

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

Effectivity Date:

February 8, 2023Model Code/Part number: **J34A / 7L0105-7020G**Customer: **TRQSS**

Validity Date:

n/aPurpose: ☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

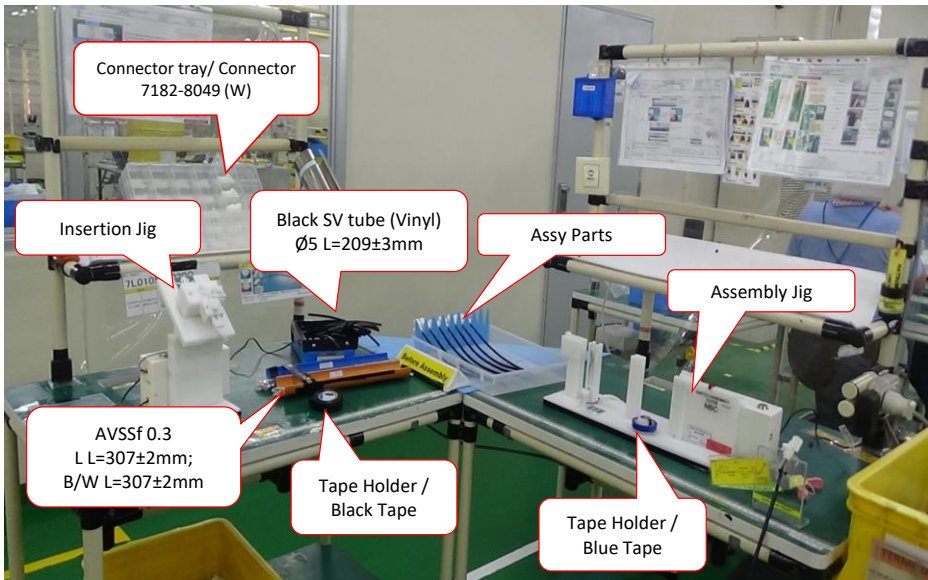
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PARTS:	4	1. All parts: Connector 7182-8049 (W); AVSSf 0.3 L L=307±2mm; B/W L=307±2mm; Black SV tube (Vinyl) Ø5 L=209±3mm; Black tape; Blue tape (10mm)				JIG:		1. Insertion jig 2. Assembly jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE		QUALITY POINTERS	
1	P1 (Table 1)	<div style="text-align: center;">BATCHING QUANTITY: 10pcs</div> <div style="text-align: center;">TABLE LAY-OUT</div> 				<div style="border: 1px dashed red; padding: 5px;">Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</div> <div style="border: 1px dashed red; padding: 5px;">Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div style="border: 1px dashed red; padding: 5px;">Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>		<div style="border: 1px dashed red; padding: 5px;">Document reference/s: 1. Refer to WI-PRO-CNC-071 Wire and Strip Length Tolerance</div> <div>1. No missing parts/tools 2. No excess parts/tools 3. No wrong position of parts/tools</div>	
Revision History						Prepared by	Reviewed by	Approved by	Noted by
02/08/22	4	Work instruction improvement: Combined Offline and Taping assembly process due to change MP from 2MP to 1MP. Inclusion of Quality checkpoint (Page 5).				D. Castillo	J. Loterte	C. Villanueva	A. Arañes
06/18/21	3	Change part number from 7L0105-7020D to 7L0105-7020G due to changes in vinyl tube length from L=223mm to 209mm. Transferred insertion process to Kitting (Refer to WI-ENG-PDE-284). Apply some improvements. Update pictures and additional process.				M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
05/19/21	2	Extension of validity date due to customer requirements. Apply some improvements.				M. Catapang	C. Villanueva	A. Shimamura	A. Arañes
Eff. Date	Rev. No	Details of Change				Revised	Checked	Approved	Noted
						Est. Date:	January 29, 2021		

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PARTS:

1. Connector 7182-8049 (W)

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

2

P1
(Table
1)Connector setting to
insertion jig
7182-8049 (W)

INSERTION JIG

Visual reference

Holes

Slider

Button

Guide

Reset

Adjustable

CONNECTOR ORIENTATION

Slide

Release

1. Slide the slide lock using right thumb..

2. Insert the connector **7182-8049 (W)** into jig using left hand and release the side lock using right hand.
Note: Follow the connector orientation; Cannot insert the inverted connector.

