



WORK INSTRUCTION

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

November 13, 2024

Model code/Part number:

178D / 7N0129-7021C

Customer: TRJ

Car Model: TOYOTA-COROLLA

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

WI-ENG-PDE-1162B

Revision No.:

1

Page No.:

1 of 9

PARTS: 1. Assy parts; Black tape [1pc.]

JIG:

1. Insertion jig
2. Locking jig

3. Terminal cover jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

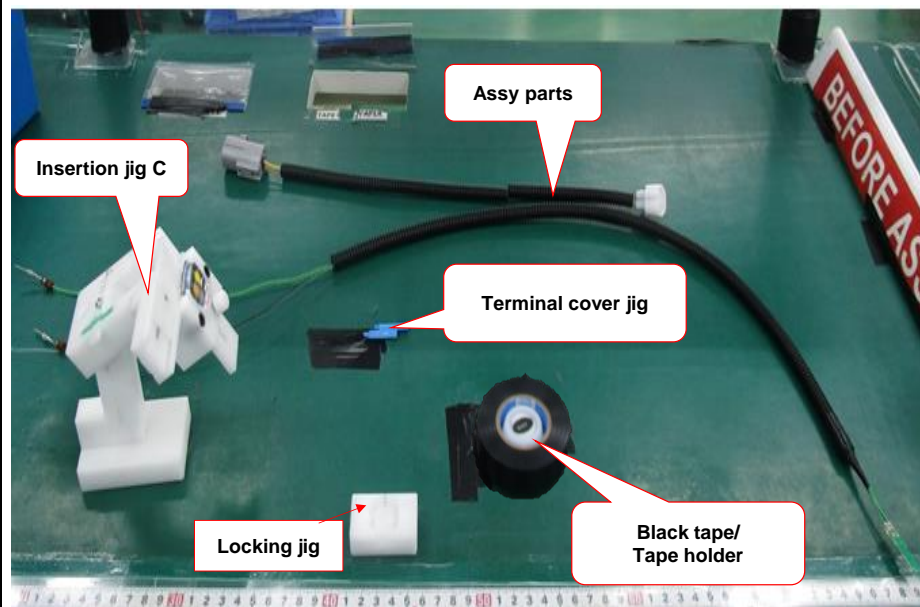
QUALITY POINTERS

1

P2

Table Lay-out

Table Lay-out

**Safety Instruction**

Be sure to wear prescribed 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
11/13/24	1	Change pre-launch to mass pro.	A.Hernandez	C. Villanueva	A. Arañes	n/a	A.Hernandez	C. Villanueva	A. Arañes	n/a
11/12/24	0	Initial issue.	A.Hernandez	C. Villanueva	A. Arañes	n/a	A.Hernandez	C. Villanueva	A. Arañes	n/a

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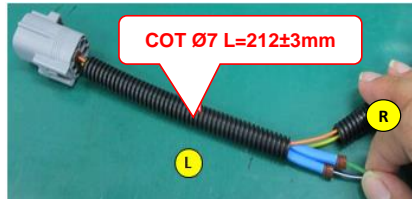
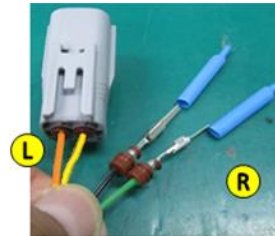

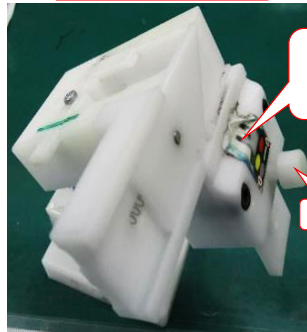
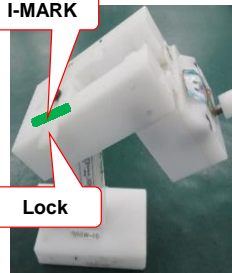

