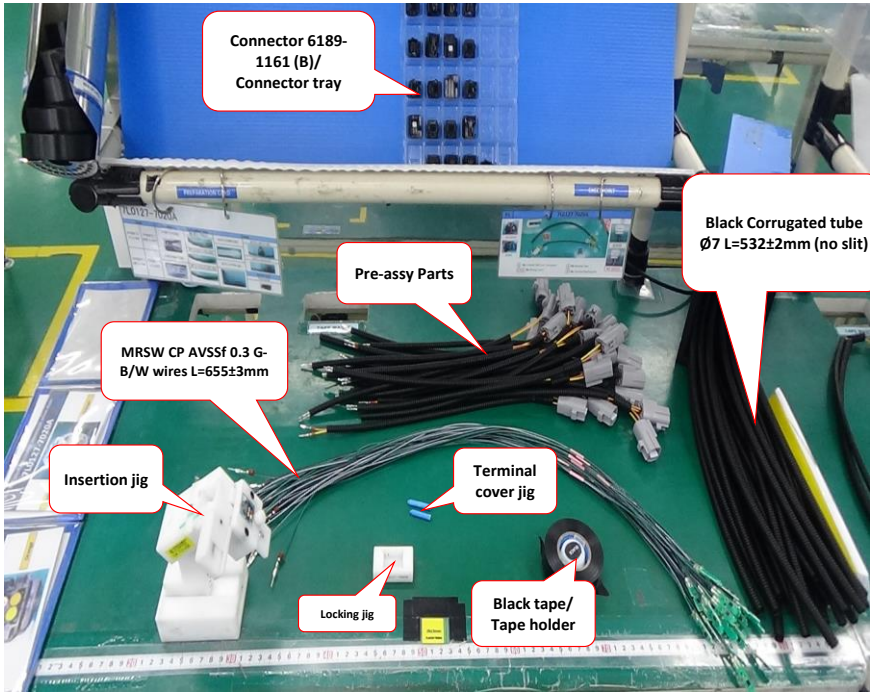


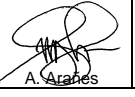

	WORK INSTRUCTION				Effectivity Date:	May 10, 2023		
	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
	Model Code/Part Number: 177D / 7L0127-7020A		Customer: TRQSS		Document No.:	WI-ENG-PDE-351A		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	4	Page No.:	1 of 8

PARTS:	1. Connector 6189-1161 (B); Black Corrugated tube $\phi 5$ L=286 \pm 3mm (no slit); Black Corrugated tube $\phi 7$ L=532 \pm 2mm (no slit); MRSW CP TVSSf 0.3 G-B/W wires L=655 \pm 3mm; Black tape			JIG:	1. Insertion jig 2. Locking jig 3. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS	
1	P1	Table Lay-out		<p>Safety Instruction Be sure to wear required 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>1. No missing parts/tools 2. No excess parts/tools</p> <p>Document references: 1. Refer to WI-ENG-PDE-587 for Offline Assembly Process 2. Refer to WI-PRO-KIT-005 for Wire taping without Vinyl tube</p>

Revision History						Prepared by	Reviewed by	Approved by	Noted by		
05/10/23	4	Inclusion of quality checkpoints	J. Loterte	Villanueva	A. Arañes	n/a	 J. Loterte	 C. Villanueva	 A. Arañes	n/a	
09/30/22	3	Change of tolerance from 26 \pm 3mm to 26(+3/-1mm) as countermeasure of encountered NG dimension from end of tape up to edge of PCB.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes					
08/31/22	2	Remove process no.2, 3 and 4 then transfer to (WI-ENG-PDE-587 Offline Assembly Process). Additional process from P2 wire insertion to Assy parts due to process improvement. Improve work procedure/ Illustration, Quality pointers and notes. Change table lay-out.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes					
01/17/22	1	Change from Pre-Launch to Masspro; Additional Table lay-out; Change part number from 7L0127-7020 to 7L0127-7020A due to change COT length from $\phi 7$ L=537 \pm 2mm to $\phi 7$ L=532 \pm 2mm due to removal of tolerance from COT to MR SW	K. Doria	J. Loterte	C. Villanueva	A. Arañes					
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted	Est. Date:	October 13, 2021

