



WORK INSTRUCTION

Process Name/Title:

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

March 08, 2025

Model code/Part number:

521B / 7M0656-7020

Customer: TRJ

Car Model: TOYOTA CAMRY

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

WI-ENG-PDE-1208

Revision No.:

0

Page No.:

1 of 8

PARTS:

1. Connector 6098-2220 (W); AVSSf 0.3 wires Y-OR L=353±2mm ; Black Corrugated tube (no slit) ø5 L=254±3mm ±3mm

JIG:

1. Insertion jig with Switch cover
2. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

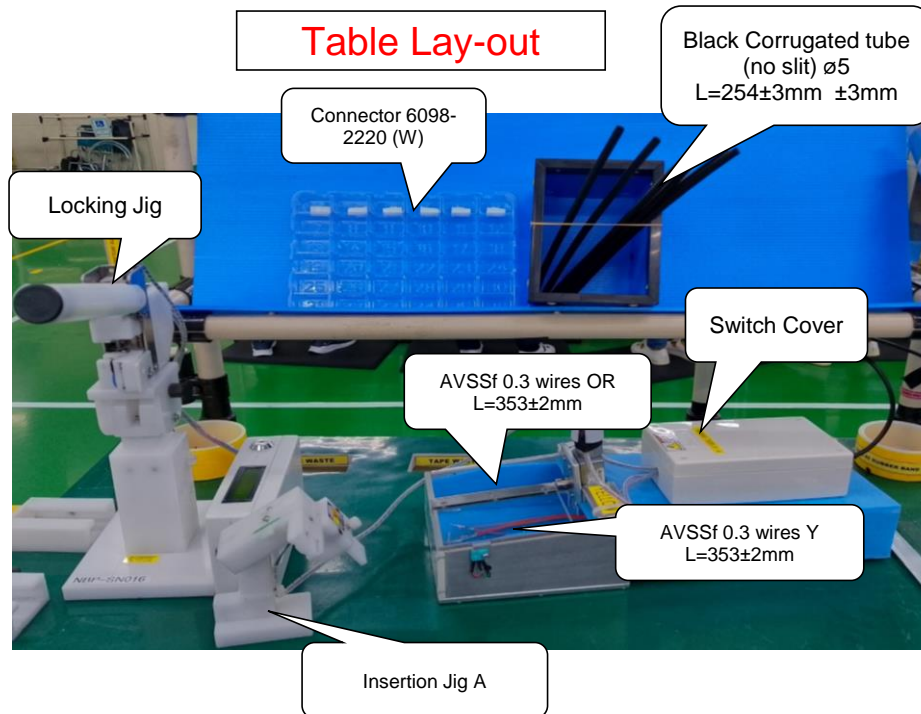
TOOLS/PPE

QUALITY POINTERS

1

Offline

Table Lay-out

**Safety Instruction**

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

Housekeeping1. Maintain and always practice 5's.
2. Personal things on the workplace 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**Document reference/s:**

1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance

Revision History

Prepared by

Checked by

Reviewed by

Approved by

03/08/25 0 Initial issue.

A.Hernandez J.Loterte C.Villanueva A.Arañes

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J.Loterte

C.Villanueva

A.Arañes

Eff. Date Rev. No

Details of Change

Revised Checked Reviewed Approved

Est. Date:

March 08, 2025

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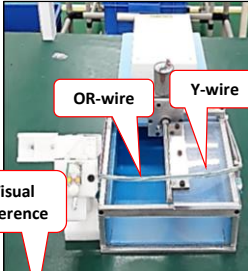
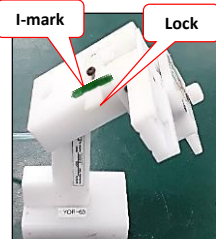

