



WORK INSTRUCTION
TAPING ASSEMBLY PROCESS

Effectivity Date:

March 13, 2023

Process Name/Title:

TAPING ASSEMBLY PROCESS

Validity Date:

n/a

Model Code/Part Number: 920B / 7R0115-7021

Customer: TRMX

Document No.:

WI-ENG-PDE-643A

Purpose: ☐ PROTOTYPE

☒ PRE-LAUNCH

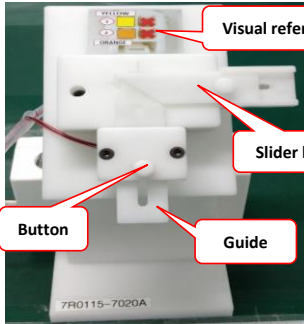
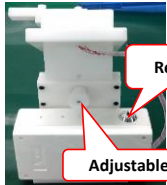


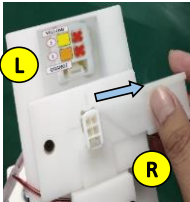
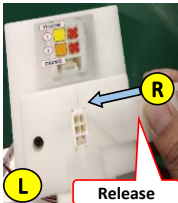
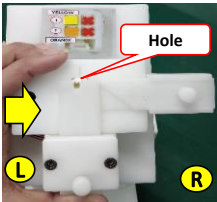




☐ MASSPRO

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PARTS:		1. Connector 7189-0995 (W)				JIG:	1. Insertion jig with controller			
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS		
1	P1	Connector setting to insertion jig 7189-0995 (W)	<div><div><div>Insertion jig</div><div></div></div><div><div>Insertion jig (Back view)</div><div></div></div><div><div>Insertion jig Orientation</div><div></div></div><div><div>Connector Orientation</div><div></div></div><div><div></div><div></div><div></div></div><div><div>2. Insert the connector 7189-0995 (W) into jig using left hand and release the side lock.</div><div>3. Push the guide using left hand. The slot for Yellow wire will be opened.</div></div><div><div>1. Slide the slide lock using right thumb.</div></div></div>				<div>Safety Instruction Be sure to wear prescribed personal protective equipment during operation (gloves, finger cots, etc.)</div> <div>Housekeeping 1. Maintain and always practice 5's. 2. Personal things on the workplace is prohibited. Keep it in your locker.</div> <div>Alert level For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.</div>	<div>Important reminders/Note/s: 1. Cannot insert the inverted connector.</div> <div>1. Use provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector</div>		
Revision History							Prepared by	Reviewed by	Approved by	Noted by
03/13/23	0	Initial issue.					 D. Castillo	 J. Loterte	 C. Villanueva	 A. Arañes
Eff. Date	Rev. No	Details of Change		Revised	Reviewed	Approved	Noted	Est. Date:		March 13, 2023

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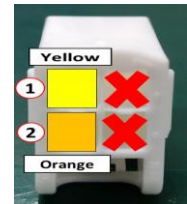
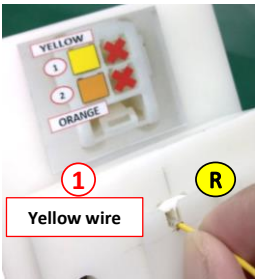
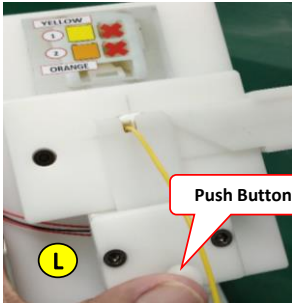
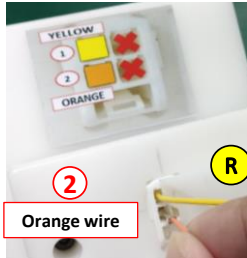
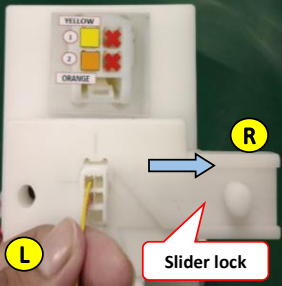
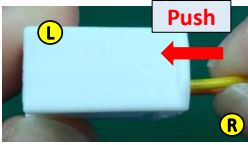
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PARTS:

1. AVSSf 0.3 wires Y-OR L=338±2mm

JIG

1. Insertion jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1 Wire insertion to connector 7189-0995 (W)	<div><p>Wire facing</p></div> <div><p>Visual Reference</p></div> <div><p>1. Get the Yellow wire then insert to terminal slot 1 using right hand. Conduct Pull-Push-Pull-Push after insertion.</p></div> <div><p>2. Press the button using left hand. The slot for Orange wire will be opened.</p></div> <div><p>3. Get the Orange wire then insert to terminal slot 2 using right hand. Conduct Pull-Push-Pull-Push. After insertion, press the button using left hand. GO sound will be heard.</p></div> <div><p>4. Slide the lock using right thumb and then hold the wires and gently pull out the connector from jig using left hand.</p></div> <div><p>5. After removing the connector from jig, conduct Pushing (1x) of Y wire using right hand to confirm that wire is fully inserted. Repeat the process for OR wire.</p></div>	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>Important reminders/Note/s:</p> <p>1. Please hold the wire near terminal.</p> <p>2. Make sure wires are properly inserted.</p> <p>Conduct Pull-Push-Pull-Push after insertion.</p> <p>Do not exert extra force.</p> <p>3. Insertion jig will alarm if will not conduct Pull-Push-Pull-Push method.</p> <p>4. Insertion jig will alarm if Yellow wire will not insert before 5 seconds.</p> <p>5. Conduct Pushing of wires after removing the connector from jig.</p> <p>6. Pushing of wires will be done one by one of every inserted wires</p> <p>Document references:</p> <p>1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p> <p>2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p>

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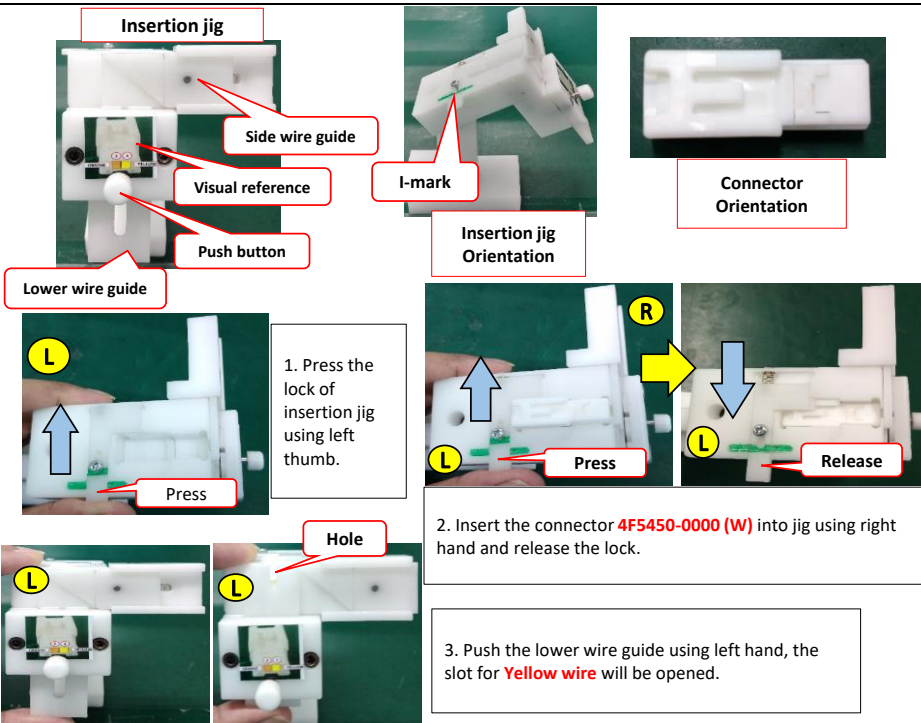
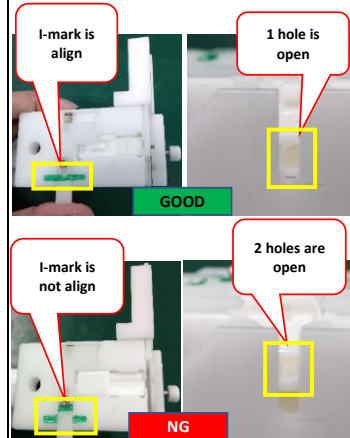
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PARTS:		1. Assy parts 2. Black SV Tube (Vinyl) Ø7 L=267±3mm 3. Connector 6098-6653 (W)			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
3	Wire insertion to Black SV Tube (Vinyl) Ø7 L=267±3mm	 <p>1. Get the SV tube (Vinyl) Ø7 L=267±3mm using right hand then insert the Y-OR red using left hand.</p>			n/a	1. No wrong use of parts 2. No deformed terminal
4	Connector setting to insertion jig 6098-6653 (W)	<p>Insertion jig</p>  <p>Insertion jig Orientation</p> <p>1. Press the lock of insertion jig using left thumb.</p> <p>Press</p> <p>Release</p> <p>2. Insert the connector 4F5450-0000 (W) into jig using right hand and release the lock.</p> <p>3. Push the lower wire guide using left hand, the slot for Yellow wire will be opened.</p>			n/a	<p>Connector Orientation Illustration</p>  <p>GOOD</p> <p>NG</p> <p>Important reminders/Note/s:</p> <p>1. Follow the connector orientation</p> <p>1. Use provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector</p>

