

OWNER'S Manual

NP-30G

AIR-COOLED RECREATIONAL VEHICLE GENERATOR

Models 9557-0 and 9557-1

GENERAC
CORPORATION

GENERAL SAFETY RULES

THE MANUFACTURER SUGGESTS THAT THESE "RULES" FOR SAFE OPERATION BE COPIED AND POSTED IN POTENTIAL HAZARD AREAS OF THE RECREATIONAL VEHICLE. SAFETY SHOULD BE STRESSED TO ALL OPERATORS AND POTENTIAL OPERATORS OF THIS EQUIPMENT.

Study these SAFETY RULES carefully before operating or servicing applicable equipment. Become familiar with this Owner's Manual and with your generator. Safe, efficient and reliable operation can only be achieved if generator is properly installed, operated and maintained. Many accidents are caused by failing to follow simple and fundamental rules or precautions. The manufacturer suggests that these GENERAL SAFETY RULES be copied and posted in potential hazard areas of the recreational vehicle. Safety should be stressed to all operators and potential operators of equipment.

The manufacturer cannot possibly anticipate every possible circumstance that might involve a hazard. The warnings in this Manual and on tags and decals affixed to the unit are, therefore, not all-inclusive. If you use a procedure, work method or operating technique Generac does not specifically recommend, you must satisfy yourself that it is safe for you and others. You must also make sure the procedure, work method or operating technique that you chose does not render the generator to be unsafe.

- For fire safety, the recreational vehicle generator must be properly installed and maintained. Installation must always remain in compliance with applicable codes and standards. In addition, the generator must be installed in conformance to the manufacturer's detailed installation instructions. Following installation, nothing must be done that might render the generator in noncompliance with such codes, standards and instructions.
- The RV generator produces extremely high and dangerous electrical voltages and can cause dangerous, and possibly fatal, electrical shock. Avoid contact with bare wires, terminals, etc. while the unit is running. If you must work around an operating generator, stand on an insulated, dry surface to reduce shock hazard.
- Never work on this equipment or handle any electrical device while standing in water, while barefoot, or while hands or feet are wet. Dangerous electrical shock will result.
- Have the generator properly grounded (bonded) during installation onto the vehicle, either by solid mounting to the vehicle frame or chassis or by means of an approved bonding conductor. DO NOT disconnect the bonding conductor, if so equipped. DO NOT reconnect the bonding conductor to any generator part that might be removed or disassembled during routine maintenance. If the grounding conductor must be replaced, use only a flexible conductor that is of No. 8 AWG copper wire minimum.
- In case of accident caused by electric shock, shut down the source of electrical power down at once. If this cannot be done, free victim from live conductor. AVOID DIRECT CONTACT WITH THE VICTIM. Use a dry board, dry rope, or other non-conducting implement to free the victim from live conductor. If victim is unconscious, apply CPR (cardio-pulmonary resuscitation) and get medical help.
- Inspect fuel system frequently for leaks or damage. Repair or replace any damaged or leaking component immediately. Never attempt to change, alter or modify the generator fuel system in any way that might affect safety or compliance with applicable codes and standards.
- The generator engine gives off DEADLY carbon monoxide gas through its exhaust system. This dangerous gas, if breathed in sufficient concentrations, can cause unconsciousness or even death. This exhaust system must have been properly installed, in strict compliance with applicable codes and standards. Following installation, you must do nothing that might render the system unsafe or in non-compliance with such codes and standards. The generator compartment must be completely vapor sealed from vehicle interior. There must be no possibility of exhaust fumes entering the vehicle interior. Never operate this equipment with a leaking or defective exhaust system.
- Never use the generator or any of its parts as a step. Stepping on the unit can stress and break parts and may result in dangerous operating conditions from leaking exhaust gases, fuel leakage, oil leakage, coolant leakage, etc.
- Do not smoke around the generator. Wipe up any fuel, oil and coolant spills immediately. Never leave oily or fuel soaked rags in the generator compartment or on the generator itself. Keep the area around the generator clean and free of debris.
- Adequate ventilation is required to expel toxic fumes and gasoline vapors from the generator compartment. Do not alter the installation of this equipment in any manner that might obstruct air and ventilation openings. Such openings must be kept clear and unobstructed.
- Keep hands, feet, clothing, etc., away from drive belts, fans and other moving parts of this equipment. Never remove any drive belt or fan guards while the unit is operating.
- Inspect the generator periodically. Repair or replace all damaged or defective parts immediately.
- Before performing any maintenance on the generator set, disconnect its battery cables to prevent accidental start up. Disconnect the cable from the battery post indicated by a NEGATIVE, NEG or (-) first. Reconnect that cable last.

IDENTIFICATION RECORD

Please record the following information, from the generator DATA PLATE or information decal:

1. Model Number _____
2. Serial Number _____
3. kW Rating _____
4. Rated Voltage _____
5. Phase _____
6. Hertz _____

MODEL	09557-
SERIES	NP-30G
SERIAL	
VOLTS	
AMPS	
WATTS	
PHASE	1
HERTZ	60
R.P.M.	VARIABLE
CLASS F INSULATION AT 40°C CONTINUOUS DUTY FOR SERVICE LOCATIONS CALL 800-333-1322	
GENERAC CORP WAUKESHA, WIS MADE IN U.S.A.	

