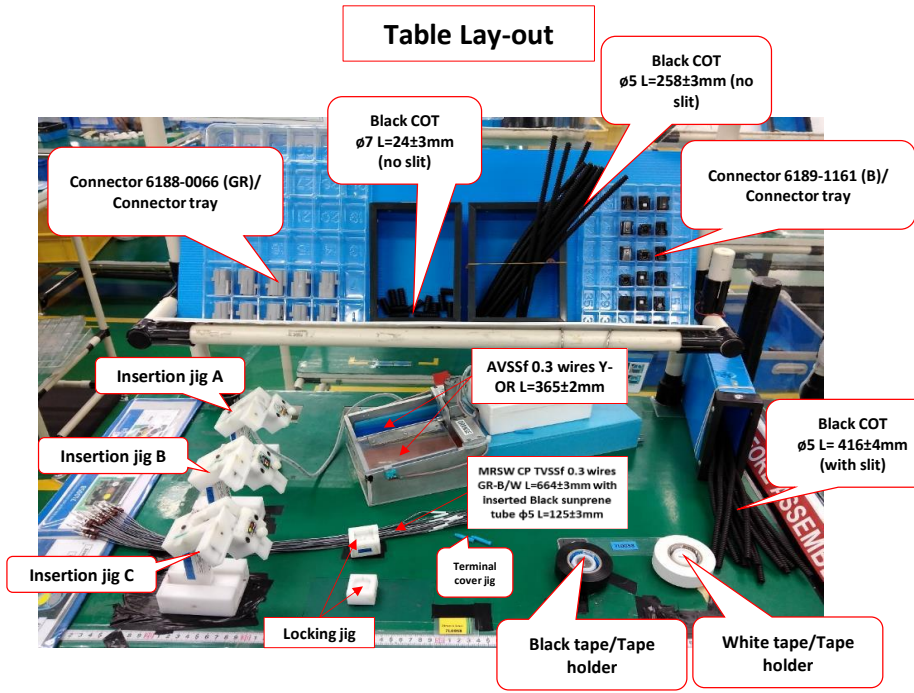
	WORK INSTRUCTION TAPING ASSEMBLY PROCESS				Effectivity Date:		November 25, 2021	
	Process Name/Title:				Validity Date:		n/a	
	Model Code/Part Number: 150B / 4 7L0058-7023		Customer: TRQSS		Document No.:		WI-ENG-PDE-228A	
	Purpose: <input type="checkbox"/> PROTOTYPE <input type="checkbox"/> PRE-LAUNCH <input checked="" type="checkbox"/> MASSPRO		Revision No.:		4		Page No.: 1 of 11	

PARTS: 4 1. All parts: Connector 6188-0066 (GR); Black COT $\phi 7$ L=24 \pm 3mm (no slit); Black COT $\phi 5$ L=258 \pm 3mm (no slit); Connector 6189-1161 (B); AVSSf 0.3 wires Y-OR L=365 \pm 2mm; MRSW CP TVSSf 0.3 wires GR-B/W L=664 \pm 3mm with inserted Black sunprene tube $\phi 5$ L=125 \pm 3mm; Black COT $\phi 5$ L=416 \pm 4mm (with slit); Black tape [1pc.]; White tape [1pc.]			JIG:		1. Insertion jig with switch cover 2. Locking jig 3. Terminal cover jig	
NO.	PROCESS NAME	4 WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS		
1	P1 4 Table Lay-out		<div> Safety Instruction Be sure to wear required 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> Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance </div> <div> 1. No missing parts/tools 2. No excess parts/tools </div>		

Revision History								Prepared by	Reviewed by	Approved by	Noted by
11/25/21	4	Change part number from 7L0058-7022 to 7L0058-7023 due to additional clamp (82711-52090 (W)) (Refer to WI-ENG-PDE-228D). Improve work procedure and illustration. Additional table lay-out, checkpoint in checking of wire tolerance (Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance)	M. Catapang	J. Loterte	C. Villanueva	A. Arañes					
02/01/21	3	Transfer process owner from Production (WI-PRO-ASY-134A) to Engineering (WI-ENG-PDE-228A); Change 2x pulling to Pull-Push-Pull-Push; Put calibrated measuring tape illustration and Improve the work procedure and illustration of all process; Add connector orientation illustration instruction in all taping process	J. Loterte	C. Villanueva	A. Shimamura	A. Arañes					
03/17/20	2	Include wire insertion jig/Change length of COT	J. Silang	A. Morcozo	O. Merin	n/a	M. Catapang	J. Loterte	C. Villanueva	A. Arañes	
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	October 17, 2018			

