	_				WORK IN	ISTRUCTION				Effec	ctivity Date:			October 22, 20)24
			Process Name/Title:		TAPIN	NG ASSEMBLY PROC	CESS			Valid	lity Date:			n/a	
			Model Code/Part number	550B	/ 7L0061-7023	Customer: TRJ	Car Model:	тоуота-	-HIGHLAND	ER Docu	ıment No.:			WI-ENG-PDE-0	17A
			Purpose:	PROT	OTYPE	PRE-LAUNCH	MASSF	PRO		Revi	sion No.:		9	Page No.:	1 of 14
PARTS:		L=30±3r		(W); Black VM to		corrugated tube (no slit) ø5 L=27 £3mm; AVSSf 0.3 B L=565±3mn					JIG:	2. I	Insertion j Insertion j Locking ji		t Switch cover
NC).	PF	ROCESS NAME		WORK	PROCEDURE/ ILLUSTR	ATION				TOOLS/PPE			QUALITY POIN	TERS
1		P1	Table lay-out	co	Insertion jig B sertion jig C Locking jig AV	4 4	k SV Tube (Viny d5 L=30±3mm	Black Cor (N Ø5 L=3	onnector 6098- 3802(W)/ connector tray prugated tube lo slit) 342±3mm be (Sunprene) 06±3mm	p du	Be sure to wear prescribed persona rotective equipme ring operation (glo finger cots, etc.) Housekeeping Maintain and alwa practice 5's. Personal things on orkplace is prohibit (eep it in your lock) Alert level or any trouble, infone Assembly Assistate pervisor or Line Lear immediate correct action.	al 1. I 2. I	No dama	usage of parts ged rubber seal reference/s: WI-PRO-CNC-017 for rance	Wire and Strip
		1			Revision History				T T		Prepared by	Review	wed by	Approved by	Noted by
10/22/24	9		al Work procedure/Illustration a r 6098-2220 (W)).	nd notes on page	4-5 as countermeasure for the	e customer claim (Broken lock of	D. Castillo	C. Villanueva	A. Arañes	n/a					
07/26/23	8		emplate; Inclusion of CAR MOI . Changed Wire color location to			ocking process of connector 6098-	M. Ariola	J. Loterte	Villanueva	A. Arañes	0	1//	<u>ار ، ال</u>	Alax	
03/22/23		Correctio	on of Work procedure/Illustration	, ,			D. Castillo	J. Loterte	Villanueva	A. Arañes	D. Castillo	C. Villa		A. Areñes	n/a
Eff. Date	Rev. No]		Deta	ails of Change		Revised	Reviewed	Approved	Noted	Est. Date:	October 4,	, 2019		

				WO	RK INST	TRUCTION			Effectivity Date:		October 22,	, 2024
		Process Name/Title:		T	APING	ASSEMBLY PR	OCE	SS	Validity Date:		n/a	
		Model code/Part number:	550B	/ 7L0061-7	023	Customer: TRJ	1	Car Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE	E-017A
		Purpose:	PRO	OTOTYPE	[PRE-LAUNCH		MASSPRO	Revision No.:		9 Page No.:	2 of 14
									<u>I</u>			
PARTS:	1.Conr	ector 6098-2220 (W)								JIG	Insertion jig with switch	ch cover
NO.	F	ROCESS NAME		W	ORK PR	ROCEDURE/ ILLUS	3TRA	TION	TOOLS/	PPE	QUALITY PO	INTERS
2	P1	Connector setting to insertion jig 6098-2220 (W)	Visual ret	ertion Jig with Switch COR-wire eference R insertion jig lock	L L 2. Ge	Insertion Jig Orient: Press Let the connector 6098-2222 Release the lock after insertions of the connector for the co	Lock Lation R 20 (W) ustion.	Connector Orientation Release Release sing right hand and insert to insertion	n/a		I-mark is align 1	hole is open I hole is open

