-										Effec	tivity Date:		May 10, 202	4
			Process Name/Title:		TAPING	S ASSEMBLY PROC	ESS			Valid	ity Date:		n/a	
			Model code/Part number:	840B /	75Q943-0050	Customer: TRJ	Car Model:	TOYO	TA SIEN	TA Docu	ment No.:		WI-ENG-PDE-	336
			Purpose:	PROTOTY	PE	PRE-LAUNCH	MASS	PRO		Revis	sion No.:	5	Page No.:	1 of 13
	1											<u> </u>		
PARTS:		1. Conr	nector PBVP-10V-S (W) [2	2pcs]							JIG:	1. Insertior	n jig	
N	0.	P	ROCESS NAME		WORK PI	ROCEDURE/ ILLUSTR/	ATION				TOOLS/PPE	(QUALITY POIN	ITERS
	1	P1	Connector setting to insertion jig PBVP-10V-S (W)	Insertice 2. Pres	Upper E Lower Button 1. Crar No 2 s the upper and lower grit are only open.		hand then i	r using rightnesert to inse	R t hand ertion jig.	For the control of	afety Instruction Be sure to wear rescribed person otective equipmed during operation gloves, finger cot etc.) Housekeeping Maintain and alw practice 5's. Personal things the workplace is rohibited. Keep it your locker. Alert level or any trouble, infe & Assembly Assis Supervisor or Lineader for immedia corrective action	al a	provided jig per n ig usage of parts g orientation of co aged connector	
					Revision History						Prepared by	Reviewed by	Approved by	Noted by
05/10/24		13. Upda	the folding facing due to impro- te Quality pointers. Change ha from Production to QC. Inclusion	and method (Process 3).	Change Electrical test docu	/Illustration of Process 5,7, 11- ument number due to transfer	D.Castillo	C.Villanueva	A. Arañes	n/a				
8/15/23	4	wire usin	work procedure of process 2 p g right hand and process 3 pro "Get the VM tube (Sunprene) u	cedure 1 from "Get the	VM tube (Sunprene) using le	ransfer to right hand" to "Get the eft hand transfer to the right o 2 layers navigation, and gray	A. Hernandez	J. Loterte	C. Villanueva	A. Arañes				
2/10/23		procedure/illustration. Include quality checkpoints (Page 14). D.Castillo J. Loterte Villan						C. Villanueva	A. Arañes	D. Castillo	C.Villanueva	A. vaão	n/a	
Eff. Date	Rev. No		Details of Change Revised Reviewed						Approved	Noted /	Est. Date:	September 10, 202	1	



			WORK IN	ISTRUCTION			Effectivity Date:		May 10, 2024	
		Process Name/Title:	TAPI	NG ASSEMBLY PR	OCESS		Validity Date:		n/a	
		Model code/Part number:	840B / 75Q943-0050	Customer: TRJ	Car Model: TOYOTA	SIENTA	Document No.:		WI-ENG-PDE-33	36
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO		Revision No.:	5	Page No.:	2 of 13
PARTS:	L=208±	S 0.3 P L=130±2mm; W/G 2mm; OR L=208±2nn; R/L Gray VM tube (Sunprene)		08±2mm; BR L=130±2mm	n; R/W L=208±2m; GR L=130±	-2mm; LG	JIG:	1. Insertion	jig	
NO.	Р	ROCESS NAME	WORK	PROCEDURE/ ILLUS	STRATION		TOOLS/PPE	(QUALITY POINT	TERS
2	P1	Wire insertion to Connector PBVP-10V-S (W)	1. Get the P wire using left hand and the process for W/G-G-B/W-BR-R/W-GR-Note: Follow the insertion sequence to	1 2 3 4 P W/G G B/W 130 130 130 208	BR R/W GR LG (1) 130 208 130 208 2	9 10 OR R/L 208 208		2. No wron 3. One by 0 4. No wron 5. No defor 6. No stuck Importa 1. Please during ins 2. Make s Conduct Insertion. Do not ex Docume 1. Refer to and Strip	med terminal to of terminal tip Int reminders/N hold the wire near vertion. Intervention are properated to the solution of t	lote/s: terminal erly inserted. Push after 44 for Steering fure.
3		Wire insertion to Dark Gray VM tube (Sunprene) Ø8 L=85±2mm	L		1. Get the Dark tuber (Sunpren L=85±2mm usin hand. Hold the v using left hand a the wires using r	ne) Ø8 ng right wires and insert	N/A		g usage of parts med terminal ed wires	



