



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

April 27, 2022

Model Code/Product Number:

N/A

/

7H0389W7020A

Customer:

NBS

Validity Date:

n/a

Document No.:

WI-ENG-PDE-468A

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Revision No.:

1

Page No.:

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PARTS:

1. All parts; Connector 6098-2220(W); AVSSf 0.3 Y-OR wire L=352±3mm; Connector 6098-3802(W); Black Corrugated tube tube Ø5 L=398±3mm (no slit); Black Corrugated tube Ø5 L= 254±3mm (no slit); Black Vinyl tube Ø5 L=30±3mm; AVSSf 0.3 wires B L=571±3mm; Black tape

JIG

1.Insertion jig only & Insertion jig with switch cover.
2.Locking jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P1	Table Lay-out	<p>Safety Instruction</p> <p>Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping</p> <p>1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p>Alert level</p> <p>For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	<p>Note: Refer to WI-PRO-CNC-017 for Wire and Strip length Tolerance.</p> <p>1. No missing parts/ tools. 2. No excess parts/tools.</p>

Revision History

Eff.Date	Rev.No	Details of Change	Prepared by	Reviewed by	Approved by	Noted by
04/27/22	1	Change from Pre-Launch to Masspro. Additional table Lay-out.	M.Ariola	J. Loterte	C.Villanueva	A.Arañes
04/07/22	0	Initial Issue.	M.Ariola	J. Loterte	C.Villanueva	A.Arañes

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PARTS:

1. Connector 6098-2220 (W)

JIG

1. Insertion jig with switch cover

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1 Connector setting to Insertion jig	<p>Insertion Jig with Switch Cover</p> <p>Visual reference</p> <p>Y-wire</p> <p>OR-wire</p> <p>I-mark</p> <p>Lock</p> <p>Insertion Jig Orientation</p> <p>Connector Orientation</p> <p>GOOD</p> <p>NG</p> <p>1. Press the lock of the insertion jig using left hand.</p> <p>2. Get the connector 6098-2220 (W) using right hand and insert to insertion jig. Release the lock after insertion.</p> <p>3. Push the lower wire guide upward using right hand. Slot for yellow wire will be open.</p>	n/a	<p>CONNECTOR ORIENTATION ILLUSTRATION</p> <p>I-mark is align</p> <p>1 hole is open</p> <p>I-mark is not align</p> <p>1 hole is open</p> <p>1. Use the provided jig per model</p> <p>2. No wrong orientation of connector</p>

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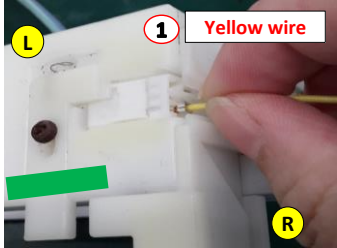
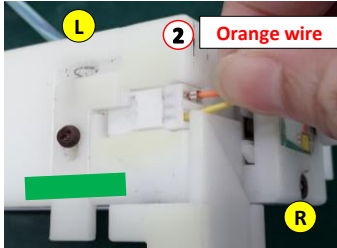
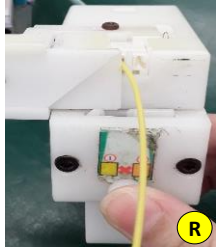
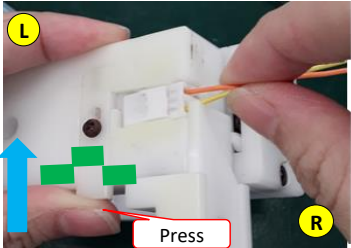
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PARTS:

1. AVSSf 0.3 wires Y L=352±2mm; OR L=352±2mm

JIG

1. Insertion jig with switch cover

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P1 Wire Insertion to Connector 6098-2220 (W)	<div><p>Wire facing</p></div> <div><p>1. Hold the insertion jig using left hand. Get the Yellow wire and insert to connector using right hand.</p></div> <div><p>3. Get the Orange wire and insert to connector using right hand.</p></div> <div><p>2. Press the button using right thumb. slot for Orange wire will be open.</p></div> <div><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></div>	n/a	<p><i>Note: Refer to WI-PRO-CNC-017 for Wire and Strip length Tolerance</i></p> <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>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p><i>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</i></p>

