



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

November 18, 2024

Model code/Part number:

559D / 7N0242-7020

Customer: TRJ

Car Model:

TOYOTA HI-ACE

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☒ PRE-LAUNCH☐ MASSPRO

Document No.:


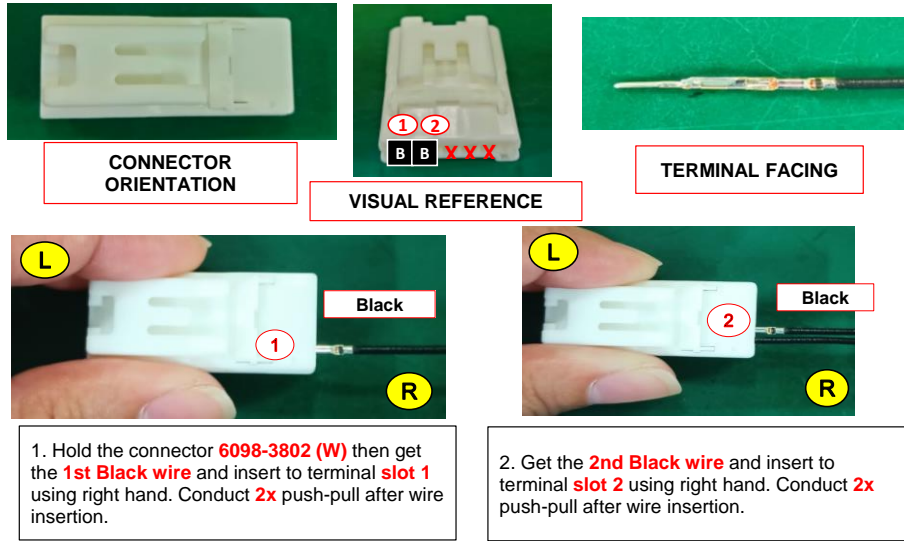
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PARTS:		1. AVSSf 0.3 B L=975±3mm [2pcs] 2. Black Corrugated tube ø7 L=394±3mm (No slit) 3. Connector 6098-3802 (W)				JIG:	n/a		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS		
1	Wire insertion to Black Corrugated tube ø7 L=394±3mm (No slit)	 <p>1. Get the Black corrugated tube (no slit) ø7 L=394±3mm using left hand and get 2pcs of Black wire using right hand then insert.</p>				Safety Instruction Be sure to wear required personal protective equipment during operation (gloves, finger cots, etc.)	Document reference/s: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 1. No wrong usage of parts 2. No deformed terminal		
2	Wire insertion to Connector 6098-3802 (W)	 <p>1. Hold the connector 6098-3802 (W) then get the 1st Black wire and insert to terminal slot 1 using right hand. Conduct 2x push-pull after wire insertion.</p> <p>2. Get the 2nd Black wire and insert to terminal slot 2 using right hand. Conduct 2x push-pull after wire insertion.</p>				Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.	Important reminders/note/s: 1. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.		
Revision History						Prepared by	Reviewed by	Approved by	Noted by
11/18/24	0	Initial issue.				D.Castillo	C. Villanueva	A. Arañes	n/a
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted
						Est. Date:	November 18, 2024		

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PRE-LAUNCH








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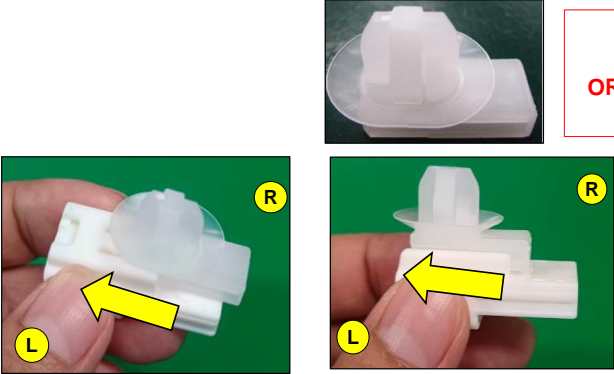
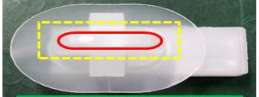
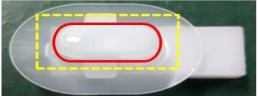

