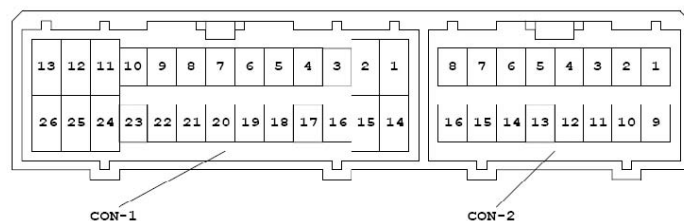


5E-FHE EXY10 TOYOTA SERA ECU phase I (march 1990 to may 1991)



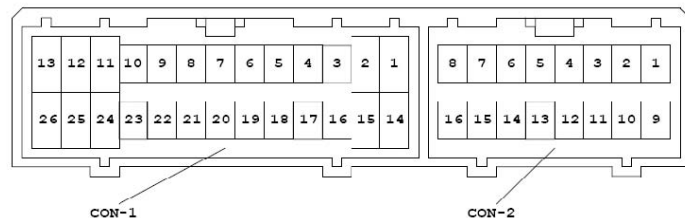
26 pin plug

1	~	~
2	NSW	Neutral Starter Switch
3	THW	Water Temperature Signal
4	PIM	Pressure Intake Manifold
5	THA	Intake Air Temperature
6	IGT	Ignition Timing
7	IGF	Ignition Feedback from the Ignitor-Coil
8	G1	Distributor
9	G-	Distributor Crank Angle
10	OX	Oxygen Sensor (Lambda Sensor)
11	STA	Engine Cranking Signal (Starter Switch)
12	#10	Injector Pulse 1 & 3
13	E01	Computer Ground
14	DISC	Aux. Control Valve or Idle-Up System Vacuum Switching Valve
15	~	~
16	E2	Sensor Ground
17	PSW	Throttle Position Sensor
18	VC	
19	IDL	Throttle Position Sensor (Signals ECU throttle position is at idle)
20	G2	Distributor
21	NE	Part of the IIA (Intergrated Ignition Assembly) (RPM)
22	E21	Sensor Ground
23	KNK	Knock Sensor
24	E1	Computer Ground
25	#20	Injector Pulse 2 & 4
26	E02	Computer Ground

16 pin plug

1	+B1	Switched Battery Power (12V)
2	BATT	Switched Battery Power (+12V) (EFI Main Relay)
3	CCO	Check Connector Outputs
4	FC	Circuit Opening Relay (Fuel Cut)
5	ELS	Electrical Load Signal System Taillight Relay
6	AC2	12V To Aircon Computer
7	~	~
8	T	
9	+B	Switched Battery Power (12V)
10	W	Warning Light
11	EGW	Catalytic Converter Temperature Warning Light (Combination Meter)
12	~	~
13	SPD	Speed Signal
14	ACT	A/C Cut Control System
15	AC1	A/C Switch Signal System (12V to Aircon Computer)
16	VF	Check Connector Outputs

5E-FHE EXY10 TOYOTA SERA ECU phase II & III (may 1991-June 1992 / June 1992 – December 1995)



26 pin plug

1	IPV	
2	NSW	Neutral Starter Switch
3	THW	Water Temperature Signal
4	PIM	Pressure Intake Manifold
5	THA	Intake Air Temperature
6	IGT	Ignition Timing
7	IGF	Ignition Feedback from the Ignitor-Coil
8	G1	Distributor
9	G-	Distributor Crank Angle
10	OX	Oxygen Sensor (Lambda Sensor)
11	STA	Engine Cranking Signal (Starter Switch)
12	#10	Injector Pulse 1 & 3
13	E01	Computer Ground
14	DISC	Aux. Control Valve or Idle-Up System Vacuum Switching Valve
15	~	~
16	E2	Sensor Ground
c17	PSW	Throttle Position Sensor
18	VC	
19	IDL	Throttle Position Sensor (Signals ECU throttle position is at idle)
20	G2	Distributor
21	NE	Part of the IIA (Intergrated Ignition Assembly) (RPM)
22	E21	Sensor Ground
23	KNK	Knock Sensor
24	E1	Computer Ground
25	#20	Injector Pulse 2 & 4
26	E02	Computer Ground