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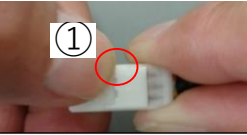
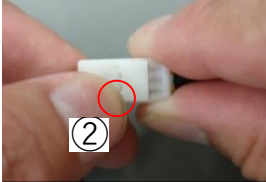
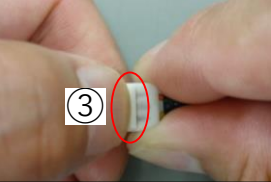
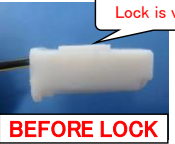

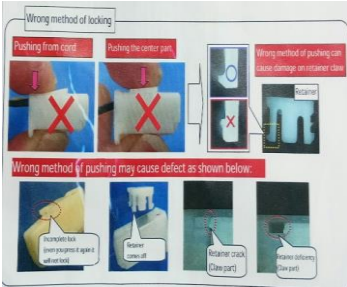

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PARTS:

1. Black Corrugated tube Ø5 L= 254±3mm (no slit)
2. Assy parts

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	P1 Connector lock	<p>Sequence of Pressing the Double Lock: ① - ② - ③ Method: Press one by one using one thumb</p>   <p>1. Hold the 6098-2220 connector using right hand</p>  <p>2. Press the right side of the connector lock using your left thumb</p>  <p>3. Press the left side of the connector lock using your left thumb</p>  <p>4. Press the terminal insertion side with your left thumb</p>  <p>Lock is visible</p>  <p>Lock is not</p> <p>5. Check the locking condition</p>	n/a	<p>Wrong Locking Method</p>  <p>1. No unlocked/half-locked connector 2. No one time pressing of double lock 3. Make sure not to hit the portion ③ (bottom side) when pressing ① & ②</p>
5	Wire insertion to Corrugated tube Ø5 L= 254±3mm (no slit)	 <p>1. Get the corrugated tube Ø5 L=254±3mm (no slit) using right hand then insert the yellow wire and orange wire by using left hand.</p>	n/a	<p>1. No wrong use of parts 2. No deformed terminal</p>

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PARTS:

1. Assy parts

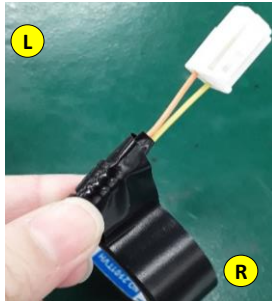
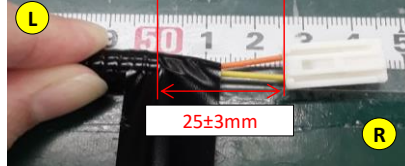
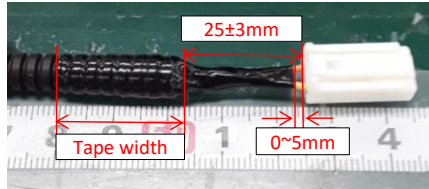


2. AVSSf 0.3 wires B L=571±3mm [2pcs]

3. Black Corrugated tube tube Ø5 L= 398±3mm (no slit)

4. Black tape

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	P1 Taping (1) COT to wire near Connector	 <p>1. Hold the assy parts using left hand. Get Black tape using right hand and start pre-taping.</p>  <p>2. Measure from COT to Connector 25±3mm using both hands and continue the taping process. <i>Refer to WI-PRO-ASY-001 for taping procedure.</i></p>  <p>3. Check the measurement and taping condition after taping.</p>	MEASURING TAPE 	<i>Note:</i> <i>Please use calibrated/verified measuring tape when getting the measurement.</i> 1.No flip out tape. 2.No tape peeling. 3.No loose tape
7	Wire insertion to Corrugated tube tube Ø5 L=398±3mm (no slit)	 <p>1. Get the corrugated tube Ø5 L=398±3mm (no slit) using left hand then insert the 2 Black wires by using right hand.</p>	n/a	<i>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance.</i> 1. No wrong use of parts 2. No deformed terminal