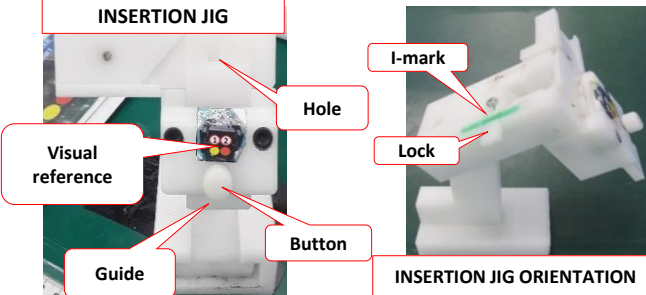
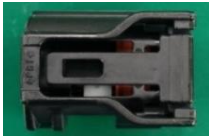
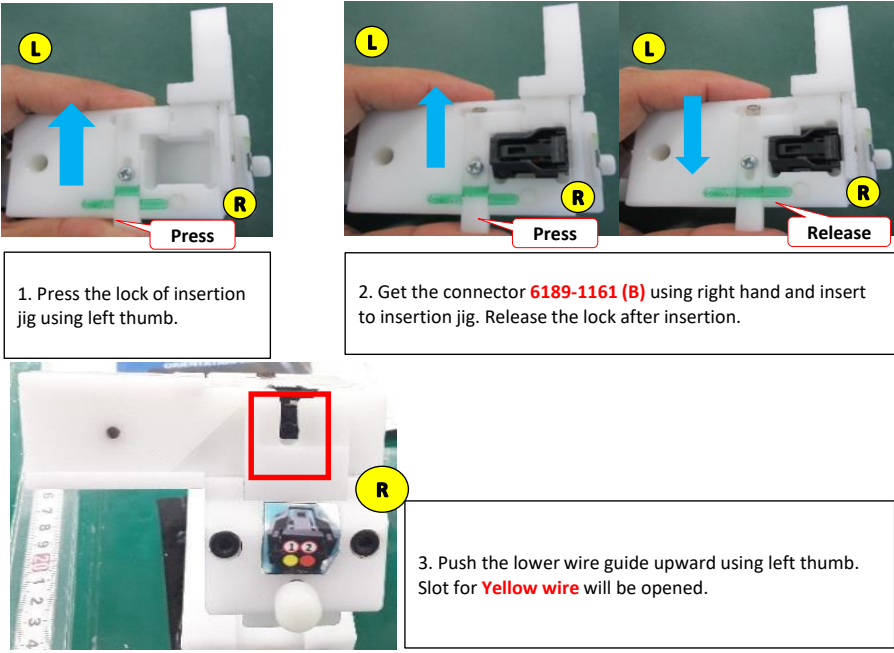
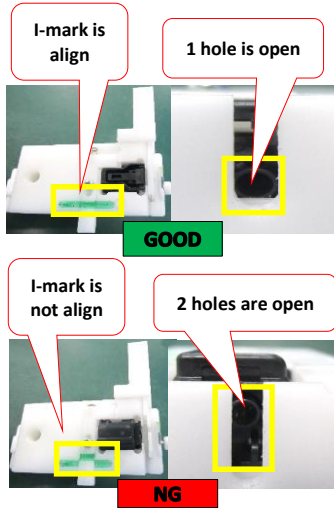
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WORK INSTRUCTION
TAPING ASSEMBLY PROPCESS

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Process Name/Title:	TAPING ASSEMBLY PROPCESS		
Model Code/Part Number:	177D / 7L0127-7020A	Customer:	TRQSS
Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS:	1. Connector 6189-1161 (B)			JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1 Connector setting to insertion jig 6189-1161 (B)	<div><p>INSERTION JIG</p><p>CONNECTOR ORIENTATTION</p><p>INSERTION JIG ORIENTATION</p></div>		n/a	<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> <p>Important reminders/Note/s: 1. Follow the connector orientation.</p> <div><p>CONNECTOR ORIENTATION ILLUSTRATION</p></div>

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☐ PROTOTYPE

☐ PRE-LAUNCH

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PARTS:

1. Assy parts

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION


TOOLS/PPE

QUALITY POINTERS

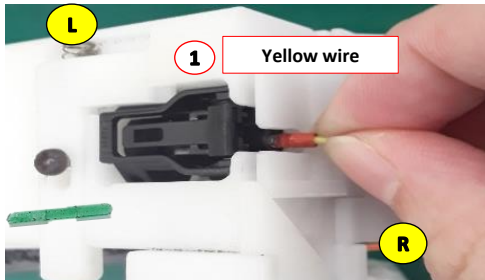
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P1

