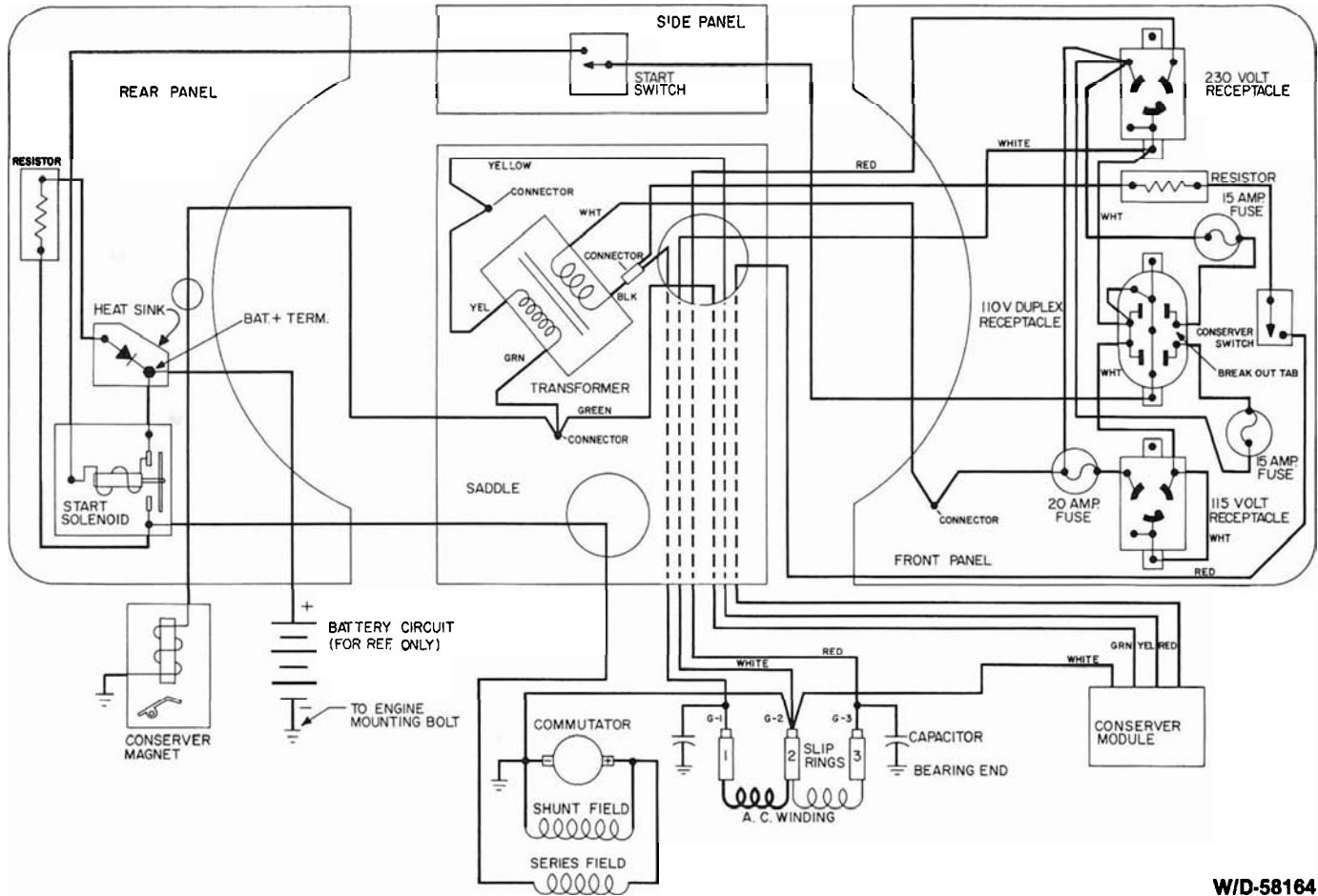
