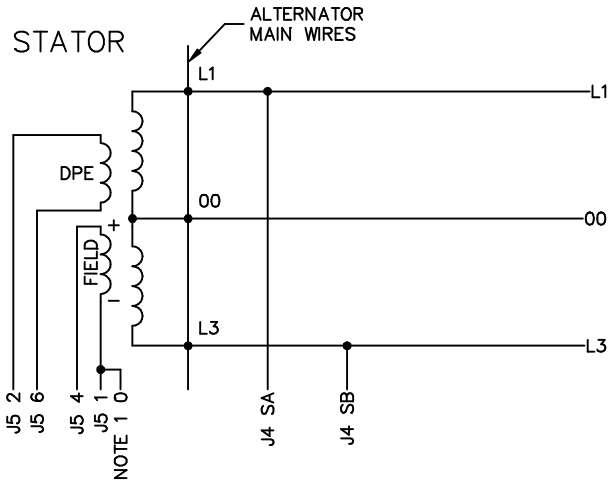
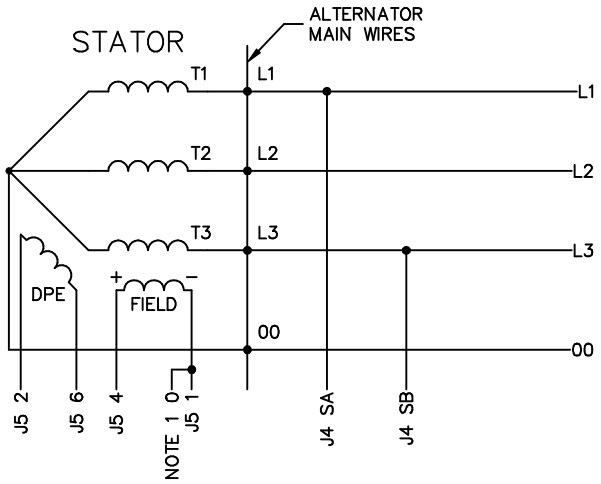
LEGEND

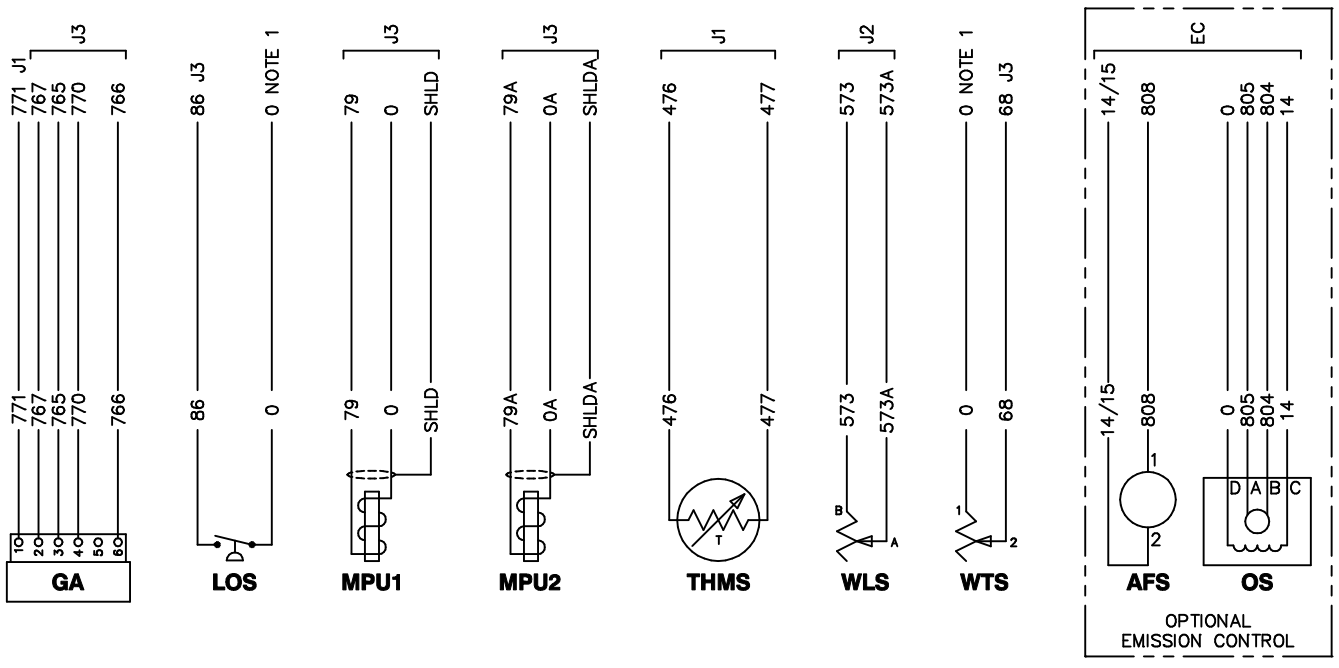
AFS – AIR/FUEL SOLENOID	FS_ – FUEL SOLENOID	R – RESISTOR
ALT – DC CHARGE ALTERNATOR	GA – GOVERNOR ACTUATOR	SC – STARTER CONTACTOR
BAT – BATTERY	J_ – ENGINE CONTROL MODULE CONNECTOR	SM – STARTER MOTOR
CYL_ – CYLINDER IGNITION COIL	LFP – LOW FUEL PRESSURE SWITCH	SP_ – SPARK PLUG
DB_ – DIODE BRIDGE	LOS – LOW OIL PRESSURE SWITCH	THMS – THERMISTOR (BATTERY AMBIENT TEMP.)
DPE – EXCITER	MLCB – MAIN LINE CIRCUIT BREAKER	WLS – COOLANT LEVEL SENDER
EC – EMISSIONS CONNECTOR	MPU_ – MAGNETIC PICKUP	WTS – COOLANT TEMPERATURE SENDER
F1 – FUSE INLINE	OS – OXYGEN SENDER	