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PARTS:

1. Connector 6188-0066 (GR)

JIG

1. Insertion jig with switch cover

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

2

P1

Connector setting to
insertion jig
6188-0066 (GR)

Insertion jig with switch cover

Orange wire

Yellow wire

Visual reference

I-mark

Lock

INSERTION JG ORIENTATION

CONNECTOR ORIENTATION

GOOD

NG

1. Press the lock using left hand.

2. Get the connector **6188-0066 (GR)** using right hand and insert to insertion jig. Release the lock after insertion.
Note: Follow the connector orientation.

3. Push the lower wire guide upward using right hand. Slot for **Yellow wire** will be opened.

Press

Release

1. I-mark is align

1 hole is open

2. I-mark is not align

2 holes are open

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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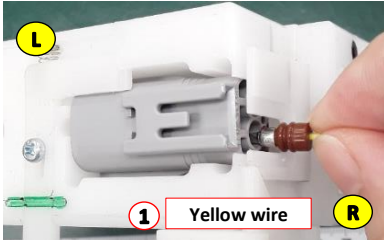
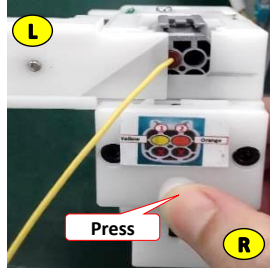
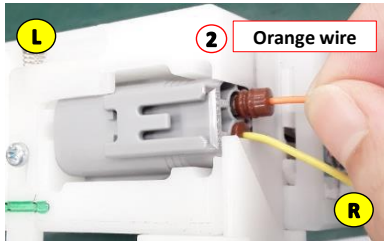
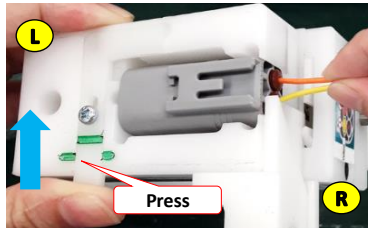
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PARTS:

1. AVSSf 0.3 wires Y L=365±2mm; OR L=365±2mm

JIG

1. Insertion jig with switch cover

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P1 Wire Insertion to connector 6188-0066 (GR)	<div><p>WIRE FACING</p></div> <div><p>1. Hold the insertion jig using left hand. Get the Yellow wire then insert to terminal slot 1 using right hand.</p></div> <div><p>2. Press the button using right thumb. The slot for Orange wire will be opened.</p></div> <div><p>3. Get the Orange wire then insert to terminal slot 2 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	<p>Note: Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance</p> <p>1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing</p> <p>Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force.</p> <p>Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.</p>

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Purpose:

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☐ PRE-LAUNCH

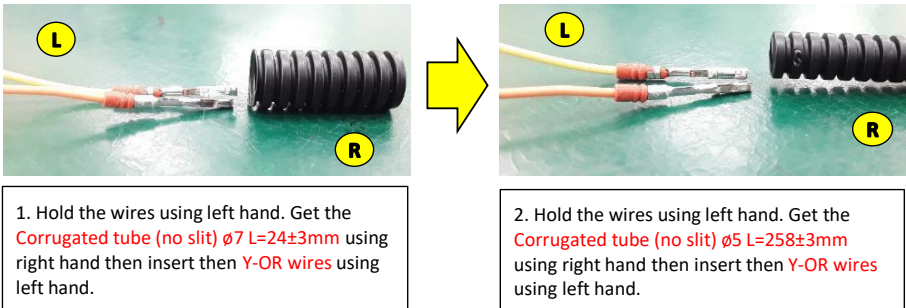
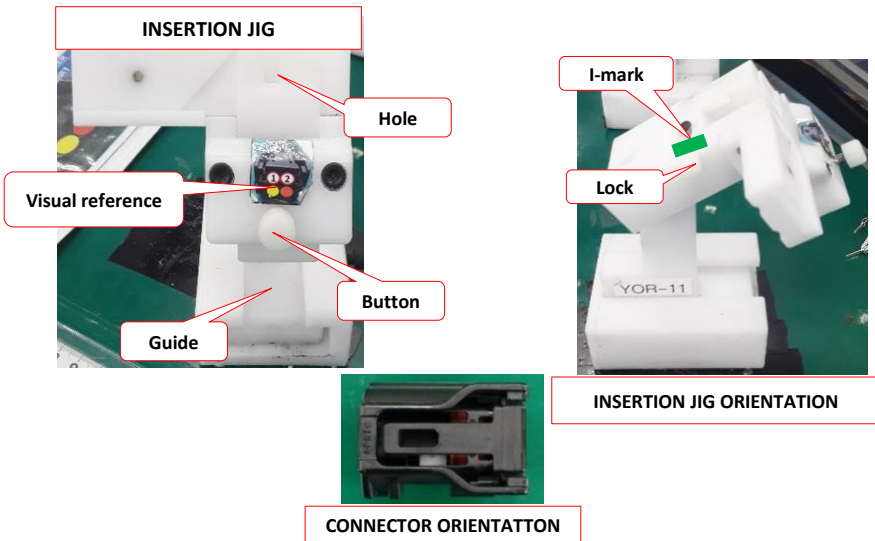
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PARTS:		1. Black Corrugated tube $\phi 7$ L= 24 \pm 3mm (no slit) 2. Black Corrugated tube $\phi 5$ L= 258 \pm 3mm (no slit)			3. Assy parts	JIG	1. Insertion jig
NO.	PROCESS NAME	4 WORK PROCEDURE/ ILLUSTRATION			TOOLS/PPE	QUALITY POINTERS	
4		Wire insertion to COT (no slit) $\phi 7$ L= 24 \pm 3mm (1ST) $\phi 5$ L= 258 \pm 3mm (2ND)	 <p>1. Hold the wires using left hand. Get the Corrugated tube (no slit) $\phi 7$ L=24\pm3mm using right hand then insert then Y-OR wires using left hand.</p> <p>2. Hold the wires using left hand. Get the Corrugated tube (no slit) $\phi 5$ L=258\pm3mm using right hand then insert then Y-OR wires using left hand.</p>			n/a	1. No wrong use of parts 2. No deformed terminal
5	P1	Connector setting to insertion jig 6189-1161 (B)				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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PARTS:

1. Connector 6189-1161 (B)

JIG

1. Insertion jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

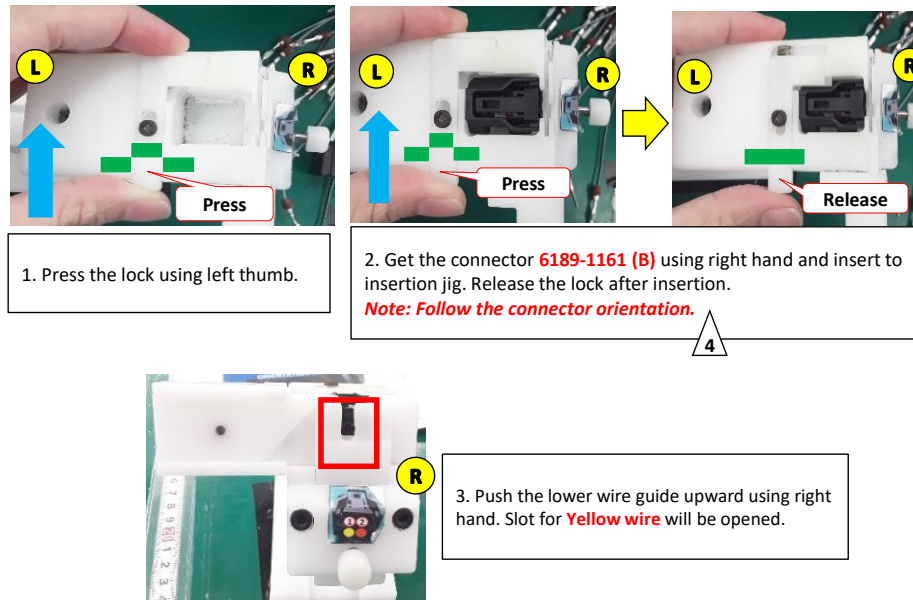
TOOLS/PPE

QUALITY POINTERS

5

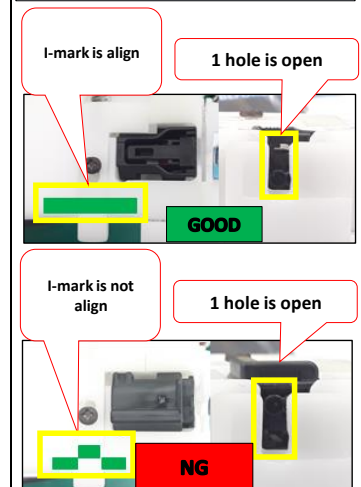
P1

Connector setting to
insertion jig
6189-1161 (B)
(Continuation)



