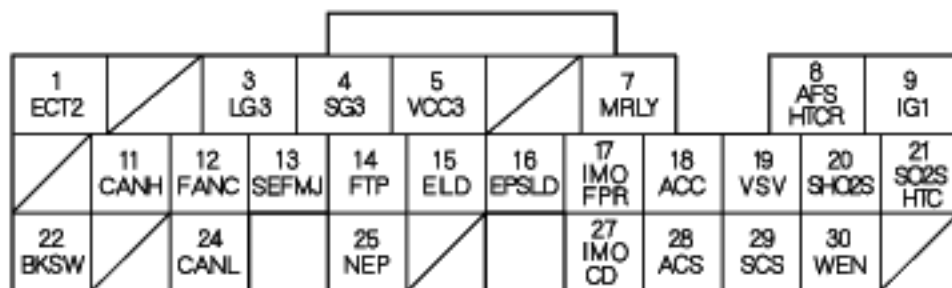


## ECM Inputs and Outputs at Connector E (31P)

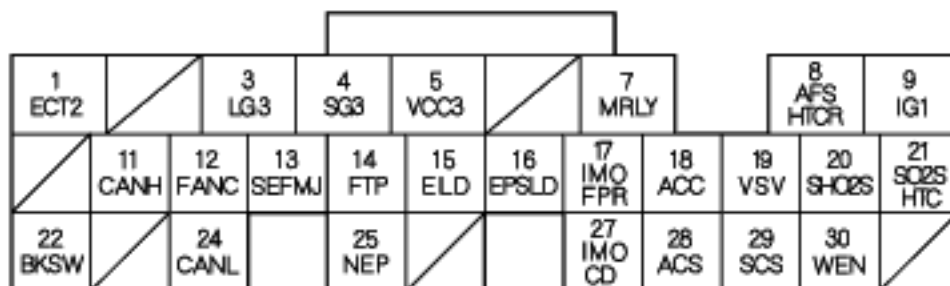


Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
20	RED	SHO2S (SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S), SENSOR 2)	Detects secondary HO2S (sensor 2) signal	With throttle fully closed and idle with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
21	BLK/WHT	SO2SHTC (SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) HEATER CONTROL)	Drives secondary HO2S (sensor 2) heater	With ignition switch ON (III): battery voltage With fully warmed up engine running: duty controlled
22	WHT/BLK	BKSW (BRAKE PEDAL POSITION SWITCH)	Detects brake pedal position switch signal	With brake pedal released: about 0 V With brake pedal pressed: battery voltage
24	WHT	CANL (CAN COMMUNICATION SIGNAL LOW)	Sends communication signal	With ignition switch ON (III): pulses
25	BLU	NEP (ENGINE SPEED PULSE)	Outputs engine speed pulse	With engine running: pulses
27	RED/BLU	IMOC D (IMMOBILIZER CODE)	Detects immobilizer signal	
28	BLU/RED	ACS (A/C SWITCH SIGNAL)	Detects A/C switch signal	With A/C switch ON: about 0 V With A/C switch OFF: about 5.0 V
29	BRN	SCS (SERVICE CHECK SIGNAL)	Detects service check signal	With service check signal shorted using HDS: about 0 V With the service check signal open: about 5.0 V
30	GRN/WHT	WEN (WRITE ENABLE SIGNAL)	Detects service enable signal	With ignition switch ON (III): about 0 V

