				RUCTION	Effectivity Date:					June 18, 2024			
			Process Name/Title:	TAPING	ASSEMBLY PROC	ESS			Valid	ity Date:		n/a	
			Model code/Part number:	096D / 7L0118-7021A	Customer: TRQSS	Car Model:	тоуота-	HIGHLANI	DER Docu	ment No.:		WI-ENG-PDE-3	92A
			Purpose:	PROTOTYPE	PRE-LAUNCH	MASS	PRO		Revis	sion No.:	3	Page No.:	1 of 13
									<u></u>				
PARTS:		(vinyl) (		V); Y-OR wire L=713±3mm; Black COT (no slit 098-3802 (W); B wire L=798±3mm; Black VM					ube	JIG:	Insertion     Locking		
N	Э.	F	PROCESS NAME	WORK PR	ROCEDURE/ ILLUSTRA	TION				TOOLS/PPE		QUALITY POIN	ITERS
1		P1	Table Lay-out	Black COT (no slit) Ø5 L=316±3mm  Connector 6098-2220 (W)/ Connector Tray  Insertion jig A  Insertion jig C  Locking jig	Black COT (no slit)		Black (sur Ø5 L=	Connector 098-3802 (W onnector Tra  ack COT (no slit) L=237±3mm  c vm tube nprene) 121±3mm	p pr pr (!	Bafety Instruction Be sure to wear rescribed person otective equipme 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 r any trouble, info. Assembly Assist Supervisor or Line eader for immedia corrective action.	Docal strip and	ument refere o WI-PRO-CNC-C Length Tolerand sing parts/tools ess parts/tools CONNECTOR ILLUSTRA  O	117 for Wire se
				Revision History			1			Prepared by	Reviewed by	Approved by	Noted by
06/18/24	3	inspection	on. Inclusion of Car model "TOY	NG-PDE-392B due to process improvement. Update OTA-HIGHLANDER". Additional Work procedure/Illum Im(Broken lock of Connector 6098-2220 (W)).		D. Castillo	C. Villanueva	A. Arañes	n/a				
07/26/23	2	(Sunprei		sion of locking process 6098-2220 (W); Standardize Quality pointers: Reminders and notes (page no.4		M. Ariola	J. Loterte	C. Villanueva	A. Arañes				
12/03/22	1	Black Co Reminde and prod	orrugated tube to Black sunpreners/notes and references on page	•	Improve Quality pointers: s improvement. Process no.4	M. Ariola			A. Arañes	D. Castillo	Lout form	A. Asañes	n/a
Eff. Date	Rev. No	]		Details of Change		Revised	Reviewed	Approved	Noted /	Est. Date:	February 4, 2022		



			WORK INS	TRUCTION		Effectivity Date: June 18, 2024			
		Process Name/Title:		G ASSEMBLY PROCE		Validity Date:		n/a	
		Model code/Part number:	096D / 7L0118-7021A		Car Model: TOYOTA-HIGHLANDER			WI-ENG-PDE-392	2A
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	3	Page No.:	2 of 13
PARTS:	1. Conr	ector 6098-2220 (W)				JIG:	1. Connecto	r 6098-2220 (W)	
NO.	F	PROCESS NAME	WORK P	ROCEDURE/ ILLUSTRA	TION	TOOLS/PPE	(	QUALITY POINT	ERS
2	P1	Connector setting to insertion jig 6098-2220 (W)	Insertion jig  I-MARK Holes  1. Press the lock of insertion jig using left thumb.  Guide	OR-wire  2. Insert the connect hand and release the series of the connect hand and release the connect	CONNECTOR ORIENTATION  Release  ctor 6098-2220 (W) into jig using right the lock. connector orientation.  3. Push the guide using left hand. The slot for Y wire will be opened.	n/a	I-mark not a  1. Use the 2. No wron 3. No wron	GOOD	All holes rere open

ir-											
			WORK INST					Effectivity Date:		June 18, 2024	1
		Process Name/Title:		G ASSEMBL				Validity Date:		n/a	
		Model code/Part number:	096D / 7L0118-7021A	Customer:	TRQSS	Car Model:	TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE-39	92A
		Purpose:	PROTOTYPE	PRE-LAUNCH		MASSPR	0	Revision No.:	3	Page No.:	3 of 13
PARTS:	1. AVS	Sf 0.3 Y/OR wires L=713±3mm						JIG:		jig with switch cover	
NO.	I	PROCESS NAME	WORK P	ROCEDURE/	ILLUSTR <i>A</i>	NOITA		TOOLS/PPE	C	QUALITY POIN	TERS
			WIRE FACING						2. No wro 3. One by 4. No defo 5. No wro	se insertion ong insertion one insertion orm terminal ong wire facing	c/Noto/c
3	P1	Wire insertion to connector 6098-2220 (W)	1. Get the Y wire then insert to terminal slot 1 using right hand.				press the button or OR wire will be	n/a	1.Please terminal 2.Inserti left to rig 3.Make s inserted Conduct after ins	sure wires are t <u>Pull-Push-Pu</u>	near on. st be from properly
			2 Orange				R		1.Refer Wire and 2.Refer	ent referenc to WI-PRO-CN d Strip Length to GL-PRO-AS sh procedure.	C-017 for Tolerance
			Get the OR wire then insert to termina slot 2 using right hand.		and then hold	tion, push the I d the wires and om jig using rigl	ock using left thumb gently pull out the nt hand.				



			WORK IN	ISTRUCTION	Effectivity Date:		June 18, 202	:4	
		Process Name/Title:	TAPI	NG ASSEMBLY PRO	CESS	Validity Date:		n/a	
		Model code/Part number:	096D / 7L0118-7021A	Customer: TRQS	S Car Model: TOYOTA-HIGHLAI	IDER Document No.:		WI-ENG-PDE-3	92A
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	3	Page No.:	4 of 13
PARTS:	1. Assy	part				JIG:	1. Locking	jig	
NO.		PROCESS NAME	WORK	PROCEDURE/ ILLUST	RATION 3	TOOLS/PPE		QUALITY POIN	ITERS
		<u>/3</u>	SIDE GOOD		1.Check the Robefore insertion	NO half-locked condition	lock/retain object pric half-lock of 2. Maintain connector 3. Connector 4. Make s process. 5. No wron 6. No dam	n 10mm proper hotor must be fully in	or hit by any cking jig to avoid olding of wire to asserted to ag before locking actor.
4	P1	Connector lock	2. Hold the assy parts using left Make sure the connector touch to NOTE: CONNECTOR LOCKING	the sensor. Sound will be	nector locking jig based on the heard if properly lock.		1. Incom alarm th 2. No ret proceed 3. If ence and imm of the lea	ainer in connecto cuntered abnoma rediately CALL th ader. WAIT for fu on and continue	ocess will or cannot ality, STOP the attention orther

			WORK INS		Effectivity Date:		June 18, 2024	1		
		Process Name/Title:	TAPIN	IG ASSEMBLY PR	OCESS		Validity Date:		n/a	
	7	Model code/Part number:	096D / 7L0118-7021A	Customer: TRQ	SS Car Model: T	OYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE-39	92A
	4	Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	)	Revision No.:	3	Page No.:	5 of 13
PARTS: 1.	Assy p	art					JIG:	1. Locking j	iig	
NO.	PI	ROCESS NAME	WORK F	PROCEDURE/ ILLUS	TRATION		TOOLS/PPE		QUALITY POIN	TERS
	P1	Connector lock (Continuation)	HOLD THE HANDLE  R  SLIDE  STEP 1	STEP 2	PULL-DOWN  R  SLIE  SLIE	locking jig using down and bring after locking. No only.  4. Remove th left hand base	e locked connector using ad on the illustration, ection of arrow.  5. Ensure that connector is in locked condition by slide touching the connector lock based on the sequence illustrated.	1. Please lock/retain object prio half-lock c 2. Maintain connector 3. Connect connector 4. Make su process. 5. No wron 6. No dam 7. No unlo limpo 1. Incoalarm t 2. No reprocees 3. If emand im the lea	ensure that Conne er will not touch or r insertion into lock onnector. n 10mm proper hol or must be fully ins slot. ure no offset setting g setting of connect aged connector locked/ half-locked of creating of connections c	ctor hit by any king jig to avoid ding of wire to serted to g before locking ctor. ck connector  Note/s: 3  cocess will tor cannot hality, STOP he attention of her instruction



				TRUCTION	Effectivity Date: June 18, 2024				
		Process Name/Title:		G ASSEMBLY P		Validity Date:		n/a	
		Model code/Part number:	096D / 7L0118-7021A	Customer: TR	QSS Car Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE-392	!A
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	3	Page No.:	6 of 13
PARTS:	1. Assy 2. Black	parts corrugated tube (no slit) Ø5 L	_=316±3mm	Black corrugate     Black vinyl tube	ed tube (no slit) Ø5 L=172±3mm e Ф5 L=181±3mm	JIG:	n/a		
NO.	Р	ROCESS NAME	WORK F	PROCEDURE/ ILLU	JSTRATION	TOOLS/PPE	C	QUALITY POINT	ERS
5	Wire insertion to Black corrugated tut (no slit) Ø5 L=316±3mm Ø5 L=172±3mm		L	R Lith	Get the corrugated tube Ø5 =316±3mm using right hand then insert le Y-OR wire using left hand.  Get the corrugated tube Ø5 =172±3mm using right hand then insert le Y-OR wire using left hand.			g use of parts rmed terminal	
6		Wire insertion to Black SV tube (vinyl) Ø5 L=181±3mm	1. Get the St hand then ins	V tube (vinyl) Ø5 L=181 sert the Y-OR wire using	R  I±3mm using right g left hand.			g use of parts rmed terminal	



			WORK INS		Effectivity Date: June 18, 2024				
		Process Name/Title:		NG ASSEMBLY PROC	FSS	Validity Date:		n/a	
		Model code/Part number:	096D / 7L0118-7021A			Document No.:		WI-ENG-PDE-39	)2A
		Purpose:	PROTOTYPE	☐ PRE-LAUNCH	MASSPRO	Revision No.:	3	Page No.:	7 of 13
PARTS:	1. Conn	ector 6098-3802 (W)				JIG:	1.Insertion j	iig	
NO.	F	ROCESS NAME	WORK	PROCEDURE/ ILLUSTRA	ATION	TOOLS/PPE	(	QUALITY POIN	TERS
7	P1	Connector setting to insertion jig 6098-3802 (W)	Lock  Guide  1. Press the lock of insertion jig using left thumb.	Button  INSERTION ORIENTAT  2. Insert the connector 6098-380 and release the lock.  Note: Follow the connector ori	Release  22 (W) into jig using right hand		I-mark ali  1. Use the p 2. No wrong 3. No wrong	GOOD	poles are open



			WORK INS			Effectivity Date:	June 18, 2024			
		Process Name/Title:		G ASSEMBLY PROC		Validity Date:		n/a		
		Model code/Part number:	096D / 7L0118-7021A	Customer: TRQSS	Car Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE-392	2A	
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	3	Page No.:	8 of 13	
PARTS:	1. Assy 2. AVSS	parts if 0.3 B wires L=798±3mm [2po	cs.]	3. Black VM tube (Sunpr	ene) Ø5 L=121±3mm	JIG:	1.Insertion ji	ig	,	
NO.	F	ROCESS NAME	WORK F	PROCEDURE/ ILLUSTR	ATION	TOOLS/PPE	(	QUALITY POINT	ERS	
8	P1	Wire insertion to connector 6098-3802 (W)	1. Get the assy part and hold the Y wire then insert to terminal slot 1 using right hand.  2 Orange  R  3. Get the OR wire then insert to terminal slot 2 using right hand.	butto wire  1. 4. A left gen	rer insertion of Y wire press the n using right hand. Slot for OR will be opened.  Press R  Ifter insertion, push the lock using thumb and then hold the wires and thy pull out the connector from jig g right hand.	n/a	4. No defor 5. No wron Importa 1. Please terminal 2. Insertic left to rig inserted. Conduct insertion Do not ex Docum 1. Refer to Wire and 2. Refer to	g insertion one insertion rm terminal g wire facing  ant reminders  hold the wire ne during insertion. on of wire must b tht. ure wires are pro	e from  operly  Push after  e/s:  17 for lerance	
9		Wire insertion to Black VM tube (sunprene) Ø5 L=121±3mm		L=121±3m	lack VM tube (sunprene) Ø5 m using right hand then insert the B-B 08±3mm (n=2) using left hand.	n/a	1. No wrong	use of parts		



				STRUCTION		Effectivity Date:		June 18, 2024	
		Process Name/Title:		IG ASSEMBLY PROC	CESS	Validity Date:		n/a	
		Model code/Part number:	096D / 7L0118-7021A	Customer: TRQSS	Car Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE-392	2A
		Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	3	Page No.:	9 of 13
PARTS:	1. Assy 2. Yellov			3. Black corrugated tube	(no slit) Ø5 L=237±3mm	JIG:	n/a		
NO.	Р	ROCESS NAME	WORK	PROCEDURE/ ILLUSTR	ATION	TOOLS/PPE	(	QUALITY POINT	ERS
10	P1	Taping 1 Black corrugated tube to wire near terminal	Start of taping  L  R  2. Get the Yellow tape using right hand to start taping process using both hands.	1. Measure f pointed tip 5  R  20±3mm	from end of sunprene tube up to terminal 5±3mm using both hands.	MEASURING TAPE 6 7 8 9 (1) 1 2 3 4 5 6 7 8 9 9	1. No flip-o 2. No peel- 3. No loose 4. No miss 5. No wron 6. No wron 1.Please measuri measure 2.USE Y	out tape off tape ing tape g use of tape g dimension  ant reminders/N e use calibrated/ve ing tape when gette	ote/s: rified ing the
11		Wire insertion to Black corrugated tube (no slit) Ø5 L=237±3mm	L	1. Get the corr slit) using righ left hand.	ugated tube Ø5 L=237±3mm (no t hand and insert B-B wires using			g use of parts rmed terminal	



NBA			WORK I		Effectivity Date:		June 18, 2024			
		Process Name/Title:	TAP	ING ASSEMBI	LY PROCES	SS	Validity Date:		n/a	
		Model code/Part number:	096D / 7L0118-7021A	Customer:	TRQSS Ca	ar Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE-39	2A
		Purpose:	PROTOTYPE	PRE-LAUNCH	· •	MASSPRO	Revision No.:	3	Page No.:	10 of 13
PARTS:	1. Assy	parts					JIG:	1.Insertion j	iig	
NO.	P	ROCESS NAME	WORK	K PROCEDURE/	ILLUSTRATI	ON	TOOLS/PPE	(	QUALITY POIN	TERS
12		Wire insertion to assy parts	1. Hold the corrugated tube (no L=172±3mm using left hand the assy parts using right hand	o slit) Ø5	L=181±3mm	Ø5 L=181±3mm  V tube (vinyl) Ø5 using left hand then insert is using right hand.	n/a		g use of parts med terminal g insertion	
13	P1	Connector setting to insertion jig 6098-3802 (W) (Assy parts)	Lock Virefe  Press  1. Press the lock of insertion iin using left using r		NSERTION JIG ORIENTATION  Relea  198-3802 (W) into	o jig  3. Check the holes for B-B wires, it must be	n/a	1. Use the programme 2. No wrong 3. No wrong 3. No wrong 3.	Connector Orient Illustration  k is align  2 Ho  GOOD  Provided jig per mod g orientation of connector guee of connector ged connector	les are open



WORK INSTRUCTION Effectivity Date: June 1997 Process Name/Title: TAPING ASSEMBLY PROCESS Validity Date:	une 18, 2024 n/a
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	ge No.: 11 of 13
PARTS: JIG:	
NO. PROCESS NAME WORK PROCEDURE/ ILLUSTRATION TOOLS/PPE QUAL	ITY POINTERS
WIRE FACING  1. Please hold during insertic 2. Insertion of to right. 3. Make sure w. inserted. Conduct Pull-finsertion. Do not exert exercises the property of the property o	vire must be from left ires are properly Push-Pull-Push after vtra force.  reference/s: PRO-CNC-017 for Length Tolerance PRO-ASY-029 for

1. Get the assy part and hold the **B wire** then insert to terminal slot **1** using right hand. Note: Insertion of wire must be from left to right.

2. Hold the **B** wire then insert to terminal slot 2 using right hand.

- 1. No loose insertion
- 2. No wrong insertion
- 3. One by one insertion
- 4. No deformed terminal
- 5. No wrong wire facing



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.

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(Assy parts)

			WORK INSTRUC	TION			Effectivity Date:		June 18, 2024	ı
		Process Name/Title:	TAPING AS	SEMB	LY PROC	ESS	Validity Date:		n/a	
		Model code/Part number:	<b>096D / 7L0118-7021A</b>	ustomer:	TRQSS	Car Model: TOYOTA-HIGHLANDER	Document No.:		WI-ENG-PDE-39	92A
		Purpose:	PROTOTYPE P	RE-LAUNCH	I	MASSPRO	Revision No.:	3	Page No.:	12 of 13
PARTS:	1. Assy	/ parts					JIG:	1. Locking	jig	
NO.	ı	PROCESS NAME	WORK PROC	EDURE/	ILLUSTRA	ATION	TOOLS/PPE	C	TERS	
15	P1	Connector lock	1. Load the connector into the jig holding bot side of the connector, tip first.  Right thumb-Lower Left thumb-middle  3. Press the lower parts of connector using right hand while left hand holding the middle.  Right thumb-middle  Etf thumb-middle  5. Lift then press the connector in the middle using left and right hand.	6. Ens	4. Press the thand while le	e lower part of connector to fully he locking jig.  Right thumb-upper Left thumb-middle  upper part of connector using right ft hand holding the middle.  Lower part of connector using right ft hand holding the middle.		2. Use providamaged local languages of the languages of t	retant reminders IUAL LOCKING M. GED LOCK provided jig tool p lamaged lock.  ment reference er to GL-PRO-ASS ion of Coupler lock  e pressing  Afte	s/note/s: AY CAUSED er model to e/s: G-017 for the



	WORK INSTRUCTION Process Name/Title: TAPING ASSEMBLY PROCESS				June 18, 2024	
Process Name/Title:					n/a	
Model code/Part number:	Model code/Part number: 096D / 7L0118-7021A Customer: TRQSS Car Model: TOYOTA-HIGHLAND			Document No.:	WI-ENG	G-PDE-392A
Purpose:	PROTOTYPE	PRE-LAUNCH	MASSPRO	Revision No.:	3 Page	No.: 13 of 13
					1	
PARTS: 1. Assy parts				JIG:	n/a	
		2 MICHAL INCO	FOTION			
<u>✓3</u> VISUAL INSPECTION						
TAPING - P1 7L0118-7021A						
TAPING - PT / LUTTO-7UZTA						
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$oxedsymbol{(1)}$ No Deformed terminal $oxedsymbol{(2)}$ No Terminal $oxedsymbol{(3)}$ No Missing tape/Wrong Used of Tape						
		king Out		_		
	Bac	ming out	(Yellow ta	pe)		