



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

May 2, 2025

Model code/Part number:

468B / 7M0476-7020A

Customer:

TRJ

Car Model:

TOYOTA HIACE

Document No.:

WI-ENG-PDE-252

Purpose:

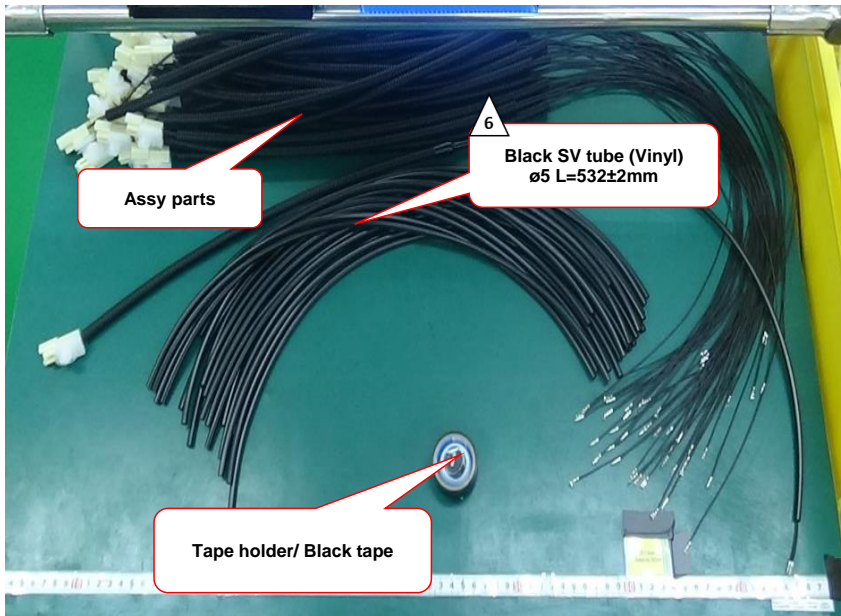
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

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PARTS:	1. Assy parts 2. Black tape			3. Black SV tube (Vinyl) $\phi 5$ L=532 \pm 2mm	JIG:	n/a		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS		
1	P1	Table Lay-out	<div style="text-align: center;">Table Lay-out</div> 			<div>Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</div> <div>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>	<div>Document reference/s: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to WI-ENG-PDE-966 for Offline assembly process</div> <div>1. No missing parts/tools 2. No excess parts/tools</div>	
Revision History					Prepared by	Checked by	Reviewed by	Approved by
05/02/25	6	Align SV tube length based on Cutting ledger from L=535 \pm 2mm to 532 \pm 2mm. Improved Work procedure/Illustration of process 4 and 5. Additional process "Spot taping". Improved Visual inspection/Quality checkpoints.			D. Castillo	-	C. Villanueva	A. Arañes
10/22/24	5	Transfer Wire insertion to connector, connector lock, wire insertion to COT and clip attachment to Offline assembly process. Transfer process 3-4 from P2. Change term Black vinyl tube to SV tube (Vinyl). Inclusion of car model "TOYOTA-HIACE" Improved table lay-out, measurement and Visual inspection/Quality checkpoints.			D. Castillo	C. Villanueva	A. Arañes	n/a
12/03/22	4	Improvement due to quality claim: Remove Wire insertion to Black vinyl tube process and transfer to P2. This countermeasure is to avoid missing tape. Update Table lay-out. Include quality pointers (Page 6).			D. Castillo	J. Loterte	C. Villanueva	A. Arañes
Eff. Date	Rev. No	Details of Change			Revised	Checked	Reviewed	Approved
					Est. Date:	October 27, 2018		

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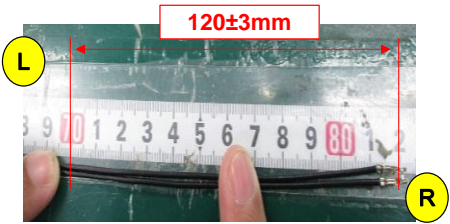
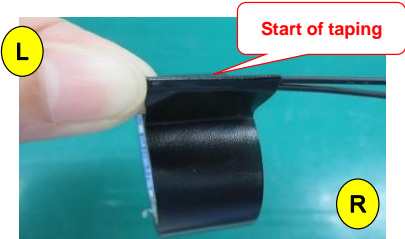
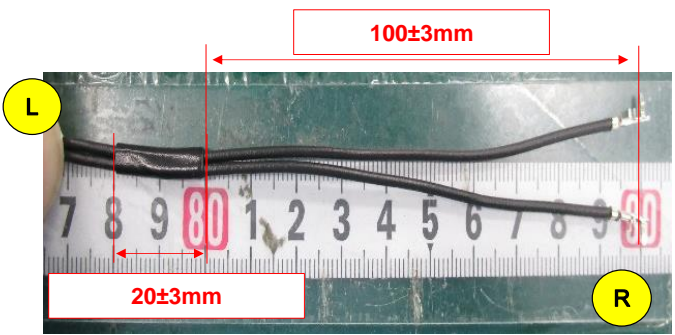

