

**WORK INSTRUCTION**

Process Name/Title:

TAPING ASSEMBLY PROCESS

Effectivity Date:

February 7, 2025

Model code/Part number:

257B / A7445C1

Customer:

TRQSS

Car Model:

TOYOTA-TACOMA

Validity Date:

n/a

Purpose:



PROTOTYPE



PRE-LAUNCH



MASSPRO

Document No.:

WI-ENG-PDE-1180A

Revision No.:

1

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1 of 8**PARTS:**

1. All parts (Connector 6189-0451 (W); TVSSf 0.3 G/BW L=514±3mm; Black SV tube (Vinyl) ø7 L=367±3mm)

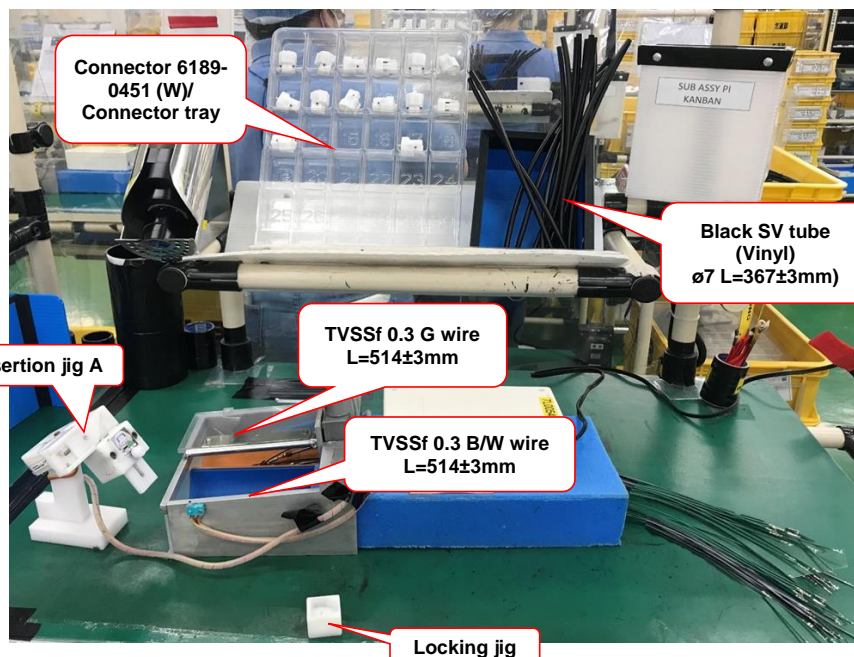
JIG:

1. Insertion jig with switch cover

NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

1

P1

Connector setting to
insertion jig
6189-0451 (W)**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.

Document reference/s:

1. Refer to WI-PRO-CNC-071 Wire
and Strip Length Tolerance

1. No missing parts/tools
2. No excess parts/tools
3. No wrong positions of parts/tools

Revision History

Prepared by

Reviewed by

Approved by

Noted by

02/7/25 1 Change pre-launch to mass-pro

A. Buban C. Villanueva A. Arañes n/a

01/10/25 0 Initial issue.

A. Buban C. Villanueva A. Arañes n/a

Eff. Date Rev. No Details of Change

Revised Reviewed Approved Noted

Est. Date:

January 10, 2025

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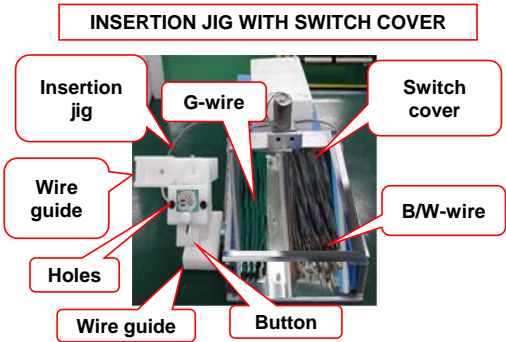
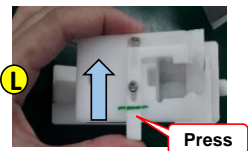
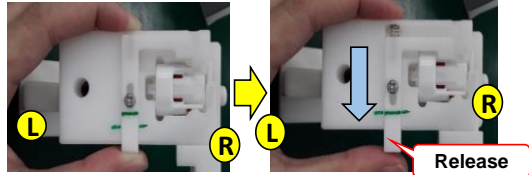
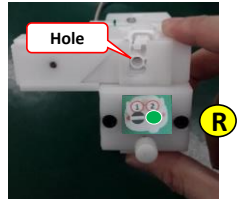


☒ MASSPRO

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PARTS:		1. AVSSf 0.3 G wire L=514±3mm 2. AVSSf 0.3 B/W wire L=514±3mm		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
2	P1	<p>Connector setting to insertion jig 6189-0451 (W)</p> <div><p>INSERTION JIG WITH SWITCH COVER</p></div> <div><p>1. Press the lock of insertion jig using left thumb.</p><p>2. Insert the connector 6189-0451 (W) into jig using right hand and release the lock. Note: Follow the connector orientation</p><p>3. Push the guide using right thumb. The slot for B/W wire will be opened.</p></div>		n/a	<div><p>Connector Orientation Illustration</p><p>1. Use provided jig per model 2. No wrong orientation of connector</p></div>

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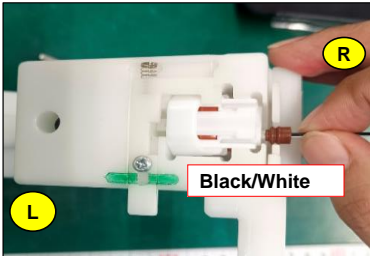
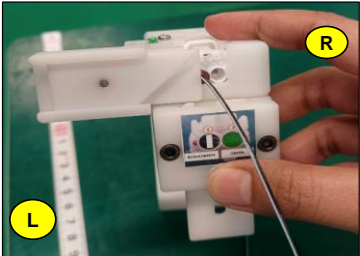


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PARTS:		1. AVSSf 0.3 G wire L=514±3mm 2. AVSSf 0.3 B/W wire L=514±3mm		JIG:	1. Insertion jig with switch cover
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P1 Wire insertion to connector 6189-0451 (W)	<div><div><p>Terminal facing</p></div><div><p>Black/White</p></div><div><p>1. Get the B/W wire then insert to terminal slot 1 using right hand.</p></div><div><p>2. After insertion of B/W wire press the button using right hand. The slot for Green wire will be open.</p></div><div><p>Green</p></div><div><p>3. Get the G wire then insert to terminal slot 2 using right hand.</p></div><div><p>4. After insertion, push the lock of insertion jig using left thumb and then hold the wires and gently pull-out the connector from the jig using right hand.</p></div></div>		n/a	<p>Important reminders/Note/s:</p> <p>1. Please hold the wire near terminal during insertion.</p> <p>2. Insertion of wire must be inserted.</p> <p>3. Make sure wires are properly inserted.</p> <p><u>Conduct Pull-Push-Pull-Push after insertion.</u></p> <p>Do not exert extra force.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-CNC-017 for Wire and Strip length Tolerance</p> <p>2. Please refer to GL-PRO-ASSY-029 for Pull-Push procedure.</p> <p>1. No wrong use of connector</p> <p>2. No damaged connector</p> <p>3. No wrong insertion</p> <p>4. One by one insertion</p> <p>5. No deformed terminal</p> <p>6. No wrong wire facing</p>

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4 of 8**PARTS:**

1. Assy parts

JIG:

1. Locking jig

NO.**PROCESS NAME****WORK PROCEDURE/ ILLUSTRATION****TOOLS/PPE****QUALITY POINTERS**

4

P1

Connector lock



1. Put the connector into locking jig using right hand. Then press to lock **2x** using both hands.



2. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.

**BEFORE PRESSING****AFTER PRESSING**

Check the double lock deformation

LOCKING JIG**Important reminders/Notes**

1. Manual locking may cause damaged connector lock

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

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PARTS:		1. Black corrugated tube (no slit) $\varnothing 7$ L=367 \pm 3mm 2 Black SV tube (Vinyl) $\varnothing 5$ L=73 \pm 3mm		JIG:	1. Terminal cover jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P1 Wire insertion to Black corrugated tube (no slit) $\varnothing 7$ L=367 \pm 3mm	<div><p>1. Get the terminal cover jig using right hand then insert the G-B/W wires using left hand.</p></div> <div><p>2. Get the Black corrugated tube (no slit) $\varnothing 7$ L=367\pm3mm using right hand then insert the G-B/W wires using left hand.</p></div> <div><p>3. After insertion, remove the terminal cover jig using right hand.</p></div>		<div>TERMINAL COVER JIG</div> 	1. Use the provided locking jig per model 2. No unlock/half-locked connector
6	P1 Wire insertion to Black SV tube (Vinyl) $\varnothing 5$ L=73 \pm 3mm	<div><p>1. Get the Black SV tube (Vinyl) $\varnothing 5$ L=73\pm3mm using right hand then insert the wires using left hand.</p></div>		n/a	1. No wrong usage of parts 2. No deformed terminal

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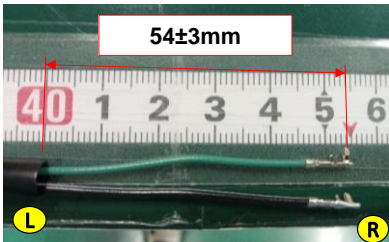
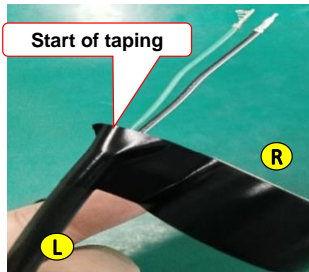
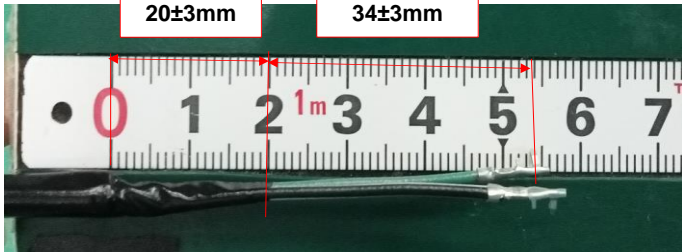

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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
7	P1 Taping 1 SV tube (Vinyl) to wire near terminal	 <p>54±3mm</p> <p>40 1 2 3 4 5 6</p> <p>L R</p> <p>1. Hold the SV tube (Vinyl) using left hand and measure from end of Black SV tube (Vinyl) up to terminal pointed tip 54±3mm.</p>  <p>Start of taping</p> <p>R L</p> <p>2. Hold the SV tube (Vinyl) using left hand. Get the Black tape using right hand and begin taping process using both hands.</p>  <p>20±3mm 34±3mm</p> <p>0 1 2 3 4 5 6 7</p> <p>L R</p> <p>3. After taping, check the measurement, terminal alignment and taping condition.</p>		 <p>MEASURING TAPE</p>	<p>Important reminders/Note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>Document references:</p> <p>1. Please refer to WI-PRO-ASY-001B for taping procedure.</p> <p>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 7. No insufficient tape</p>

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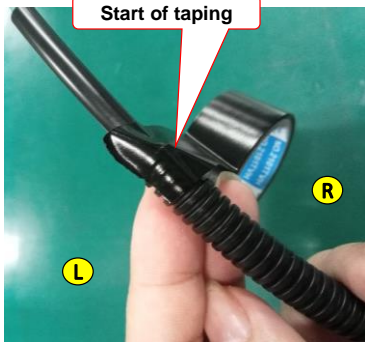

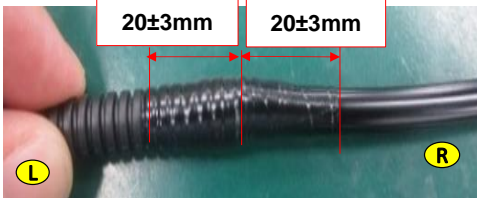

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PARTS:		1. Assy parts 2. Black tape		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
8	P1 Taping 2 Black Corrugated tube to Black SV tube (vinyl) near terminal	<div><p>1. Hold the COT Ø7 using left hand and fix the SV tube (Vinyl) using right hand.</p></div> <div><p>2. Hold the assy parts using left hand. Get the Black tape and start taping process using both hands.</p></div> <div><p>3. Hold the assy parts using left hand and measure COT up to terminal pointed tip 107±3mm.</p></div> <div><p>4. After taping, check the measurement and taping condition.</p></div>		<div>MEASURING TAPE</div> 	<p>Important reminders/Note/s:</p> <ol style="list-style-type: none">1. Please use calibrated/verified measuring tape when getting the measurement.2. Must be no gap between COT and Vinyl tube. <p>Document references:</p> <ol style="list-style-type: none">1. Please refer to WI-PRO-ASY-001B for taping procedure. <ol style="list-style-type: none">1. No flip-out tape2. No peel-off tape3. No loose tape4. No missing tape5. No wrong use of tape6. No wrong dimension7. No insufficient tape

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PARTS:

1. Assy parts

JIG:

n/a

VISUAL INSPECTION/ QUALITY CHECKPOINTS

TAPING - P1

A7445C1



① No **Unlocked/ Half-locked connector**

③ No **Terminal Backing Out**

② No **Wrong Insert**

④ ⑤ No **Missing Tape**

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