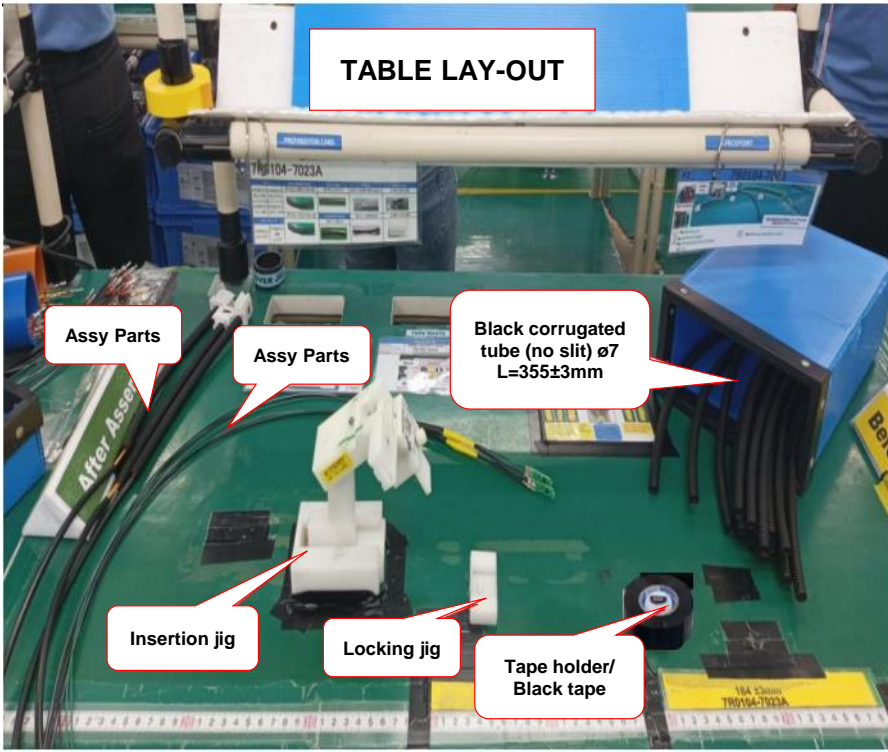





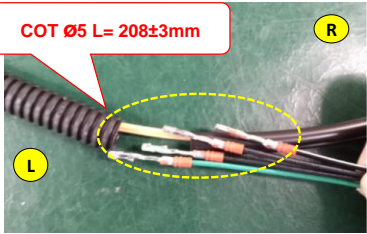
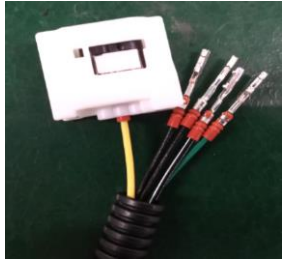
	WORK INSTRUCTION TAPING ASSEMBLY PROCESS				Effectivity Date:	February 13, 2024		
	Process Name/Title:				Validity Date:	n/a		
	Model code/Part number: 780B / 7R0104-7023A		Customer: TRMX	Car Model: TOYOTA-TUNDRA	Document No.:	WI-ENG-PDE-557B		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	4	Page No.:	1 of 8



PARTS:		1. Assy parts; Black tape; Black corrugated tube (no slit) ø7 L=355±3mm		JIG:	1. Insertion jig 2. Locking jig	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
1	P2			<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. Please refer to WI-PRO-CNC-017 for Wire and Strip Length tolerance. 2. Please refer to WI-PRO-KIT-005 for Wire taping without tube.</p> <p>1. No missing parts/tools 2. No excess parts/tools</p>	


