



WORK INSTRUCTION

Process Name/Title:

CLAMP ASSEMBLY PROCESS

Effectivity Date:

November 30, 2023

Model code/Part number:

382D / 7N0185-7020B

Customer:

TRJ

Car Model:

TOYOTA-CAMRY

Validity Date:

n/a

Purpose:

☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Document No.:

WI-ENG-PDE-766

Revision No.:

1

Page No.:

1 of 7

PARTS:

1. Assy parts

2. Clamp 82711-48210 (B)

3. Clamp 82711-34490 (B)

4. Clamp 82711-33650 (B) (UNIQUE PARTS)

5. Black tape (3 pcs.)

JIG:

1. Clamp Assembly Jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

TOOLS/PPE

QUALITY POINTERS

1

P2

TABLE LAY-OUT

TABLE LAY-OUT

Clamp 82711-34490 (B)

Clamp 82711-33650 (B)

Clamp 82711-48210 (B)

Assy parts

Master sample with holder

Clamp assembly jig

Black tape with tape holder

Bando gun

Safety Instruction

Be sure to wear required 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
3. No wrong position of parts/tools

Revision History

Prepared by

Reviewed by

Approved by

Noted by

11/30/2023 1 Correction in Quality pointers in Connector from "2 connector change to 1 connector".

A.Hernandez C.Villanueva A. Arañes n/a

11/24/2023 0 Initial issue

A.Hernandez C.Villanueva A. Arañes n/a

Eff. Date Rev. No Details of Change

Revised Reviewed Approved Noted

Est. Date:

November 24, 2023

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2 of 7

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JIG:

1. Clamp Assembly jig

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

2

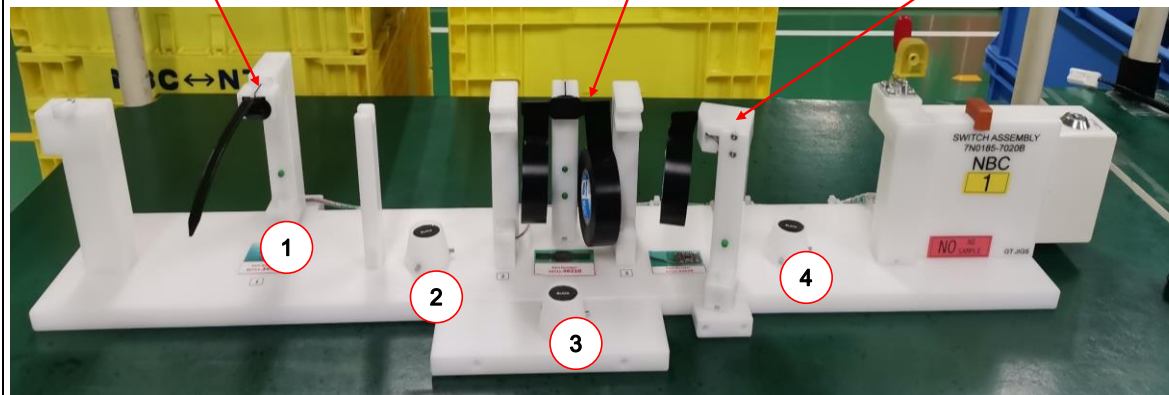
P2

Clamp setting

82711-34490 (B)

82711-48210 (B)

82711-33650 (B)



1. Get 1pc. of clamp **82711-34490 (B)** using right hand and set to clamp location **1** using both hands.

2. Get 1pc. of clamp **82711-48210 (B)** using right hand and set to clamp location **2 and 3** using both hands.

3. Get 1pc. of clamp **82711-33650 (B)** using right hand and set to clamp location **4** using both hands.

4. Initially attach **Black tape** to clamp location **2, 3 and 4** using both hands.

1. No wrong use of parts
2. No wrong use of tape
3. No damaged clamp
4. No wrong clamp position

Important reminders/Note/s:

1. Please check the Clamp first before start of assembly to avoid wrong use of clamp.

One side tape under clamp



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Page No.:

3 of 7

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3. Clamp 82711-34490 (B)

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5. Black tape (3 pcs.)

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1. Clamp Assembly jig

NO.