	_		W	ORK INSTRUCTION		Effectivity Date:		May 10, 2024	
		Process Name/Title:		TAPING ASSEMBLY PRO	CESS	Validity Date:		n/a	
		Model code/Part number:	840B / 75Q943	3-0050 Customer: TRJ	Car Model: TOYOTA SIENTA	Document No.:		WI-ENG-PDE-3	36
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	5	Page No.:	3 of 13
PARTS:	1. AVS	S 0.3 V L=130±2mm; B L=1	130±2mm; Y L=130±2mm; GR/	/B L=130±2mm; R L=130±2mm		JIG:	1. Insertior	n jig	
NO.	F	ROCESS NAME		WORK PROCEDURE/ ILLUST	RATION	TOOLS/PPE	(QUALITY POIN	TERS
4	P1	Wire insertion to Connector PBVP-10V-S (W)	1. Get the V wire using rig Check the wire after insert	1 2 3 4 V B Y 130 130 130 Note: Hole are only of	eat the process for B-Y-GR/B-R.		2. No wron 3. One by 4. No wron 5. No defo 6. No stuci Importa 1. Please during ins 2. Make 3 Conduct insertion. Do not ex Docum 1. Refer Navigatio 2. Refer tand Strip	ant reminders/I hold the wire neasertion. sure wires are properties are extra force. ent References to WI-ENG-PDE-Con Controller proceduce Wi-PRO-CNC-0 Length Tolerance to GL-PRO-ASY-0	Note/s: In terminal Deerly inserted. In the property inserted. In the



			WORK INS			Effectivity Date:	May 10, 2024
		Process Name/Title:	TAPIN	G ASSEMBLY PROC	CESS	Validity Date:	n/a
		Model code/Part number:	840B / 75Q943-0050	Customer: TRJ	Car Model: TOYOTA SIENTA	Document No.:	WI-ENG-PDE-336
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	5 Page No.: 4 of 13
PARTS:	1. Blad	k VM tube (Sunprene) Ø8				JIG:	1. Insertion jig
NO.	I	PROCESS NAME	✓₅\ WORK P	PROCEDURE/ ILLUSTR	ATION	TOOLS/PPE	QUALITY POINTERS
5	P1	Wire insertion to Black VM tube (Sunprene) Ø8 L=85±2mm	1. Get the Black VM tube (Sunprene) & L=85±2mm using right hand. Hold the wusing left hand then insert the wires.	OB.0 OB.0 OB.0 OB.0 OB.0 OB.0 OB.0 OB.0	2. Press the Upper button using left hand. Remove the 1st connector with inserted wires and Dark Gray VM tube (Sunprene) using right hand Press the upper guide using left and and press the lower button using left hand. Holes that need to be insert re only open. Check the wire insertion condition. Jote: Second connector with inserted wire and Black Sunprene ube will stay in the jig.		1. No wrong usage of parts 2. No deformed terminal 3. No tangled wires Terminal tip must be visible Document References: 1. Refer to GL-PRO-ASY-025 for Inspection Standard for Coupler Insertion.
6		Wire insertion to assy parts	R	75Q943-0050 J1-			No wrong use of parts No deformed terminal No tangled wires