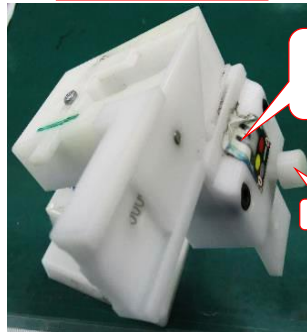
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PARTS:		1. Assy parts		JIG:	1. Terminal cover jig 2. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Wire insertion to assy parts P2	<div><p>1. Get the MRSW CP G-B/W wires L=822±3mm using both hands then insert the terminal cover jig using right hand.</p></div> <div><p>COT Ø7 L=212±3mm</p></div> <div><p>2. Get the assy parts then hold the COT (no slit) Ø7 L=212±3mm using left hand then insert the MRSW CP G-B/W wires L=822±3mm using right hand.</p></div> <div><p>3. After insertion, remove the cover jig using right hand.</p></div>		<div>TERMINAL COVER</div> 	1. No wrong usage of parts 2. No damaged rubber seal 3. No exposed rubber seal during insertion
3	Connector setting to insertion jig 6188-0066 (GR) (Assy parts)	<div><p>Visual reference</p></div> <div><p>I-MARK Lock</p></div> <div><p>CONNECTOR ORIENTATION</p></div> <div><p>Button</p></div> <div><p>INSERTION JIG</p></div> <div><p>INSERTION JIG ORIENTATION</p></div>		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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☐ PRE-LAUNCH


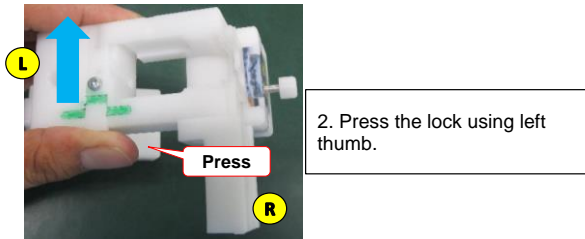
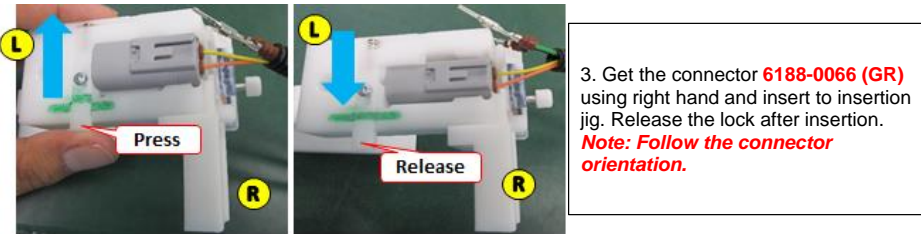
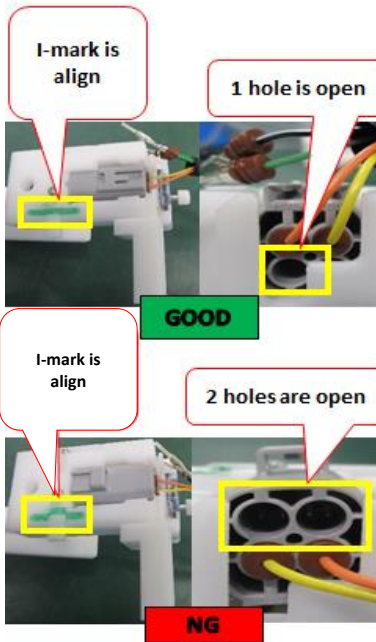
☒ MASSPRO

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PARTS:	1. Assy parts		JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P2 Connector setting to insertion jig 6188-0066 (GR) (Assy parts) (Continuation)	<div><p>Hole</p><p>1. Push the lower wire guide upward using right thumb. Slot for Green wire will be opened.</p></div> <div><p>Press</p><p>2. Press the lock using left thumb.</p></div> <div><p>Press</p><p>Release</p><p>3. Get the connector 6188-0066 (GR) using right hand and insert to insertion jig. Release the lock after insertion. Note: Follow the connector orientation.</p></div>	n/a	<div><p>1. Use the provided jig per model 2. No wrong orientation of connector 3. No wrong use of connector 4. No damaged connector</p></div> <div><p>CONNECTOR ORIENTATION ILLUSTRATION</p><p>I-mark is align</p><p>1 hole is open</p><p>GOOD</p><p>I-mark is align</p><p>2 holes are open</p><p>NG</p></div>

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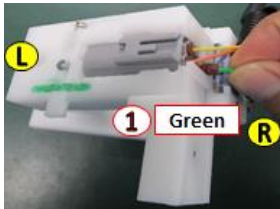