					WORK INSTE	RUCTIO	V				Effectivity Date:			October 2	2, 2024
		Process Name/Title:			TAPING A	ASSEM	BL'	Y PROC	ESS	1	Validity Date:			n/a	ı
		Model code/Part number:	550B	1	7L0061-7023	Custome	r: '	TRJ	Car Model: TOYOTA-HIGHL	ANDER	Document No.:			WI-ENG-PE	DE-017A
		Purpose:	☐ PI	ROTOTYPE		PRE-LAUN	ICH		MASSPRO		Revision No.:		9 F	Page No.:	3 of 14
PARTS:		of 0.3 Y L=353±2mm of 0.3 OR L=353±2mm										JIG	1. Insetion	n jig with swi	tch cover
NO.	P	ROCESS NAME			WORK PRO	CEDUR	E/I	LLUSTRA	ATION		TOOLS/F	PPE	QU	JALITY P	OINTERS
3	P1	Wire insertion to Connector 6098-2220 (W)	L 3. Get th	using right	Yellow R		L. After sing in the spends of	er insertion, p	Y wire press the button the slot for OR wire will be R ush the lock using left d the wires and connector from jig		n/a		2. No wroi 3. One by 4. No defo 5. No wroi 1. Pleas termina 2. Make inserted after ins Do not a Docume 1. Refer Push pro 2. Refer	e sure wires d. t Pull-Pusl sertion. exert extra f ent reference to GL-PRO- ocedure. to WI-PRO-	on nal rs/Note/s: vire near s are properly h-Pull-Push force.

				WORK INSTRU	UCTION			Effectivity Date:		October 22	2, 2024
		Process Name/Title:		TAPING A	ASSEMBLY PROC	ESS		Validity date		n/a	
		Model code/Part number:	550B /	7L0061-7023	Customer: TRJ	Car Model:	TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PD)E-017A
		Purpose:	PROTO	TYPE	PRE-LAUNCH	MASS	PRO	Revision No.:		9 Page No.:	4 of 14
								ı			
PARTS:	1. Assy	parts							JIG	1. Locking jig	
NO.		PROCESS NAME		WORK PRO	OCEDURE/ ILLUSTR	ATION		TOOLS/	PPE	QUALITY PO	DINTERS
4	P1	Connector lock	2. Hold the ass connector touch	Sensor	NG RETAINER SENSOR insert into connector lockin heard if properly lock.	R S S S S S S S S S S S S S S S S S S S		g jig. ocked condition STEP 2 Make sure the		1. Please ensure that lock/retainer will not to object prior insertion in avoid half-lock connect. Maintain 10mm projure to connector slot. 4. Make sure no offset locking process. 5.No wrong setting of 6. No damaged conne. No unlocked/ half-locking process. Important reminders/Note/1. Incomplete lock will alarm the jig. 2. No retainer in container in container in continue the process.	puch or hit by any noto locking jig to ctor. per holding of fully inserted to at setting before connector. Sector lock backed connector. S: cting process connector abnomality, liately CALL be leader. Instruction and

					WORK INS	TRU	JCTION			Effectivity Date:			October 22	, 2024
		Process Name/Title:			TAPIN	G A	ASSEMBLY PRO	CI	ESS	Validity date			n/a	
		Model code/Part number:	550B	7	7L0061-7023		Customer: TRJ		Car Model: TOYOTA-HIGHLANDER	Document No.:			WI-ENG-PD	E-017A
		Purpose:	F	PROTOTYPE	E		PRE-LAUNCH		MASSPRO	Revision No.:		9	Page No.:	5 of 14
		<u> </u>								1			<u> </u>	
PARTS:	1. Assy	parts									JIG	1. Locki	ng jig	
NO.		PROCESS NAME			WORK F	PRO	CEDURE/ ILLUS	TRA	ATION	TOOLS/	PPE	Q	UALITY PO	DINTERS
4	<u>/</u> g	Connector lock (Continuation)		LD THE ANDLE	R SLIDE		C C C C C C C C C C C C C C C C C C C	PUL	2	t hand then gent back to original g. Note: Pull dow cked connector used on the	ocked e nector	lock/reta object p avoid ha 2. Maint wire to c 3. Connec 4. Make locking 5.No wr 6. No da 7. No ur Impo remii 1. Inco will ala 2. No canno 3. If e STOP the att WAIT	rior insertion in alf-lock connectation 10mm proponnector ector must be fitter state. It is sure no offset process. From setting of a maged connector enders/Note, omplete lock arm the jig. Incountered a pand immediatention of the	uch or hit by any to locking jig to tor. ber holding of ully inserted to setting before connector. ctor lock cked connector (s: ing process onnector abnomality, ately CALL eleader. estruction and