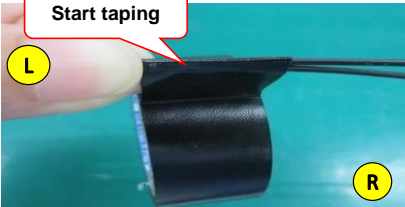
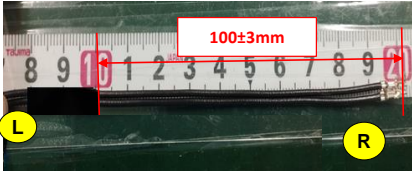

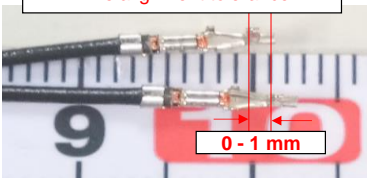
PARTS:		1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P1	Connector lock		<div><div>LOCKING JIG</div><div></div></div>	<div><div>1. No Unlock and half-locked</div><div>2. Use provided jig tools per model to avoid damaged lock.</div><div>Important reminders/note/s: 1. MANUAL LOCKING MAY CAUSED DAMAGED LOCK 2. Use provided jig tool per model to avoid damaged lock.</div><div><div><div><p>Before pressing</p></div><div><p>After pressing</p></div><div><div><div><p>GOOD Full Lock</p></div><div><p>NG Half Lock</p></div></div></div></div></div></div>

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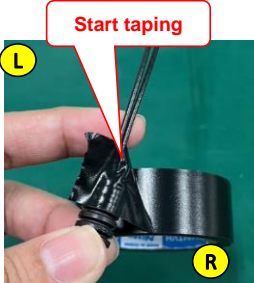
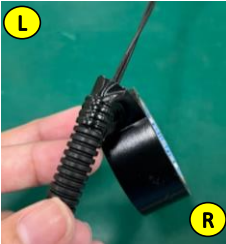
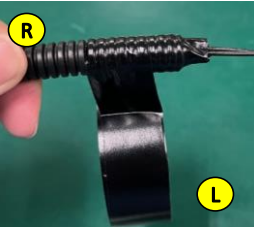
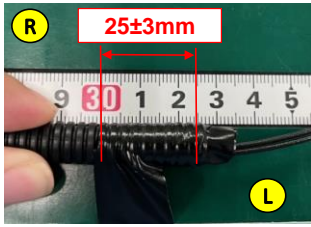
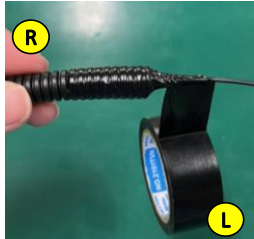
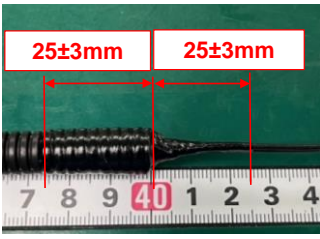
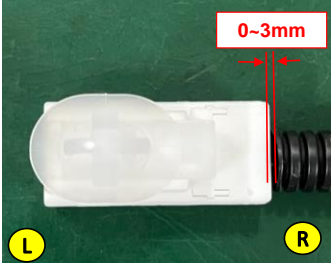

PARTS:	1. Clamp 82711-1E360 (W) 2. Assy parts 3. Black tape			JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	Clip attachment (Clip type clamp)	<div><p>CLAMP ORIENTATION</p><p>1. Hold the Connector using left hand, get the clip type clamp 82711-1E360 (W) then insert the clamp using right hand. <i>Note: Follow the illustration. Sound will be heard if properly inserted.</i></p></div>		n/a	<div><p>1. No wrong used of clamp 2. No damaged clamp 3. No missing clamp</p><p>CLIP CLAMP ILLUSTRATION</p><div><p>GOOD</p><p>82711-1E360 (W)</p></div><div><p>NG</p><p>82711-12B10 (W)</p></div></div>
5	P1 Spot taping	<div><p>120±3mm</p></div> <div><p>1. Hold the wires using left hand and measure from wire up to terminal pointed tip 120±3mm</p></div> <div><p>Start taping</p></div> <div><p>2. Get the Black tape and start taping on the Black wires. Conduct 2 windings of tape before cut the tape using both hands.</p></div> <div><p>100±3mm</p></div> <div><p>3. After taping, check the measurement, tape condition and terminal appearance.</p></div>		<div><p>MEASURING TAPE</p></div>	<div><p>Wire alignment tolerance</p><p>0 - 1 mm</p></div> <div><p>1. No flip-out tape. 2. No peel-off tape. 3. No loose tape. 4. No missing tape. 5. No wrong dimension. 3. No wrong use of tape.</p><p>Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</p></div>