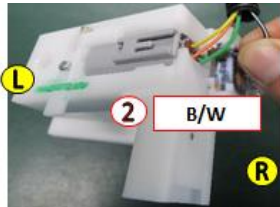
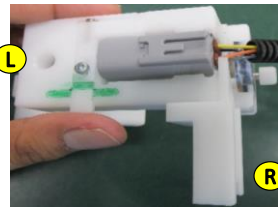
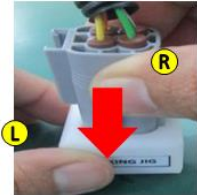


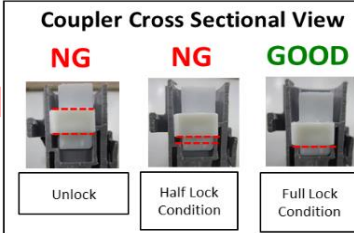

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PARTS:	1. Assy parts			JIG:	1. Insertion jig 2. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P2 Wire insertion to connector 6188-0066 (GR) (Assy parts)	<div><div><p>1 Hold the G wire then insert to terminal slot 1 using right hand.</p></div><div><p>2 Press the button using right thumb. The slot for B/W wire will be opened.</p></div><div><p>3. Hold the B/W wire then insert to terminal slot 2 using right hand.</p></div><div><p>4. After insertion, push the lock using left thumb then hold the wires and gently pull out the connector from jig using right hand.</p></div></div>		n/a	<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</div> <div>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.</div>
5	Connector Lock	<div><div><p>1. Put the connector into locking jig using both hands and then conduct 2x pressing. Check the connector if properly locked.</p></div><div><div><p>Before pressing</p><p>After pressing</p></div><div><div><p>Coupler Cross Sectional View</p><p>NG NG GOOD</p><p>Unlock Half Lock Condition Full Lock Condition</p></div></div></div></div>		<div>LOCKING JIG</div> 	<div>1. Use the provided locking jig per model 2. No unlock/half-locked connector 3. No damaged lock</div> <div>Important reminders/Note/s: 1. MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR.</div>

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PARTS:

1. Assy parts
2. Black tape

JIG:

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

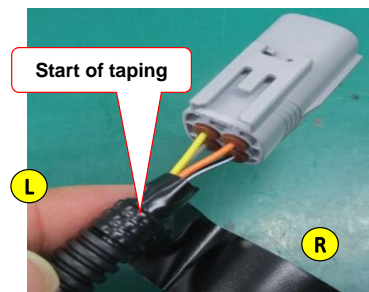
TOOLS/PPE

QUALITY POINTERS

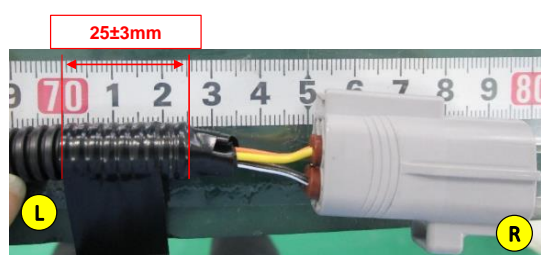
6

P2

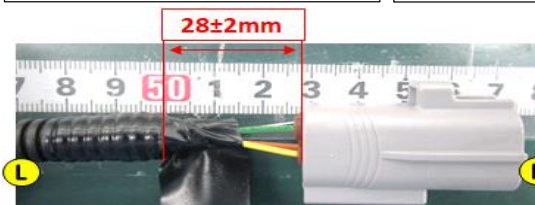
Taping 1
Black corrugated tube to
wire near connector



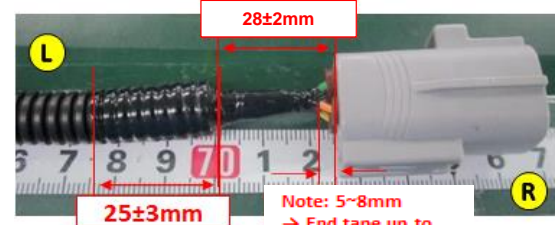
1. Hold the corrugated tube using left hand then start taping using right hand.



2. Confirm **25±3mm** measurement from end of tape up to end of corrugated tube then continue the taping process using both hands.



3. Measure from end corrugated tube up to edge of connector **28±2mm** then continue the taping process using both hands.