3. Push the guide using left thumb. The slot for **Blue wire** will be opened.

Hole

n/a

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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PARTS:

1. AVSSf 0.3 L L=307±2mm; B/W L=307±2mm

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

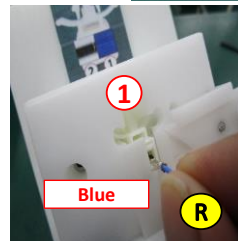
TOOLS/PPE

QUALITY POINTERS

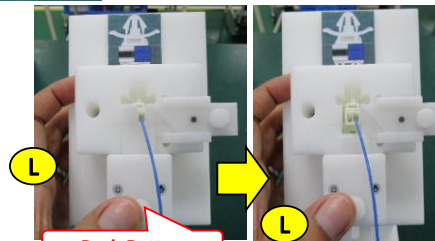
3

P1
(Table
1)Wire insertion to
connector
7182-8049 (W)

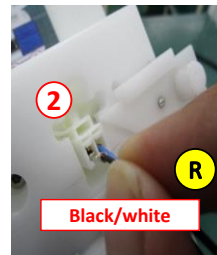
WIRE FACING



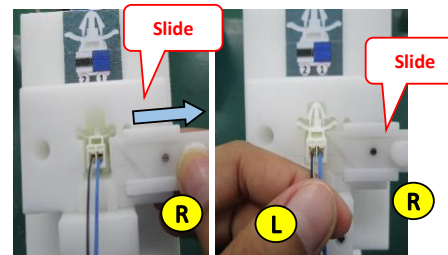
1. Get the **Blue wire** then insert to terminal slot ① using right hand. Conduct **Pull-Push-Pull-Push** after insertion.



2. Press the button using left thumb. The slot for **Black/White wire** will be opened.



3. Get the **Black/white wire** then insert to terminal slot ② using right hand. Conduct **Pull-Push-Pull-Push** after insertion.
Note: Insertion jig will alarm if Black/White wire will not insert before 5 seconds.



4. After insertion, **GO** sound will be heard. Slide the slider lock using right thumb then hold the wires and gently pull out the connector from jig using left hand.

n/a

Important reminders/Note/s:

1. Please hold the wire near terminal during insertion.
2. Insertion of wire must be inserted.
3. Make sure wires are properly inserted. Conduct **Pull-Push-Pull-Push** after insertion. Do not exert extra force.
4. Insertion jig will alarm if will not conduct Pull-Push-Pull-Push method.
5. This connector has **NO DOUBLE LOCK**, proper insertion method must be followed.

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

Document reference/s:

1. Refer to WI-PRO-CNC-017 for Wire and Strip length Tolerance
2. Please refer to GL-PRO-ASSY-029 for Pull-Push procedure.

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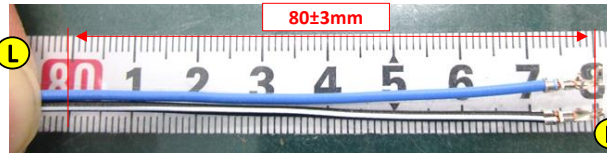
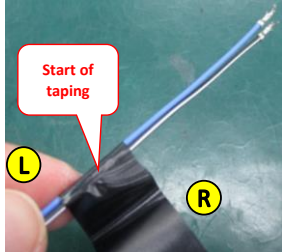
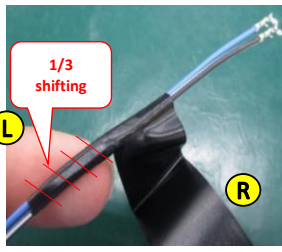
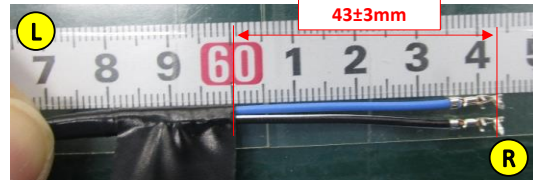
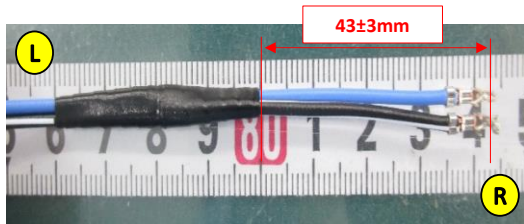

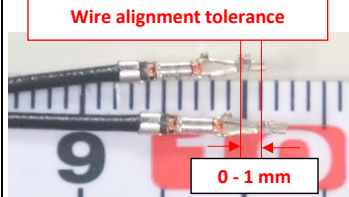
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PARTS:

1. Assy parts
2. Black tape [1pc]

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	P1 (Table 1) Taping 1 Wire taping	<div><p>1. Hold the wires using left hand then measure 80±3mm up to terminal pointed tip using both hands.</p></div> <div><div><p>Start of taping</p></div><div><p>2. Initially attach Black tape using right hand then make 2 windings of tape before shifting.</p><p>1/3 shifting</p></div><div><p>3. Make 1/3 shifting of tape then continue the taping process using both hands.</p></div></div> <div><p>4. Confirm measurement then make 3 windings of tape before cut.</p></div> <div><p>5. After taping, check the measurement, taping condition and terminal appearance.</p></div>	<div><p>MEASURING TAPE</p></div>	<p>Important reminders/Note/s:</p> <p>4. 1. Please use calibrated/verified measuring tape when getting the measurement.</p> <ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong use of tape6. No wrong dimension <div><p>Wire alignment tolerance</p><p>0 - 1 mm</p></div>

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PARTS:


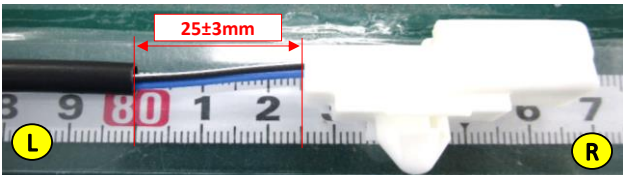
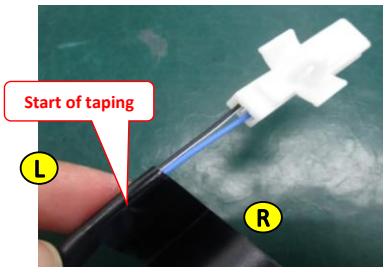
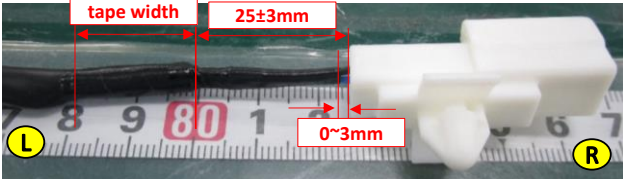

1. Assy parts

2. Black SV tube (Vinyl) Ø5 L=209±3mm

3. Black tape

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
5	Wire insertion to Black SV tube (Vinyl) Ø5 L=209±3mm	 <p>1 Get the Black SV tube (Vinyl) Ø5 L=209±3mm using right hand then insert the L-B/W wires using left hand.</p>	n/a	1. No wrong usage of parts 2. No deformed terminal
6	Taping 2 Black SV tube (Vinyl) to wire near connector	 <p>1. Hold the SV tube (Vinyl) using left hand then measure from end of SV tube (Vinyl) up to edge of connector 25±3mm using both hands.</p>  <p>2. Hold the SV tube (Vinyl) using left hand, get the Black tape using right hand then start taping process using both hands.</p>  <p>3. After taping, check the taping condition and measurement.</p>	MEASURING TAPE 	Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement. 2. Refer to GL-PRO-ASY-001 for taping procedure. 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

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PARTS:

1. Assy parts
2. Blue tape (10mm) [1pc.]

JIG

1. Clamp Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

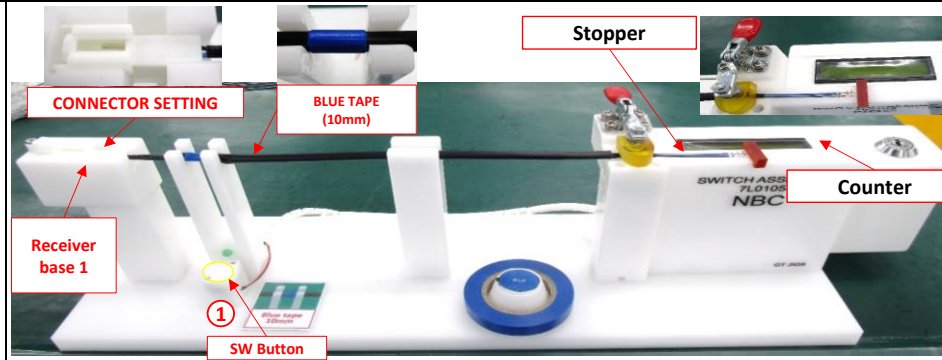
TOOLS/PPE

QUALITY POINTERS

7

P1
(Table
2)

Clamp Assembly

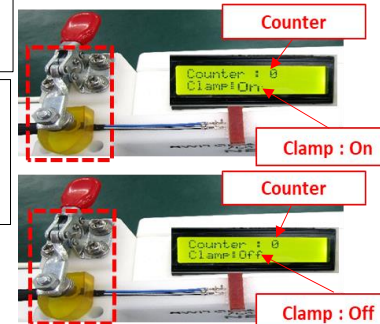


1. Get the assy parts and set to tester jig using both hands. (*See above picture for correct setting*). First, set the **7182-8049 (W)** to **Receiver base 1** then lock. Continue to set the harness, last set the **L-B/W wires** together within the stopper jig then press by toggle clamp. Continue if the sequence light in location **1** was **ON**.

