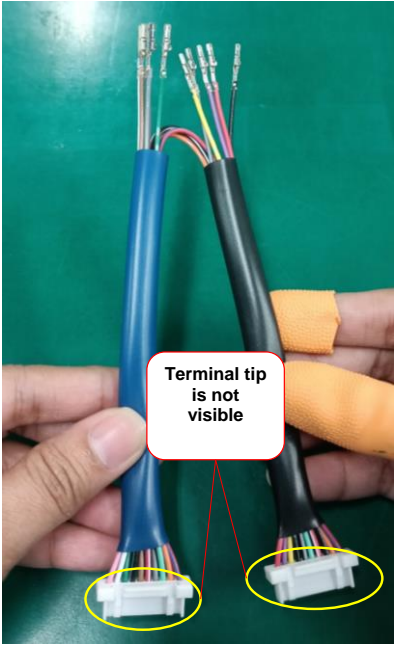
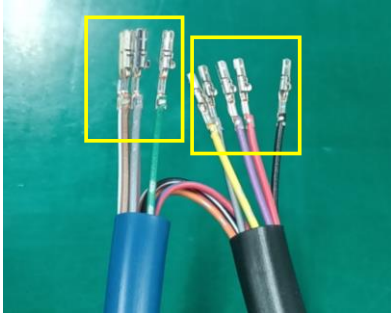
PARTS:	1. Assy parts		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
8	P1 Wire insertion to connector PBVP-10V-S (W) (Continuation)	<div><div>Proper alignment of terminal to connector</div><div></div><div><div>BACK VIEW OF TERMINAL</div><div></div><div>GOOD Terminal condition</div><div>FRONT OF TERMINAL</div><div></div><div>GOOD Terminal condition</div></div><div><div>Improper alignment of terminal to connector</div><div></div><div><div>BACK VIEW OF TERMINAL</div><div></div><div>Damaged terminal NO GOOD Terminal condition</div><div>FRONT VIEW OF TERMINAL</div><div></div><div>NO GOOD Terminal condition</div></div><div>Note: *Make sure the terminal was in proper alignment before insert. *Avoid hitting the terminal into the connector during wire insertion, if encountered abnormality stop the process and call the attention of Immediate superior and Automatically disposed and replace the unit.</div><div><div></div><div></div><div>2. Press the Upper button using left hand then remove the assy part using right hand. Check the insertion condition.</div></div></div></div>		<div>1. Use provided jig per model 2. No wrong usage of parts 3. No wrong insertion 4. No deformed terminal 5. No stuck of terminal tip 6. One by one insertion</div> <div>Important reminders/Note/s:</div> <div>1. Make sure wires are properly inserted. Conduct <u>Pull-Push-Pull-Push</u> after insertion. Do not exert extra force. 2. Please hold the wires near terminal during insertion. 3. Automatically dispose and replace the unit if once encountered bend terminal, difficulty of insertion and half-locked connector. 4. Insertion of wires must be from left to right.</div> <div>Document reference/s:</div> <div>1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance. 2. Refer to WI-ENG-PDE-044 for Steering Navigation Controller procedure.. 3. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 4. Refer to GL-PRO-ASY-025 for Inspection Standard for connector insertion.</div>

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	WORK INSTRUCTION				Effectivity Date:	April 17, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
	Model code/Part number: 466D / 75V098-0040		Customer: TRJ	Car Model: LAND CRUISER	Document No.:	WI-ENG-PD-823		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	1	Page No.:	12 of 20

PARTS:		1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
9	P1	<div><p>BEFORE FOLDING</p><p>Terminal tip is not visible</p><p>1. Hold the assy parts using both hands then conduct wire arrangement.</p></div>		N/A	1. No deformed terminals 2. No tangled wires 3. No wrong facing

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466D / 75V098-0040

Customer:

TRJ

Car Model:

LAND CRUISER

Document No.:

WI-ENG-PD-823

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

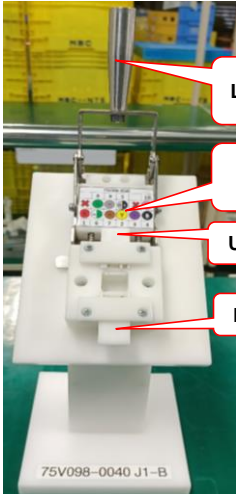
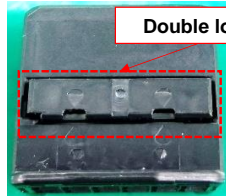
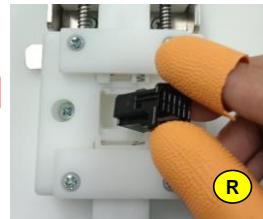
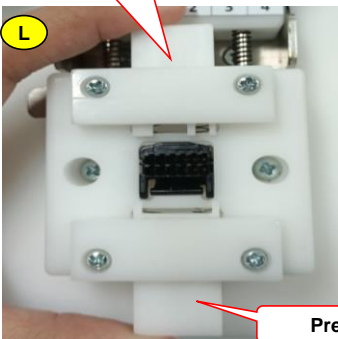
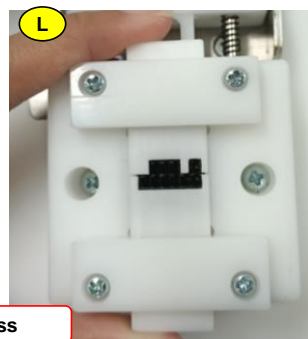
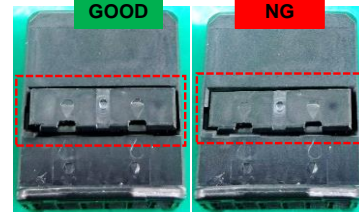
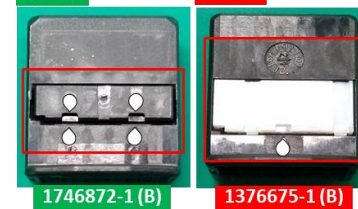
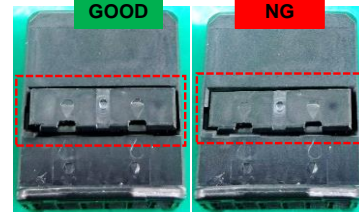
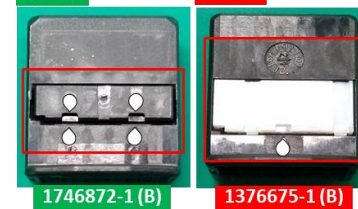
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PARTS:	1. Connector 1746872-1 (B)		JIG:	1. Insertion jig with locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
10	P1 Connector setting to insertion jig 1746872-1 (B)	<div><div>INSERTION JIG</div><div><div>75V098-0040 J1-B</div></div><div><div>Double lock</div><div></div><div>CONNECTOR</div><div><div>R</div></div><div><div>1. Get the connector 1746872-1 (B) and insert to insertion jig using right hand. <i>Note: Follow the connector orientation</i></div></div><div><div>Press</div><div><div>L</div></div><div><div>Press</div><div><div>L</div></div><div><div>2. Press the upper and lower guide (same timing) using left hand. Holes that need to be insert are only open.</div></div></div></div><div>N/A</div><td><div>1. Use the 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>CONNECTOR LOCK APPEARANCE CHECK</div><div><div>GOOD</div><div>NG</div><div></div><div>UNLOCK</div><div>HALF-LOCKED</div></div><div>CONNECTOR ILLUSTRATION</div><div><div>GOOD</div><div>NG</div><div></div><div>1746872-1 (B)</div><div>1376675-1 (B)</div></div><div>Important reminders/Note/s: <div>1. Automatically dispose and replace the unit if once encountered bend terminal, difficulty of insertion and half-locked connector.</div><div>2. Follow the connector orientation</div><div>3. Check the connector before insertion.</div></div></td></div></div>	<div>1. Use the 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>CONNECTOR LOCK APPEARANCE CHECK</div> <div><div>GOOD</div><div>NG</div><div></div><div>UNLOCK</div><div>HALF-LOCKED</div></div> <div>CONNECTOR ILLUSTRATION</div> <div><div>GOOD</div><div>NG</div><div></div><div>1746872-1 (B)</div><div>1376675-1 (B)</div></div> <div>Important reminders/Note/s: <div>1. Automatically dispose and replace the unit if once encountered bend terminal, difficulty of insertion and half-locked connector.</div><div>2. Follow the connector orientation</div><div>3. Check the connector before insertion.</div></div>	

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WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 17, 2024