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

Measuring tape



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

Important reminders and Note/s:

1. Please use calibrated/verified measuring tape when getting the measurement.

Document reference/s:

1. Refer to WI-PRO-ASY-001 for taping procedure.

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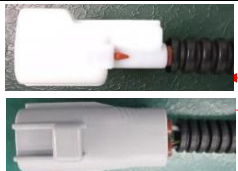
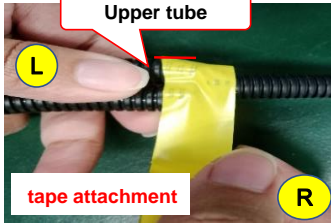

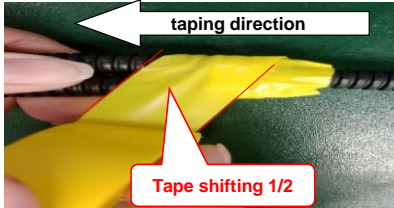
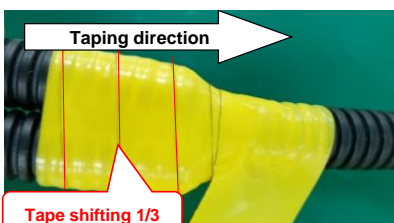
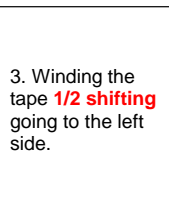
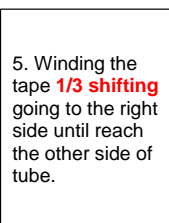
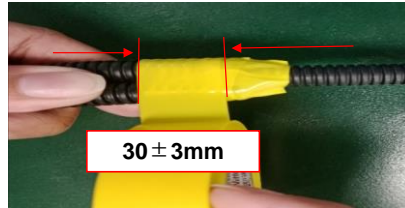
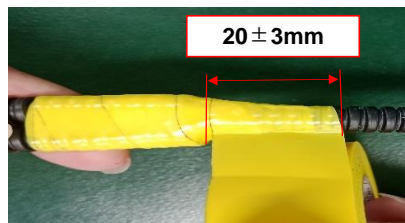

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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P2	Y-Taping	<div><p>CORRECT FACING</p></div> <div><p>Upper tube</p><p>tape attachment</p></div> <div><p>pre-tape</p></div> <div><p>taping direction</p><p>Tape shifting 1/2</p></div> <div><p>Taping direction</p><p>Tape shifting 1/3</p></div> <div><p>3. Winding the tape 1/2 shifting going to the left side.</p></div> <div><p>5. Winding the tape 1/3 shifting going to the right side until reach the other side of tube.</p></div> <div><p>30 ± 3mm</p></div> <div><p>20 ± 3mm</p></div> <div><p>1. Fix the 3 corrugated tube. Note: Follow the correct facing. (If need to standard)</p><p>2. Start taping at the middle of combined tubes, attach the tape on the upper tube. Then make pre-tape 2 windings. Note: Do not exert excessive force during pulling & winding of tape.</p><p>4. Make 2 windings, width must be - 30±2mm.</p><p>6. Make 2 windings, width must be 20±3mm.</p></div> <div><p>No Gap</p><p>L R</p></div>		<p>Document reference/s: 1. Refer to WI-PRO-ASY-001C for taping procedure (special).</p> <p>Important reminders/Note/s: 1. Use yellow tape for easy visualization of tape shifting, but actual should be BLACK TAPE. 2. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>1. No loose tape 2. No flip-out tape 3. No peel-off tape 4. No wrong use of tape 5. No wrong dimension-out tape 6. No exposed wire 7. No gap between tubes</p>

