



WORK INSTRUCTION

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

April 23, 2024

Model code/Part number:

164B / 7M0546-7020C

Customer:

TRJ

Car Model:

TOYOTA-AURIS

Document No.:

WI-ENG-PDE-083

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

3

Page No.:

1 of 5

PARTS:

1. All parts: IRRAX A 0.3 B L=192+2mm; Connector 6098-5668 (W); Black corrugated tube Ø5 L=39+2mm

JIG:

1. Insertion jig
2. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

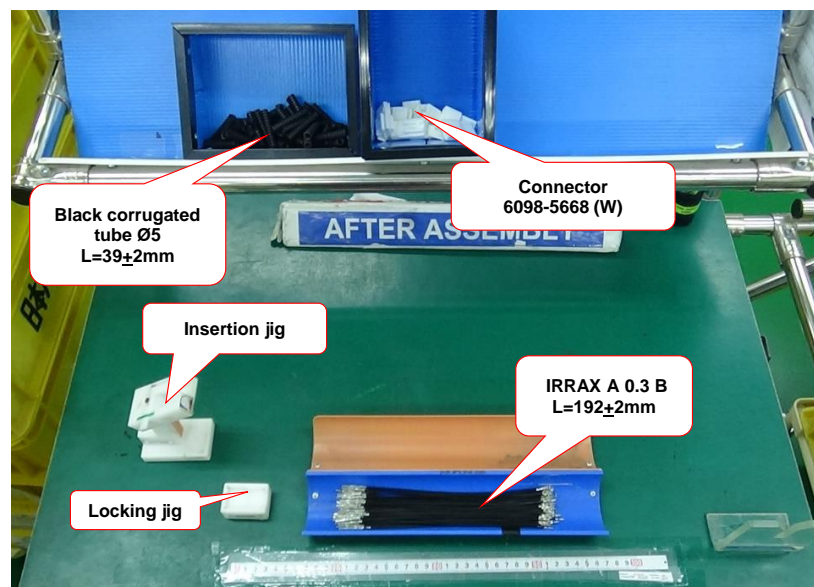
QUALITY POINTERS

1

Offline

Table Lay-out

TABLE LAY-OUT



Safety Instruction

Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)

Housekeeping

1. Maintain and always practice 5's.
2. Personal things on the work place is prohibited. Keep it in your locker.

Alert level

For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.

- 1.No missing parts/tools
- 2.No excess parts/tools

Revision History

Prepared by

Reviewed by

Approved by

Noted by

04/23/24

3

Inclusion of all improvements (Table lay-out; important reminders and note/s; Document references; Measurements, Visual inspection and Car model"TOYOTA-AURIS"). Change assembly process name from kitting assembly to offline assembly and improve work procedure/Illustration on process 1 connector lock. Transfer Wire insertion to corrugated tube process form Taping assembly process (WI-ENG-PDE-084). Transfer to new format.

D.Castillo

C.Villanueva

A. Arañes

n/a

02/27/21

2

Remove cycle time; Change connector colours in accordance with color standardization for plastic parts please refer to (GL-COM-003); Change 2x pulling to Pull-Push-Pull-Push in insertion quality pointers; Put reference control number on connector lock process.

J. Loterte

C.Villanueva

A.Shimamura

A. Arañes

08/28/20

1

Updated Cycle time, changed effective and validity date.

J. Loterte

R. Peñaloza

A.Shimamura

A. Arañes

Eff. Date

Rev. No

Details of Change

Revised

Reviewed

Approved

Noted


Est. Date:

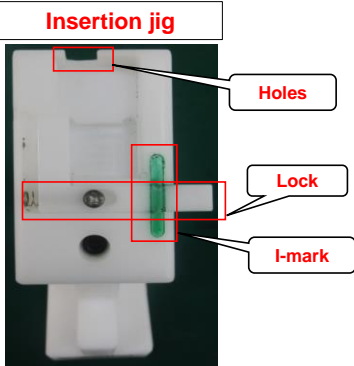
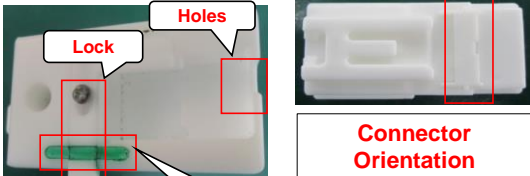
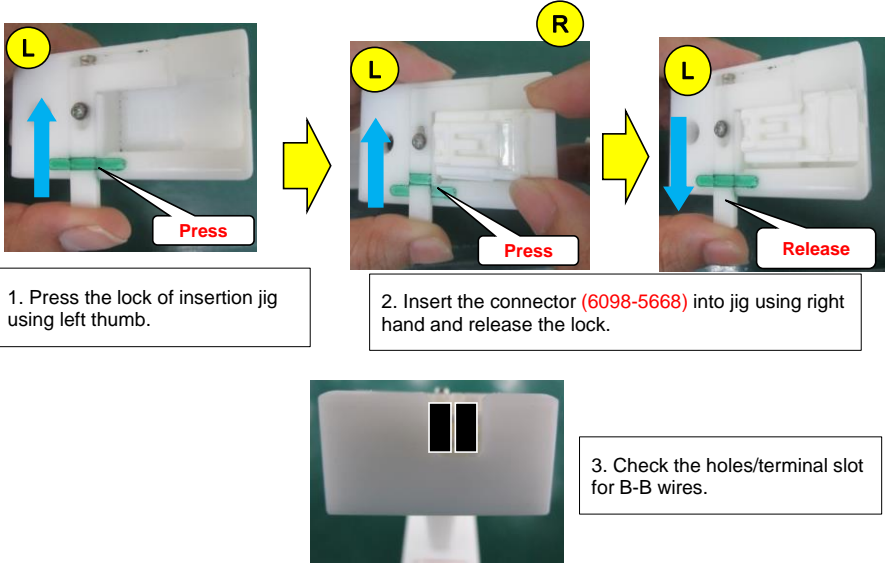
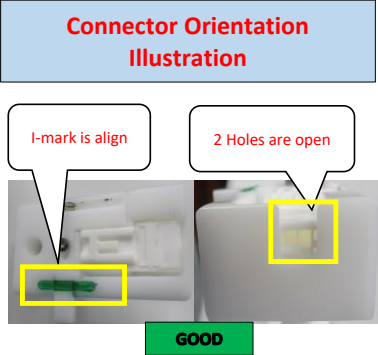
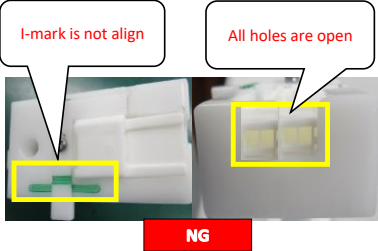
February 27, 2020

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	Model code/Part number: 164B / 7M0546-7020C		Customer: TRJ	Car Model: TOYOTA-AURIS	Revision No.: 3 Page No.: 2 of 5		
Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO							


PARTS:		1. Connector 6098-5668 (W)		JIG:	1. Insertion jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
2	Offline Connector setting to insertion jig 6098-5668 (W)	<div><div></div><div></div><div></div></div>		n/a	<div><div></div><div></div><div>1. Use the provided jig per model 2. No wrong orientation of connector</div></div>	


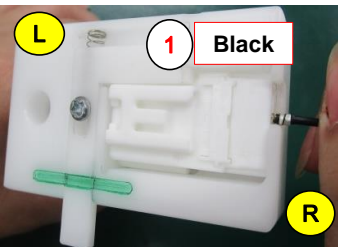
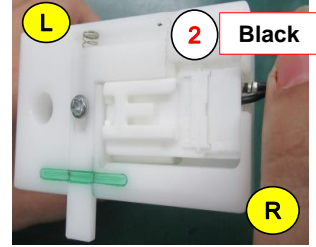
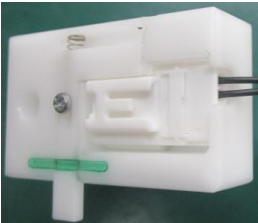
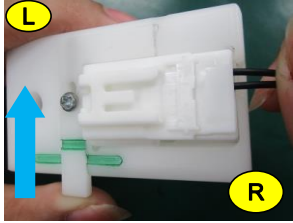
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	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO			Revision No.:	3	Page No.:	3 of 5

