

GD CONNECTOR

PIN	WIRE	TO	FUNCTION
1	0	GND	NOTE 1
4	14	RB1-7	NOTE 3
8	771	GA1-1	THROTTLE DRIVE LO
9	770	GA1-4	THROTTLE DRIVE HI
10	0	GND	NOTE 1
12	769	J1-33	THROTTLE PWM

AVR CONNECTOR

PIN	WIRE	TO	FUNCTION
1	1	FIELD	- FIELD
2	194	J2-31	+12VDC
3	6	PMG	PME OUTPUT
4	4	R1/FIELD	+ FIELD
5	4	R1/FIELD	+ FIELD
6	403	J2-8	GATE TRIGGER B
7	404	J2-20	GATE TRIGGER A
10	406	J2-30	ZERO CROSSING I/P
11	405	J2-19	GROUND (ISO)
13	162	CB1	PME OUTPUT (AFTER CB)

ICM - IGNITION MODULE CONNECTOR

PIN	WIRE	TO	FUNCTION
1	459	CYL9	IGNITION COIL DRIVE 9
2	460	CYL10	IGNITION COIL DRIVE 10
3	457	CYL7	IGNITION COIL DRIVE 7
4	451	CYL1	IGNITION COIL DRIVE 1
5	456	CYL6	IGNITION COIL DRIVE 6
6	452	CYL2	IGNITION COIL DRIVE 2
7	453	CYL3	IGNITION COIL DRIVE 3
8	454	CYL4	IGNITION COIL DRIVE 4
9	455	CYL5	IGNITION COIL DRIVE 5
10	SHLD	CUT	CAMSHAFT SENSOR DRAIN
11	56	RB1-10	STARTER RELAY OUT
12	14	RB1-7	NOTE 3
13	0	GND	NOTE 1 (WITH LP FUEL ONLY)
14	79A	CSS-2	CRANKSHAFT SENSOR +
15	458	CYL8	IGNITION COIL DRIVE 8
16	15C	F3	NOTE 7
17	0	GND	NOTE 1
18	15D	CYL1-CYL10	IGNITION COIL PWR
19	806	J1-27	IGNITION ALARM
20	SHLD	CUT	CRANKSHAFT SENSOR DRAIN
21	0A	CSS-1	CRANKSHAFT SENSOR -
22	0	CAM-1	CAMSHAFT SENSOR -
23	450	CAM-2	CAMSHAFT SENSOR +

ENGINE CONTROL MODULE CONNECTIONS**J1**

PIN	WIRE	TO	FUNCTION
3	810	MOD	MODEM SIGNAL RETURN
4	805	OS	OXYGEN SENSOR RTN
5	804	OS	OXYGEN SENSOR +
10	R15B	RB1A-3/ES1	OVERSPEED/WATCHDOG
11	256	RB1A-5	FUEL RELAY
12	0	GND	NOTE 1
14	811	MOD	MODEM DATA CARRIER DETECT
15	68V	ESC1-1	COOLANT TEMP +
16	803	BCH	BAT CHARGER CURRENT
17	766R	ESC3-2	THROTTLE POS RTN
18	766V	ESC3-1	THROTTLE POS +
19	69R	OPS-3	OIL PRESS RTN
20	69V	OPS-2	OIL PRESS +
21	808	AFS	AIR/FUEL SOLENOID
23	56A	RB1A-6	STARTER RELAY
24	0	MPU1-2	MPU1 SIGNAL (-)
25	79	MPU1-3	MPU1 SIGNAL (+)
26	812	MOD	MODEM ENABLE
27	806	ICM-19	IGNITION ALARM
29	573R	ESC2-2	COOLANT LVL RTN
30	573V	ESC2-1	COOLANT LVL +
31	68R	ESC1-2	COOLANT TEMP RTN
32	809	MOD	MODEM 12V POWER
33	769	GD-12	THROTTLE PWM
34	445	RB1A-2	ALARM RELAY
35	15B	F2	NOTE 6

