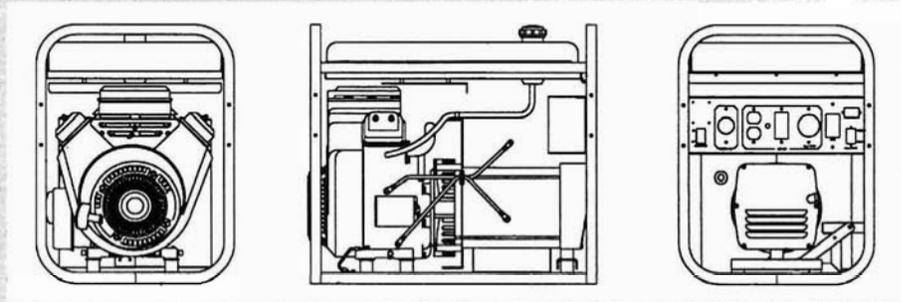


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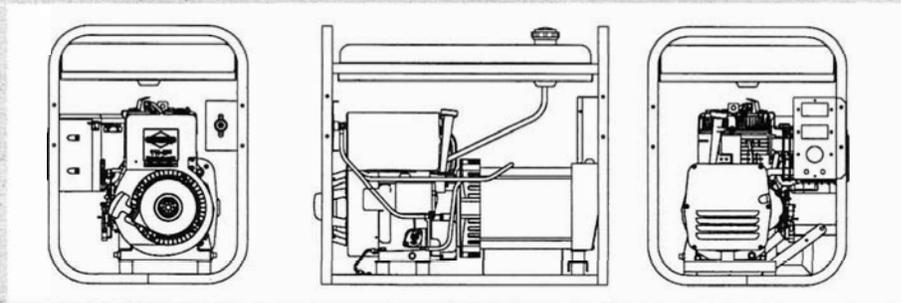
HEAVY DUTY GENERATORS

OPERATOR INSTRUCTION MANUAL



COV4400HE, COV5500HE, COV6500HE, COV8500VES

EL AND COV SERIES



EL2500H, EL4400PRO, EL5500PRO-S

P.O. Box 495
St. Peter, MN 56082
Phone: 507-357-6700
Fax: 507-357-6580



Congratulations on your choice of a Winpower heavy duty generator set. You have selected a high-quality, precision-engineered generator set designed and tested to give you years of satisfactory portable service. To get the best performance from you new engine generator set, **it is important that you carefully read and follow the operating instructions in this manual.**

For your convenience we have added tear-off cover. Carefully remove and fill out warranty information and mail back to us as soon as possible.

Did you know?.....

Winpower offers a very attractive portability wheel kit:

Item PK300 fits all COV Models and all EL Models except the EL2500.

Winpower is your one stop shopping place for heavy duty generators. We offer air cooled portables, tractor driven PTO generators and larger diesel self contained units. See your dealer for details or call the factory.



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Copy your model and serial number here. No other Winpower generator has the same serial number as yours. It is important that you record the number and other vital information here. If you should ever need to contact us on this unit it will help us to respond to your needs faster.

MODEL _____
 SERIAL NUMBER _____
 PURCHASE DATE _____
 DEALER _____

INTRODUCTION

Thank you for purchasing a Winpower generator. This manual covers the operation and maintenance of the EL & COV Models. It contains the latest product information available at the time of printing. Winpower Inc. reserves the right to make changes at any time without notice and without incurring any obligation.

WARNING!  Indicates a possibility that personal injury, equipment damage, or other property damage could occur if the instructions are not followed.

CAUTION!  Indicates a possibility that personal injury, equipment damage, or other property damage could occur if the instructions are not followed.

NOTE: Lists helpful information which should assist you in getting satisfactory performance from your new generator.

If you have a problem with your generator, or have any questions about the generator, consult an authorized Winpower distributor, dealer, or service center. Should you require additional information, please consult the factory service department.

The Winpower generator is designed to give safe and dependable service if operated according to the instructions given in this manual. Read and understand the owner's operation and service manual before operating the generator. Failure to do so could result in personal injury or equipment damage.

This manual covers the latest compact portable generator set models from 2000 to 9000 watts. There are two different model types (COV & EL) included. Both use the same heavy-duty generator, but are offered with various engines and differing levels of features. The models covered by this manual are listed below with their notable features.

The most basic model group is the EL Series. The EL series is designed to provide a heavy-duty generator set with essential features but avoiding the cost of unused features. Primary applications for the EL series are for infrequent or medium duty loads where the initial cost is critical and unit will be operated less than 50 to 100 hours per year. Typical uses might be for farm, ranch or home standby or portable field power away from convenient utility or where running an extension cord is impractical. The EL Series have premium engines, but use their manufacturers entry level offerings to minimize cost.

The COV line is the Premium Featured model group that has the same heavy duty generators, but includes a full control panel with features like Econ-O-Mizer auto idle, Dual Voltage, Switchable Full Power, Twist lock receptacles, 4-wire receptacles and premium engine offerings. These units are designed for regular, rugged, heavy, and severe loads and operating conditions. These units are made to serve faithfully in the construction and rental markets where the added cost of the heavy duty features are offset by the increased reliability and efficiency of the generator sets' ability to stay on the job to completion..... day in and day out.