ALTERNATOR CONNECTIONS FOR 1ø UNITS



ALTERNATOR CONNECTIONS FOR 3ø UNITS



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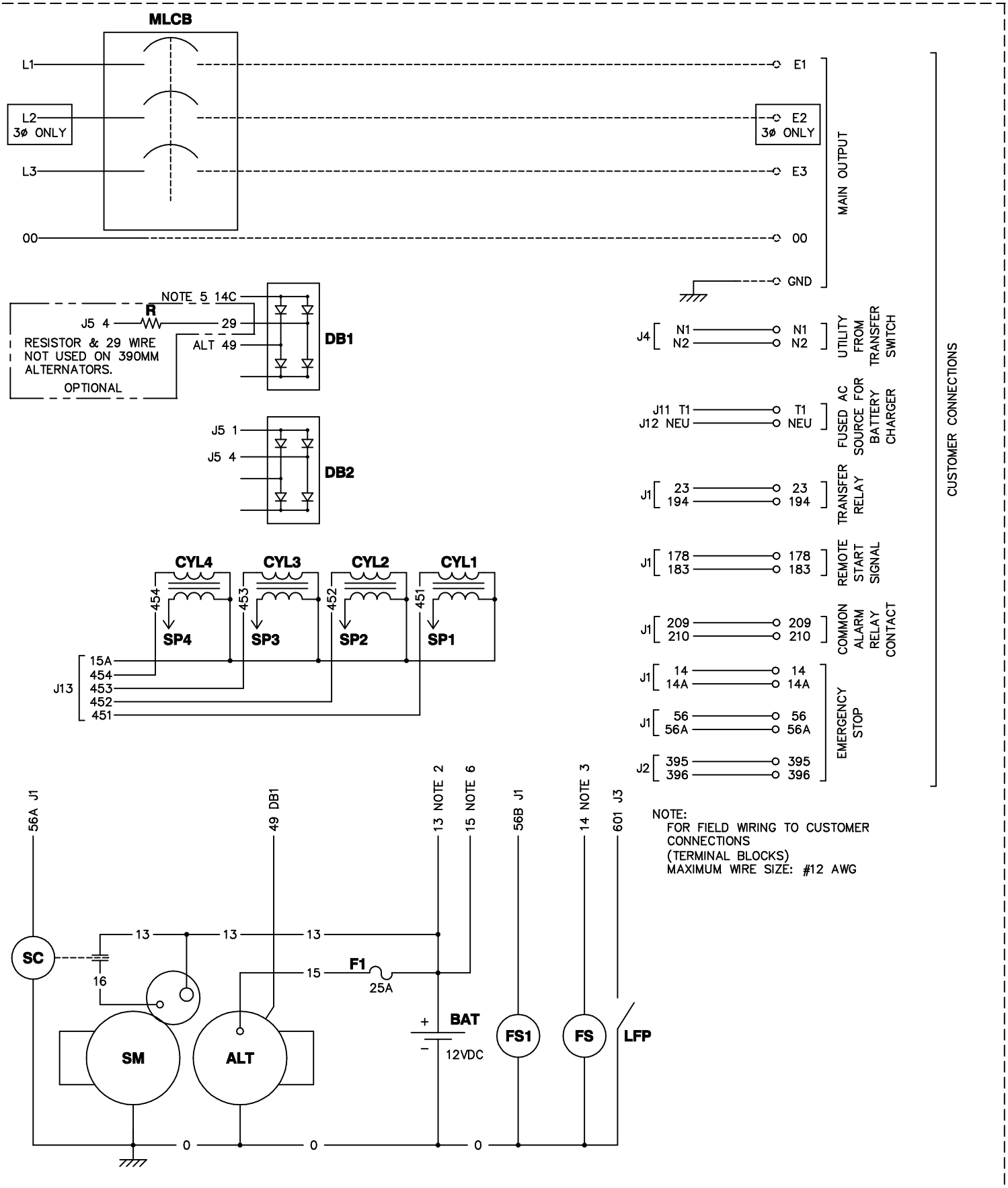

