



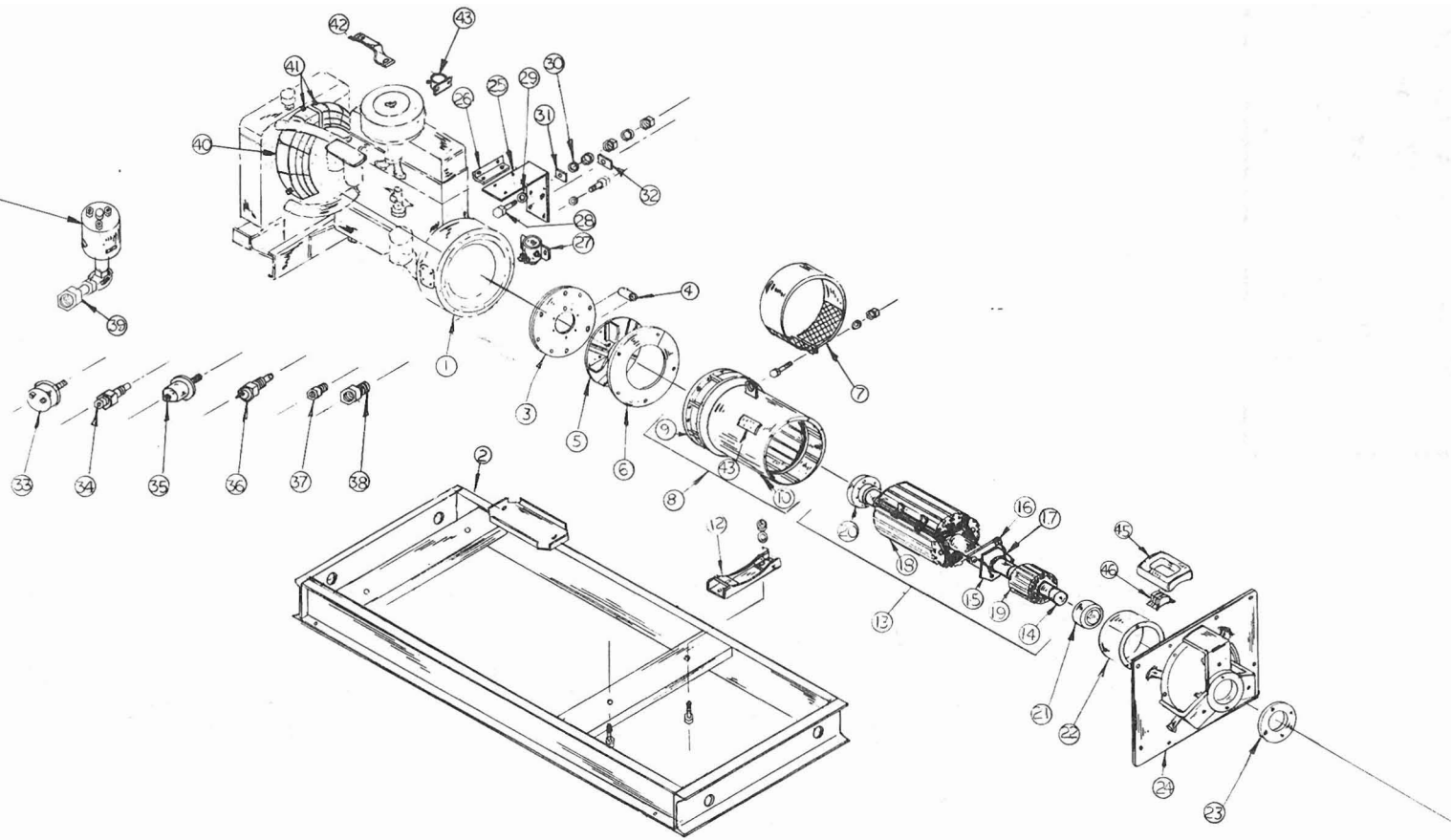
WINPOWER CORPORATION

Model GR30H4-C Type I
 30 KW 30 KVA 1.0P.F. 60 HZ
 1 Phase 125 Amps 3 Wire
 120/240 Volts 130 °C Rise
 Wiring Diagram IF-5216-4
 Released: 12-1-76

