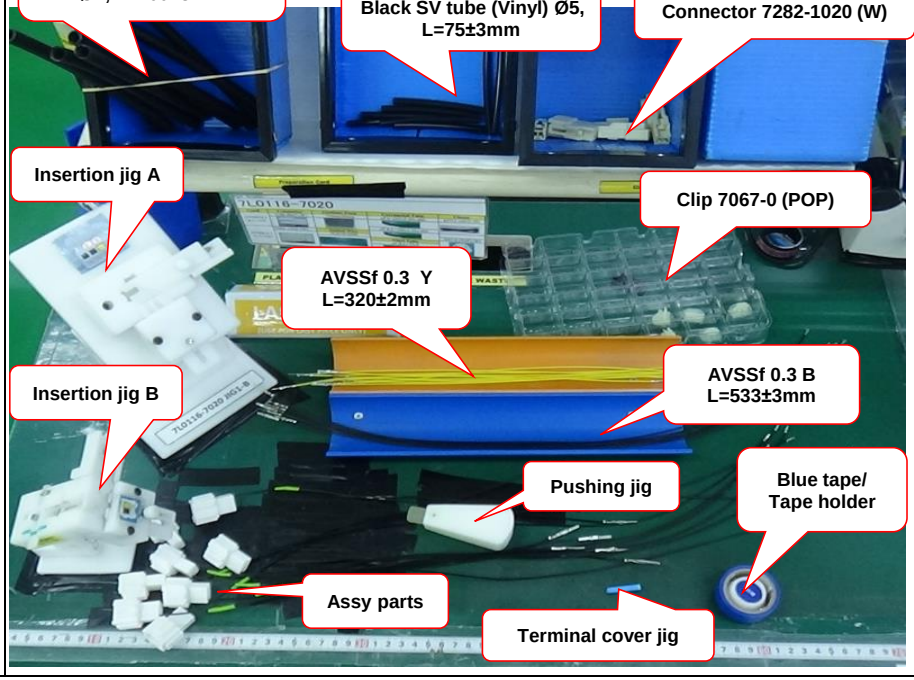
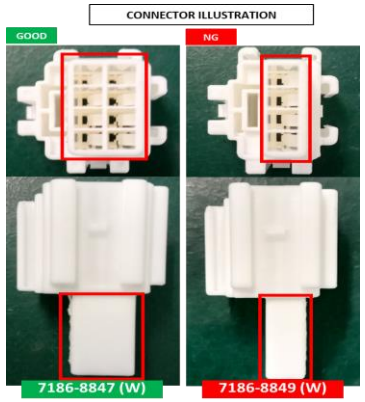
	WORK INSTRUCTION			Effectivity Date:	September 10, 2024		
	Process Name/Title:	TAPING ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number:	TM3 / 7L0116-7020	Customer: TRQSS	Car Model: SUBARU ASCENT	Document No.:	WI-ENG-PDE-341A	
	Purpose:	☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	4	Page No.: 1 of 11

PARTS:	1. Assy parts; Black corrugated tube Ø7, L=190±3mm (no slit); Black SV tube (Vinyl) Ø5, L=75±3mm; Connector (7282-1020); Clip 7067-0 (POP) ; AVSSf 0.3 Y L=320±2mm; AVSSf 0.3 B L=533±3mm; Blue tape	JIG:	1. Insertion jig 2. Terminal cover jig 3. Pushing jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
1	4 P1	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 ***Document reference/s:*** *1. Refer to **WI-ENG-PDE-354** for Offline Assembly Process.* *2. Refer to **WI-PRO-CNC-017** for WIre and Strip Length Tolerance.* 

Revision History							Prepared by	Reviewed by	Approved by	Noted by
09/10/24	4	Transfer Wire insertion to COT and Taping 2 to P2 due to process improvement. Inclusionn of car model "SUBARU-ASCENT". Improved table lay-out and Visual inspection/Quality checkpoints.	D. Castillo	C. Villanueva	A. Arañes	n/a	D. Castillo	C. Villanueva	A. Arañes	n/a
02/25/23	3	Removal of notes related to the function of insertion jig. Addition of " Must have slightly movement of after insertion." inclusion of Quality Checkpoints. Standardized tube description: SV tube (Vinyl); Improve work quality checkpoints; References/notes on page 4.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
09/30/22	2	Change tolerance from 35+/-3mm to 35(+3/-1mm) as countermeasure of encountered NG dimension from end of tape up to terminal tip. Improve: work procedure/Illustration on process no.	M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
Eff. Date	Rev. No	Details of Change	Revised	Reviewed	Approved	Noted	Est. Date:	October 2, 2021		

