



WORK INSTRUCTION

Process Name/Title: TAPING ASSEMBLY PROCESS

Effectivity Date:

April 26, 2023

Model Code/Part Number: 373D / 7N0174-7020A

Customer: TRJ

Validity Date:

n/a

Purpose: ☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

WI-ENG-PDE-658B

Revision No.:

1

Page No.:

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PARTS:

1. Assy parts: Black SV tube (Vinyl) Ø5 L=108±3mm; Black tape; White tape (10mm)

JIG:

1. Assembly jig

NO.

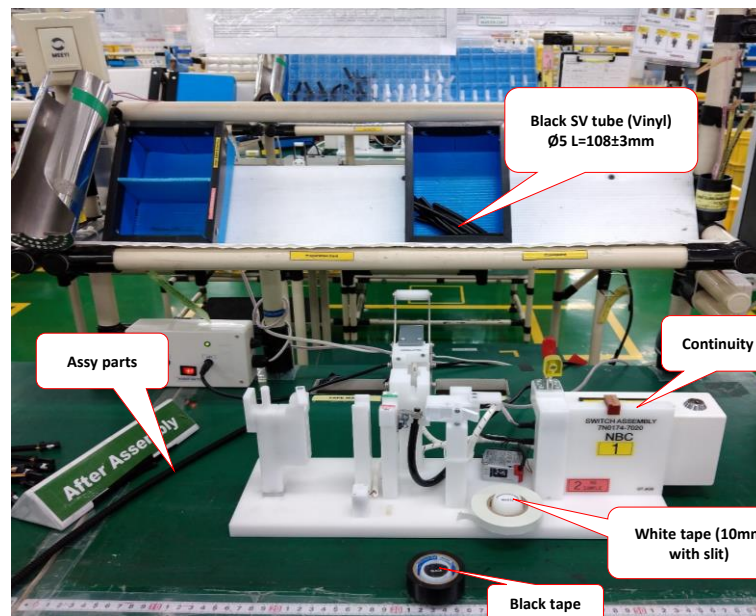
PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

Table Lay-out



Safety Instruction

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

Housekeeping

1. Maintain and always practice 5's.
2. Personal things on the workplace is prohibited. Keep it in your locker.

Alert level

For any trouble, inform the Assembly Assistant Supervisor or Line Leader for immediate corrective action.

1. No missing parts/tools
2. No excess parts/tools

Revision History

Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Prepared by	Reviewed by	Approved by	Noted by
04/26/23	1	Change document purpose from prelaunch to masspro. Inclusion of table layout. Modified the assembly jig. Change of Y-taping measuring (COT and vinyl) from tape width to range (20~22mm) to meet the required dimension of end tape up to terminal pointed tip.	D.Castillo	J. Loterte	C. Villanueva	A. Arañes	J. Loterte	J. Loterte	C. Villanueva	A. Arañes
03/24/23	0	Initial issue	D.Castillo	J. Loterte	C. Villanueva	A. Arañes	D. Castillo	J. Loterte	C. Villanueva	A. Arañes

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WORK INSTRUCTION



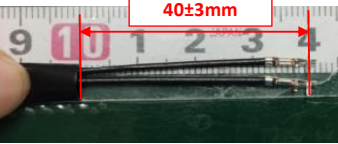
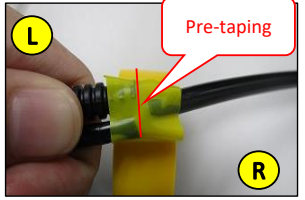
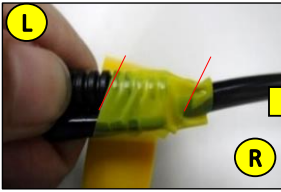

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Model Code/Part Number: **373D / 7N0174-7020A** Customer: **TRJ**

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:		1. Assy parts 2. Black tape	3. Black SV tube (Vinyl) Ø5 L=108±3mm	JIG	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2		<p>Wire insertion to Black SV tube (Vinyl) Ø5 L=108±3mm</p>  <p>1. Get the Black SV tube (Vinyl) Ø5 L=108±3mm using right hand then insert the B-B wire using left hand.</p>		n/a	1. No wrong use of parts
3	<div>1</div> <div>P2</div> <div>Y-taping</div>	<div><p>1. Fix the COT and SV tube (Vinyl). Make sure no gap in between.</p></div> <div><p>2. Measurement from end of SV tube (Vinyl) up to terminal tip. Must be 40±3mm.</p></div> <div><p>3. Get the tape and fix the COT to SV tube (Vinyl). Make 1 wind pre-taping before shifting.</p></div> <div><p>4. Make 1 shifting to the left until tape width then wind the tape 2x.</p></div>		<p>MEASURING TAPE</p> 	<p>Important reminders/Note/s:</p> <p>1. Use YELLOW TAPE for easy visualization of shifting lines, but actual should be BLACK TAPE.</p> <p>2. Please use calibrated/verified measuring tape when getting the measurement.</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>