## ECM Inputs and Outputs at Connector E (31P)

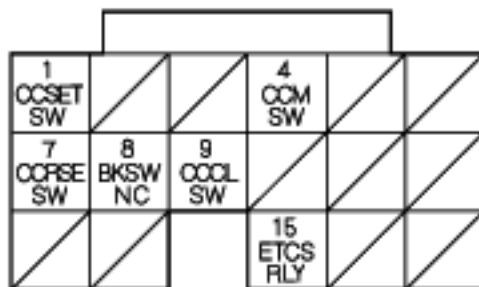


Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	BLU	ECT2 (ENGINE COOLANT TEMPERATURE SENSOR 2)	Detect ECT sensor 2 signal	With ignition switch ON (III): about 0.1—4.8 V (depending on engine coolant temperature) Less than 1.0 V at all times
3	GRN/WHT	LG3 (LOGIC GROUND)	Ground for ECM control circuit	Less than 1.0 V at all times
4	GRN	SG3 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
5	YEL/BLU	VCC3 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (III): about 5.0 V With ignition switch OFF: about 0 V
7	GRN	MRLY (PGM-FI MAIN RELAY 1 (FI MAIN))	Drives PGM-FI main relay 1 (FI MAIN) Power source for DTC memory	With ignition switch ON (III): about 0 V With ignition switch OFF: battery voltage
8	ORN	AFSHTCR (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL RELAY)	Drives A/F sensor heater relay	With ignition switch ON (III): about 0 V
9	BLK/YEL	IG1 (IGNITION SIGNAL)	Detects ignition signal	With ignition switch ON (III): battery voltage With ignition switch OFF: about 0 V
11	RED	CANH (CAN COMMUNICATION SIGNAL HIGH)	Sends communication signal	With ignition switch ON (III): pulses
12	GRN	FANC (RADIATOR FAN CONTROL)	Drives radiator fan relay	With radiator fan running: about 0 V With radiator fan stopped: battery voltage
13	YEL	SEFMJ	Communicates with multiplex control unit	With ignition switch ON (III): about 5.0 V With engine running with load: pulses
14	LT GRN	FTP (FUEL TANK PRESSURE (FTP) SENSOR)	Detects FTP sensor signal	With ignition switch ON (III) and fuel fill cap open: about 2.5 V
15	GRN/RED	ELD (ELECTRICAL LOAD DETECTOR)	Detects ELD signal	With ignition switch ON (III): about 0.1—4.8 V (depending on electrical load)
16	BLU/BLK	EPSLD (ELECTRICAL P/S LOAD DETECT)	Detects P/S load signal	At idle with steering wheel straight ahead: about 0 V At idle with steering wheel at full lock: battery voltage
17	GRN/YEL	IMOFP (IMMOBILIZER FUEL PUMP RELAY)	Drives PGM-FI main relay 2 (FUEL PUMP)	0 V for 2 seconds after turning ignition switch ON (III), then battery voltage
18	RED	ACC (A/C CLUTCH RELAY)	Drives A/C clutch relay	With compressor ON: about 0 V With compressor OFF: battery voltage
19	LT GRN/WHT	VSV (EVAPORATIVE EMISSION (EVAP) CANISTER VENT SHUT VALVE)	Drives EVAP canister vent shut valve	With ignition switch ON (III): battery voltage