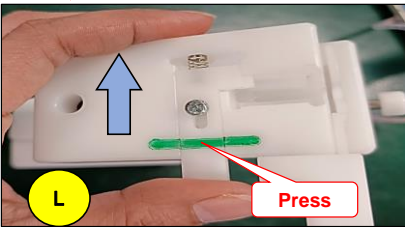
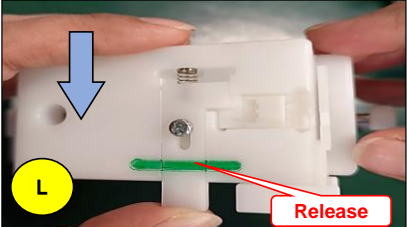
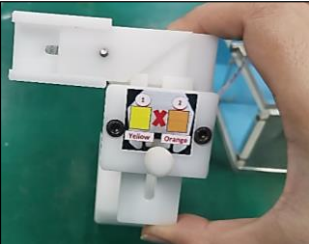
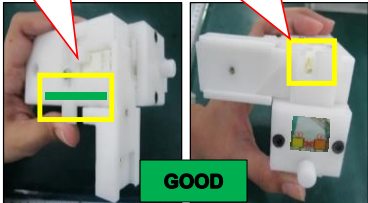
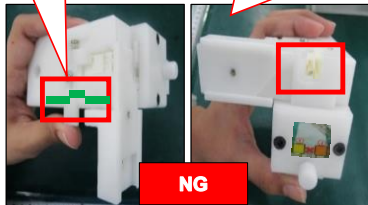
WI-ENG-PDE-1208

Revision No.:

0

Page No.:

2 of 8

PARTS:	1. Connector 6098-2220(W)		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	Offline Connector setting to insertion jig 6098-2220(W)	<div><div>INSERTION JIG ILLUSTRATION</div><div></div></div> <div><div>I-mark</div><div>Lock</div><div></div><div>INSERTION JIG ORIENTATION</div></div> <div><div></div><div>CONNECTOR ORIENTATION</div></div> <div><div></div><div>Press</div><div>1. Press the lock of insertion jig using left thumb.</div></div> <div><div></div><div>Release</div><div>2. Insert the connector 6098-2220 (W) into jig using right hand and release the lock. Note: Follow the connector orientation.</div></div> <div><div></div><div>3. Push the guide using left hand. The slot for Y wire will be opened.</div></div>	n/a	<div>Connector Orientation Illustration</div> <div><div>I-mark is align</div><div>1 hole is open</div><div></div><div>GOOD</div></div> <div><div>I-mark is not align</div><div>All holes were open</div><div></div><div>NG</div></div> <div>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</div>

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MASSPRO

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0

Page No.:

3 of 8

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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	Offline Wire insertion to connector 6098-2220 (W)	<div><div><div>YELLOW</div><div><div>1</div><div>2</div><div><div><div></div><div></div></div></div><div>ORANGE</div></div><div><div>Wire facing</div></div></div><div><div><div>L</div><div>1</div><div>Yellow wire</div><div><div></div><div></div></div><div>R</div></div><div><div>1. Hold the insertion jig using left hand. Get the Yellow wire and insert to connector using right hand. Conduct 2x push-pull after wire insertion.</div></div><div><div><div>L</div><div>2</div><div>Orange wire</div><div><div></div><div></div></div><div>R</div></div><div><div>3. Get the Orange wire and insert to connector using right hand. Conduct 2x push-pull after wire insertion.</div></div><div><div><div>L</div><div><div></div><div></div></div><div>R</div></div><div><div>4. After insertion, push the lock using left thumb and then hold the wires and gently pull-out the connector from jig using right hand.</div></div></div><div><div><div>2. Press the button using right thumb. Slot for Orange wire will be open.</div></div></div></div><td>n/a</td><td><div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform 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. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</div></td></div></div>		n/a	<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform 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. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</div>

