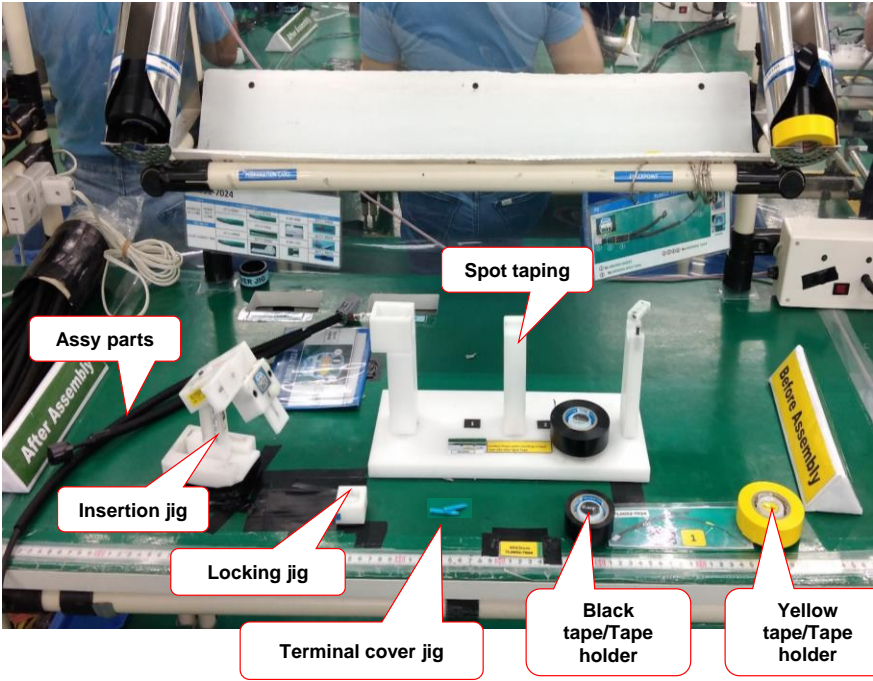



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	TAPING ASSEMBLY PROCESS					Validity Date:		n/a		
	Process Name/Title:		Model code/Part number: 320B / 7L0052-7024		Customer: TRQSS	Car Model: TOYOTA-RAV4		Document No.: WI-ENG-PDE-409B		
	Purpose:		<input type="checkbox"/> PROTOTYPE		<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO		Revision No.: 4		Page No.: 1 of 9


PARTS:		1. Assy parts; Black tape [2pcs.]; Yellow tape [1pc.]			JIG:		1. Insertion jig 2. Locking jig 3. Terminal cover jig 4. Spot Taping jig		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS		
1	P2	<div>Table Lay-out</div> 				<div>Safety Instruction</div> <p>Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <div>Housekeeping</div> <p>1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <div>Alert level</div> <p>For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	1. No missing parts/tools 2. No excess parts/tools		


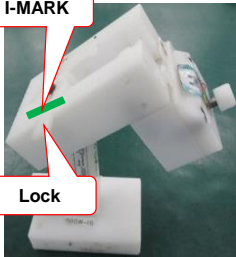





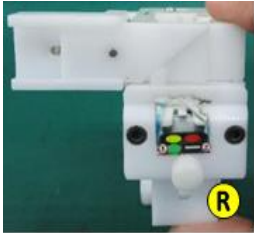

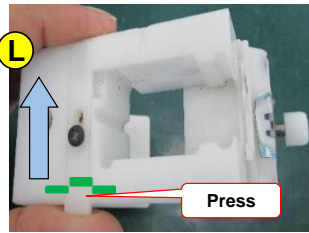
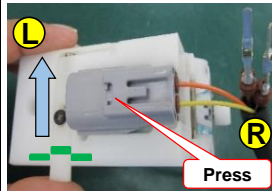
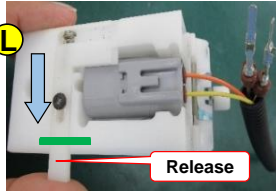
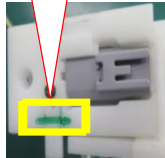
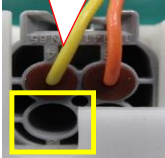