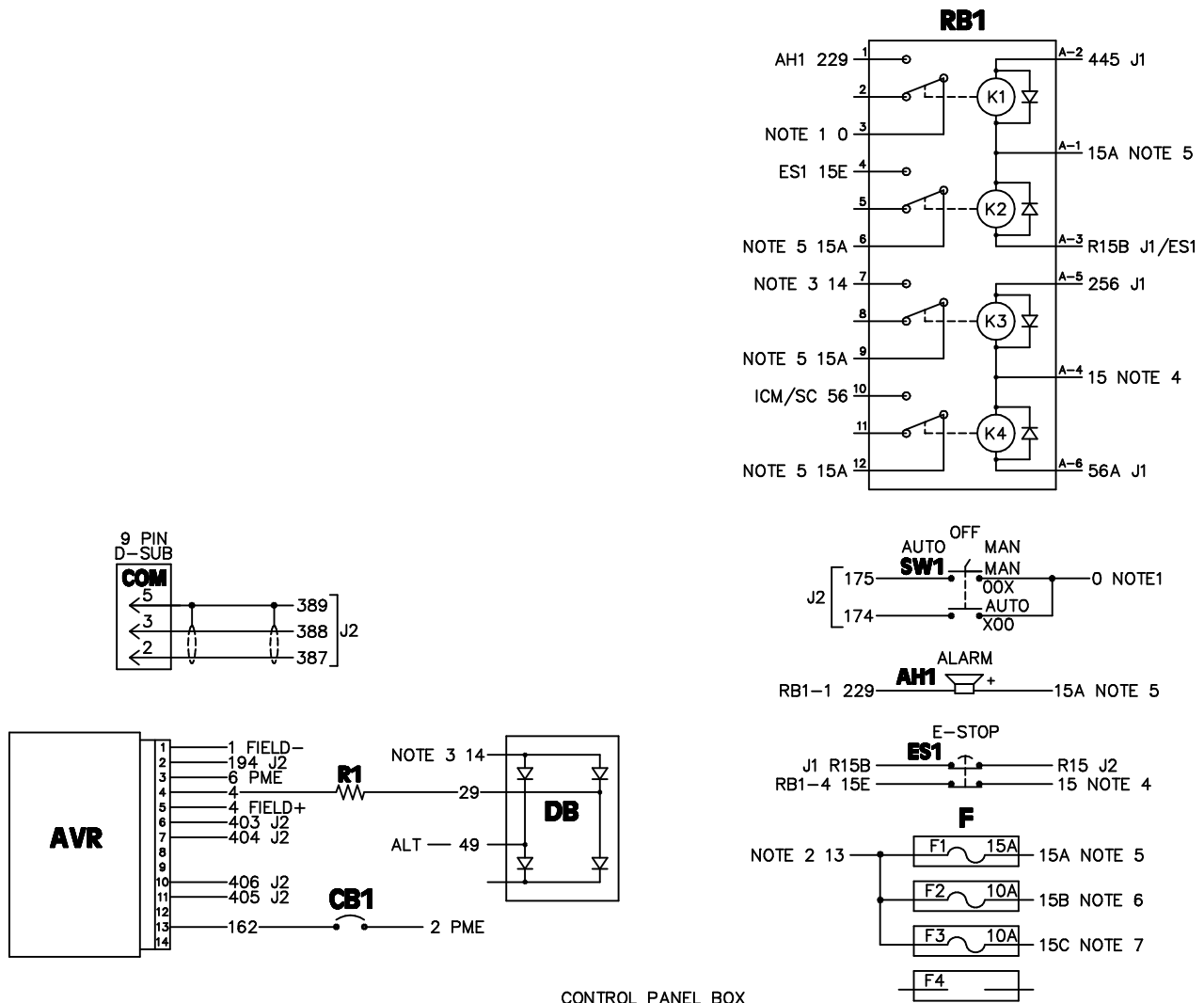
J2

PIN	WIRE	TO	FUNCTION
1	391	CUST CON	RS485- (XFER SW)
2	388	COM-3	RS232 TX (GENLINK)
3	D13	CUST CON	LINE POWER SIGNAL
4	183	CUST CON	REMOTE START
5	174	SW1	"AUTO" START
6	224	IFT	V SENSE GEN A PH
7	227	IFT	V SENSE RTN
8	403	AVR-6	AVR GATE TRIGGER B
9	399C	CT3	GEN C PH CURRENT -
10	398C	CT3	GEN C PH CURRENT +
11	399A	CT1	GEN A PH CURRENT -
12	398A	CT1	GEN A PH CURRENT +
13	390	CUST CON	RS485+ (XFER SW)
14	387	COM-2	RS232 RX (GENLINK)
15	601	LFP	LOW FUEL PRESSURE
16	R15	ES1	EMERGENCY STOP
17	226	IFT	V SENSE GEN C PH
19	405	AVR-11	AVR GROUND
20	404	AVR-7	AVR GATE TRIGGER A
21	OC8	RB2A-6	SPARE OUTPUT 4
22	OC6	RB2A-3	SPARE OUTPUT 2
23	OC5	RB2A-2	SPARE OUTPUT 1
24	SHLD	CUST CON	RS485 DRAIN (XFER SW)
25	389	COM-5	RS232 COM (GENLINK)
26	D14	CUST CON	GEN POWER SIGNAL
27	505	BCH	BAT CHARGER FAIL
28	175	SW1	"MANUAL" START
29	225	IFT	V SENSE GEN B PH
30	406	AVR-10	AVR ZERO CROSSING I/P
31	194	AVR-2	AVR +12VDC
33	OC7	RB2A-5	SPARE OUTPUT 3
34	399B	CT2	GEN B PH CURRENT-
35	398B	CT2	GEN B PH CURRENT+

