



WORK INSTRUCTION

TAPING ASSEMBLY PROCESS

Process Name/Title:

Model Code/Part Number: **TM3 / 7L0117-7020A**

Customer:

TRQSS

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Effectivity Date:

February 28, 2023

Validity Date:

n/a

Document No.:

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Revision No.:

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PARTS:

1. Assy parts; Connector 7282-1028 (W); Black Corrugated tube $\phi 7$ L=78 \pm 3mm (no slit); Black SV tube (Vinyl) $\phi 5$ L=40 \pm 3mm; Black Corrugated tube $\phi 10$ L=195 \pm 3mm (no slit); Black Corrugated tube $\phi 7$ L=140 \pm 3mm (no slit); Blue tape

JIG:

1. Insertion jig
2. Terminal cover jig
3. Pushing jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	P1	Table Lay-out	<p>Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</p> <p>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</p> <p>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</p>	<p>Document reference/s: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. Refer to WI-ENG-PDE-365 7L0117-7020A for Offline Assembly process</p> <p>1. No missing parts/tools 2. No excess parts/tools</p>

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
02/28/23	4	Inclusion of Quality Checkpoints.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
10/11/22	3	Remove process no. 2,3,4 and 5 insertion of B-V-Y-OR and transfer to Offline Assembly Process. Transfer Wire insertion to Black vinyl tube $\phi 5$ L=40 \pm 3mm to process 9. Transfer Taping 1-Black corrugated tube to wire near connector from P2 to P1 due to Process improvement. Change table lay-out illustration.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
09/01/22	2	Improve quality pointers and notes in: Process no.1,2,3,4,5,7,8,9,11,12 and 13 as document improvement. Work procedure and illustration in locking process in process no.9 and 13. Additional process in: Process no.3 and 5, procedure5 - pushing of wires as countermeasure for encountered terminal backing out.	M. Catapang	J. Loterte	C. Villanueva	A. Arañes				
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	August 10, 2021		

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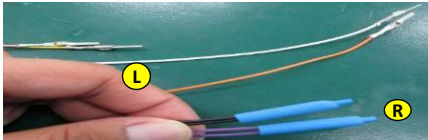




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PARTS:		1. Assy parts 2. Black corrugated tube $\phi 10$ L=195 \pm 3mm 3. Black vinyl tube $\phi 5$ L=40 \pm 3mm			JIG	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
2	P1	<p>Wire insertion to Black corrugated tube $\phi 10$ L=195\pm3mm (no slit)</p> <div><p>1. Hold the wires using left hand, get the terminal cover jig using right hand then insert the B-B ; V-V wires using left hand.</p></div> <div><p>2. Get the corrugated tube (no slit) $\phi 10$ L=195\pm3mm using right hand then insert B-B ; V-V ; OR-W jointed wires using left hand.</p></div> <div><p>3. Continue to insert the Y-P jointed wires using left hand.</p></div> <div><p>4. After insertion, remove the terminal cover jig using right hand.</p></div>			<div>TERMINAL COVER JIG</div>  n/a	<p>1. No wrong usage of parts 2. No deformed terminal tip</p>

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PARTS:		1. Assy parts 2. Black corrugated tube $\varnothing 7$ L=78 \pm 3mm			3. Black corrugated tube $\varnothing 7$ L=140 \pm 3mm		JIG	1. Terminal cover jig
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE		QUALITY POINTERS
3	P1	Wire insertion to Black corrugated tube $\varnothing 7$ L=78 \pm 3mm (no slit)	<div></div> <div>1. Hold the wires using left hand, get the terminal cover jig using right hand then insert the B-B ; V-V wires using left hand.</div>			<div>TERMINAL COVER JIG</div> <div></div>	1. No wrong usage of parts 2. No deformed terminal tip	
			<div></div> <div>2. Get the corrugated tube (no slit) $\varnothing 7$ L=78\pm3mm using right hand then insert the B-B; V-V ; OR-W jointed wires using left hand.</div>					
			<div></div> <div>3. After insertion, remove the terminal cover jig using right hand.</div>					
4		Wire insertion to Black corrugated tube $\varnothing 7$ L=140 \pm 3mm (no slit)	<div></div> <div>1. Hold the wires using left hand, get the corrugated tube (no slit) $\varnothing 7$ L=140\pm3mm using right hand then insert the OR-W wires using left hand.</div>					1. No wrong usage of parts 2. No deformed terminal

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PARTS:

1. Connector 7282-1028 (W)

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

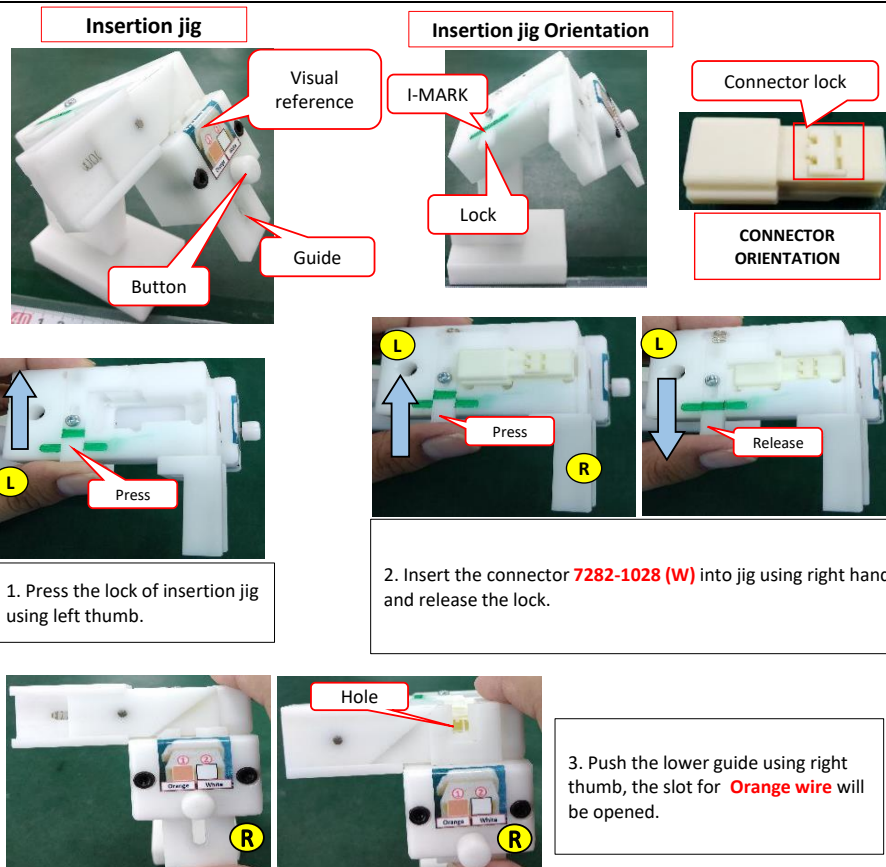
TOOLS/PPE

QUALITY POINTERS

5

P1

Connector setting to
insertion jig
7282-1028 (W)



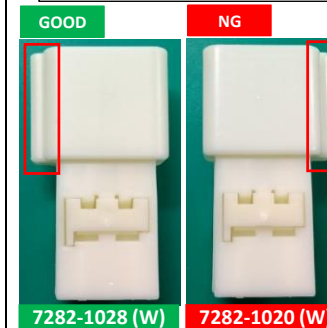
n/a

Important reminders/Note/s:

1. Follow the connector orientation
2. Cannot insert the inverted connector.

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

CONNECTOR ILLUSTRATION



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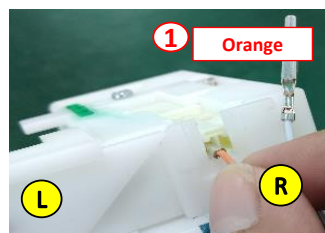
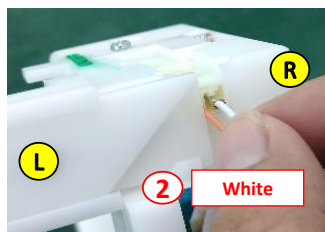
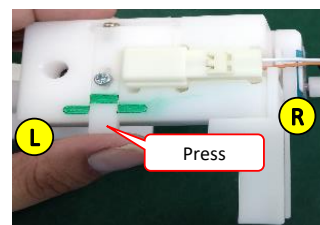
PARTS:

1. Assy parts

JIG1. Insertion jig
2. Pushing jig**NO.****PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

6

P1

Wire insertion to connector
7282-1028 (W)**WIRE FACING**1. Hold the **Orange wire** then insert
to terminal slot **1** using right hand.2. Press the button using
right hand, the slot for
White wire will be
opened.3. Hold the **White wire** then insert
to terminal slot **2** using right hand.4. After insertion, press the lock using left thumb
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**Important reminders/Note/s:****1. Please hold the wire near terminal.**
2. Make sure wires are properly inserted.
Conduct Pull-Push-Pull-Push after insertion.
Do not exert extra force.**Document references:****1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.**

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PARTS:

1. Assy parts

JIG

1. Pushing jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

7

P1

Connector lock

Pressing sequence

1. Hold the connector using left hand and place on the table. Get the pushing jig using right hand and start the sequential locking based on the above illustration. Push the lower part of the connector lock first and then push the upper part.

2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.

