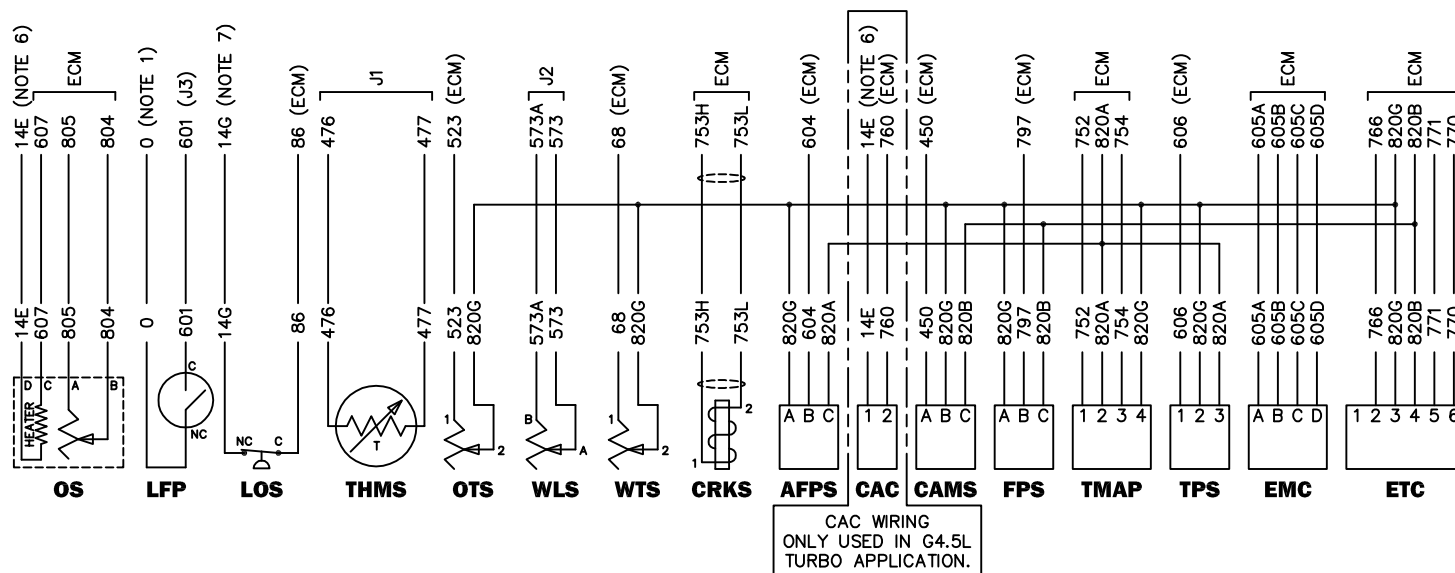
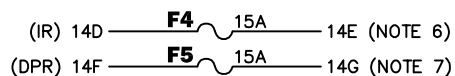
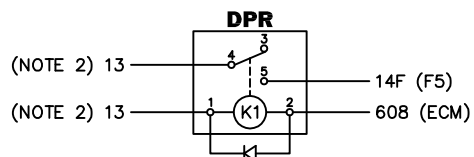
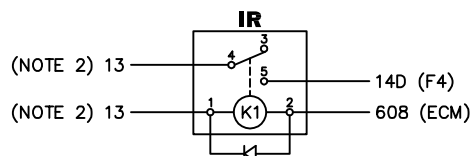
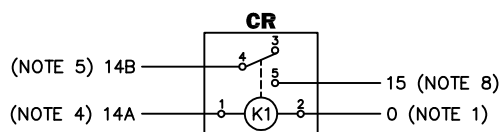
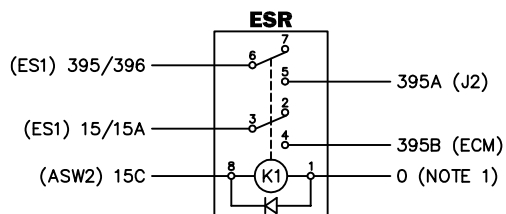
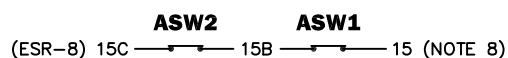
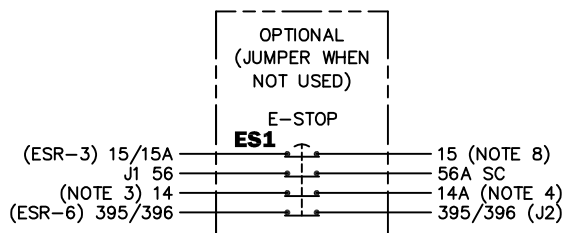
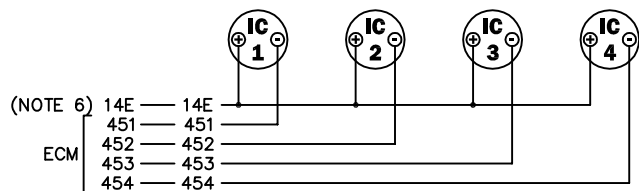