* - CONNECTIONS NOT USED IN 1Ø UNITS.

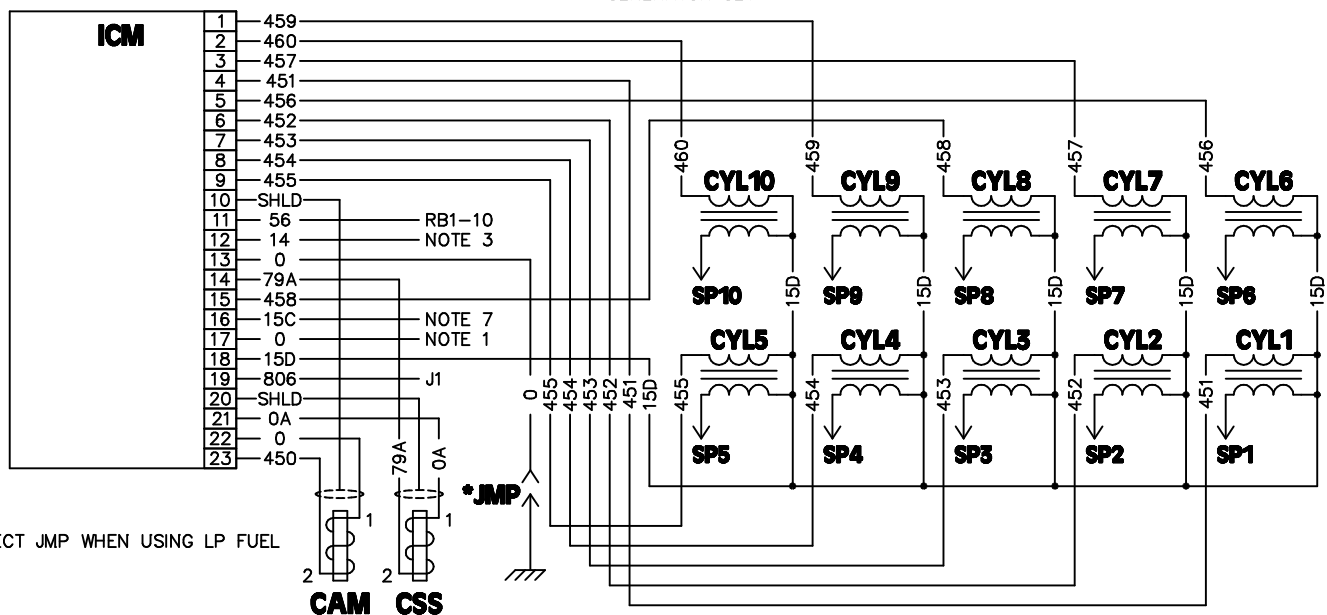
NOTES:

- 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# 15 IS FUSED +12VDC WHEN E-STOP IS NOT ACTIVATED.
- 5) WIRE# 15A IS FUSED +12VDC FOR GENERAL USE.
- 6) WIRE# 15B IS FUSED +12VDC FOR THE ENGINE CONTROL MODULE.
- 7) WIRE# 15C IS FUSED +12VDC FOR THE IGNITION.