## ECM Inputs and Outputs at Connector D (17P)

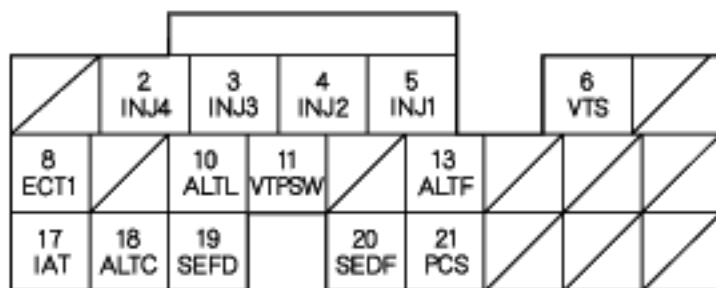


Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	LT GRN/RED	CCSETSW (CRUISE CONTROL SET SWITCH)	Detects cruise SET switch signal	With cruise SET switch ON: about 0 V With cruise SET switch OFF: battery voltage
4	LT GRN	CCMSW (CRUISE CONTROL MAIN SWITCH CONTROL)	Detects cruise MAIN switch signal	With cruise MAIN switch ON: about 0 V With cruise MAIN switch OFF: battery voltage
7	LT GRN/BLK	CCRESSW (CRUISE CONTROL RES SWITCH CONTROL)	Detects cruise RES switch signal	With cruise RES switch ON: about 0 V With cruise RES switch OFF: battery voltage
8	GRY	BKSWNC (BRAKE PEDAL POSITION SWITCH)	Detects brake pedal position switch signal	With ignition switch ON (II) and brake pedal released: battery voltage With ignition switch ON (II) and brake pedal pressed: about 5.0 V
9	PNK	CCCLSW (CRUISE CONTROL CLUTCH PEDAL POSITION SIGNAL)	Detects cruise control clutch pedal position switch signal	With ignition switch ON (II) and clutch pedal released: about 5.0 V With ignition switch ON (II) and clutch pedal pressed: battery voltage
15	BRN	ETCSRLY (ETCS CONTROL RELAY)	Drives ETCS control relay	With ignition switch ON (II): about 0 V

## ECM Inputs and Outputs at Connector B (24P)



Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
2	YEL	INJ4 (No. 4 INJECTOR)	Drives No. 4 injector	At idle: duty controlled With ignition switch ON (II): battery voltage
3	BLU	INJ3 (No. 3 INJECTOR)	Drives No. 3 injector	
4	RED	INJ2 (No. 2 INJECTOR)	Drives No. 2 injector	
5	BRN	INJ1 (No. 1 INJECTOR)	Drives No. 1 injector	
6	GRN/YEL	VTS (ROCKER ARM OIL CONTROL SOLENOID (VTEC SOLENOID VALVE))	Drives rocker arm oil control solenoid (VTEC solenoid valve)	
8	RED/WHT	ECT1 (ENGINE COOLANT TEMPERATURE SENSOR 1)	Detects ECT sensor 1 signal	With ignition switch ON (II): about 0.1—4.8 V (depending on engine coolant temperature) With fully warmed up engine: about 0.5—0.7 V
10	WHT/BLU	ALTL (ALTERNATOR L SIGNAL)	Detects alternator signal	With ignition switch ON (II): about 0 V With engine running: battery voltage
11	BLU/BLK	VTPSW (ROCKER ARM OIL PRESSURE SWITCH (VTEC OIL PRESSURE SWITCH))	Detects rocker arm oil pressure switch (VTEC oil pressure switch) signal	With engine at low engine speed: about 0 V With engine at high engine speed: battery voltage
13	WHT/RED	ALTF (ALTERNATOR FR SIGNAL)	Detects alternator FR signal	With engine running: about 0—5.0 V (depending on electrical load)
17	RED/YEL	IAT (INTAKE AIR TEMPERATURE SENSOR)	Detects IAT sensor signal	With ignition switch ON (II): about 0.1—4.8 V (depending on intake air temperature)
18	WHT/GRN	ALTC (ALTERNATOR CONTROL)	Sends alternator control signal	With engine running and fully warmed up: about 8.0 V
19	GRN	SEFD (THROTTLE ACTUATOR CONTROL SERIAL SIGNAL)	Sends throttle actuator control serial signal	
20	BLU	SEDF (THROTTLE ACTUATOR CONTROL SERIAL SIGNAL)	Detects throttle actuator control serial signal	
21	RED/YEL	PCS (EVAPORATIVE EMISSION CANISTER PURGE VALVE)	Drives EVAP canister purge valve	With engine running, engine coolant below 149 °F (65 °C): battery voltage With engine running, engine coolant above 149 °F (65 °C): duty controlled

## ECM Inputs and Outputs at Connector A (31P)

1 KS	2 IGP2	3 IGP1	4 PG2	5 PG1	6 CMP	7 CKP	8 LG2	9 LG1			
10 AFS HTC	/	/	13 IGPLS4	14 IGPLS3	15 IGPLS2	16 IGPLS1	/	18 NC	/	20 VCC2	21 VCC1
/	23 SG2	24 SG1	/	25 APSB	26 APSA	/	/	28 AFS-	/	30 MAP	31 AFS+

Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
20	YEL/BLU	VCC2 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5.0 V With ignition switch OFF: about 0 V
21	YEL/RED	VCC1 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (III): about 5.0 V With ignition switch OFF: about 0 V
23	GRN/YEL	SG2 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
24	GRN/WHT	SG1 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
25	RED/YEL	APSB (ACCELERATOR PEDAL POSITION (APP) SENSOR B)	Detects APP sensor B signal	With ignition switch ON (III) and accelerator pedal pressed: about 2.3 V With ignition switch ON (III) and accelerator pedal released: about 0.2 V
26	RED/BLU	APSA (ACCELERATOR PEDAL POSITION (APP) SENSOR A)	Detects APP sensor A signal	With ignition switch ON (III) and accelerator pedal pressed: about 4.5 V With ignition switch ON (III) and accelerator pedal released: about 0.5 V
28	RED/YEL	AFS- (AIR FUEL RATIO (A/F) SENSOR, SENSOR 1 -SIDE)	Detects A/F sensor (sensor 1) signal	
30	GRN/RED	MAP (MANIFOLD ABSOLUTE PRESSURE SENSOR)	Detects MAP sensor signal	With ignition switch ON (III): about 3.0 V At idle: about 1.0 V (depending on engine speed)
31	RED	AFS+ (AIR FUEL RATIO (A/F) SENSOR, SENSOR 1 +SIDE)	Detects A/F sensor (sensor 1) signal	

## ECM Inputs and Outputs at Connector A (31P)

1 KS	2 IGP2	3 IGP1	4 PG2	5 PG1	6 CMP	7 CKP	8 LG2	9 LG1			
10 AFS HTC	/	/	13 IGPLS4	14 IGPLS3	15 IGPLS2	16 IGPLS1	/	18 NC	/	20 VCC2	21 VCC1
/	23 SG2	24 SG1	/	25 APSB	26 APSA	/	28 AFS-	/	30 MAP	31 AFS+	

Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	RED/BLU	KS (KNOCK SENSOR)	Detects knock sensor signal	With engine knocking: pulses
2	YEL/BLK	IGP2 (POWER SOURCE)	Power source for ECM circuit	With ignition switch ON (II): battery voltage With ignition switch OFF: about 0 V
3	YEL/BLK	IGP1 (POWER SOURCE)	Power source for ECM circuit	With ignition switch ON (II): battery voltage With ignition switch OFF: about 0 V
4	BLK	PG2 (POWER GROUND)	Ground circuit for ECM	Less than 1.0 V at all times
5	BLK	PG1 (POWER GROUND)	Ground circuit for ECM	Less than 1.0 V at all times
6	GRN	CMP (CAMSHAFT POSITION SENSOR)	Detects CMP sensor signal	With engine running: pulses With ignition switch ON (II): about 5.0 V
7	BLU	CKP (CRANKSHAFT POSITION SENSOR)	Detects CKP sensor signal	With engine running: pulses With ignition switch ON (II): about 5.0 V
8	BRN/YEL	LG2 (LOGIC GROUND)	Ground circuit for ECM	Less than 1.0 V at all times
9	BRN/YEL	LG1 (LOGIC GROUND)	Ground circuit for ECM	Less than 1.0 V at all times
10	GRN	AFSHTC (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL)	Drives A/F sensor heater	With ignition switch ON (II): battery voltage With fully warmed up engine running: about 0 V
13	WHT/BLU	IGPLS4 (No. 4 IGNITION COIL PULSE)	Drives No. 4 ignition coil	With ignition switch ON (II): about 0 V With engine running: pulses
14	WHT/BLK	IGPLS3 (No. 3 IGNITION COIL PULSE)	Drives No. 3 ignition coil	
15	WHT/GRN	IGPLS2 (No. 2 IGNITION COIL PULSE)	Drives No. 2 ignition coil	
16	WHT	IGPLS1 (No. 1 IGNITION COIL PULSE)	Drives No. 1 ignition coil	
18	BLU/WHT	NC (OUTPUT SHAFT (COUNTERSHAFT) SPEED SENSOR)	Detects output shaft (countershaft) speed sensor signal	With ignition switch ON (II): about 0 V or about 5.0 V While driving: about 2.5 V