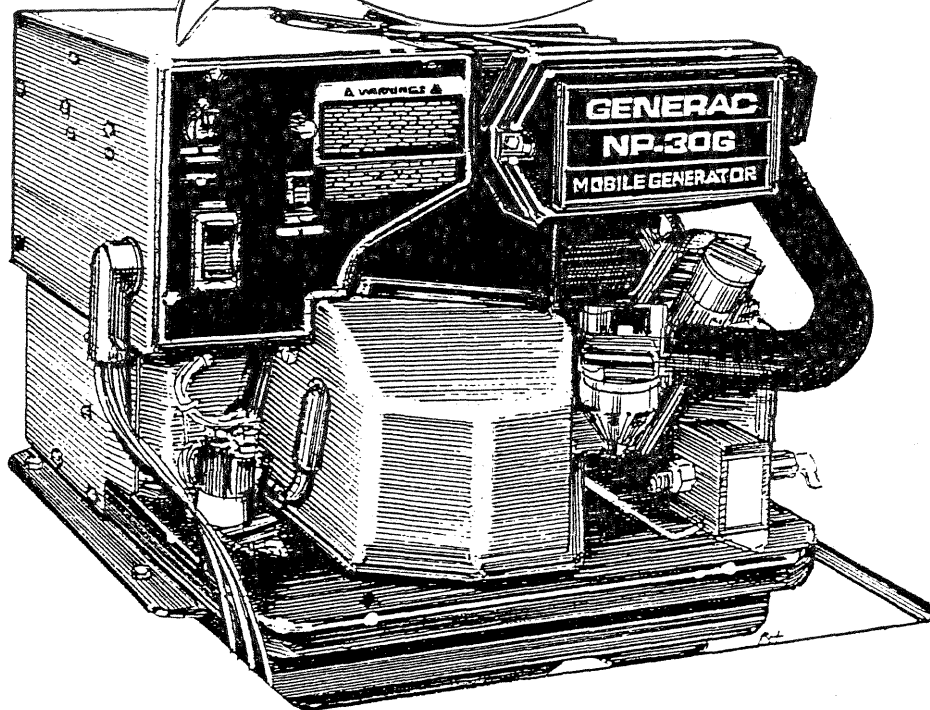


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READ THIS MANUAL THOROUGHLY

If you don't understand any portion of this manual, contact Generac for a demonstration of actual starting, operating and servicing procedures.

Throughout this publication and on tags and decals affixed to the generator, DANGER and CAUTION blocks are used to alert you to special instructions about a particular operation that may be hazardous if performed incorrectly or carelessly. Observe them carefully.

These safety warnings cannot eliminate the hazards that they indicate. Strict compliance with the special instructions while performing the service plus "common sense" are major measures to prevent accidents.

The following definitions apply to DANGER, CAUTION and NOTE blocks found throughout the manual.



DANGER: AFTER THIS HEADING YOU CAN READ HANDLING, INSTALLING, OPERATING OR SERVICING INSTRUCTIONS THAT, IF NOT STRICTLY COMPLIED WITH, MAY RESULT IN PERSONAL INJURY.

CAUTION: After this heading you can read instructions for handling, installing, operating or servicing the generator that, if not strictly complied with, may result in damage to equipment and/or property.

NOTE: After this heading you can read explanatory statements that require special emphasis.

These symbols indicate the following:



Points out important safety information and, if not followed, could endanger personal safety and/or property of yourself and others.



Potential explosion hazard



Potential fire hazard



Potential electrical shock hazard

The operator (driver) is responsible for proper and safe use of the vehicle, equipment on the vehicle, and the safety of all vehicle occupants. We strongly recommend that the operator read this Owner's Manual and thoroughly understand all instructions before using this equipment. We also strongly recommend instructing other occupants in the vehicle to properly start and operate the generator. This prepares them if they need to operate the equipment in an emergency.

OPERATION AND MAINTENANCE

It is the operator's responsibility to perform all safety checks; to make sure that all maintenance for safe operation is performed promptly; and to have the equipment checked by an Authorized Dealer periodically. Normal maintenance service and replacement of parts are the responsibility of the Owner/Operator and, as such, are not considered defects in materials or workmanship within the terms of the warranty. Individual operating habits and usage contribute to the need for maintenance service.

Proper maintenance and care of your industrial mobile generator assures a minimum number of problems and keeps your operating expenses at a minimum. See your authorized Dealer/Distributor for service aids and accessories.