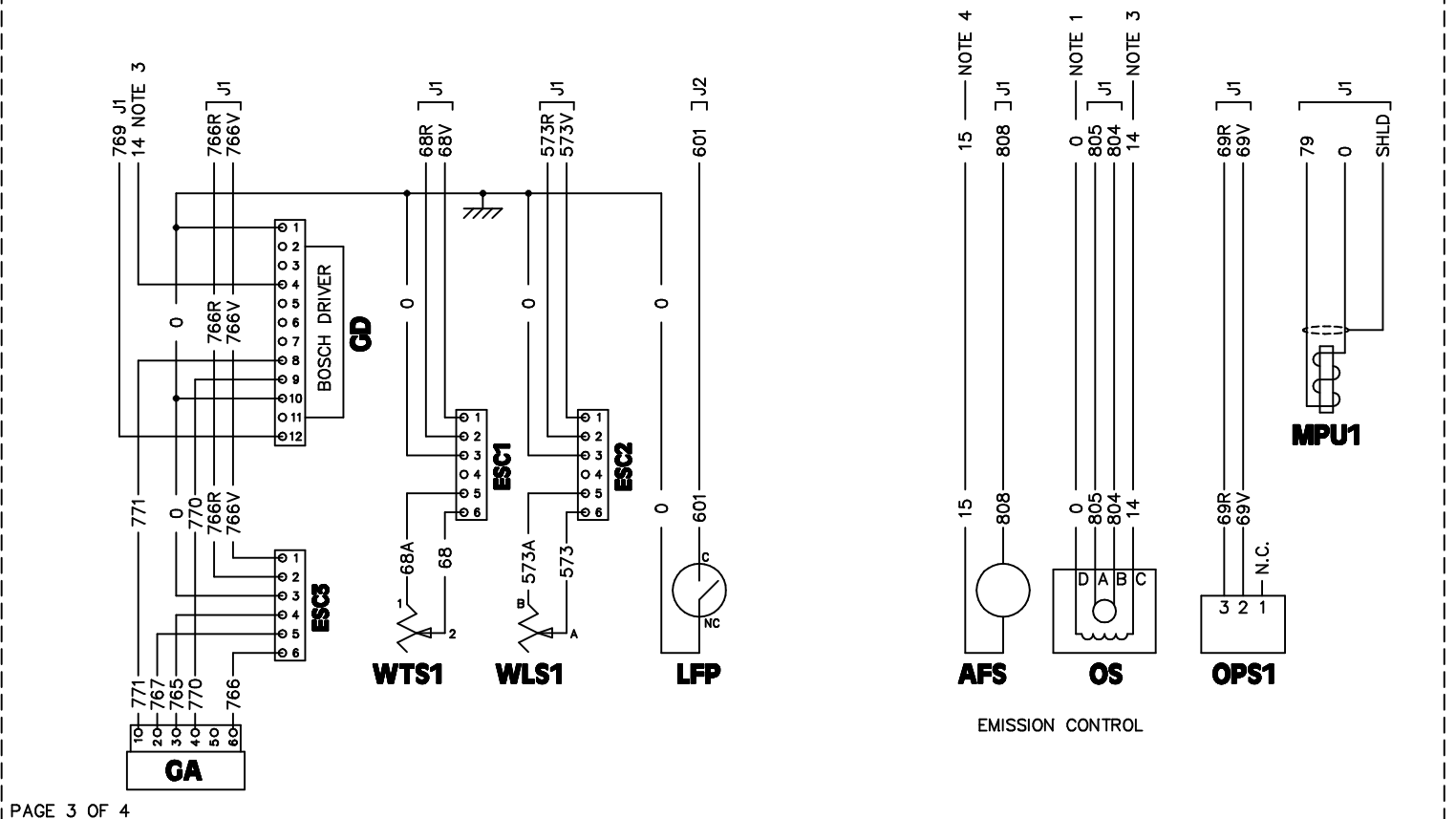