			WORK INS	TRUCTION	Effectivity Date:	May 10, 2024			
		Process Name/Title:	TAPIN	G ASSEMBLY PRO	CESS	Validity Date:		n/a	
		Model code/Part number:	840B / 75Q943-0050	Customer: TRJ	Car Model: TOYOTA SIENTA	Document No.:		WI-ENG-PDE-3	36
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	5	Page No.:	5 of 13
PARTS:	1. Assy	parts	^		JIG:	1. Insertion	n jig		
NO.	F	PROCESS NAME	<u> </u>	PROCEDURE/ ILLUSTR	RATION	TOOLS/PPE	(QUALITY POINT	ΓERS
7	P1	Wire insertion to Connector PBVP-10V-S (W)	INSERTION SEQUENCE FROM LEFT TO RIGHT 1 2 3 4 5 6 7 8 9 10 1 R 1 Hold the B/W wire using right hand a using right hand. Repeat the process o Note: Follow the insertion sequence bath	1 2 3 4 V B B/W Y 130 130 208 130 R and support the wire by left in R/W-LG-OR-R/L wires. C	Wire facing 5 6 7 8 9 10 R/W GR/B LG OR R/L R 208 130 208 208 208 130 L	STEERING NAVIGATION(2 layer) CONTROLLER	1. Use pro 2. No wror 3. One by 4. No wror 5. No defo 6. No stuc 7. No tang 8. No wror Importa 1. Please insertion. 2. Make Conduct insertion. Do not ei Docum 1. Refer Navigatic 2. Refer 3. Refer 3. Refer Inspection	ovided jig per model ng usage of parts one insertion ng insertion or med terminal the office of the control of	Note/s: r terminal during perly insertedPush after 3: 44 for Steering dure. 17 for Wire and 128 for Pull-Push upler Insertion.

				WORK INS					Effectivity Date:		May 10, 2024	
		Process Name/Title:			G ASSEMBL				Validity Date:		n/a	
		Model code/Part number:	840B /	75Q943-0050	Customer:	TRJ	Car Model:	TOYOTA SIENTA	Document No.:		WI-ENG-PDE-3	36
		Purpose:	PROTOTYP	E	PRE-LAUNCH		MASSPE	RO	Revision No.:	5	Page No.:	6 of 13
PARTS:	1. Assy	<i>r</i> parts							JIG:	N/A		
NO.	F	PROCESS NAME		WORK P	ROCEDURE/ II	LLUSTR	ATION		TOOLS/PPE		QUALITY POIN	TERS
8	P1	Wire arrangement	Terminal tip is not visible		BEFORE F	1. Hold		s using both hands rangement.	N/A	1. No defor 2. No tangl 3. No wrong	rmed terminals led wires ig facing	
				AFTER FO	OI DING							



			WOR	RK INSTRUCTION		Effectivity Date:		May 10, 2024	
	AL	Process Name/Title:		TAPING ASSEMBLY PRO	CESS	Validity Date:		n/a	
		Model code/Part number:	840B / 75Q943-0	0050 Customer: TRJ	Car Model: TOYOTA SIENTA	Document No.:		WI-ENG-PDE-3	36
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	5	Page No.:	7 of 13
PARTS:	1. Con	nector 1746872-1 (B)				JIG:	1. Insertior	n jig	
NO.	F	PROCESS NAME	W	ORK PROCEDURE/ ILLUST	RATION	TOOLS/PPE	(QUALITY POIN	ΓERS
9	P1	Connector setting to insertion jig 1746872-1 (B)	INSERTION JIG	R	2-1 (B) and insert to insertion jig rientation 2. Press the upper guide using left hand. Holes that need to be insert are only open.	N/A	2. No wror 3. No wror 4. No dam CONNE 17468 Import 1. Autificalty connected	CONNECTOR ILLUST NG B72-1 (B) 137 Fant reminders/ Patically dispose an acce encountered be of insertion and he	PEARANCE NG ALF-LOCKED TRATION Office 1 (B) Note/s: and replace the end terminal, alf-locked