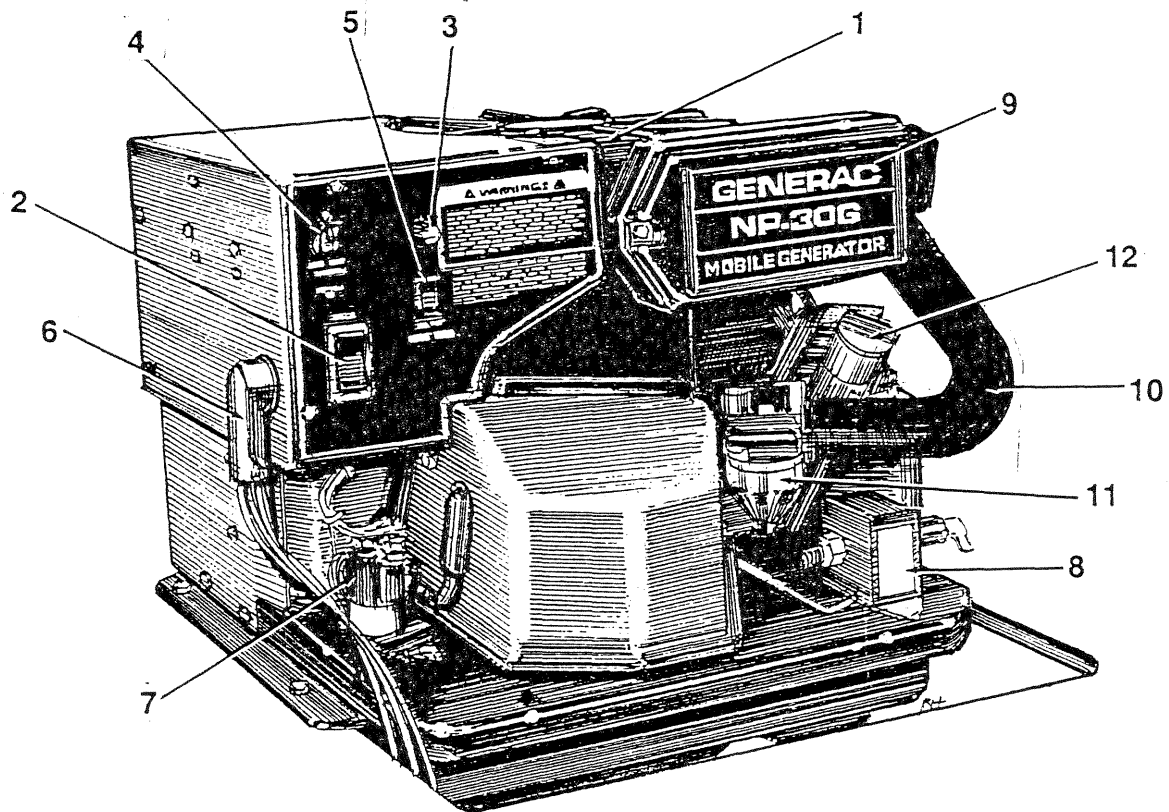
HOW TO OBTAIN SERVICE

When your industrial mobile generator set requires servicing or repairs, simply contact an Authorized Service Station for assistance. Service technicians are factory-trained and are capable of handling all of your service needs.

When contacting an Authorized Service Facility or the factory about parts and service, always supply the complete model number and serial number of your unit as given on its data plate.

The warranty on your generator is included in this Owner's Manual, as well as listings for repair parts.

GENERATOR FEATURES



REFERENCE NUMBER IDENTIFICATION

- | | |
|--------------------------------|----------------------------------|
| 1. Generator Air Intake Screen | 7. 12 Volts Battery Connection |
| 2. Engine Start/Stop Switch | 8. Fuel Pump |
| 3. 15 amp Fuse | 9. Air Cleaner |
| 4. 30 amp Circuit Breaker | 10. Air Intake Tube |
| 5. Fuel Pump Primer | 11. Carburetor |
| 6. Generator AC Output Leads | 12. Oil Dipstick and Filler Tube |

GENERATOR FAMILIARIZATION

GENERATOR APPLICABILITY

NP-30G generators have been designed and manufactured for supplying electrical power for recreational vehicles. You should not modify the generator or use it for any application other than for what it was designed. If there are questions pertaining to its application, write or call the factory. Do not use the unit until you have been advised by competent authority.

⚠ DANGER: FOR FIRE SAFETY, THE GENERATOR MUST HAVE BEEN PROPERLY INSTALLED IN COMPLIANCE WITH (1) ANSI 119.2-1975/NFPA 501C-1974 "STANDARD FOR RECREATIONAL VEHICLES", PART III, "INSTALLATION OF ELECTRICAL SYSTEMS." THE GENERATOR ALSO MUST HAVE BEEN INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S DETAILED INSTALLATION INSTRUCTIONS. AFTER INSTALLATION, DO NOTHING THAT MIGHT RENDER THE UNIT IN NON-COMPLIANCE WITH SUCH CODES, STANDARDS AND INSTRUCTIONS.

You can use this generator to supply electrical power for operating 115 volts, single phase, 60 Hz electrical loads. These loads can require up to 3250 watts (3.25 kW) of power, but cannot exceed 28.3 AC amperes at 115 volts.

CAUTION: Do not overload the generator. Some installations may require that electrical loads be alternated to avoid overloading. Applying excessively high electrical loads may damage the generator and may shorten its life. Add up the rated watts of all electrical lighting, appliance, tool and motor loads the generator will power at one time. This total should not be greater than the wattage capacity of the generator. If an electrical device nameplate gives only volts and amps, multiply volts times amps to obtain watts (volts x amps = watts). Some electric motors require more watts of power (or amps of current) for starting than for continuous operation.

INSTALLATION

This Owner's Manual has been prepared under the assumption that a competent, qualified technician installed the generator into a recreational vehicle. We also assume the installer complied with all applicable codes, standards and regulations pertaining to installation.

An INSTALLATION MANUAL was shipped with the generator. That Manual contains manufacturer's instructions and recommendations for installing the unit into a recreational vehicle. After installation, installers should forward the Installation Manual to Owners/Operators for their information.

Owners/Operators have the responsibility to make sure that nothing is done that might render the installation unsafe or in non-compliance with applicable codes, standards and instructions.

SAFETY

Before using the generator set, carefully read GENERAL SAFETY RULES inside the cover. Comply with these RULES to prevent accidents and damage to equipment and/or property. Generac suggests copying and posting the GENERAL SAFETY RULES in potential operators of this equipment.

GENERATOR AC CONNECTION SYSTEM

This air-cooled NP-30G generator set powers 115 volts AC loads at 28.3 amps. The diagram below is a simple schematic of the generator connection system (Figure 1).