2. Check if the Clamp is **ON**. Check if location **1** sequence light was **ON**. If encountered abnormality, **STOP** and immediately **CALL** the attention of the leader. **WAIT** for further instruction then continue the process.

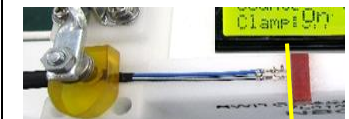
3. Get the **Blue tape (10mm)** using right hand then conduct spot taping using both hands on location **1**. Make **2~3 windings** then cut the tape. Press the **SW button** using right index finger. **Go** sound will be heard.

Make sure no gap between terminal and stopper jig.



4. Conduct **POINT CHECKING** before removing the harness from jig.

n/a



Important reminders/Note/s:

1. Make sure no gap between stopper jig and Terminal
2. Counter will be the basis of quantity of harness per box. Only **LEADER** are allowed to reset the counter.

1. No wrong insert
2. Make sure no gap between terminal and stopper jig
3. No wrong use of tape
4. No excess windings
5. No missed tape

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PARTS:

1. Assembled parts
2. Master sample

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

8

P1
(Table
2)

Visual/By Two's
Inspection



ACTUAL PRODUCT



Master
sample

Assembled
parts

2. Check the **terminal** and **insertion**



3. Check the **VI to wire taping condition and spot tape condition.**

1. Conduct **alignment of harness (Master sample vs. Assembled parts)** using both hands.

4. Check the **taping condition** inside the VT.



5. Check the **terminal appearance**. Must be **no deformed terminal**.

1. No skip checking during inspection

MASTER SAMPLE



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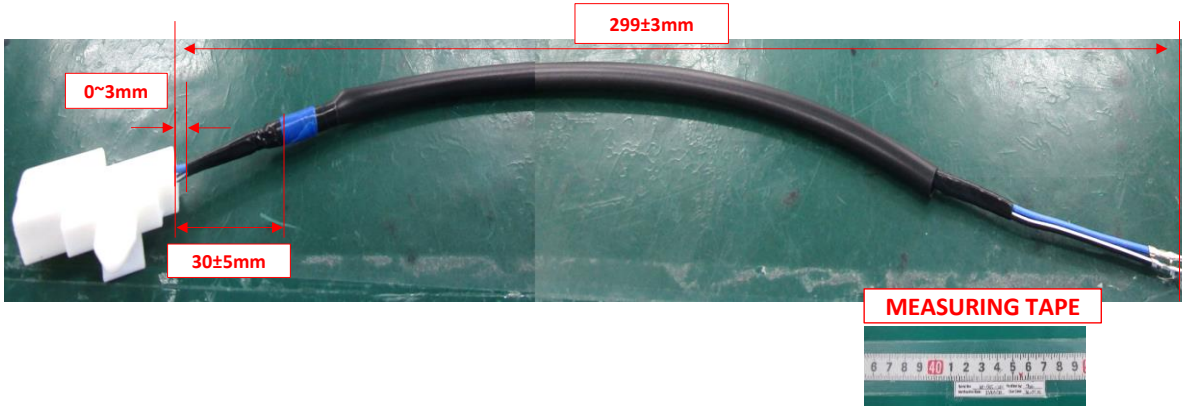
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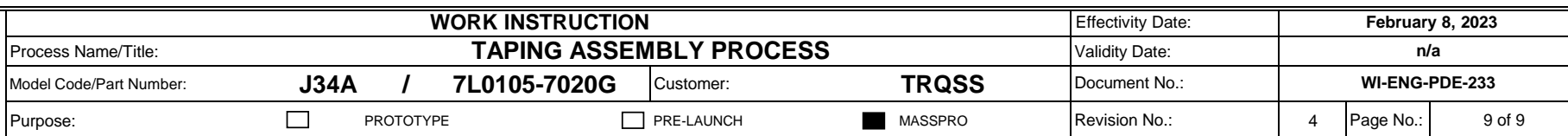
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PARTS:	n/a			JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
9	Measurement			<div>1. No wrong dimension</div> <div>Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement. 2. For Hatsumono and Owarimono</div>	
	P1 (Table 2)				

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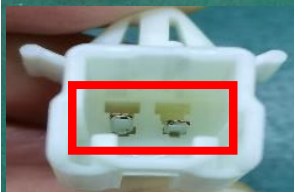
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JIG	n/a
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4 QUALITY CHECKPOINTS

7L0105-7020G



① No Terminal Backing Out

② **No Missing Tape (black tape)
and No Missing Spot Tape
(Blue tape)**

③ No Deformed Terminal

④ No Wrong Insert

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