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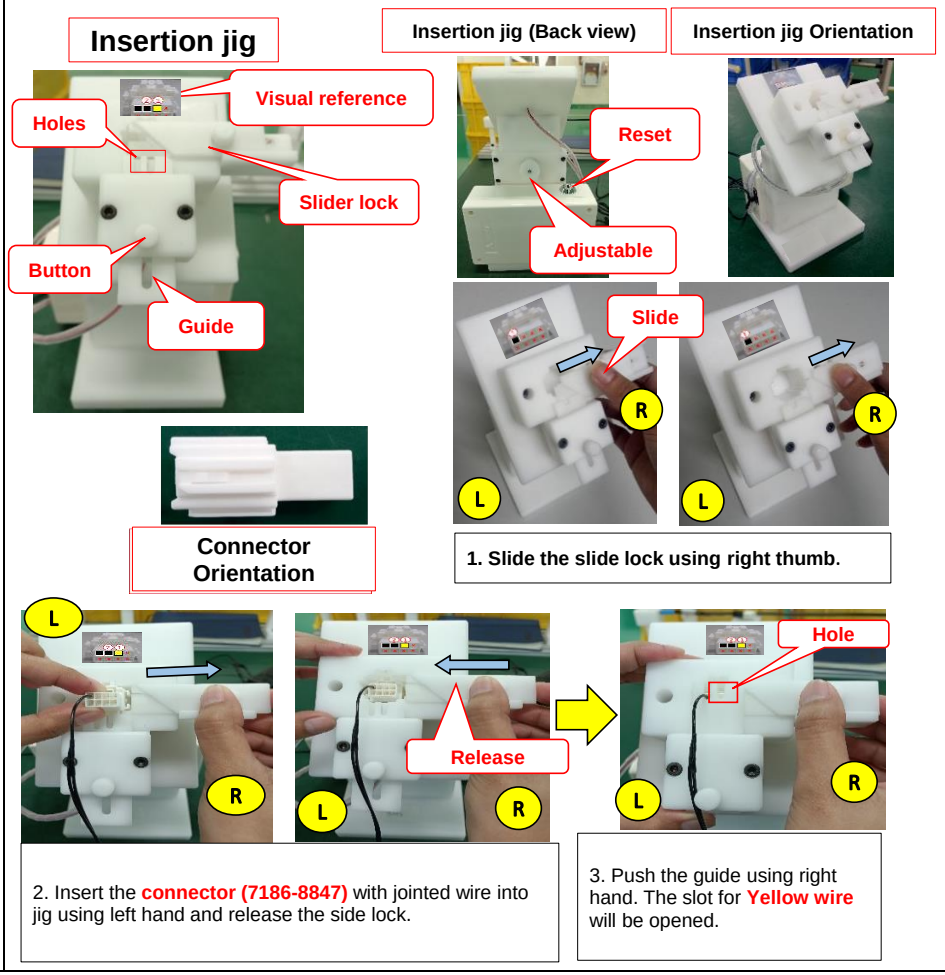
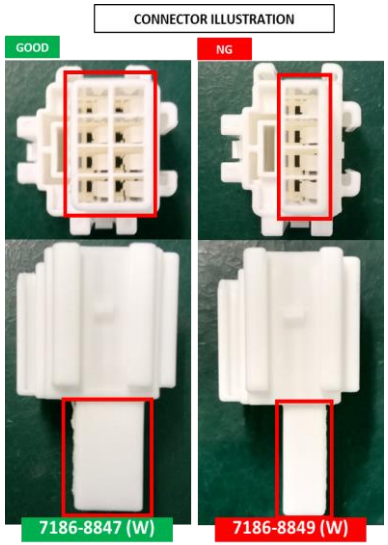
	Process Name/Title:	TAPING ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number: TM3 / 7L0116-7020	Customer: TRQSS	Car Model: SUBARU ASCENT	Document No.:	WI-ENG-PDE-341A		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	4	Page No.:	2 of 11