		T			WODI/ ING				I		T	
						STRUCTION	V DD 0.0	2500	Effectivity Date:		October 22,	2024
		Process Name/Title:				G ASSEMBI			Validity Date:		n/a	
	57	Model code/Part number:	550B		7L0061-7023	Customer:	TRJ	Car Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE	017A
		Purpose:	PRO	OTOTYP	Έ	PRE-LAUNCH		MASSPRO	Revision No.:		9 Page No.:	6 of 14
	,								•			
PARTS:	1. Assy 2. Black	parts corrugated tube (no slit) ø	5 L=279±3mm			3. Black SV	tube (Vinyl) ø	5 L=30±3mm		JIG	n/a	
NO.	P	ROCESS NAME			WORK P	ROCEDURE/	ILLUSTR	ATION	TOOLS/	PPE	QUALITY POI	NTERS
5		Wire insertion to Black corrugated tube (no slit) ø5 L=279±3mm			1. Get the corrugated tub hand then insert the Y-OF			R	n/a		No wrong usage of pa No deformed terminal	
6	P1	Wire insertion to Black SV tube (Vinyl) ø5 L=30±3mm			1. Get the Black SV tube (hand then insert the Y-Oi			R	n/a		No wrong usage of pa No deformed terminal	

					WORK II						Effectivity Date:			Octobe	r 22, 2024
		Process Name/Title:			TAPI	NG AS	SEMBL	Y PROC	CESS		Validity Date:			r	n/a
		Model code/Part number:	550B	1	7L0061-7023	C	ustomer:	TRJ	Car Model:	TOYOTA-HIGHLANDER	Document No.:			WI-ENG-	PDE-017A
		Purpose:	PF	ROTOTYF	E	☐ PF	RE-LAUNCH		MASSI	PRO	Revision No.:		9	Page No.:	7 of 14
												1	1		
PARTS:	1. Assy	parts										JIG	1. Inser	tion jig	
NO.	P	ROCESS NAME			WORK	PROCE	EDURE/	ILLUSTR	ATION		TOOLS	/PPE	C	QUALITY	POINTERS
7	P1	Connector setting to insertion jig 6098-3802 (W)	I-MARK Lock	the lock of	Guide Press of insertion jig		Proceedings of the lock.	NSERTION DRIENTATION PRIENTATION PRIENTATI	JIG	ide using left	n/a		I-marl al 1. Use 2. No w 3. No w	the provided vrong orienta vrong use of lamaged con	nnector

	_				WORK IN	STRUC	TION				Effectiv	vity Date:		Octobe	r 22, 2024	
		Process Name/Title:			TAPIN	IG ASS	SEMBL	Y PROC	ESS		Validity	y Date:		ı	n/a	
		Model code/Part number:	550B	1	7L0061-7023	Cu	stomer:	TRJ	Car Model	: TOYOTA-HIGHLAND	R Docum	nent No.:		WI-ENG-	-PDE-017A	
		Purpose:	☐ PR	ROTOTYPE		☐ PRE	E-LAUNCH		MASS	SPRO	Revision	on No.:		9 Page No.:	8 of 14	
		I												<u> </u>		
PARTS:	1. Assy 2.Black	parts VM tube (Sunprene) ø5 L=	106±3mm			3. /	AVSSf 0.3	3 B L=565±3m	m [2pcs.				JIG	1. Insertion jig		
NO.	P	ROCESS NAME			WORK I	PROCE	DURE/	ILLUSTRA	ATION		1	TOOLS/	PPE	QUALITY	POINTERS	
8	P1	Connector setting to insertion jig (Assy part)			Yellow R Ind hold the Y wire It slot 1 using right Orange			Presented insert to tend.	K	2. After insertion of Y wire press the button using right hand. Slot for OR wire will be opened. 4. After insertion, push th 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 insertic 2. No wrong insertic 3. One by one inse 4. No deformed ter 5. No wrong wire fa Important remina 1. Please hold the terminal. 2. Make sure wir inserted. Conduct Pull-Pus insertion. Do not exert extr Document referer 1. Refer to GL-PRO Pull-Push procedu	on rtion minal acing. ders/Note/s: e wire near res are properly h-Pull-Push after a force. nces: O-ASY-029 for	
9		Wire insertion to Black VM tube (Sunprene) ø5 L=106±3mm	L			R	Black \right h	VM tube (Sunp	rene) ø5 L=1	eft hand, get the 06±3mm using res using left hand.		n/a		No wrong usage No deformed ten		