16 pin plug

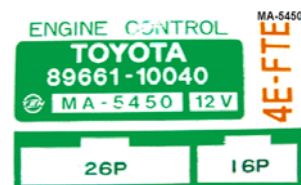
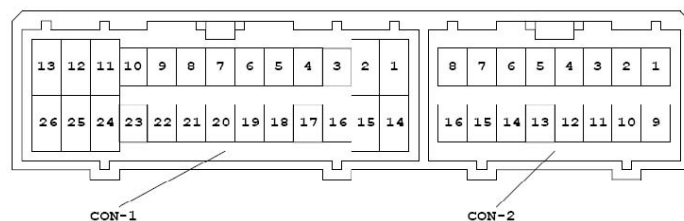
1	+B1	Switched Battery Power (12V)
2	BATT	Switched Battery Power (+12V) (EFI Main Relay)
3	CCO	Check Connector Outputs
4	FC	Circuit Opening Relay (Fuel Cut)
5	ELS	Electrical Load Signal System Taillight Relay
6	AC2	12V To Aircon Computer
7	~	~
8	T	
9	+B	Switched Battery Power (12V)
10	W	Warning Light
11	EGW	Catalytic Converter Temperature Warning Light (Combination Meter)
12	~	~
13	SPD	Speed Signal
14	ACT	A/C Cut Control System
15	AC1	A/C Switch Signal System (12V to Aircon Computer)
16	VF	Check Connector Outputs

Computer Wiring Diagram
5E-FHE - Manual Sera (May 1991 - Dec 1995)
Part Number: unknown
Code: unknown

Connector 1			Connector 2		
1	IPV	Vacuum Switching Valve	1	+B1	Switched Battery Power (12V)
2	NSW	Neutral Starter Switch	2	BATT	Switched Battery Power (+12V) (EFI Main Relay)
3	THW	Water Temperature Signal	3	CCO	Check Connector Outputs
4	PIM	Pressure Intake Manifold	4	FC	Circuit Opening Relay (Fuel Cut)
5	THA	Intake Air Temperature	5	ELS	Electrical Load Signal System Taillight Relay
6	IGT	Ignition Timing	6	AC2	12V To Aircon Computer
7	IGF	Ignition Feedback from the Ignitor-Coil	7	~	~
8	G1	Distributor	8	T	~
9	G-	Distributor Crank Angle	9	+B	Switched Battery Power (12V)
10	OX	Oxygen Sensor (Lambda Sensor)	10	W	Warning Light
11	STA	Engine Cranking Signal (Starter Switch)	11	EGW	Catalytic Converter Temperature Warning Light (Combination Meter)
12	#10	Injector Pulse 1 & 3	12	~	~
13	E01	Computer Ground	13	SPD	Speed Signal
14	DISC	Aux. Control Valve or Idle-Up System Vacuum Switching Valve	14	ACT	A/C Cut Control System
15	~	~	15	AC1	A/C Switch Signal System (12V to Aircon Computer)
16	E2	Sensor Ground	16	VF	Check Connector Outputs
17	~	~			
18	VCC	Throttle Position Sensor (pin 1)			
19	IDL	Throttle Position Sensor (Signals ECU throttle position is at idle)			
20	G2	Distributor			
21	NE	Part of the IIA (Integrated Ignition Assembly) (RPM)			
22	E21	Sensor Ground			
23	KNK	Knock Sensor			
24	E1	Computer Ground			
25	#20	Injector Pulse 2 & 4			
26	E02	Computer Ground			



