



WORK INSTRUCTION OFFLINE ASSEMBLY PROCESS

Effectivity Date:	September 29, 2022		
Validity Date:	n/a		
Document No.:	WI-ENG-PDE-399		
Revision No.:	2	Page No.:	1 of 7

Process Name/Title:	OFFLINE ASSEMBLY PROCESS		
Model Code/Part Number:	240B / 7M0516-7021	Customer:	TRJ
Purpose:	<input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		

PARTS:		1. All parts: Connector 6098-2220 (W); Connector 6188-0779 (GR); Black COT (no slit) ø5 L=275±3mm; Black COT (no slit) ø7 L=408±4mm; AVSSf 0.3 Y-OR wire L=730±3mm; MRSW CP TVSSf 0.3 G-B/W L=814±3mm				JIG:	1. Terminal cover jig					
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS					
1	n/a	Table Lay-out	<div><div>Black COT (no slit) ø5 L=275±3mm</div><div>Table Lay-out</div><div>Connector 6188-0779 (GR)/ Connector Tray</div><div>Connector 6098-2220 (W)/ Connector Tray</div><div>AVSSf 0.3 Y-OR wire L=730±3mm</div><div>Black COT (no slit) ø7 L=408±4mm</div><div>Terminal cover jig</div><div>MRSW CP TVSSf 0.3 G- B/W L=814±3mm</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>	<div><div>Document references: 1. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance 2. WI-PRO-KIT-005 Wire Taping without Vinyl Tube</div><div>1. No missing parts/tools 2. No excess parts/tools</div></div>				
Revision History												
09/27/22	2	Correction of work procedure in process no.7, procedure1 and 2.				Prepared by	Reviewed by	Approved by	Noted by			
09/22/22	1	Improve quality pointers: Reminders/notes and references in process no.1,2,5,6 and 7; Table lay-out due to document improvement. Transfer of process no.2-4 from P1 to Offline process. Work procedure/illustration in process no.4-7 due to process improvement.				M. Catapang	J. Loterte	C. Villanueva	A. Arañes			
02/14/22	0	Initial issue.				M. Catapang	J. Loterte	C. Villanueva	A. Arañes			
Eff. Date	Rev. No	Details of Change				Revised	Reviewed	Approved	Noted	Est. Date:	February 14, 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

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

September 29, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number: 240B / 7M0516-7021

Customer:

TRJ

Document No.:

WI-ENG-PDE-399

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:


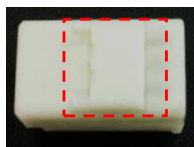
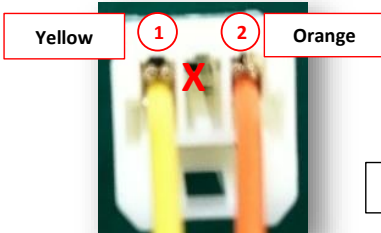
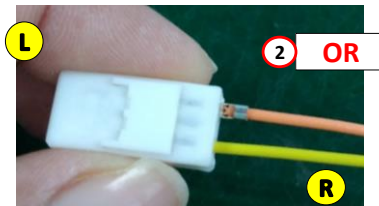

2 of 7

PARTS:

1. Connector 6098-2220 (W)
2. AVSSf 0.3 Y-OR wires L=730±3mm

JIG

n/a

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	n/a Wire insertion to Connector 6098-2220 (W)	<div><p>CONNECTOR ORIENTATION</p><p>WIRE FACING</p></div> <div><p>1. Hold the connector 6098-2220 (W) using left hand then insert the Yellow wire to terminal slot 1 using right hand.</p><p>2. Hold the connector 6098-2220 (W) using left hand then insert the Orange wire to terminal slot 2 using right hand.</p></div>	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 facing6. No wrong orientation of connector <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.</p> <p>Do not exert extra force.</p> <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

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

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

September 29, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number: **240B / 7M0516-7021**

Customer:

TRJ

Document No.:

WI-ENG-PDE-399

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:


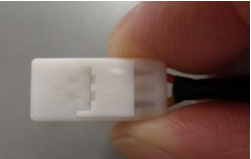
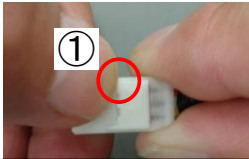
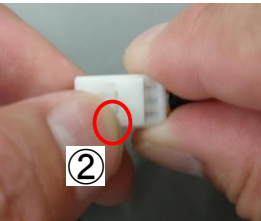
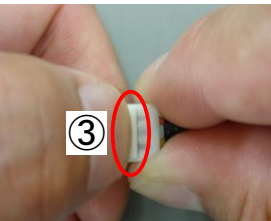
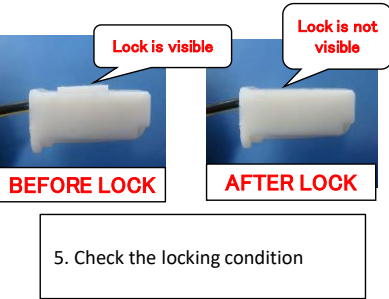
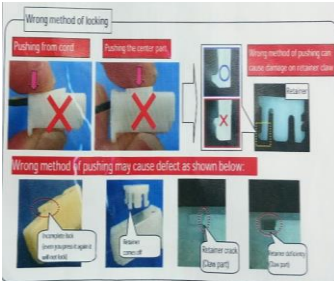
3 of 7

PARTS:

1. Assy parts

JIG

n/a

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	n/a	Connector lock	<div><p>Sequence of Pressing the Double Lock: ① - ② - ③ Method: Press one by one using one thumb</p></div> <div><p>1. Hold the 6098-2220 connector using right hand</p></div> <div><p>2. Press location 1 of the connector lock using your left thumb</p></div> <div><p>3. Press location 2 of the connector lock using your left thumb</p></div> <div><p>4. Press location 3 of connector near terminal insertion side with your left thumb</p></div> <div><p>5. Check the locking condition</p></div>	n/a	<div><p>Wrong Locking Method</p></div> <div><p>1. No unlocked/half-locked connector</p><p>2. No one time pressing of double lock</p><p>3. Make sure not to hit the portion ③ (bottom side) when pressing ① & ②</p></div>



WORK INSTRUCTION

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

September 29, 2022

Validity Date:

n/a

Process Name/Title:

Model Code/Part Number: 240B / 7M0516-7021

Customer:

TRJ

Document No.:

WI-ENG-PDE-399

Purpose:

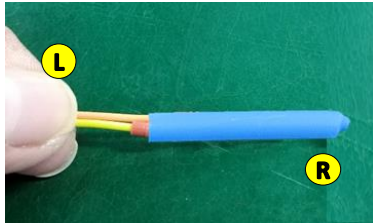


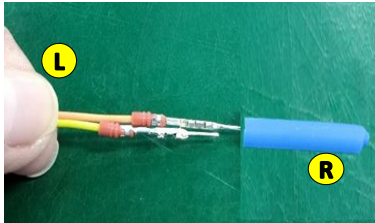

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:

4 of 7

PARTS:		1. Assy parts 2. Black COT (no slit) $\varnothing 5$ L=275 \pm 3mm		3. Black COT (no slit) $\varnothing 7$ L=408 \pm 4mm		JIG	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION				TOOLS/PPE	QUALITY POINTERS
4	n/a Wire insertion to Black COT (no slit) $\varnothing 5$ L=275 \pm 3mm (1st) $\varnothing 7$ L=408 \pm 4mm (2nd)	<div></div> <div>1. Hold the wires using left hand, get the terminal cover jig using right hand then insert the Y-OR wire using left hand.</div> <div></div> <div>2. Get the corrugated tube $\varnothing 5$ L=275\pm3mm (no slit) using right hand then insert the Y-OR wire using left hand.</div> <div></div> <div>3. Get the corrugated tube $\varnothing 7$ L=408\pm4mm (no slit) using right hand then insert the Y-OR wire using left hand.</div> <div></div> <div>4. After insertion, remove the terminal cover jig using right hand.</div>				<div>TERMINAL COVER JIG</div> 	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.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

September 29, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number:

240B / 7M0516-7021

Customer:

TRJ

Document No.:

WI-ENG-PDE-399

Purpose:

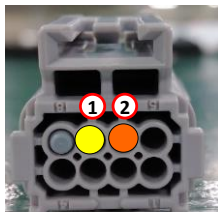


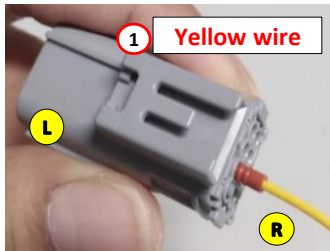
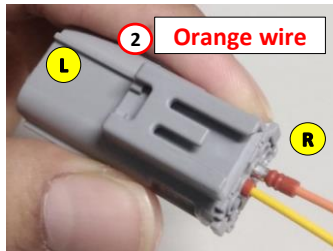
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:

5 of 7

PARTS:		1. Assy parts			JIG	n/a
NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	n/a	Wire insertion to Connector 6188-0779 (GR)	<div><div><p>VISUAL REFERENCE</p></div><div><p>CONNECTOR ORIENTATION</p></div><div><p>WIRE FACING</p></div><div><p>1. Hold the connector 6188-0779 (GR) using left hand, get the Y wire then insert to terminal slot 1 beside dummy seal using right hand.</p></div><div><p>2. Hold the connector 6188-0779 (GR) using left hand, get the OR wire then insert to terminal slot 2 beside Yellow wire using right hand.</p></div></div> <td>n/a</td> <td><div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing 6. No wrong orientation of connector</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><div>Document references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</div></td>		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 6. No wrong orientation of connector</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> <div>Document references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure.</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

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

September 29, 2022

Validity Date:

n/a

Process Name/Title:

Model Code/Part Number: 240B / 7M0516-7021

Customer:

TRJ

Document No.:

WI-ENG-PDE-399

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:


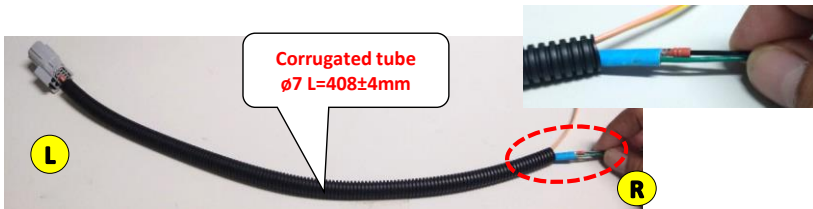
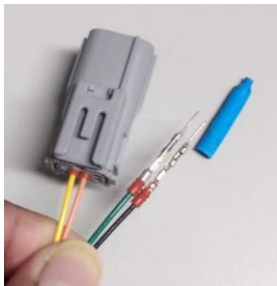

6 of 7

PARTS:

1. Assy parts
2. MRSW CP TVSSf 0.3 G-B/W L=814±3mm

JIG

1. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	n/a	<p>Wire insertion to assy parts</p>  <p>1. Hold the wires using left hand and insert the terminal cover jig using right hand.</p>  <p>2. Get the assy parts, hold the corrugated tube $\phi 7$ L=408±4mm using left hand then insert the wires using right hand.</p>  <p>3. After insertion, remove the terminal cover jig using left hand.</p>	<p>TERMINAL COVER JIG</p> 	<ol style="list-style-type: none">1. No wrong use of parts2. 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.

NBC (Philippines)
MASTER COPY

DCC Stamp



WORK INSTRUCTION

OFFLINE ASSEMBLY PROCESS

Effectivity Date:

September 29, 2022

Process Name/Title:

Validity Date:

n/a

Model Code/Part Number:

240B / 7M0516-7021

Customer:

TRJ

Document No.:

WI-ENG-PDE-399

Purpose:

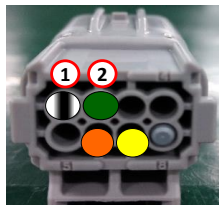


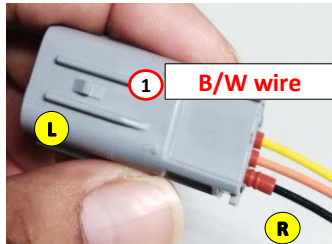
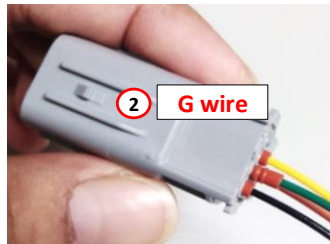
☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

2

Page No.:

7 of 7

PARTS:	1. Assy parts			JIG	n/a
NO.	PROCESS NAME	2 WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	n/a	<div><div><p>VISUAL REFERENCE</p></div><div><p>CONNECTOR ORIENTATION</p></div><div><p>WIRE FACING</p></div><div><p>1 B/W wire</p><div>1. Hold the connector 6188-0779 (GR) using left hand, get the B/W wire then insert to terminal slot 1 using right hand.</div></div><div><p>2 G wire</p><div>2. Hold the connector 6188-0779 (GR) using left hand, get the G wire then insert to terminal slot 2 using right hand.</div></div></div> <div>2 Wire insertion to Connector 6188-0779 (GR) (Assy parts)</div> <div>n/a</div>			<div>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing 6. No wrong orientation of connector</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> <div>Document references: 1. Refer to GL-PRO-ASY-029 for Pull-Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</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