

**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

May 19, 2023

Model Code/Part Number:

373D / 7N0172-7020

Customer:

TRJ

Validity Date:

n/a

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Document No.:

WI-ENG-PDE-603A

Revision No.:

2

Page No.:

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PARTS:**2**

1. Assy parts; Connector 6098-3803 (B); AVSSf 0.3 wires B L=225±2mm; Black tape; Black SV tube (Vinyl) ø5 L=28±3mm

JIG:

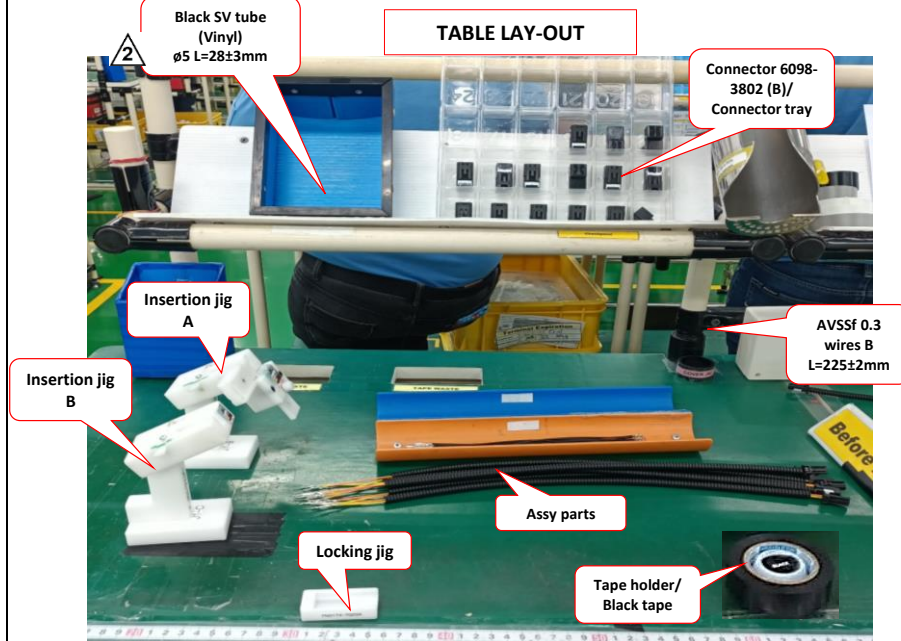
1. Insertion jig
2. Locking jig

NO.**PROCESS NAME****2****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

1

P1

Table Lay-out

**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.

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

Document reference/s:

1. Refer to WI-ENG-PDE-631 for offline Assembly Process

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
05/19/23	2	Work Instruction improvement from Genba check audit. Transfer process of Wire Insertion to Black SV tube (Vinyl) ø5 L=28±3mm process from Offline Assembly Process to Taping Assembly Process (P1) to prevent missing SV tube (Vinyl). Change table lay-out illustration. Standardized tube description: SV tube (Vinyl)	M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
01/31/23	1	Change purpose from Pre-launch to Masspro. Improve Quality pointers; Reminders/notes and references. Additional table lay-out. Inclusion of Quality Checkpoints; Change B-B wire length from L=222mm to L=225mm; Change color of spot taping (Black tape to Blue tape) due to process distribution.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
11/28/22	0	Initial issue.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes	M. Ariola	J. Loterte	C. Villanueva	A. Arañes

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PARTS:

1. Connector 6098-3803 (B)
2. Black SV tube (Vinyl) $\varnothing 5$ L=28 \pm 3mm

JIG

1. Insertion jig

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

2

Wire Insertion to
Black SV tube (Vinyl)
 $\varnothing 5$ L=28 \pm 3mm

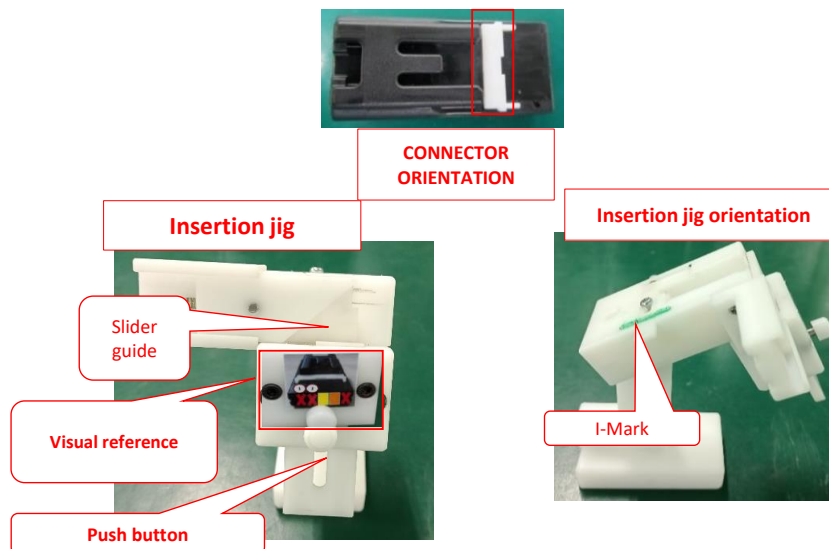
1. Get the Black SV tube (Vinyl) $\varnothing 5$ L=28 \pm 3mm using right hand then insert the **Y-OR wires** using left hand.

n/a

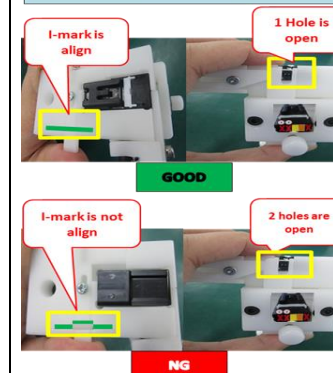
1. No wrong use of parts
2. No deformed terminal

3

P1

Connector setting to
insertion jig 6098-3803 (B)

1. No loose insertion
2. No wrong insertion
3. One by one insertion
4. No deformed terminal
5. No wrong wire facing

Connector Orientation Illustration

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PARTS:

1. Connector 6098-3803 (B)

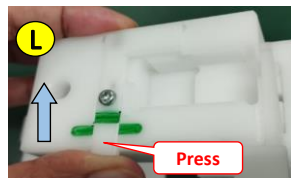
JIG

1. Insertion jig

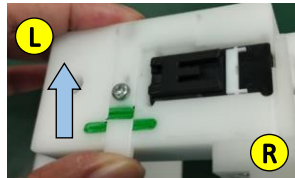
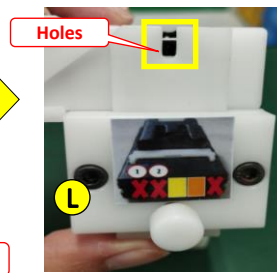
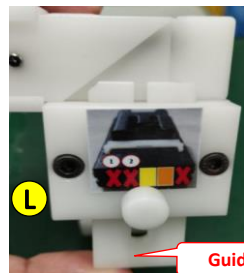
NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

3

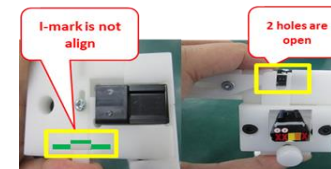
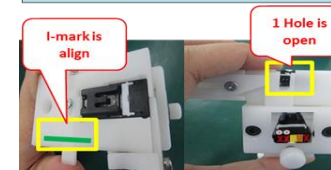
P1

Connector setting to
insertion jig 6098-3803 (B)
(Continuation)

1. Press the lock of insertion jig using left thumb.

2. Insert the connector **6098-3803 (B)** into jig using right hand and release the lock.3. Push the guide using left thumb.
The slot for **Y wire** will be opened.

n/a

Connector Orientation Illustration

1. No loose insertion
2. No wrong insertion
3. One by one insertion
4. No deformed terminal
5. No wrong wire facing

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PARTS:

1. Assy parts

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

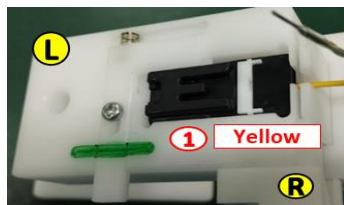
4

P1

Wire insertion to connector 6098-3803 (B)



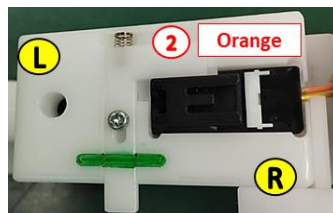
WIRE FACING



1. Hold the insertion jig using left hand. Get the assy part and hold the **Yellow wire** then insert to connector using right hand.