FEATURES BY MODEL									
MODEL	ENGINE	FUEL	LUBE	START	WATTS	AMPS@	FEATURES*		
	MFR/MODEL	HP	TANK	OIL***	TYPE**	MAX/RATED	120/240V		
EL 2500 H	HONDA	5.0	2.0 QT	1.3 PTS	RECOIL	2500/2200	18.3 / -N/A-	1, 6	
EL 4400 PRO	B & S	8.0	24.0 QT	2.4 PTS	RECOIL	4400/4000	33.3 / 16.7	1, 2L	
EL 5500 PRO-S	B & S	11.0	24.0 QT	2.4 PTS	RCL/12VDC	5500/5000	41.7 / 20.8	1, 2L, 5	
COV 4400 HE	HONDA	8.0	24.0 QT	2.4 PTS	RECOIL	4400/4000	33.3 / 16.7	1, 2L, 3, 4, 7	
COV 5500 HE	HONDA	11.0	24.0 QT	2.4 PTS	RECOIL	5500/5000	41.7 / 20.8	1, 2L, 3, 4, 7	
COV 6500 HE	HONDA	13.0	24.0 QT	2.4 PTS	RECOIL	6500/6000	50.0 / 25.0	1, 2L, 3, 4, 7	
COV 8500 VE-S	VANGUARD	16.0	24.0 QT	2.4 PTS	RCL/12VDC	8500/8000	66.6 / 33.3	1, 2P, 3, 4, 5	

*** LUBE OIL – CAPACITIES LISTED FOR CONVENIENCE ONLY – USE ENGINE MFRS RECOMMENDATION
 **START TYPE – RECOIL / MANUAL PULL – RCL/12VDC/RECOIL & 12VDC BATTERY ELECTRIC START
 *FEATURES – LISTED BELOW BY REFERENCE NUMBER WITH EXPLANATION –
 1 – Full protective 'roll cage' carrying frame
 2 – Low lubricating oil shutdown (lube oil Level or Pressure)
 3 – Econ-O-Mizer (Auto Idle device w/delayed dropout)
 4 – Full Power Switch – Reconnects generator from 120/240 to full output at 120 volts
 5 – Electric Start – 12VDC-starter motor with battery tray and cables – *Battery not Furnished*
 6 – Engine mounted fuel tank
 7 – Spark Arresting Muffler – USDA Forest Service Approved

PRECAUTIONS FOR SAFE USE

To avoid fires:

WARNING! Do not store combustible material such as straw, waste paper, scrap wood, etc. where the generator is to be stored.

WARNING! Do not store dangerous or flammable materials such as lubricants, celluloid, gasoline, explosives, etc. near the generator.

WARNING! Operate the generator on a level surface. If the generator is tilted or moved during use, there is the danger of fuel spillage and/or a chance the generator will overturn.

CAUTION! During operation, maintain a safe distance of at least three feet (one meter) from buildings or other equipment. When a generator is located too close to a building or other equipment, heat and exhaust from the engine will cause the surrounding air temperature to rise. This will reduce the generator's cooling capability and could cause the engine or generator to over-heat.

CAUTION! Do not enclose the generator, install in a recreational vehicle, or cover with a structure, because this will cause it to overheat creating a possible equipment damaging condition.

WARNING! Always stop the engine when refueling due to the extreme danger that fuel vapor or spilled fuel may be ignited.

CAUTION! Be careful not to spill fuel when refueling. If fuel is spilled, completely wipe up and let dry before starting the engine.

CAUTION! Do not overfill the tank. Never refuel in the presence of a lighted cigarette or open fire.

WARNING! Never refuel a hot engine. Always allow the engine to cool before refueling.

Other precautions:

WARNING! Do not store dangerous or flammable materials such as lubricants, celluloid, gasoline, explosives, etc. near the generator.

CAUTION! Do not touch the muffler during operation or just after stopping, because a serious burn could result. The exhaust system operates at a very high temperature.

CAUTION! Do not get water on the generator. If the unit becomes wet allow it to completely dry before operating. Also, a wet spark plug may prevent the engine from starting.

PRECAUTIONS FOR SAFE USE CONTINUED

Other precautions continued:

CAUTION!  Do not connect the generator to the household electrical system without using a UL listed double throw disconnect switch. Any such installation should be made only by a licensed electrician in accordance with all city, county, province, state, regional, and national electrical codes.

CAUTION!  If you should notice an abnormal noise, odor, vibration, etc. when the unit is operating, it should be stopped immediately and the reason for the condition determined. Failure to do so could permanently damage the unit as well as associated equipment. If the cause cannot be determined, the unit should be taken to the nearest service center for proper diagnosis.

WARNING!  Make sure that the unit is grounded properly and in accordance with all applicable regulating codes.

Exhaust gases:

WARNING!  Do not operate the generator in locations with poor ventilation such as home interiors, warehouses, tunnels, wells, pits, tanks, ship holds, etc. Fatal levels of gaseous fumes can accumulate in poorly ventilated areas and increase the danger of carbon monoxide poisoning. Always pay strict attention to the fire codes, building codes, and safety regulations if the generator is operated inside a building.

