



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Process Name/Title:

Model Code/Part Number:

373D

/

7N0174-7020A

Customer:

TRJ

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Effectivity Date:

April 26, 2023

Validity Date:

n/a

Document No.:

WI-ENG-PDE-658A

Revision No.:

1

Page No.:

1 of 9

PARTS:

1. Assy parts: Connector 6098-3870 (B); AVSSf 0.3 wires B L=204±2mm; Black SV tube (Vinyl) ø5 L=20±3mm; Gray tape

JIG:

1. Insertion jig
2. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

1

P1

Table Lay-out

Table Lay-out

Black SV tube (Vinyl) ø5
L=20±3mmConnector tray/
Connector 6098-3870 (B)

AVSSf 0.3 wires B L=204±2mm

Insertion jig A

Insertion jig B

Assy parts

Locking jig

Tape holder/ Gray
tape

Safety Instruction

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

Housekeeping

1. 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.

Document references:

1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance
2. Refer to WI-ENG-PDE-665 for 7N0174-7020A Offline assembly process

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

Revision History

Prepared by

Reviewed by

Approved by

Noted by

04/26/23

1

Change document purpose from prelaunch to masspro. Inclusion of Table lay-out (Page 1), Insertion jig (Page 2-5) and Quality pointers (Page 9). Change tape width to 15±3mm of Taping 1 Black SV tube (Vinyl) to wire near connector process for hadling of harness.

D.Castillo

J. Loterte

C. Villanueva

A. Arañes

03/24/23

0

Initial issue

D.Castillo

J. Loterte

C. Villanueva

A. Arañes

Eff. Date

Rev. No

Details of Change

Revised

Reviewed

Approved

Noted

Est. Date:

March 24, 2023

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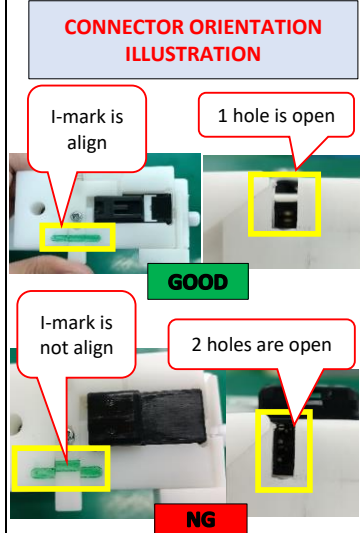
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PARTS:		1. Connector 6098-3870 (B)		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Wire Insertion to Black SV tube (Vinyl) ø5 L=20±3mm	 <p>1. Get the Black SV tube (Vinyl) ø5 L=20±3mm using right hand then insert the Y-OR wires using left hand.</p>		n/a	1. No wrong use of parts
3	Connector setting to insertion jig 6098-3870 (B)	<p>1</p> <p>P1</p>		n/a	<p>CONNECTOR ORIENTATION ILLUSTRATION</p>  <p>1. Use the provided jig per model 2. No wrong orientation of connector</p>