				WORK INSTR	RUCTION			Effectivity Date:		October 22	2, 2024
		Process Name/Title:		TAPING A	ASSEMBLY F	PROCES	SS	Validity Date:		n/a	
		Model code/Part number:	550B /	7L0061-7023	Customer: TR	≀J	ar Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PD	E-017A
		Purpose:	☐ PROTOTY	PE	PRE-LAUNCH		MASSPRO	Revision No.:		9 Page No.:	9 of 14
		<u> </u>									
PARTS:	1. Assy 2. Blue				3. Black Corrugate	ed tube (no	slit) ø5 L=342±3mm		JIG	1. Insertion jig	
NO.	Р	ROCESS NAME		WORK PRO	CEDURE/ ILL	USTRAT	ION	TOOLS/	PPE	QUALITY PO	DINTERS
10	P1	Taping 1 Black VM tube (Sunprene) to wire near terminal	Measure from	55±3 mm 1 2 3 4 What tube (Sunprene) using left han end of VM tube (Sunprene) upited tip 55±3 mm. 35±3 mm 35±3 mm	2. Ho Get t tapin	the Blue tape ng process. After taping,	taping The (Sunprene) using left hand. The using right hand and begin The check the measurement, wire taping condition.	6 7 8 9 10 1 2 3 4	G TAPE	1. No flip-out tape 2. No peel-off tape 3. No loose tape 4. No missing tape 5. No wrong use of tap 6. No wrong dimension Important reminders/ 1. Please use calibrate measuring tape when measurement. 2. Please refer to WI-Ftaping procedure. Wire alignment to	Note/s: ed/verified getting the PRO-ASY-001 for
11		Wire insertion to Black Corrugated tube (no slit) ø5 L=342±3mm	L				rugated tube ø5 L=342±3mm en insert the B-B wires using left	n/a		No wrong usage of p No deformed terminate	

					WORK INS	TRUCTION			Effectivity Date:		October 22	2, 2024
		Process Name/Title:			TAPING	ASSEMB	LY PROC	ESS	Validity Date:		n/a	
		Model code/Part number:	550B	/ 7	L0061-7023	Customer:	TRJ	Car Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PD	E-017A
		Purpose:	PRO	TOTYPE		PRE-LAUNCH	ł	MASSPRO	Revision No.:		9 Page No.:	10 of 14
									ı			
PARTS:	1. Assy	parts								JIG	1. Insertion jig	
NO.	P	ROCESS NAME			WORK P	ROCEDURE	/ ILLUSTR	ATION	TOOLS/	PPE	QUALITY PO	DINTERS
		Connector setting to	I-MARK Lock	INSER	Holes Visua referen	Lock	NSERTION JIG PRIENTATION	CONNECTOR ORIENTATION			Connector Ori Illustrati I-mark is align Gool I-mark is not align	2 Holes are open
12	P1	insertion jig (Assy part)	1. Press the left thumb.		Press ertion jig using	into jig using i	Press y part and inserright hand and remoles for B-B with		n/a		1. Use the provided jig 2. No wrong orientation 3. No wrong use of cor 4. No damaged connect	per model n of connector nnector

NB	A	Process Name/Title:			WORK INS			SLY PRO		Effectivity Date: Validity Date:			October 2	,
		Model code/Part number:	550B	7	7L0061-7023	Custon	ner:	TRJ	Car Model: TOYOTA-HIGHLANDER	Document No.:			WI-ENG-P	DE-017A
		Purpose:	PR	OTOTYP	E	☐ PRE-LA	UNCH	Н	MASSPRO	Revision No.:		9	Page No.:	11 of 14
PARTS:	1. Assy	parts									JIG	1. Inserti	ion jig	