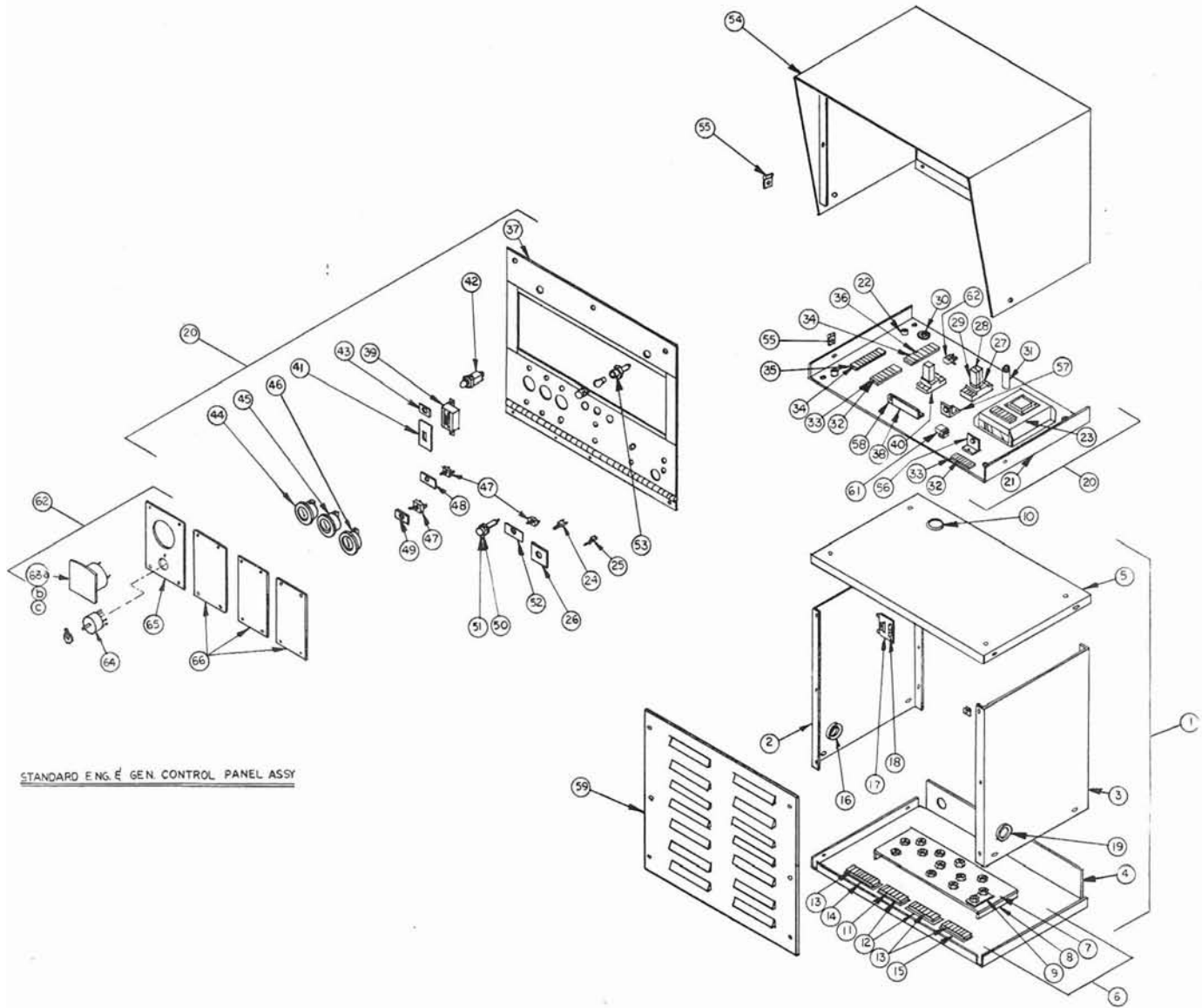
REF. NO.	PART NO.	PART DESCRIPTION	REQ'D/UNIT
1	EC-17502	Engine Hercules G-2300	1
2	G-6407	Skid Assembly	1
	3685-2	Screw 5/8-11 x 1-1/4	2
	1189	Washer 5/8 Flt Stl	2
	4621	Nut 5/8-11 Hx	2
	1148	Washer 5/8 Lock	2
3	S-5813-1	Coupling Disc	2
	S-6896-1	Screw 3/8-16 x 3/4	7
	1185	Washer 3/8 Flat Steel	7
4	S-6878-4	Fan Spacer	4
	S-6896-1	Screw 3/8-16 x 2	4
5	G-5829	Fan Assembly	1
6	S-6902	Fan Shroud	1
7	G-3863-2	Fan Guard	1
	3526	Screw 1/4-20 x 1	1
	5805	Nut 1/4-20	2
8	G-5818-12	Stator & Frame Assembly	1
9	G-5816	Frame Assembly	1
10	G-6881	Stator, Electrical	1
11	Not Applicable		
12	G-5817	Generator Support	1
13	G-6920	Revolving Elec Assembly	1
14	N-587-1	Shaft	1
15	G-6303	Heat Sink Assembly	1
16	EE-2123	Diode - Forward	1
17	EE-2122	Diode - Reverse	1
18	G-6907	Rotor Elec. Assembly	1
19	G-6933	Exciter, Armature	1
20	I-825-1	Coupling Hub	1
	3887	Screw 1/2-13 x 1/2 Soc Hd	1
21	D-7	Bearing	1
22	G-6946	Exciter Frame Assembly	1