PARTS:	1. Connector 7186-8847(W) (Assy parts)	JIG:	1. Insertion jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
2	P1	Connector setting to insertion jig 7186-8847(W)		N/A	1. Use the provided jig tool per model 2. No wrong orientation of connector  ***Important reminders/note/s:*** *1. Cannot insert the inverted connector.*

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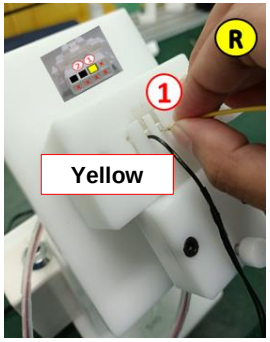
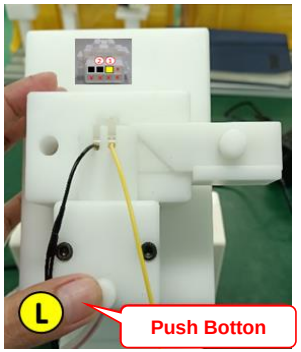
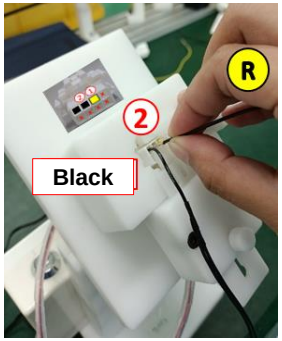
	Process Name/Title:	TAPING ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number: TM3 / 7L0116-7020	Customer: TRQSS	Car Model: SUBARU ASCENT	Document No.:	WI-ENG-PDE-341A		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	4	Page No.:	3 of 11

PARTS:	1. AVSSf 0.3 Y L=320±2mm 2. AVSSf 0.3 B L=533±3mm	3. Assy parts	JIG:	1. Insertion jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P1	Wire insertion to Connector 7186-8847 (W)	 Wire facing  1. Get **Yellow wire** then insert to terminal slot **1** using right hand. Conduct Pull-Push-Pull-Push after insertion.  2. Press the button using left hand. The slot for Black wire will be opened.  3. Get **Black wire** then insert to terminal slot **2** using right hand. Conduct Pull-Push-Pull-Push.	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. Please hold the wire near terminal during insertion.* *2. Make sure wires are properly inserted.* *Conduct **Pull-Push-Pull-Push** after insertion* ***Documents reference/s:*** *1. Refer to **GL-PRO-ASY-029** for Pull-Push procedure.* *2. Refer to **WI-PRO-CNC-017** for Wire and Strip Length Tolerance.*

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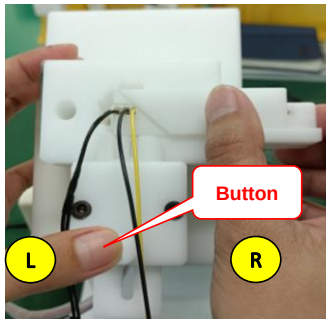
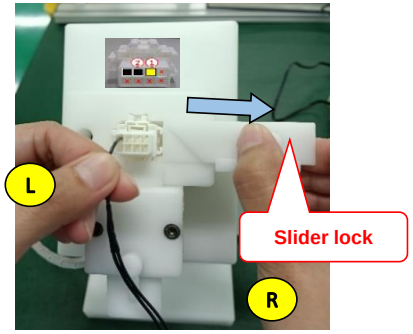
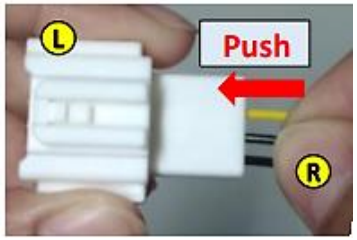
	Process Name/Title:	TAPING ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number: TM3 / 7L0116-7020	Customer: TRQSS	Car Model: SUBARU ASCENT	Document No.:	WI-ENG-PDE-341A		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	4	Page No.:	4 of 11