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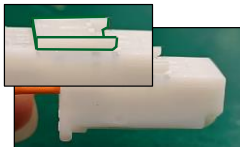
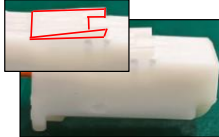
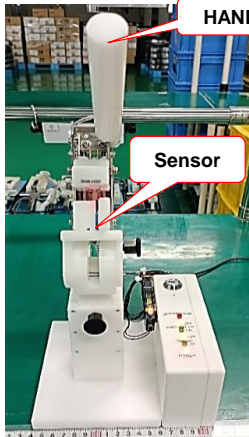
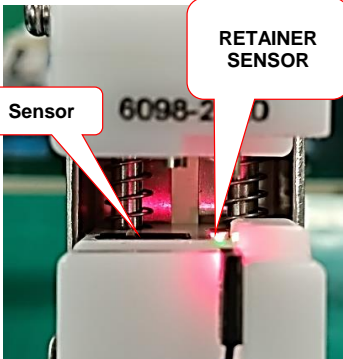
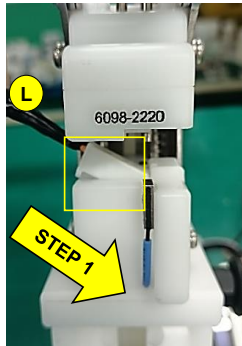
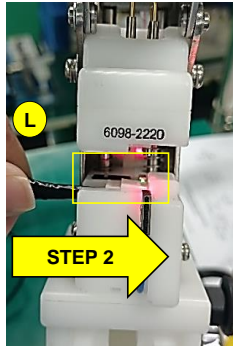
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Revision No.:

0

Page No.:

4 of 8

PARTS:	1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Offline Connector lock	<div><div><div>CONNECTOR RETAINER ILLUSTRATION SIDE VIEW</div><div><div></div><div></div><div>GOOD</div><div>NG</div></div></div><div><div></div><div></div><div></div><div></div><div>2. Hold the assy parts using left hand and insert into connector locking jig based on the direction of arrow. Make sure the connector touch the sensor. Sound will be heard if properly lock. NOTE: CONNECTOR LOCKING JIG WILL NOT FUNCTION IF CONNECTOR NOT REACH THE SENSOR.</div></div></div> <div><div>1. Check the Retainer lock of connector before insertion to locking jig. <i>Note: Must be NO half-locked condition prior connector locking.</i></div></div>	<div>1. Please ensure that Connector lock/retainer will not touch or hit by any object prior insertion into locking jig to avoid half-lock connector. 2. Maintain 10mm proper holding of wire to connector 3. Connector must be fully inserted to connector slot. 4. Make sure no offset setting before locking process. 5. No wrong setting of connector. 6. No damaged connector lock 7. No unlocked/ half-locked connector.</div> <div>Important reminders/Note/s: 1. Incomplete locking process will alarm the jig. 2. No retainer in connector cannot proceed. 3. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process.</div>	

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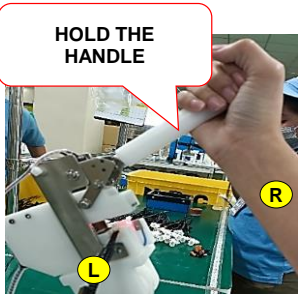
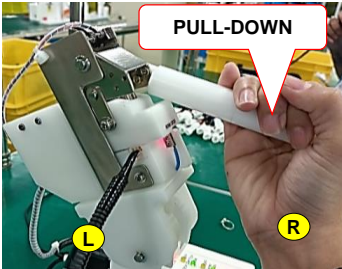
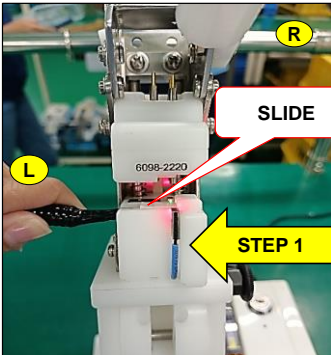
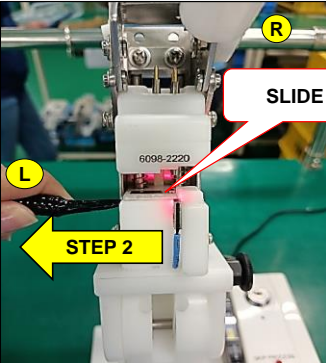
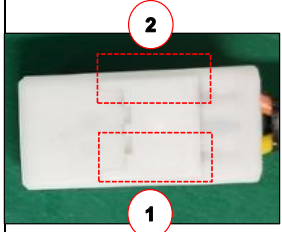
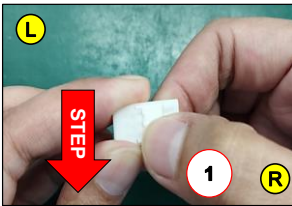
WI-ENG-PDE-1208