4E-FTE EP82 ECU 89661-10040 GREEN STICKER ma-5450



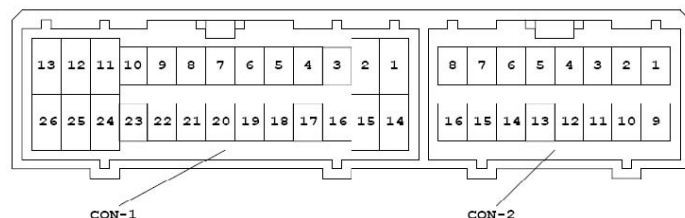
26 pin plug

1	~	~
2	NSW	Neutral Starter Switch
3	THW	Water Temperature Signal
4	PIM	Pressure Intake Manifold
5	THA	Intake Air Temperature
6	IGT	Ignition Timing
7	IGF	Ignition Feedback from the Ignitor-Coil
8	G1	Distributor
9	G-	Distributor Crank Angle
10	OX	Oxygen Sensor (Lambda Sensor)
11	STA	Engine Cranking Signal (Starter Switch)
12	#10	Injector Pulse 1 & 3
13	E01	Computer Ground
14	DISC	Aux. Control Valve or Idle-Up System Vacuum Switching Valve
15	VSV1	Air Control Vacuum Switching Valve
16	E2	Sensor Ground
17	PSW	Throttle Position Sensor
18	VC	
19	IDL	Throttle Position Sensor (Signals ECU throttle position is at idle)
20	G2	Distributor
21	NE	Part of the IIA (Intergrated Ignition Assembly) (RPM)
22	E21	Sensor Ground
23	KNK	Knock Sensor
24	E1	Computer Ground
25	#20	Injector Pulse 2 & 4
26	E02	Computer Ground

16 pin plug

1	+B1	Switched Battery Power (12V)
2	BATT	Switched Battery Power (+12V) (EFI Main Relay)
3	CCO	Check Connector Outputs
4	FC	Circuit Opening Relay (Fuel Cut)
5	ELS	Electrical Load Signal System Taillight Relay
6	AC2	12V To Aircon Computer
7	BC	Boost Control
8	T	
9	+B	Switched Battery Power (12V)
10	W	Warning Light
11	EGW	Catalytic Converter Temperature Warning Light (Combination Meter)
12	~	~
13	SPD	Speed Signal
14	ACT	A/C Cut Control System
15	AC1	A/C Switch Signal System (12V to Aircon Computer)
16	VF	Check Connector Outputs

4E-FTE EP82 ECU 89661-10100 BLACK STICKER 211000-0550 12v
4E-FTE EP82 ECU 89661-10100 GREEN STICKER ma-5970

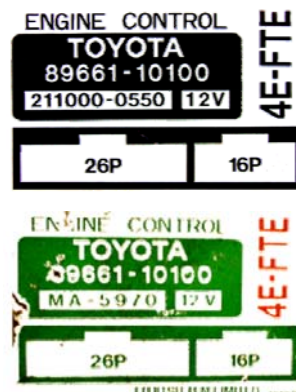


26 pin plug

1	IPV	Vacuum Switching Valve
2	NSW	Neutral Starter Switch
3	THW	Water Temperature Signal
4	PIM	Pressure Intake Manifold
5	THA	Intake Air Temperature
6	IGT	Ignition Timing
7	IGF	Ignition Feedback from the Ignitor-Coil
8	G1	Distributor
9	G-	Distributor Crank Angle
10	OX	Oxygen Sensor (Lambda Sensor)
11	STA	Engine Cranking Signal (Starter Switch)
12	#10	Injector Pulse 1 & 3
13	E01	Computer Ground
14	DISC	Aux. Control Valve or Idle-Up System Vacuum Switching Valve
15	VSV1	Air Control Vacuum Switching Valve
16	E2	Sensor Ground
17	PSW	Throttle Position Sensor
18	VC	
19	IDL	Throttle Position Sensor (Signals ECU throttle position is at idle)
20	G2	Distributor
21	NE	Part of the IIA (Intergrated Ignition Assembly) (RPM)
22	E21	Sensor Ground
23	KNK	Knock Sensor
24	E1	Computer Ground
25	#20	Injector Pulse 2 & 4
26	E02	Computer Ground

16 pin plug

1	+B1	Switched Battery Power (12V)
2	BATT	Switched Battery Power (+12V) (EFI Main Relay)
3	CCO	Check Connector Outputs
4	FC	Circuit Opening Relay (Fuel Cut)
5	ELS	Electrical Load Signal System Taillight Relay
6	AC2	12V To Aircon Computer
7	TE2	Check Connector
8	TE1	Check Connector
9	+B	Switched Battery Power (12V)
10	W	Warning Light
11	EGW	Catalytic Converter Temperature Warning Light (Combination Meter)
12	AC1	A/C Switch Signal System (12V to Aircon Computer)
13	SPD	Speed Signal
14	ACT	A/C Cut Control System
15	BC	Boost Control
16	VF	Check Connector Outputs