PARTS:	1. AVSSf 0.3 Y L=320±2mm 2. AVSSf 0.3 B L=533±2mm	3. Assy parts	JIG:	1. Insertion jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
3	P1	Wire insertion to Connector 7186-8847 (W) (Continuation)	 4. After insertion, press the button using left hand. **GO** sound will be heard.  5. Slide the lock using right thumb and the hold the wires and gently pull out the connector from the jig using left hand.  6. After removing the connector from jig, conduct **Pushing (1x)** of **B wires** using right hand to confirm that wire is fully inserted. repeat the process for Y wire.	N/A	1. No loose insertion 2. No wrong insertion 3. One by one insertion 4. No deformed terminal 5. No wrong wire facing 6. Must have slightly movement after insertion. ***Important reminders/Note/s:*** *1. Please hold the wire near terminal during insertion.* *2. Make sure wires are properly inserted.* *Conduct **Pull-Push-Pull-Push** after insertion* *3. Conduct Pushing of wires after removing the connector from jig.* *4. Pushing of wires will be done one by one of every inserted wire.* ***Documents reference/s:*** *1. Refer to **GL-PRO-ASY-029** for Pull-Push procedure.* *2. Refer to **WI-PRO-CNC-017** for Wire and Strip Length Tolerance.*

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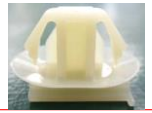
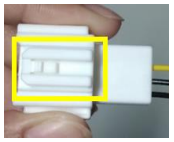
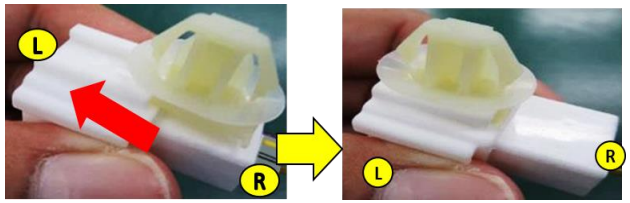
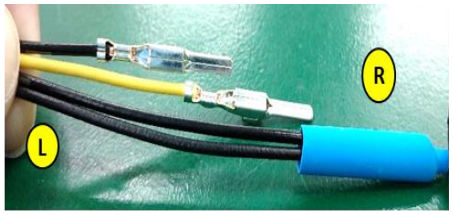
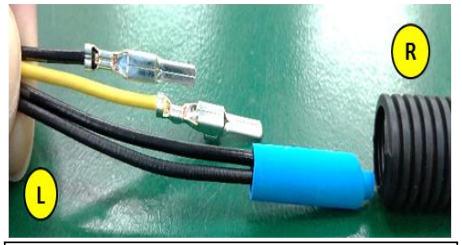
	Process Name/Title:	TAPING ASSEMBLY PROCESS		Validity Date:	n/a		
	Model code/Part number: TM3 / 7L0116-7020	Customer: TRQSS	Car Model: SUBARU ASCENT	Document No.:	WI-ENG-PDE-341A		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	4	Page No.:	5 of 11

PARTS:	1. Assy parts 2. Clip 7067-0 (POP)	3. Black corrugated tube Ø7, L=190±3mm (no slit)	JIG:	1. Terminal cover jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	P1	Clip Attachment	 CLIP ORIENTATION   1. Hold the connector using left hand, get the clip **7067-0 (POP) (W)** then insert using right hand.	N/A	1. No loose attachment 2. No wrong usage of parts 3. No missing clamp
5		Wire insertion to Black corrugated tube Ø7, L=190±3mm (no slit)	 1. Get the terminal cover jig and insert to **B-B wires** using right hand.  2. Get the **Corrugated tube Ø7, L=190±3mm (no slit)** using right hand and insert the **B, Y and jointed wires** using left hand. 3. After insertion, remove the cover jig using right hand.	**Terminal cover jig** 	1. No deformed terminal 2. No wrong usage of parts