Revision History								Prepared by	Reviewed by	Approved by	Noted by
02/13/24	4	Change term from Sunprene tube to VM tube (Sunprene). Inclusion of Car model "TOYOTA-TUNDRA"				D.Castillo	C. Villanueva	A. Arañes	n/a		n/a
1/19/23	3	Remove taping of Sunprene tube to wire near terminal hotmelted wires then transfer to P1; Transfer process no.7 and 8 from P3 to P2 as DCS countermeasure for missing tape and out of tolerance. Inclusion of Quality Checkpoint.				M. Ariola	J. Loterte	C. Villanueva	A. Arañes		
11/10/22	2	Improve Quality pointers; Reminders/Note/s and references on page no. 1,2,3 and 5 due to document improvement.				M. Ariola	J. Loterte	C. Villanueva	A. Arañes		
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted	Est. Date:	July 19, 2022

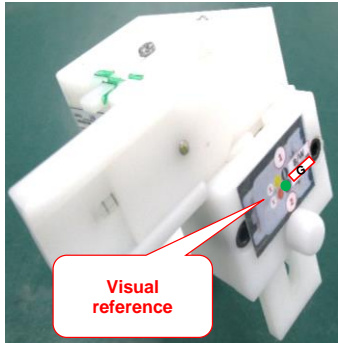
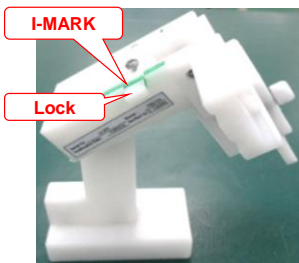

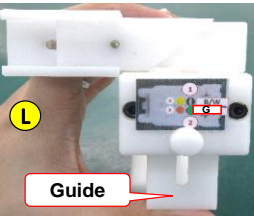
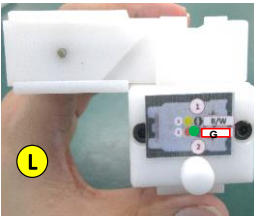
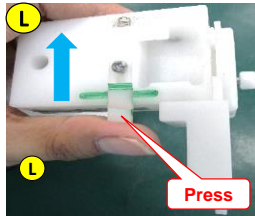
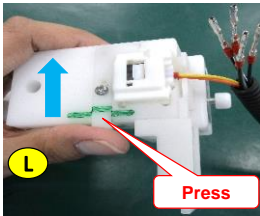
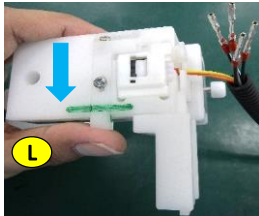
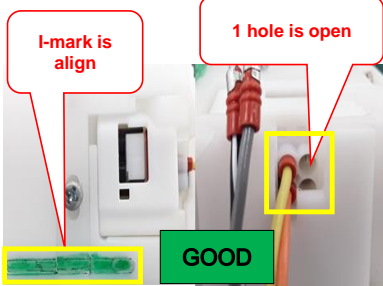

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.	NBC (Philippines) MASTER COPY	DCC Stamp

	WORK INSTRUCTION				Effectivity Date:	February 13, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
	Model code/Part number: 780B / 7R0104-7023A		Customer: TRMX	Car Model: TOYOTA-TUNDRA	Document No.:	WI-ENG-PDE-557B		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	4	Page No.:	2 of 8

PARTS:		1. Assy parts 2. Black corrugated tube (no slit) $\phi 7$ L=355 \pm 3mm		JIG:	N/A
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	Wire insertion to Black corrugated tube (no slit) $\phi 7$ L= 355 \pm 3mm	<div>  </div> <div> 1. Hold the wires using left hand, get the corrugated tube (no slit) $\phi 7$ L=355\pm3mm using right hand then insert the G-B/W hotmelted wires and B-B wires using left hand. </div>		n/a	1. No wrong use of parts 2. No deformed terminal <div>  </div> <div>  </div> <p>Importnat reminders/note/s:</p> <p>1. <i>Wire must not be inserted at the same time</i></p>
3	Wire insertion to assy parts	<div>  </div> <div> 1. Get the assy parts, hold the COT $\phi 7$ L=208\pm3mm then insert the G-B/W hotmelted wires and B-B wires using right hand. </div> <div>  </div> <div> 2. After insertion, check the inserted wires.. Note: No wires left inside COT. </div>		n/a	1. No wrong use of parts 2. No deformed terminal