AFPS — AIR FILTER PRESSURE SENSOR
ALT — DC CHARGE ALTERNATOR
ASW — AUXILIARY SHUTDOWN SWITCH
BAT — BATTERY
CAC — CHARGE AIR COOLER
CAMS — CAMSHAFT SENSOR
CR — CONTROL RELAY
CRKS — CRANKSHAFT SENSOR
CT — CURRENT TRANSFORMER
DB_ — DIODE BRIDGE
DPE — EXCITER
DPR — DRIVER POWER RELAY
ECM — ELECTRONIC CONTROL MODULE

EMC — ELECTRONIC MIXER CONTROL VALVE
ES — EMERGENCY STOP
ESR — EMERGENCY STOP RELAY
ETC — ELECTRONIC THROTTLE CONTROL VALVE
F — FUSE
FPS — FUEL PRESSURE SENSOR
FS — FUEL SOLENOID
IC — IGNITION COIL
J — IGNITION RELAY
J — MAIN CONTROLLER CONNECTORS
LFP — LOW FUEL PRESSURE SWITCH
LOS — LOW OIL PRESSURE SWITCH

- MLCB – MAIN LINE CIRCUIT BREAKER
- NB – NEUTRAL BLOCK
- OS – OXYGEN SENSOR
- OTS – OIL TEMPERATURE SENSOR
- R – RESISTOR
- SC – STARTER CONTACTOR
- SM – STARTER MOTOR
- THMS – THERMISTOR (BATTERY AMBIENT TEMP.)
- TMAP – MANIFOLD TEMPERATURE AND PRESSURE
- TPS – MIXER POSITION SENSOR
- WLS – COOLANT LEVEL SENSOR
- WTS – COOLANT TEMPERATURE SENSOR





MAIN CONTROLLER CONNECTIONS

J1

PIN	WIRE	TO	FUNCTION
1	15	F1	NOTE 8
2	15	F1	NOTE 8
3	56/56A	ES1	STARTER OUTPUT
4	0	GND	NOTE 1
5	183	CUST CON	REMOTE START
6	194	CUST CON	TRANSFER RELAY COIL (+)
7	23	CUST CON	TRANSFER RELAY COIL CONTROL
8	209/210	CAR	COMMON ALARM RELAY
9	14/14A	ES1	NOTE 3/NOTE 4
11	476	THMS	THERMISTOR (BATTERY CHARGER)
12	477	THMS	THERMISTOR (BATTERY CHARGER)
14	178	CUST CON	REMOTE START
15	209/210	CAR	COMMON ALARM RELAY
16	172	ECM-20	RUN SIGNAL

J2

PIN	WIRE	TO	FUNCTION
4	395/396	ES1	EMERGENCY STOP
6	SHLD	ECM (CUT)	CAN COMMS TO ECM (SHIELD)
8	395A	ESR-5	EMERGENCY STOP
9	573	WLS-A	COOLANT LEVEL SIGNAL
10	573A	WLS-B	COOLANT LEVEL SIGNAL RETURN
11	743A	ECM-2C	CAN COMMS TO ECM (HIGH)
12	744A	ECM-2B	CAN COMMS TO ECM (LOW)

J3

PIN	WIRE	TO	FUNCTION
4	0	GND	NOTE 1
5	601	LFP	LOW FUEL PRESSURE

J4

PIN	WIRE	TO	FUNCTION
1	SA	MLCB	OUTPUT VOLTAGE SENSING A
3	N1	CUST CON	UTILITY VOLTAGE SENSING 1
4	SB	MLCB	OUTPUT VOLTAGE SENSING B
6	N2	CUST CON	UTILITY VOLTAGE SENSING 2

J5

PIN	WIRE	TO	FUNCTION
1	2	DPE	EXCITER OUTPUT
2	1	FIELD	FIELD (BRUSH) -
3	6	DPE	EXCITER RETURN
4	4	FIELD	FIELD (BRUSH) +

NOTES:

1) WIRE #0 IS CHASSIS GROUND (BATTERY-) UNLESS NOTED OTHERWISE.