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☐ PROTOTYPE

☐ PRE-LAUNCH

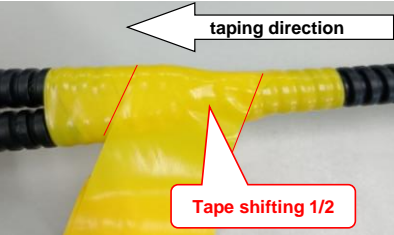
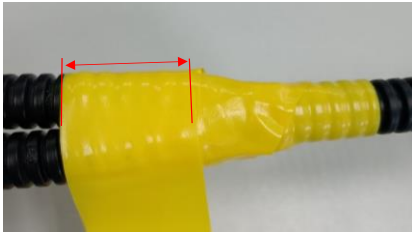
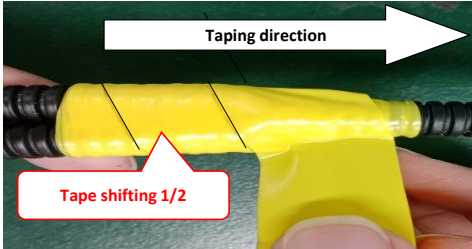
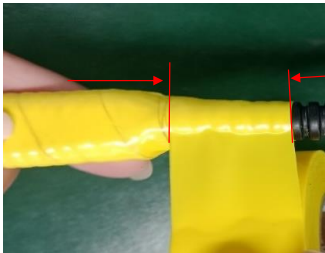
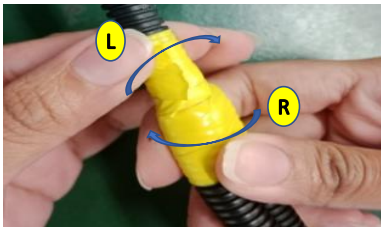
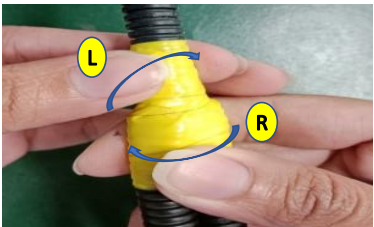
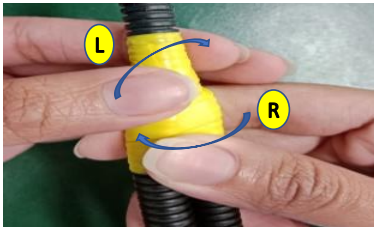
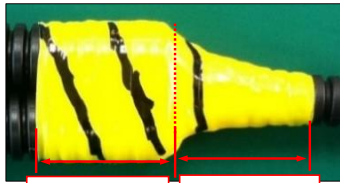
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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P2	Y-Taping (Continuation)	<div></div> <div>7. Winding the tape 1/2 shifting going to the left side.</div> <div></div> <div>8. Make 2 windings, width must be --- ±2mm.</div> <div></div> <div>9. Winding the tape 1/2 shifting going to the right side until it reach the other side of tube</div> <div></div> <div>10. Make 3 winds, width must be --±3mm. Then cut the tape.</div> <div></div> <div>11. conduct proper pressing of end tape using left hand (top part). Note: Reference only.</div> <div></div> <div>12. conduct proper pressing of end tape using left hand (Middle part).</div> <div></div> <div>13. conduct proper pressing of end tape using left hand (bottom part).</div> <div><p>Document reference/s: 1. Refer to WI-PRO-ASY-001C for taping procedure (special).</p><p>Important reminders/Note/s: 1. Use yellow tape for easy visualization of tape shifting, but actual should be BLACK TAPE. 2. Please use calibrated/verified measuring tape when getting the measurement.</p><ul style="list-style-type: none">1. No loose tape2. No flip-out tape3. No peel-off tape4. No wrong use of tape5. No wrong dimension-out tape6. No exposed wire7. No gap between tubes<div><p>30 ± 3mm 20 ± 3mm</p></div><p>14. Check the Measurement and condition of tape.</p></div>		

