



# WORK INSTRUCTION

## TAPING ASSEMBLY PROCESS

Effectivity Date:	December 9, 2022		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-353A		
Revision No.:	3	Page No.:	1 of 9

Process Name/Title:	TAPING ASSEMBLY PROCESS		
Model Code/ Part Number:	D01L / 7M0651-7020C	Customer:	TRJ
Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS:	1. Connector 4G5400-000 (W)	4. AVSSf 0.3 Y wire L=153±2mm	7. Black Vinyl tube ø7 L=111±3mm	JIG:	1. Insertion jig
	2. Connector 7282-1027 (W)	5. AVSSf 0.3 OR wire L=153±2mm	8. Black Vinyl tube ø5 L=135±3mm		2. Pushing jig
	3. AVSSf 0.3 B wires L=958±3mm	6. Black Corrugated tube ø5 L=60±3mm (No Slit)	9. Black tape		

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P1	Table Lay-out	<div><p><b>Safety Instruction</b></p><p>Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p><p><b>Housekeeping</b></p><p>1. Maintain and always practice 5's. 2. Personal things on the work place is prohibited. Keep it in your locker.</p><p><b>Alert level</b></p><p>For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p></div>	<p>1. No missing parts/tools 2. No excess parts/tools</p> <p><b>Document reference/s:</b></p> <p>1. Refer to WI-PRO-CNC-017 for Wire and Strip length tolerance. 2. Refer to WI-ENG-PDE-353A for offline Assembly Process.</p>

### Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
12/09/22	3	Improve Quality pointers on pages no. 1,3,5,6,7 and 8 due to document improvement. Improve work procedure/ illustration on process no.7- Connector lock due to process improvement. Inclusion of Quality checkpoints.	M.Ariola	J. Loterte	C. Villanueva	A. Arañes	M.Ariola	J. Loterte	C. Villanueva	A. Arañes
05/25/22	2	Remove Process no. 12,13,14,15 and 16 and transfer to P2 due to process improvement.	M.Ariola	J. Loterte	C. Villanueva	A. Arañes	M.Ariola	J. Loterte	C. Villanueva	A. Arañes
11/25/21	1	Change from Pre-launch to Masspro; Improve Work Procedure/ Illustration; Additional Table Lay-out.	M.Ariola	J. Loterte	C. Villanueva	A. Arañes	M.Ariola	J. Loterte	C. Villanueva	A. Arañes
							Est. Date:	October 11, 2021		

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### PARTS:

1. Connector 4G5400-0000 (W)

### JIG

1. Insertion jig with switch cover

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

### TOOLS/PPE

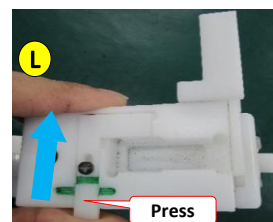
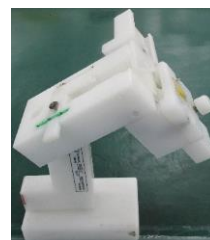
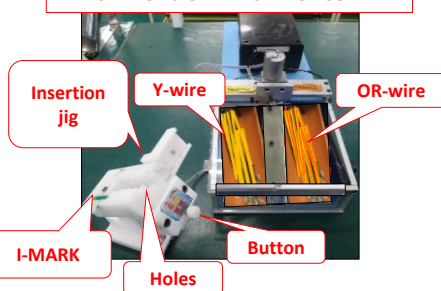
### QUALITY POINTERS

2

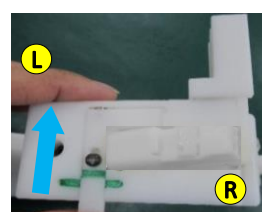
P1

Connector setting to  
insertion jig  
4G5400-0000 (W)

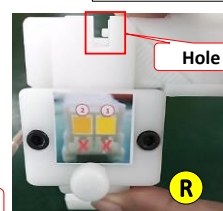
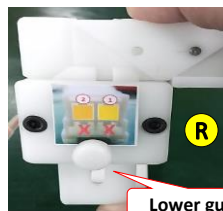
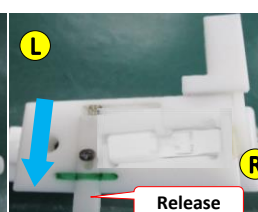
#### INSERTION JIG WITH SWITCH COVER



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



2. Insert the connector **4G5400-0000 W** using right hand then release the lock using left thumb.  
**Note: Follow the connector orientation.**



3. Push the lower guide using right hand the slot for **Yellow wire** will be opened.

#### Safety Instruction

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

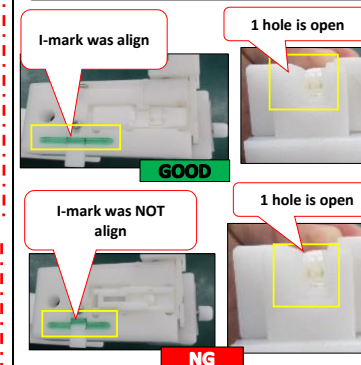
#### Housekeeping

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.