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PARTS:

1. Assy parts

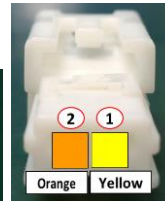
JIG

1. Insertion jig

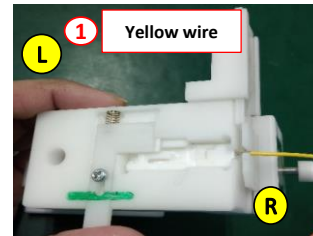
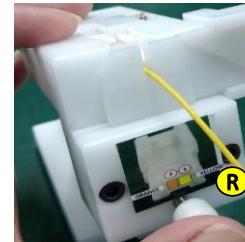
NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

5

P1

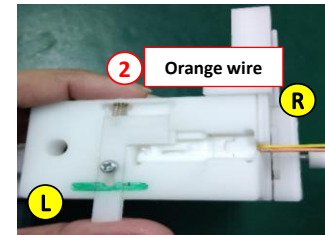
Wire insertion to Connector
6098-6653 (W)**VISUAL REFERENCE**

Wire facing

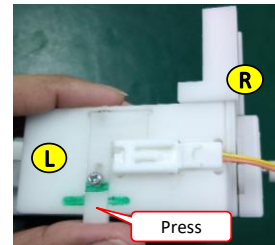


1. Get the **Yellow wire** using right hand then insert to terminal **slot 1** using right hand.

2. Press the button using left hand, the slot for **Orange wire** will be opened.



1. Get the **Orange wire** using right hand then insert to terminal **slot 2** using right hand.



4. After insertion, press the lock guide 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

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
2. Clamp 82711-12B10 (W)

JIG

1. Locking jig

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

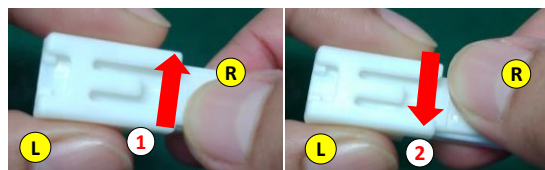
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P1

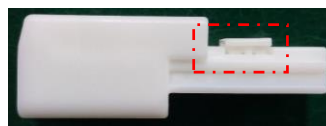
Connector Lock



1. Put the connector into locking jig using right hand then press **2x** using both hands. Touch the connector lock to confirm if properly locked.



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



Before Pressing

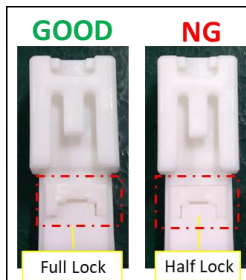


After Pressing

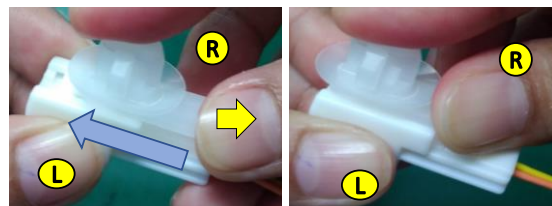
LOCKING JIG**Important reminders/Note/s:**

1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR

1. Use the provided locking jig per model
2. No unlock/half-locked connector

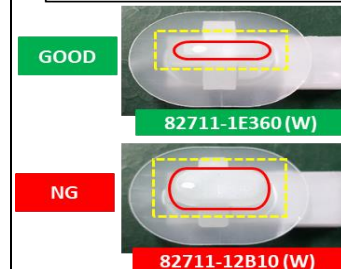


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Clamp Attachment
82711-12B10 (W)**CLAMP ORIENTATION**