Revision No.:

0

Page No.:

5 of 8

PARTS:	1. Assy parts		JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	Offline Connector lock (Continuation)	<div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div><p>3. Hold the handle of the connector locking jig using right hand then gently pull down and bring back to original position after locking. Note: Pull down one time only.</p><p>4. Remove the locked connector using left hand based on the illustration, follow the direction of arrow.</p><p>5. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</p></div>	<p>1. Please ensure that Connector lock/retainer will not touch or hit by any object prior insertion into locking jig to avoid half-lock connector.</p> <p>2. Maintain 10mm proper holding of wire to connector</p> <p>3.Connector must be fully inserted to connector slot.</p> <p>4. Make sure no offset setting before locking process.</p> <p>5.No wrong setting of connector.</p> <p>6. No damaged connector lock</p> <p>7. No unlocked/ half-locked connector</p> <p>Important reminders/Note/s:</p> <p>1. Incomplete locking process will alarm the jig.</p> <p>2. No retainer in connector cannot proceed.</p> <p>3. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process.</p>	

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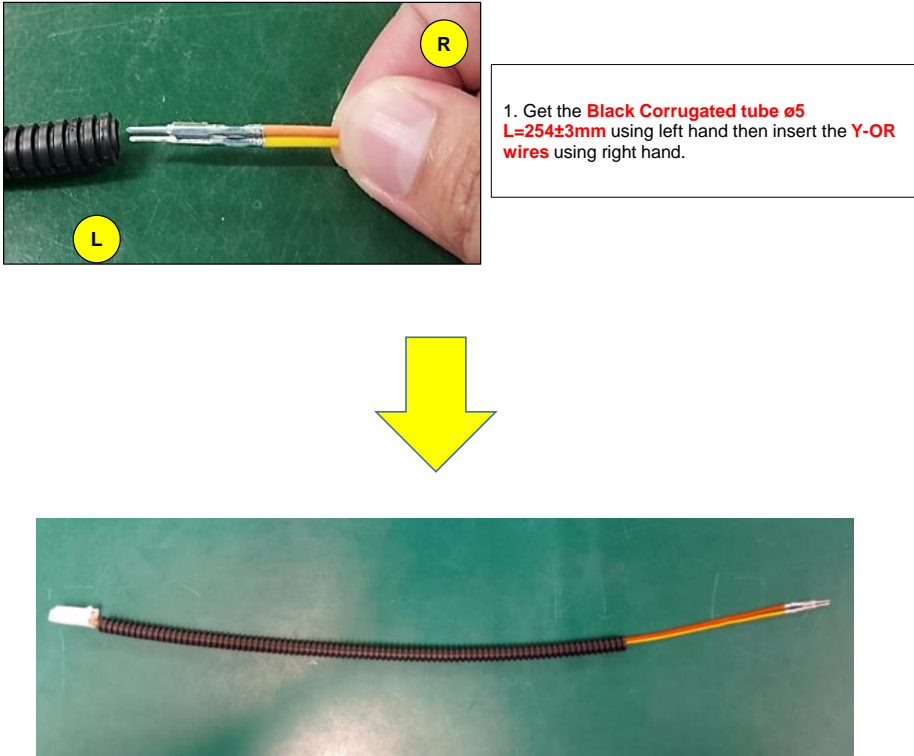
MASSPRO

Revision No.:

0

Page No.:

6 of 8

PARTS:			1. Assy parts 2. Black Corrugated tube ø5 L=254±3mm		JIG:	n/a
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	Offline	Wire insertion to Black Corrugated tube (no slit) ø5 L=254±3mm ±3mm	<div></div> <div>1. Get the Black Corrugated tube ø5 L=254±3mm using left hand then insert the Y-OR wires using right hand.</div>		n/a	1. No wrong use of parts 2. No deformed terminal