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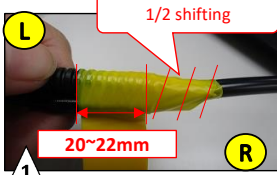

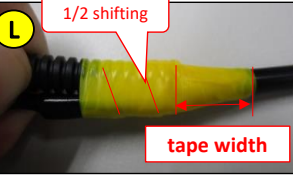
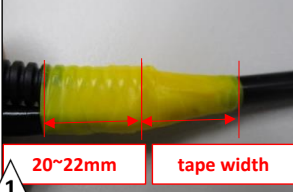
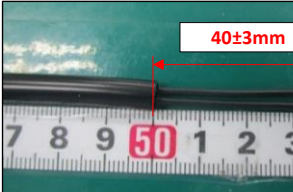

Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ☒ MASSPRO

PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P2 Y-taping (Continuation)	<div><p>170 ± 3mm</p><p>5. Confirm measurement from end of tape up to terminal pointed tip 170±3mm using both hands then continue the taping process.</p><div><p>1/3 shifting</p><p>tape width</p></div><div><p>1/2 shifting</p></div><div><p>1/2 shifting</p><p>20~22mm</p></div><p>6. Make 1/3 shifting to the right side until tape width on SV tube (Vinyl).</p><p>6. Make 1/2 shifting to the left until tape width then wind the tape 2x.</p><div><p>1/2 shifting</p></div><div><p>1/2 shifting</p><p>tape width</p></div><p>7. Make 1/2 shifting to the right until tape width on SV tube (Vinyl), wind the tape 2x then cut the tape.</p><div><p>20~22mm</p><p>tape width</p></div><div><p>40 ± 3mm</p></div><p>8. After taping, check the measurement from SV tube (Vinyl) up to terminal pointed 40±3mm and taping condition.</p></div>	<p>MEASURING TAPE</p> 	<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

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Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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PARTS:

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

JIG

1. Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

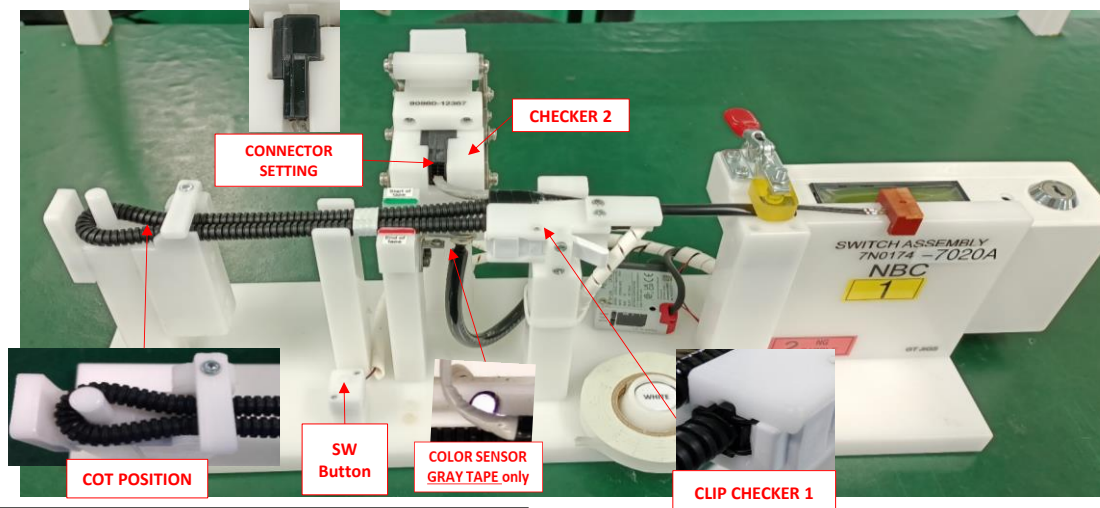
QUALITY POINTERS

4

P2

Assembly

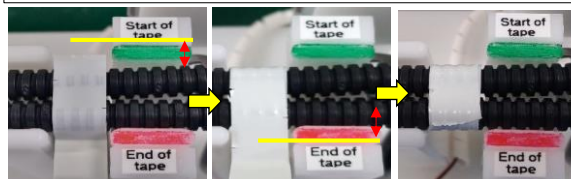
1



1. Get the assy part and then put into jig. (See above illustration). First, set the connector 6098-6663 (B) to Clip Checker 1 then lock. Second, set the connector 6098-6663 (B) to Checker 2 then pull the checker fixture for continuity checking. Next, set the B-B wires together within the stopper jig and then press by toggle clamp. Color sensor light will be/buzz if sensor detects Gray tape. Last set the Y-taping in hook.