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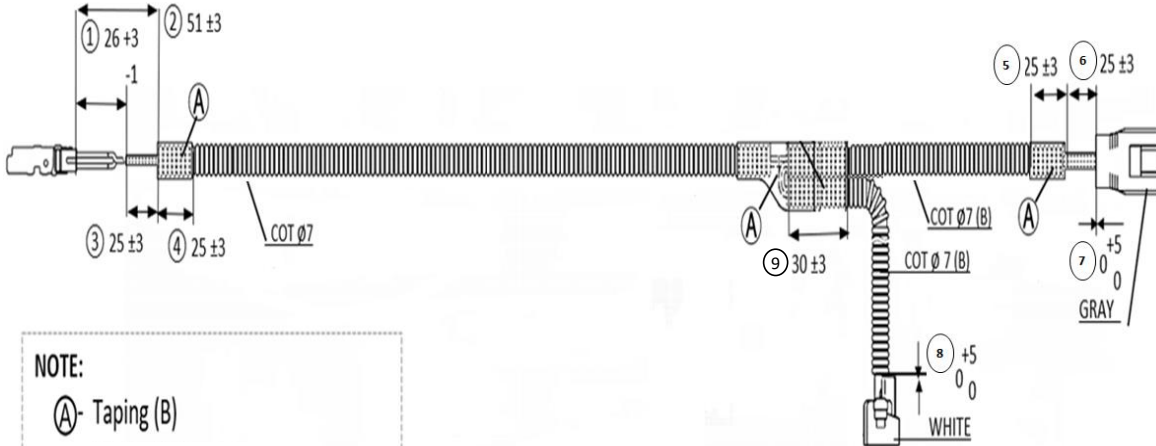
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
8	P2	Measurement		<div>MEASURING TAPE</div> <div></div>	<div>Important reminders/Note/s:</div> <div>1. FOR HATSUMONO AND OWARIMONO.</div> <div>2. Please use calibrated/verified measuring tape when getting the measurement.</div> <div>1. Refer to WI-PRO-ASY-056 for Sub-assembly Hatsumono Nakamono Owarimono Inspection.</div>
		<div></div> <div>NOTE: (A)- Taping (B)</div>		1.No wrong dimension	

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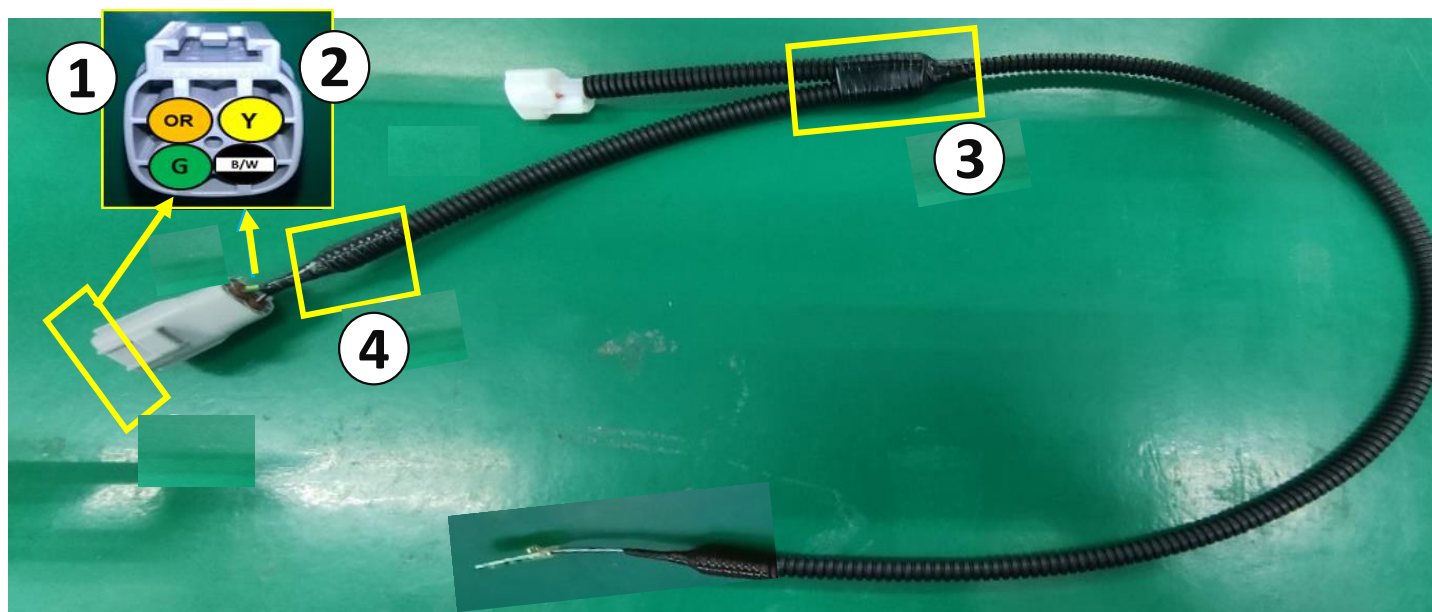
JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS

TAPING - P2

7N0129-7021C



- 1 No Unlock/Half-locked Connector
- 2 No Wrong Insert
- 3 No Wrong Facing of Y-Taping
- 4 No Missing Tape
- 5 No Deformed terminal
- 6 No Terminal Backing Out

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DCC Stamp