#### Connector Orientation Illustration



1. Use provided jig per model
2. No wrong usage of parts
3. No wrong orientation of connector
4. No damaged connector

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### PARTS:

1. AVSSf 0.3 Y wire L=153±2mm
2. AVSSf 0.3 OR wire L=153±2mm

3. Black vinyl tube Ø7 L=111±3mm

JIG

1. Insertion jig w/ switch cover

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	Wire insertion to connector 4G5400-0000 (W)	<p>1. Hold the insertion jig using left hand, get <b>Yellow wire</b> then insert to terminal slot <b>1</b> using right hand.</p> <p>2. Press the button using right hand, slot for <b>Orange wire</b> will be opened.</p> <p>3. Get the <b>Orange wire</b> then insert to terminal slot <b>2</b> using right hand.</p> <p>4. After insertion, push the lock using left thumb then hold the wires and gently pull out the connector from jig using right hand.</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><b>Important reminders/Note/s:</b></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><b>Document reference/s:</b></p> <p>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip length.</p>
4	Wire insertion to Black vinyl tube Ø7 L=111±3mm	<p>1. Hold the assy parts using left hand, get the vinyl tube <b>Ø5 L=111±3mm</b> using right hand then insert the wires using left hand.</p>	n/a	<p>1. No deformed terminal 2. No wrong usage of parts</p>

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### PARTS:

1. Connector 7282-1027 (W)

### JIG

1. Insertion jig w/ switch cover

### NO.

### PROCESS NAME

### WORK PROCEDURE/ ILLUSTRATION

### TOOLS/PPE

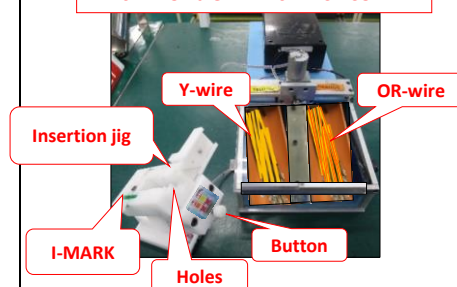
### QUALITY POINTERS

5

P1

Connector setting to insertion jig 7282-1027 (W)

#### INSERTION JIG WITH SWITCH COVER

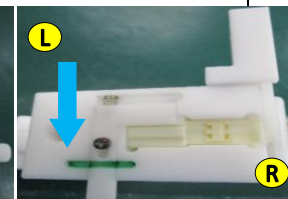
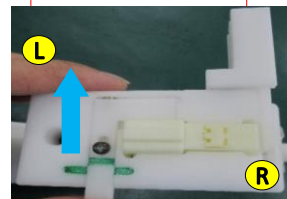


Press

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



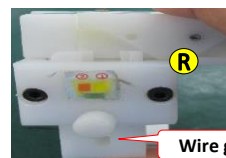
Insertion Orientation



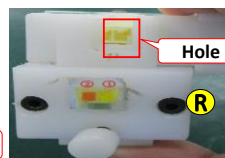
2. Insert the connector **7282-1027 (W)** using right hand then release the lock using left thumb.

**Note: Follow the connector orientation.**

Connector Orientation



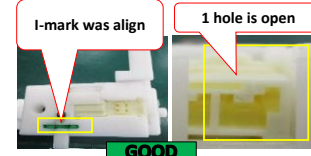
Wire guide



3. Push the lower guide using right hand the slot for **Yellow wire** will be opened.

n/a

#### Connector Orientation Illustration



1. Use the provided jig per model
2. No wrong orientation of connector
3. No wrong use of connector
4. No damaged connector

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☐ PRE-LAUNCH


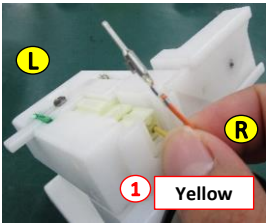
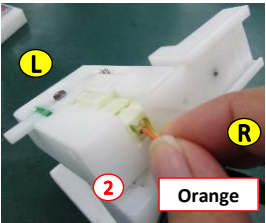
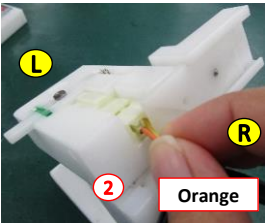
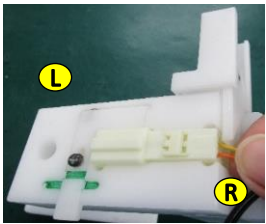
☒ MASSPRO