PARTS:	1. IRRAX A 0.3 B L= 192+2mm [2pcs] 2. Black corrugated tube Ø5 L=39+2mm (with slit)			JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">3</div> <div>Wire insertion to corrugated tube Ø5, L=39+2mm (with slit)</div> </div> </div>	<div style="display: flex; align-items: center;">  <div style="border: 1px solid black; padding: 5px; margin-left: 10px;"> 1. Get black corrugated tube Ø5 L=39+2mm (with slit) using left hand and insert IRRAX A 0.3 B L=192+2mm using right hand. </div> </div>		n/a	1. No wrong usage of parts 2. No deformed terminal
4	Offline Wire insertion to connector 6098-5668 (W)	<div style="display: flex; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;">  <div style="border: 1px solid black; padding: 5px; margin: 5px;"> Wire facing </div>  </div> <div style="margin: 0 20px; font-size: 2em;">➔</div> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> 1. Get Black wire then insert to terminal slot 1 using right hand. Note: Make sure to hold the COT using right hand while insertion to prevent deformed in 7D0349 Terminal. <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">3</div> </div> <div style="border: 1px solid black; padding: 5px;"> 2. Get Black wire then insert to terminal slot 2 using right hand. </div> </div> </div> <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin: 0 10px; font-size: 2em;">➔</div>  <div style="border: 1px solid black; padding: 5px; margin-left: 10px;"> 3. After insertion, push the lock button using left thumb and then hold the wires and gently pull out the connector from jig using right hand. </div> </div>		n/a	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire 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. 3. Insertion must be from left to right. Document reference/s 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance

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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

3

Page No.:

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PARTS:

1. Assy parts

JIG:

1. Insertion jig

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

5

Offline

Connector Lock



1. Load the connector into the jig holding both side of the connector, tip first.



2. Press the lower part of connector to fully insert into the locking jig.



Right thumb-Lower
Left thumb-middle

3. Press the lower parts of connector using right hand while left hand holding the middle.



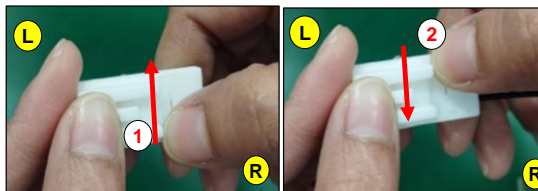
Right thumb-upper
Left thumb-middle

4. Press the upper part of connector using right hand while left hand holding the middle.



Right thumb-middle
Left thumb-middle

5. Lift then press the connector in the middle using left and right hand.



6. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.

LOCKING JIG



Important reminders/Note/s;

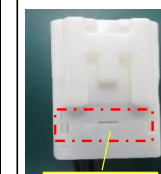
**1.MANUAL LOCKING MAY
CAUSED DAMAGED LOCK**

Document reference/s;

**1.Please refer to GL-PRO-ASS-017 for
the verification of connector lock.**

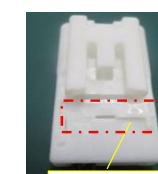
1. Use the provided locking per model
2. No unlock/half-locked connector