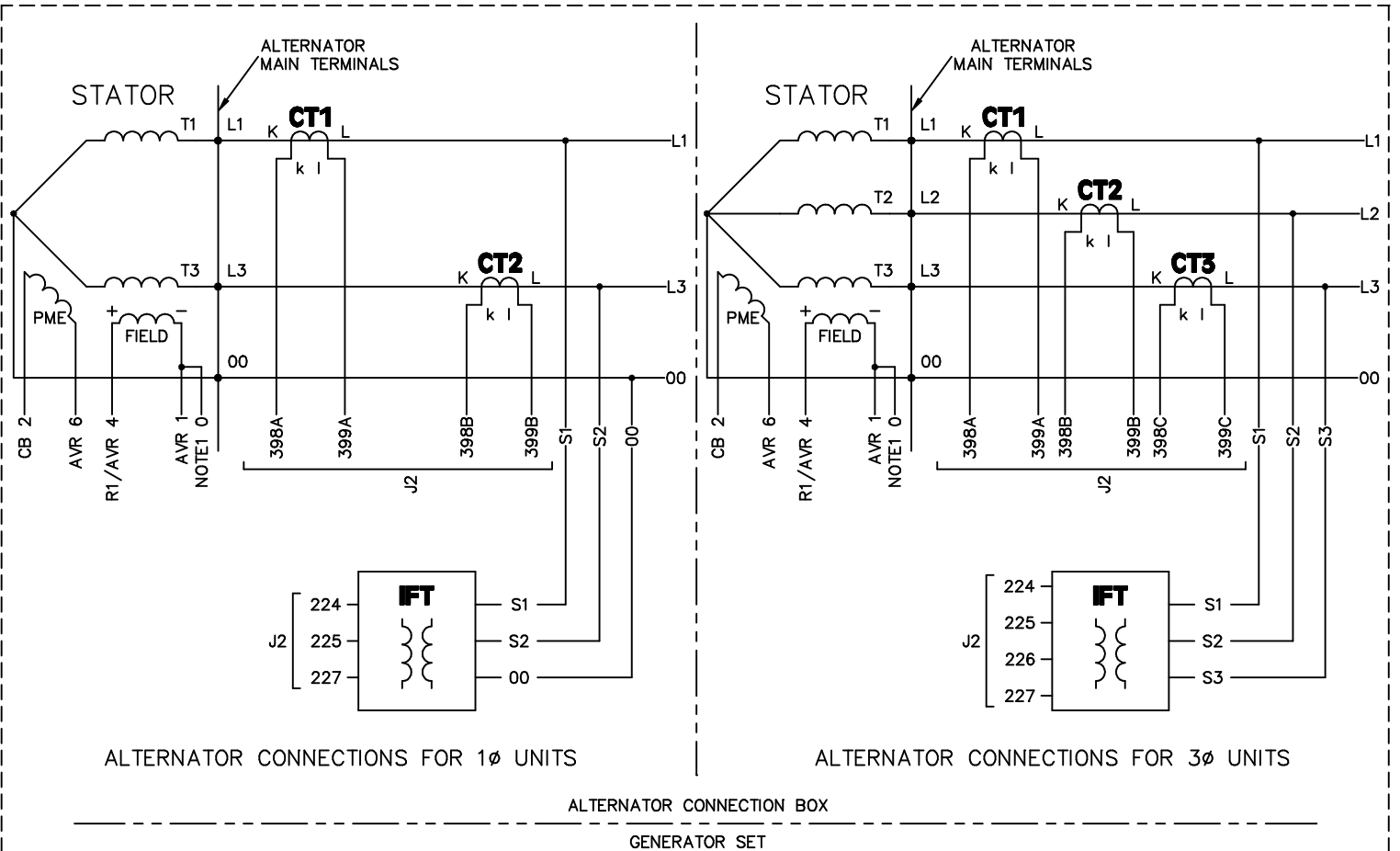
CONTROL PANEL BOX