4E-FTE EP82 automatic ECU / part no. 89661-10110 / code. 211000-0630

26 PIN PLUG													16 PIN PLUG								12 PIN PLUG					
13	12	11	10	9	8	7	6	5	4	3	2	1	8	7	6	5	4	3	2	1	6	5	4	3	2	1
26	25	24	23	22	21	20	19	18	17	16	15	14	16	15	14	13	12	11	10	9	12	11	10	9	8	7

26 pin plug

1	IPV	Vacuum Switching Valve
2	STA	Engine Cranking Signal (Starter Switch)
3	IGF	Ignition Feedback from the Ignitor-Coil
4	NE	Part of the IIA (Intergrated Ignition Assembly) (RPM)
5	G1	Distributor
6	L	ECT "L" Selection Signal. Shift Position Switch
7	2	ECT "2" Selection Signal. Shift Position Switch
8	SL	ECT Solenoid
9	S2	ECT Solenoid
10	DISC	Aux. Control Valve or Idle-Up System Vacuum Switching Valve
11	VSV1	Air Control Vacuum Switching Valve
12	#10	Injector Pulse 1 & 3
13	E02	Computer Ground
14	~	~
15	NSW	Neutral Starter Switch
16	SP2	No. 2 Vehicle Speed Sensor ECT in Auto-Transmission
17	G-	Distributor Crank Angle
18	G2	Distributor
19	DG	Check Connector
20	BC	Boost Control
21	S1	ECT Solenoid
22	IGT	Ignition Timing
23	OD2	Cruise Control Computer
24	E1	Computer Ground
25	#20	Injector Pulse 2 & 4
26	E01	Computer Ground



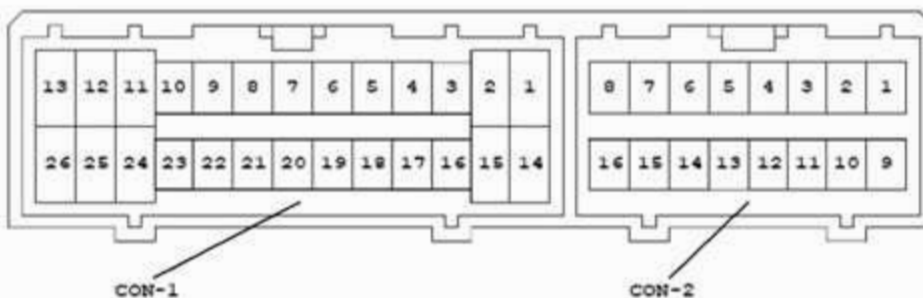
16 pin plug

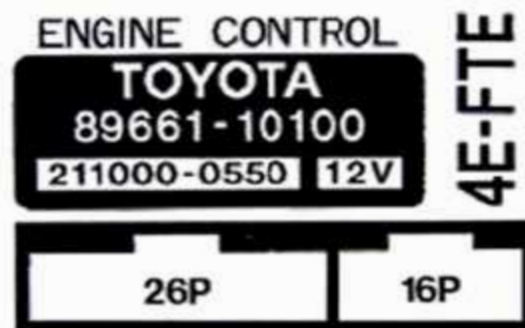
1	STP	Stop Light Switch
2	PIM	Pressure Intake Manifold
3	THA	Intake Air Temperature
4	THW	Water Temperature Signal
75	P	Shift Position Switch (Parking)
6	OX	Oxygen Sensor (Lambda Sensor)
7	TE2	Check Connector
8	VF	Check Connector Outputs
9	E2	Sensor Ground
10	VTA/PSW	Throttle Position Sensor
11	VCC	Throttle Position Sensor (pin 1)
12	IDL	Throttle Position Sensor (Signals ECU throttle position is at idle)
13	M	Shift Position Switch
14	KNK	Knock Sensor
15	TE1	Check Connector
16	E21	Sensor Ground