WARNING!  Engine exhaust from this product contains chemicals known, in certain quantities, to cause cancer, birth defects, or other reproductive harm.

WARNING!  Do not operate the generator with wet hands, because severe electrical shock may occur. Do not operate in the rain or snow.

PRESTART PROCEDURES

Check the engine oil level:

CAUTION!  Remove the oil filler cap to check the oil level. If the oil level is low, add a high quality motor oil to the full mark on the dipstick.

CAUTION!  Engine oil is a major factor affecting engine performance and service life. Use only recommended types and grades of lubricating oil (see engine manual for manufacturer's recommendation). If your engine manual has been misplaced, then the following is recommended:
Summer SAE #20-30
Winter SAE #10W-30

CAUTION!  The engine is shipped WITHOUT oil. Use a high quality detergent oil classified "For service SF, SE, SD, or SC." Detergent oils keep the engine cleaner and retard the formation of gum and varnish deposits. Use 4 stroke oil, do not use 2 stroke oil.

Oil capacity: see engine manual

CAUTION!  Running the engine with insufficient oil can cause serious engine damage.

Fueling the engine:

The engine manufacturer recommends the use of clean, fresh, lead-free gasoline. Leaded gasoline may be used if lead-free is not available. The use of lead-free gasoline results in fewer combustion deposits and longer valve life.

Fueling the engine continued:

If long-term storage is expected, a fuel stabilizer (such as STA-BIL) should be used to eliminate the formation of fuel gum deposits in the fuel system.
Fuel Capacity: See page 1 Model Features

When refueling, the following steps are recommended:

WARNING!  Always stop the engine. Disconnect and ground the spark plug lead wire.

NOTE: Close the fuel valve at the base of the fuel tank.

NOTE: Check the fuel strainer. Never operate without a fuel strainer.

CAUTION!  Always wipe up all spilled fuel. Replace spark plug lead wire.

NOTE: Open the fuel valve.

NOTE: Ensure the circuit breakers are in the pushed in or "Reset" position, and the GFCI receptacle is reset.

WARNING!  Before starting, disconnect all power cords from the AC receptacles on the generator panel.

WARNING!  The generator may be hard to start if a load is connected. It is dangerous if electric tools are powered during start up. This could result in personal injury or damage to the electric tools.

ENGINE STARTING/STOPPING

Engine starting (manual):

1. Check oil and fuel levels.
2. Make sure the appliance is disconnected.
3. Move engine choke control as far forward as possible toward "Choke" or "Start" position. (When the engine is warm or the temperature is high, start the engine with the choke in the run position.)
4. Place the engine stop switch in the "On" position.
5. Grasp the starter grip and pull on the rope until you feel the maximum resistance. Allow the rope to recoil to its original position, then pull it again vigorously.
6. When the engine starts, open choke gradually. If the engine does not start, review the status of the fuel supply and oil level. All units are equipped with low oil protection. If the oil level or pressure is below the safety point, the engine will not start. Always restore the oil level to the full mark before restarting the engine.

Engine starting (electrical):

1. With the choke fully closed, press firmly on the "Stop-Run-Start" switch pushing into the momentary "Start" position. Never crank for more than 5 second intervals, and allow 20 second rest cycles between crank cycles. Never crank the engine more than 5 cycles. If the engine does not start, review the status of the fuel supply and oil level.
2. When the engine starts, open choke gradually.

Engine stopping:

1. Remove all electrical load by disconnecting all power cords from the rear generator panel.
2. Ensure the Economizer switch is in the "Off" position.
3. Place the side panel "Stop-Run" switch at the "Stop" position.

ECONOMIZER

The economizer operates as an idling device which will sense the generator load and slow the engine speed down when a generator no-load condition exists. This is to save fuel, create less engine noise, and reduce wear and tear on the engine when the generator is not required to supply power on an intermittent basis. If the generator will be unloaded for extended periods of time, the engine should be shut off.

The Economizer switch on the side panel controls this device. With the switch in the "Off" position, the engine runs at rated speed continuously. The switch should be in the "Off" position when starting or stopping the engine. During starting, allow the engine to run for five minutes before using the Economizer. This will allow the engine to warm up so that it runs smoothly at the lower speed as well as ensure proper engine lubrication. The proper idled-down engine speed is 2500 to 3000 rpm.

MAINTENANCE

Before start-up, perform the following routine maintenance items:

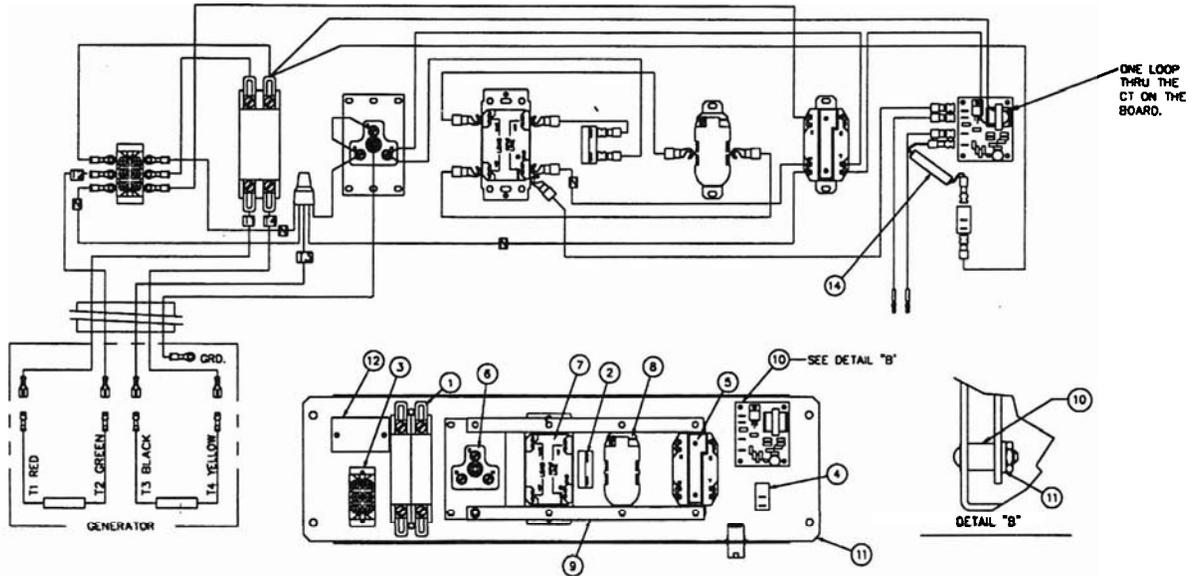
1. Check fuel supply.
2. Check engine oil level - if not full, add as required. If at service interval, start engine to warm oil; drain and replace.
3. Check air cleaner; service if required.
4. Inspect for loose bolts and screws. Retighten all loose items. Replace all missing or broken items. Inspect for broken receptacles; replace broken items.
5. Inspect for fuel and oil leaks. Service as required to stop leakage.

6. Start unit and check for abnormal noise and vibrations. Correct any abnormal condition.
7. Inspect exhaust system.
8. Ensure the generator cooling slots are clear for proper ventilation.

Refer to the engine manual for the manufacturer's recommended engine maintenance procedures.

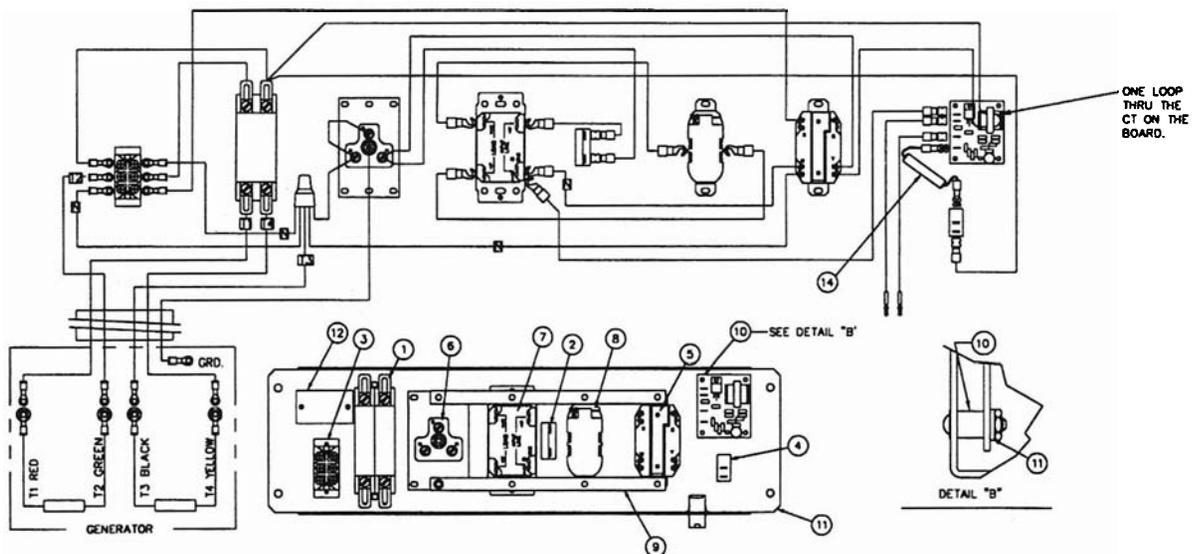
To ensure reliable starting, start and run the unit periodically to minimize carburetor clogging and fuel varnishing. When the engine will be stored for long periods of time without exercising, drain all fuel from the carburetor and fuel system.