PROCESS NAME

WORK PROCEDURE/ ILLUSTRATION

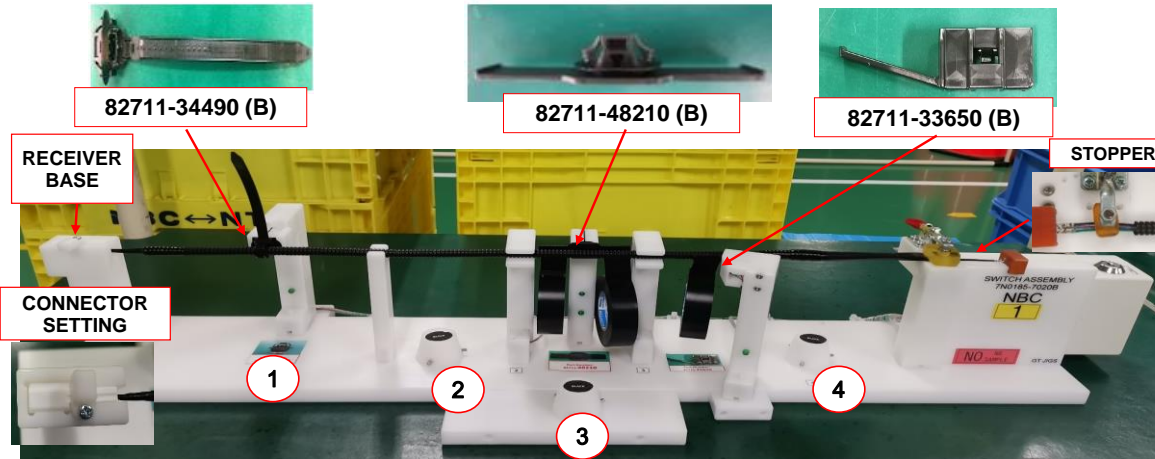
TOOLS/PPE

QUALITY POINTERS

3

P2

Clamp Assembly



1. Put the assy into jig. (See above picture for the correct setting). First, set the connector 6098-3802 (W) to Receiver base 1. Continue to set the harness in jig. Last, set B-B wires together within stopper then press by toggle clamp.

2. Check if all LED light for POWER and CLAMP ON was ON. If encountered abnormality, STOP and immediately CALL the attention of the leader. WAIT for further instruction and continue the process. Continue if the sequence light in location 1 is ON.

3. Initially tighten the band clamp on location 1 using both hands.

4. Get the bando gun using right hand then cut the band clamp on location 1 using both hands. Press the SW button after cut. Continue the process if sequence light on clamp location 2 was ON.

PROPER CUTTING POSITION OF BANDO GUN

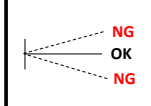


IMPROPER CUTTING POSITION OF BANDO GUN

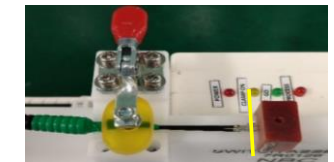


Note: Setting of band clamp cutter depends on the size of the COT/Vinyl tube.
For: ø5 - 1~2, ø7 - 3~4

PERPENDICULARITY



Fixed setting of band clamp cutter: 1~2



Important reminders/Note/s:
1. Make sure no gap between stopper and terminals

1. No loose attachment of clamp
2. No damaged clamp
3. No missing parts

BANDO GUN ILLUSTRATION



BANDO GUN



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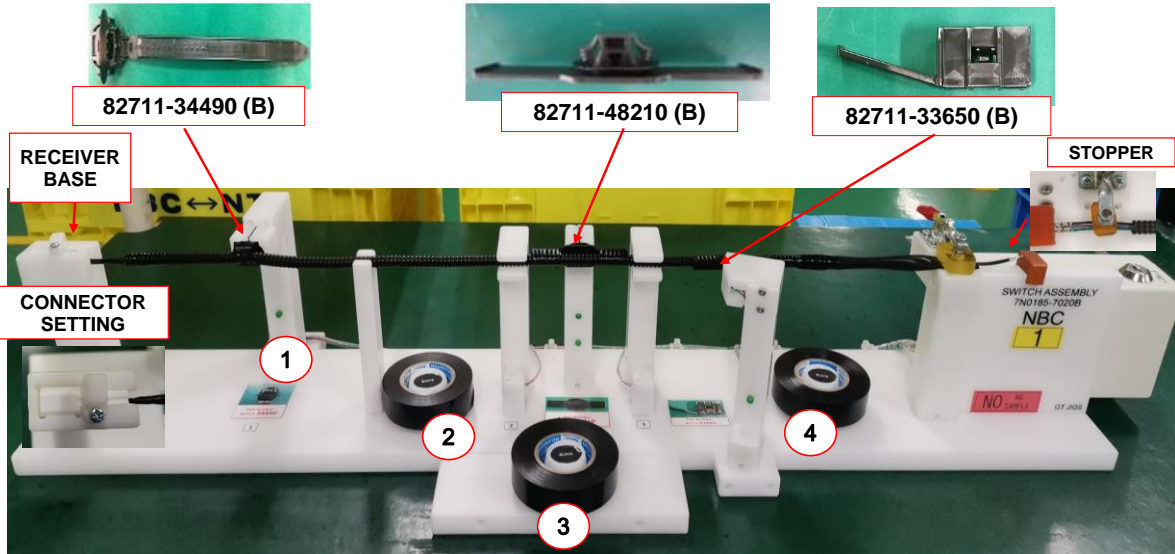