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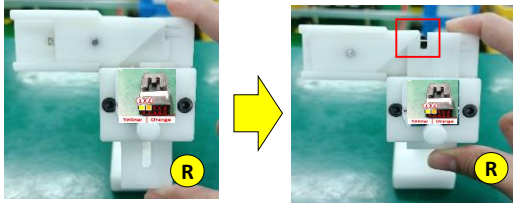
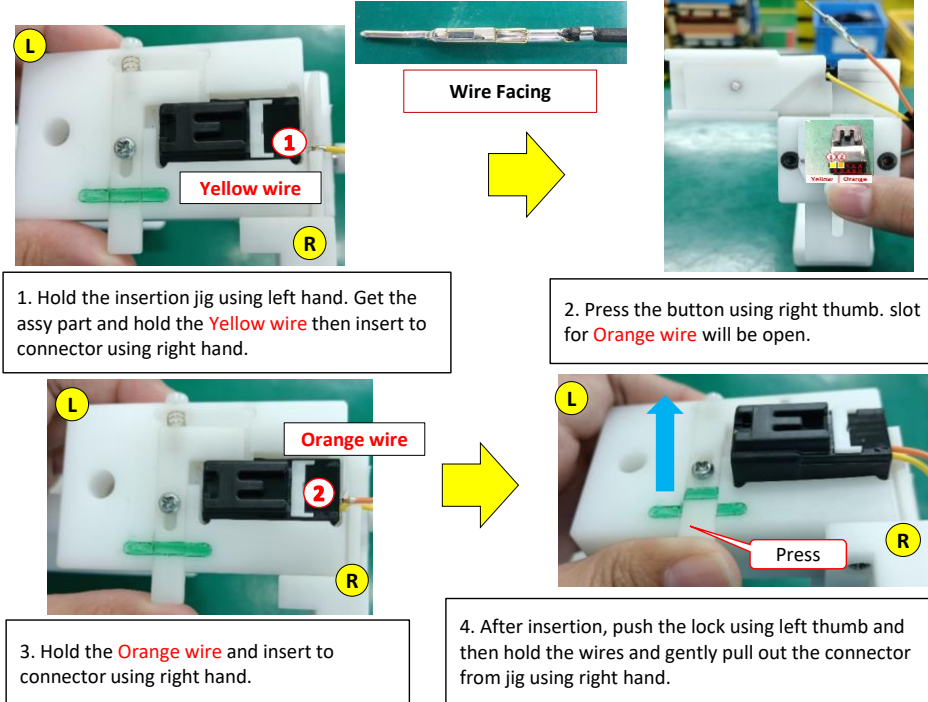
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PARTS:		1. Assy parts	JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Connector setting to insertion jig 6098-3870 (B) (Continuation)	 <p>3. Push the lower wire guide upward using right hand. Slot for yellow wire will be open.</p>	n/a	1. Use the provided jig per model 2. No wrong orientation of connector
4	Wie insertion to connector 6098-3870 (B)	 <p>1. Hold the insertion jig using left hand. Get the assy part and hold the Yellow wire then insert to connector using right hand.</p> <p>2. Press the button using right thumb. slot for Orange wire will be open.</p> <p>3. Hold the Orange wire and insert to connector using right hand.</p> <p>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.</p>	n/a	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform 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. Document References: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to GL-PRO-ASY-028 for Pull-Push procedure.

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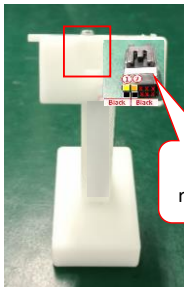


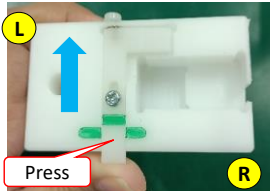
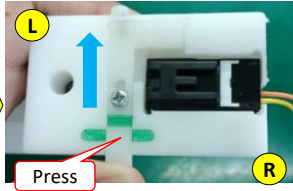
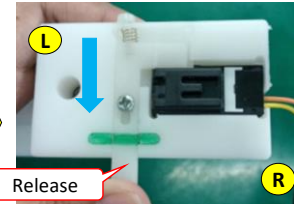
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PARTS:		1. Assy parts		JIG	1. Insertion jig with Switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1	<div><div><div>Insertion Jig</div><div>Visual reference</div></div><div><div>I-mark</div><div>Insertion Jig Orientation</div></div><div><div>Connector Orientation</div></div></div> <div><div><div>L</div><div>Press</div><div>R</div></div><div><div>L</div><div>Press</div><div>R</div></div><div><div>L</div><div>Release</div><div>R</div></div></div> <div><div><div>1. Press the insertion jig lock using left hand.</div><div>2. Get the connector 6098-3870 (B) using right hand and insert to insertion jig. Release the lock after insertion.</div><div>3. Slot for Black-Black wire are open.</div></div></div>		n/a	<div><div>CONNECTOR ORIENTATION ILLUSTRATION</div><div><div>I-mark is align</div><div>2 holes are open</div><div>GOOD</div></div><div><div>I-mark is not align</div><div>All holes are open</div><div>NG</div></div></div> <div><div>1. Use the provided jig per model</div><div>2. No wrong orientation of connector</div></div>

