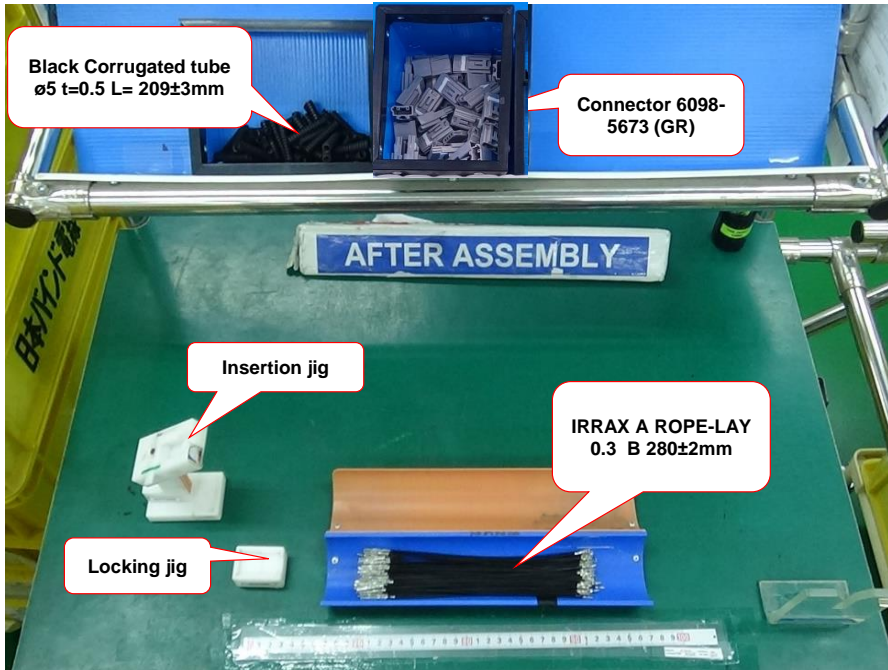




	WORK INSTRUCTION				Effectivity Date:	March 20, 2025		
	OFFLINE ASSEMBLY PROCESS				Validity Date:	n/a		
	Process Name/Title:		Model code/Part number: 311D / 7L0158-7021		Customer: TRQSS	Car Model: TOYOTA-RAV4	Document No.: WI-ENG-PDE-1210	
	Purpose:		<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		Revision No.:	1	Page No.:	1 of 7

PARTS:		1. Connector 6098-5673 (GR) 2. IRRAX A ROPE-LAY 0.3 B 280±2mm		3. Black Corrugated tube ø5 t=0.5 L= 209±3mm	JIG:	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
1	Offline	Table Lay-out	<div>TABLE LAY-OUT</div> <div></div>		<div>Safety Instruction Be sure to wear required 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>	1. No missing parts/tools 2. No excess parts/tools

Revision History							Prepared by	Checked by	Reviewed by	Approved by		
							 D. Castillo	 J. Loterte	 C. Villanueva	 A. Arañes		
03/20/25	1	Change from Pre-launch to Masspro.			D. Castillo	J.Loterte					C.Villanueva	A. Arañes
03/05/25	0	Initial issue.			D. Castillo	J.Loterte					C.Villanueva	A. Arañes
Eff. Date	Rev. No	Details of Change			Revised	Checked	Reviewed	Approved	Est. Date:	March 5, 2025		

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

**WORK INSTRUCTION**

Effectivity Date:

March 20, 2025

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Validity Date:

n/a

Model code/Part number:

311D / 7L0158-7021

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1210

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

2 of 7

PARTS:		1. Connector 6098-5673 (GR)		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Offline	<div>Connector setting to insertion jig 6098-5673 (GR)</div> <div><div><div><div><div>Insertion jig</div><div></div></div><div><div><div>Lock</div><div>Holes</div><div>I-mark</div></div><div><div><div>Connector Orientation</div><div></div></div></div></div></div><div><div><div><div><div>L</div><div></div><div>Press</div></div><div><div><div>L</div><div></div><div>Press</div></div><div><div><div>L</div><div></div><div>Release</div></div></div></div></div><div><div><div>1. Press the lock of insertion jig using left thumb.</div><div>2. Insert the connector 6098-5673 (GR) into jig using right hand and release the lock.</div></div><div><div><div><div><div></div><div>3. Check the holes/terminal slot for B-B wires.</div></div></div></div></div></div></div></div></div></div>		n/a	<div><div><div>Connector Orientation Illustration</div><div><div><div>I-mark is align</div><div>2 Holes are open</div></div><div><div><div></div><div>GOOD</div></div><div><div><div></div><div>NG</div></div></div></div></div><div><div><div>I-mark is not align</div><div>All holes are open</div></div><div><div><div></div><div>NG</div></div></div></div><div><div>1. Use the provided jig per model</div><div>2. No wrong orientation of connector</div></div></div></div>

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Effectivity Date:

March 20, 2025

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Validity Date:

n/a

Model code/Part number:

311D / 7L0158-7021

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1210

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

3 of 7**PARTS:**

1. IRRAX A ROPE-LAY 0.3 B wire L=280±2mm [2 pcs.]
2. Black Corrugated tube ø5 t=0.5 L= 209±3mm

JIG:

n/a**NO.****PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS****3****Offline**Wire insertion to Black
Corrugated tube
ø5 t=0.5 L= 209±3mm

1. Get black corrugated tube **Ø5 L=209±2mm** (with slit) using left hand and insert **IRRAX A 0.3 B L=280±2mm** using right hand.

n/a

1. No wrong usage of parts
2. No deformed terminal

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Effectivity Date:

March 20, 2025

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Validity Date:

n/a

Model code/Part number:

311D / 7L0158-7021

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1210

Purpose:



PROTOTYPE



PRE-LAUNCH




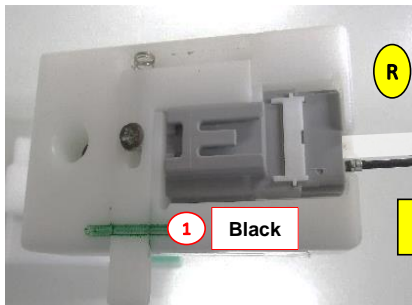
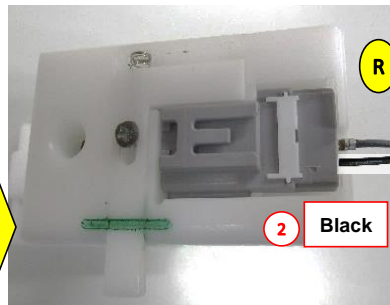
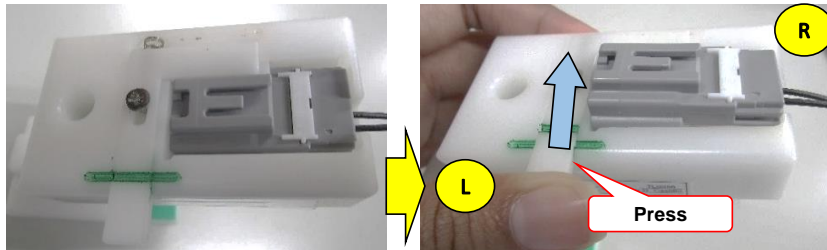
MASSPRO

Revision No.:

1

Page No.:

4 of 7

PARTS:		1. Assy parts	JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Offline Wire insertion to Connector 6098-5673 (GR)	<div>TERMINAL FACING</div> <div><div>1. Get the first Black wire and insert to Slot 1 of connector using right hand. Note : Insertion should be left to right.</div></div> <div><div>2. Get the second Black wire and insert to Slot 2 of connector using right hand. Note : Insertion should be left to right.</div></div> <div><div>3. After insertion, press the lock using left thumb and then hold the wires and gently pull out the connector from jig using right hand.</div></div>	n/a	<p>Important reminders and Note/s; 1. Make sure wires are properly inserted. Conduct <u>Pull-Push-Pull-Push</u> after insertion. Do not exert extra force.</p> <p>Document reference/s: 1. Refer to WI-PRO-CNC-017 for wire and strip length tolerance.</p> <ul style="list-style-type: none">1. No loose insertion2. No wrong dimension3. One by one insertion4. No deformed terminal5. No wrong wire facing