	S-6906	Exciter Frame	1
	3547	Screw 5/16-18 x 1-1/4 Hx Hd	12
	1115	Washer T.T.	12
	G-292-1	Field Pole Assembly	4
	J-436	Insulator	8
	H-1202	Field Coil Assembly	4
23	S-3952	Bearing Retainer	1
	3522	Screw 1/4-20 x 1/2	2
	1114	Washer 1/4 Int. T.	2
24	I-881	Bearing Housing	1
	3582-2	Screw 3/8-16 x 1-1/4 Gr 5	6
	1144	Washer, Split Lock	6
25	S-5872-1	Bracket	1
26	S-6076	Angle	1
27	EE-1201	Start Contactor	1
28	3547-1	Screw 5/16-18 x 1-1/4 Brass	2
29	J-592	Washer, Nylon	1
30	J-593	Washer 5/16 Nylon	1
31	Z-283	Nameplate, Positive Battery	1
32	Z-284	Nameplate, Negative Battery	1
	1034	Washer, Flat Brass	6
	4710	Nut 5/16-18 Brass	4
	1115	Washer 5/16-18 Brass	6
33	OP-23	Oil Pressure Switch	1
33a	OP-24	Oil Pressure Switch	1
34	WT-22	Water Temperature Sender 1/2 NPT	1
35	OP-22	Oil Pressure Sender	1
36	WT-23	Water Temperature Switch 1/2 NPT	1
37	EN-18174	Tee 1/8M to 1/8F to 1/8F	1
38	EN-1802	Bushing 3/8M to 1/4F NPT	1
39	Not Applicable		
40	G-5895	Fan Guard	1