Revision History								Prepared by	Reviewed by	Approved by	Noted by		
07/10/24	4	Inclusion of car model "TOYOTA-RAV 4" and Measurement.				D.Castillo	C.Villanueva	A. Arañes	n/a	 D. Castillo	 C. Villanueva	 A. Arañes	n/a
04/24/23	3	Inclusion of quality checkpoints on page no. 8 as Document process improvements.				M.Ariola	J. Loterte	C. Villanueva	A. Arañes				
09/17/22	2	Transferring of process - Wire insertion to assy parts from P2 to P1 due to process and capacity improvement.				M. Catapang	J. Loterte	C. Villanueva	A. Arañes				
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted	Est. Date:	February 14, 2022		

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		Purpose: <input type="checkbox"/> PROTOTYPE		<input type="checkbox"/> PRE-LAUNCH	<input checked="" type="checkbox"/> MASSPRO	Revision No.:		4	Page No.: 2 of 9

PARTS:		1. Assy parts				JIG:		1. Insertion jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE		QUALITY POINTERS	
2	P2	<div><div>Connector setting to insertion jig 6188-0066 (GR) (Assy parts)</div><div><div><div><div>INSERTION JIG</div><div></div><div><div>I-MARK</div><div></div><div><div>Lock</div><div></div><div><div>Button</div><div></div><div><div>Visual reference</div><div></div></div></div></div><div><div>CONNECTOR ORIENTATION</div><div></div></div><div><div>INSERTION JIG ORIENTATION</div><div></div></div><div><div></div><div></div><div></div><div><div>1. Press the guide using right thumb. The slot for G wire will be opened.</div><div>2. Press the lock of insertion jig using left thumb.</div><div>3. Insert the connector 6188-0066 (GR) with inserted Y-OR wire using right hand</div></div><div><div></div><div></div><div><div>Press</div><div>Release</div></div></div></div></div></div></div></div></div>				n/a	<div><div>Connector Orientation Illustration</div><div><div><div>I-mark is align</div><div></div></div><div><div>1 Hole is open</div><div></div></div></div><div><div>GOOD</div></div><div><div><div>I-mark is NOT align</div><div></div></div><div><div>2 Holes are opened</div><div></div></div></div><div><div>NG</div></div><div><div>1. Use the provided jig per model</div><div>2. No wrong orientation of connector</div><div>3. No wrong use of connector</div><div>4. No damaged connector</div></div><div><div>Important reminders/Note/s:</div><div>1. Follow the connector orientation</div></div></div>		

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320B / 7L0052-7024

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-409B

Purpose:


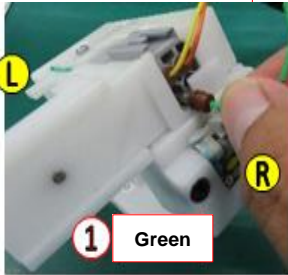

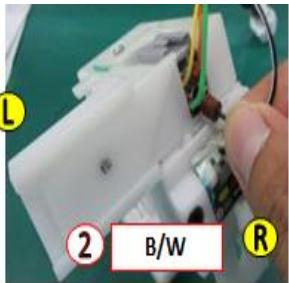
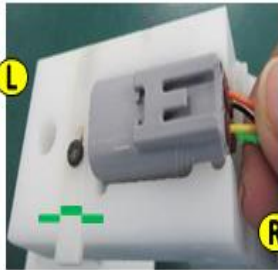
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:	1. Assy parts		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P2 Wire insertion to connector 6188-0066 (GR)	<div><p>WIRE FACING</p></div> <div><p>1 Green</p><p>1 Hold the G wire then insert to terminal slot 1 using right hand.</p></div> <div><p>2. Press the button using right thumb. The slot for B/W wire will be opened.</p></div> <div><p>2 B/W</p><p>3. Hold the B/W wire then insert to terminal slot 2 using right hand.</p></div> <div><p>4. After insertion, push the lock using left thumb then hold the wires and gently pull out the connector from jig using right hand.</p></div>	n/a	<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</div> <div>Important reminders/Note/s: 1. Please hold the wire near terminal. 2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> <div>Document references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div>

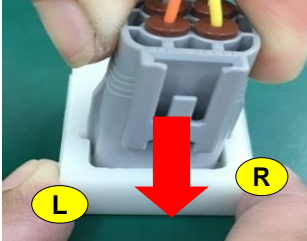
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	Model code/Part number: 320B / 7L0052-7024		Customer: TRQSS	Car Model: TOYOTA-RAV4	Document No.:		WI-ENG-PDE-409B	
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:		4	Page No.: 4 of 9


PARTS:		1. Assy parts		JIG:		1. Insertion jig 2. Locking jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS		
4	P2	Connector Lock					



1. Put the connector into locking jig using right hand then press **2x**. Touch the connector lock to confirm if properly locked.




