



# WORK INSTRUCTION TAPING ASSEMBLY PROCESS

Effectivity Date:	June 6, 2023		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-609A		
Revision No.:	2	Page No.:	1 of 8

Process Name/Title: **TAPING ASSEMBLY PROCESS**

Model Code/Part Number **YDB / 75S324-0010** Customer: **TRJ**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

<b>PARTS:</b>		1. Connector PBVP-08V-S (W) 2. Connector PBVP-10V-S (W)	JIG:	1. Insertion jig
<b>NO.</b>	<b>PROCESS NAME</b>	<b>WORK PROCEDURE/ ILLUSTRATION</b>	<b>TOOLS/PPE</b>	<b>QUALITY POINTERS</b>
1	P1 Connector setting to insertion jig PBVP-08V-S (W) PBVP-10V-S (W)	<p>Visual reference</p> <p>Upper guide</p> <p>Upper Button</p> <p>Lower guide</p> <p>Lower Button</p> <p>Insertion Jig</p> <p>Connector orientation</p> <p>Press</p> <p>1. Get the 1 pc of <b>PBVP-08V-S</b> connector using left hand and get 1 pc of <b>PBVP-10V-S</b> connector using right hand then insert to insertion jig. <i>Note: Follow the connector orientation.</i></p> <p>2. Press the upper and lower guide using left hand in same timing. Holes that need to be insert are only open.</p>	<p><b>Safety Instruction</b> Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p><b>Housekeeping</b> 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p><b>Alert level</b> For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	1. Use the provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector

Revision History				Prepared by:	Checked by:	Approved by:	Noted by:
06/06/23	2	Change Light Gray Sunprene tube to N6GR VM tube (Sunprene); Change term Sunprene tube to VM tube (Sunprene). Improved work procedure of Page 4-6. Improved quality checkpoints (Page 8).	D.Castillo	J.Loterte	C. Vilanueva	A. Arañes	
01/13/23	1	Change Pre-launch to Masspro. Provide Insertion jig. Update Quality pointers.	D.Castillo	J.Loterte	C. Vilanueva	A. Arañes	
01/04/23	0	Initial issue.	D.Castillo	J.Loterte	C. Vilanueva	A. Arañes	
Eff. Date	Rev. No	Details of Change	Revised	Checked	Approved	Noted	Established Date: January 4, 2023

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Revision No.:

2

Page No.:

2 of 8







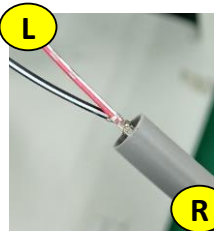
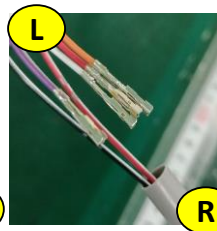

PARTS:

2

1. AVSS 0.3 wire B/W L=351±2mm; W/G wire L=193±2mm; V wire L=193±3mm; OR wire L=193±2mm; W wire L=193±2mm; R wire L=193±2mm; R/W wire L=351±2mm
2. N6GR VM tube (Sunprene) Ø6.5 L=157±2mm

JIG

1. Insertion jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS																							
2	P1	Wire insertion to Connector PBVP-08V-S (W)	<div>INSERTION SEQUENCE FROM LEFT TO RIGHT</div>  <div>WIRE INSERTION ILLUSTRATION</div> <table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>B/W</td><td>X</td><td>W/G</td><td>V</td><td>OR</td><td>W</td><td>R</td><td>R/W</td></tr><tr><td>351</td><td></td><td>193</td><td>193</td><td>193</td><td>193</td><td>193</td><td>351</td></tr></table>  <div>Wire facing</div>  	1	2	3	4	5	6	7	8	B/W	X	W/G	V	OR	W	R	R/W	351		193	193	193	193	193	351	<div>STEERING NAVIGATION</div>  <div>CONTROLLER</div> 	<div>1. Use provided jig per model</div> <div>2. No wrong usage of parts</div> <div>3. One by one insertion</div> <div>4. No wrong insertion</div> <div>5. No deformed terminal</div> <div>6. No stuck of terminal tip</div> <div>Important reminders/Note/s:</div> <div>1. Please hold the wire near terminal during insertion.</div> <div>2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> <div>Document References:</div> <div>1. Refer to WI-ENG-PDE-044 for Steering Navigation Controller procedure.</div> <div>2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</div> <div>3. Refer to GL-PRO-ASY-028 for Pull-Push procedure.</div>
		1	2	3	4	5	6	7	8																				
B/W	X	W/G	V	OR	W	R	R/W																						
351		193	193	193	193	193	351																						
3	<div>2</div> Wire insertion to N6GR VM tube (Sunprene) Ø6.5 L=157±2mm	   <div>1. Get the N6GR VM tube (Sunprene) Ø6.5 L=157±2mm using left hand and transfer to right hand. Hold the wires using left hand and insert the wires using right hand.</div>	N/A	<div>1. No wrong usage of parts</div> <div>2. No deformed terminal</div> <div>3. No tangled wires</div>																									