PL-1711

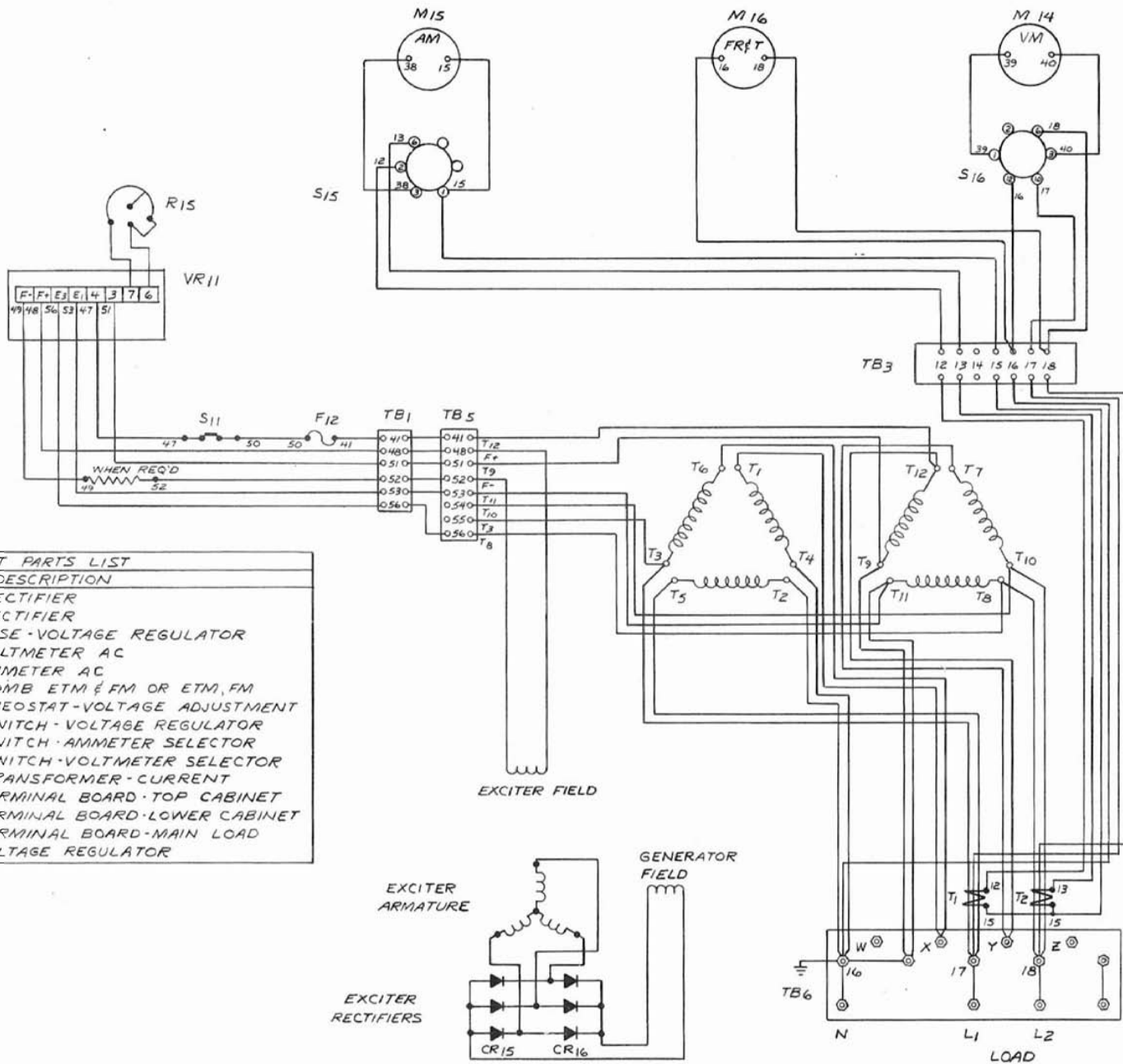
OPTIONAL ON SOME MODELS



REF. NO.	PART NO.	PART DESCRIPTION	REQ'D/UNIT
	G-6863	Panel Assy Complete 13 in. Lam.	
	G-5740-3	Panel Cabinet Assembly	
	S-6860	Panel Side - Left	
	S-6858	Panel Side - Right	
	S-6857	Panel Bottom	
	S-6853	Panel Top	
	3522	Screw 1/4-20 x 1/2 H.H.	8
	1114	Washer 1/4 Int.	8
	5805	Nut 1/4-20 H.H.	8
6	G-5722-1	Terminal Board Assembly	1
7	J-579	Terminal Board	2
	3524	Screw 1/4-20 x 3/4 H.H.	4
	1114	Washer 1/4	4
	5805	Nut 1/4-20	4
8	S-6850	Bracket - Mounting	2
9	B-717	Link	10
	3549-1	Screw 5/16-18 x 1-1/2 Hex Brass	13
	1115	Washer 5/16 Int. T.T.	39
	1034	Washer 5/16 Flat Brass	39
	4710	Nut 5/16-18 Hex Brass	26
10	6100	Grommet	1
11	EE-646-1	Terminal Board 6-Pole	1
12	EE-646-2	Insulator	2
	2045	Screw #8-32	2
	5802	Nut #8-32	2
13	EE-653	Terminal Board 8-Pole	3
14	EE-653-8	Insulator	1
15	EE-653-2	Insulator	2
	2045	Screw #8-32	6
	5802	Nut #8-32	6
16	6221	Plug Button	1
17	EE-2214	Auto Exciter Field Flasher	1
18	EE-471-2	Fuse 1 Amp.	1
	2005	Screw #6 x 1/2 lg.	2
	5801	Nut #6-32 H.H.	2
19	6905	Bushing	1
20	G-6865	Engine & Generator Sub. Assembly	1
21	S-6871	Panel Bottom	1
22	W-166-2	Shockmounts	4
23	EE-1750	Voltage Regulator	1
	2087	Screw 10-24 x 3/4 RHMS	4
	5803	Nut #10-24	8
24	EE-233	Push Button Switch	1
25	EE-181	Toggle Switch on-off-on	1
26	Z-1123	Nameplate - Adust volts	1
27	EE-1207-1	Socket - Relay	1
	2011	Screw #6-32 x 1-1/4 RHMS	2
	5801	Nut #6-32	2
28	EE-1207-2	Hold Down Clamp	
29	EE-1220	Relay	
	EE-1219	Socket	
30	6100	Grommet	
31	R-171	Resistor	