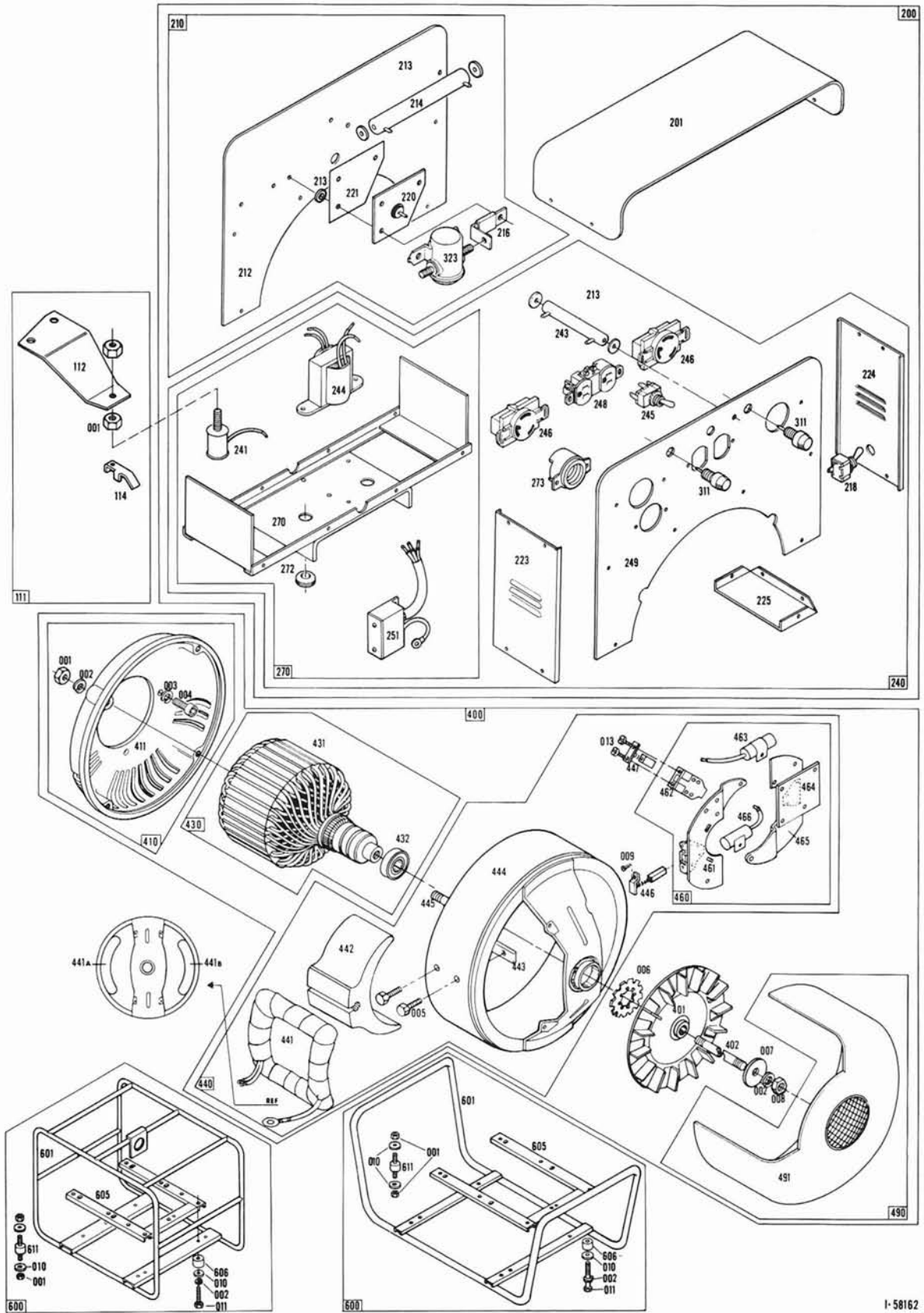