Model code/Part number:

466D

/ 75V098-0040

Customer:

TRJ

Car Model:

LAND CRUISER

Document No.:

WI-ENG-PD-823

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:	1. Assy parts		JIG:	1. Insertion jig with locking jig																																				
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS																																				
11	P1 Wire insertion to Connector 1746872-1 (B)	<div><div>INSERTION SEQUENCE FROM LEFT TO RIGHT</div><div></div></div> <div><div>WIRE INSERTION ILLUSTRATION</div><div><table><tr><td>X</td><td>X</td><td>X</td><td>5</td><td>X</td><td>X</td></tr><tr><td></td><td></td><td></td><td>GR/B</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td>148</td><td></td><td></td></tr><tr><td>1</td><td></td><td></td><td>2</td><td>3</td><td>4</td></tr><tr><td>R</td><td>X</td><td>X</td><td>Y</td><td>V</td><td>B</td></tr><tr><td>149</td><td></td><td></td><td>148</td><td>148</td><td>148</td></tr></table></div></div> <div><div>BLACK VM TUBE (SUNPRENE)</div><div></div></div> <div><div>WIRE FACING</div><div></div></div> <div></div> <div><div>1. Insert first the wires from Black VM tube (Sunprene). Hold the R wire and insert to terminal slot 1 using right hand. Repeat the process for V-Y-B wires. <i>Note: Follow the insertion sequence based on the illustration stated above.</i></div><div><div>2. Hold the GR/B wire and insert to terminal slot 5. <i>Note: Follow the insertion sequence based on the illustration stated above.</i></div></div></div>	X	X	X	5	X	X				GR/B						148			1			2	3	4	R	X	X	Y	V	B	149			148	148	148	N/A	<div>1. Use provided jig per model</div> <div>2. No wrong usage of parts</div> <div>3. One by one insertion</div> <div>4. No wrong insertion</div> <div>5. No deformed terminal</div> <div>6. No stuck of terminal tip</div> <div>Important reminders/Note/s:</div> <div>1. Automatically dispose and replace the unit if once encountered bend terminal, difficulty of insertion and half-locked connector.</div> <div>2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> <div>3. Please hold the wire near terminal during insertion.</div> <div>4. Follow the insertion sequence based on the illustration stated above.</div> <div>Document references:</div> <div>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div> <div>2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</div>
X	X	X	5	X	X																																			
			GR/B																																					
			148																																					
1			2	3	4																																			
R	X	X	Y	V	B																																			
149			148	148	148																																			

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TAPING ASSEMBLY PROCESS

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466D

/ 75V098-0040

Customer: TRJ

Car Model:

LAND CRUISER

Document No.:

WI-ENG-PD-823

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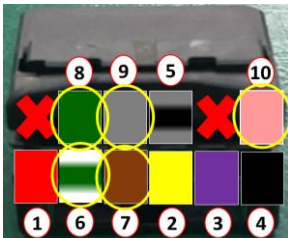
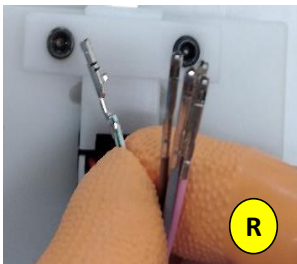
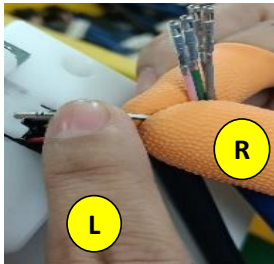
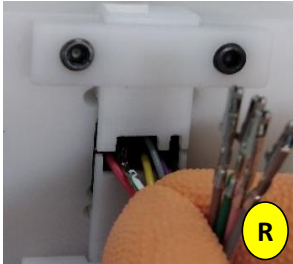
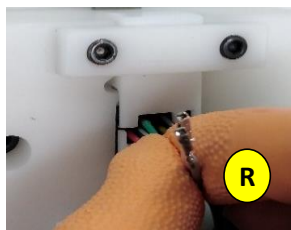
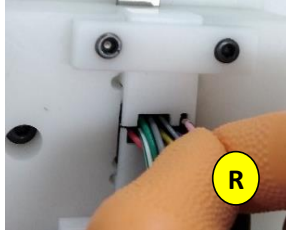
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Revision No.:

1

Page No.:

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PARTS:	1. Assy parts			JIG:	1. Insertion jig with locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
11	P1 Wire insertion to Connector 1746872-1 (B) (Continuation)	<div>BLUE VM TUBE (SUNPRENE)</div>     <p>3. Insert the wires from Blue VM tube (Sunprene), hold the W/G wire using right hand and support the wire by left index finger then insert to terminal slot 6 using right hand. Repeat the process for BR wire. <i>Note: Follow the insertion sequence based on the above illustration.</i></p>   <p>4. Hold the G wire and insert to terminal slot 8 using right hand. Repeat the process for GR-P wire. <i>Note: Follow the insertion sequence based on the illustration.</i></p>		N/A	<p>1. Use provided jig per model 2. No wrong usage of parts 3. One by one insertion 4. No wrong insertion 5. No deformed terminal 6. No stuck of terminal tip</p> <p>Important reminders/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>2. Please hold the wire near terminal during insertion.</p> <p>3. Follow the insertion sequence based on the above illustration.</p> <p>Document references:</p> <p>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p>

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WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 17, 2024

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n/a

Model code/Part number:

466D / 75V098-0040

Customer: TRJ

Car Model: LAND CRUISER

Document No.:

WI-ENG-PD-823

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

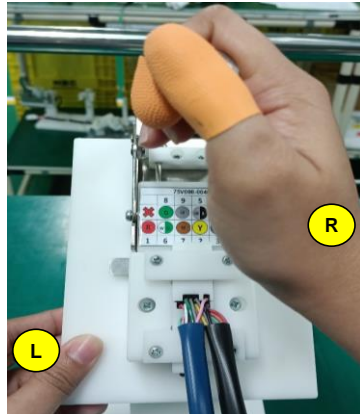
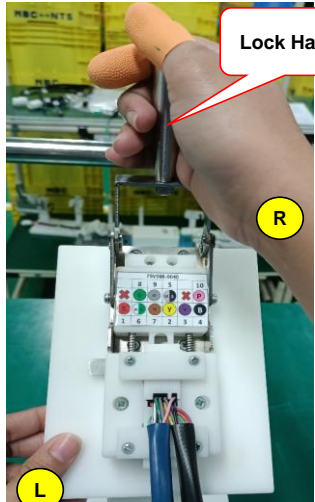
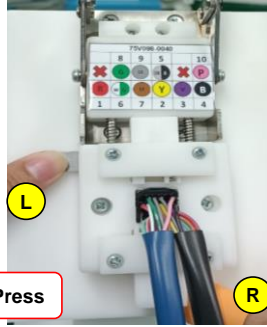
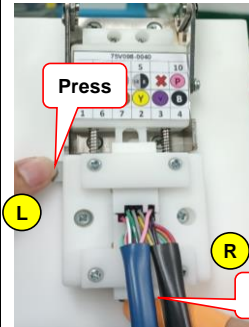
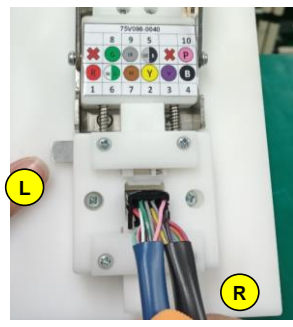


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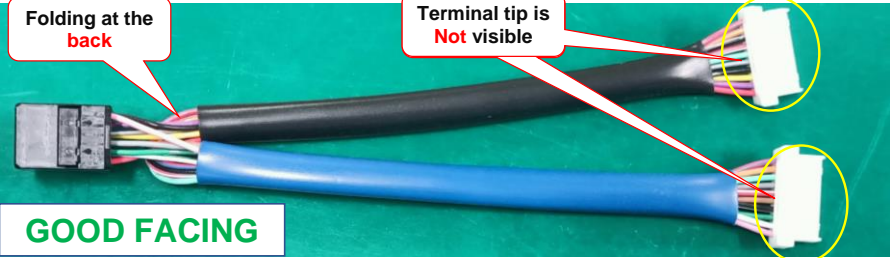

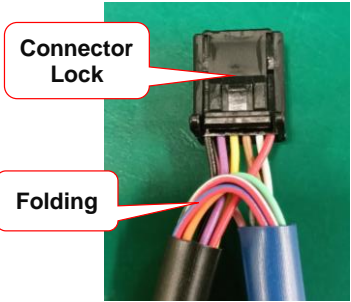
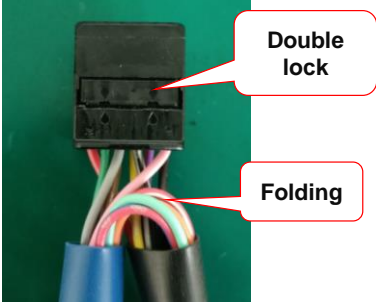
PARTS:	1. Assy parts		JIG:	1. Insertion jig with locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
12	P1 <div>1</div> Connector lock	<div><div><p>1. Hold the Lock handle and Pull down to lock the connector using right hand.</p></div><div><p>2. Press the upper and lower lever guide (same timing) using both hands.</p></div><div><p>3. Remove the assy parts using right hand and check if the connector is totally locked.</p></div></div> <div>n/a</div> <div><div>1. No skipped process 2. No damaged retainer lock 3. No manual locking</div><div><div>CONNECTOR LOCK ILLUSTRATION</div><div><div>UNLOCK</div></div><div><div>LOCKED</div></div></div></div>		

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	Model code/Part number: 466D / 75V098-0040		Customer: TRJ	Car Model: LAND CRUISER	Document No.:	WI-ENG-PD-823		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	1	Page No.:	17 of 20


PARTS:	1. Assy parts			JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
13	P1 Harness arrangement	<div><div><div><p>Folding at the back</p><p>Terminal tip is Not visible</p><p>GOOD FACING</p></div><div><p>Terminal tip is visible</p><p>NG FACING</p></div></div><div><div><p>Connector Lock</p><p>Folding</p><p>GOOD FACING</p></div><div><p>Double lock</p><p>Folding</p><p>NG FACING</p></div></div></div>	n/a	1. No wrong orientation of connector 2. No tangled wires 3. No wrong wire folding	


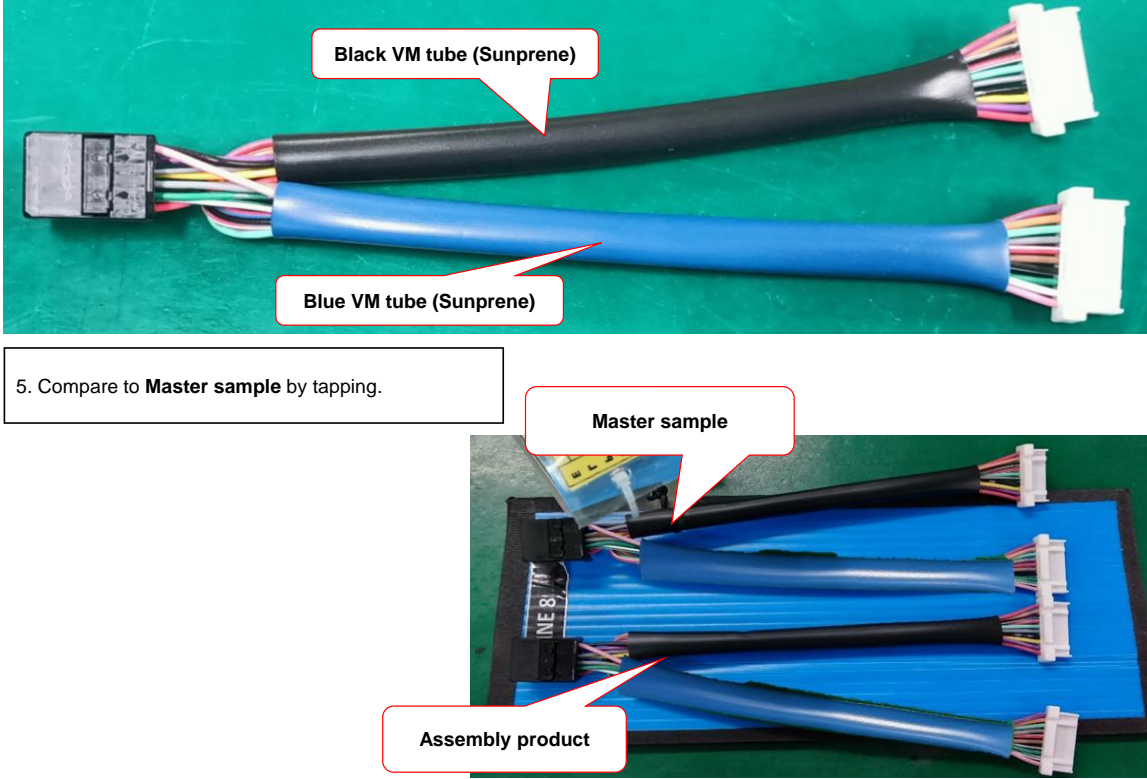
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	WORK INSTRUCTION				Effectivity Date:	April 17, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
	Model code/Part number: 466D / 75V098-0040		Customer: TRJ	Car Model: LAND CRUISER	Document No.:	WI-ENG-PD-823		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	1	Page No.:	18 fo 20