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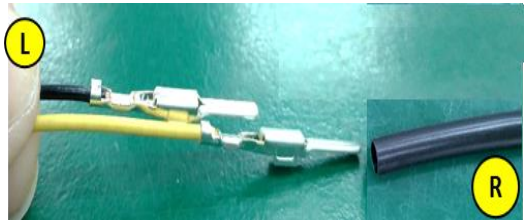
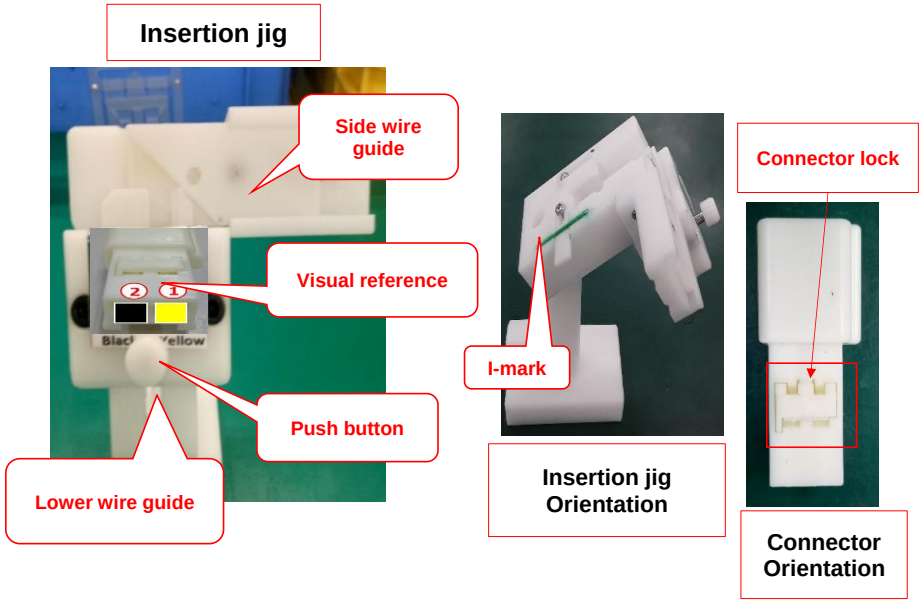
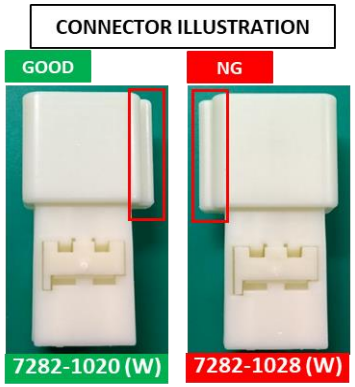
	Model code/Part number: TM3 / 7L0116-7020	Customer: TRQSS	Car Model: SUBARU ASCENT	Document No.:	WI-ENG-PDE-341A		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	4	Page No.:	6 of 11

PARTS:	1. Assy parts 2. Black SV tube (Vinyl) Ø5, L=75±3mm 3. Connector 7282-1020 (W)	JIG:	1. Insertion jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
6	P1	Wire insertion to Black SV tube (Vinyl) Ø5, L=75±3mm	 1. Get the Black SV tube (Vinyl) **Ø5 L=75±3mm** using right hand then insert the **Y and Black jointed wire** using left hand.	N/A	1. No deformed terminal 2. No wrong usage of parts
7		Connector setting to Insertion jig 7282-1020 (W			1. Use provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector 

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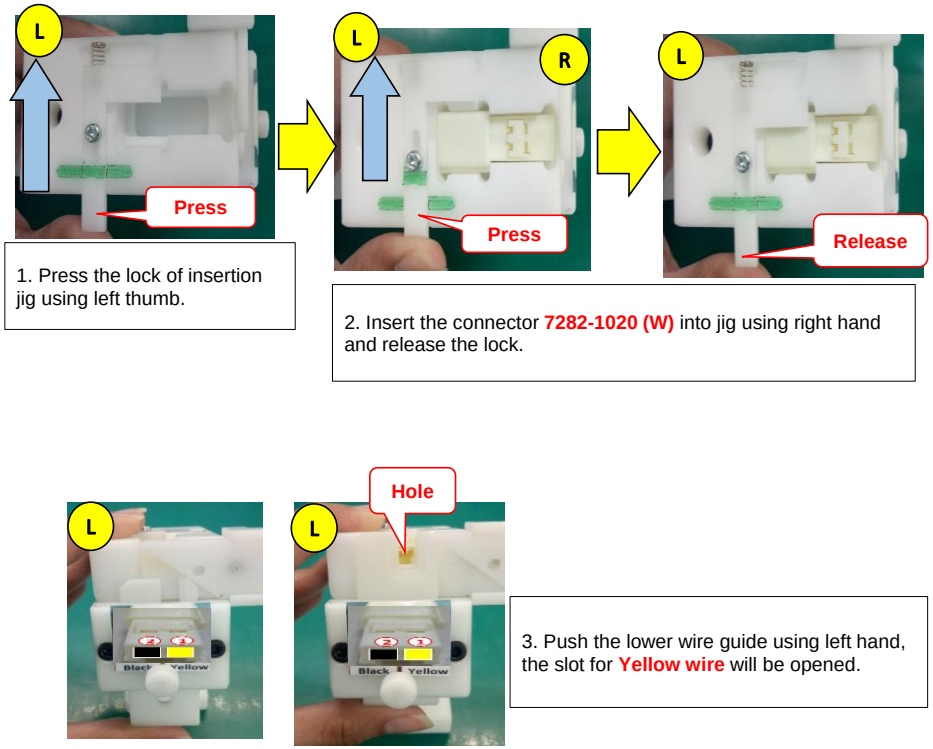
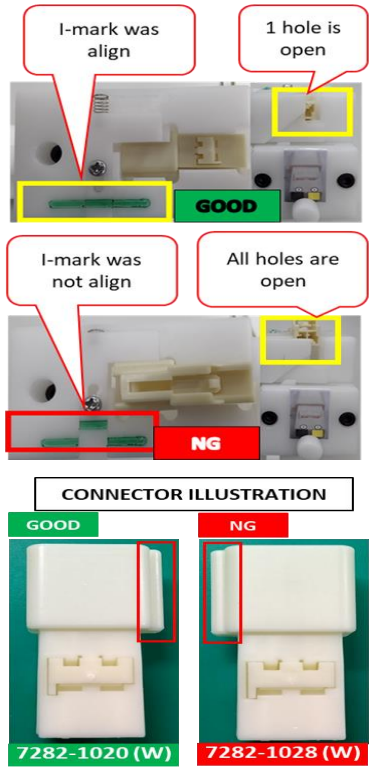
	Model code/Part number: TM3 / 7L0116-7020	Customer: TRQSS	Car Model: SUBARU ASCENT	Document No.:	WI-ENG-PDE-341A		
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	4	Page No.:	7 of 11

PARTS:	1. Connector 7282-1020 (W)			JIG:	1. Insertion jig
NO.	**PROCESS NAME**		**WORK PROCEDURE/ ILLUSTRATION**	**TOOLS/PPE**	**QUALITY POINTERS**
7	P1	Connector setting to Insertion jig 7282-1020 (W) (Continuation)	 1. Press the lock of insertion jig using left thumb. 2. Insert the connector **7282-1020 (W)** into jig using right hand and release the lock. 3. Push the lower wire guide using left hand, the slot for **Yellow wire** will be opened.	N/A	1. Use provided jig per model 2. No wrong usage of parts 3. No wrong orientation of connector 4. No damaged connector **Connector Orientation Illustration** 

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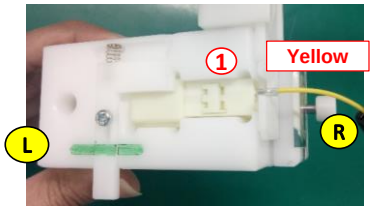
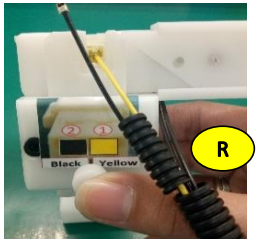
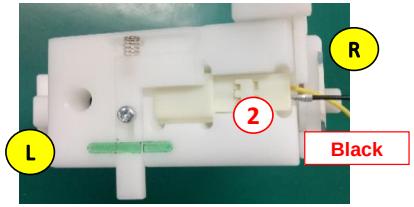
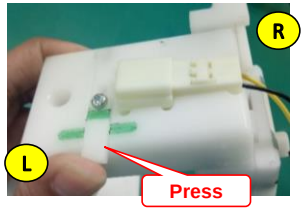
	Purpose:	☐ PROTOTYPE	☐ PRE-LAUNCH	■ MASSPRO	Revision No.:	4	Page No.: 8 of 11