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☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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Document No.:

WI-ENG-PDE-609A

Revision No.:

2

Page No.:

3 of 8

**PARTS:**

1. AVSS 0.3 P wire L=188±2mm; G wire L=188±2mm; LG L=188±2mm; GR wire L=188±2mm; B wire L=188±2mm

**JIG**

1. Insertion jig

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

4

P1

Wire insertion to  
Connector  
PBVP-10V-S (W)**INSERTION SEQUENCE FROM LEFT TO RIGHT****WIRE INSERTION ILLUSTRATION**

1	2	3	4	5	6	7	8	9	10
X	X	P	G	X	LG	X	GR	X	B
188	188	188	188	188	188	188	188	188	188



Wire facing



Note: Holes that need to be insert are only open.

Lower guide



1. Get the **P wire** using right hand and insert to connector. Repeat the process for **G-LG-GR-B wires**. Check the wire after insertion.

Note: Follow the insertion sequence based on the above illustration.

**STEERING NAVIGATION****CONTROLLER**

1. Use provided jig per model
2. No wrong usage of parts
3. One by one insertion
4. No wrong insertion
5. No deformed terminal
6. No stuck of terminal tip

**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-ENG-PDE-044 for Steering Navigation Controller procedure.
2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance
3. Refer to GL-PRO-ASY-028 for Pull-Push procedure.

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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

Revision No.:

2

Page No.:

4 of 8

PARTS:

2

1. Blue VM tube (Sunprene) Ø6.5 L=152±2mm

JIG

1. Insertion jig

NO.

PROCESS NAME

2

WORK PROCEDURE/ ILLUSTRATION

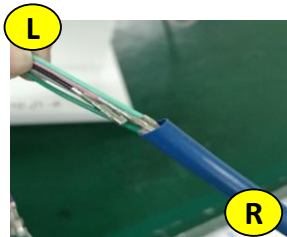
TOOLS/PPE

QUALITY POINTERS

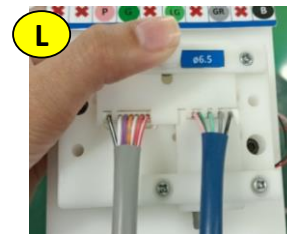
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P1

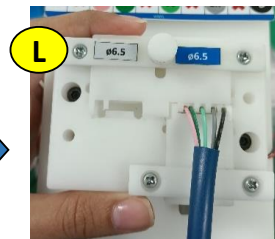
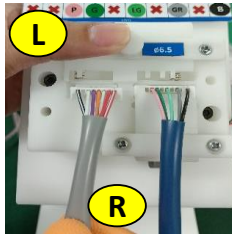
Wire insertion to  
Blue VM tube (Sunprene) Ø6.5  
L=152±2mm



1. Get the **Blue VM tube (Sunprene) Ø6.5 L=152±2mm** using right hand. Hold the wire using left hand then insert the wires.

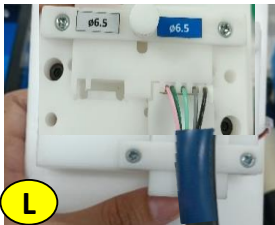
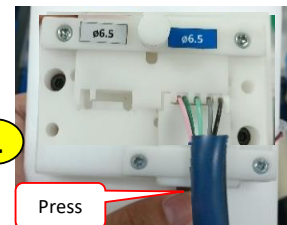


2. Press the Upper button using left hand. Remove the 1st connector with inserted wires and N6GR VM tube (Sunprene) using right hand.