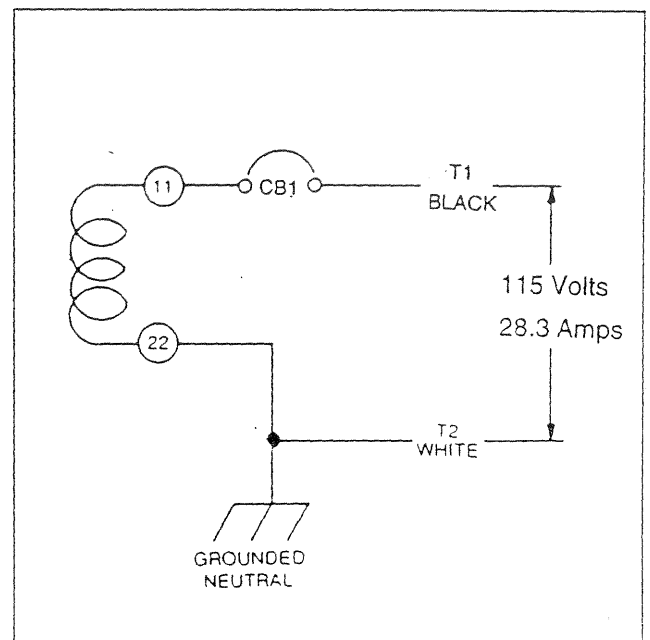


Figure 1 — Connection for 120 Volts Only

OPERATING INSTRUCTIONS

GENERATOR CONTROL PANEL

Mounted on the generator control panel (Figure 2) are the following features:

- **Fuel Pump Primer:** Before starting a cold engine (it has not been started in more than two weeks), you must press this switch to bring fuel from the tank to the fuel pump. This rocker type switch springs back into its original position when you release it.
- **Start/Stop Switch:** To crank and start the engine, hold this switch at its START position. Release the switch when the engine starts. To stop an operating engine, place the switch in its STOP position. The switch center position is the RUN position.
- **15 amp Fuse:** Protects the engine DC control circuit against electrical overload. If the fuse element has melted open due to overloading, the engine cannot be cranked. If you must replace it, use only an identical 15 amp replacement fuse.
- **Line Breakers:** Protects generator's AC output circuit against overload, i.e., prevents unit from exceeding wattage/ampere capacity. NP-30G has one 30 amp breaker.

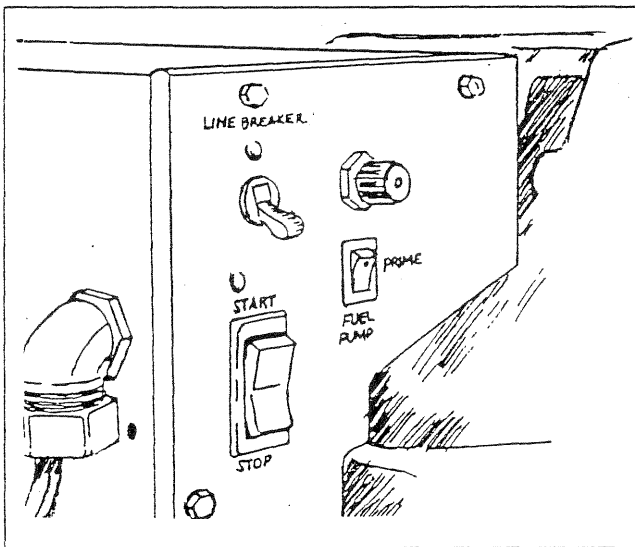


Figure 2 — Typical Control Panel

AUTOMATIC CHOKE

The engine is equipped with an automatic choke that consists of two main components — choke solenoid and prechoke.

Choke Solenoid: During engine cranking (start/stop switch at START), a solid state choke module signals the choke solenoid to actuate and cycle (choke on/choke off) until engine starts. The choke solenoid thus opens and closes the carburetor choke valve only when the engine is cranking. When the engine starts, the choke cycling stops.

Prechoke: The choke system also has a temperature sensitive metal strip that adjusts the choke valve angle according to ambient temperatures (i.e. in cold ambient temperatures the choke valve closes more). Once the engine starts, an element heats the temperature-sensitive strip to a normal operating condition, opening the choke valve. This may take about 3 minutes in cooler weather.

BEFORE STARTING THE ENGINE

IMPORTANT: INSTRUCTIONS AND INFORMATION IN THIS MANUAL ASSUME THE GENERATOR HAS BEEN PROPERLY INSTALLED, CONNECTED, SERVICED, TESTED AND ADJUSTED BY A QUALIFIED INSTALLATION TECHNICIAN OR INSTALLATION CONTRACTOR.

- **Installation:** Generator installation must have been properly completed so it complies with all applicable codes, standards and regulations and with the manufacturer's recommendations.
- **Engine Lubrication:** Have engine crankcase properly serviced with recommended oil before starting. Refer to "Maintenance" and "Specifications" sections for oil servicing procedures and recommendations.

CAUTION: Any attempt to crank or start the engine before you have properly serviced it with the recommended oil will result in an engine failure.

- **Fuel Supply:** The engine must have adequate supply of proper fuel to operate. Before starting, check that sufficient fuel is available.

NOTE: On some installations, the generator engine may "share" the vehicle's gasoline fuel tank with vehicle engine. Some installations may provide separate fuel tanks for generator and vehicle engine.

- **Cooling and Ventilating Air:** Air inlet and outlet openings in the generator compartment must be open and unobstructed for continued proper operation. Without sufficient cooling and ventilating air flow, the engine-generator quickly overheats, which causes it to quickly shutdown. Overheating could also damage the unit or your vehicle.

- **Engine Exhaust Gases:** Before starting the generator engine, you should be sure there is no way for exhaust gases to enter the vehicle interior and endangering people or animals. Close windows, doors and other openings in the vehicle that, if open, might permit exhaust gases to enter the vehicle.