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PARTS:		1. Assy parts 2. AVSSf 0.3 wires B L=204±2mm [2pcs]		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	1 Wire insertion to Black SV tube (Vinyl) ø5 L=20±2mm (Assy parts)	 1. Get the Black wire [2pcs] and insert to SV tube (Vinyl) using right hand.		n/a	1. No wrong use of parts
7	P1 Wie insertion to connector 6098-3870 (B)	 2. hold the 1st Black wire then insert to terminal slot 1 of connector using right hand. 3. Hold the 2nd Black wire then insert to terminal slot 2 of connector using right hand. 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. Wire Facing 1. Lift up the wires to see the slot for Black-Black wire. Press		n/a	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deform 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. Document References: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to GL-PRO-ASY-028 for Pull-Push procedure.

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PARTS:

1. Assy parts

JIG

1. Locking jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

8

P1

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.



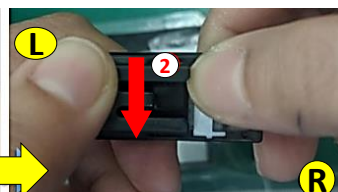
Right thumb-upper
Left thumb-middle

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



Right thumb-middle

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



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

LOCKING JIG



1. No Unlock and half-locked
2. Use provided jig tools per model to avoid damaged lock.

Important reminders/Note/s:

1. Manual locking may cause damaged connector
2. Refer WI-PRO-KIT-001 Proper locking and checking of connector lock

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PARTS:

1. Assy parts
2. Gray tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

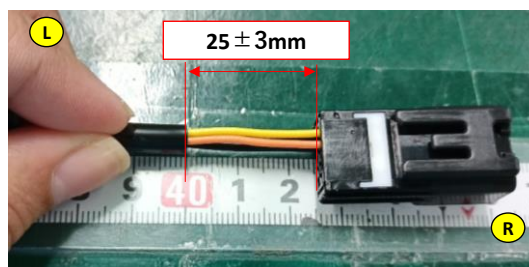
TOOLS/PPE

QUALITY POINTERS

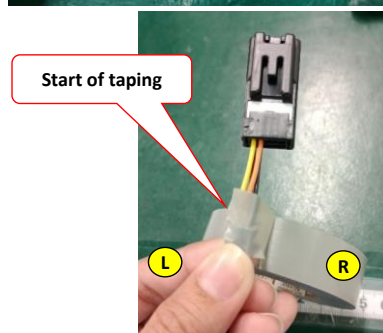
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P1

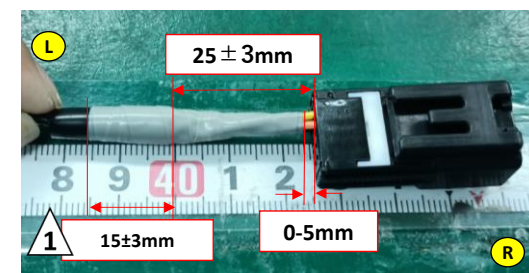
Taping 1
Black SV tube (Vinyl) to wire
near connector



1. Hold the Black SV tube (Vinyl) using left hand and measure from end of SV tube up to connector **25±3mm**.
Note: Without folding in Vinyl tube



2. Hold the tube using left hand, get the **Gray tape** using right hand then start pre-taping using both hands.



3. After taping, check the measurement and taping condition.

MEASURING TAPE



Important reminders/Note/s:
1. Use GRAY TAPE only
2. 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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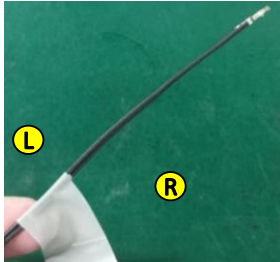
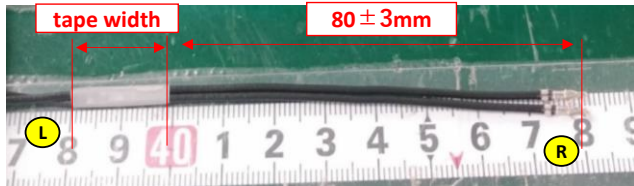