Before pressing

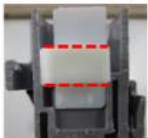
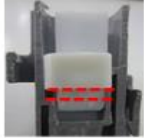
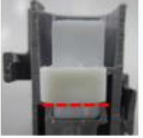


After pressing

LOCKING JIG



Coupler Cross Sectional View

NG	NG	GOOD
		
Unlock	Half Lock Condition	Full Lock Condition

Important reminders /Note/s:


1.MANUAL LOCKING MAY CAUSED DAMAGED LOCK



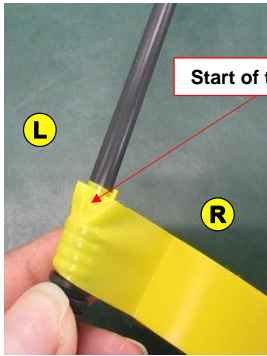


1. Use the provided locking jig per model
2. No unlock/half-locked connector

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	Purpose:		<input type="checkbox"/> PROTOTYPE		<input type="checkbox"/> PRE-LAUNCH		<input checked="" type="checkbox"/> MASSPRO		Revision No.:	4	Page No.:	5 of 9


PARTS:		1. Assy parts 2. Yellow tape			JIG:	n/a	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS	
5	P2 Taping 3 Corrugated tube to VM tube (Sunprene)	<div></div> <div>1. Measure from end of COT up to hotmelted wire 176mm using both hands.</div> <div></div> <div>2. Fix the COT and sunprene tube using both hands. Make sure no gap in between.</div> <div></div> <div>3. Get the Yellow tape using right hand then start taping process using both hands.</div> <div></div> <div>4. After taping, check the dimension and taping condition.</div>			<div>MEASURING TAPE</div> 	<p>Important reminders and Note/s:</p> <p>1. Use YELLOW TAPE only</p> <p>2. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-ASY-001 for taping procedure.</p> <p>1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No wrong use of tape</p>	



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	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO			Revision No.:	4	Page No.:	6 of 9

PARTS:		1. Assy parts 2. Black tape		JIG:	n/a	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
6	P2	Y-taping		<div>MEASURING TAPE</div> 	<p>Important reminders and Note/s:</p> <p>1. Use YELLOW TAPE for easy visualization of shifting lines, but actual should be BLACK TAPE.</p> <p>2. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-ASY-001 for taping procedure.</p> <p>1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong dimension 6. No wrong use of tape</p> <p>Y-TAPING ORIENTATION</p> 	

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PARTS:

1. Assy parts
2. Black tape

JIG:

1. Spot taping jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

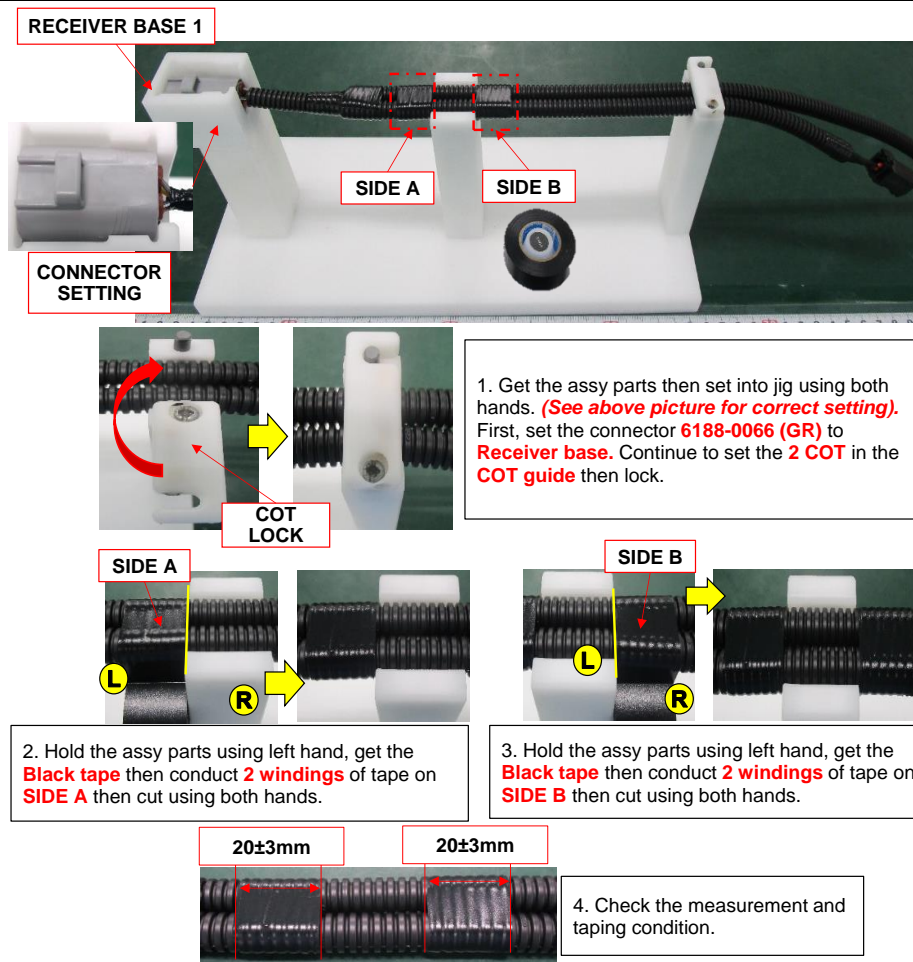
TOOLS/PPE

QUALITY POINTERS

7

P2

Spot taping



MEASURING
TAPE



Important reminders and 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 missing tape
5. No wrong dimension
6. No wrong use of tape

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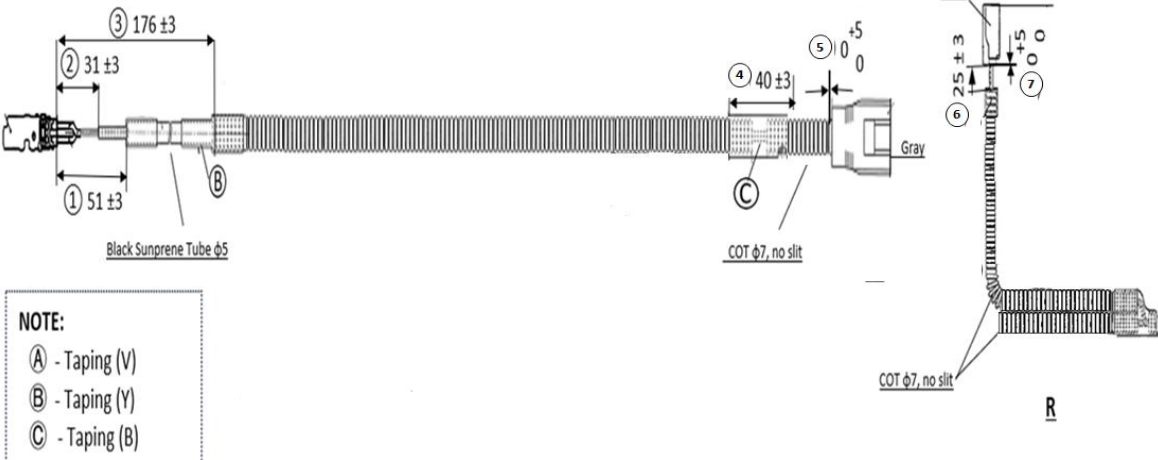

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PARTS:	1. Assy parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
8	P2 <div>4</div>	<div>Measurement</div> <div></div> <div><p>NOTE:</p><ul style="list-style-type: none">A - Taping (V)B - Taping (Y)C - Taping (B)</div>	<div><div>MEASURING TAPE</div></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></div> <div>1. No wrong dimension</div>

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PARTS:

1. Assy parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS

P2

7L0052-7024

NO GOOD

GOOD

① No WRONG INSERT

② No UNLOCK AND HALF LOCK CONNECTOR

③ ④ No MISSING TAPE

⑤ No MISSING SPOT TAPE

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