2. Check if all LED light for POWER ON, COLOR SENSOR was ON. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process.

3. Get the WHITE NITTO TAPE 2107TVH (with slit) and begin taping using both hands. Make 1.5 windings of tape then cut using both hands. (Follow below instructions for taping procedure)



4. Start of tape must be within the GREEN MARK. Wind the tape 1.5 windings using both hands then cut within RED MARK.



Important reminders/Note/s:

1. Make sure no gap between stopper and terminals

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

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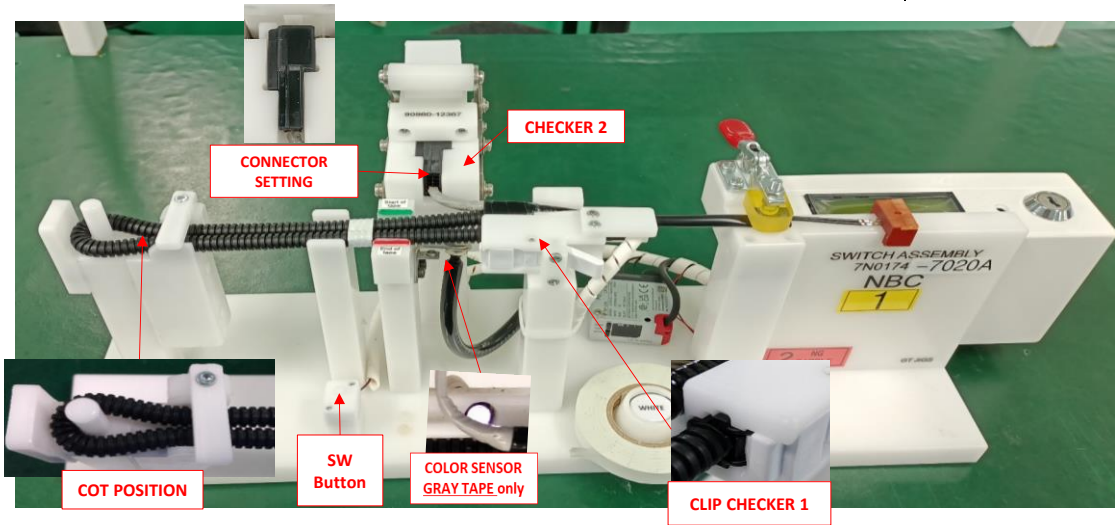

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Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS:		1. Assy parts	JIG	1. Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	P2 1 Assembly (Continuation)	 <p>5. Press the SW button, Go sound will be heard if the result is GOOD.</p> <p>6. Conduct POINT CHECKING before removing the harness from jig. First, unlock the COT then remove the assy. Second, remove the toggle clamp. Third, push the Checker fixture then remove the connector 6098-3870 (B). Last, press the clip then remove the connector 6098-6663 (B).</p>		 <p>Important reminders/Note/s: 1. Make sure no gap between stopper and terminals</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>REFERENCE AFTER TAPING USING NITTO TAPE 2107TVH</p> <p>GOOD: 1.5 windings</p> <p>NG: 1 winding</p>

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☐ PROTOTYPE

☐ PRE-LAUNCH

☒ MASSPRO

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PARTS:

1. Assy parts

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

5

P2

Visual/By two's inspection



Assembled parts



Engineering sample

1. Conduct **alignment of harness (Engineering sample vs. assembled parts)** using both hands.



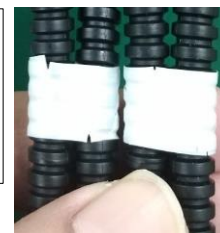
2. Check the **terminal, connector lock, insertion and taping condition.**



4. Check the **connector lock and insertion**



3. Check the **Y-taping condition.**



5. Check the **presence of spot tape (White 10mm with slit)**



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



1. No skip checking during inspection

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PARTS:

1. Assy parts

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

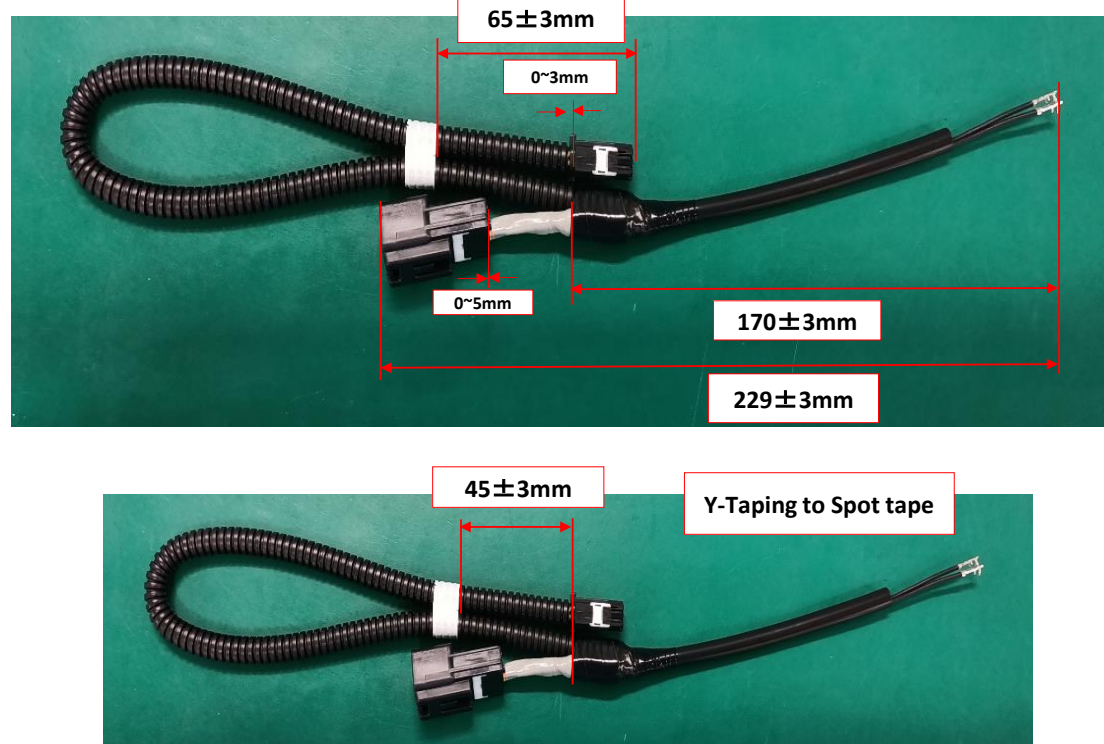
TOOLS/PPE

QUALITY POINTERS

6

P2

Measurement



Important reminders/Note/s:

1. FOR HATSUMONO AND OWARIMONO
2. Please use calibrated/verified measuring tape when getting the measurement.

1. No wrong dimension

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☐ PROTOTYPE

☐ PRE-LAUNCH

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PARTS:

1. Assy parts

JIG

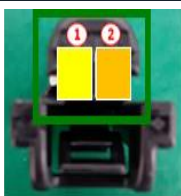
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QUALITY CHECKPOINTS

7N0174-7020A



GOOD



GOOD

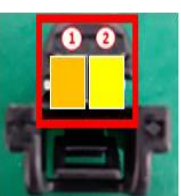
REFERENCE AFTER TAPING USING
NITTO TAPE 2107TVH

GOOD: 1.5 windings

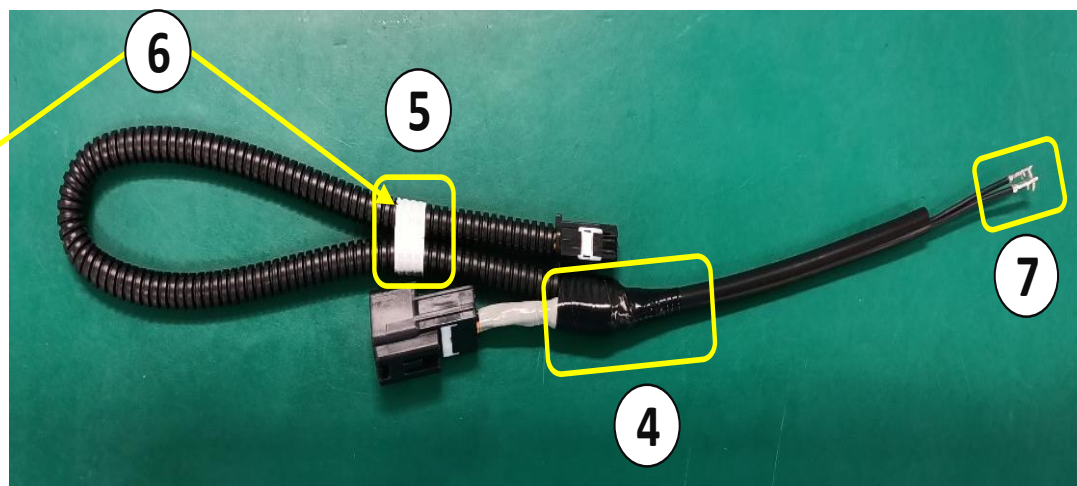
NG: 1 winding



NO GOOD



NO GOOD



GOOD



NO GOOD

1 No Unlock/Halflock
Connector (2 connector)

2 No Wrong Insert

3 No Terminal Backing Out

4 No Missing Tape
(for y-taping)

5 No Wrong Used of Tape
(Spot Taping white tape)

6 Spot Taping must be 1.5
windings

7 No Deformed Terminal

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