ILLUSTRATED PARTS LIST



SCHEMATIC DIAGRAM

This IPL contains wiring, illustration, parts list, ordering information and technical data to perform routine maintenance on this generator. Consult factory with model no., serial no. and test data for further assistance.



MODEL 405BH-FE/F

REF.	PART NO.	QTY.	DESCRIPTION	REF.	PART NO.	QTY.	DESCRIPTION
001	458	12	Hex Nut— $\frac{5}{16}$ -18	270	57008	1	Saddle
002	480	6	Lockwasher— $\frac{5}{16}$ Split	272	56927	1	Grommet
003	90570	4	Lockwasher— $\frac{7}{16}$ Split	273	4667	1	Fuse Holder—(CSA Models Only)
004	54028	4	Cap Screw— $\frac{7}{16}$	311	2489	2	Fuse Holder—(CSA Models Only)
005	91658-4	4	Cap Screw— $\frac{3}{8}$ -18 X	401	55101	1	Fan Assembly
006	55224	1	Lockwasher Int. Tooth	402	23197-15	1	Thru Bolt
007	23558	1	Flat Washer	411	54025	1	End Bracket
008	23605	1	Hex Nut— $\frac{5}{16}$ -24	430	57001	1	Armature & Brg Assembly
009	4637	4	Machine Screw—#10-32 x $\frac{3}{8}$	431	57001-1	1	Armature Less Brg
010	23760	8	Flat Washer	432	55223	1	Bearing
011	468	1	Cap Screw— $\frac{5}{16}$ -18 x 1- $\frac{1}{2}$	440	56999	1	Field Shell & Coil Assembly
013	40746	20	Machine Screw 8-32 x $\frac{5}{16}$	441A	53989	1	Field Coil
100	53884	1	Drive Engine B&S 243432-1131-01	441B	53989-1	1	Field Coil
112	55063	1	Formed Conserver Bracket	442	43972	2	Pole Shoe
114	44892	1	Steel Extension	443	43973	2	Pole Shoe Retainer
200	57001	1	Control Panel Assembly	444	57000	1	Field Shell
201	51580	1	Cover	445	23451	4	Stud
212	57009	1	Rear Panel (Bare)	446	41393	2	Brush D.C.
213	1376	1	Shoulder Washer	447	55536	10	Brush A.C.
214	57011	1	Resistor—Batt. Charge	461	41745	1	Riveted Brush Rack—LH
216	52789-1	1	Copper Strap	462	59690	10	Brush Holder A.C.
218	52029	1	Start Switch	463	41221	2	Capacitor A.C.
220	54776	1	Diode and Heat Sink Assembly	464	50237	1	Bracket—Module Mtg.
221	54798	1	Insulation	465	61093	1	Riveted Brush Rack—RH
223	51685	1	Side Panel	466	41180	1	Capacitor D.C.
224	51589-1	1	Side Panel	491	55007	1	End Cover
225	51577	2	Bottom Box Support	601	59245	1	Cradle—Wrap Around
241	44889	1	Electromagnet—Conserver	601A	57906	**Alt	Cradle—Open Loop Style
243	48583	1	Resistor—Conserver	605	23754	1	Sub Frame
244	54196	1	Transformer—Conserver Sensing	606	20561	1	Spacer
245	24238	1	Switch—Conserver	611	23623	4	Shock Mount
246A	56279	1	Receptacle—125V/20A NEMA L5-20R				
246B	56281	1	Receptacle—250V/20A NEMA L6-20R				
248	24749	1	Receptacle—125V/15A NEMA 5-15R				
249	57010	1	Front Panel—Less Receptacles				
251	48574	1	Electronic Module—Conserver				

**Alt—Alternate Part/Interchangeable Part

PARTS ORDERING INFORMATION REQUIRED

To fill your order for service parts, please advise the complete Generator model number and serial number, part number(s), and part description. If in doubt, consult the factory prior to placing the order. Send all parts orders to WINCO, Division of Dyna Technology, Inc., 225 South Cordova Ave., Le Center, MN 56057.



TECHNICAL DATA

GENERATOR SPECIFICATIONS:

Watts—4500; Volts—115/230; Amps—39/20; Phase—1; Hz—60; RPM—3600

Normal Voltage:

115 VAC
230 VAC

No Load:

132 VAC
264 VAC

Full Load:

112 VAC
224 VAC

Resistance:

SS#1263

Field Coils— $3.91 \pm .19$ ohms

Armature—Less than one ohm ring to ring
Less than one ohm bar to bar

Excitation Voltage: (Approximately)

36.5 Volts DC

Separately Excited:

12 VDC to Positive Field Lead. 160 to 200 VAC line to line. NOTE: Remove positive DC brush. Unit will have to be started manually.

BASIC TEST PROCEDURE:

Refer to illustration for component location by Reference Number.

Example: No output—Check field coils for opens and shorts, Reference Numbers 441A and 441B.

No Output:

- Check for loose or open connections.
- Check field coils for opens or shorts, Reference Numbers 441A and 441B.
- Check brushes for wear, proper seating and not stuck in holder, Reference Numbers 446 and 447.
- Check armature for opens or shorts, Reference Number 431.

Low Voltage—No Load:

- Check generator speed/frequency (3600 RPM nominal).
- Check for loose or open connections.
- Check winding resistance, Reference Numbers 441A, 441B and 431.

Low Voltage—Full Load:

- Check generator speed/frequency (3600 RPM nominal).
- Check generator load.
- Check for loose or open connections.
- Check winding resistance, Reference Numbers 441A, 441B and 431.