☒ MASSPRO

Revision No.:

1

Page No.:

4 of 7

PARTS:		1. Assy parts 2.Clamp 82711-48210 (B) 3.Clamp 82711-34490 (B) 4.Clamp 82711-33650 (B) (UNIQUE PARTS) 5. Black tape (3 pcs.)		JIG:	1. Clamp Assembly jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
3	P2 Clamp Assembly (Continuation)	<div></div> <div>5. Hold the tape on clamp location 2. Make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if sequence light in clamp location 3 was ON.</div> <div>6. Hold the tape on clamp location 3. Make 3 windings of tape then cut the tape using both hands. Press the SW button after taping. Continue the process if sequence light in clamp location 4 was ON.</div> <div>7. Hold the tape on clamp location 4. Make 3 windings of tape then cut the tape using both hands. Press the SW button after taping.</div> <div>8. After taping, CONDUCT POINT CHECKING before removing the harness from jig.</div>		<div></div> <div>Important reminders/Note/s: 1. Make sure no gap between stopper and terminals</div> <div>1. No wrong use of parts 2. No wrong use of tape 3. No damaged clamp 4. No wrong clamp position</div>	

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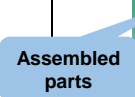









☐ PROTOTYPE☐ PRE-LAUNCH☒ MASSPRO

Revision No.:

1

Page No.:

5 of 7

PARTS:		1. Assy parts 2. Master sample	JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
4	P2 Visual/By Two's Inspection	<div><p>ACTUAL PRODUCT</p><p>Master sample</p><p>Assembled parts</p></div> <p>1. Conduct alignment of harness (Master sample vs. Assembled parts) using both hands.</p> <p>2. Check the connector lock condition, insertion, terminal and taping condition.</p> <p>3. Check the presence of clamp attachment, taping condition and color of tape.</p> <p>4. Check the Taping condition. Conduct slightly bending to avoid overlook of missing tape.</p> <p>5. Check the terminal. Must no deformed terminal.</p>		1. No skip checking during inspection. MASTER SAMPLE 

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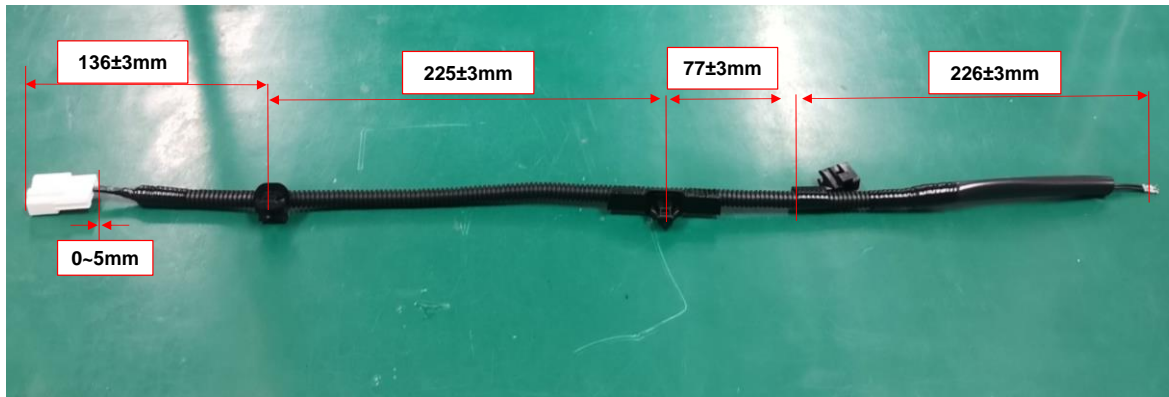