⚠ DANGER: THE GENERATOR ENGINE GIVES OFF DEADLY CARBON MONOXIDE GAS THROUGH ITS EXHAUST SYSTEM. THIS DANGEROUS GAS, IF BREATHED IN SUFFICIENT CONCENTRATIONS, CAN CAUSE UNCONSCIOUSNESS OR EVEN DEATH. DO NOT OPERATE THE GENERATOR IF ITS EXHAUST SYSTEM IS LEAKING OR HAS BEEN DAMAGED. SYMPTOMS OF CARBON MONOXIDE POISONING ARE (A) INABILITY TO THINK COHERENTLY, (B) VOMITING, (C) TWITCHING MUSCLES, (D) THROBbing TEMPLES, (E) DIZZINESS, (F) HEADACHE, (G) WEAKNESS AND SLEEPINESS. IF YOU FEEL ANY OF THESE SYMPTOMS, MOVE INTO FRESH AIR IMMEDIATELY. IF SYMPTOMS PERSIST, GET MEDICAL HELP.

STARTING

IMPORTANT: Read the vehicle manufacturer's instructions. The owner/operator should become familiar with the vehicle in which this generator is installed. Differences exist between vehicles. For example, some vehicles may use a transfer switch to isolate dockside power from the generator, while other vehicles may use an isolating receptacle. Some vehicles may be equipped with a DC converter which allows the generator to power certain DC lighting and other DC loads.

To crank and start the generator engine, proceed as follows:

1. Turn OFF electrical loads, using whatever means provided in your vehicle (such as a main line circuit breaker or transfer switch).

NOTE: If you start the engine with the start/stop switch on the generator control panel, turn OFF loads by setting the panel's main breakers to their "OFF" or "OPEN" positions. Electrical load circuits will be turned ON after the generator has started, stabilized and warmed up.

NOTE: You only need to use the fuel pump primer during the initial startup, after the unit has not been used for an extended period of time (two weeks) or the fuel line has been disconnected. The primer is used to disengage the fuel pump's automatic shut-off feature. Press the fuel pump primer until the shut-off feature goes off.

2. To crank and start the engine, hold the start/stop switch at START. Release the switch when the engine starts.

CAUTION: If the engine does not start after it has been cranking for 15 seconds, release the start/stop switch and try again. Holding the switch for longer than 15 seconds can damage the starter motor.

3. Let the engine run at no-load for a few minutes to stabilize and warm up the engine.
4. Turn ON electrical loads, using whatever means provided (such as a main circuit breaker or transfer switch).

STOPPING THE GENERATOR

1. Turn OFF all electrical loads, using whatever means provided (such as a main circuit breaker or transfer switch).
2. Let the generator run at no-load for a few minutes, to stabilize internal engine-generator temperatures.
3. Place Start/Stop switch in its STOP position.

APPLYING LOADS TO GENERATOR

When applying electrical loads to the generator, observe these guidelines:

- Before applying electrical loads, let the generator stabilize and warm up for a minute or two.
- DO NOT overload the generator.

Letting Engine Stabilize: The generator supplies correct rated frequency and voltage only at the proper governed speed. Some electrical appliances may be extremely sensitive to voltage and frequency. Incorrect frequencies and/or voltages can damage those appliances.

If electrical loads are applied at reduced operating speeds, such loads imposed on the engine when sufficient power is not available may shorten engine life. Never turn ON electrical loads until after the generator engine has started and stabilized ON-speed.



OPERATION IN HIGH GRASS OR BRUSH

Never operate the generator while the vehicle is parked in high grass, weeds, brush or leaves. Such materials can ignite and burn from the heat of the exhaust system. The generator exhaust system becomes extremely hot during operation and remains hot for a long time after it has shut down.

DO NOT OVERLOAD THE GENERATOR

You can read the rated wattage/ampere capacity of your generator on the generator data plate (see "Identification Record" on Page 1).

Applying electrical loads in excess of the unit's rated capacity will cause the engine-generator to automatically shutdown.

To avoid overloading, add up the wattage of all connected electrical lighting, appliance, tool and motor loads. This total should not be greater than the generator's rated wattage capacity.

- Most lighting, appliance, tool and motor loads indicate their required watts on their nameplate or data plate. For light bulbs, simply note the wattage rating of the bulb.

- If a load does not show its rated wattage, multiply that load's rated VOLTS times AMPS to obtain WATTS.
- Induction type motors (such as those that run the vehicle's furnace fan, refrigerator, air conditioner, etc.) need about 2-1/2 times more watts of power for starting than for running (for a few seconds during motor starting). Be sure to allow for this when connecting electrical loads to the generator. First, figure the watts needed to start electric motors in the system. To that figure, add the running wattages of other items that will be operated by the generator.
- Do not apply heavy electrical loads for the first two or three hours of operation.