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PARTS:

1. Black tape
2. Assy parts

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

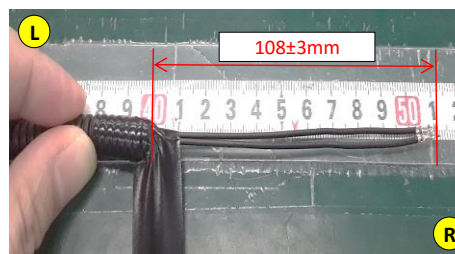
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P1

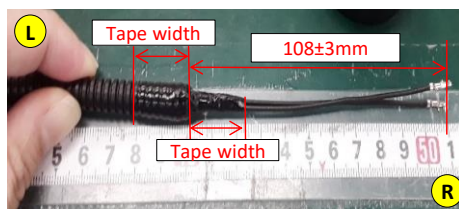
Taping (2)
COT to wire near
terminal



1. Hold the assy parts using left hand. Get **Black tape** using right hand and start pre-taping.



2. Measure from COT to terminal pointed tip **108±3mm** using both hands and continue the taping process.
Refer to WI-PRO-ASY-001 for taping procedure.



3. Check the measurement, wire alignment and taping condition after taping.

MEASURING TAPE



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

- 1.No flip out tape.
- 2.No tape peeling.
- 3.No loose tape

Wire alignment tolerance



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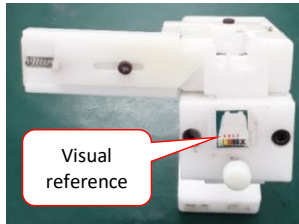
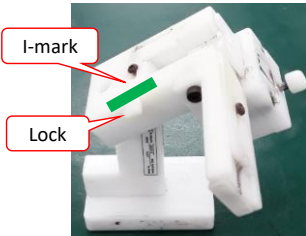

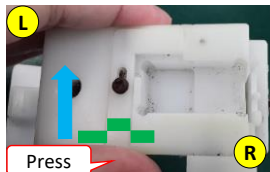

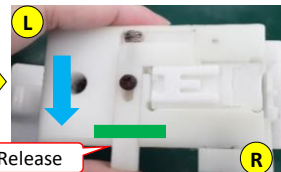



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PARTS:

1. Assy parts.
2. Connector 6098-3802 (W)

JIG

1. Insertion jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	P1	Connector setting to Insertion jig 6098-3802 (W)	<div><div><p>Visual reference</p></div><div><p>Insertion Jig Orientation</p></div><div><p>Connector Orientation</p></div></div> <div><div><p>Press</p></div><div><p>Press</p></div><div><p>Release</p></div></div> <div><div></div><div><p>3. Do not push the lower wire guide upward. Slot for 2 Black wires must be open.</p></div></div>	n/a	<div><div><p>CONNECTOR ORIENTATION ILLUSTRATION</p><p>I-mark is align 2 holes are open GOOD</p><p>I-mark is not align 4 holes are open NG</p></div><div><p>1. Use the provided jig per model 2. No wrong orientation of connector</p></div></div>