12 pin plug

1	+B1	Switched Battery Power (12V)
2	BATT	Switched Battery Power (+12V) (EFI Main Relay)
3	CCO	Check Connector Outputs
4	FC	Circuit Opening Relay (Fuel Cut)
5	AC2	12V To Aircon Computer
6	ACT	A/C Cut Control System
7	+B	Switched Battery Power (12V)
8	W	Warning Light
9	EGW	Catalytic Converter Temperature Warning Light (Combination Meter)
10	AC1	A/C Switch Signal System (12V to Aircon Computer)
11	SPD	Speed Signal
12	ELS	Electrical Load Signal System Taillight Relay

Computer Wiring Diagram
4E-FTE - EP82
Part Number: 89661 - 10100
Code: 211000-0550 (MA-5970)

Connector 1			Connector 2		
1	IPV	Vacuum Switching Valve	1	+B1	Switched Battery Power (12V)
2	NSW	Neutral Starter Switch	2	BATT	Switched Battery Power (+12V) (EFI Main Relay)
3	THW	Water Temperature Signal	3	CCO	Check Connector Outputs
4	PIM	Pressure Intake Manifold	4	FC	Circuit Opening Relay (Fuel Cut)
5	THA	Intake Air Temperature	5	ELS	Electrical Load Signal System Taillight Relay
6	IGT	Ignition Timing	6	AC2	12V To Aircon Computer
7	IGF	Ignition Feedback from the Ignitor-Coil	7	TE2	Check Connector
8	G1	Distributor	8	TE1	Check Connector
9	G-	Distributor Crank Angle	9	+B	Switched Battery Power (12V)
10	OX	Oxygen Sensor (Lambda Sensor)	10	W	Warning Light
11	STA	Engine Cranking Signal (Starter Switch)	11	EGW	Catalytic Converter Temperature Warning Light (Combination Meter)
12	#10	Injector Pulse 1 & 3	12	AC1	A/C Switch Signal System (12V to Aircon Computer)
13	E01	Computer Ground	13	SPD	Speed Signal
14	DISC	Aux. Control Valve or Idle-Up System Vacuum Switching Valve	14	ACT	A/C Cut Control System
15	VSV1	Air Control Vacuum Switching Valve	15	BC	Boost Control
16	E2	Sensor Ground	16	VF	Check Connector Outputs
17	PSW	Throttle Position Sensor			
18	VCC	Throttle Position Sensor (pin 1)			
19	IDL	Throttle Position Sensor (Signals ECU throttle position is at idle)			
20	G2	Distributor			
21	NE	Part of the IIA (Intergrated Ignition Assembly) (RPM)			
22	E21	Sensor Ground			
23	KNK	Knock Sensor			
24	E1	Computer Ground			
25	#20	Injector Pulse 2 & 4			
26	E02	Computer Ground			



4E-FTE EP91 ECU pinout / part no. 89661-10200 / code. 211000-4290

26 PIN PLUG													16 PIN PLUG								12 PIN PLUG					
13	12	11	10	9	8	7	6	5	4	3	2	1	8	7	6	5	4	3	2	1	6	5	4	3	2	1
26	25	24	23	22	21	20	19	18	17	16	15	14	16	15	14	13	12	11	10	9	12	11	10	9	8	7

26 pin plug

1	IPV	Vacuum Switching Valve
2	STA	Engine Cranking Signal (Starter Switch)
3	IGF	Ignition Feedback from the Ignitor-Coil
4	NE	Part of the IIA (Intergrated Ignition Assembly) (RPM)
5	G1	Distributor
6	L	ECT "L" Selection Signal. Shift Position Switch
7	2	ECT "2" Selection Signal. Shift Position Switch
8	SL	ECT Solenoid
9	S2	ECT Solenoid
10	DISC	Aux. Control Valve or Idle-Up System Vacuum Switching Valve
11	VSV1	Air Control Vacuum Switching Valve
12	#10	Injector Pulse 1 & 3
13	E02	Computer Ground
14	~	~
15	NSW	Neutral Starter Switch
16	SP2	No. 2 Vehicle Speed Sensor ECT in Auto-Transmission
17	G-	Distributor Crank Angle
18	G2	Distributor
19	DG	Check Connector
20	BC	Boost Control
21	S1	ECT Solenoid
22	IGT	Ignition Timing
23	OD2	Cruise Control Computer
24	E1	Computer Ground
25	#20	Injector Pulse 2 & 4
26	E01	Computer Ground