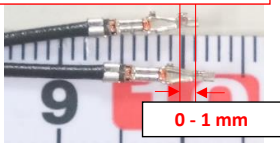
PARTS:

1. Assy parts
2. Gray tape

3. Black SV tube (Vinyl) Ø5 L=108±3mm

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
10	P1 Spot taping 1	<div><p>1. Hold the wires using left hand and measure from wire up to terminal pointed tip 100±3mm.</p></div> <div><p>2. Get the Gray tape and start taping on the Black wires. Conduct 2x windings of tape before cutting using both hands.</p></div> <div><p>3. After taping, check the measurement and taping condition.</p></div>	<div><p>MEASURING TAPE</p></div>	<div><p>Wire alignment tolerance 0 - 1 mm</p></div> <div><ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong dimension6. No wrong use of tape</div> <div><p>Important reminders/Note/s:</p><ol style="list-style-type: none">1. Use GRAY TAPE only2. Please use calibrated/verified measuring tape when getting the measurement.</div>

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PARTS:

1. Assy parts

JIG

n/a



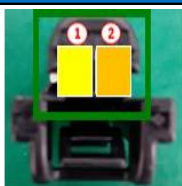
QUALITY CHECKPOINTS

P1

7N0174-7020A



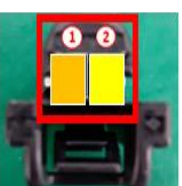
GOOD



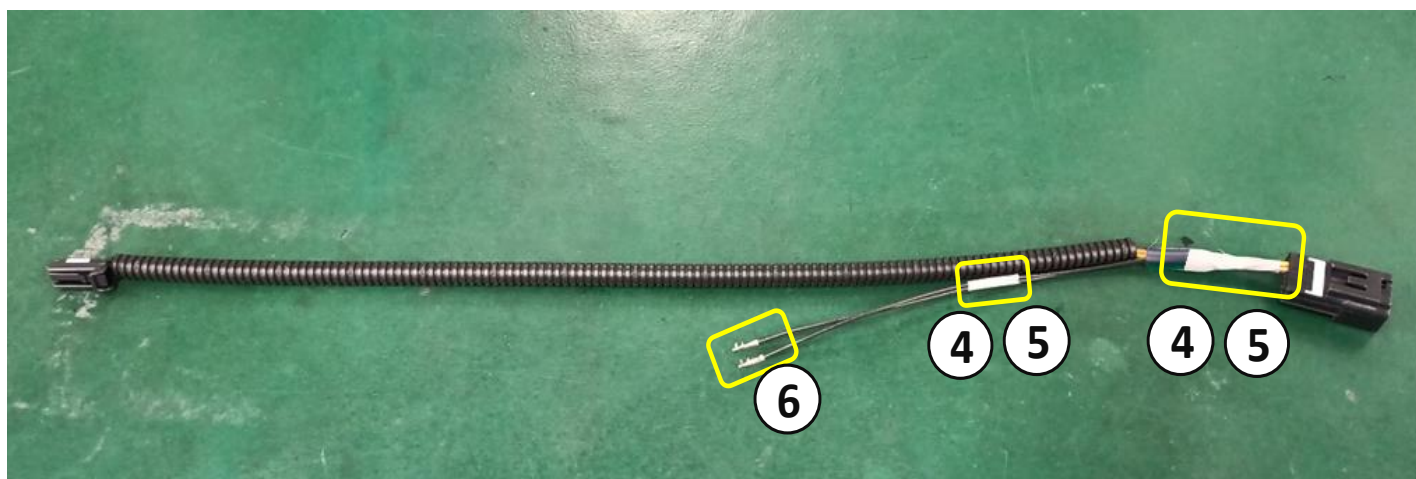
GOOD



NO GOOD



NO GOOD



GOOD



NO GOOD

1

No Unlock/Halflock Connector (2 connector)

3

No Terminal Backing Out

5

No Missing tape

2

No Wrong Insert

4

No Wrong Used of Tape (Gray tape)

6

No Deformed Terminal

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