			WORK INS	STRUCTION		Effectivity Date:	T	May 10, 2024	
		Process Name/Title:	TAPIN	NG ASSEMBLY PRO	CESS	Validity Date:	1	n/a	
		Model code/Part number:	840B / 75Q943-0050	Customer: TRJ	Car Model: TOYOTA SIENTA	Document No.:		WI-ENG-PDE-3	36
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	5	Page No.:	8 of 13
PARTS:	1. Assy	parts				JIG:	1. Insertion	n jig	
NO.	F	ROCESS NAME	WORK I	PROCEDURE/ ILLUST	RATION	TOOLS/PPE		QUALITY POIN	TERS
10	P1	Wire insertion to Connector 1746872-1 (B)	INSERTION SEQUENCE FROM LE 2ND ROW 1ST ROW 1 6 7 2 3 1. Insert first the wires from Black VM Hold the R wire and insert to terminal s Repeat the process for Y-V-B wires. Note: Follow the insertion sequence be stated above.	BLACK VM TUBE So RIGHT) Results to the second sec		N/A	2. No wror 3. One by 4. No wror 5. No defo 6. No stuc Importa 1. Autom unit if one difficulty oconnecto 2. Make s Conduct insertion. Do not ex 3. Please during ins Docum 1. Refer t Inspectio 2. Refer t Navigation	sure wires are prop Pull-Push-Pull- vert extra force. In hold the wire near sertion. ent reference/s to GL-PRO-ASY-0 in Standard for Cou- to WI-ENG-PDE-04 in Controller proces to GL-PRO-ASY-0 ito GL-PRO-ASY-0 ito GL-PRO-ASY-0 ito GL-PRO-ASY-0 ito GL-PRO-ASY-0 ito GL-PRO-ASY-0	d replace the nd terminal, if-locked rerly inserted. Push after rerminal 25 for upler Insertion.



				WORK INSTRUCTION			Effectivity Date:		May 10, 2024	<u> </u>
		Process Name/Title:		TAPING ASSEMB	LY PROC	CESS	Validity Date:	+	n/a	
		Model code/Part number:	840B / 75Q9	943-0050 Customer:		Car Model: TOYOTA SIENTA	Document No.:	1	WI-ENG-PDE-3	36
		Purpose:	PROTOTYPE	PRE-LAUNCH	1	MASSPRO	Revision No.:	5	Page No.:	9 of 13
PARTS:	1. Assy	parts					JIG:	1. Insertior	n jig	
NO.	F	ROCESS NAME		WORK PROCEDURE	/ ILLUSTR	ATION	TOOLS/PPE	(QUALITY POIN	TERS
10	P1	Wire insertion to Connector 1746872-1 (B) (Continuation)	slot 6 using right hand. Re	g right hand and support the wippeat the process for BR wire sequence based on the above	4. Hold th slot 8 usir for GR-P Note: Folion the illu	ne G wire and insert to terminal ng right hand. Repeat the process wires.	N/A	2. No wron 3. One by 4. No wron 5. No defo 6. No studi 1. Automainit if one difficulty of connecto 2. Make s Conduct insertion. Do not ex 3. Please during ins Docume 1. Refer t Inspectio. 2. Refer t Navigatio	sure wires are prop Pull-Push-Pull- vert extra force. In hold the wire near sertion. eent reference/s to GL-PRO-ASY-0 in Standard for Cou- to WI-ENG-PDE-04 in Controller process to GL-PRO-ASY-0 in GL-PRO-ASY-0	note/s: d replace the nd terminal, lif-locked perly insertedPush after r terminal 25 for upler Insertion. 44 for Steering dure.