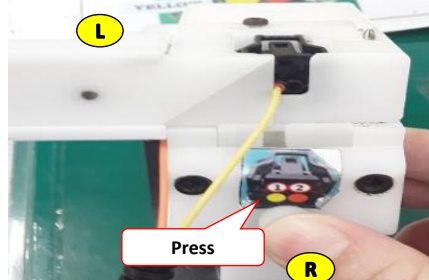
Wire insertion to connector
6189-1161 (B)



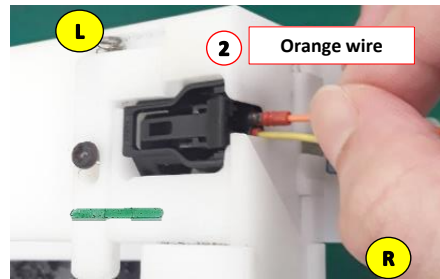
WIRE FACING



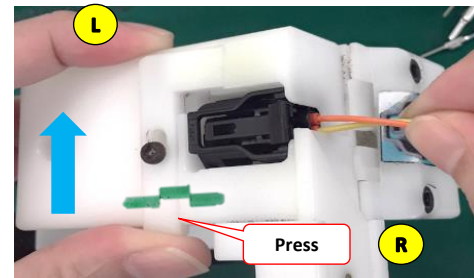
1 Yellow wire



Press



2 Orange wire



Press

1. Hold the insertion jig using left hand. Get the **Yellow wire** then insert to terminal slot **1** using right hand.

2. Press the button using right thumb. The slot for **Orange wire** will be opened.

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

4. After insertion, push the lock 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. 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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☐ PROTOTYPE

☐ PRE-LAUNCH

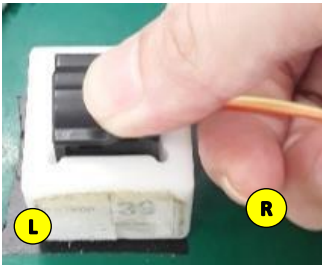
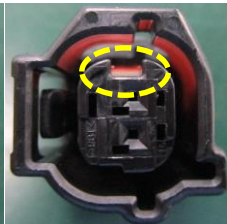
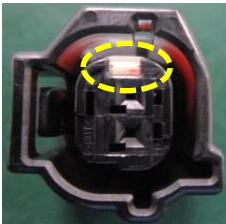
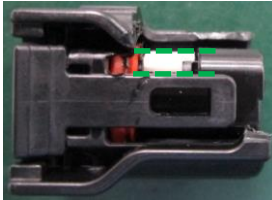
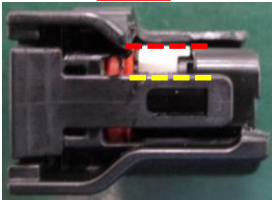
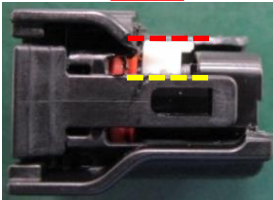
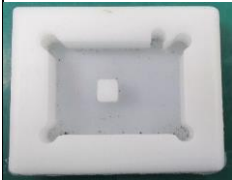
☒ MASSPRO

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PARTS:		1. Assy parts		JIG	1. Locking jig	
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
4	P1	Connector lock	<div><div></div><div><p>1. Put the connector into locking jig and push down 2x using both hands. Check the connector lock if properly locked.</p></div><div><div></div><div><div>BEFORE PRESSING</div><div>AFTER PRESSING</div></div><div><div></div><div><div>UNLOCK CONDITION</div><div>HALF LOCKED CONDITION</div><div>FULLY LOCKED CONDITION</div></div></div></div></div>		<div><div>LOCKING JIG</div></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 lock. 2. Set aside the assy parts</div>

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Model Code/Part Number: **177D / 7L0127-7020A**

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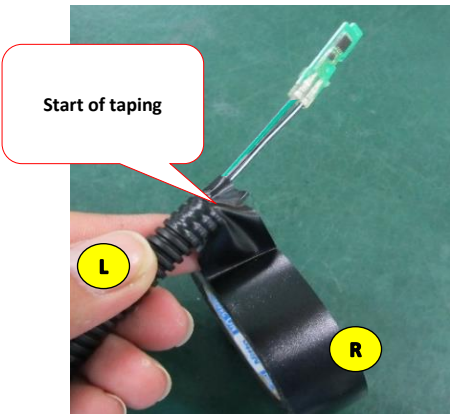