1. Hold the connector using left hand, get the clip type clamp **82711-12B10 (W)** then insert the clamp using right hand. **Note: Sound will be heard if properly inserted.**

n/a

CLIP CLAMP ILLUSTRATION

1. No wrong use of parts
2. No loose attachment

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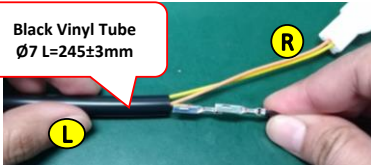
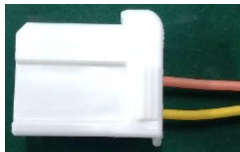

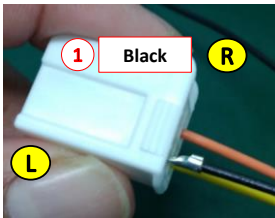
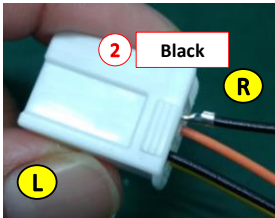
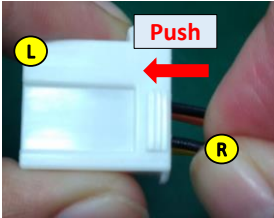
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PARTS:

1. Assy parts
2. AVSSf 0.3 wires B-B L=534±3mm

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
8	Wire insertion to assy parts	<p>Black Vinyl Tube Ø7 L=245±3mm</p>  <p>1. Hold the SV tube (Vinyl) Ø7 L=267±3mm using left hand then insert the B-B wire using right hand.</p>	n/a	<ol style="list-style-type: none">1. No wrong use of parts2. No deformed terminal
9	P1 Wire insertion to connector 7189-0995 (W)	<p>Connector Orientation</p>  <p>Wire facing</p>  <p>1. Hold the connector 7189-0995 (W) then hold the first Black wire and insert to terminal slot 1 of connector using right hand. Conduct 2x push pull after wire insertion. Note: Insertion of wire must be from left to right</p>  <p>2. Hold the connector 7189-0995 (W) then hold the second Black wire and insert to terminal slot 2 of connector using right hand. Conduct 2x push pull after wire insertion.</p>  <p>3. Conduct Pushing (1x) of B wire using right hand to confirm that wire is fully inserted. Repeat the process for B wire.</p> 	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>Important reminders/Note/s:</p> <ol style="list-style-type: none">1. Please hold the wire near terminal.2. Make sure wires are properly inserted. <p>Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <ol style="list-style-type: none">3. Insertion jig will alarm if will not conduct Pull-Push-Pull-Push method.4. Insertion jig will alarm if Yellow wire will not insert before 5 seconds.5. Conduct Pushing of wires after removing the connector from jig.6. Pushing of wires will be done one by one of every inserted wires <p>Document references:</p> <ol style="list-style-type: none">1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance

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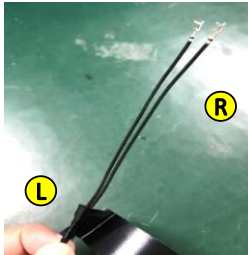
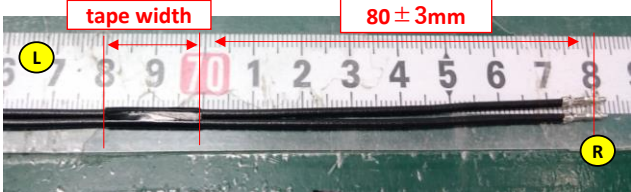

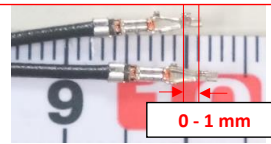

PARTS:

1. Assy parts
2. Black tape

3. Black twisted tube Ø5 L=189±4mm

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
10	P1 Spot taping 1	 <p>1. Hold the wires using left hand and measure from wire up to terminal pointed tip 100±3mm.</p>  <p>2. Get the Black tape and start taping on the Black wires. Conduct 2x windings of tape before cutting using both hands.</p>  <p>3. After taping, check the measurement and taping condition.</p>	 <p>MEASURING TAPE</p>	 <p>Wire alignment tolerance</p> <ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong dimension6. No wrong use of tape <p>Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</p>
11	Wire insertion to Black twisted tube Ø5 L=189±4mm	 <p>1. Get the Viny tube Ø5 L=189±4mm using right hand then insert the B-B wire using left hand.</p>	n/a	<ol style="list-style-type: none">1. No wrong use of parts2. No deformed terminal