**16 pin plug**

1	STP	Stop Light Switch
2	PIM	Pressure Intake Manifold
3	THA	Intake Air Temperature
4	THW	Water Temperature Signal
5	P	Shift Position Switch (Parking)
6	OX	Oxygen Sensor (Lambda Sensor)
7	TE2	Check Connector
8	VF	Check Connector Outputs
9	E2	Sensor Ground
10	VTA/PSW	Throttle Position Sensor
11	VCC	Throttle Position Sensor (pin 1)
12	IDL	Throttle Position Sensor (Signals ECU throttle position is at idle)
13	M	Shift Position Switch
14	KNK	Knock Sensor
15	TE1	Check Connector
16	~	~

12 pin plug

1	+B1	Switched Battery Power (12V)
2	BATT	Switched Battery Power (+12V) (EFI Main Relay)
3	CCO	Check Connector Outputs
4	FC	Circuit Opening Relay (Fuel Cut)
5	AC2	12V To Aircon Computer
6	ACT	A/C Cut Control System
7	+B	Switched Battery Power (12V)
8	W	Warning Light
9	EGW	Catalytic Converter Temperature Warning Light (Combination Meter)
10	AC1	A/C Switch Signal System (12V to Aircon Computer)
11	SPD	Speed Signal
12	ELS	Electrical Load Signal System Taillight Relay

as you can see pin 16 on 16 pin connector isn't used. That's the only difference between the two ecus except the size of them.

1995 US Paseo 5E-FE (AUTOMATIC) CALIFORNIA

26 PIN PLUG

13	12	11	10	9	8	7	6	5	4	3	2	1
26	25	24	23	22	21	20	19	18	17	16	15	14

16 PIN PLUG

8	7	6	5	4	3	2	1
16	15	14	13	12	11	10	9

12 PIN PLUG

6	5	4	3	2	1
12	11	10	9	8	7

26 pin plug

1	SL
2	STA
3	IGF
4	NE+
5	~
6	~
7	S2
8	~
9	RSC
10	RSO
11	HT2
12	#10
13	E01
14	HT1
15	NSW
16	EGR
17	NE-
18	G2
19	2
20	L
21	IGT2
22	IGT1
23	SP2
24	E1
25	#20
26	S1

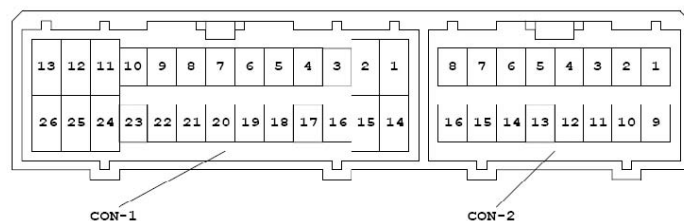
16 pin plug

1	DG
2	PIM
3	THA
4	THW
5	OX2
6	OX1
7	TE2
8	VF
9	E2
10	VTA
11	VCC
12	IDL
13	THG
14	KNK
15	TE1
16	~

12 pin plug

1	STP
2	BATT
3	OD1
4	FC
5	~
6	ACT
7	+B
8	W
9	OD2
10	AC1
11	SPD
12	~

1995 US Paseo 5E-FE (MANUAL) CALIFORNIA



26 pin plug

1	RSC	
2	~	
3	THW	Water Temperature Signal
4	PIM	Pressure Intake Manifold
5	IGT2	
6	IGT1	
7	IGF	Ignition Feedback from the Ignitor-Coil
8	KNK	Knock Sensor
9	ne-	
10	ox1	
11	sta	
12	#10	
13	e01	
14	rso	
15	THA	
16	E2	
17	VTA	
18	VCC	
19	IDL	
20	G2	
21	NE+	
22	THG	
23	OX2	
24	E1	
25	#20	
26	~	

16 pin plug

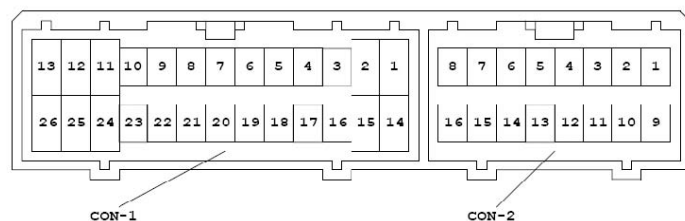
1	~
2	BATT
3	~
4	FC
5	HT2
6	HT1
7	TE2
8	TE1
9	+B
10	W
11	~
12	AC1
13	SPD
14	ACT
15	EGR
16	VF