n/a

CONNECTOR ORIENTATION ILLUSTRATION



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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☐ PROTOTYPE

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PARTS:

1. Assy parts

JIG

1. Insertion jig

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

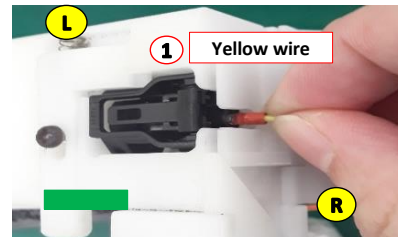
TOOLS/PPE

QUALITY POINTERS

6

P1

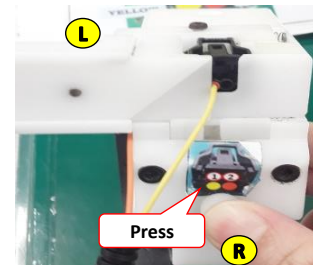
Wire insertion to connector
6189-1161 (B)



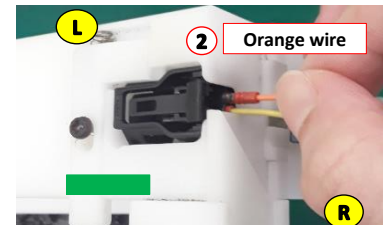
1. Hold the insertion jig using left hand.
Get the **Yellow wire** then insert to terminal
slot **1** using right hand.



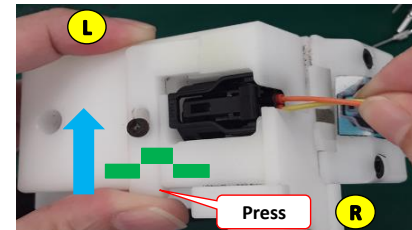
WIRE FACING



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

Make sure wires are properly inserted.
Conduct **Pull-Push-Pull-Push** after
insertion.
Do not exert extra force.



**Note: Refer to GL-PRO-ASY-029
for Pull-Push procedure.**

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PARTS:

1. Assy parts
2. Black tape

JIG

1. Locking jig

NO.

PROCESS NAME



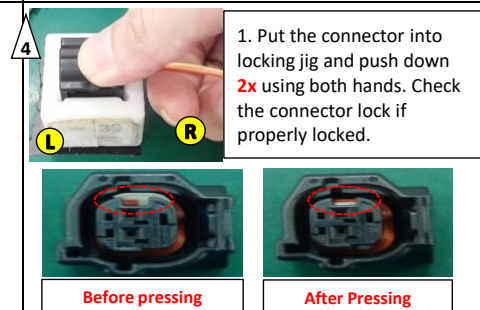
WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

7

Connector lock



LOCKING JIG

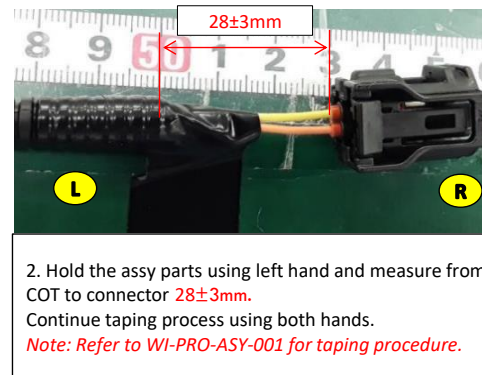


- Note:**
MANUAL LOCKING MAY CAUSE DAMAGED CONNECTOR LOCK.
1. No unlock/half-locked connector
 2. No damaged lock

8

P1

Taping 1
COT to wire near
connector



MEASURING JIG



- Note:**
Please use calibrated/verified measuring tape when getting the measurement.
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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PARTS:

1. White tape
2. MRSW CP A7475-7L00582-7040 TVSSf 0.3 wires GR L=664±2mm; B/W L=664±3mm with inserted Black sunprene tube $\phi 5$ L=125±3mm

3. Assy parts

1. Terminal cover jig

NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	Taping 2 Black Sunprene tube to wire near hotmelted wires	<p>1. Get the hotmelted GR-B/W wires with sunprene tube then measure from end of the sunprene tube up to the edge of hotmelt 51mm using both hands.</p> <p>2. Hold the sunprene tube using left hand, get the White tape using right hand and begin taping process using both hands. Note: Refer to WI-PRO-ASY-001 for taping procedure.</p> <p>3. After taping, check the measurement and taping condition.</p>	<p>MEASURING JIG</p>	<p>Note: Please use calibrated/verified measuring tape when getting the measurement.</p> <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 <p>Note: USE WHITE TAPE ONLY</p>
10	Wire insertion to assy parts	<p>1. Get the terminal cover jig using right hand then insert to both terminals (GR-B/W wires) using right hand.</p> <p>2. Hold the corrugated tube $\phi 7$ L=24±3mm using left hand then insert the GR-B/W wires using right hand.</p> <p>3. After insertion, remove the cover jig using right hand.</p>	<p>TERMINAL COVER JIG</p>	<ol style="list-style-type: none">1. No wrong usage of parts2. No damaged rubber seal

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PARTS:

1. Assy parts

JIG

1. Insertion jig

NO.