RECEPTACLE PANEL ASSEMBLY PARTS ILLUSTRATION & WIRING DIAGRAM COV4400HE & COV5500HE

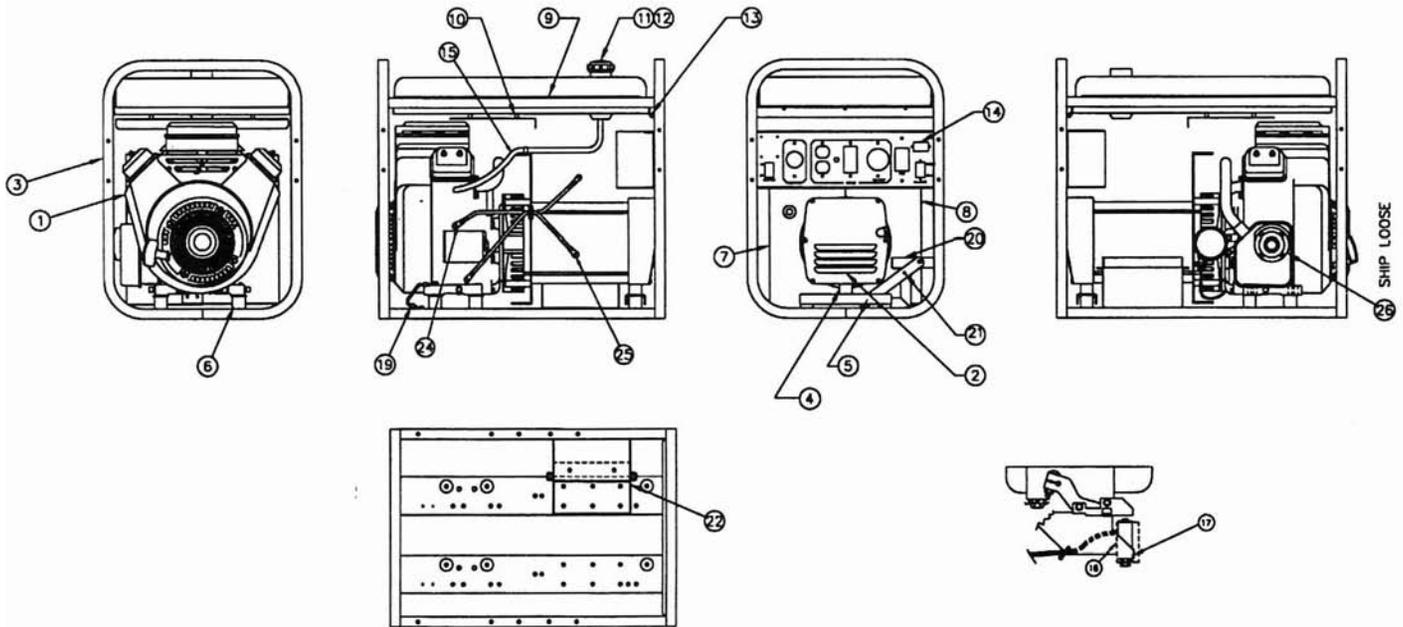


DESCRIPTION	COV4400HE	COV5500HE	COV6500HE	COV8500VES
RECEPTACLE PANEL ASY	300023-1	300023-2	300023-4	300023-3
1 CIRCUIT BREAKER	57030-1(20A)	EE28094S(25A)	EE28094S(25A)	57030-3(35A)
2 CIRCUIT BREAKER	240013200(20A)	240013200(20A)	240013200(20A)	240013200(20A)
3 SWITCH, 30A FULL POWER	240027033	240027033	240027033	240027033
4 SWITCH	64089	64089	64089	64089
5 RECEPTACLE, 120/240 NEMA L14-30	97360	97360	97360	97360
6 RECEPTACLE, 120V NEMA 5-50	54545	54545	54545	54545
7 GFCI, NEMA 5-15 120V	240007401	240007401	240007401	240007401
8 DUPLEX, NEMA 5/15 120V	240008150	240008150	240008150	240008150
9 MOUNTING STRAP	64045-1	64045-1	64045-1	64045-1
10 IDLE CONTROL	300042	300042	300042	300042
11 CONTROL, FRONT	300029	300029	300029	300029
12 PLATE, COVER	300061	300061	300061	300061
13 BACK (NOT SHOWN)	300030	300030	300030	300030
14 RESISTOR ASSEMBLY	300109	300109	300109	300109