2. After insertion of **Y wire**, press the button using right hand. The slot for **OR wire** will be opened.



3. Get the **OR wire** then insert to terminal slot **2** using right hand.



4. After insertion, push the lock using left thumb and then hold the wire and gently pull out the connector from jig using right hand.

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.

Document reference/s:

1. Refer to GL-PRO-ASY-029 for pull-push procedure.
2. Refer to WI-ENG-PDE-631 for offline Assembly Process

Hold in the SV tube (Vinyl) to check the presence of SV tube (Vinyl)



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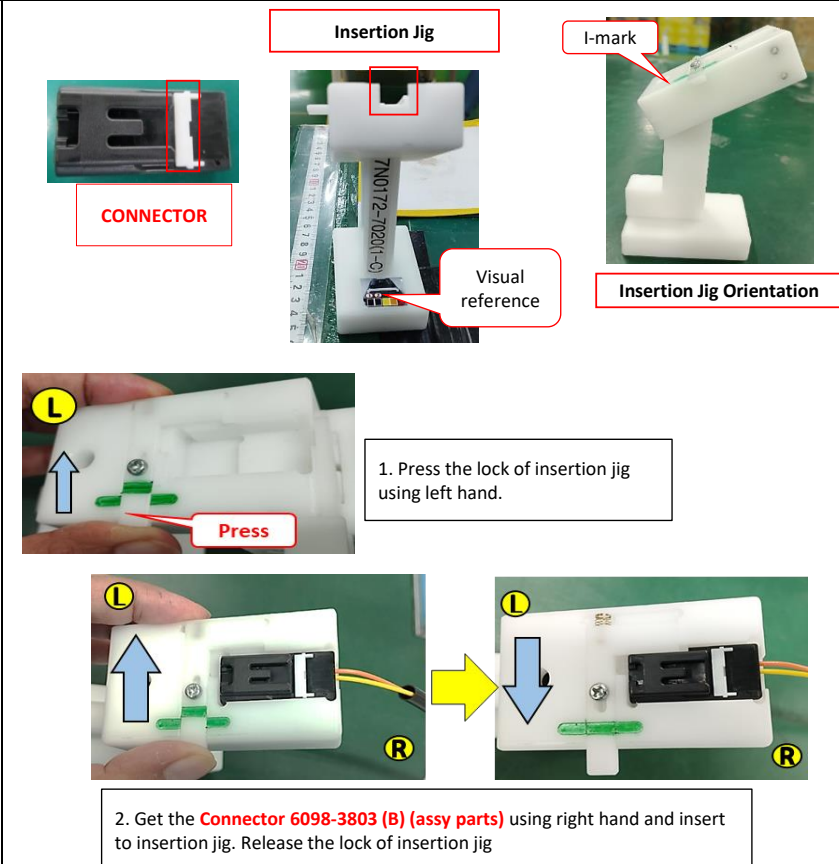
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PARTS:		1. Assy parts		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1	<p>Connector setting to insertion jig 6098-3803 (B) (Assy parts)</p> 		n/a	<p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p> <p>Important reminders/Note/s:</p> <p>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.</p> <p>Document reference/s:</p> <p>1. Refer to GL-PRO-ASY-029 for pull-push procedure. 2. Refer to WI-ENG-PDE-631 for offline Assembly Process</p>

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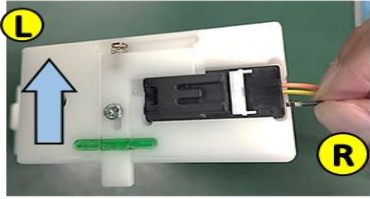