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PARTS:

1. Assy parts
2. Gray tape (10mm)

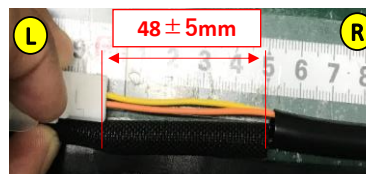
JIG

n/a

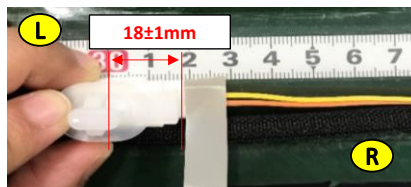
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
12	P1	Spot Taping 2	MEASURING TAPE 	<ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong dimension6. No wrong use of tape Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.



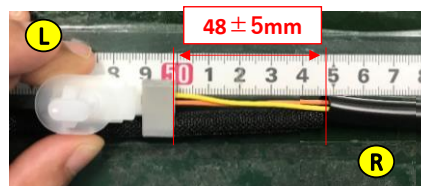
1. Fix the Connector and the twisted tube.
Note: Alignment of twisted tube must be beside the Connector.



2. Measure from end of connector up to end of twisted tube **48±5mm** using both hands.



3. Measure **18±1mm** from end of clamp up to connector using both hands, get the **Gray tape (10mm)** using right hand the conduct **2 windings** of tape using both hands.



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

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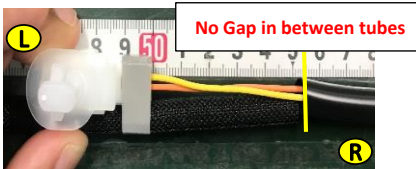
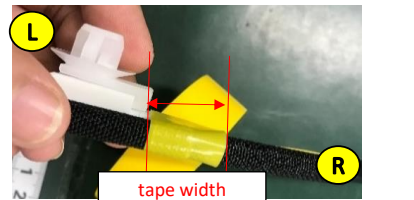
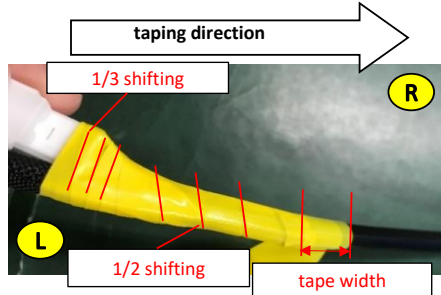
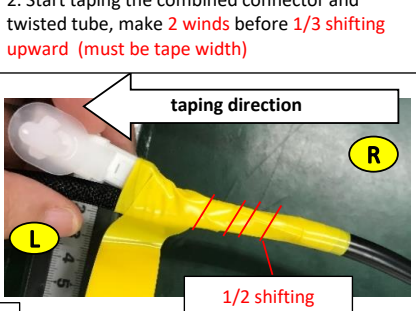
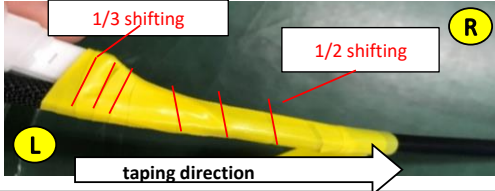
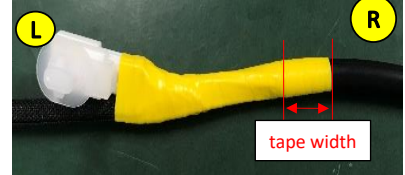

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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
13	P1	Y-taping	<div><div><p>1. Fix the SV tube (Vinyl) and twisted tube.</p></div><div><p>2. Start taping the combined connector and twisted tube, make 2 winds before 1/3 shifting upward (must be tape width)</p></div><div><p>3. Wind the tape upward 1/3 shifting, then conduct 1/2 shifting upward until it reach the vinyl tube (must be tape width)</p></div><div><p>4. Wind the tape backward 1/2 shifting.</p></div><div><p>5. Wind the tape 1/3 shifting then 1/2 shifting, same shifting to no.3, then cut the tape after 2 winds on SV tube (Vinyl).</p></div><div><p>6. After taping, check the condition of tape, measurement and the connector facing.</p></div></div> <div><div>MEASURING TAPE</div></div> <div><p>Important reminders/Note/s:</p><ol style="list-style-type: none">1. Use YELLOW TAPE for easy visualization of shifting lines, but actual should be BLACK TAPE.2. Please use calibrated/verified measuring tape when getting the measurement.<ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong dimension6. No wrong use of tape</div>		