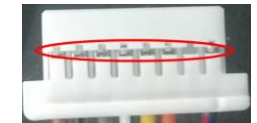
3. Press the upper guide using left hand. Check the wire insertion condition.

**Note: Second connector with inserted wire and Black VM tube (Sunprene) will stay in the jig.**



4. Press the Lower button using right hand. Holes that need to be insert are only open.

N/A



**Terminal tip must be visible**

#### Document References:

1. Refer to GL-PRO-ASY-025 for Inspection Standard for Coupler Insertion.

1. No wrong usage of parts
2. No deformed terminal
3. No tangled wires

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☐ PROTOTYPE

☐ PRE-LAUNCH

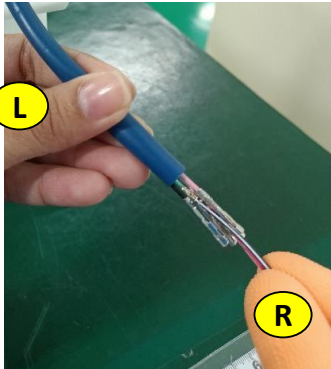


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Revision No.:

2

Page No.:

5 of 8

PARTS:		1. Assy parts			JIG	1. Insertion jig
NO.	PROCESS NAME		2 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
6	P1	Wire insertion to assy parts	<div><div><div><div>L</div><div>R</div></div></div><div></div><div></div></div> <div><div>2</div><div>1. Hold the <b>Blue VM tube (Sunprene)</b> using left hand and insert the wires from <b>N6GR VM tube (Sunprene)</b> using right hand.</div></div>		N/A	1. No wrong use of parts 2. No deformed terminal 3. No tangled wires

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Document No.:

**WI-ENG-PDE-609A**

Revision No.:

**2**

Page No.:

**6 of 8**

**PARTS:**

1. Assy parts

**JIG**

1. Insertion jig

**NO.**

**PROCESS NAME**

### 2 WORK PROCEDURE/ ILLUSTRATION

**TOOLS/PPE**

**QUALITY POINTERS**

7

P1

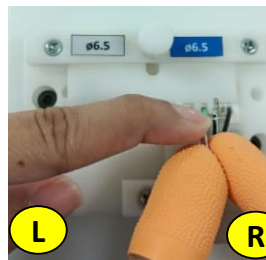
Wire insertion to  
Connector  
PBVP-10V-S (W)

#### INSERTION SEQUENCE FROM LEFT TO RIGHT



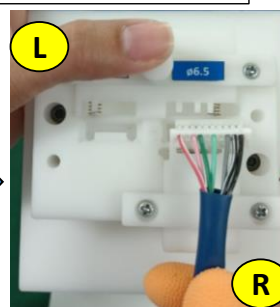
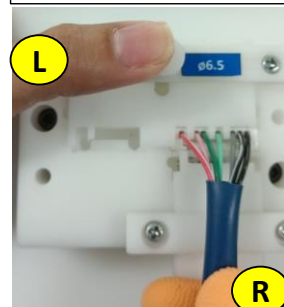
#### WIRE INSERTION ILLUSTRATION

1	2	3	4	5	6	7	8	9	10
R/W	X	P	G	X	LG	X	GR	B/W	B
351	188	188	188	188	188	188	188	351	188



Wire facing

1. Hold the **R/W wire** using right hand and support the wire by left index finger then insert to connector using right hand. Repeat the process on **B/W wire**. Check the wire after insertion  
*Note: Follow the insertion sequence based on the above illustration.*



3. Press the Upper button using left hand then remove the assy part using right hand. Check the insertion condition.

#### STEERING NAVIGATION



#### CONTROLLER



1. Use provided jig per model
2. No wrong usage of parts
3. One by one insertion
4. No wrong insertion
5. No deformed terminal
6. No stuck of terminal tip

#### 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-ENG-PDE-044 for Steering Navigation Controller procedure.
2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance
3. Refer to GL-PRO-ASY-028 for Pull-Push procedure.