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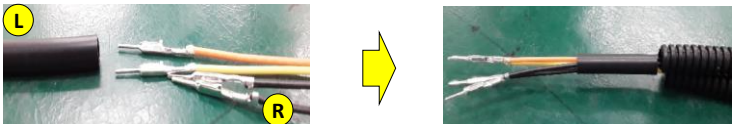
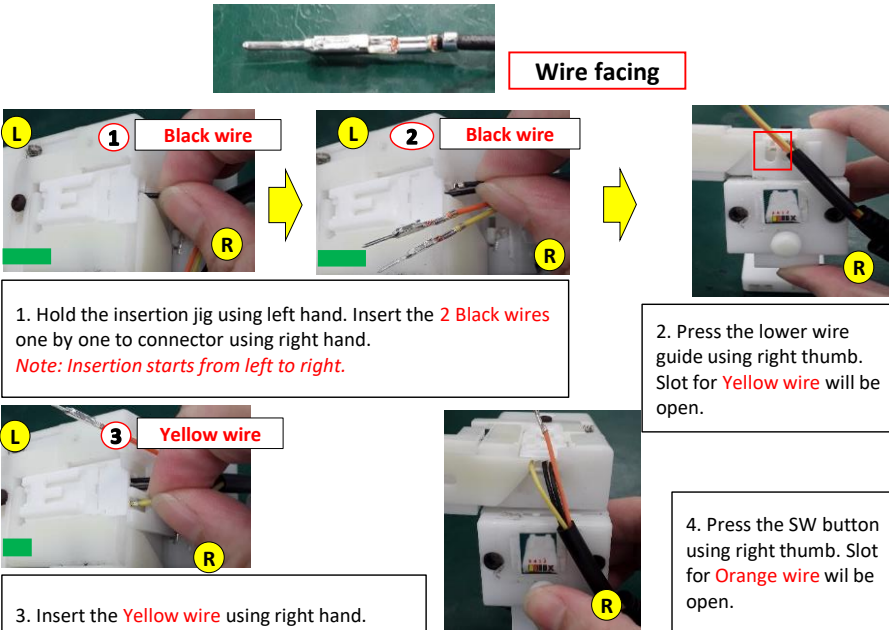
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PARTS:

1. Assy parts
2. Black Vinyl tube Ø5 L= 30±3mm

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
10	Wire insertion to Vinyl tube Ø5 L= 30±3mm	 <ol style="list-style-type: none">1. Combine the assy parts (Y-OR wires) with COT Ø5 L= 254±3mm and 2 Black wires with COT Ø5 L= 398±3mm) then get the Vinyl tube Ø5 L= 30±3mm using left hand and insert the wires using right hand.	n/a	<ol style="list-style-type: none">1. No wrong use of parts
11	Wire insertion to Connector 6098-3802 (W)	 Wire facing <ol style="list-style-type: none">1. Hold the insertion jig using left hand. Insert the 2 Black wires one by one to connector using right hand. <i>Note: Insertion starts from left to right.</i>2. Press the lower wire guide using right thumb. Slot for Yellow wire will be open.3. Insert the Yellow wire using right hand.4. Press the SW button using right thumb. Slot for Orange wire will be open.	n/a	<ol style="list-style-type: none">1. No loose insertion2. No wrong insertion3. One by one insertion4. No deformed terminal5. No wrong wire facing <p>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p><i>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</i></p>

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PARTS:

n/a

JIG

1. Insertion jig
2. locking jig

NO.

PROCESS NAME

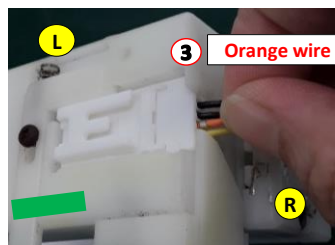
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

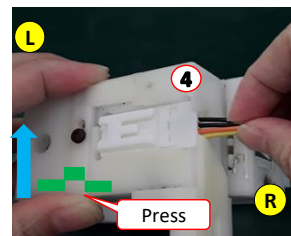
QUALITY POINTERS

12

Wire insertion to
Connector
6098-3802 (W)
(continuation)



5. Insert the **Orange wire** using right hand.



6. After insertion, push the lock using left thumb and then hold the wires 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

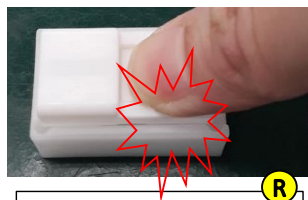
Make sure wires are properly inserted.
Conduct **Pull-Push-Pull-Push** after insertion.
Do not exert extra force.

Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.

13

P1

Connector lock



1. Put the connector into locking jig using right hand then press to lock.
Refer to GL-PRO-ASY-017 for verification of connector lock.



Before pressing



After pressing

GOOD

NG



Full Lock



Half Lock

LOCKING JIG



NOTE:
MANUAL LOCKING MAY CAUSE DAMAGED LOCK.

1. No Unlock/half-locked connector
2. Use provided jig tool to lock the connector

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