			WORK II	NSTRUCTION			Effectivity Date:	$\overline{}$	May 10, 202	4
		Process Name/Title:		PING ASSEMBLY PRO		Validity Date:	+	n/a	•	
	H	Model code/Part number:	840B / 75Q943-005			OYOTA SIENTA	Document No.:	+	WI-ENG-PDE-	336
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO		Revision No.:	5	Page No.:	10 of 13
PARTS:	1. Assy	parts	^				JIG:	N/A		
NO.	F	PROCESS NAME	5 WOR	K PROCEDURE/ ILLUS	TRATION		TOOLS/PPE	(QUALITY POIN	TERS
11	P1	Wire Arrangement	1. Hold the harness using both har Folding in the back CORRECT FACING Folding in the front WRONG GOOD Connector lock Folding	FACING NG FAC	Terr	Terminal tip is not visible Terminal tip is not visible rminal tip is visible minal tip is visible	n/a	2. No tang	ng orientation of co led wires ng harness facing	onnector



				NSTRUCTION		Effectivity Date:		May 10, 2024	į.
		Process Name/Title:	TAP	ING ASSEMBLY PR	OCESS	Validity Date:		n/a	
		Model code/Part number:	840B / 75Q943-005	0 Customer: TRJ	Car Model: TOYOTA SIEN	Document No.:		WI-ENG-PDE-3	36
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	5	Page No.:	11 of 13
PARTS:	N/A		Λ			JIG:	N/A		
NO.	ı	PROCESS NAME	∑5\ WORF	K PROCEDURE/ ILLUS	TRATION	TOOLS/PPE		QUALITY POIN	TERS
			locking of connector is included in Steering electrical test.	2. Check the wire alignment. Make sure no tangled wires.		Check the orientation of arness.	2. No Tan	ng facing of harnes gled wires sing parts	
12	P1	Visual/By two's inspection		Dark Gray VM tube (Sunpress) 5. Com	mpare to Master Sample by tapping. Master Sample Assembly product	NEW LINE 2	Docui	ment reference or to WI-ENG-PDE-cal Test after assert	/s: 252 for Steering

				STRUCTION		Effectivity Date:		May 10, 2024	
		Process Name/Title:		IG ASSEMBLY PRO		Validity Date:		n/a	
		Model code/Part number:	840B / 75Q943-0050	Customer: TRJ	Car Model: TOYOTA SIENTA	Document No.:		WI-ENG-PDE-33	36
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	5	Page No.:	12 of 13
PARTS:	N/A					JIG:	N/A		
NO.	F	ROCESS NAME	<u>∕</u> 5∖ WORK	PROCEDURE/ ILLUSTI	RATION	TOOLS/PPE	(QUALITY POINT	TERS
13	P1	Measurement	20±3mm	142±3m	3mm	ING TAPE CHARLES AND A SECOND CONTRACTOR OF THE SECOND CONTRACTOR OF T	1. Pleas tape wh 2. For H. Owarim Docum 1. Refer assembl Owarimo	ant reminders and the use calibrated/ve en getting the mea latsumono, Nakamono. The ent reference/s to WI-PRO-ASY-On y Hatsumono Naka ono Inspection g dimension	erified measuring surement. ono and :: 5: 56 for Sub-

	WORK INSTRUCTION				Effectivity Date:	May 10, 2024		
Proce	Process Name/Title: TAPING ASSEMBLY PROCESS				Validity Date:	n/a		
Mode	el code/Part number: 840B	/ 75Q943-0050	Customer: TRJ Car Model: TOYOTA S		Document No.: WI-ENG-PDE-3		36	
Purpo	oose: PRO	TOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	5	Page No.:	13 of 13
PARTS: N/A			٨		JIG:	N/A		
5 QUALITY CHECKPOINTS								
75Q943-0050 1. Check the								
1. Check the connector lock, should be unlock. 2. Check the wire alignment. Make sure no tangled wires. Black VM Tube (Sunprene)								
3. Check the terminal if with backing								
terminal.	serted) or deformed	4. Check the harness.	e orientation of	5. Check if no r	missing parts.			