PROCESS NAME

4

WORK PROCEDURE/ ILLUSTRATION

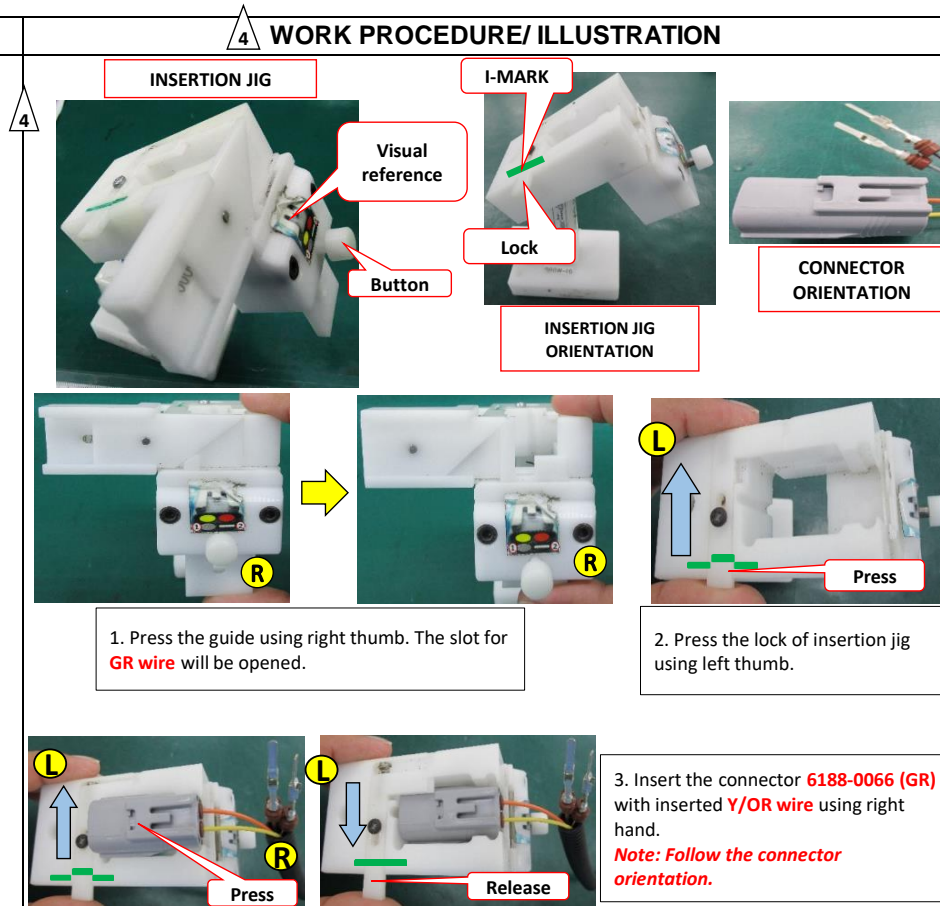
TOOLS/PPE

QUALITY POINTERS

11

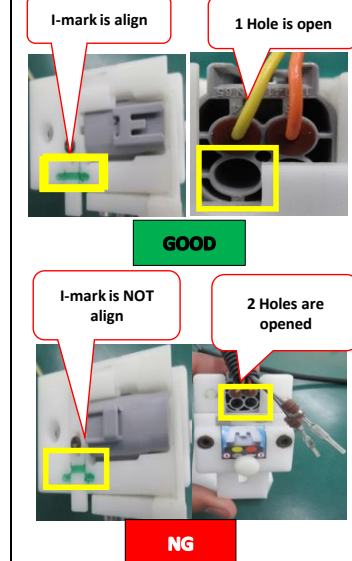
P2

Connector setting to
insertion jig
6188-0066 (GR)
(Assy parts)



n/a

Connector Orientation Illustration



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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PARTS:

1. Assy parts

JIG

1. Insertion jig
2. Locking jig

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

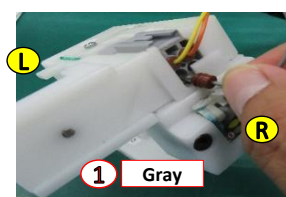
TOOLS/PPE

QUALITY POINTERS

12

P2

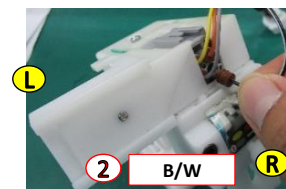
Wire insertion to connector
6188-0066 (GR)
(Assy parts)



1 Hold the **GR wire** then insert to terminal slot **1** using right hand.



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



3. Hold the **B/W wire** then insert to terminal slot **2** using right hand.



4. After insertion, push the lock using left thumb 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

Make sure wires are properly inserted. Conduct **Pull-Push-Pull-Push** after insertion. Do not exert extra force.

Note: Refer to GL-PRO-ASY-029 for Pull-Push procedure.

13

Connector Lock



1. Put the connector into locking jig using both hands and then conduct **2x** pressing. Check the connector if properly locked.



Coupler Cross Sectional View



Unlock

Half Lock Condition

Full Lock Condition

Locking jig



NOTE: MANUAL LOCKING MAY CAUSED DAMAGED LOCK

1. Use the provided locking jig per model
2. No unlock/half-locked connector

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PARTS:

1. Black Corrugated tube $\phi 5$ L=416 \pm 4mm (with slit)
2. Assy parts

JIG

1. COT Adaptor jig

NO.

PROCESS NAME



WORK PROCEDURE/ ILLUSTRATION

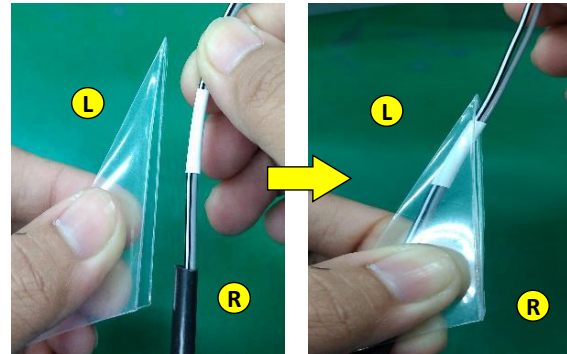
TOOLS/PPE

QUALITY POINTERS

14

P1

Wire insertion to
Corrugated tube
 $\phi 5$ L=416 \pm 4mm
(with slit)

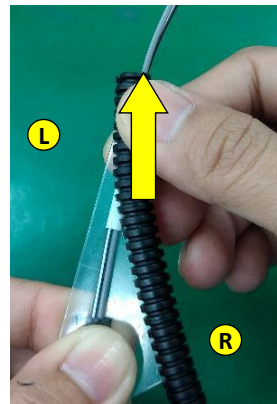


1. Hold the COT adaptor using left hand. Insert the wires using right hand.

COT Adaptor



1. No wrong use of parts
2. No wires left in between the COT with slit



2. Hold the COT adaptor with wires using left hand, get the **Black Corrugated tube (w/slit) $\phi 5$ L=416 \pm 4mm** using right hand and insert to COT adaptor. Pull the adaptor and push the COT (**same timing**) using both hands. Make sure all wires are inserted.

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