32	EE-646-1	Terminal Block 6-Pole	
33	EE-646-2	Insulator	
34	EE-653	Terminal Block 8-Pole	
35	EE-653-2	Insulator	
36	EE-653-8	Insulator	
	2045	Screw #8-32 x 1/2	
	5802	Nut #8-32	
37	G-5724	Front Panel Assembly	
	2085	Screw #10-24 x 1/2 Lg.	
	5803	Nut #10-24	
38	S-6870	Brace	
	2085	Screw #10-24 x 1/2 Lg.	
	1019	Washer	
39	EE-1811	Eng. Safety Circuit Breaker	
	EE-1812-5	Circuit Breaker Heater	
40	EE-1233	Relay - Latching	
	EE-1233-1	Relay Socket	
41	Z-1671	Nameplate - Engine Safety	
42	EE-937-1	Failure Light	
	EE-933-1	Lamp 12 Volt	
43	Z-2092	Nameplate Engine Shutdown	
44	AM-12	Ammeter	
45	OP-21	Oil Pressure Guage	
46	WT-21	Water Temperature	
47	EE-151	Switch	
48	Z-2093	Nameplate Stop Run	
49	Z-920-1	Nameplate Off-On	
50	EE-425	Fuse Holder	
51	EE-445-2	Fuse Amp	
52	Z-2116	Nameplate - Regulator	
53	EE-924-1	Panel Lamp Holder	
	EE-940-1	Lamp 12 Volt	
54	G-5723	Panel Top Assembly	
	2085	Screw #10-24 x 1/2	
	5803	Nut #10-24	
55	4957	Tinnerman	
	2325	Screw 1/4-20 x 1/2 Truss Head	
56	G-5819	Diode Assembly Blocking	
	J-546	Shoulder Washer - Nylon	
	J-583	Washer - Flat - Nylon	
	2087	Screw #10-24 x 3/4	
	5803	Nut #10-24	
57	G-5183-3	Diode Assembly Blocking	
58	4956	Tinnerman	
	6224	Plug Button 23/32 Dia.	
	6223	Plug Button 1" Dia.	
	6218	Plug Button 1/2" Dia.	
59	G-5724	Panel Front	
	4957	Tinnerman	
	3522	Screw 1/4-20 H.H.	
	1183	Washer 1/4 Flat Stl.	
60	EE-1203	Relay	
61	EE-1054	Time Delay Relay	
62	G-6533-1	Voltmeter & Sel. Switch Assembly	
63	VM-69-1	Voltmeter 0-300 Volt	
64	EE-275-1	Selector Switch	
65	S-6822-1	Meter Panel	
66	S-6832	Basic Panel	