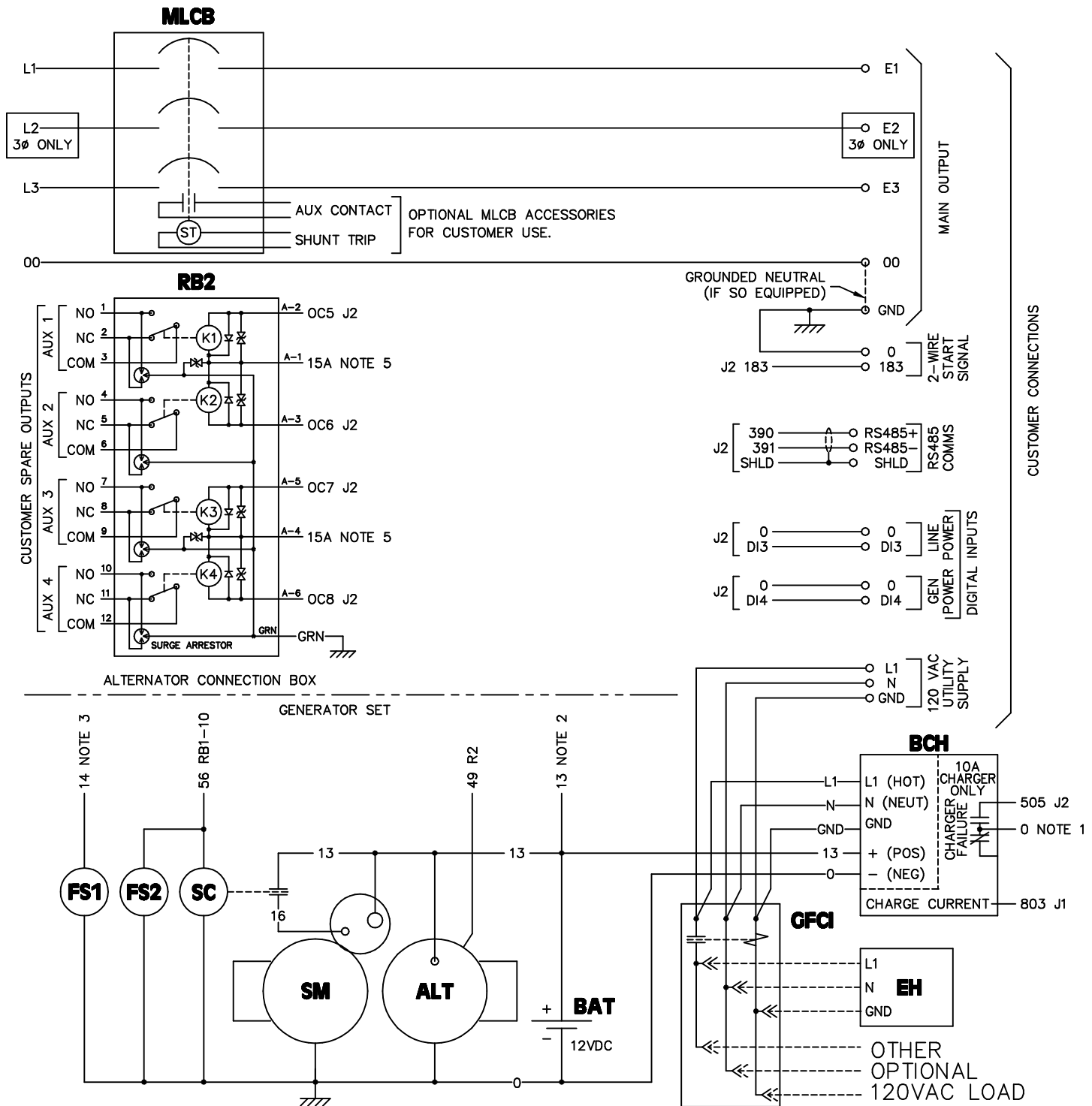
GENERATOR SET



PAGE 2 OF 4

SCHEMATIC - DIAGRAM
6.8L QTA W/EMISSIONS
DRAWING #: 0G9991





LEGEND			
00 - NEUTRAL	CSS - CRANKSHAFT SENSOR	GFCI - GND FAULT CIRCUIT INTERRUPT	RB_ - RELAY BOARD
AFS - AIR/FUEL SOLENOID	CT_ - CURRENT TRANSFORMER	ICM - IGNITION CONTROL MODULE	SC - STARTER CONTACTOR
AH1 - ALARM HORN	CYL_ - CYLINDER IGNITION COIL	IFT - INTERFACE TRANSFORMER	SHLD - SHIELD
ALT - CHARGE ALTERNATOR	DB - DIODE BRIDGE	J_ - ENGINE CONTROLLER CONNECTIONS	SM - STARTER MOTOR
AVR - AUTOMATIC VOLTAGE REGULATOR	EH - ENGINE BLOCK HEATER	LFP - LOW FUEL PRESSURE	SP_ - SPARK PLUG
BAT - BATTERY	ES1 - E-STOP SWITCH	MLCB - MAIN LINE CIRCUIT BREAKER	ST - SHUNT TRIP
BCH - BATTERY CHARGER	ESC_ - ELECT. SIGNAL CONDITIONER	MPU_ - MAGNETIC PICK-UP	SW1 - AUTO/MANUAL SWITCH
CAM - CAMSHAFT SENSOR	F_ - FUSE	OPS_ - OIL PRESSURE SENDER	WLS_ - WATER LEVEL SENSOR
CB_ - CIRCUIT BREAKER	FS_ - FUEL SOLENOID	OS - OXYGEN SENSOR	WTS_ - WATER TEMPERATURE SENDER
COM - COMMUNICATION CONNECTOR	GA - GOVERNOR ACTUATOR	PME - PERMANENT MAGNET EXCITER	
	GD - GOVERNOR DRIVER	R_ - RESISTOR	