RECEPTACLE PANEL ASSEMBLY PARTS ILLUSTRATION & WIRING DIAGRAM COV6500HE & COV8500VES



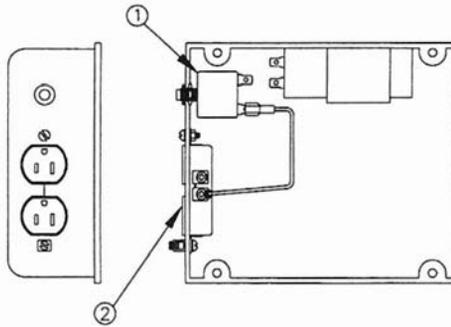
PARTS ILLUSTRATION COV MODELS



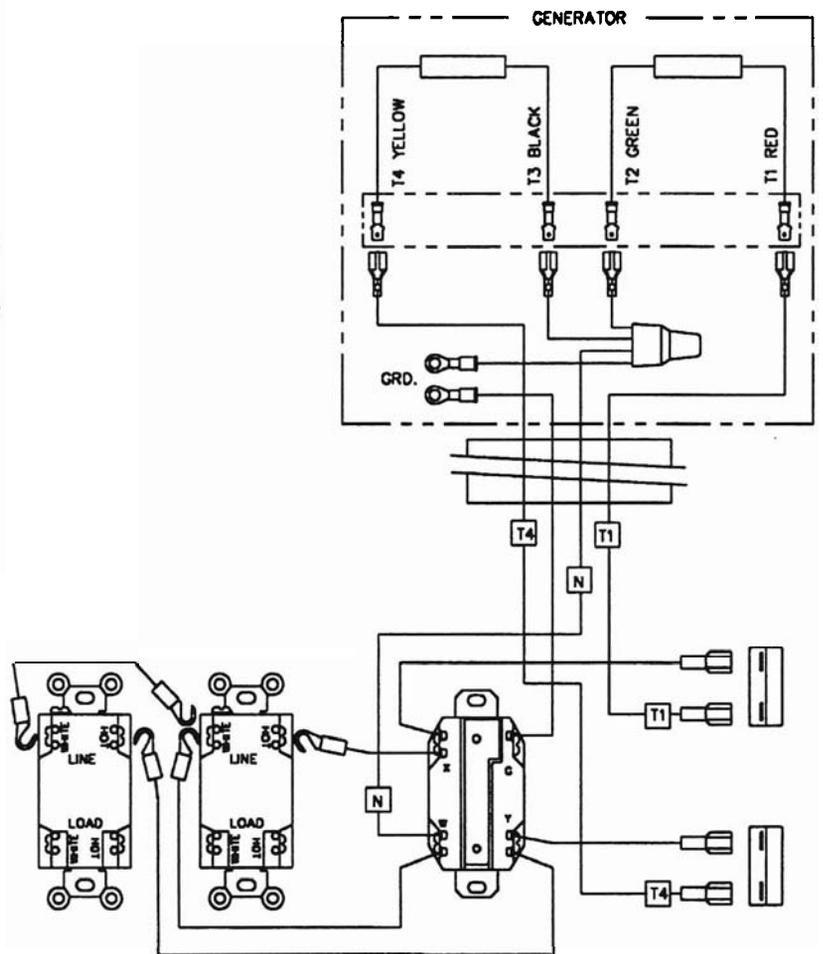
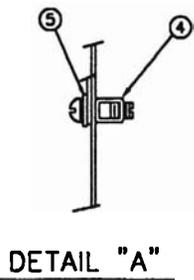
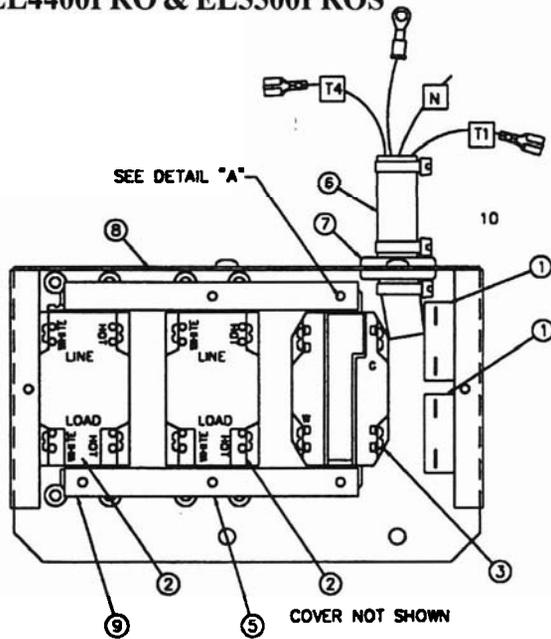
PARTS LIST COV MODELS

DESCRIPTION	COV4400HE	COV5500HE	COV6500HE	COV8500VES
1 ENGINE	248003080	248003110	248003130	15456
2 GENERATOR	300043-5	300043-7	300043-8	300043-9
3 CRADLE	300024	300024	300024	300024
4 SPACER, GEN-SUPPORT	300040	300040	300040	300040
5 SUPPORT, GENERATOR	300039	300039	300039	300039
6 SHOCKMOUNT (QTY 6)	64062	64062	64062	64062
7 BAFFLE, LEFT	300033	300033	300033	300033-1
8 BAFFLE, RIGHT	300034	300034	300034	300034-1
9 TRAY, FUEL TANK	300031	300031	300031	300031
10 SHIELD, HEAT	300053	300053	300053	300053
11 FUEL TANK	240022003	240022003	240022003	240022003
12 FUEL TANK CAP	240020003	240020003	240020003	240020003
13 HINGE	300032	300032	300032	300032
14 RECEPTACLE PANEL ASSEMBLY	300023-1	300023-2	300023-4	300023-3
15 FUEL LINE 1/4" ID	40078	40078-17	40078	40078-17
16 MAGNET ASSEMBLY	15182	15182	15182	15182
17 BRACKET, ECONOMIZER	300057	300057	300057	15270
18 HARNESS, MAGNET"	300060-1	300060-1	300060-1	300060-1
19 LEAD WIRE ASSEMBLY	9769-145	9769-145	9769-145	9769-145
20 BATTERY TRAY	N/A	N/A	N/A	300036
21 BRACE, BATTERY TRAY (QTY. 2)	N/A	N/A	N/A	300037
22 SUPPORT, BATTERY TRAY"	N/A	N/A	N/A	300054
23 KIT, BATTERY HOLD DOWN	N/A	N/A	N/A	300143
24 BATTERY CABLE, POSITIVE	N/A	N/A	N/A	15767-13
25 BATTERY CABLE, NEGATIVE	N/A	N/A	N/A	15767-12
26 SPARK ARRESTOR GROUP	N/A	N/A	N/A	64159-1
27 HOSE & FILTER ASSEMBLY	300098	300098	300098	N/A
28 WINPOWER DECAL	Z2508-1	Z2508-1	Z2508-1	Z2508-1
29 DECAL SET	15209	15209	15209	15209