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

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PARTS:		1. MRSW CP TVSSf 0.3 G-B/W wires L=655±3mm 2. Black Corrugated tube Ø7 L=532±2mm (no slit) 3. Assy parts 4. Black tape			JIG	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
5	P1	Wire insertion to Black Corrugated tube Ø7 L=532±2mm (no slit)	 	<p>1. Get the MRSW CP TVSSf 0.3 G-B/W wires L=655±3mm using left hand, then get the terminal cover jig using right hand then insert to both terminals (G-B/W wires) using right hand.</p> <p>2. Get the corrugated tube Ø7 L=532±2mm using right hand then insert the G-B/W wires using left hand. After insertion, remove the cover jig using right hand.</p>	<div>TERMINAL COVER JIG</div> 	<p>1. No wrong usage of parts 2. No damaged rubber seal</p> <p>Important reminders/Note/s 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance.</p>
6		Taping 1 Black corrugated tube to wire near PCB		<p>1. Hold the assy parts using left hand, get the Black tape then conduct pre-taping using both hands.</p>	<div>MEASURING TAPE</div> 	<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>Important reminders/Note/s: 1. Please use calibrated/verified measuring tape when getting the measurement.</p>

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☐ PROTOTYPE

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PARTS:

1. Assy parts
2. Black tape

JIG

n/a

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

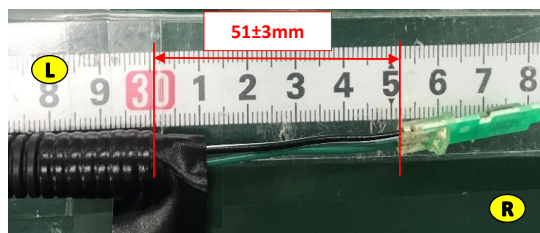
TOOLS/PPE

QUALITY POINTERS

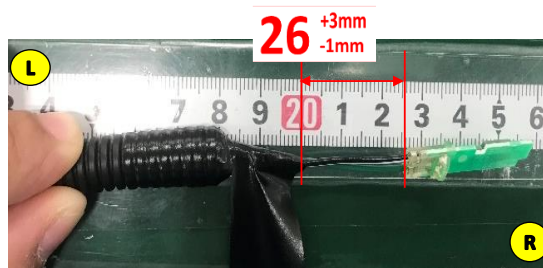
6

P1

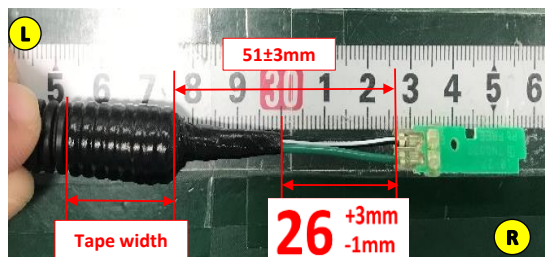
Taping 1
Black corrugated tube to
wire near PCB
(Continuation)



2. Measure from end of COT up to edge of hot melted wires **51±3mm** then continue the taping process using both hands.



3. Confirm measurement of **26 (+3/-1mm)** from end of tape up to edge of PCB then continue the taping process using both hands.



4. 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/Note/s:

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

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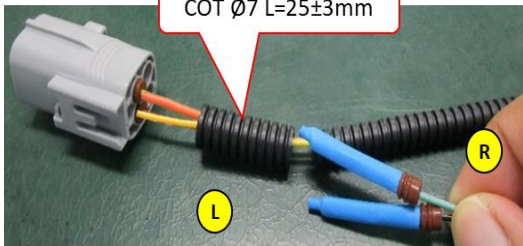
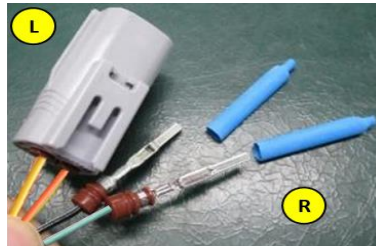