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.	<div>  </div>	<div>  </div>
--	--	--

	WORK INSTRUCTION			Effectivity Date:	February 13, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCESS			Validity Date:	n/a		
	Model code/Part number: 780B / 7R0104-7023A		Customer: TRMX	Car Model: TOYOTA-TUNDRA	Document No.: WI-ENG-PDE-557B		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO			Revision No.:	4	Page No.:	3 of 8

PARTS:	1. Assy parts			JIG:	1. Insertion jig			
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS		
4	P2	<div><div>INSERTION JIG</div><div><div>Visual reference</div></div><div><div>I-MARK Lock</div></div><div><div>CONNECTOR ORIENTATION</div></div><div><div>Guide</div></div><div><div>Press</div></div><div><div>Press</div></div><div><div>Press</div></div><div><div>Press</div></div></div> <div><div>1. Press the lower wire guide using left thumb to make sure connector with inserted wires will be inserted.</div><div>2. Press the insertion jig lock using left hand.</div><div>3. Get the assy parts and insert the connector using right hand. Release the lock after insertion.</div></div>			N/A	<div>CONNECTOR ORIENTATION ILLUSTRATION</div> <div><div>I-mark is align 1 hole is open</div></div> <div><div>GOOD</div></div> <div><div>1. Use the provided jig per model</div><div>2. No wrong usage of parts</div><div>3. No wrong orientation of connector</div><div>4. No damaged connector</div></div>		

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)

MASTER COPY

DCC Stamp



WORK INSTRUCTION

Effectivity Date:

February 13, 2024

Process Name/Title:

TAPING ASSEMBLY PROCESS

Validity Date:

n/a

Model code/Part number:

780B / 7R0104-7023A

Customer:

TRMX

Car Model:

TOYOTA-TUNDRA

Document No.:

WI-ENG-PDE-557B

Purpose:

☐ PROTOTYPE

☐ PRE-LAUNCH


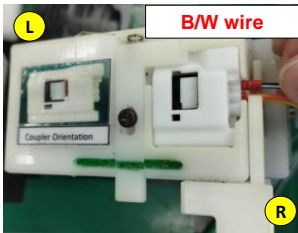
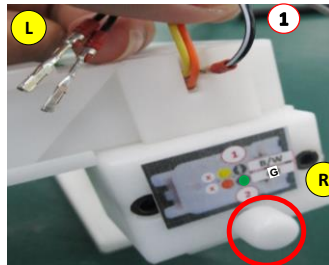
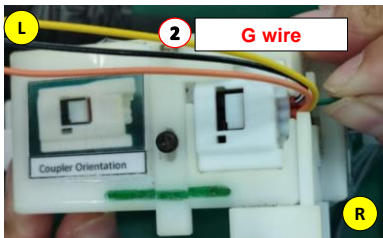
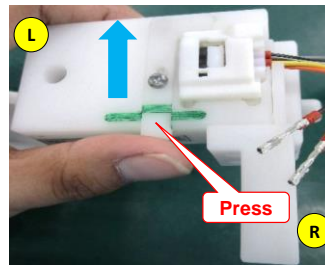
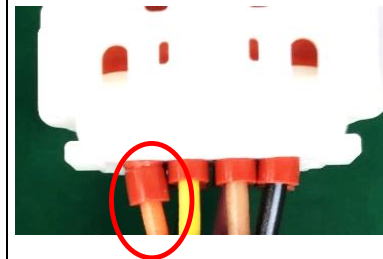
☒ MASSPRO

Revision No.:

4

Page No.:


4 of 8


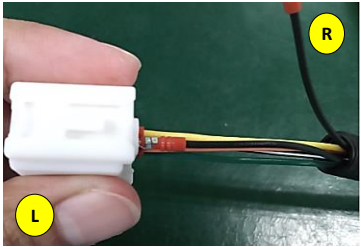
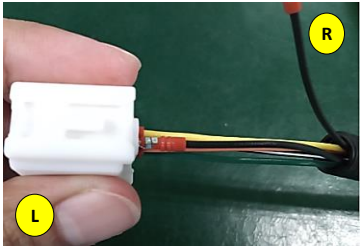
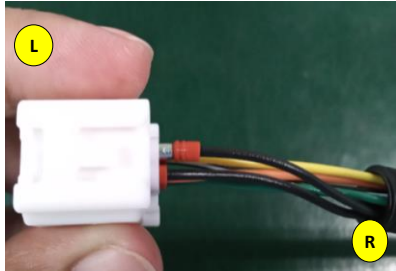
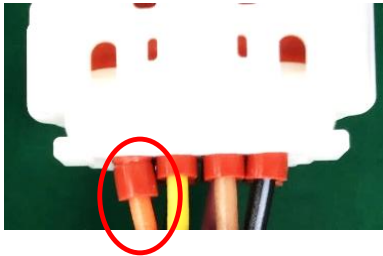
PARTS:	1. Assy parts			JIG:	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P2	<div><p>WIRE FACING</p></div> <div><p>1. Hold the insertion jig using left hand. Get the B/W wire and insert to connector using right hand.</p></div> <div><p>2. Press the button using right thumb. The slot for G wire will be opened.</p></div> <div><p>3. Hold the G wire and insert to connector using right hand.</p></div> <div><p>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.</p></div>		N/A	<div><p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p></div> <p>Important reminders/Note/s:</p> <p>1. Make sure wires are properly inserted.</p> <p>Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>2. During insertion, hold the wire not rubber seal to prevent sagging.</p> <p>Document reference/s:</p> <p>1. Please refer to WI-PRO-CNC-017 for Wire and Strip Length tolerance.</p> <p>2. Please refer to GL-PRO-ASY-029 for Pull-Push procedure.</p>

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)
MASTER COPY

DCC Stamp

	WORK INSTRUCTION			Effectivity Date:	February 13, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCESS			Validity Date:	n/a		
	Model code/Part number: 780B / 7R0104-7023A		Customer: TRMX	Car Model: TOYOTA-TUNDRA	Document No.:	WI-ENG-PDE-557B	
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO			Revision No.:	4	Page No.:	5 of 8


PARTS:	1. Assy parts			JIG:	1. Locking jig		
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS		
6	P2	<div>Wire insertion to connector 6189-1142 (W) (Assy parts)</div> <div><div>WIRE FACING</div><div>Connector Orientation</div><div>1. Hold the connector using left hand and insert first B wire to connector using right hand.</div><div>2. Hold the connector using left hand and insert second B wire to connector using right hand.</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:</div> <div>1. Make sure wires are properly inserted.</div> <div>Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</div> <div>3. During insertion, hold the wire not <u>rubber seal</u> to prevent sagging.</div> <div>4. Insertion of wire must be from left to right.</div> <div>Important reminders/Note/s:</div> <div>1. Please refer to GL-PRO-ASY-029 for Pull-Push procedure.</div> <div></div>		