PARTS:	1. Assy parts 2. Connector 7282-1020 (W)			JIG:	1. Insertion jig
NO.	**PROCESS NAME**		**WORK PROCEDURE/ ILLUSTRATION**	**TOOLS/PPE**	**QUALITY POINTERS**
8	P1	Wire insertion to connector 7282-1020 (W)	 WIRE FACING  1. Insert the **Yellow wire** using right hand and insert to connector.  2. Press the button using right hand, the slot for Black wire will be opened.  3. Get **Black wire** using right hand and insert to connector.  4. After insertion, press 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. Please hold the wire near terminal during insertion.* *2. Make sure wires are properly inserted.* *Conduct **Pull-Push-Pull-Push** after insertion* ***Documents reference/s:*** *1. Refer to **GL-PRO-ASY-029** for Pull-Push procedure.*

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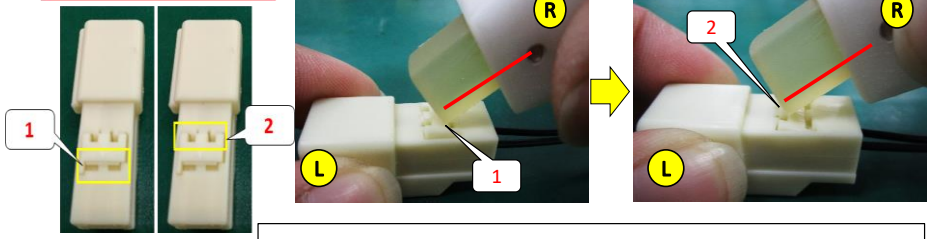
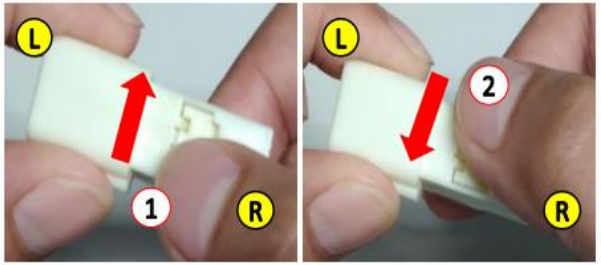
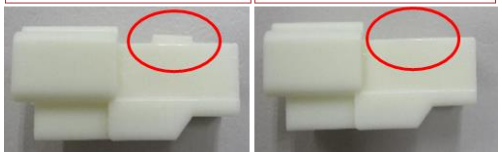
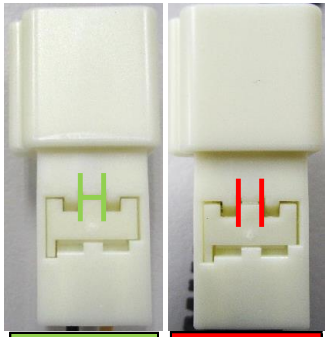
PARTS:	1. Assy parts	JIG:	1. Pushing jig

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
9	P1	Connector lock	Pressing Sequence  1. Hold the connector using left hand and place on the table. Get the pushing jig using right hand and start the sequential locking based on the above illustration. Push the lower part of the connector lock first and then push the upper part. *(Note: Position of pushing jig during locking must be slant.)*  2. Ensure that connector is in locked condition by touching the connector lock based on the sequence illustrated. Before pressing / After pressing 	PUSHING JIG 	1. No unlocked/half-locked connector 2. No damage connector. LOCKED CONDITION  GOOD / NG

