

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



4000 XLT GENERATOR

Models: 9224, 52223

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: 4-stroke; Single phase;
Electronic ignition
Start Type: Recoil & Electric Start
Rated Power: 3500W
Fuel Capacity: 4gallons
Run Time: 9 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

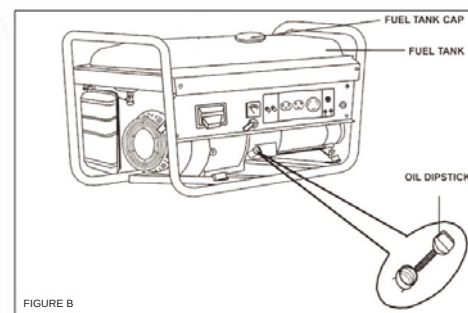
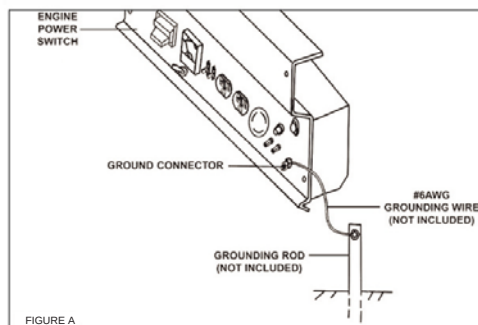
GROUNDING THE GENERATOR

Connect a #6 AWG grounding wire (not included) from the generator grounding log on the front of the generator to a grounding rod (not included) that has been driven at least 24 inches into the earth. The grounding rod must be an earth-driven copper or brass rod (electrode) which can adequately ground the generator.

Pre-Start Checks:

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

2. IMPORTANT! Prior to first using the Generator, the Engine MUST be filled with approximately 3/4 (0.63) quart of a high quality SAV 10W-30 grade engine oil. To do so, unscrew and remove the Engine's Oil Dipstick located at the bottom of the Engine Crankcase. Fill the Engine's Crankcase until the oil level is level with the upper marked line on the Dipstick. Then, screw the Dipstick back into the Oil Fill Hole. (See Figure B.)



3. Before the first use, remove the fuel Tank cap and fill the Fuel Tank with unleaded gasoline. Then replace the fuel Tank Cap. Thereafter, check the Engine's Fuel Gauge for the amount of unleaded gasoline in the Fuel Tank. If necessary, refill the Fuel Tank with unleaded gasoline; the Generator must be turned off and cooled down before refilling the fuel tank. (See Figure B.)

To Start The Engine

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



2. IMPORTANT: 2. Make sure to unplug any load from the Generator before starting to prevent permanent damage to any appliances, tools, or equipment.

3. Turn the Engine Fuel Valve to its "ON" position. Then turn the Engine Choke Lever to its "CLOSE" position.

No choke is required if the Engine is warm. Make sure the Choke Lever is in the "OPEN" position when starting a warm Engine. (See Figure D.)

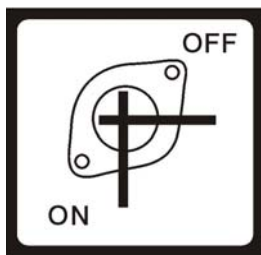


Figure D

4. To start the Engine, using the Battery (Model:9224 with Battery, Model:52223 Battery not included) for cranking power, insert the Engine Switch Key into the Engine Switch (See Figure C.) Then turn the Key to the "START" position. NOTE: To prolong Starter life, use short starting cycles (5 seconds maximum). Then wait one minute before attempting to start again.

5. To start the Engine manually, using the Starter Handle, insert the Engine Switch Key and turn the Key to its "RUN" position. Grasp the Starter Handle, and pull slowly until resistance is felt. Allow the Starter Rope to rewind slowly.

Then, pull the Starter Handle (See Figure E.) with a rapid, full arm stroke. Allow the Rope to rewind slowly. If necessary, repeat this procedure until the Engine starts.



Figure E.

6. When the Engine starts, slowly move the Choke Lever to its "OPEN" position. (See Figure D.)

7. IMPORTANT: Allow the Generator to run at no load for five minutes after each start-up so that the Engine and Generator can stabilize.

TO CONNECT ELECTRICAL LOADS

1. Start the Engine, and allow the Engine and Generator to run and warm up for five minutes after starting with no electrical load.

2. WARNING! Connect 120 VAC appliances, tools, and equipment only to the two 120 VAC Outlet Sockets. Connect 240 VAC appliances, tools, and equipment only to the one 240 VAC Outlet Socket. (See Figure F.)



Figure F

3. CAUTION! Never exceed the rated capacity for this Generator, as serious damage to the Generator and/or appliances, tools, and equipment could result from an overload. Starting and running wattage requirements should always be calculated when matching this Generator's wattage capacity to the appliance, tool, or equipment.

4. Use the DC12V terminals to charge DC batteries. WARNING! Frequently monitor charging of DC batteries. Do not overcharge.

5. Most appliances, tools, and equipment will list on the motor nameplate the starting and running voltage and amperage requirements. Use the following formula to convert voltage and amperage to wattage:

a. Volts x Amps = Watts
(example: 120 Volts x 3 Amps = 360 Watts)

b. To determine the approximate wattage requirement for most appliances, tools, and equipment with "inductive" type motors, multiply the wattage that was calculated by 2 times to assure adequate Generator capacity.

c. The starting and running wattage for "resistant" loads are the same. Example: a 100 watt light bulb requires only 100 watts to turn on. Most resistant loads will be listed in wattage.

6. Always power the largest electric motor first. Then, plug in other appliances, tools, and equipment.

a. Connect "inductive" load appliances, tools, and equipment first. Inductive loads consist of small hand tools and some small appliances. Connect the items that require the most wattage first.

b. Connect any lights next.

c. Voltage sensitive appliances, tools, and equipment should be the last to be connected to the Generator. Plug voltage sensitive items such as T.V.'s, VCR's, microwaves, and cordless telephones into a UL® Listed voltage surge protector (not included). Then, connect the surge protector into the Generator.

7. **IMPORTANT!** Failure to connect and operate appliances, tools, and equipment in this sequence can cause damage to the Generator, appliances, tools, and equipment and will void the Warranty of this Generator.

8. Once the Engine is running, simply connect the 120 VAC appliances, tools, and equipment into the 120 VAC Outlet Sockets. Also, connect a 240 VAC appliance, tool, or equipment into the 240 VAC Outlet Socket. (See Figure F.)

9. **NOTE:** If Engine speed or voltage fluctuates with a load below 250 watts, move the Engine Choke Lever to the "HALF-CHOKE" position. (See Figure D.)

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.

10. When finished using the Generator, disconnect all electrical loads. Turn the Engine Switch to its "OFF" position to stop the Engine. Then, close the Engine Fuel Valve. (See Figures C and D.)

11. Allow the Generator and its Engine to completely cool. Then store the unit in a clean, dry, safe location out of reach of children and other unauthorized people

MAINTENANCE

Cleaning the Generator

Always try to use your generator in a cool dry place. In the event your generator becomes dirty you may clean the exterior with one or more of the following:

- a damp cloth
- a soft brush

- a vacuum
- pressurized air

Never clean your generator with a bucket of water or a hose. Water can get inside the working parts of the generator and cause a short circuit or corrosion.

Checking the Oil

The generator is equipped with an automatic shutoff to protect it from running on low oil.

Nonetheless, you should check the oil level of the generator before each use to ensure that the generator crankcase has a sufficient amount. To check the oil level:

1. Make sure the generator is on a level surface.
2. Unscrew the oil filler/dipstick cap (see figure G).
3. With a dry cloth, wipe the oil off of the stick on the inside of the cap.
4. Insert the dipstick as if you were replacing the cap and then remove again. There should now be oil on the stick. If there is no oil on the stick, or oil only at the very end of the stick, you should add oil until the engine crankcase is filled. See "Changing/ Adding Oil" in this section.

5. Be sure to reinstall the cap when finished checking the oil

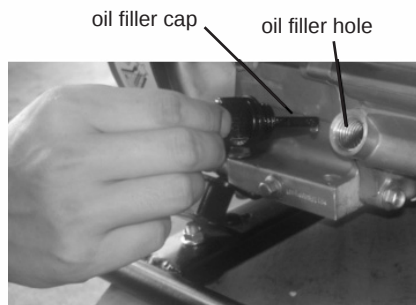


Figure G

Changing/ Adding Oil

You should check the oil level of your generator. When the oil level is low you will need to add oil until the level is sufficient to run the generator.

The oil capacity of your generator engine is 37 fluid oz.

It is necessary to drain the oil from the crankcase after 50 hrs of use, or if it has become contaminated with water or dirt. In this case, you can drain the oil from the generator according to the following steps:

1. Place a bucket underneath the generator to catch oil as it drains.
2. Using a hex wrench, unscrew the oil drain plug, which is located on the crankcase underneath the oil filler/dipstick cap (see figure H). Allow all the oil to drain from the generator.

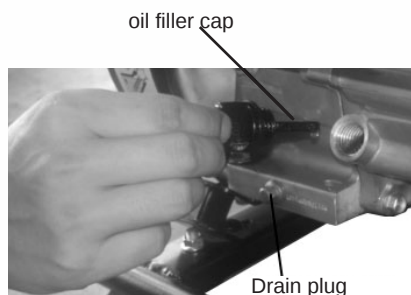


Figure H

3. Replace the oil drain plug and tighten with a hex wrench.

To add oil to the crankcase, follow these steps:

1. Make sure the generator is on a level surface.
2. Unscrew the oil filler/dipstick cap from the engine as shown in figure 12 above.
3. Using a funnel, add 30W, 4-stroke engine oil. When full, the oil level should come close to the top of the oil fill opening (see figure I).



Figure I

NOTE: Never dispose of used motor oil in the trash or down a drain. Please call your local recycling center or auto garage to arrange oil disposal.

Air Cleaner Maintenance

Routine maintenance of the air cleaner helps maintain proper air flow to the carburetor. Occasionally check that the air cleaner is free of excessive dirt.

1. Unscrew the four bolts at the top and bottom of the air cleaner cover (see figure J).
2. Remove the sponge-like elements from the casing.
3. Wipe the dirt from inside the empty air cleaner casing.
4. Wash the sponge-like elements in household detergent and warm water. Allow to dry.
5. Soak the dry elements in engine oil. Squeeze out any excess oil.
6. Replace the sponge-like elements in the air cleaner casing and replace the cover.

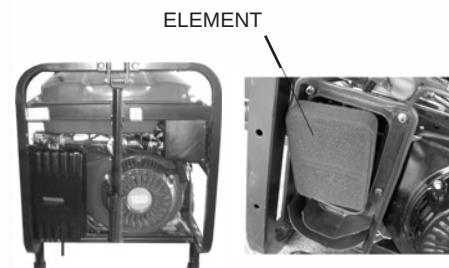


Figure J

Fuel Filter Cup Cleaning

The fuel filter cup is a small well underneath the fuel valve. It helps to trap dirt and water that may be in your fuel tank before it can enter the engine. To clean the fuel filter cup.

1. Turn the fuel valve to the "off" position.
2. Unscrew the fuel filter cup from the fuel valve using a wrench. Turn the valve toward you to unscrew (see figure K).
3. Clean the cup of all sediment using a rag or brush.
4. Reinstall the fuel filter cup.

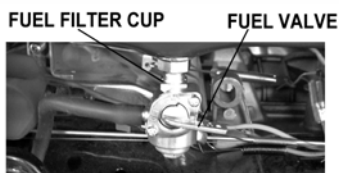


Figure K

Spark Plug Maintenance

The spark plug is important for proper engine operation. A good spark plug should be intact, free of deposits, and properly gapped. To inspect your spark plug:

1. Pull on the spark plug cap to remove it.
2. Unscrew the spark plug from the generator using the spark plug wrench included with this product (see figure L).

Visually inspect the spark plug. If it is cracked or chipped, discard and replace with a new spark plug. Measure the plug gap with a gauge (see figure M). The gap should be (0.028-0.031in.).

3. If you are re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base and then re-gap the spark plug.
4. Screw the spark plug back into its place on the generator using the spark plug wrench. Replace the spark plug cap.

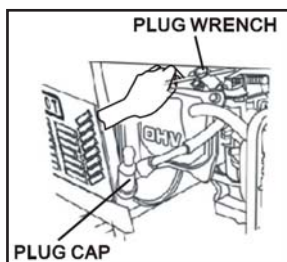


Figure L

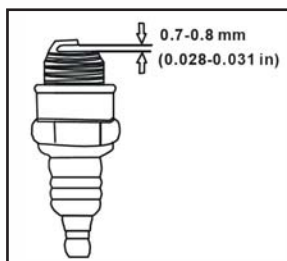


Figure M

Emptying the Gas Tank

Before storing your generator for extended periods of time, you should drain your generator of gasoline. To drain the generator of gas:

1. Turn the fuel valve to the "off" position.
2. Remove the fuel filter cup (see "Fuel Filter Cup Cleaning" earlier in this section).
3. Empty the fuel filter cup of any fuel.
4. With a receptacle underneath the generator to catch the gas, turn the fuel valve to the "on" position. Drain all the gas from the generator.
5. Turn the fuel valve to the "off" position.
6. Replace the fuel filter cup.
7. Store the emptied gasoline in a suitable place. drain. Please call your local recycling center or auto garage to arrange oil disposal.

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					
	Replace		x	x			x
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

Problem	Possible Cause	Possible Solution
Engine will not start.	1. Low on fuel or oil. 2. Engine power switch is in the OFF position. 3. Faulty spark plug. 4. Choke in wrong position. 5. Fuel valve lever in CLOSED position. 6. Generator loaded during start-up. 7. Spark plug wire loose. 8. Fuel line clogged. 9. Faulty ignition system.	1. Add fuel or oil. 2. Turn engine power switch to the ON position. 3. Replace spark plug. 4. Properly adjust choke. 5. Turn fuel valve lever to OPEN position. 6. Remove load from Generator. 7. Attach wire to spark plug. 8. Clean fuel line and fuel filter. 9. Have a qualified technician check ignition system.
No electrical output.	1. Faulty outlet. 2. Circuit breaker tripped. 3. Defective capacitor. 4. Faulty power cord.	1. Have a qualified technician check outlets. 2. Depress circuit breaker and reset. 3. Have a qualified technician check capacitor. 4. Repair or replace cord.
Repeated circuit breaker tripping.	1. Overload. 2. Faulty cords or equipment.	1. Reduce load. 2. Check for damaged, bare, or frayed wires on equipment. Repair or replace.
Generator overheating.	1. Generator overloaded. 2. Insufficient ventilation.	1. Reduce load. 2. Move to adequate supply of fresh air.

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:

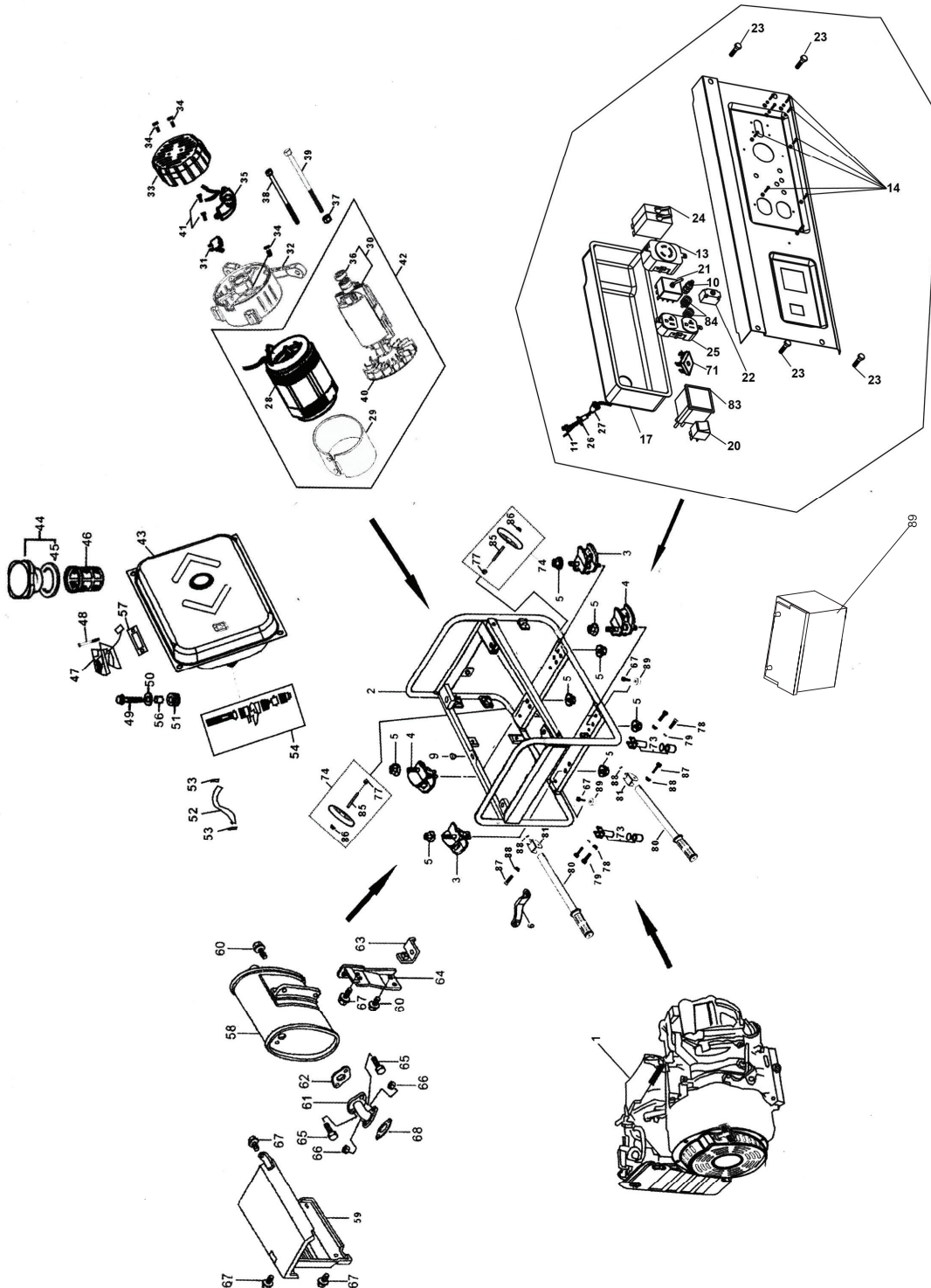
Email: feedback@natitools.com or Call 1-800-348-5004



4000 XLT GENERATOR

Models: 9224, 52223

Parts List - Generator



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

Please provide the following information

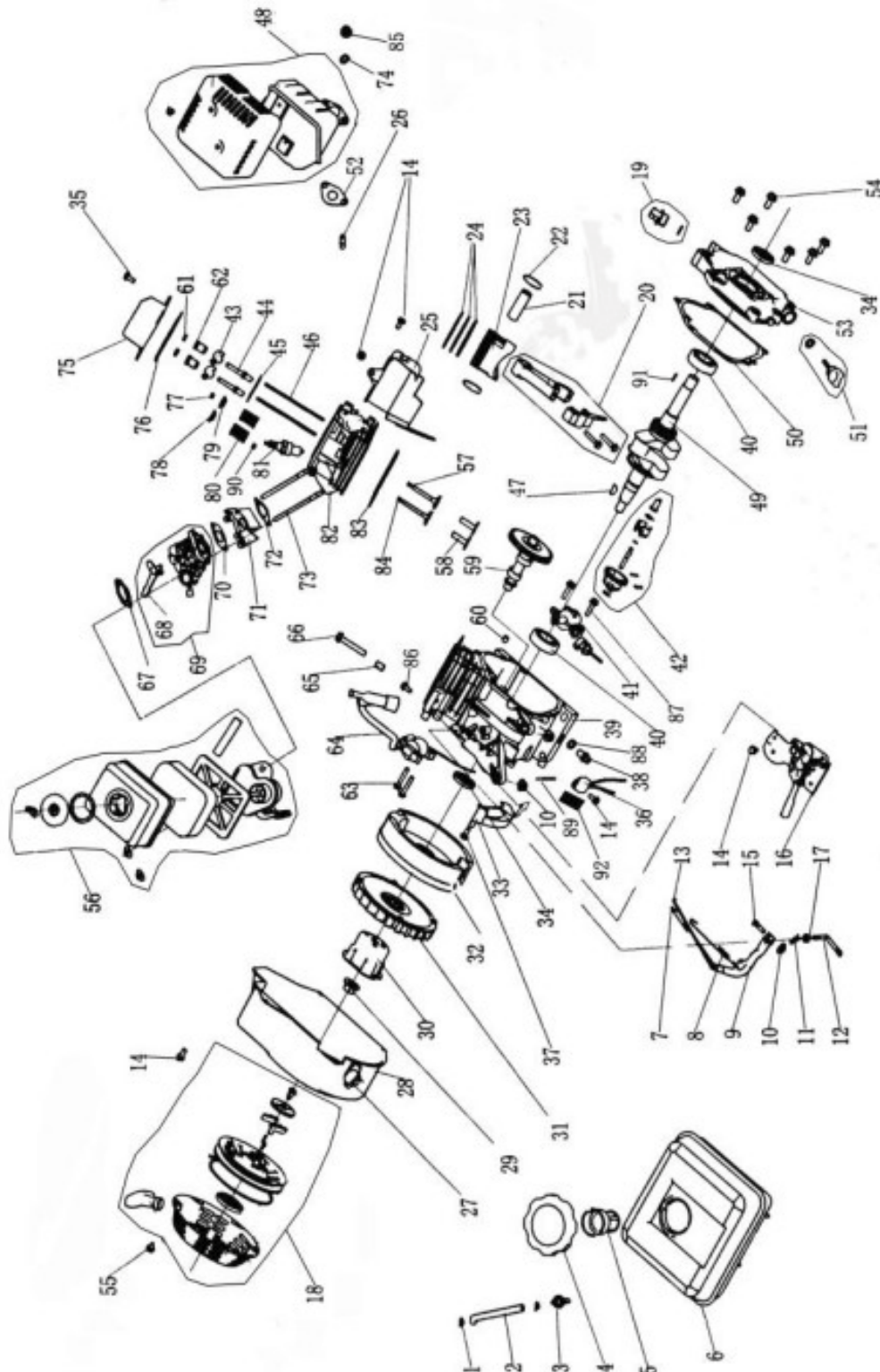
- Model number
- Part description and number as shown in parts list
- Serial number

Address any correspondence to:

North American Tool Industries
84 Commercial Rd
Huntington, IN 46750

Item	Description	Qty	Item	Description	Qty
1	Gasoline engine	1	45	Packing ring	1
2	Frame comp	1	46	Fuel filter	1
3	Bottom rubber A	2	47	Fuel gauge	1
4	Bottom rubber B	2	48	Screw M5×10	2
5	Flange nut M8	8	49	Flange bolt M6×22	4
6	Air cleaner bracket	4	50	Washer	4
9	Rubber pad, frame	1	51	Cushion	4
10	Earth terminal set	1	52	Outlet pipe 9×4.5×130	1
11	Wire harness Assy	1	53	Tube clip	2
13	Receptacle(30A)	1	54	Fuel cock	1
14	Bolt M4×10	4	56	Fitting brush for fuel tank	4
15	Control panel Assy	1	57	Gasket	1
17	Control panel case	1	58	Muffler	1
20	Engine switch	1	59	Muffler guard	1
21	Voltage Selector	1	60	Flange bolt M8×16	3
22	DC Circuit breaker	2	61	Exhaust pipe comp	1
23	Circuit bolt M6×25	4	62	Muffler gasket	1
24	Circuit breaker	4	63	Supporting plate	1
25	Duplex Receptacle	1	64	Muffler stay	1
26	Boot, AC output wire	1	65	Bolt M8×25	2
27	Boot, main wire harness	1	66	Nut M8	2
28	Stator assembly	1	68	Exhaust pipe gasket	1
29	Stator cover	1	71	Rectifier	1
30	Rotor comp	1	73	Rubber Foot	2
31	Brush assembly	1	74	Wheel	2
32	Generator stay	1	77	Nut	2
33	Generator end cover	1	78	Bolt M6×40	4
34	Bolt M5×12	3	79	Nut M6	4
35	Voltage regulator	1	80	Handle	2
36	Bearing 6202-2RS	1	81	Handle seat	2
37	Plain washer	1	83	Voltage Meter	1
38	Flange bolt M6×125	4	84	DV 12V	2
39	Bolt M8×180	1	85	Wheel Shaft II	2
40	Generator fan	1	86	Lock Nut M10	2
41	Bolt M5×14	3	87	Bolt M8×43	2
42	Stator & rotor Assy	1	88	Lock Nut M8	4
43	Fuel tank	1	89	Battery (Model:9224 with battery, Model:52230 battery not included)	1
44	Fuel cap	1			

Parts List - Engine



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

No.	Spare parts code	Name	Qty	No.	Spare parts code	Name	Qty
1	2.55.07.001000	CLIP TUBE	2	47	2.63.01.01036	KEY SPECIAL WOODRUFF	1
2	2.55.06.000100	TUBE FUEL	1	48	/	MUFFLER ASSY	1
3	2.55.05.005206	JOINT ASSY FUEL TANK	1	49	/	CRANKSHAFT COMP	1
4	2.55.05.005201	CAP COMP FUEL FILLER	1	50	2.60.01.001100	PACKING CASE COVER	1
5	2.55.05.005205	FILTER FUEL	1	51	/	OIL FILLER CAP	1
6	/	TANK COMP FUEL	1	52	2.60.03.000100	GASKET MUFFLER	1
7	2.54.02.000200	SPRING THROTTLE	1	53	2.51.05.000800	COVER	1
8	2.54.02.000300	SPRING THROTTLE	1	54	2.63.01.00208	BOLT, M8*32	6
9	2.54.04.000100	ARM GOVERNOR	1	55	2.63.01.00166	BOLT, M6*10	3
10	2.63.01.00274	NUT FLANGE	5	56	/	AIR CLEANER	1
11	2.63.01.00340	PIN LOCK	1	57	2.50.04.000100	VALVE EX	1
12	2.51.03.000100	SHAFT GOVERNOR ARM	1	58	/	LEFTER VALVE	2
13	2.54.03.000100	ROD GOVERNOR	1	59	/	CAMSHAFT ASSY	1
14	2.63.01.00170	BOLT FLANGE	9	60	2.63.01.00404	PIN FLYING BLOCK	2
15	2.63.01.00092	BOLT QUADRATE HEAD	1	61	2.50.05.000101	PIVOT ROCKER ARM	2
16	/	CONTROL ASSY	1	62	2.50.05.000102	NUT PIVOT ADJUSTING	2
17	2.63.01.00370	WASHER PAIN	1	63	2.63.01.00181	BOLT FLANGE 6*25	2
18	/	COVER COMP FAN	1	64	2.53.02.000100	COIL ASSY IGNITION	1
19	/	OIL STICK	1	65	2.63.01.00406	PIN DOWER	2
20	/	CONNECTING ROD	1	66	2.63.01.00256	BOLT FLANGE 8*55	4
21	/	PIN PISTON	1	67	2.60.05.000100	SPACER COMP AIR	1
22	2.51.10.000100	CLIP PISTON PIN	2	68	2.55.01.000601	CHOKE HANDLE	1
23	/	PISTON	1	69	/	CARBURETOR	1
24	/	RING SET	1	70	2.60.04.000100	PACKING CABURETOR	1
25	2.52.06.000100	SHROUD	1	71	2.55.02.000100	INSULATOR, CARBURETOR	1
26	2.63.01.00045	BOLT STUD EXHAUST	2	72	2.60.02.000100	PACKING INSUL ATOR	1
27	2.53.05.000200	SWITCH ASSY ENGINE	1	73	2.63.01.00051	BOLT STUD IN	2
28	/	COVER COMP FAN	1	74	2.63.01.00365	WASHER,8	2
29	2.63.01.00278	NUT SPECIAL	1	75	/	COVER COMP HEAD	1
30	2.52.03.000100	PULLEY STARTER	1	76	2.60.09.000100	PACKING HEAD COVER	1
31	2.52.04.000200	FAN COOLING	1	77	2.50.09.001300	RATATOR VALVE	1
32	2.53.01.000100	FLYWHEEL COMP	1	78	2.50.09.000200	SEAL GUIDE	1
33	2.52.07.000100	DIVERSION ASSY	1	79	2.50.09.000300	RETAINER VALVE SPRING	1
34	2.51.17.000100	OIL SEAL25*41.25*6	2	80	2.50.09.000100	SPRING VALVE	2
35	2.63.01.00173	BOLT FLANGE	4	81	2.53.06.000200	PLUG SPARK	1
36	2.51.04.000700	ALART UNIT OIL	1	82	/	HEAD COMP CYLINDER	1
37	2.63.01.00178	BOLT FLANGE	1	83	/	GASKET CYLINDER	1
38	2.63.01.00149	BOLT DRAIN PLUG	2	84	2.50.03.000100	VALVE IN	1
39	/	CRANK CASE	1	85	2.63.01.00270	NUT HEX 8MM	2
40	2.63.02.006000	BEARING RADIAL BALL	2	86	2.63.01.00182	BOLT, M6*28	1
41	2.51.04.000100	OIL LEVEL SWITCH	1	87	2.63.01.00175	BOLT, M6*16	2
42	2.51.02.000100	GEAR GOVERNOR	1	88	2.63.01.00497	WASHER DRAIN PLUG	2
43	2.50.05.000104	ARM VALVE ROCKER	2	89	2.62.01.000100	WIRE CLIP	1
44	2.50.05.000103	BOLT PIVOT ARM	2	90	2.50.10.000100	SEAL GUIDE	1
45	2.50.06.000100	PLATE ASSY	1	91	/	PING	1
46	2.50.07.000100	ROD PUSH	2	92	2.62.01.000600	Bushing	1