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Revision No.:

1

Page No.:

6 of 7

PARTS:		n/a		JIG:	n/a
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION		TOOLS/PPE	QUALITY POINTERS
5	P2	Measurement	 		<p>1. No wrong dimension</p> <p>Important reminders/Note/s:</p> <p>1. Please use calibrated/verified measuring tape when getting the measurement.</p> <p>2. For Hatsumono and Owarimono.</p> <p>Document reference/s:</p> <p>1. Refer to WI-PRO-ASY-056 for Sub assembly Hatsumono, Nakamono, and Owarimono Inspection.</p>

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7 of 7

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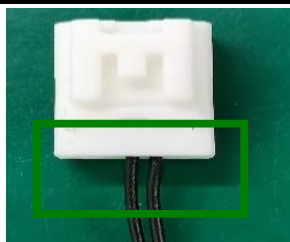
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QUALITY CHECKPOINTS

P2

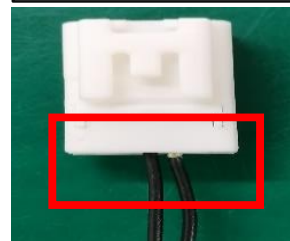
7N0185-7020B



GOOD



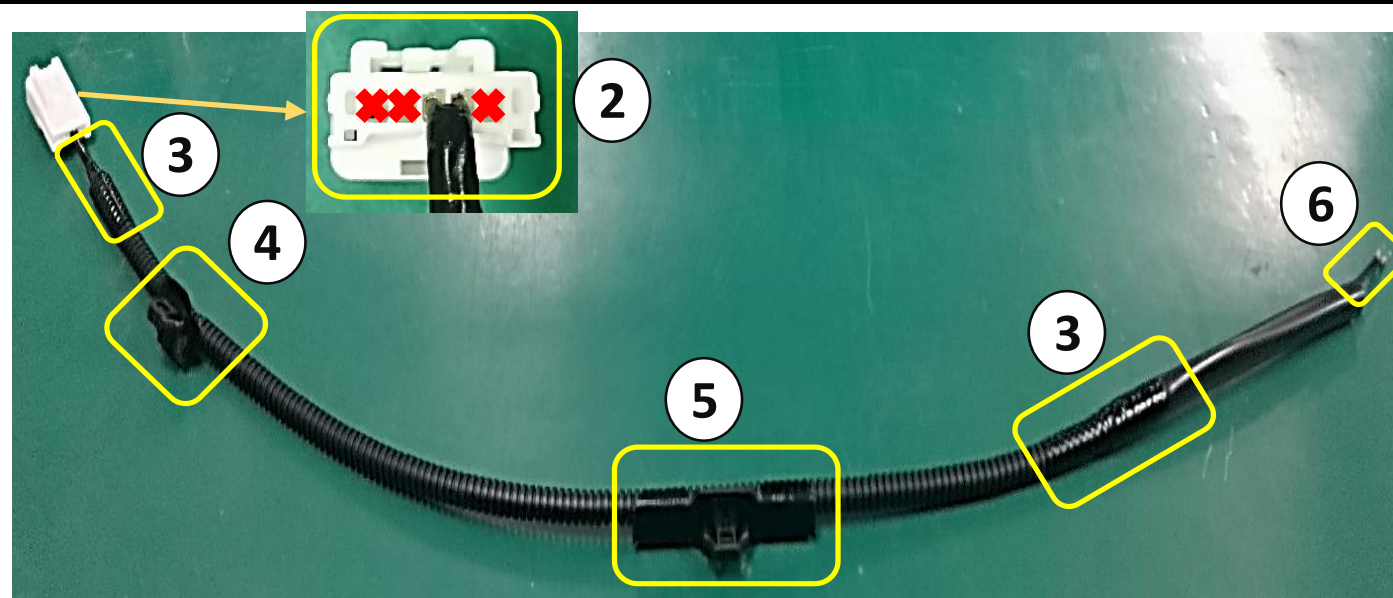
GOOD



NO GOOD



NO GOOD



1 No Unlock/Halflock Connector
(on 1 connector)

2 No Wrong Insert
(on 2 connector)

3 No Missing Tape
4 No Missing of Clamp
5

6 No Deformed Terminal

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