WATTAGE REFERENCE GUIDE

	RUNNING WATTS		RUNNING WATTS
*Air Conditioner (12,000 Btu)	1700	Lawn Mower	1200
Battery Charger (20 amp)	500	Light Bulb	100
Belt Sander (3").....	1000	Microwave Oven.....	700
Chain Saw.....	1200	*Milk Cooler.....	1100
Circular Saw (6-12").....	800 to 1000	Oil Burner on Furnace	300
Coffee Maker	1000	Oil Fired Space Heater (140,000 Btu)	400
*Compressor (1 HP).....	2000	Oil Fired Space Heater (85,000 Btu)	225
*Compressor (3/4 HP).....	1800	Oil Fired Space Heater (30,000 Btu).....	150
*Compressor (1/2 HP).....	1400	*Paint Sprayer, Airless (1/3 HP)	600
Curling Iron	700	Paint Sprayer, Airless (handheld).....	150
*Deep Freeze	500	Radio.....	50 to 200
Disc Sander (9").....	1200	*Refrigerator.....	600
Edge Trimmer	500	Slow Cooker	200
Electric Nail Gun	1200	*Submersible Pump (1-1/2 HP)	2800
Electric Range (one element)	1500	*Submersible Pump (1 HP)	2000
Electric Skillet.....	1250	*Submersible Pump (1/2 HP)	1500
*Furnace Fan (1/3 HP).....	1200	Sump Pump.....	600
Hair Dryer.....	1200	*Table Saw (10").....	1750 to 2000
Hand Drill (1").....	1100	Television.....	200 to 500
Hand Drill (1/2").....	750 to 1000	Weed Trimmer.....	500
Hand Drill (3/8").....	500		
Hand Drill (1/4").....	250		
Hedge Trimmer	450		
Impact Wrench.....	500		
*Jet Pump	800		

* Allow 2-1/2 times the listed watts for starting these devices.

ENGINE PROTECTIVE DEVICES

This generator has a computer that monitors low oil pressure, oil temperature, engine speed, and low voltage output. This section discusses those protective devices.

AUTOMATIC LOW OIL PRESSURE SHUTDOWN

The engine is equipped with an oil pressure sensor that shuts down the engine automatically when oil pressure is too low. If the engine shuts down by itself and the fuel tank has enough gasoline, check the engine oil level.

Initial Startup: During initial startup, a time delay built into the shutdown control system allows oil pressure to build. The delay allows the engine to run for about 10 seconds before sensing oil pressure.


Sensing low pressure: If the system senses low oil pressure during operation, the engine shuts down. If you do restart the engine after a low oil shutdown and have not corrected the low oil pressure, the engine runs for about 10 seconds as described above then stops.

HIGH TEMPERATURE SHUTDOWN

An oil temperature switch (Figure 3) with normally-open (N.O.) contacts is mounted near the oil filter. If oil temperature were to exceed a preset temperature, the switch contacts close and the engine shuts down.

OVERSPEED

If engine speed is increased manually (or otherwise) beyond the control of the computer control system, the computer disables the load capability of the generator and shuts down the engine.

 **WARNING: DO NOT ADJUST OR CONTROL THE ENGINE SPEED. EQUIPMENT DAMAGE OR PERSONAL INJURY MAY RESULT.**

LOW VOLTAGE

The computer monitors the voltage output of the generator. If voltage sensors indicate that voltage has dropped below a preset level, the engine will automatically shut down. Once the unit has shutdown, the computer is automatically reset when you restart the engine.

NOTE: The computer allows for the low voltage output that occurs during startup. A time delay that allows the engine to start and warm up is programmed into monitoring the system.

CAUTION: Before restarting a generator that has been shutdown, disconnect all loads the generator might power by whatever means provided, such as the recreational vehicle's main circuit breaker.

SPECIFICATIONS

FUEL REQUIREMENTS

The NP-30G generator is furnished with a gasoline fuel system as standard equipment. Specific installations may provide either a separate fuel tank for the generator, or the generator may "share" the vehicle engine's fuel tank.

NOTE: Some installations using a "shared" fuel tank may have a generator fuel pickup tube that is shorter than the vehicle engine's pickup tube. Such an arrangement causes the generator engine to "run out of gas" while adequate fuel for the vehicle remains in the tank.

Use a high quality UNLEADED gasoline with the generator. Leaded REGULAR grade gasoline is an acceptable substitute.

NOTE: Using "Unleaded" gasoline contributes to longer engine valve life by reducing lead and carbon deposits.

CAUTION: Using any gasoline containing alcohol (such as "gasohol") is NOT recommended. If you use any gasoline containing alcohol, it must not contain more than 10% ethanol and it must be removed from the tank during storage. Do NOT use any gasoline containing methanol. If you use gasoline containing alcohol, you must inspect more frequently for fuel leaks and other abnormalities.

ENGINE OIL REQUIREMENTS

The recommended oils include the following:

- During summer months: SAE 30. An acceptable substitute is SAE 10W-30.
- During winter months: SAE 5W30. DO NOT USE SAE 10W-40.

Crankcase oil capacity if about 850ml or about 29 fluid ounces. Use no special additives. See "Maintenance" section for oil level check and fill procedures.

GENERATOR SPECIFICATIONS

Rated Maximum Continuous	
AC Power Output	3250 watts (3.25 kW)
Rated Voltage.....	115 volts AC
Rated Maximum Continuous	
Current at 115 volts	28.3 AC amperes
Phase	Single Phase
Rated AC Frequency.....	60 Hz.
Driven Speed of Rotor.....	2300 to 3900 RPM, dependent on size of the load

ENGINE SPECIFICATIONS

Type of Engine	GN-190
Cooling Method	Air-cooled
Displacement.....	190cc
Type of Governor	Electronic
Air Cleaner	Paper element with foam pre-cleaner
Starter.....	12 volts DC electric
Ignition System.....	Solid state
Recommended Spark Plugs	
Champion	RC12YC
Spark Plug Gap	0.030 inch (0.8mm)

This section includes information about simple maintenance which includes the following tasks:

- Checking engine oil level.
- Changing engine oil.
- Changing oil filter.
- Changing the air cleaner.
- Cleaning the air intake screen.
- Cleaning spark plugs.
- Change fuel filter.

CHECKING ENGINE OIL LEVEL

Check engine crankcase oil level at least every eight hours of operation, or before you use it (Figure 3).