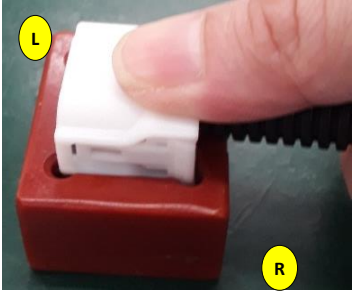

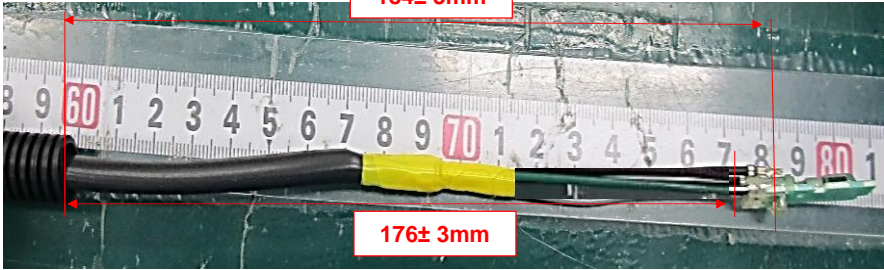

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)

MASTER COPY

DCC Stamp

	WORK INSTRUCTION				Effectivity Date:	February 13, 2024		
	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
	Model code/Part number: 780B / 7R0104-7023A		Customer: TRMX	Car Model: TOYOTA-TUNDRA	Document No.:	WI-ENG-PDE-557B		
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO				Revision No.:	4	Page No.:	6 of 8


PARTS:	1. Assy parts			JIG:	1. Locking jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	Connector lock	<div><p>1. Put the connector into locking jig using right hand and then press 2x using both hands. Check the connector lock if properly locked.</p></div> <div><div>BEFORE PRESSING</div><div>AFTER PRESSING</div></div>		<div>LOCKING JIG</div> 	Important reminders/note/s: 1. Manual locking may cause damaged connector lock. 1. Use the provided jig tool per model 2. No unlock/half-locked connector 3. No damaged lock
8	Taping 1 Black corrugated tube to Black VM tube (Sunprene) <div>4</div>	<div><p>1. Measure the end of the corrugated tube up to the edge of hotmelt 176mm and terminal pointed tip 184mm.</p></div>		<div>MEASURING TAPE</div> 	Important reminders/note/s: 1. Please use calibrated/verified measuring tape when getting the measurement. 1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No wrong use of tape 5. No wrong dimension


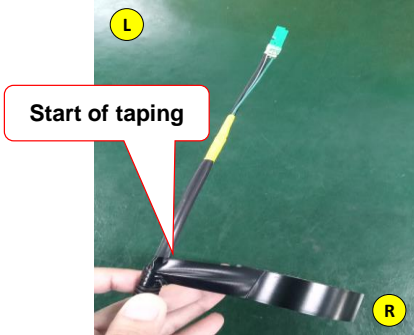
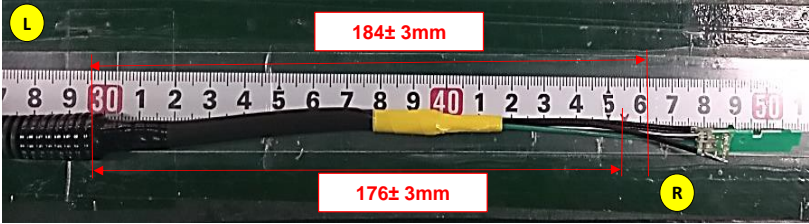
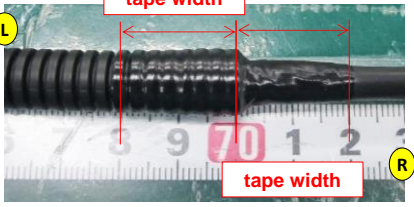

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)

MASTER COPY

DCC Stamp

	WORK INSTRUCTION				Effectivity Date:		February 13, 2024	
	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:		n/a	
	Model code/Part number: 780B / 7R0104-7023A		Customer: TRMX	Car Model: TOYOTA-TUNDRA	Document No.:		WI-ENG-PDE-557B	
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		Revision No.:		4	Page No.:	7 of 8	