2) WIRE #13 IS UNFUSED +12VDC (BATTERY+).

3) WIRE #14 IS FUSED +12VDC WHEN GENERATOR IS CRANKING OR RUNNING.

4) WIRE #14A IS FUSED +12VDC WHEN GENERATOR IS CRANKING OR RUNNING AND E-STOP IS NOT ACTIVATED.

5) WIRE #14B IS FUSED +12VDC WHEN GENERATOR IS CRANKING OR RUNNING AND E-STOP IS NOT ACTIVATED (FUSED WIRE #15 & SWITCHED WIRE #14A).

6) WIRE #14E IS FUSED +12VDC FOR IGNITION COILS, CHARGE AIR COOLER BYPASS, AND OXYGEN SENSOR HEATER.

7) WIRE #14G IS FUSED +12VDC FOR THE ECM DRIVER POWER.

8) WIRE #15 IS FUSED +12VDC FOR GENERAL USE.

ENGINE CONTROL MODULE CONNECTIONS

ECM

PIN	WIRE	TO	FUNCTION
1A	605C	EMC-C	ELECTRONIC MIXER CONTROL VALVE B (+)
1B	753L	CRKS-2	CRANKSHAFT POSITION SENSOR (-)
1C	753H	CRKS-1	CRANKSHAFT POSITION SENSOR (+)
1D	760	CAC	CHARGE AIR COOLER BYPASS
1G	607	OS-C	OXYGEN HEATER
1H	608	IR/DPR	ECM MAIN POWER RELAY
1J	610	FS1-B	FUEL SHUT OFF VALVE
1L	820A	AFPS/TMAP/TPS	SENDER POWER 1
1M	820B	CAMS/ETC/FPS	SENDER POWER 2
1N	797	FPS-B	FUEL PRESSURE SENSOR
1O	606	TPS-1	MIXER POSITION SENSOR
1P	771	ETC-5	ELECTRONIC THROTTLE CONTROL VALVE (-)
1Q	770	ETC-6	ELECTRONIC THROTTLE CONTROL VALVE (+)
2A	605D	EMC-D	ELECTRONIC MIXER CONTROL VALVE B (-)
2B	744A	J2-12	CAN COMMS TO CONTROLLER (LOW)
2C	743A	J2-11	CAN COMMS TO CONTROLLER (HIGH)
2D	754	TMAP-3	INTAKE AIR TEMPERATURE
2E	820G	AFPS/CAMS/ETC/FPS OTS/TMAP/TPS/WTS	SENDER GROUND
2L	450	CAMS-A	CAMSHAFT POSITION SENSOR
2M	752	TMAP-1	MANIFOLD AIR PRESSURE
2N	766	ETC-2	ELEC. THROTTLE CONTROL VALVE POSITION
2O	172	J1-16	RUN SIGNAL
2P	14G	F5-Y	NOTE 7
2Q	14G	F5-Y	NOTE 7
3A	605A	EMC-A	ELECTRONIC MIXER CONTROL VALVE A (+)
3B	399D	CTC2-1	CURRENT TRANSFORMER (-)
3C	398D	CTC2-2	CURRENT TRANSFORMER (+)
3E	805	OS-A	OXYGEN SENSOR (-)
3G	523	OTS-1	OIL TEMPERATURE SENSOR
3J	395B	ESR-4	EMERGENCY STOP
3L	86	LOS-1	LOW OIL PRESSURE SIGNAL
3O	15	F1	NOTE 8
3P	0	GND	NOTE 1
3Q	0	GND	NOTE 1
4A	605B	EMC-B	ELECTRONIC MIXER CONTROL VALVE A (-)
4B	604	AFPS-B	AIR FILTER PRESSURE SENSOR
4D	804	OS-B	OXYGEN SENSOR
4F	68	WTS-1	COOLANT TEMPERATURE SENSOR
4L	452	IC2-C	IGNITION COIL 2
4M	453	IC3-C	IGNITION COIL 3
4N	454	IC4-C	IGNITION COIL 4
4O	451	IC1-C	IGNITION COIL 1
4P	0	GND	NOTE 1
4Q	0	GND	NOTE 1