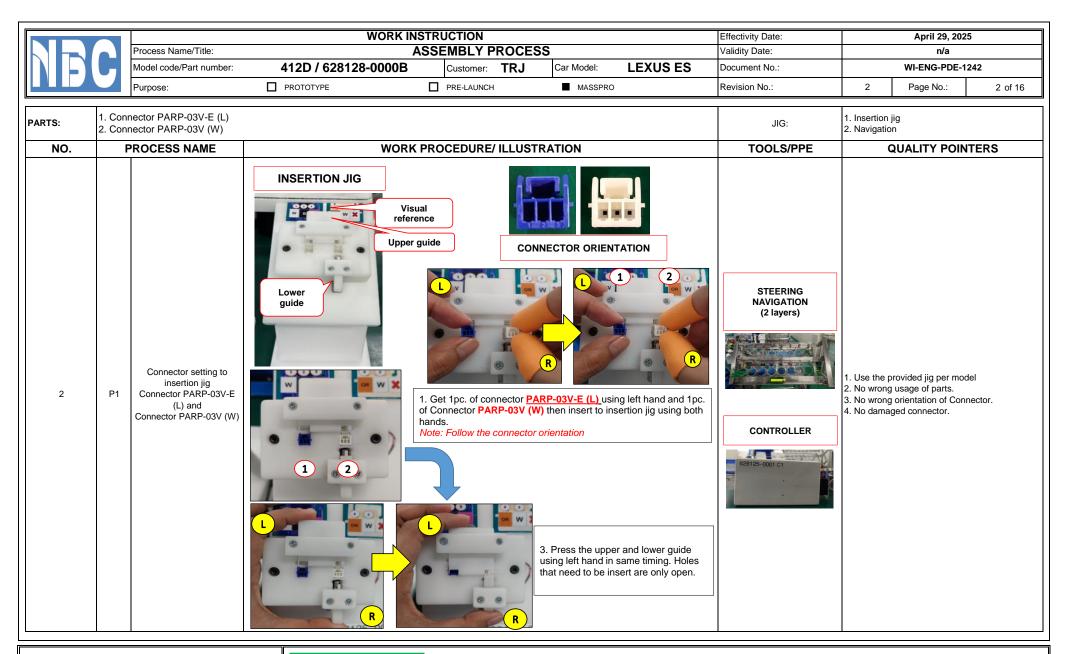
WORK INSTRUCTION Effectivity Date: April 29, 2025														
			Process Name/Title:		ASSEMBLY PROCES	SS			Validi	ty Date:		n/a		
			Model code/Part number:	412D / 628128-0000B	Customer: TRJ	Car Model:	LEX	US ES	Docu	ment No.:		WI-ENG-PDE-12	42	
			Purpose:	☐ PROTOTYPE	☐ PRE-LAUNCH	MASSPR	0		Revis	sion No.:	2	Page No.:	1 of 16	
PARTS:	1. Connector PARP-03V-E (L); Connector PARP-03V (W); AVSS 0.3 W wire L=314±2mm; AVSS 0.3 P-B wires L=268±2mm; N6GR VM tube (Sunprens) Ø4.5, L=184±3mm; Black VM tube (Sunprens) Ø4, L=78±3mm; Retainer (PMS-03V-S (W); AVSS 0.3 OR wire L=162±2mm; Connector 4A1330-0 (W); Black VM tube (Sunprens) Ø6, L=47±3mm									JIG: 1. Insertion jig 2. Navigation				
N			PROCESS NAME		K PROCEDURE/ ILLUST	TRATION				TOOLS/PPE	(QUALITY POINTERS		
				Connector 4A1330- 0000 (W)/ Box	TABLE LAY-OU Black VM tube (Sunprene) Ø6, L=47±3mm/ Box	T		layers rigation	p	Be sure to wear prescribed persona otective equipme during operation gloves, finger cots etc.)	nt 1. No missii 2. No exces	ng parts/tools s parts/tools		
	1	P1	Table lay-out				Black VM tube (Sunprene) Ø4			Housekeeping Maintain and alwa practice 5's. Personal things o the workplace is rohibited. Keep it i your locker.	Importai 1. Please 2. Make inserted Conduct insertion	Important reminders/Note/s: 1. Please hold the wire near termin 2. Make sure wires are properly inserted. Conduct Pull-Push-Pull-Push after insertion.		
				Insertion jig (J1-A)	N6GR VM tube (Sunprene) Ø4.5, L=184±3mm		L=78±3m	=78±3mm		Alert level r any trouble, infore Assembly Assista Supervisor or Line eader for immediat corrective action.	Docume 1. Refer Push pro	Do not exert extra force. Document references: 1. Refer to GL-PRO-ASY-029 for Push procedure. 2. Refer to WI-PRO-CNC-017 for Wire and Strip Length Tolerance		
						Connector ARP-03V (W)	R (PN	Retainer MS-03V-S (W)						
				Revision History	у			,	•	Prepared by	Reviewed by	Approved by	Noted by	
0.4/00/05		la aluai - :-	of terminal "Cood and N - C	III illustration on page 4.5 and 0		A.Hernandez	J.Loterte C	C. Villanueva A	.Arañes					
04/29/25			of terminal "Good and No Good document purpose from pre-launce			A.Hernandez A.Hernandez			.Aranes .Arañes	0.0	(Au)	1/4:4	CAMP	
04/11/25									.Arañes	Orlinica de A.Hernandez	J.Loterte	C. Villanueva	A Arañes	
Eff. Date	Rev. No			Details of Change		Revised	Checked	Reviewed Ap	proved		April 11, 2025			





			WORK INSTRUCT	TION			Effectivity Date:	T	April 29, 202		
		Process Name/Title:		BLY PROCE	SS		Validity Date:		n/a	,	
		Model code/Part number:		stomer: TRJ	Car Model:	LEXUS ES	Document No.:	 	WI-ENG-PDE-12	242	
		Purpose:	□ PROTOTYPE □ PRE		■ MASSF		Revision No.:	2	Page No.:	3 of 16	
PARTS:		6 0.3 W wire L=314±2mm 6 0.3 P-B wires L=268±2mm					JIG:	Insertion j Navigatio			
NO.	F	PROCESS NAME	WORK PROCE	DURE/ ILLUS	TRATION		TOOLS/PPE	QUALITY POINTERS			
3	P1	Wire insertion to Connector PARP-03V (L)	INSERTION SEQUENCE FROM LEFT TO RIGHT I Q 3 W B P 1. Get the W wire using left hand and transfe pull push after wire insertion. Repeat the proce Note: Follow the insertion sequence based	W 314	RTION ILLUS 2 B 268	3 P 268	STEERING NAVIGATION (2 layers) CONTROLLER	2. No wrong 3. One by c 4. No wrong 5. No defor 6. No stuck Importan 1. Please 2. Make inserted Conduct insertion Do not e 3. Auton the unit terminal half-lock 4. Insert to right. Documen 1. Refer te and Strip 2. Refer te Steering procedur	med terminal to of terminal tip. Interminders/Note the hold the wire newer wires are p the treatically dispose if once encounte the difficulty of inset the difficulty of ins	e/s: ear terminal. roperly Push after and replace red bend ertion and at be from left 17 for Wire ee 44 for the coller	

				WORK INSTR	RUCTION				Effectivity Date:		April 29, 2025	
		Process Name/Title:		ASS	SEMBLY PROC	CESS			Validity Date:		n/a	
		Model code/Part number:	412D / 628128-	0000B	Customer: TR	J	Car Model:	LEXUS ES	Document No.:		WI-ENG-PDE-12	42
		Purpose:	☐ PROTOTYPE		PRE-LAUNCH		MASSPRO		Revision No.:	2	Page No.:	4 of 16
PARTS:		S 0.3 W wire L=314±2mm S 0.3 P-B wires L=268±2mm							JIG:	1. Insertion j	iig	
NO.	F	PROCESS NAME	/2\	WORK PR	OCEDURE/ ILLU	USTRA	TION		TOOLS/PPE	C	QUALITY POINT	ERS
3	P1	Wire insertion to Connector PARP-03V-E (L)(Continuation)	GOOD Terminal Condition Note: *Make sure the te *Avoid hitting the	rminal was in p		before in	BACK VIEW ON T Damage Terminal NO GOOD Terminal Cond sert. insertion, if end		VIEW ON TERMINAL NO GOOD minal Condition	2. No wrong 3. No wrong 4. No deform 5. No stuck of the control of	red terminal of terminal of terminal tip ne insertion retant reminders/N ke sure wires are ed. Conduct <u>Pull</u> after insertion. It exert extra force as hold the wire neal during insertion and during insertion and connector. It extra the unit if once intered bend termility of insertion and connector. It erto will be the unit if once intered bend termility of insertion and connector. It erto will be the unit if once intered bend termility of insertion and connector. It erto will be the will be t	properly Push-Pull- a. a. b. b. a.

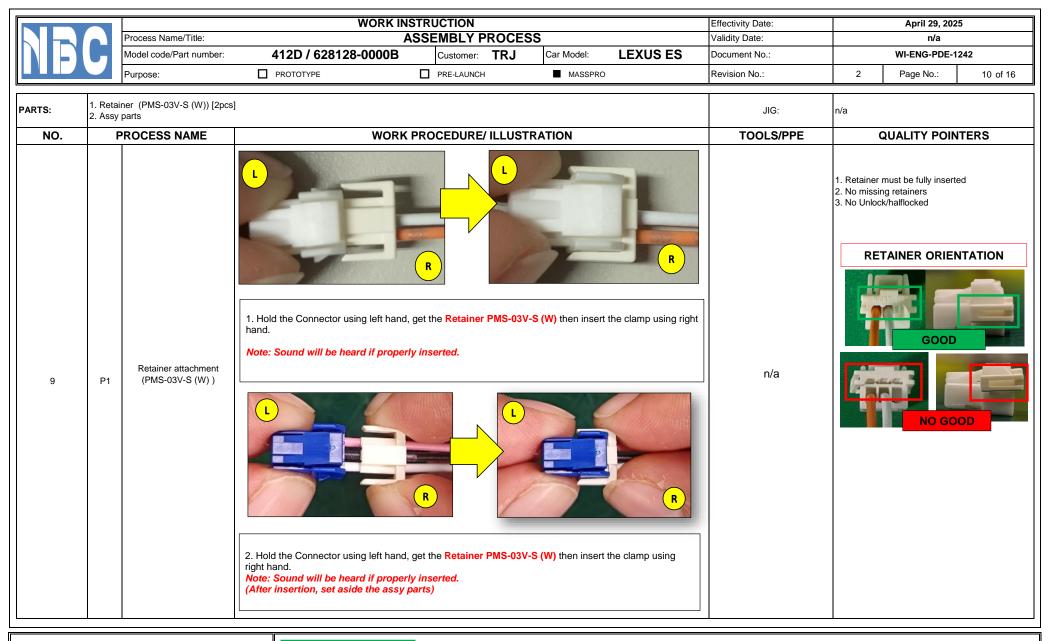
			WORK INST	Effectivity Date:	April 29, 2025						
		Process Name/Title:	AS	SEMBLY PROCESS	5		Validity Date:		n/a		
		Model code/Part number:	412D / 628128-0000B	Customer: TRJ	Car Model:	LEXUS ES	Document No.:		WI-ENG-PDE-124	12	
		Purpose:	☐ PROTOTYPE [PRE-LAUNCH	■ MASSPRO		Revision No.:	2	Page No.:	5 of 16	
PARTS:	1. Assy 2. Dark 3. Conn	parts Brown VM tube (Sunprene) ector PARP-03V (W)					JIG:	Insertion j Navigation			
NO.	F	ROCESS NAME	WORK PI	ROCEDURE/ ILLUSTR	ATION		TOOLS/PPE	QUALITY POINTERS			
4		Wire insertion to N6GR VM tube (Sunprene) Ø4.5, L=184±3mm	L R		left I VM Ø4.: usin inse	lold the wires using hand, get the N6GR tube (Sunprene) 5, L=184±3mm g right hand then out the wires using hands	n/a		g usage of parts. rmed terminal. ed wires.		
5	P1	Wire insertion to Connector PARP-03V (W)	INSERTION SEQUENCE FROM LEFT TO RIGHT		right hand then ull push after wire	insert to e insertion. <i>Note:</i>	STEERING NAVIGATION	2. No wrong 3. One by c 4.No wrong 5. No defor 6. No stuck Important 1. Please i inserted. Conduct F insertion. Do not ext 3. Automa the unit if terminal, c locked co. 4. Insertio right. Document 1. Refer tc 2. Refer tc Steering N procedure	rmed terminal c of terminal tip. t reminders/Note/s hold the wire near ure wires are prop Pull-Push-Pull-Pus ert extra force, atically dispose an once encountered difficulty of inserti mnector, on of wires must be t references: o WI-PRO-CNC-017 o WI-ENG-PDE-044 Navigation Control e, o GL-PRO-ASY-028	r terminal. perly sh after d replace d bend ion and half- e from left to 7 4 for the ller	

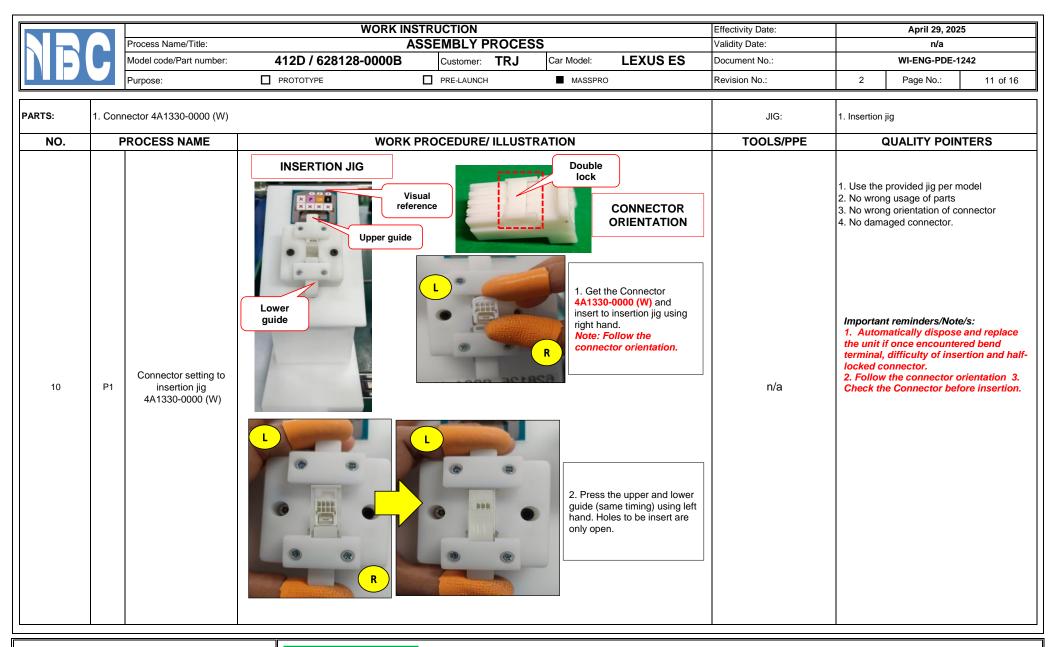
				WORK INSTR	UCTION			Effectivity Date:		April 29, 2025	
		Process Name/Title:		ASS	EMBLY PROCE	SS		Validity Date:		n/a	
		Model code/Part number:	412D / 628128-	0000B	Customer: TRJ	Car Model:	LEXUS ES	Document No.:		WI-ENG-PDE-12	42
		Purpose:	☐ PROTOTYPE		PRE-LAUNCH	■ MASSPRO		Revision No.:	2	Page No.:	6 of 16
PARTS:	1. AVS	0.3 OR wire L=162±2mm						JIG:	1. Insertion j	iig	
NO.	F	PROCESS NAME	\sim	WORK PRO	OCEDURE/ ILLUS	TRATION		TOOLS/PPE		QUALITY POINT	ERS
5	P1	Wire insertion to Connector PARP-03V (W) (Continuation)	*Avoid hitting the	rminal was in p		Damage Terminal NO GOOD Terminal Cond	ttion Ten	VIEW ON TERMINAL NO GOOD minal Condition	2. No wrong 3. No wrong 4. No deform 5. No stuck of One by or Impoi 1. Mainsert Push Do no 2. Pleatermir 3. Aut replace encoudifficulockee 4. Inseleft to Docur 1. Refe Wire a 2. Refe Steerii procee 3. Refe Pull-P 4. Refe	red terminal of terminal of terminal tip ne insertion retant reminders/N ke sure wires are ed. Conduct <u>Pull</u> after insertion. It exert extra force as hold the wire neal during insertion and during insertion and connector. It extra the unit if once intered bend termility of insertion and connector. It erto will be the unit if once intered bend termility of insertion and connector. It erto will be the unit if once intered bend termility of insertion and connector. It erto will be the will be t	properly Push-Pull- a. a. b. b. a.

			WORK IN	STRUCTION		Effectivity Date:	April 29, 2025			
		Process Name/Title:	A	ASSEMBLY PROCES	S		Validity Date:		n/a	
		Model code/Part number:	412D / 628128-0000B	Customer: TRJ	Car Model:	LEXUS ES	Document No.:		WI-ENG-PDE-12	42
		Purpose:	☐ PROTOTYPE	PRE-LAUNCH	■ MASSPRO		Revision No.:	2	Page No.:	7 of 16
PARTS:		y parts k VM tube (Sunprene) Ø4,	L=78±3mm				JIG:	Insertion jig Navigation		
NO.		PROCESS NAME	WORK	PROCEDURE/ ILLUSTR	₹ATION		TOOLS/PPE	C	QUALITY POINT	ERS
6	P1	Wire insertion to Black VM tube (Sunprene) Ø4, L=78±3mm	2. Press the upper button using both h hand. After removal of harness, Press Note: Second connector with inserting.	nands. Remove the 1st Conn. the Upper guide using left ha	1. Hold the hand, get (Sunpren using right the wires in t	er button	n/a	1. No wrong 2. No wrong 3. No defort 4. No wrong	g orientation of conguse of parts med terminal g wire facing	nector

			WORK IN	WORK INSTRUCTION						April 29, 2025		
	AL	Process Name/Title:		SSEMBLY PR	ROCESS			Effectivity Date: Validity Date:		n/a		
		Model code/Part number:	412D / 628128-0000B			ar Model:	LEXUS ES	Document No.:		WI-ENG-PDE-12	242	
		Purpose:	PROTOTYPE	PRE-LAUNCH		MASSPRO		Revision No.:	2	Page No.:	8 of 16	
PARTS:	1. Assy	parts						JIG:	Insertion Navigation			
NO.	F	PROCESS NAME	WORK	PROCEDURE/	ILLUSTRAT	ION		TOOLS/PPE	(QUALITY POIN	TERS	
7		Wire insertion to Assy parts	L R			(Sunprene)	Black VM tube using left hand e wire of assy ight hand.		2. No defor 3. No tangl			
8	P1	Wire insertion to Connector PARP-03V (W)		wire	2. Press the Remove the wires using		INSERTION STRATION R sing left hand. with inserted ck the terminal		2. No wron 3. One by 6 4. No wron 5. No defol 6. No stuck Importar 1. Please 2. Make s inserted. Conduct insertion Do not e 3. Autom the unit i terminal, locked c 4. Inserti right. Documel 1. Refer i 2. Refer i Steering procedui	med terminal to f terminal tip.	e/s: ear terminal. roperly Push after and replace red bend ertion and half- t be from left to 117 144 for the roller	

			WORK INS	TRUCTION		Effectivity Date:		April 29, 2025	
		Process Name/Title:	A:	SSEMBLY PROCES	S	Validity Date:		n/a	
		Model code/Part number:	412D / 628128-0000B	Customer: TRJ	Car Model: LEXUS ES	Document No.:		WI-ENG-PDE-12	42
		Purpose:	☐ PROTOTYPE	☐ PRE-LAUNCH	■ MASSPRO	Revision No.:	2	Page No.:	9 of 16
PARTS:		6 0.3 W wire L=314±2mm				JIG:	1. Insertion		
NO.	F	PROCESS NAME	/2 \work i	PROCEDURE/ ILLUST	RATION	TOOLS/PPE		QUALITY POINT	ERS
8	P1	Wire insertion to Connector PARP-03V (W) (Continuation)	GOOD Terminal Condition Note: *Make sure the terminal was i *Avoid hitting the terminal int	to the connector during w	Damage Terminal NO GOOD Terminal Condition Terminal Condition	VIEW ON TERMINAL NO GOOD minal Condition whity stop the	2. No wrong 3. No wrong 4. No defort 5. No stuck 6. One by or 1. Mainsert Push Do no 2. Ple termin 3. Aut replace encou diffict locke 4. Inst. left to Docui 1. Refi Wire a 2. Refi Steeri proce 3. Refi Pull-P 4. Refi	ned terminal of terminal of terminal tip ne insertion retant reminders/N like sure wires are ted. Conduct <u>Pull</u> after insertion. In the exert extra force as a hold the wire to matically dispose the unit if once untered bend termility of insertion and connector. In the error of wires must right. In the error will be the error of wires must reference of the error of wires must right. In the error will be to WI-PRO-CNC and Strip Length 1 are to WI-ENG-PDE in Navigation Codure. In the error of L-PRO-AS with the error of L-PRO-AS with the error of	properly Push-Pull- a. a. b. b. a. b. a. b. a. b. b. a. b. b. a. b. b. a. b. b. b. b. b. b. b. b. c. b. b. b. b. c. b. b. c. b. b. c. b. b. c.





			WORK IN		Effectivity Date:		April 29, 2025				
		Process Name/Title:	A	ASSEMBLY PROCE	SS		Validity Date:		n/a		
		Model code/Part number:	412D / 628128-0000B	Customer: TRJ	Car Model:	LEXUS ES	Document No.:		WI-ENG-PDE-1	242	
		Purpose:	☐ PROTOTYPE	PRE-LAUNCH	MASSPRO		Revision No.:	2	Page No.:	12 of 16	
PARTS:	1. Assy 2. Blac	r parts k VM tube (Sunprene) Ø6,	L=47±3mm				JIG:	1. Insertion jig			
NO.	F	PROCESS NAME	WORK	PROCEDURE/ ILLUS	TRATION		TOOLS/PPE	QUALITY POINTERS			
11		Wire insertion Black VM tube (Sunprene) Ø6, L=47±3mm	R	1. Hold the wires of as hand, get the Black V Ø6, L=47±3mm using the wires (Assy parts)	'M tube (Sunprend left hand then inse	ert	n/a	2. No wron 3. One by 4.No wron 5. No defo 6. No stuc	vided jig per mode ng usage of parts one insertion g insertion. rmed terminal k of terminal tip.	al.	
12	P1	Wire insertion to Connector 4A1330-0000 (W)	xxxx		N 3 B 268 X	terminal slot	n/a	2. No wrong 3. One by c 4. No wrong 5. No defor 6. No stuck Importar 1. Make inserted. Push aft Do not e 2. Please terminal 3. Auton replace t encount difficulty locked c 4. Inserti left to rig Docum 1. Refer Push pn 2. Refer	med terminal of terminal tip. nt reminders/Note sure wires are pi . Conduct <u>Pull-Pi</u> er insertion. xert extra force. e hold the wires ri during insertion. natically dispose the unit if once ered bend termin of insertion and onnector. ion of wires must ght. nent reference/s: to GL-PRO-ASY- ocedure. to GL-PRO-ASY- on Standard for of	roperly ush-Pull- lear and al, half- be from 029 for Pull- 025 for	

			WORK II	NSTRUCTION			Effectivity Date:		April 29, 202	5
		Process Name/Title:		ASSEMBLY PROCES	S		Validity Date:		n/a	
		Model code/Part number:	412D / 628128-0000B	Customer: TRJ	Car Model:	LEXUS ES	Document No.:		WI-ENG-PDE-1	242
		Purpose:	PROTOTYPE	☐ PRE-LAUNCH	MASSPRO		Revision No.:	2	Page No.:	13 of 16
PARTS:	1. Ass	/ parts					JIG:	1. Insertion	jig	
NO.		PROCESS NAME	WOR	K PROCEDURE/ ILLUST	RATION		TOOLS/PPE	(QUALITY POIN	ITERS
13	P1	Wire insertion to Connector 4A1330-0000 (W) (Continuation)		ar button (same timing) using button (same timin	sy parts using righ	nt hand and ed.	n/a	2. No wron 3. One by 0 4. No wron 5. No defoi 6. No stuck Importar 1. Please 2. Make inserted Conduct insertior Do not e 3. Auton the unit terminal, locked c 4. Insert right. Docum 1. Refe Push p 2. Refe	med terminal to of terminal tip. Int reminders/Note the hold the wire newer wires are p Pull-Push-Pull-In. The terminders wire are p The pull-Push-Pull-In. The pull-Push-Pull-In. The pull-Push-Pull-In. The pull-Push-Pull-In. The pull-Pull-In. The pull-In. The pull-Pull-In. The	e/s: ear terminal. roperly Push after and replace red bend ertion and half- t be from left to :: Y-029 for Pull-