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PARTS:		1. Assy parts		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P1	<div><div><p>Wire Facing</p></div><div><p>1. Hold the insertion jig using left hand, get <b>Yellow wire</b> then insert to terminal slot <b>1</b> using right hand.</p></div><div><p>2. Press the button using right hand, slot for <b>Orange wire</b> will be opened.</p></div><div><p>3. Hold the insertion jig using left hand, get <b>Orange wire</b> then insert to terminal slot <b>2</b> using right hand.</p></div><div><p>4. After insertion, push the lock using left thumb then hold the wires and gently pull out the connector from jig using right hand.</p></div></div>		n/a	<div><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>3 <b>Important reminders/Note/s:</b></p><p>1. Please hold the wire near terminal during insertion. 2. Make sure wires are properly inserted. Conduct <b>Pull-Push-Pull-Push</b> after insertion. Do not exert extra force.</p><p>3 <b>Document reference/s:</b></p><p>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p></div>

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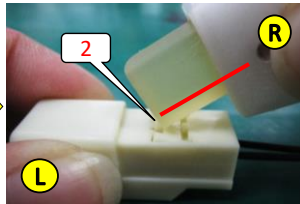
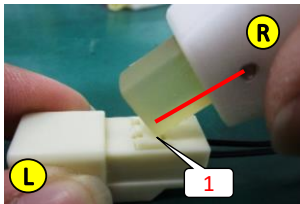
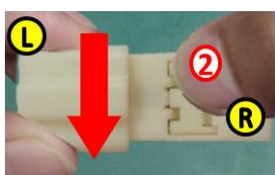







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PARTS:		1. Assy parts 2. Black vinyl tube $\phi 5$ L=135 $\pm$ 3mm	JIG	1. Pushing jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
7	P1 Connector Lock	<div></div> <div><p>1. Place the connector on the table while holding using left hand. Get the Pushing jig using right hand and start the sequential locking based on above illustration. Push the lower part of the connector lock first and then push the upper part <i>Note: Position of pushing jig during locking must be slanted.</i></p></div> <div></div> <div><p>4. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.</p></div> <div><p>BEFORE PRESSING</p><p>AFTER PRESSING</p></div>	<p>PUSHING JIG</p> 	<p>1. No wrong usage of parts 2. No deformed terminal</p> <p>3 <b>Important reminders/Note/s:</b></p> <p>1. Manual locking may cause damaged connector lock 2. Position of pushing jig locking must be slanted.</p> <div><p>GOOD</p><p>NG</p></div>
8	Wire insertion to Black vinyl tube $\phi 5$ L=135 $\pm$ 3mm	<div></div> <div><p>1. Get the B-B wire using left hand and get the vinyl tube <math>\phi 5</math> L=135<math>\pm</math>3mm then insert using right hand .</p></div>	n/a	<p>1. No deformed terminal 2. No wrong usage of parts</p>

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### PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

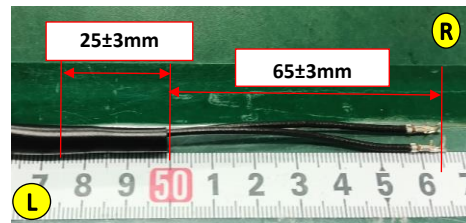
TOOLS/PPE

QUALITY POINTERS

9

P1

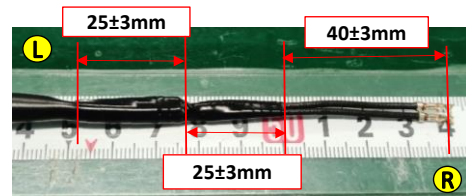
Taping 1  
Black Vinyl tube to wire  
near terminal



1. Measure from end of vinyl tube up to terminal pointed tip **65±3mm** using both hands.



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



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

### MEASURING TAPE

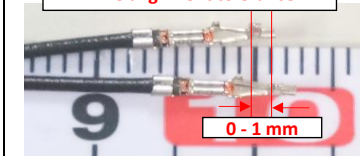


### Important reminders/Note/s:

1. 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 use of tape
6. No wrong dimension

### Wire alignment tolerance



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## PARTS:

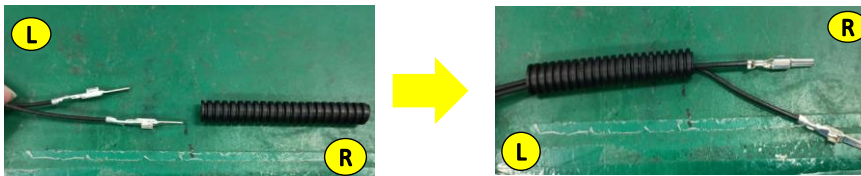

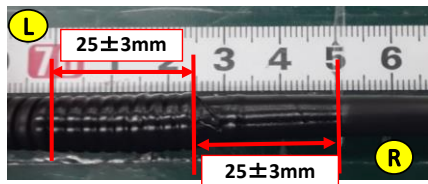

1. Assy parts

2. Black corrugated tube Ø5 L=60±3mm (No Slit)

3. Black tape

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
10	Wire insertion to Black corrugated tube (No slit) Ø5 L=60±3mm	 <p>1. Get the corrugated tube (No Slit) Ø5 L=60±3mm using right hand then insert using left hand.</p>	n/a	1. No deformed terminal 2. wrong usage of parts
11	Taping 2 Black Corrugated tube to Black Vinyl tube	<p>Note: Must be no gap between COT and vinyl</p>  <p>1. Fix the corrugated tube to vinyl tube using left hand then get Black tape and start taping using right hand.</p>  <p>2. After taping, check the tape condition &amp; measurement.</p>	<p>MEASURING TAPE</p> 	<p>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</p> <p><b>Important reminders/Note/s:</b></p> <p>1. Please use calibrated/verified measuring tape when getting the measurement. 2. Must be no gap between the COT and vinyl.</p>

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PARTS:

n/a

JIG

n/a

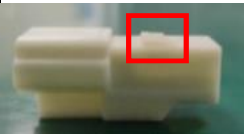
## 3 QUALITY CHECKPOINTS

P1

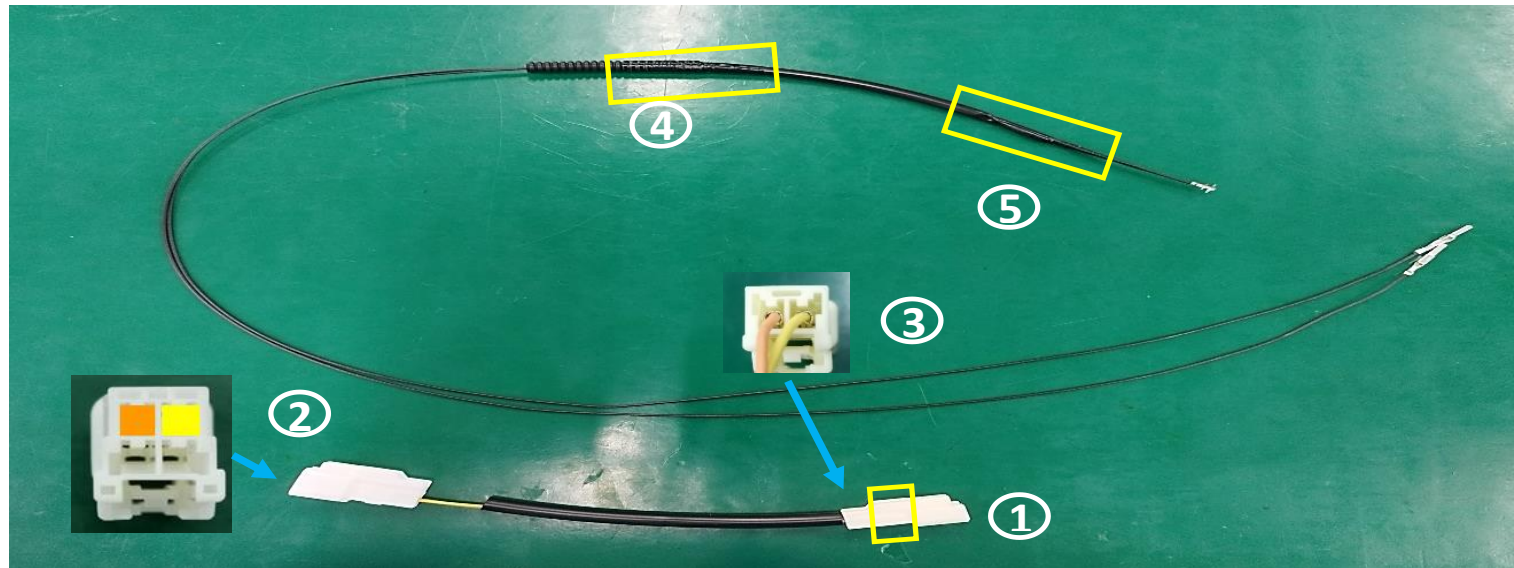
7M0651-7020C



GOOD



NO GOOD



6 Sample Reference



GOOD



NO GOOD

1 No Unlock/ Half Lock Connector

2 3 No Wrong Insert

4 5 No Missing Tape

6 No Terminal Backing

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