**RECEPTACLE PANEL ASSEMBLY
EL2500H**

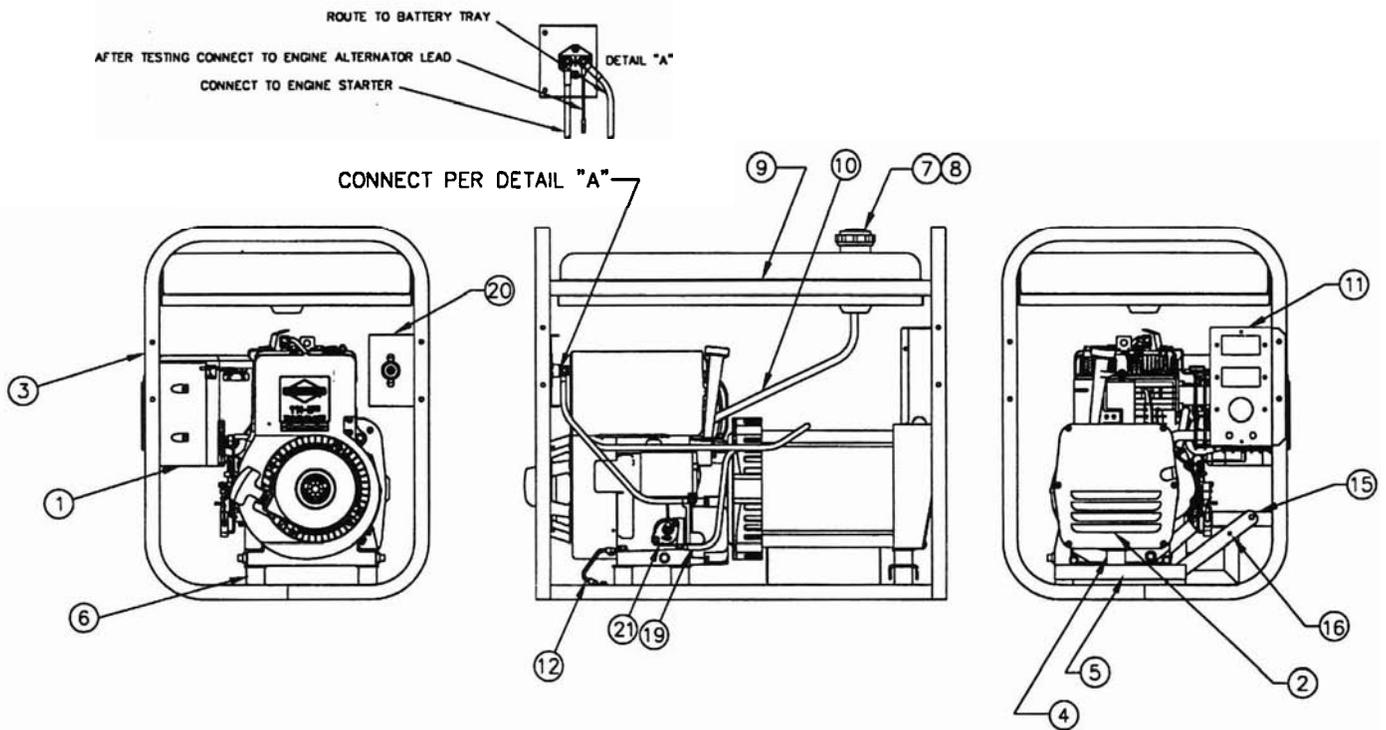


**RECEPTACLE PANEL ASSEMBLY
EL4400PRO & EL5500PROS**



DESCRIPTION	EL2500H	EL4400PRO	EL5500PROS
RECEPTACLE PANEL ASY	300092	300152-1	300152-2
1 CIRCUIT BREAKER,	240013200 (20A 1P)	240013150 (15A 1P)	240013250 (25A 1P)
2 RECEPTACLE, 15A/125V	240008150	240007401 (GFCI)	240007401 (GFCI)
3 RECEPTACLE, NEMA L14-30R	N/A	240008302	240008302
4 GROUND LUG	64211	64211	64211
5 GROUND STRAP (QTY. 2)	N/A	64045-14	64045-14
6 LOOM 9"	N/A	62487-4	62487-4
7 GROMMET	N/A	23917	23917
8 RECEPTACLE PANEL	N/A	300150	300150
9 RECEPTACLE COVER	N/A	300151	300151