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PARTS:		1. Assy part 2. Black tape		JIG:	n/a	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
6	P1 Taping 1 Corrugated tube to wire near Connector	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div>1. Hold the assy part using left hand and start taping using both hands. Make pre-tape 2 windings.</div><div>2. Measure from end of tape up to end of COT 25±3mm using both hands then make 1 winding.</div><div>3. Wind the tape 1/3 shifting up to wire then make 2 windings for end tape.</div><div>4. After taping, check the measurement and taping condition.</div></div>		<div>MEASURING TAPE</div>	<div>1. No flip-out tape 2.No peel-off tape 3. No loose tape 4. No wrong dimension 5. No wrong use of tape 6. No missing tape</div> <div>Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</div>	


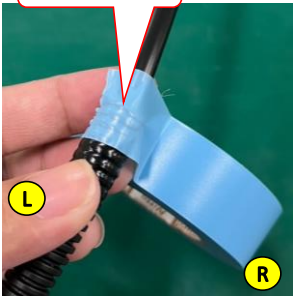
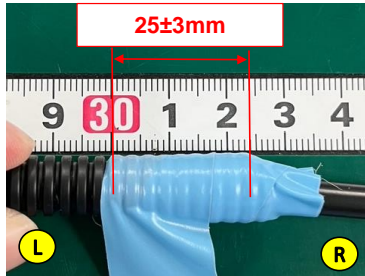
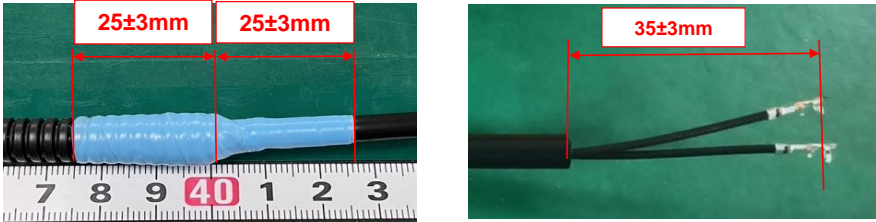

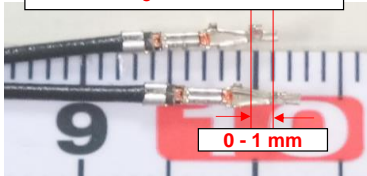
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PARTS:		1. Assy part 2. Black SV tube (VInyl) ø5 L=537±3mm		JIG:	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	Wire Insertion to Black Black SV tube (VInyl) ø5 L=537±3mm	 <div>1. Hold the assy part using left hand and get Black SV tube (VInyl) ø5 L=537±3mm using right hand then insert.</div>		n/a	1. No wrong usage of parts 2. No deformed terminal
8	P1 Taping 2 Black corrugated tube to Black SV tube (Vinyl)	<div><div>1. Get the Sky blue tape using right hand then start taping process using both hands.</div></div> <div><div>2. Hold the assy part using left hand and measure from end of tape up to end of COT 25±3mm. Then continue taping using both hands.</div></div> <div><div>3. After taping, check the measurement, taping condition and terminal appearance.</div></div>		<div>MEASURING TAPE</div> 	Important reminders/Note/s: 1. 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 wrong dimension 5. No wrong use of tape 6. No missing tape <div><div>Wire alignment tolerance 0 - 1 mm</div></div>

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PARTS:

1. Clamp 82711-16830 (B)
2. Clamp 82711-16820 (BR)

JIG:

1. Temporary Clamp assembly jig

NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

9

P1

Clamp Setting

**82711-17830 (B)****82711-16820 (BR)**

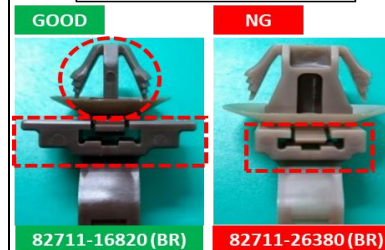
1. Get 1pc of band clamp 82711-16830 (B) then attach to clamp location **1**.

2. Get 1pc of band clamp 82711-16820 (BR) then attach to clamp location **2**.

Important reminders/Notes/:

1. Please check the clamp first before start of assembly to avoid wrong use of clamp.


1. No damaged clamp
2. No wrong use of clamp
3. No missing clamp

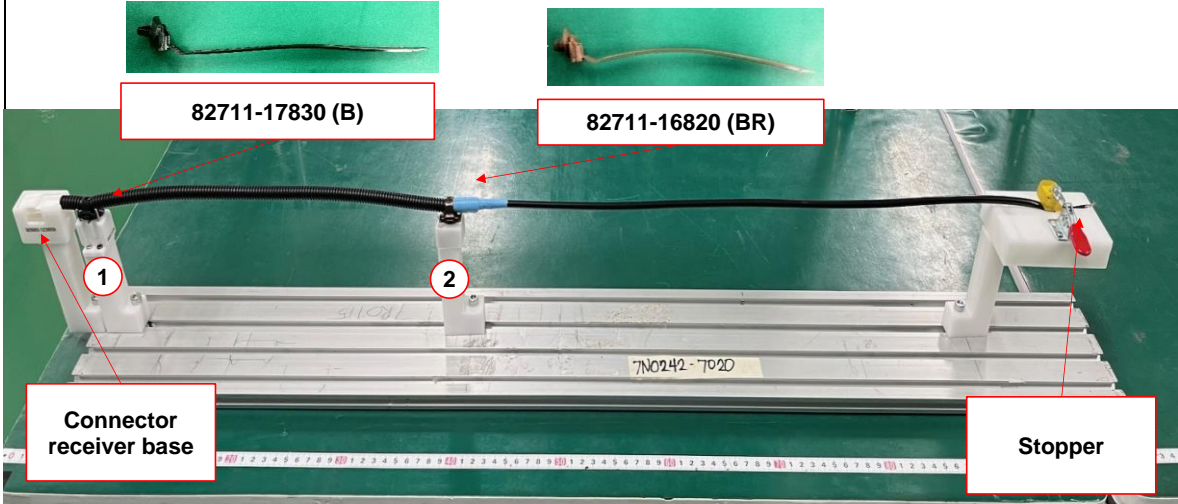
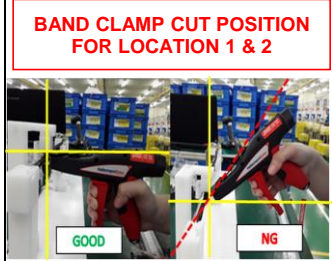
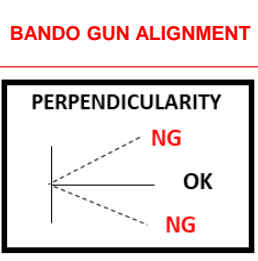

BAND CLAMP ILLUSTRATION

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PARTS:	1. Clamp 82711-16830 (B) 2. Clamp 82711-16820 (BR)			JIG:	1. Temporary Clamp assembly jig		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS		
10	P1 Clamp Assembly	<div></div> <div><div>1. Get the assy part and set to clamp assembly jig. First put the connector with clip into receiver base using left hand. Second, put the terminal to stopper jig using left hand and pull down the toggle clamp using right hand. <i>Note: Refer to above illustration for the correct setting.</i></div><div>2. Initially tighten the band clamp 1 and band clamp 2 using both hands</div><div>3. Get the bando gun using right hand then cut the band clamp on Location 1 and 2.</div></div> <div><div></div><div></div><div></div></div> <div>4. Conduct POINT CHECKING, before removing of harness from jig.</div> <div>5. Remove the harness from jig. Start from toggle clamp up to clamp up to connector receiver base.</div>			<p>Important reminders/Note/s:</p> <p>1. Using steel rule, check if the band cut measurement is within the required dimension and should not exceed the allowable range (0~2mm).</p> <p>2. Make sure no gap between the terminal and stopper jig.</p> <p>1. No wrong setting of clamp 2. No wrong use of clamp 3. No Loose attachment of clamp 4. No wrong setting of Bando gun</p>		