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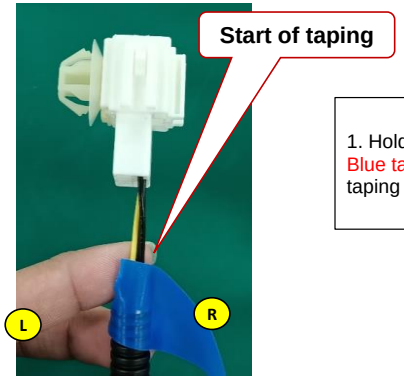
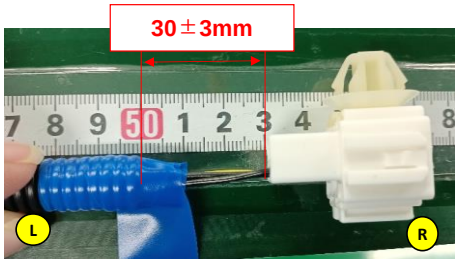
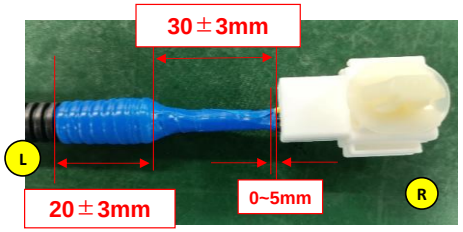
	WORK INSTRUCTION			Effectivity Date:	September 10, 2024	
	Process Name/Title:	TAPING ASSEMBLY PROCESS		Validity Date:	n/a	
	Model code/Part number: TM3 / 7L0116-7020	Customer: TRQSS	Car Model: SUBARU ASCENT	Document No.:	WI-ENG-PDE-341A	
	Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO			Revision No.:	4	Page No.: 10 of 11

PARTS:	1. Blue tape 2. Assy parts	JIG:	N/A

NO.	PROCESS NAME		WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
10	P1	Taping 1 Black COT to wire near Connector	 1. Hold the COT using left hand, get the Blue tape using right hand then start pre-taping using both hands.  2. Measure from end of COT up to edge of connector **30±3mm** then continue the taping process using both hands.  3. After taping, check the measurement and taping condition.	**Measuring tape** 	***Important reminders/note/s:*** *1. Please use calibrated/verified measuring tape when getting the measurement.* *2. Use BLUE TAPE only.* ***Document reference/s:*** *1. Refer to **WI-PRO-ASY-001** for taping procedure.* 1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong use of tape 6. No wrong dimension

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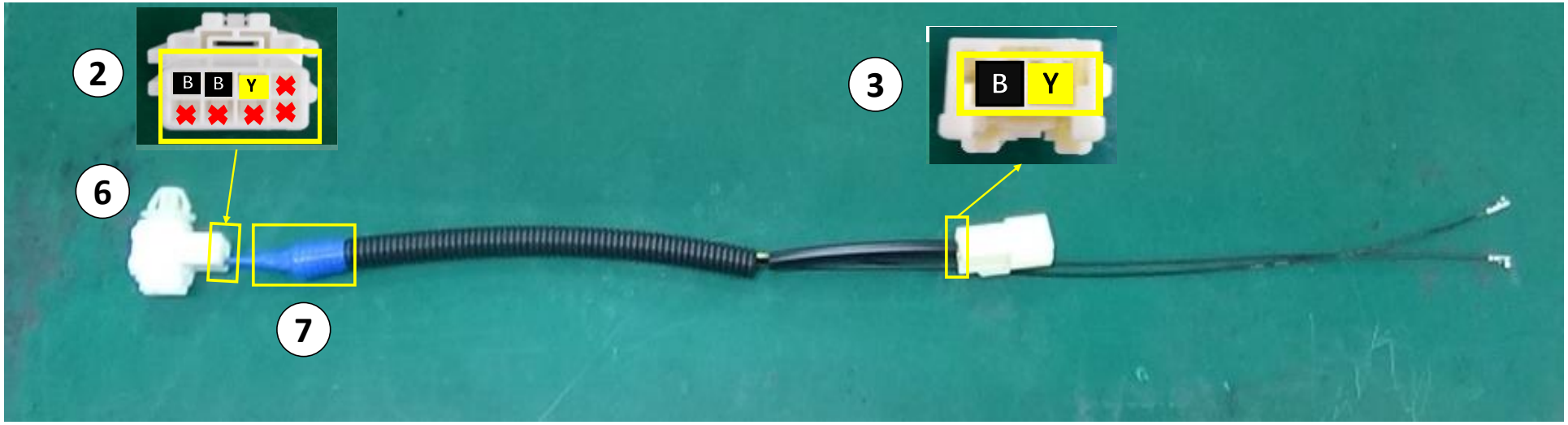
PARTS:	1. Assy parts	JIG:	N/A

4 **VISUAL INSPECTION/ QUALITY CHECKPOINTS**

P1 7L0116-7020



1 No Unlocked/Half-locked connector

2 3 No Wrong insert

4 No Terminal Backing out

5 No Deformed Terminal

6 No Missing Clip clamp

7 No Missing tape

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