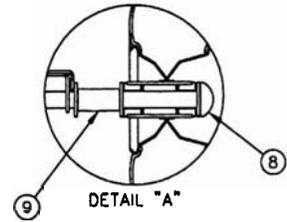
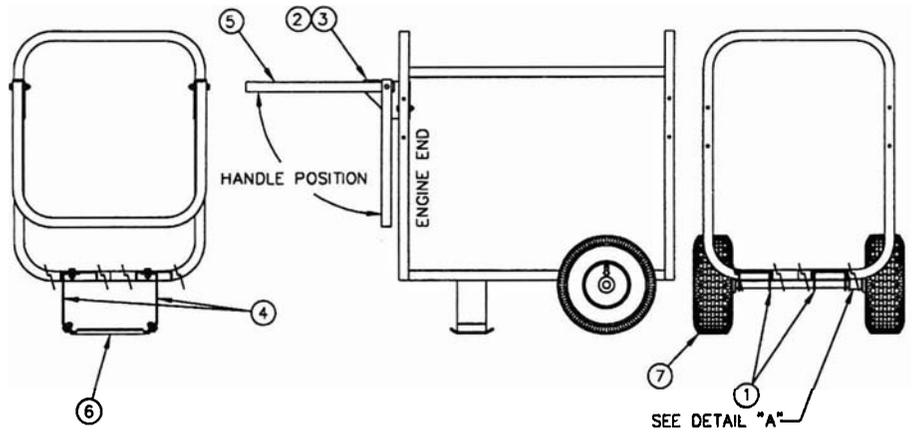
PARTS ILLUSTRATION & PARTS LIST FOR EL MODELS



ITEM	DESCRIPTION	EL2500H	EL4400PRO	EL5500PROS
1	ENGINE	15256	16089	16232-1
2	GENERATOR	300043-4	300043-5	300042-7
3	CRADLE WELDMENT	300154	300024-1	300024-1
4	SPACER, GEN-SUPPORT	300040-2	300040	300040
5	SUPPORT, GENERATOR	300039-2	300039	300039
6	SHOCKMOUNT	64062 (QTY 4)	64062 (QTY 6)	64062 (QTY 6)
7	FUEL TANK	ENG. MOUNTED	240022003	240022003
8	FUEL TANK CAP	ENG. MOUNTED	240020003	240020003
9	TRAY, FUEL TANK	N/A	300031-2	300031-2
10	FUEL LINE 1/4" ID	N/A	40078-17	40078-17
11	RECEPTACLE PANEL ASY	300092	300152-1	300152-2
12	LEADWIRE ASSEMBLY	9769-145	9769-145	9769-145
13	DECAL SET	15209	15209	15209
14	WINPOWER DECAL	Z2508-1	Z2508-1	Z2508-1
15	BATTERY TRAY	N/A	N/A	300036
16	BRACE, BATTERY TRAY	N/A	N/A	300037
17	SUPPORT, BATTERY TRAY	N/A	N/A	300054
18	KIT, BATTERY HOLD DOWN	N/A	N/A	3000143
19	BATTERY CABLE, NEG.	N/A	N/A	15767-12
20	START SWITCH ASSEMBLY	N/A	N/A	300159
21	KIT, OIL GUARD	N/A	N/A	64366

OPTIONAL WHEEL KIT PK300

FOR MODELS:
EL4400PRO
EL5500PROS
COV4400HE
COV5500HE
COV6500HE
COV8500VES



DESCRIPTION		PK300	QUANTITY
WHEEL KIT			
1	SUPPORT AXLE	300065	2
2	SUPPORT, RIGHT HANDLE	300066-1	1
3	SUPPORT, LEFT HANDLE	300066-2	1
4	SIDE, REAR SUPPORT	300067	2
5	HANDLE	300068	1
6	BOTTOM, REAR SUPPORT	300094	1
7	WHEEL & TIRE ASSEMBLY	43657-1	2
8	HUBCAP	64327	2
9	SPACER, AXLE	64688-4	1

WINPOWER

Limited Warranty

Winpower Inc. hereby warrants for one year the generator set described herein to be free from defects in material and workmanship if properly installed, serviced, and operated under normal conditions according to our instructions.

This warranty covers parts and labor and is extended to the original purchaser for a period of one year (365 days) from the date of purchase. During that period, Winpower Inc. will replace free of charge upon examination by the factory, or an authorized service center, any part or parts found to be defective in material or workmanship.

This warranty does not obligate the manufacturer to bear any transportation charges in connection with the replacement or repair of defective parts or delivery of the defective generator set. This warranty does not cover rental charges for replacements while defective unit is being repaired. The replacement of parts and/or service arising out of abuse, neglect, or normal wear and tear is not covered by this warranty.

Winpower Inc. hereby disclaims any and all implied warranties, including but not limited to, warranties of merchantability and fitness for any, if and to the extent, that such disclaimer is not forbidden by any applicable law. Implied warranties, including but not limited to, warranties of merchantability and fitness for any particular purpose which Winpower Inc. is so forbidden to disclaim by an applicable law, are warranted one year from the date of purchase.

This is the purchaser's sole and exclusive remedy hereunder. Liability for consequential, incidental or special damages and/or expenses under any and all warranties are excluded to the extent exclusion is permitted by law.

All applications for warranty must have the model and serial number of the unit for which the application(s) is being filed, customer's name, address, phone number, and date of sale; otherwise the warranty/application and payment may be rejected or delayed.

SPECIFIC CONDITIONS NOT COVERED BY LIMITED WARRANTY

The generator set is equipped with an engine which is not covered by this warranty. The engine is covered exclusively by the engine manufacturer's warranty presented in the enclosed engine manual.

The generator set is intended to be used as constructed by the factory. Any modifications to the assembly, such as conversion to LP gas fuel, will void the warranty. Winpower Inc. does not warrant any modifications to the unit.