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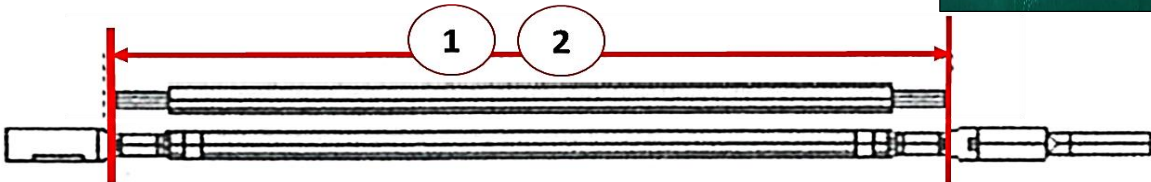


MASSPRO

Revision No.:

0

Page No.:

7 of 8

PARTS:		1. Assy Parts		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	Offline Measurement	<p>Note:</p> <ol style="list-style-type: none">1. Measurement point: End of core wire to the end of core wire2. Terminal is reference only.  		<div>MEASURING TAPE</div> 	<p>1. No wrong dimension</p> <p>Important reminders and note/s:</p> <ol style="list-style-type: none">1. Please use calibrated/verified measuring tape when getting the measurement.2. For Hatsumono, Nakamono and Owarimono. <p>Document reference/s:</p> <ol style="list-style-type: none">1. Refer to WI-PRO-ASY-056 for Sub-assembly Hatsumono Nakamono Owarimono Inspection

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MASSPRO

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Page No.:

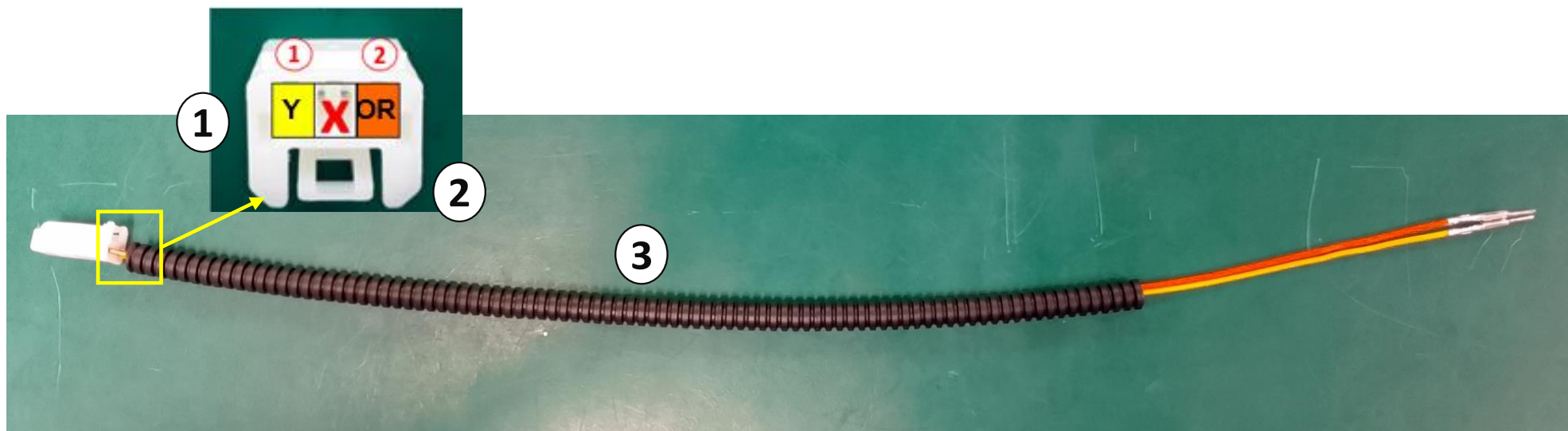
8 of 8

PARTS:

n/a

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS**OFFLINE INSERTION****7M0656-7020**

① **No Unlocked/
Half-locked connector**

② **No Wrong Insert**

③ **No Missing COT**

④ **No Deformed terminal**

⑤ **No Terminal backing
out**

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