SCHEMATIC - DIAGRAM

REVISION: -A-

DATE: 8/14/14

G2.4L G2 PROTECTOR

DRAWING #: 0K7686

MAIN CONTROLLER CONNECTIONS

J1

PIN	WIRE	TO	FUNCTION
1	15	F1	NOTE 6
2	15	F1	NOTE 6
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
10	771	GA-1	THROTTLE DRIVE LO
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	56B	FS1	START CONTACTOR CONTROL

J2

PIN	WIRE	TO	FUNCTION
1	808	EC-4	AIR/FUEL RATIO SOLENOID DRIVER
4	395/396	ES1	EMERGENCY STOP
8	395/396	ES1	EMERGENCY STOP
9	573	WLS-B	COOLANT LEVEL SIGNAL
10	573A	WLS-A	COOLANT LEVEL SIGNAL RETURN

J3

PIN	WIRE	TO	FUNCTION
1	SHLD	MPU1-1	FLYWHEEL SENSOR DRAIN
2	79A	MPU2-3	CAM SENSOR +
3	0A	MPU2-2	CAM SENSOR -
4	0	GND	NOTE 1
5	601	LFP	LOW FUEL PRESSURE
6	68	WTS-2	COOLANT TEMPERATURE SIGNAL
7	765	GA-3	THROTTLE POSITION FEEDBACK SOURCE
8	766	GA-6	THROTTLE POSITION FEEDBACK SIGNAL
9	770	GA-4	THROTTLE DRIVE HI
10	79	MPU1-3	FLYWHEEL SENSOR +
11	0	MPU1-2	FLYWHEEL SENSOR -
12	SHLDA	MPU2-1	CAM SENSOR DRAIN
15	86	LOS-NC	LOW OIL PRESSURE SIGNAL
16	804	EC-6	OXYGEN SENSOR +
17	805	EC-5	OXYGEN SENSOR RETURN
18	767	GA-2	THROTTLE POSITION FEEDBACK RETURN

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) +

J13

PIN	WIRE	TO	FUNCTION
1	15A	CYL1-CYL4	NOTE 7
3	451	CYL1	IGNITION COIL DRIVE 1
4	452	CYL2	IGNITION COIL DRIVE 2
5	453	CYL3	IGNITION COIL DRIVE 3
6	454	CYL4	IGNITION COIL DRIVE 4

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 LOW CURRENT FUSED +12VDC WHEN GENERATOR IS CRANKING OR RUNNING AND E-STOP IS NOT ACTIVATED.

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

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

7) WIRE #15A IS FUSED +12VDC FOR THE IGNITION COILS.

EC CONNECTOR

PIN	WIRE	TO	FUNCTION
1	0	GND	NOTE 1
2	14A	J1-9	NOTE 4
3	14A	J1-9	NOTE 4
4	808	J2-1	AIR/FUEL RATIO SOLENOID DRIVER
5	805	J3-17	OXYGEN SENSOR RETURN
6	804	J3-16	OXYGEN SENSOR +

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SCHEMATIC - DIAGRAM

G2.4L G2 PROTECTOR

DRAWING #: 0K7686

REVISION: -A-

DATE: 8/14/14