GOOD



Full Lock

NG



Half Lock



Before pressing





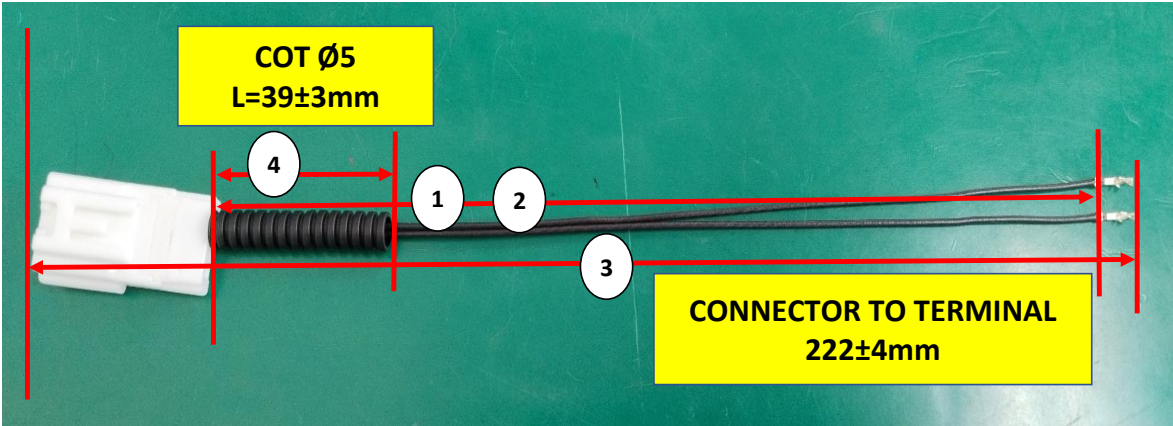
After pressing

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	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO			Revision No.:	3	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	<div><div>Measuring tape</div></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> <p>1. No wrong dimension</p>			

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☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:

n/a

JIG:

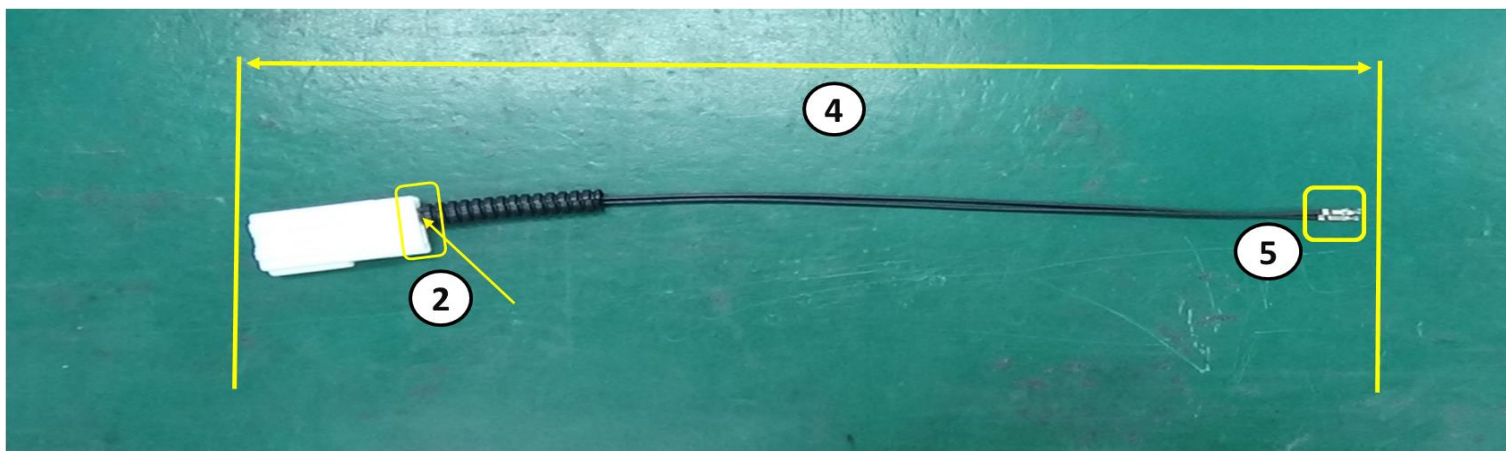
n/a

**VISUAL INSPECTION****OFFLINE INSERTION****7M0546-7020C**

①

**GOOD****NO GOOD**

②



④

⑤

③

**GOOD****NO GOOD**

①

No Unlock connector

③

No Terminal Backing Out

②

No Wrong insert

④

Check the Alignment

⑤

No Deformed terminal

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