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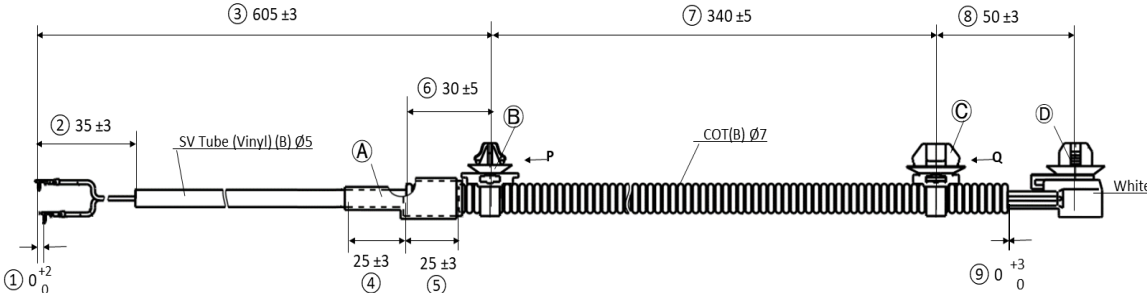

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PARTS:	1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
11	P1 Measurement	<div><div>MEASURING TAPE</div><div><p>NOTE:</p><p>(A) - Taping (Sky Blue)</p><p>(B) - Clamp (BR)</p><p>(C) - Clamp (B)</p><p>(D) - Clamp (W)</p><p><i>*Unit of measurement is in millimeter (mm)</i></p></div></div>		<p>Important reminders and note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>2. For Hatsumono and Owarimono.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-ASY-056 for Sub-assembly Hatsumono Nakamono Owarimono Inspection</p> <p>1. No wrong dimension</p>

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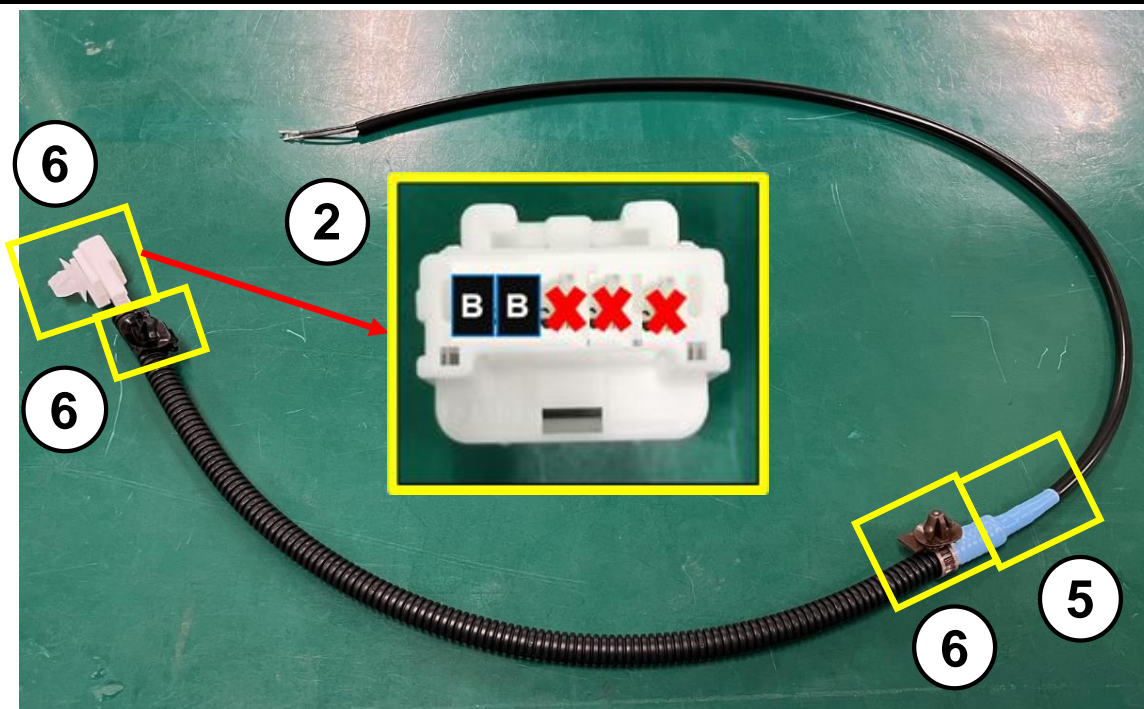
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PARTS:

1. Assy parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**TAPING - P1****7N0242-7020**

- ① No **Unlocked/half-locked connector**
- ② No **Wrong insert**
- ③ No **Deformed terminal**
- ④ No **Terminal Backing out**
- ⑤ No **Missing tape/**
No **wrong color of tape**
- ⑥ No **Missing clamp**
- ⑦ No **Mis-align clamp**

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