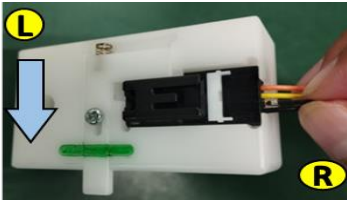
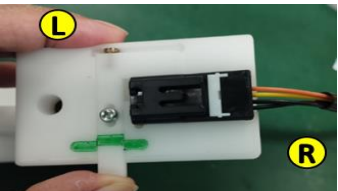
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:	1. Assy parts 2. AVSSf 0.3 B-B wires L=225±2mm			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	 Wire insertion to Black SV tube (Vinyl) (Assy parts)	 <div data-bbox="1048 507 1512 606">4. Get the B-B wires and insert to Black SV tube (Vinyl) 5 L=28±3mm using right hand.</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
7	P1 Wire insertion to Connector 6098-3803(B) (Assy parts)	 <div data-bbox="1019 694 1209 790">WIRE FACING</div>  <div data-bbox="622 1013 990 1101">3. Get the 1st Black wire then insert to terminal slot 1 using right hand.</div> <div data-bbox="1093 1029 1438 1117">4. Get the 2nd Black wire then insert to terminal slot 2 using right hand.</div>  <div data-bbox="990 1157 1406 1260">5. After insertion, push the lock using left hand and then hold the wire and gently pull out the connector from jig using right hand.</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. Document reference/s: 1. Refer to GL-PRO-ASY-029 for pull-push procedure. 2. Refer to WI-ENG-PDE-631 for offline Assembly Process

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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 illustrated.

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

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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

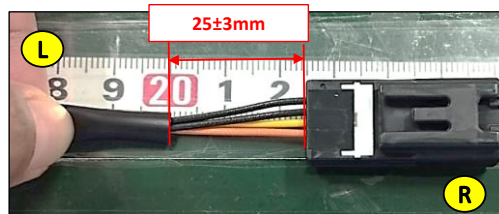
TOOLS/PPE

QUALITY POINTERS

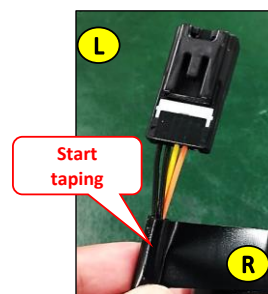
9

P1

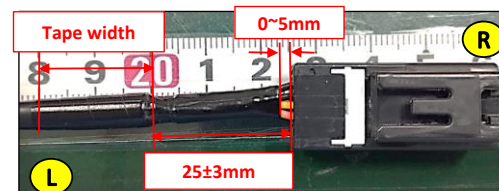
2
Taping 1
Black SV Tube (Vinyl) to
Wire near connector



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

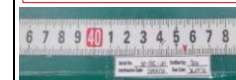


2. Get the **black tape** using right hand then start taping process using both hands.



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

MEASURING TAPE



1. No flip-out tape
2. No peel-off tape
3. No loose tape
4. No wrong dimension
5. No wrong use of tape
6. No missing tape

Important reminders/Note/s:

1. Please use calibrated/verified measuring tape when getting the measurement.

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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

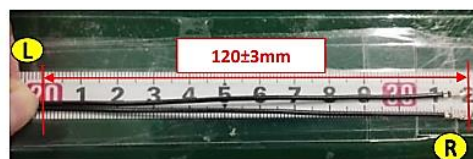
TOOLS/PPE

QUALITY POINTERS

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P1

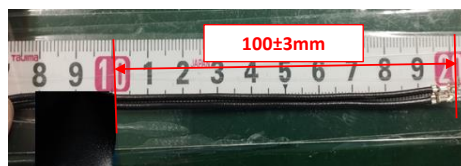
Spot taping



1. Hold the wires using both hands and measure from wire up to terminal pointed tip **120±3mm**.

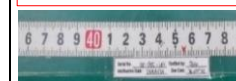


2. Hold the wires using left hand, get black tape then start taping using right hand. Make **2 windings** then cut the tape.



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

MEASURING TAPE



1. No flip-out tape.
2. No peel-off tape.
3. No loose tape.
4. No missing tape.
5. No wrong dimension.
3. No wrong use of tape.

Important reminders/Note/s:

1. Please use calibrated/verified measuring tape when getting the measurement.

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PARTS:

n/a

JIG

n/a

QUALITY CHECKPOINTS**P1****7N0172-7020****GOOD****GOOD****NO GOOD****NO GOOD****GOOD****NO GOOD**

1 No **Unlock/**
Halflock Connector
(2 connector)

2 No **Wrong Insert**

3 No **Terminal Backing Out**

4 No **Missing Spot tape**

5 No **Missing tape**

6 No **Deformed Terminal**

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