STANDARD ENG. GEN. CONTROL PANEL ASSY



CONTROL CABINET PARTS LIST		
REF	PART NO	DESCRIPTION
CR 15	EE-2122	RECTIFIER
CR 16	EE-2123	RECTIFIER
F 12	EE-445-2	FUSE-VOLTAGE REGULATOR
M 14	VM-35	VOLTMETER AC
M 15		AMMETER AC
M 16		COMB ETM & FM OR ETM, FM
R 15	R-91	RHEOSTAT-VOLTAGE ADJUSTMENT
S 11	EE-151	SWITCH-VOLTAGE REGULATOR
S 15	EE-276-2	SWITCH-AMMETER SELECTOR
S 16	EE-275-1	SWITCH-VOLTMETER SELECTOR
T 1,2		TRANSFORMER-CURRENT
TB 1,3		TERMINAL BOARD-TOP CABINET
TB 5		TERMINAL BOARD-LOWER CABINET
TB 6		TERMINAL BOARD-MAIN LOAD
VR 11	EE-1750	VOLTAGE REGULATOR

120/240 TO 139/278 VOLTS; 60 HZ
 115/230 TO 133/266 VOLTS; 50 HZ

SCHEMATIC DIAGRAM
 GENERATOR REGULATOR
 INSTRUMENTATION

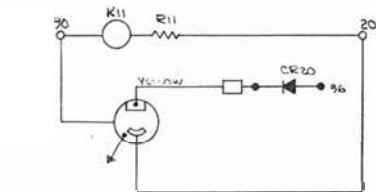
SCALE	MODEL NO.
DATE 2-7-77	1F-5216-4
DWN KH	CHK'D

WINPOWER CORPORATION
 NEWTON, IOWA 50208

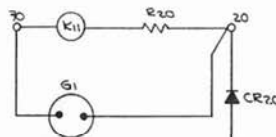
CHANGE	WAS ORIGINALLY	DATE	CHK'D	CHK. REQUEST	NO. REQ'D	MICROFILM DATA
TOLERANCE ON DIMENSIONS NOT OTHERWISE SPECIFIED						
DECIMAL ±		FRACTIONAL ±		REMOVE ALL BURRS BREAK ALL SHARP MACHINED EDGES		MATERIAL