Computer Wiring Diagram
5E-FE - Manual Paseo (USA - Not California)
Part Number: unknown
Code: unknown

Connector 1			Connector 2		
1	FPU		1	~	
2	NSW	Neutral Starter Switch	2	BATT	Switched Battery Power (+12V) (EFI Main Relay)
3	THW	Water Temperature Signal	3	~	
4	PIM	Pressure Intake Manifold	4	FC	Circuit Opening Relay (Fuel Cut)
5	THA	Intake Air Temperature	5	ELS	Electrical Load Signal System Taillight Relay
6	IGT	Ignition Timing	6	~	
7	IGF	Ignition Feedback from the Ignitor-Coil	7	~	
8	G	Distributor	8	T	
9	G-	Distributor Crank Angle	9	+B	Switched Battery Power (12V)
10	OX	Oxygen Sensor (Lambda Sensor)	10	W	Warning Light
11	STA	Engine Cranking Signal (Starter Switch)	11	AC1	A/C Switch Signal System (12V to Aircon Computer)
12	#10	Injector Pulse 1 & 3	12	~	
13	E01	Computer Ground	13	SPD	Speed Signal
14	DISC	Aux. Control Valve or Idle-Up System Vacuum Switching Valve	14	ACT	A/C Cut Control System
15	~		15	~	
16	E2	Sensor Ground	16	VF	Check Connector Outputs
17	PSW	Throttle Position Sensor			
18	VCC	Throttle Position Sensor (pin 1)			
19	IDL	Throttle Position Sensor (Signals ECU throttle position is at idle)			
20	G2	Distributor			
21	NE	Part of the IIA (Intergrated Ignition Assembly) (RPM)			
22	~				
23	~				
24	E1	Computer Ground			
25	#20	Injector Pulse 2 & 4			
26	E02	Computer Ground			



1995 US Paseo 5E-FE (MANUAL) NOT CALIFORNIA



26 pin plug

1	FPU	
2	NSW	
3	THW	Water Temperature Signal
4	PIM	Pressure Intake Manifold
5	THA	
6	IGT	
7	IGF	Ignition Feedback from the Ignitor-Coil
8	G	
9	G-	
10	OX	
11	STA	
12	#10	
13	E01	
14	DISC	
15	~	
16	E2	
17	VTA	
18	VCC	
19	IDL	
20	NE-	
21	NE	
22	~	
23	~	
24	E1	
25	#20	
26	E02	

16 pin plug

1	~
2	BATT
3	~
4	FC
5	ELS
6	~
7	~
8	T
9	+B
10	W
11	AC1
12	~
13	SPD
14	ACT
15	~
16	VF

1995 US Paseo 5E-FE (AUTO) NOT CALIFORNIA

26 PIN PLUG													16 PIN PLUG								22 PIN PLUG											
13	12	11	10	9	8	7	6	5	4	3	2	1	8	7	6	5	4	3	2	1	11	10	9	8	7	6	5	4	3	2	1	
26	25	24	23	22	21	20	19	18	17	16	15	14	16	15	14	13	12	11	10	9	22	21	20	19	18	17	16	15	14	13	12	

26 pin plug

1	SL
2	S1
3	IGF
4	NE
5	G
6	2
7	TWS
8	TOV
9	FPU
10	DISC
11	#20
12	#10
13	E01
14	E1
15	S2
16	SP2
17	NE-
18	G-
19	L
20	IDL
21	~
22	~
23	EGR
24	~
25	~
26	E02

22 pin plug

1	BATT
2	ELS
3	~
4	STP
5	W
6	~
7	OD2
8	~
9	SPD
10	AC1
11	STA
12	+B
13	~
14	FC
15	~
16	~
17	~
18	~
19	~
20	OD1
21	ACT
22	NSW

16 pin plug

1	VCC
2	PIM
3	THA
4	THW
5	~
6	OX
7	DG
8	VF
9	E2
10	THG
11	VTA
12	IDL
13	~
14	~
15	T
16	~