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Purpose:



PROTOTYPE



PRE-LAUNCH



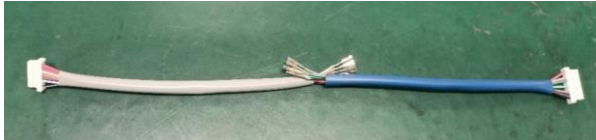
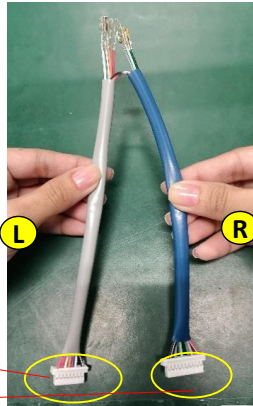

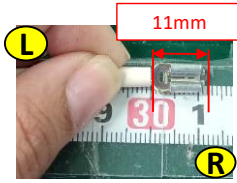



MASSPRO

Revision No.:

2

Page No.:

7 of 8

PARTS:		1. Assy parts 2. White VM tube (Sunprene) Ø3 L=110±3mm 3. AVSS 0.5 L L=131±2mm	JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
8	P1 Wire arrangement	 <b>BEFORE FOLDING</b> <div>1. Hold the assy parts using both hands then conduct wire arrangement.</div>  <b>AFTER FOLDING</b> <div>Terminal tip is not visible</div>	n/a	1. No deformed terminals 2. No tangled wires 3. No wrong facing
9	2 Wire insertion to White VM tube (Sunprene) Ø3 L=110±3mm	 <div>1. Get the <b>Blue wire</b> using right hand and insert to <b>White VM tube (Sunprene) Ø3 L=110±3mm</b></div>  <div>2. Measure the VM tube (Sunprene) up to the tip of the terminal, it should be <b>11mm</b>.</div> 	 <b>MEASURING TAPE</b>	 <div>Peel-off wire should be covered by Sunprene tube (White)</div> <b>Important Reminder/Note/s:</b> <div>1. Please use calibrated/verified measuring tape when getting the measurement.</div>

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Revision No.:

**2**

Page No.:

**8 of 8**

**PARTS:**

n/a

**JIG**

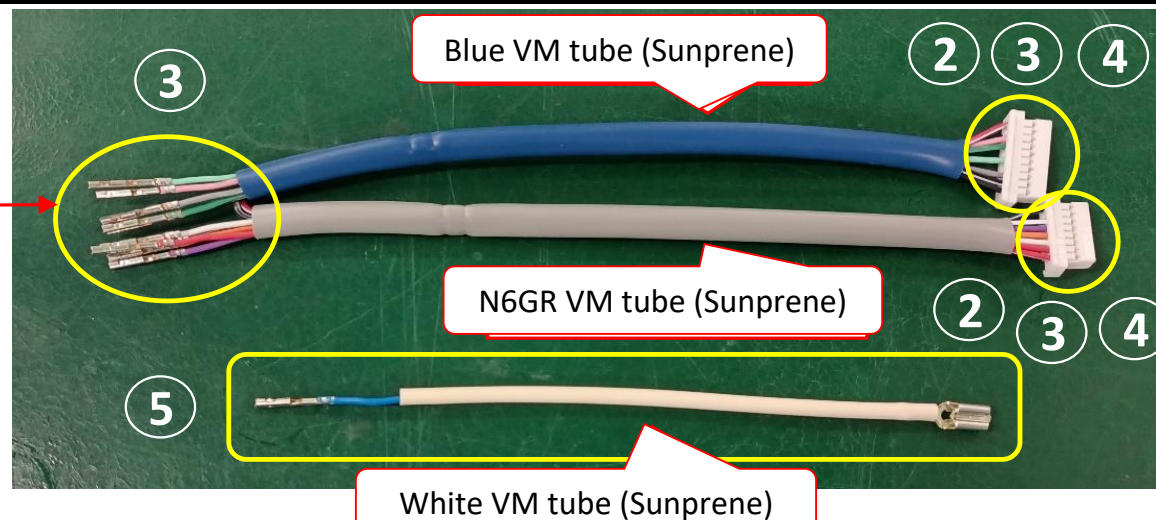
n/a

**2**

### QUALITY CHECKPOINTS

**P1**

**75S324-0010**



**1 No Interchange of VM tube color**

**2 No Wrong Insert**

**3 No Tangled wires**

**4 No Backing out of terminal**

**5 No Missing Blue wire with Sunprene tube (W)**

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