ENGINE PARTS LIST		
REF.	PART NO.	DESCRIPTION
B1	SEE ENG. MAN.	START MOTOR W/ SOLENOID SWITCH
BT1	VARIOUS	BATTERY
C1	SEE ENG. MAN.	CAPACITOR (SPARK IGNITED ENGINES ONLY)
E1	OP-22	SENDER - OIL PRESSURE
E2	WT-22	SENDER - WATER TEMP.
E9	SEE ENG. MAN.	SPARK PLUG - (SPARK IGNITED ENGINES)
G1	SEE NOTE *2	ALTERNATOR OR GENERATOR (BATT. CHARGE)
K1	EE-1201	RELAY, STARTER MOTOR
K2	SEE ENG. MAN.	SOLENOID - FUEL
K3	SEE ENG. MAN.	CHOKE (GASOLINE ONLY)
R1	SEE ENG. MAN.	RESISTOR COIL (OPTIONAL - SPARK IGNITED ENG. ONLY)
R2	SEE ENG. MAN.	RESISTORS - SPARK PLUGS
S1	OP-23	SWITCH - LOW OIL PRESSURE (CLOSED 0-15 PSI)
S2	WT-23	SWITCH - HIGH WATER TEMPERATURE
S3	OP-24	SWITCH - STARTER MOTOR SAFETY (CLOSED 0-35 PSI)
S4	VARIOUS	SWITCH - OVERSPEED (OPTIONAL)
S6	SEE ENG. MAN.	DISTRIBUTOR ASSY. (SPARK IGNITED ENG. ONLY)
S8	SEE ENG. MAN.	SWITCH - VACUUM (GASEOUS FUELS ONLY)
T1	SEE ENG. MAN.	COIL IGNITION (SPARK IGNITED ENG. ONLY)
VR1	SEE ENG. MAN.	VOLTAGE REGULATOR - BATTERY CHARGING

CONTROL CABINET PARTS LIST		
REF.	PART NO.	DESCRIPTION
CE11	EE-1811	CIRCUIT BREAKER - SAFETY SHUTDOWN
CR12	G-5183-3	RECTIFIER - BLOCKING
CR13	G-51819	RECTIFIER - BLOCKING
CR14	EE-2171.4 or EE-2168	RECTIFIER - FIELD FLASHER
CR20	G-52119	RECTIFIER - BLOCKING
CR21	EE-2167	RECTIFIER - BLOCKING
DS11,12	EE-940	LAMP - PANEL
DS13	EE-940	LAMP - FAILURE
F11	EE-445-2	FUSE - FIELD FLASHER
K11	EE-1220	RELAY - CRANKING CONTROL
K18	EE-1233	LATCHING RELAY
K14	EE-1203	RELAY
K20	EE-1054	TIME DELAY RELAY
M11	OP-21	GAUGE - OIL PRESSURE
M12	WT-21	GAUGE - WATER TEMPERATURE
M19	AM-12	GAUGE - AMMETER - CHARGE 70-0-70 OR 100-0-100
R11	R-171	RESISTOR - 33 OHM, 10 WATT
R16	R-157	RESISTOR - 100 OHM, 10 WATT
R20		RESISTOR - 125 OHM, 10 WATT
S12	EE-181	SWITCH - ENGINE - RUN, STOP, REMOTE
S13	EE-151	SWITCH - PANEL LAMP
S14	EE-233	DE-ENERGIZATION SWITCH - SAFETY SHUTDOWN