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WORK INSTRUCTION

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

Model Code/Part Number: **920B / 7R0115-7021**

Customer: **TRMX**

Purpose: ☐ PROTOTYPE

☒ PRE-LAUNCH

☐ MASSPRO

Effectivity Date:

March 13, 2023

Validity Date:

n/a

Document No.:

WI-ENG-PDE-643A

Revision No.:

0

Page No.:

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PARTS:

1. Assy parts

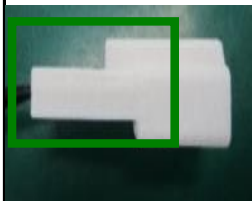
JIG

n/a

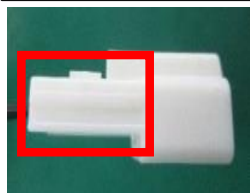
QUALITY CHECKPOINTS

P1

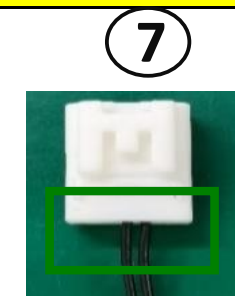
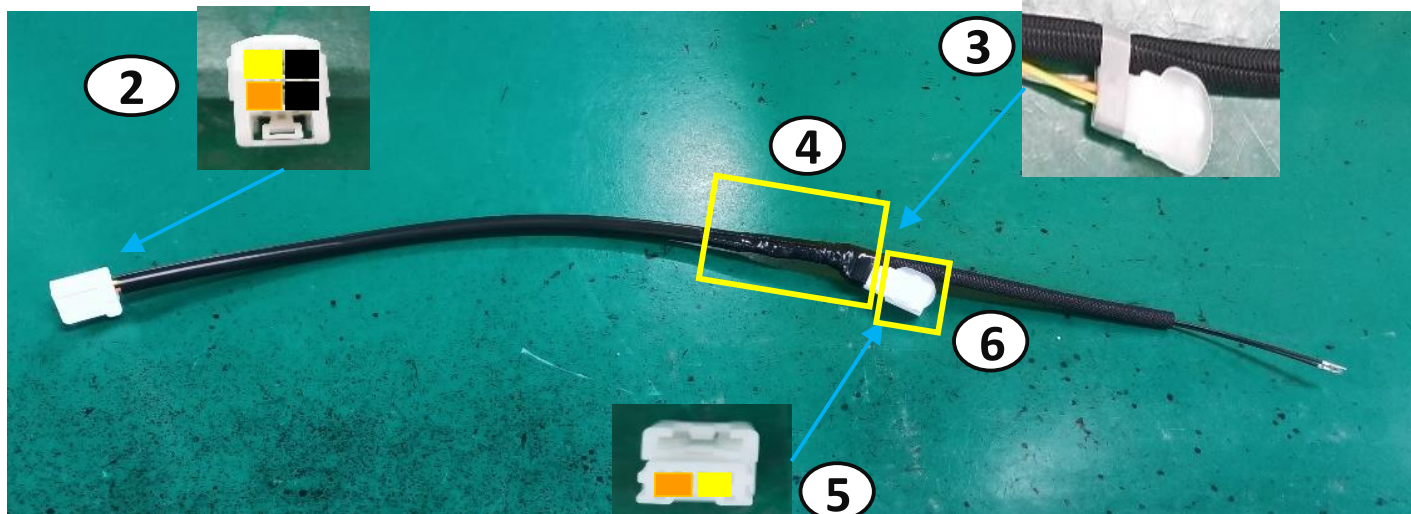
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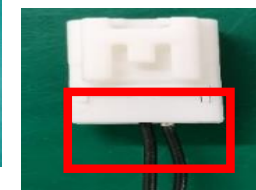
GOOD



NO GOOD



GOOD



NO GOOD

① No **Unlock/Halflocked Connector**

③ ④ No **Missing tape**

② ⑤ No **Wrong Insert**

⑥ No **Missing Clip type clamp**

⑦ No **Terminal Backing Out**

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