- Be sure the generator is as level as possible.
- Remove oil dipstick and wipe dry with clean, lint-free cloth.
- Install and tighten oil dipstick, then remove again.
- Oil should be at dipstick FULL mark. If necessary, add the recommended oil to the FULL mark only. **DO NOT OVERFILL ABOVE "FULL" MARK.**
- Install and tighten oil dipstick cap before operating the engine.

NOTE: See "Engine Oil Requirements" on Page 11 for recommended oils.

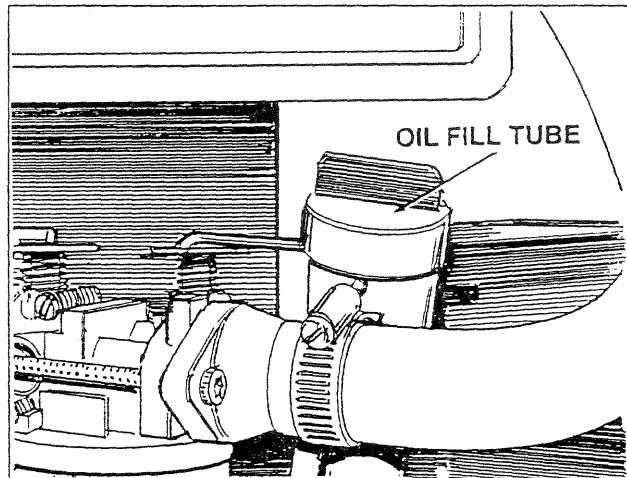


Figure 3 — Oil Dipstick and Fill Tube

CHANGE ENGINE OIL

Change engine oil after the first 8 hours of operation. Thereafter, change oil every 50 operating hours. Change oil more frequently if operating consistently under heavy load or at high ambient temperatures.

- Warm up engine for at least five minutes, then shut down.
- With engine still warm from running, clean area around oil drain plug and remove oil drain plug (Figure 4). Drain oil completely into a suitable container.

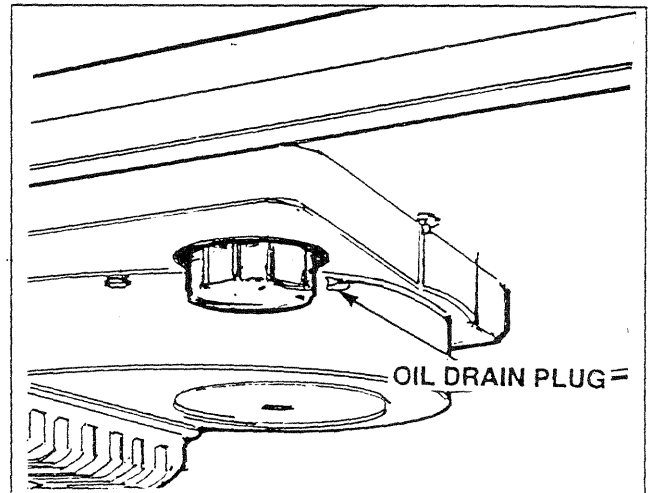


Figure 4 — Location of Oil Drain Plug

- When oil has drained, install and tighten drain plug.
- Remove oil dipstick and fill crankcase with the recommended oil (See Page 10). The engine crankcase can hold about 1 quart (946ml). **DO NOT OVERFILL ABOVE "FULL" MARK.**
- Install and tighten dipstick cap before operating engine.

CHANGE OIL FILTER

Replace the engine oil filter after the first 8 hours of operation, every 50 operating hours thereafter.

- Turn oil filter counterclockwise to remove (Figure 5).
- Coat gasket of new filter with engine oil.
- Turn new filter clockwise until its gasket contacts tightly with the filter adapter. Then tighten with an additional 3/4 to one turn by hand.
- Run engine and check for leaks.

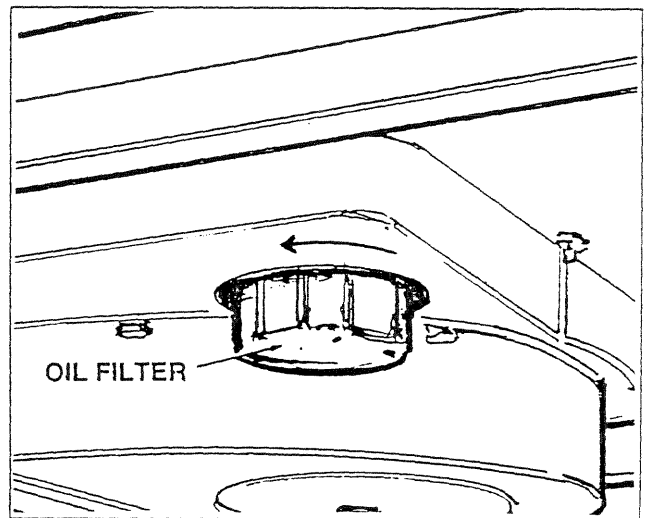


Figure 5 — Engine Oil Filter

ENGINE AIR CLEANER

Paper Filter: Once every 25 operating hours or once each year (whichever comes first), clean or replace the paper filter. Follow these steps:

- Remove air cleaner cover, then remove paper filter.
- Clean air filter by gently tapping it on a solid surface. If the filter is too dirty, replace it with a new one. Dispose of the old filter properly.
- Clean air cleaner cover then insert new paper filter into cover to hold pre-filter in place and assemble all of them to the base of the air cleaner.