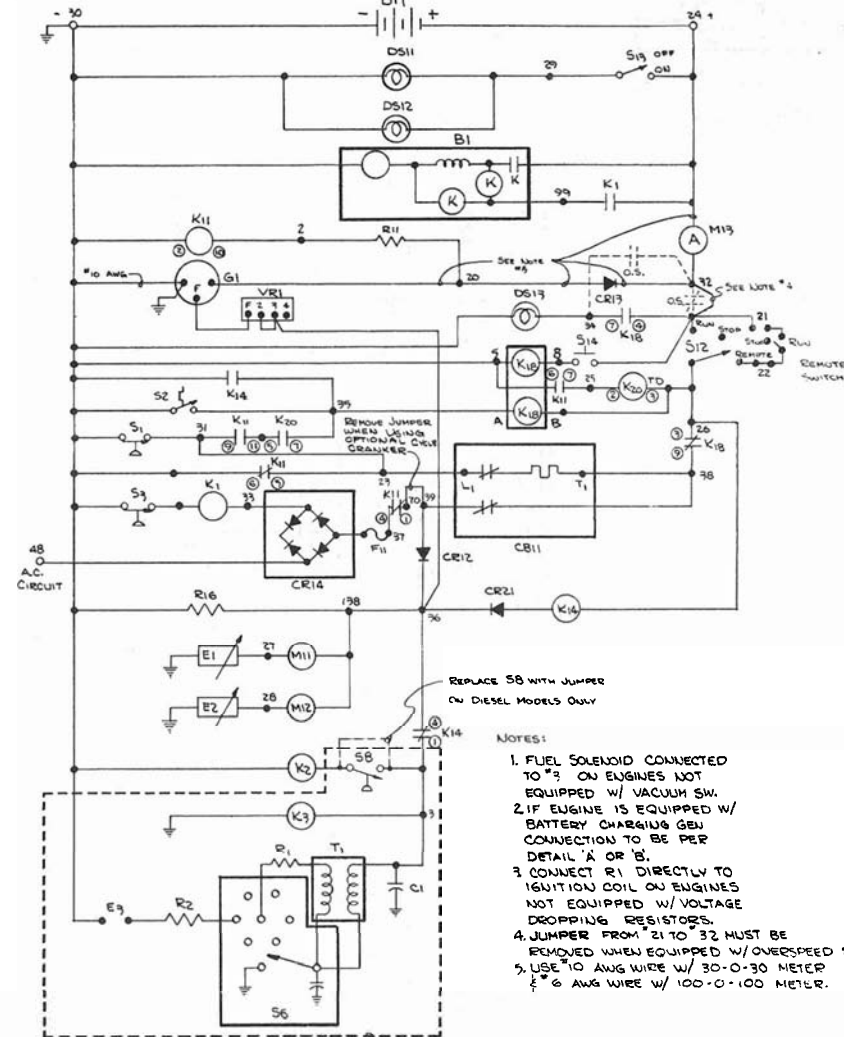


DETAIL A - ALTERNATOR - MOTOROLA NO. RA2N-4510 W/ REGULATOR NO. R3-1
NOTE: ADD CR20 RECTIFIER



DETAIL C - DELCO REMY #1102964
37, 3625 12 NEG.
NOTE - ADD RECTIFIER CR20
REMOVE R11 & REPLACE W/ R20

DC. CIRCUIT W/ BATT. CHRG. GEN.

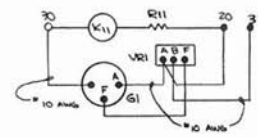


REPLACE S8 WITH JUMPER ON DIESEL MODELS ONLY

NOTES:

1. FUEL SOLENOID CONNECTED TO 23 ON ENGINES NOT EQUIPPED W/ VACUUM SW.
2. IF ENGINE IS EQUIPPED W/ BATTERY CHARGING GEN CONNECTION TO BE PER DETAIL 'A' OR 'B'.
3. CONNECT R1 DIRECTLY TO IGNITION COIL ON ENGINES NOT EQUIPPED W/ VOLTAGE DROPPING RESISTORS.
4. JUMPER FROM 21 TO 32 MUST BE REMOVED WHEN EQUIPPED W/ OVERSPEED SW.
5. USE #10 AWG WIRE W/ 30-0-30 METER & #6 AWG WIRE W/ 100-0-100 METER.

USED ON GAS & GASEOUS FUEL MODELS ONLY.



DETAIL B - (GENERATOR - DELCO-REMY)
NOTE: REMOVE CR13 & LEADS FROM 20 TO 21
NO CONNECTION FROM 36 TO VR1

CHARGE	WAS ORIGINALLY	DATE	CHG'D	CHG. REASON	NO. REV'D	MATERIAL	MICROFILM DATA
TOLERANCE ON DIMENSIONS NOT OTHERWISE SPECIFIED	DECIMAL ±	FRACTIONAL ±	ANGULAR ±	REMOVE ALL BURRS BREAK ALL SHARP MACHINED EDGES			

12 VOLT ENGINE ELEC. CIRCUIT	
SCHEMATIC DIAGRAM	
SCALE: None	MODEL NO.
DATE: 10/5/76	PART NO.
DWG: SWP	CHRG: Reddy
WINPOWER CORPORATION NEWTON, IOWA 50208	