RTS: 1. A	ssy parts		JIG	1. Insertion jig
NO.	PROCESS NAME	WORK PROCEDURE/ ILLUSTRATION	TOOLS/PPE	QUALITY POINTERS
13	Assy part insertion	1. Hold the assy parts using left hand then insert the wires into SV tube (Vinyl) using right hand.	n/a	1. No wrong usage of parts 2. No deformed terminal Document reference/s: 1. Refer to WI-PRO-CNC-017 for Wiand Strip Length Tolerance
F	Wire insertion to connector 6098-3802 (W)	1. Hold the 1st B wire then insert to terminal slot 1 using right hand. 2. Hold the 2nd B wire then insert to terminal slot 2 using right hand. 3. 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. Important reminders/Note/s: 1. Please hold the wire near terminal. 2. Insertion of wire must be from left right. 3. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion. Do not exert extra force. Document references: 1. Refer to GL-PRO-ASY-029 for Pull Push procedure.

		WORK INSTRUCTION								October 22, 2024		
	H	Process Name/Title: TAPING ASSEMBLY PROCESS						Validity Date:		n/a		
		Model code/Part number:	550B	/ 7L0061-7023	Customer:	TRJ	Car Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE-017A		
		Purpose:	PROTOTYPE		PRE-LAUNCH	1	MASSPRO	Revision No.:		9 Page No.: 12 of 14		
PARTS:	1. Assy	parts							JIG	1. Locking jig		
NO.	Р	ROCESS NAME	WORK PROCEDURE/ ILLUSTRATION					TOOLS/PPE		QUALITY POINTERS		
15	P1	Connector lock	1. Load the both side o	e connector into the jig holding of the connector, tip first. Right thumb-Lower Left thumb-middle the lower parts of connector of the left hand holding the middle thumb-middle press the connector in the ng left and right hand.	using right e. 6. Ensure that c	4. Press the uright hand wimiddle.	rer part of connector to fully ocking jig. Light thumb-upper eft thumb-middle upper part of connector using while left hand holding the Decked condition by slide touching he sequence illustrated.	LOCKING		1. Use the provided locking jig per model 2. No unlock/half-lock connector Important reminders/Note/s: After pressing GOOD NG Full Lock		

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		WORK INSTRUCTION Process Name/Title: TAPING ASSEMBLY PROCESS							n/a
		Model code/Part number:	550B /	7L0061-7023	Customer: TRJ	Car Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE-017A
		Purpose:	☐ PROTOT	YPE	PRE-LAUNCH	AUNCH MASSPRO			9 Page No.: 13 of 14
		<u> </u>					<u> </u>		
PARTS:	1. Assy 2. Black							JIG	n/a
NO.	Pl	ROCESS NAME	WORK PROCEDURE/ ILLUSTRATION					PPE	QUALITY POINTERS
16	P1	Y-taping	3. Wind the tas SV tube (Viny) Tape shift 20±3mm 5. Wind the tas Wine 1/3 sh	ipe 1/3 shifting until it reach), width must be tape width. Ing 9mm below ta ape 1/2 shifting going to viny	tube (vinyl), the tubes (3 windin 3mm the 4. Wind the tape backward 1/2 shifting pe shifting 1/3 below 25±3mm yl tube. Cover the SV tube (Vinyl) up to connector 25±3mm	Note: Do not exert excessive force during pulling & winding of tape 20±3mm at the middle of combined COT & SV en wind the tape going to 2 corrugated gs) width must be 25mm. taping direction 25±3mm 0 ~ 5mm 6. Check the measurement and taping condition.	6 7 8 9 (1) 1 2 3 4	G TAPE 5 6 7 8 9	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 Important reminders/Note/s: BLACK TAPE

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Purpose: ☐ PROTOTYPE ☐ PRE-LAUNCH ■ MASSPRO	Revision No.:	9	Page No.:	14 of 14						
PARTS: n/a		JIG n/a								
QUALITY										
P1 7L0061-7023										
12			5							
GOOD GOOD										
NO GOOD NO GOOD										
No Unlock/Halflock No Wrong Insert No Terminal No Missing tape No Wrong Used of Connector (on 2 connector) Backing Out (y-taping) Tape (blue tape)										