PARTS:	1. Assy parts 2. Master sample				JIG:	n/a			
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS		
14	P1	Visual/By Two's Inspection	1. Check the connector lock, must be locked.	2. Check the wire alignment. Make dure no tangled wires.	3. Check the terminal if with backing-out or not fully inserted and no deformed terminal.	4. Check the orientation of harness.	<div>Document References: 1. Refer to WI-QAD-QAC-252 for Steering Electrical Test after assembly.</div> <div>MASTER SAMPLE</div>  <div>1. No wrong facing of harness 2. No Tangled wires 3. No missing parts</div>		
									

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WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Model code/Part number:

466D

/ 75V098-0040

Customer:

TRJ

Car Model:

LAND CRUISER

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Effectivity Date:

April 17, 2024

Validity Date:

n/a

Document No.:

WI-ENG-PD-823

Revision No.:

1

Page No.:

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PARTS:

1. Assy parts

JIG:

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

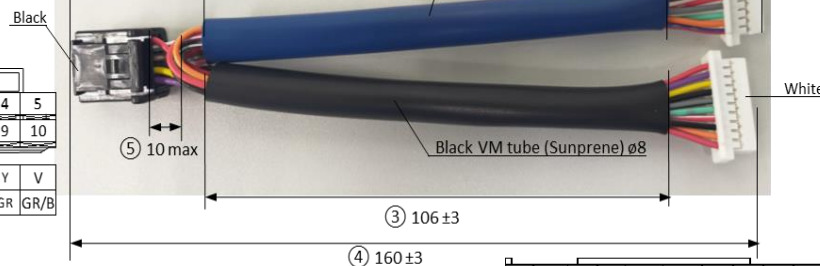
QUALITY POINTERS

15

P1

Measurement

1	2	3	4	5
6	7	8	9	10
R	W/G	BR	Y	V
B	X	G	GR	GR/B



MEASURING
TAPE



12	2	8	15	3	16	9	13	17	14
----	---	---	----	---	----	---	----	----	----

P	W/G	G	B/W	BR	R/W	GR	LG	OR	R/L
---	-----	---	-----	----	-----	----	----	----	-----

WIRE TYPE TABLE		
NO.	COLOR	WIRE TYPE
1	R	AVSS 0.3
2	W/G	AVSS 0.3
3	BR	AVSS 0.3
4	Y	AVSS 0.3
5	V	AVSS 0.3
6	B	AVSS 0.3
7		AVSS 0.3
8	G	AVSS 0.3
9	GR	AVSS 0.3
10	GR/B	AVSS 0.3
11		AVSS 0.3
12	P	AVSS 0.3
13	LG	AVSS 0.3
14	R/L	AVSS 0.3
15	B/W	AVSS 0.3
16	R/W	AVSS 0.3
17	OR	AVSS 0.3

Important reminders and note/s:

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

2. For Hatsumono, Nakamono and Owarimono.

Document reference/s:

1. Refer to **WI-PRO-ASY-056** for Sub-assembly Hatsumono Nakamono Owarimono Inspection

1. No wrong dimension

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Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

1

Page No.:

20 of 20

PARTS:

n/a

JIG:

n/a



QUALITY CHECKPOINTS

STEERING

75V098-0040

1. Check the connector lock, should be **LOCKED**.

2. Check the wire alignment. Make sure no tangled wires.

Black VM Tube (Sunprene)

Blue VM Tube (Sunprene)

3. Check the terminal if with backing out (no fully inserted) or deformed terminal.

4. Check the orientation of harness.

5. Check if no missing parts.

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