PARTS:		1. Assy parts 2. Black tape		JIG:	N/A	
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS	
8	<div>Taping 1 Black corrugated tube to Black VM tube (Sunprene) (Continuation)</div> <div></div>	<div><div>Start of taping</div></div> <div><div>184± 3mm</div><div>176± 3mm</div></div> <div><div>tape width</div><div>tape width</div></div> <div>2. Hold the corrugated tube using left hand. Get the Black tape using right hand and start taping process using both hands.</div> <div>3. After taping, check the measurement and taping condition.</div>		<div>MEASURING TAPE</div> 	<div>Important reminders/note/s:</div> <div>1. Please use calibrated/verified measuring tape when getting the measurement.</div> <div>1. No peel-off tape 2. No flip out tape 3. No loose tape 4. No wrong use of tape 5. No wrong dimension</div>	

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

NBC (Philippines)

MASTER COPY

DCC Stamp

**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

February 13, 2024

Validity Date:

n/a

Model code/Part number:

780B / 7R0104-7023A

Customer:

TRMX

Car Model:

TOYOTA-TUNDRA

Document No.:

WI-ENG-PDE-557B

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

4

Page No.:

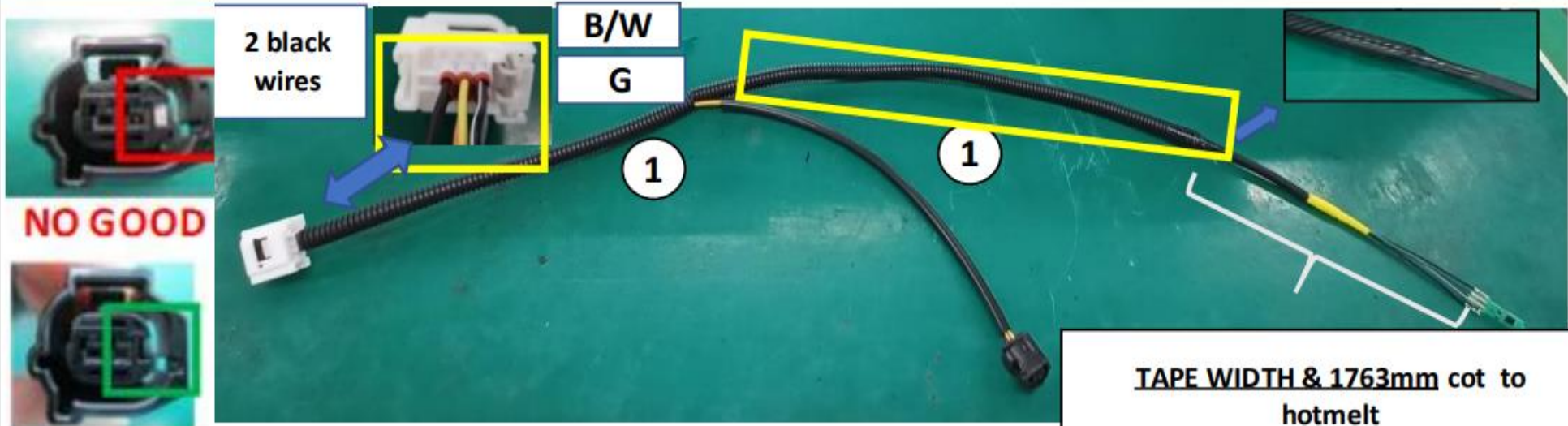
8 of 8

PARTS:

N/A

JIG:

N/A

QUALITY CHECKPOINTS**P2****7R0104-7023A****(1) No Missing cot****(2) No WRONG INSERT
No UNLOCKED/HALFLOCKED
NO TBO****(3) No Missing tape(black tape)**

CONFIDENTIAL: Any misuse or misappropriation, including unauthorized copying, reproduction in any form, disclosure or publishing of this document or any information herein is strictly prohibited.

**NBC (Philippines)
MASTER COPY**

DCC Stamp