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

March 20, 2025

Validity Date:

n/a

Model code/Part number:

311D / 7L0158-7021

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1210

Purpose:

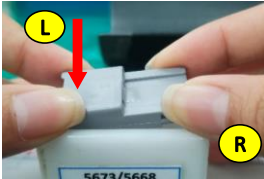
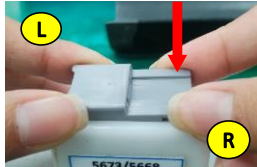



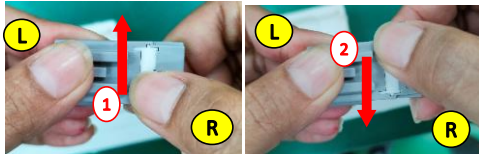





☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

5 of 7

PARTS:	1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	Offline Connector lock	<div><div><p>1. Load the connector into the jig holding both side of the connector, tip first.</p></div><div><p>2. Press the lower part of connector to fully insert into the locking jig.</p></div><div><p>Right thumb-Lower Left thumb-middle</p><p>3. Press the lower parts of connector using right hand while left hand holding the middle.</p></div><div><p>Right thumb-upper Left thumb-middle</p><p>4. Press the upper part of connector using right hand while left hand holding the middle.</p></div><div><p>Right thumb-middle Left thumb-middle</p><p>5. Lift then press the connector in the middle using left and right hand.</p></div><div><p>6. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</p></div></div>	<div>LOCKING JIG</div> 	<div>1. Use the provided jog per model 2. No unlocked/half-locked connector</div> <div>Important reminders/Note/s: 1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR LOCK 2. Use provided jig tool per model to avoid damaged lock.</div> <div>Document references: 1. Refer to GL-PRO-ASY-017 for the verification of connector lock.</div> <div><div><p>Before pressing</p></div><div><p>After pressing</p></div></div> <div><div><p>GOOD</p><p>Full Lock</p></div><div><p>NG</p><p>Half Lock</p></div></div>

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

March 20, 2025

Validity Date:

n/a

Model code/Part number:

311D / 7L0158-7021

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1210

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

6 of 7

PARTS:

1. Assy Parts

JIG:

n/a

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

6

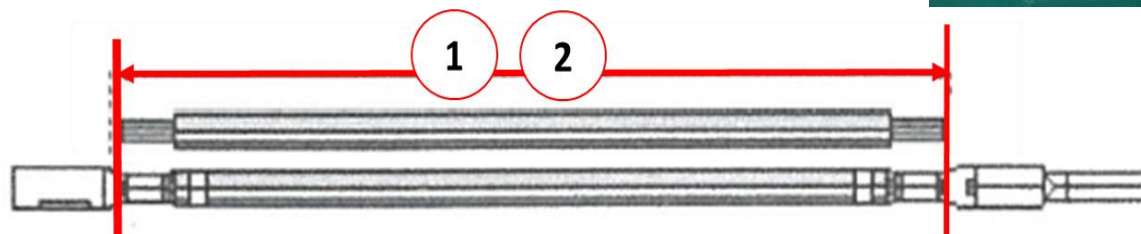
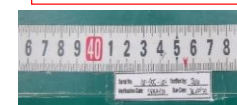
Offline

Measurement

Note:

1. Measurement point: End of core wire to the end of core wire
2. Terminal is reference only.

Measuring tape

COT $\phi 5 209 \pm 3 \text{mm}$ **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

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

March 20, 2025

Model code/Part number:

311D / 7L0158-7021

Customer:

TRQSS

Car Model:

TOYOTA-RAV4

Document No.:

WI-ENG-PDE-1210

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

7 of 7**PARTS:**

1. Assy parts

JIG:

n/a

VISUAL INSPECTION/QUALITY CHECKPOINTS**OFFLINE INSERTION****7L0158-7021****① No Unlocked/Halflocked connector****③ No Terminal Backing Out****② No Wrong Insert****④ No Missing COT****⑤ No Deformed Terminal**

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp