Please carefully read and save these instructions before attempting to assemble, maintain, install, or operate this product. Observe all safety information to protect yourself and others. Failure to observe the instructions may result in property damage and/or personal injury. Please keep instructions for future reference.

Important Operating Instructions

1250 XLT GENERATOR

Model: 51769

CALIFORNIA PROPOSITION 65 WARNING: You can create dust when you cut, sand, drill or grind materials such as wood, paint, metal, concrete, cement, or other masonry. This dust often contains chemicals known to cause cancer, birth defects, or other reproductive harm. Wear protective gear. WARNING: This product or its power cord may contain chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

CAUTION:

FOR YOUR OWN SAFETY READ INSTRUCTION MANUAL COMPLETELY AND CAREFULLY BEFORE OPERATING THIS GASOLINE ENGINE Failure to follow all instructions as listed below may result in electrical shock, fire, and/or serious personal injury.

SPECIFICATIONS:

Engine: 2-stroke; Single Cylinder Horizontal Shaf.
Start Type: Recoil Start
Rated Power: 800W
Fuel Capacity: 1.2 gallons
Run Time:5.5 hours

SAFETY WARNINGS

1) Do not operate this generator indoors or in enclosed spaces. Emissions created by this generator are harmful.

2) Do not operate the generator in wet conditions. This will increase the risk of electrical shock.

3) Do not directly connect the generator to a household power supply.

4) Do not smoke while refueling the generator. Do not overflow the fuel when refueling the generator. Stop the generator before refueling. Gasoline is flammable and the sparks may cause it to ignite. Keep the generator at least 3 feet away from flammable materials.

5) Electrical equipment, including any lines and plug connections, should be insulated.

6) The circuit breakers should be matched with the generator equipment. If the circuit breakers need replacement, they must be replaced with a breaker that has identical ratings and performance characteristics.

7) Do not operate the generator before grounding it. An ungrounded generator could cause electrical shock to occur.

8) The temperature of the environment will affect the overcurrent protector. Please change the protector so it will fit with the local environment temperature.

For warranty purchase, please keep your dated proof of purchase. File or attach to the manual for safekeeping.

9) Keep your work area clean and well lit. Do not wear loose clothing or jewelry. Keep long hair pulled back.

10) Do not overload the generator. Do not force a small generator to do the job of a large one.

11) Do not use the generator if the power switch does not properly turn it on and off.

12) Do not use damaged generator.

13) Wipe up any gasoline spills that may have occurred during refueling before starting the generator.

14) Do not refill the generator while it is running or while the engine is still hot.

15) Use only engine manufacturer recommended fuel and oil.

16) Do not attempt to connect or disconnect load connections while standing in water or on wet or soggy ground.

17) Keep all electrical equipment clean and dry.

OPERATING INSTRUCTIONS

GROUNDING THE GENERATOR

Connect a #10 AWG groundingwire (not included) from the generator grounding log on the front of the generator to a grounding rod (not included). The grounding rod must be an earth-driven copper or brass rod (electrode) which can adequately ground the generator.
(See Figure A).

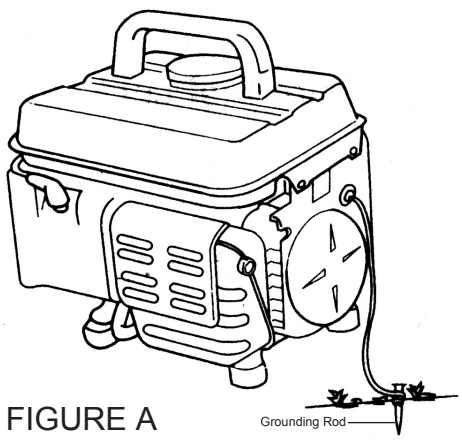


FIGURE A

PRE-START CHECKS:

1. Check to make sure the Engine Power Switch is in its "OFF" position. (See Figure C)

CAUTION! Your Warranty is VOID if the Engine's Fuel Tank is not filled with the proper mixture (50:1) of unleaded gasoline and 2-cycle oil before each use. Before each use, check the fuel level. Do not run the Engine with an improper unleaded gasoline/2-cycle oil mixture. Running the Engine with an improper mixture WILL permanently damage the Engine.

2.The Fuel Tank holds approximately 1 gallon of fuel.

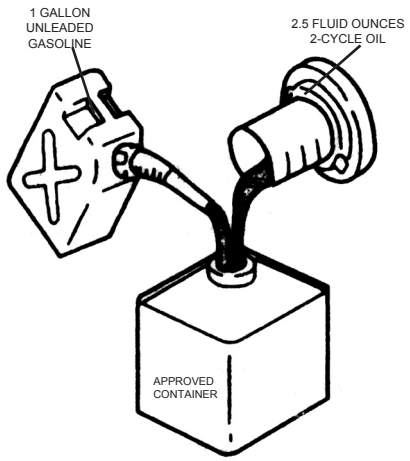


FIGURE B

3. To obtain the proper gasoline and 2-cycle oil mixture, mix 2.5 fluid ounces of 2-cycle oil with 1 gallon of unleaded gasoline into an approved container. Then slowly shake the container to thoroughly mix the gasoline/2-cycle oil.(See Figure B.)

4.Remove the Fuel Tank Cap and check the fuel level. (See Figure C.)

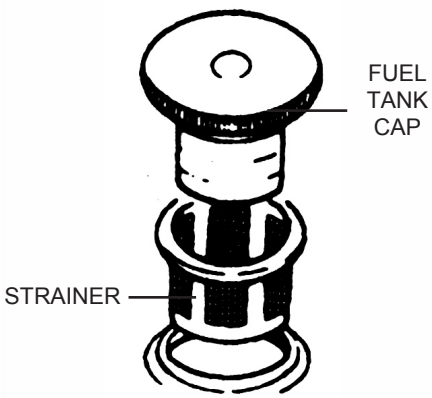


FIGURE C

4.To fill the Fuel Tank, first wipe off the Fuel Tank Cap and the surrounding area. (See Figure C.)

5.Unscrew, and remove the Fuel Tank Cap (See Figure C.)

6.Remove the Strainer and remove any dirt and debris. Then replace the Strainer. (See Figure C.)

7.Fill the Fuel Tank to about 1 inch under the fill neck of the Tank with the pre-mixed unleaded gasoline/2-cycle oil mixture.

8.Then replace the Fuel Tank Cap (See Figure C.)

TO START THE ENGINE

1.Check to make sure the Engine Switch is in its "OFF" position.

2.IMPORTANT:Make sure to unplug any load from the Generator before starting to any appliance, tool, or equipment.

3.Turn the Engine Fuel Switch to its "ON" position. (See Figure D.)

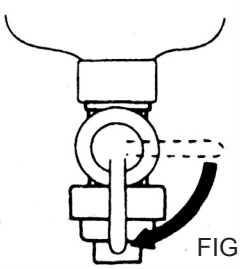


FIGURE D

"ON"

4.Turn the Engine Choke Lever to its "CHOKE" position. Set the Choke Lever in the "RUN" position when starting a warm Engine. (See Figure E.)

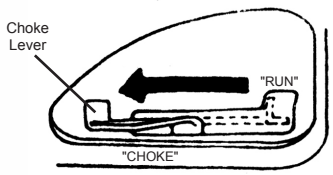


FIGURE E

5.Then turn the Engine Power Switch to its "ON" position. (See Figure F.)

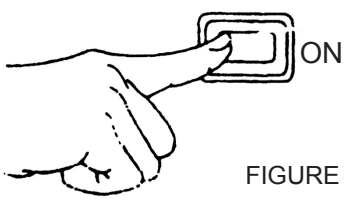


FIGURE F

6.Grasp the Recoil Starter Handle and pull slowly until resistance is felt. While holding the Handle, allow the Starter Rope to rewind slowly. Then, pull the Starter Handle with a rapid, full arm stroke. Once again while holding the Handle, allow the Rope to rewind slowly. Repeat as necessary, until the Engine starts. (See Figure G.) warm up for five minutes after starting with no electrical load.

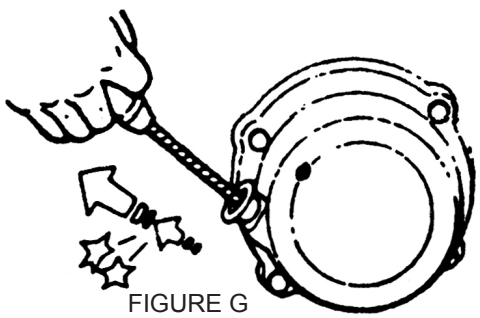


FIGURE G

5. After the Engine starts and warms up, slowly move the Choke Lever to its "RUN" position. (See Figure H.) IMPORTANT: Allow the Engine to run at

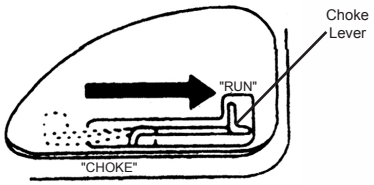


FIGURE H

6. no load until warm (approx. 3 minutes) after each start-up to allow the Engine to stabilize.

EQUIPMENT OPERATION

1.The total combined load through the outlet on the Generator must not exceed the rated maximum power of the unit.

2.Always reduce the load if the AC Circuit Breaker turns off. Once the load is reduced, press the Breaker to reset the Generator and continue operation. (See Figure I.)

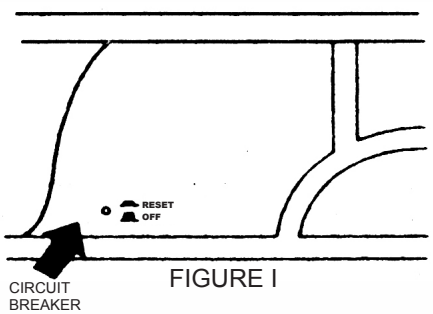


FIGURE I

3.Allow the Engine to run at no load until warm (approx. 3 minutes) after each start-up to allow the Engine to stabilize.

4.Plug the power cord of the 120 volt appliance/tool into the 120 volt AC Outlet on the Generator. (See Figure J.)

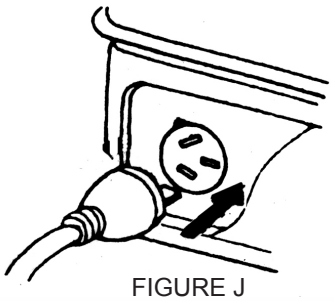


FIGURE J

5.NOTE: Do not allow the generator to completely run out of fuel with devices attached. A generator's output may sharply spike as it runs out of fuel, causing damage to attached devices.

6.When finished using the appliance/tool, unplug its power cord from the AC Outlet on the Generator. (See Figure K.)

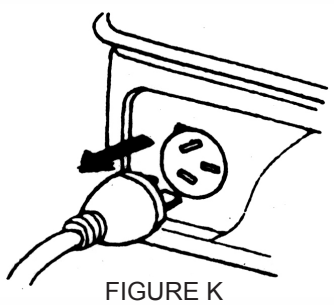


FIGURE K

7.For DC current, plug into the DC plug located on the side of the generator. To charge your car battery, connect the alligator clips to the corresponding terminals on your battery, The red lead goes to the positive (+) terminal and the black lead goes to the negative (-) terminal. This DC cord has been supplied with the unit.

GENERATOR SHUT OFF

1.Remove all electrical load devices from the Generator. (See Figure K.)

2.Allow the Engine to run for approximately 3 minutes with no electrical load.3.Turn off the Generator's Power Switch to stop the Engine.(See Figure L.)

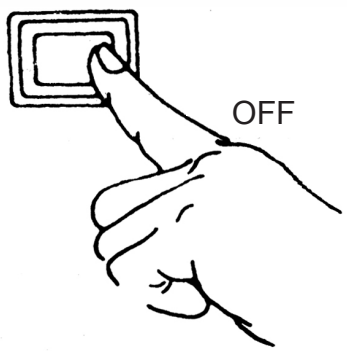


FIGURE L

4.Turn the Fuel Switch to its "OFF" position. (See Figure M.)

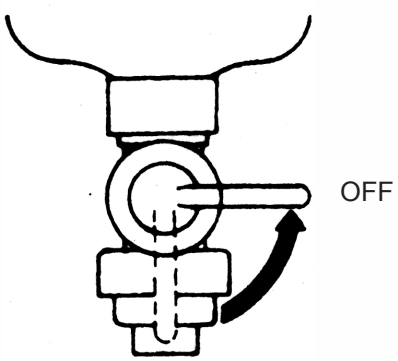


FIGURE M

5.Allow the Generator to completely cool before storing.with no electrical load.

MAINTENANCE

Many maintenance procedures, including those not detailed in this manual, will need to be performed by a qualified technician for safety. If you have any doubts allow the Engine to stabilize.about your ability to safely service the equipment or Engine, have a qualified technician service the equipment instead.

Air Filter Element Maintenance:

1.Wipe off the Air Cleaner Cover. Then remove the Cover. (See Figure N.)

2.Remove the Air Filter Element.

3.Wash the Air Filter Element in warm water and mild detergent several times. Rinse. Squeeze out excess water and allow it to dry completely. Soak the Filter in lightweight oil briefly, then squeeze out the excess oil.

4.Install the new Air Filter Element or the cleaned Filter. Secure the Air Cleaner Cover before use.

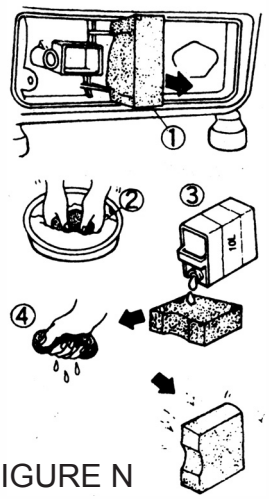


FIGURE N

Spark Plug Maintenance:

1.Disconnect Spark Plug Wire from end of plug. Clean out debris from around Spark Plug.

2.Using the spark plug wrench provided, remove the Spark Plug.

3.Inspect the Spark Plug:If the electrode is oily, clean it using a clean, dry rag. If the electrode has deposits on it, polish it using emery paper. If the white insulator is cracked or chipped, the Spark Plug needs to be replaced.

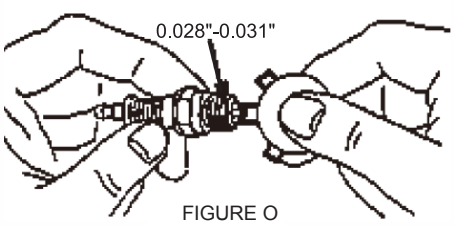


FIGURE O

4.When installing a new Spark Plug, adjust the Plug's gap to the specification on the Technical specification chart and in the illustration below. Do not pry against the electrode or the insulator, the Spark Plug can be damaged. (See Figure O.)

5.Install the new Spark Plug or the cleaned Spark Plug into the Engine. Gasket-style: Finger-tighten until the gasket contacts the cylinder head, then about 1/2-2/3 turn more.
Non-gasket-style: Finger-tighten until the plug contacts the head, then about 1/16 turn more.

Cleaning, Maintenance, and Lubrication Schedule: Engine

Note: This maintenance schedule is intended solely as a general guide. If performance decreases or if the Engine operates unusually, check systems immediately. The maintenance needs of this Engine will differ depending on factors such as temperature, air quality, fuel quality, and other factors.

Note: These procedures are in addition to the regular checks and maintenance explained as part of the regular operation of the Engine.

After Initial 25 Operation Hours:
1.Change unleaded gasoline and 2-cycle oil fuel mixture.

Every 25 Operation Hours Thereafter:
1.Clean/replace Air Filter Element.
2.Inspect/clean Spark Plug.

Every 50 Operation Hours:
1.Change unleaded gasoline and 2-cycle oil fuel mixture.

Every 100 Operation Hours:
1.Replace Spark Plug.
Replace Air Filter Element.

Note: All maintenance procedures scheduled for 20, 50, and 100 operation hours should be performed at least yearly.

Every 300 Operation Hours:
1.Clean Fuel Tank and Carburetor assembly.
2.Clean carbon build-up from Combustion.

Maintenance and Cleaning Schedule: Generator

Before Every Use:
1.Check to make sure all bolts and nuts are tight.
2.Check for any damage to the Generator.If damaged, do not use until repaired by a qualified service technician.

After Every Use:
1.Allow the unit to completely cool. Then clean the exterior of the Generator with a clean cloth.

Recommended Maintenance Schedule

		each use	first month of use or first 20 hrs	every 3 months or 50 hrs	every 6 months or 100 hrs	every year or 300 hrs	As necessary
Engine oil	check level	x					
		Run generator premix gas out prior to long periods of storage					
Air cleaner	check	x					
	Clean			x			
fuel filter cup	Clean				x		
spark plug	check/ clean				x		
gas tank	check gas level	x					
	Clean					x	

Troubleshooting Guide-Engine

Problem	Possible Causes	Probable Solutions
Engine will not start	FUEL RELATED:	FUEL RELATED:
	1. Improper gasoline/2 cycle oil mix.	1. Mix 50 parts unleaded gasoline with 1 part 2-cycle oil.
	2. No fuel in tank or fuel valve closed.	2. Fill fuel tank and open fuel valve.
	3. Choke not in start position, especially with cold engine.	3. Move choke to start position if engine is cold.
	4. Low quality or deteriorated, old gasoline.	4. Use only fresh 89+ octane unleaded gasoline and 2-cycle oil mixture.
	5. Carburetor not primed.	5. Prime carburetor by pressing priming bulb specified number of times (if equipped).
	6. Dirty fuel passageways blocking fuel flo .	6. Clean out passageways using fuel additive. Heavy deposits may require further cleaning.
	7. Carburetor needle stuck. Fuel can be smelled in the air.	7. Gently tap side of carburetor float chamber with screwdriver handle.
	8. Too much fuel in chamber. This can be caused by a stuck carburetor needle.	8. Turn choke to run position. Remove spark plug and pull the start handle several times to air out the chamber. Reinstall spark plug and set choke to start position.
	IGNITION (SPARK) RELATED:	IGNITION (SPARK) RELATED:
	1. Spark plug wire not connected securely.	1. Connect spark plug wire properly.
	2. Spark plug electrode wet or dirty.	2. Clean spark plug.
	3. Incorrect spark plug gap.	3. Correct spark plug gap.
	4. Spark plug wire or spark plug broken.	4. Replace spark plug wire and/or spark plug.
	5. Incorrect spark timing or faulty ignition system.	5. Have qualified technician diagnose repair ignition system.
	COMPRESSION RELATED:	COMPRESSION RELATED:
	1. Cylinder not lubricated. Problem after long storage periods.	1. Pour tablespoon of oil into spark plug hole. Crank engine a few times and try to start again.
	2. Loose or broken spark plug. (Hissing noise will occur when trying to start.)	2. Tighten spark plug. If that does not work, replace spark plug. If problem persists, may have head gasket problem, see #3 below.
	3. Loose cylinder head or damaged head gasket. (Hissing noise will occur when trying to start.)	3. Tighten head. If that does not remedy problem, replace head gasket.
	4. Engine valves or tappets misadjusted or stuck.	4. Adjust valve clearance. If that does not work, clean or replace valves/tappets.

Troubleshooting Guide-Engine

Problem	Possible Causes	Probable Solutions
Engine misfire	1. Spark plug wire loose. 2. Incorrect spark plug gap or damaged spark plug. 3. Defective spark plug wire. 4. Old or low quality gasoline. 5. Incorrect compression.	1. Check wire connections. 2. Re-gap or replace spark plug. 3. Replace spark plug wire. 4. Use only fresh 89+ octane unleaded gasoline and 2-cycle oil mixture. 5. Diagnose and repair compression. (Use **Engine will not start: C RELATED** section.)
Engine stops suddenly	1. Fuel tank empty or full of impure or low quality gasoline. 2. Defective fuel tank cap creating vacuum, preventing proper fuel flo . 3. Improper idle speed. 4. Faulty magneto, incorrect timing, or clogged carburetor.	1. Fill fuel tank with fresh 89+ octane unleaded gasoline and 2-cycle oil mixture. 2. Test/replace fuel tank cap. 3. Properly adjust idle speed. 4. Have qualified technician diagnose and service engine.
Engine knocks	1. Old or low quality gasoline. 2. Engine overloaded. 3. Incorrect spark timing, deposit buildup, worn engine, or other mechanical problems.	1. Fill fuel tank with fresh 89+ octane unleaded gasoline and 2-cycle oil mixture. 2. Do not exceed equipment s load rating. 3. Have qualified technician diagnose and service engine.
Engine backfire	1. Impure or low quality gasoline. 1. Engine too cold. 2. Choke not open after engine warm. 3. Engine not properly adjusted for high altitude operation. 4. Intake valve stuck, choke stuck, incorrect timing, clogged carburetor, or overheated engine.	1. Fill fuel tank with fresh 89+ octane unleaded gasoline and 2-cycle oil mixture. 2. Use cold weather fuel and oil additives to prevent backfiring 3. Move choke to run position after engine warms up. 4. Qualified technician must adjust engine at altitudes greater than 5,000 feet above sea level. 5. Have qualified technician diagnose and service engine.

Troubleshooting Guide-Generator Unit

Problem	Possible Cause	Possible Solutions
Zero output from receptacles	1. Engine speed is too slow	1. Adjust engine speed(ask repair shop for help)
	2. Open or shorted wiring	2. Clean and reconnect all wiring
	3. Faulty capacitor	3. Replace capacitor
	4. Open/ shorted rotor or stator windings	4.Test wiring resistance, replace winding if necessary
	5. Open rectifier	5. Test rectifier, replace if necessary
Low output voltage with no load	1. Engine speed is too slow	1. Adjust engine speed(ask repair shop for help)
	2. Open rectifier	2. Test rectifier, replace if necessary
	3. Faulty capacitor	3. Replace capacitor
	4.Open/shorted rotor or stator windings	4.Test winding resistance, replace winding if necessary
	5. Alternator not magnetized	5. Re-magnetize the alternator
High output voltage with no load	1. Faulty capacitor	1. Replace capacitor
	2. Engine speed is too fast	2. Adjust engine speed
Low output voltage under load	1. Open rectifier	1. Test rectifier, replace if necessary
	2. Engine speed is too low at full load	2. Adjust engine speed(ask repair shop for help)
	3. Excessive load applied	3. Reduce the applied load
Erratic output voltage	1. Dirty, corroded, or loose wiring connection	1. Referring to the wiring diagram, clean and reconnect all wiring
	2. Unbalanced load applied	2. Remove all loads, then apply each one individually to determine which one is causing erratic output.
Noisy operation	1. Loose generator or engine bolt	1. Tighten all mountings
	2. Short circuit in generator field or load	2. Test winding resistance, replace field winding if necessary; Test load devices for shorts. Replace defective load device
	3. Faulty bearing	3. Replace bearing

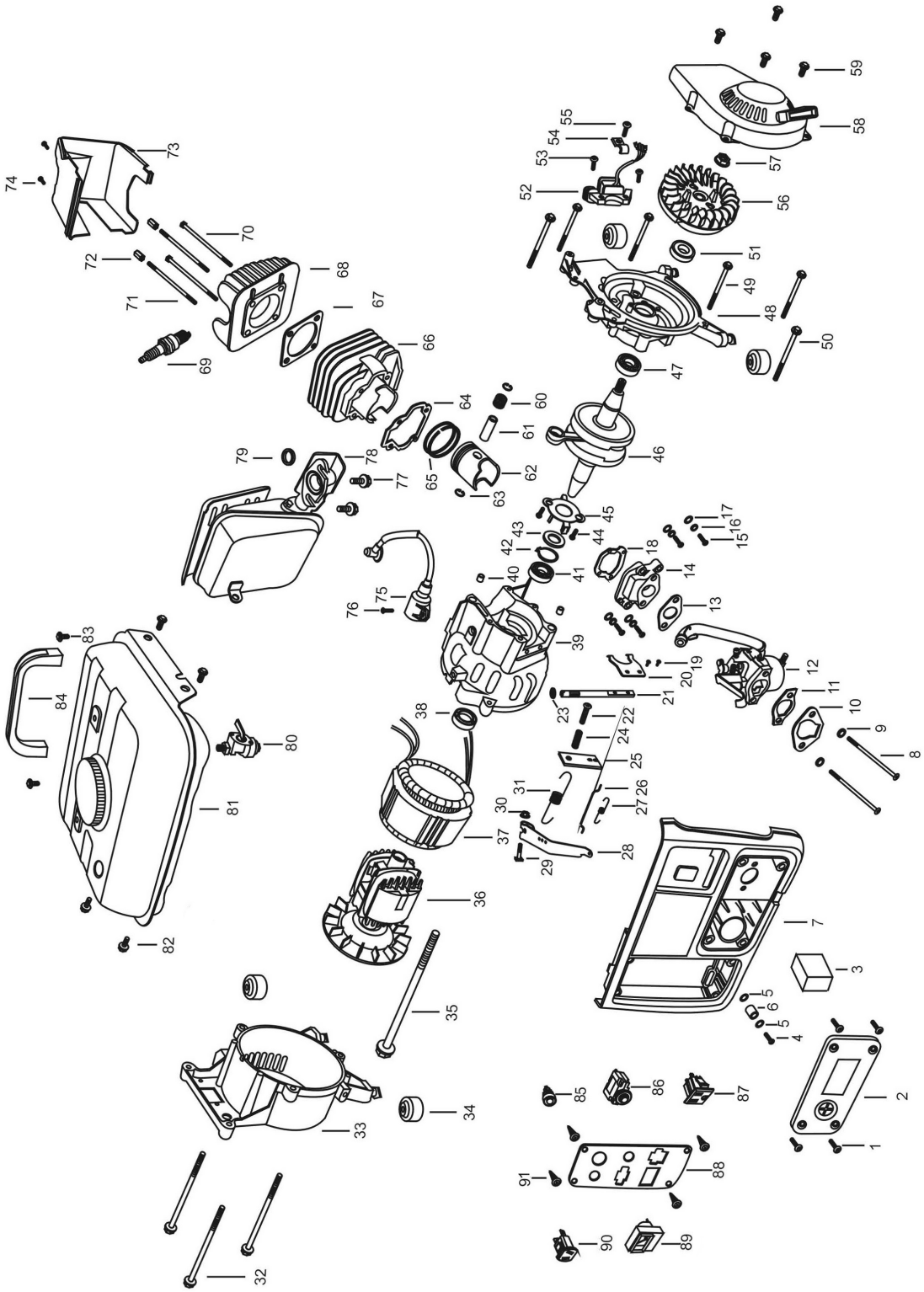
Limited Manufacturer Warranty

North American Tool (NAT) Industries makes every effort to ensure that this product meets high quality and durability standards. NAT warrants to the original retail consumer a 1-year limited warranty from the date the product was purchased at retail and each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations, or a lack of maintenance. NAT shall in no event be liable for death, injuries to persons or property, or for incidental, special or consequential damages arising from the use of our products. To receive service under warranty, the original manufacturer part must be returned for examination by an authorized service center. Shipping and handling charges may apply. If a defect is found, NAT will either repair or replace the product at its discretion.

DO NOT RETURN TO STORE

For Customer Service:
Email: feedback@natitools.com or Call 1-800-348-5004

Parts List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Call 1-800-348-5004 for assistance or replacement parts

Please provide the following information

-Model number

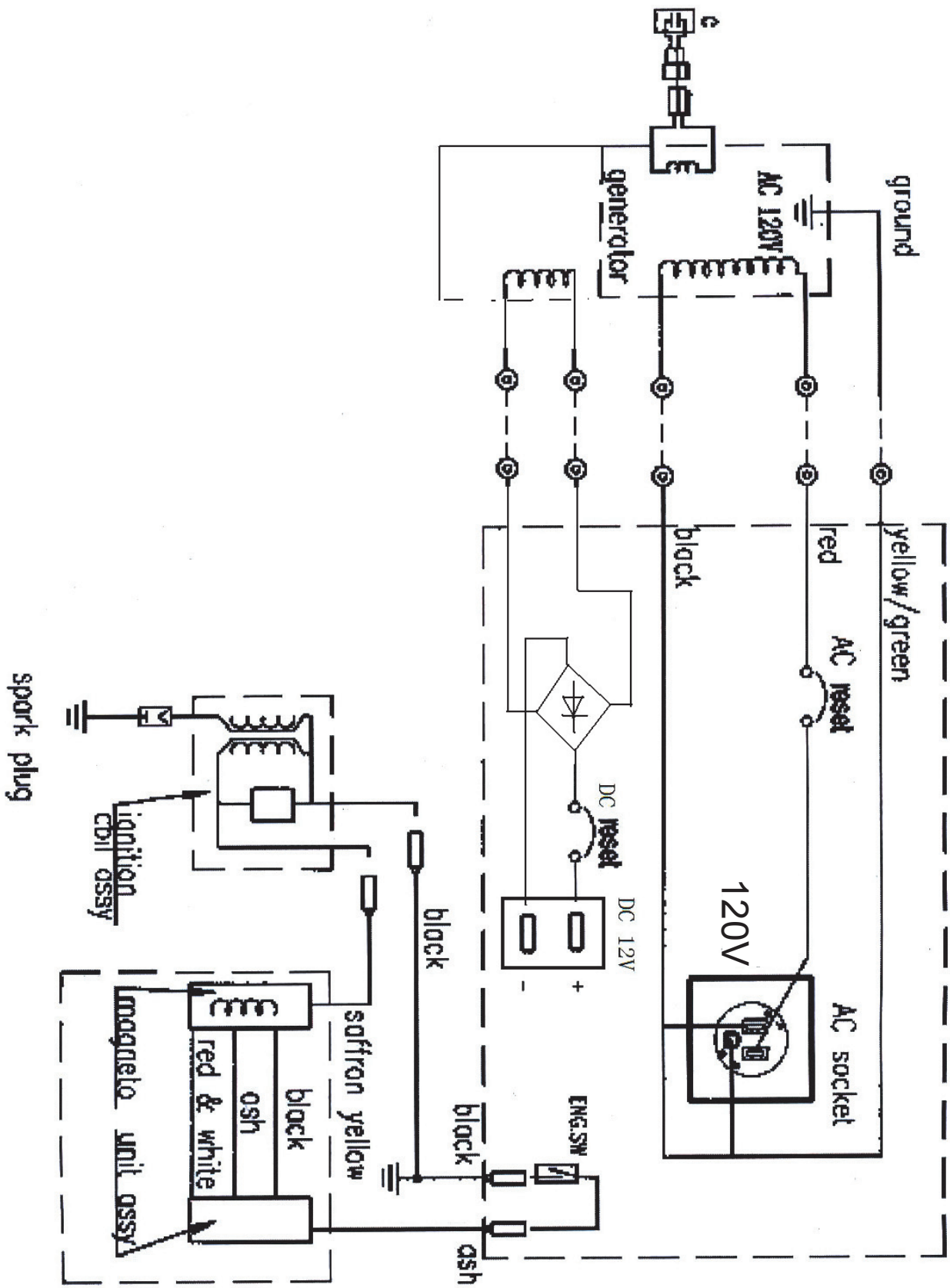
-Part description and number as shown in parts list

-Serial number

Address any correspondence to:

North American Tool Industries
84 Commercial Rd
Huntington, IN 46750

Part No.	Description	Q'ty	Part No.	Description	Q'ty
1	Bolt 5x 16	4	47	bearing 6004	1
2	Air cleaner cover	1	48	Left crankcase	1
3	Air filter element	1	49	Flange bolt 6x50	4
4	Bolt rivet 6 x 40	1	50	Flange bolt 6x55	2
5	Flat washer	2	51	Big oil sealing	1
6	Steel set	1	52	Magnetic motor	1
7	Control panel	1	53	Bolt 6x16	2
8	Bolt 6x65	2	54	Press board	1
9	Spring washer	4	55	Flange bolt	1
10	Filter flange	1	56	Flywheel	1
11	Carburetor cushion I	1	57	Flange bolt 10x1.25	1
12	Carburetor assembly	1	58	start cover	1
13	Carburetor cushion II	1	59	Flange bolt 6x12	4
14	Valve	1	60	Needle bearing	1
15	Bolt 6x20	4	61	piston pin	1
16	Spring washer	4	62	Piston	1
17	Flat washer	4	63	Piston pin fender ring	2
18	Seal ring	1	64	Cylinder seal cushion	1
19	Bolt 3x8	2	65	Piston ring	1
20	Adjustable speed fork	1	66	Cylinder block	1
21	Adjustable speed lever	1	67	Cylinder head gasket	1
22	Bolt 6x40	1	68	Cylinder head	1
23	Seal ring	1	69	Sparkle plug	1
24	Press spring	1	70	Flange bolt 6x100	2
25	Adjustable speed piece	1	71	Double head bolt 6x113	2
26	Adjustable speed pull lever	1	72	Long shape nut 6x20	2
27	Adjustable spring	1	73	Cylinder head cover	1
28	Adjustable speed arm	1	74	Flange bolt 6x12	2
29	Square bolt	1	75	High tension line	1
30	Nut	1	76	Bolt 6x20	1
31	Pull Spring	1	77	Flange bolt 6x16	2
32	Flange bolt 6x80	3	78	Muffler	1
33	Back cover	1	79	Washer	1
34	Shock absorber foot	4	80	Fuel switch	1
35	Flange bolt 8x154	1	81	Fuel tank	1
36	Rotor	1	82	Flange bolt 6x12	4
37	Stator	1	83	Round head bolt 6x35	2
38	Big oil sealing	1	84	Handle	1
39	Right crankcase	1	85	Pilot lamp	1
40	Fixing pin sheath	2	86	Circuit breaker	1
41	Bearing 6004	1	87	AC receptacle	1
42	Fender ring 47	1	88	Iron faceplate	1
43	Slide block	1	89	Voltmeter	1
44	Bolt 6x12	2	90	DC plug	1
45	shelf	1	91	Bolt	4
46	Bent axle	1			


generator
AC 120V
ground
yellow/green
red
black
AC reset
DC reset
DC 12V
+
-
120V
AC socket
ENG.SW
ash
black
saffron yellow
black
red & white
osh
black
magneto unit assy
ignition coil assy
spark plug