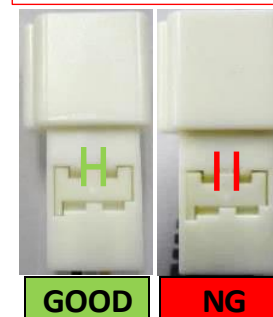
Before pressing

After pressing

Pushing jig



LOCKED CONDITION



Important reminders/Note/s:

1. Manual locking may cause damaged connector lock.
2. Use the provided jig tool to lock the connector.
3. Position of pushing jig during locking must be slanted

1. No unlocked/half-locked connector
2. No damage connector

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PARTS:

1. Assy parts
2. Blue tape

JIG:

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

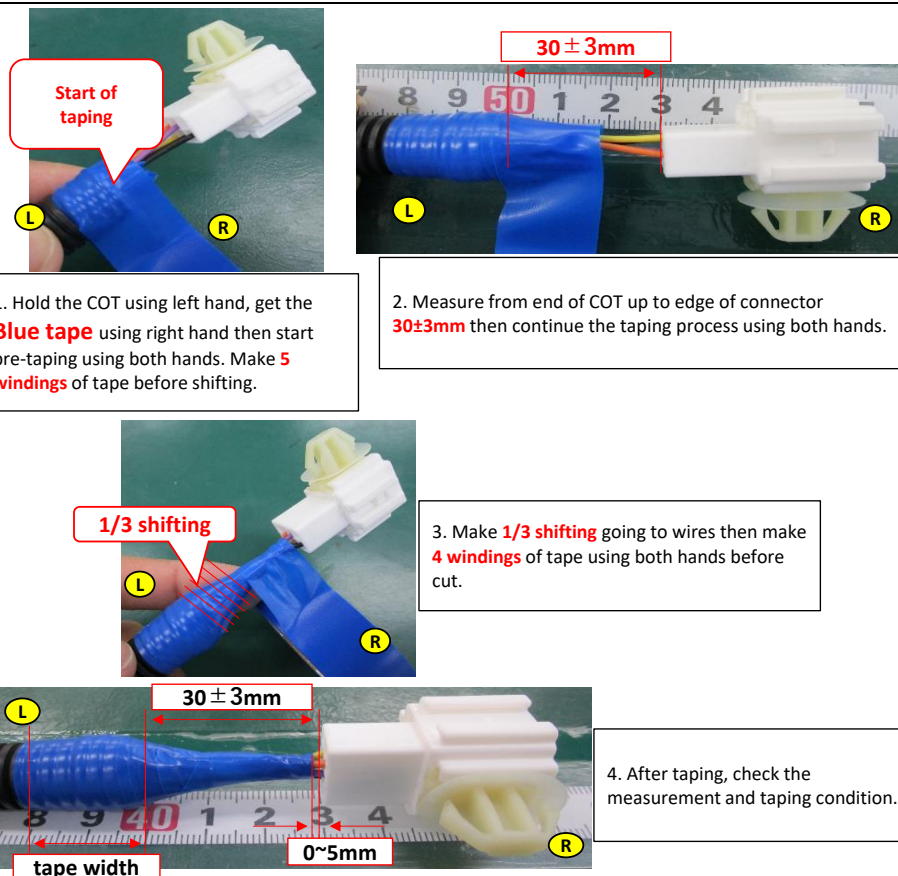
TOOLS/PPE

QUALITY POINTERS

8

P1

Taping 1
Black corrugated tube to
wire near connector



MEASURING TAPE



- Important reminders/Note/s:**
1. **USE BLUE TAPE only**
 2. 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

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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
9	P1	Wire insertion to Black SV tube (Vinyl) ø5 L=40±3mm	 <div>2. Get the black SV tube (Vinyl) ø5 L=40±3mm using right hand then insert Y-P jointed wires using left hand.</div>	n/a	1. No wrong usage of parts	

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PARTS:

n/a

JIG

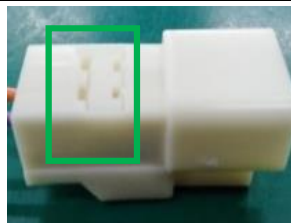
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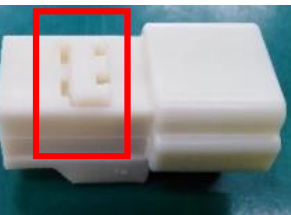
QUALITY CHECKPOINTS

P1

7L0117-7020A



GOOD



NO GOOD



**TAPE WIDTH /
30±3MM COT TO CONNECTOR**

2

BLUE TAPE

3

1



1

No WRONG INSERT

No UNLOCKED/HALFLOCKED

NO TBO

2

No Missing Tape

3

No Missing VT

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