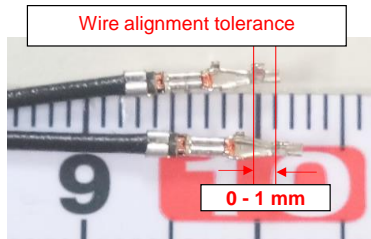
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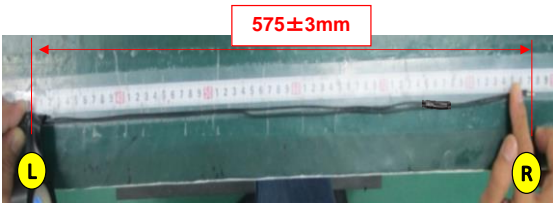





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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1	<div><div><p>1. Hold the wires using both hands and measure from wire up to terminal pointed tip 120±3mm.</p></div><div><p>2. Hold the wires using left hand, get black tape then start taping using right hand. Make 2 windings then cut the tape.</p></div></div> <div><p>3. After taping, check the measurement, wire alignment and taping condition.</p></div>		<div><p>MEASURING TAPE</p></div> <div><p>Wire alignment tolerance</p></div>	<p>Important reminders and Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</p> <ul style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong dimension

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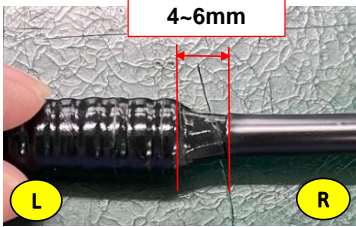
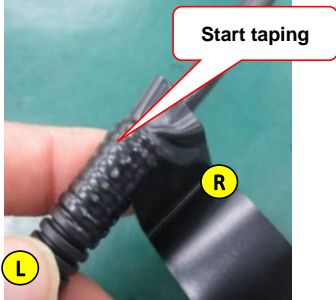

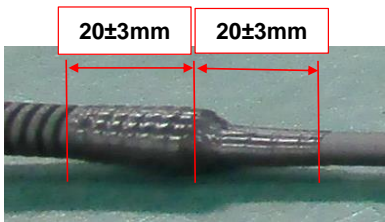
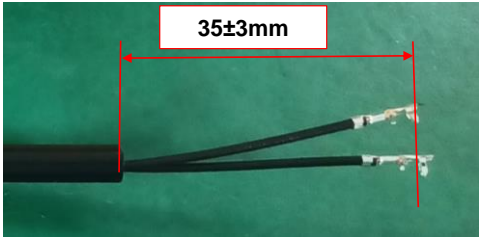

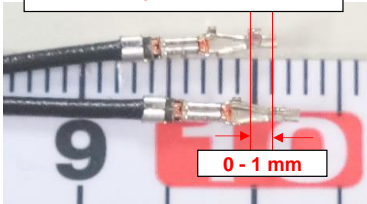
PARTS:	1. Assy parts 2. Black tape			 3. Black SV tube (Vinyl) ø5 L=532±2mm	JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
3	P1 Taping 1 Black corrugated tube to wire near terminal	<div><div><p>1. Hold the COT using left hand, get the Black tape using right hand then initially start pre-taping at the middle of COT and wire.</p></div><div><p>2. Measure from end of COT up to terminal pointed tip 575±3mm then continue the taping process using both hands.</p></div><div><p>3. After taping, check the measurement, taping condition and wire alignment.</p></div></div>			<div><p>MEASURING TAPE</p></div>	<p>Important reminders and Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>Document reference/s: 1. Refer to WI-PRO-ASY-001A for taping procedure.</p> <ul style="list-style-type: none">1. No flip-out tape2.No peel-off tape3. No loose tape4. No wrong dimension5. No wrong use of tape6. No missing tape7. No insufficient tape
4	Wire insertion to Black SV tube (Vinyl) ø5 L=535±3mm	<div><p>1. Hold the B-B wires (assy part) using left hand then insert SVI tube (Vinyl) ø5 L=535±3mm using right hand.</p></div> 			n/a	<ul style="list-style-type: none">1. No wrong usage of parts2. No deformed terminal

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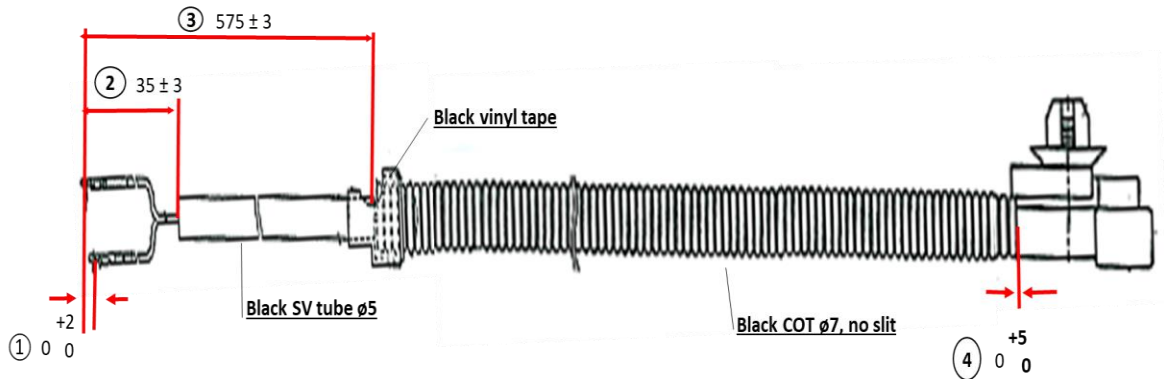

PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
5	P1 Taping 2 Black corrugated tube to Black SV tube (Vinyl)	<div><p>4~6mm</p></div> <div><p>Start taping</p></div> <div><p>1. Hold the COT using left hand and hold the SV tube (Vinyl) using right hand. Insert the SV tube (Vinyl) to tape until no movement. Make sure the dimension between COT to SV tube (Vinyl) is 4~6mm.</p><p><i>Note: Do not use to much force during insertion.</i></p></div> <div><p>2. Get the Black tape using right hand then start taping process using both hands.</p></div> <div></div> <div><p>20±3mm 20±3mm</p></div> <div><p>35±3mm</p></div> <div><p>3. After taping, check the measurement, taping condition and terminal appearance.</p></div>	<div><p>MEASURING TAPE</p></div> 	<p>Important reminders and Note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-ASY-001B for taping procedure.</p> <ul style="list-style-type: none">1. No flip-out tape2.No peel-off tape3. No loose tape4. No wrong dimension5. No wrong use of tape6. No missing tape7. No insufficient tape <div><p>Wire alignment tolerance</p><p>0 - 1 mm</p></div>	

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PARTS:	1. Assy parts			JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P1	Measurement	<div></div>	<div><div>MEASURING TAPE</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, Nakamono 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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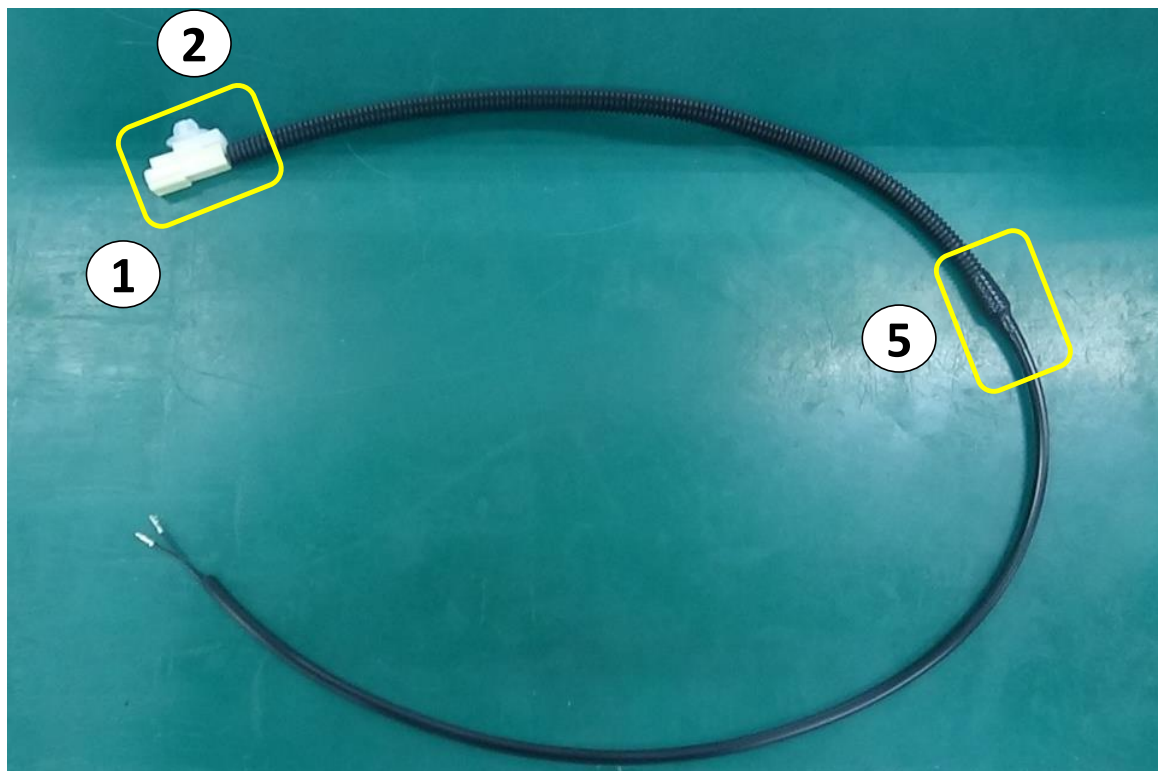
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PARTS:

1. Assy parts

JIG:

n/a

**VISUAL INSPECTION/ QUALITY CHECKPOINTS****TAPING - P1****7M0476-7020A**

- ① No **Unlock / Halflocked Connector**
- ② No **Missing Clip Type Clamp**
- ③ No **Terminal Backing Out**
- ④ No **Deformed Terminal**
- ⑤ No **Missing tape**

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