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PARTS:		1. Assy parts			JIG	1. Terminal cover jig 2. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS
8	P1	<div>Wire insertion to COT (no slit) Ø7 L=25±3mm (Assy parts)</div> <div><div>1. Get the MRSW CP G-B/W wires L=655±3mm using both hands then insert the terminal cover jig using right hand.</div><div>2. Get the assy parts then hold the COT (no slit) Ø7 L=25±3mm using left hand then insert the MRSW CP G-B/W wires L=655±3mm using right hand.</div><div>3. After insertion, remove the cover jig using right hand.</div></div> <div>TERMINAL COVER JIG</div> <div></div> <div>1. No wrong usage of parts 2. No damaged rubber seal 3. No exposed rubber seal during insertion</div>				

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WORK INSTRUCTION

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

Model Code/Part Number: **177D / 7L0127-7020A**

Customer: **TRQSS**

Purpose: ☐ PROTOTYPE

☐ PRE-LAUNCH

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Effectivity Date:

May 10, 2023

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n/a

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PARTS:

1. Assy parts

JIG

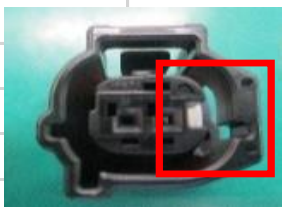
1. Terminal cover jig
2. Insertion jig



QUALITY CHECKPOINTS

P1

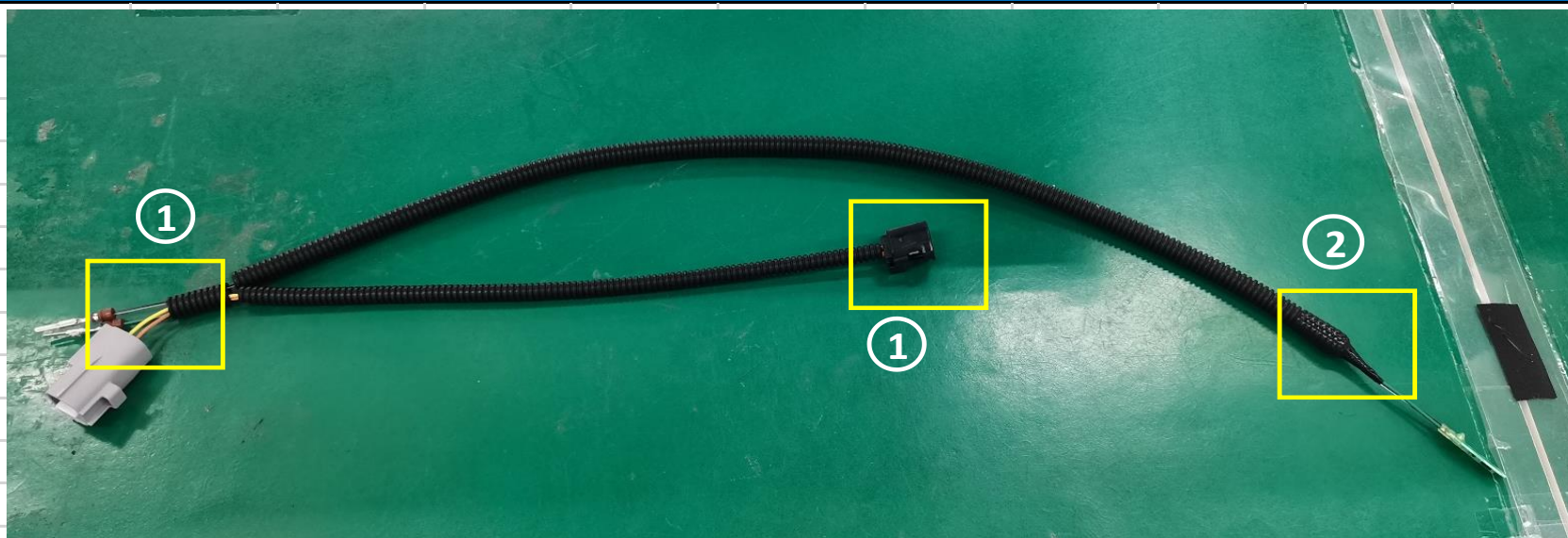
7L0127-7020A



NO GOOD



GOOD



1

No **WRONG INSERT**
No **Unlocked / halflocked connector**
No **TBO**

2

No **MISSING TAPE**

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