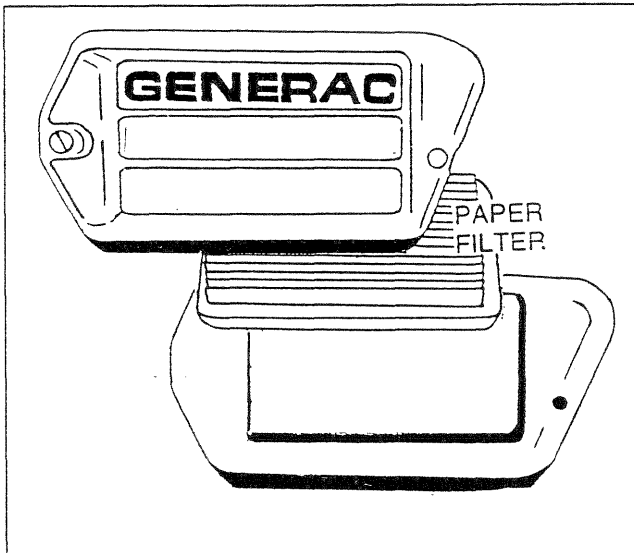


Figure 6 — Engine Air Cleaner Assembly

SPARK ARRESTOR MUFFLER

The spark arrestor must be maintained in effective working order by the vehicle owner/operator.

In the State of California, the preceding is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.

Inspect and clean the spark arrestor every 100 hours of operation.

To remove the spark arrestor, remove the exhaust tubing connected to the muffler and then remove the screw that attaches the arrestor to the muffler. Replace the cone-shaped spark arrestor if torn, perforated or otherwise damaged.

ENGINE SPARK PLUGS

Clean engine spark plug and reset gap to 0.030 inch (0.76mm) every 100 hours of operation (Figure 7). Clean by scraping or wire brushing and washing with commercial solvent. DO NOT BLAST CLEAN SPARK PLUG.

CAUTION: Sparking can occur if wire terminal does not fit firmly over spark plug terminal end. If necessary, reform wire terminal to obtain a tight fit.

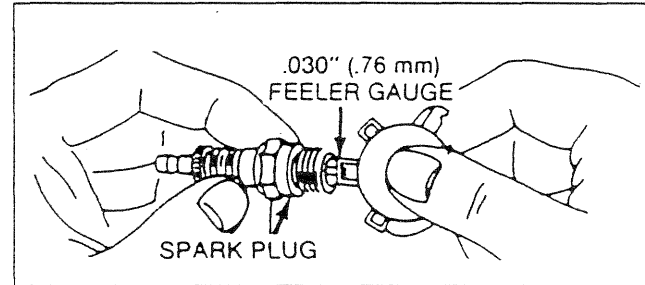


Figure 7 — Setting Gap on Spark Plug

FUEL FILTER

Remove and replace fuel filter (Figure 8) every 100 hours of operation or once each year, whichever comes first.

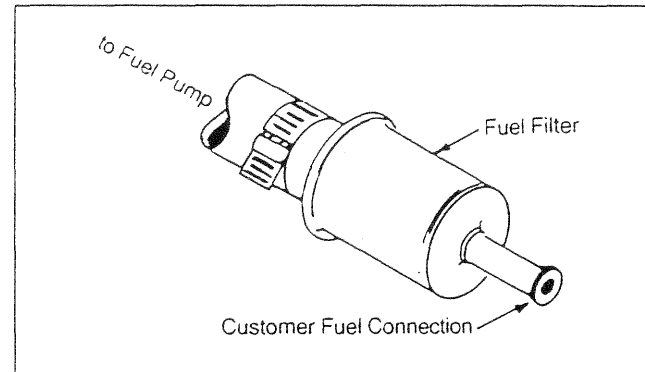


Figure 8 — Fuel Filter

MISCELLANEOUS MAINTENANCE

CLEANING THE GENERATOR

Keep your generator set as clean and dry as possible. Dirt and moisture that are permitted to accumulate on electrical windings have an adverse affect on the insulation resistance of those windings.

Moisture that is allowed to remain in contact with windings will be retained in voids and cracks of the windings. Dirt makes the problem worse, since it tends to hold the moisture into contact with the windings. Salt, as from sea air, worsens the problem since it tends to absorb moisture from the air. The combination of salt and moisture makes a good electrical conductor.

CAUTION! Do NOT use a forceful spray of water to clean the generator. Water will enter the generator interior and cause problems, and may also contaminate the generator fuel system.

BATTERY

All lead-acid storage batteries will discharge when not in use. Inspect the generator battery as follows:

Once Weekly: Inspect battery posts and cables for tightness, corrosion. Clean and/or tighten as necessary.

Also check battery fluid level, and, if necessary, fill with DISTILLED WATER ONLY. DO NOT USE TAP WATER IN BATTERY.

Every Six Months: Have the battery state of charge and condition checked by an automotive service facility. This should be done with an automotive type battery hydrometer.

⚠ DANGER: STORAGE BATTERIES GIVE OFF EXPLOSIVE HYDROGEN GAS. THIS GAS CAN FORM AN EXPLOSIVE MIXTURE AROUND THE BATTERY FOR SEVERAL HOURS AFTER CHARGING. THE SLIGHTEST SPARK CAN IGNITE THE GAS AND CAUSE AN EXPLOSION. SUCH AN EXPLOSION CAN SHATTER THE BATTERY AND CAUSE BLINDNESS OR OTHER INJURY. ANY AREA THAT HOUSES A STORAGE BATTERY MUST BE PROPERLY VENTILATED. DO NOT ALLOW SMOKING, OPEN FLAME, SPARKS OR ANY SPARK PRODUCING TOOLS OR EQUIPMENT NEAR THE BATTERY.

⚠ DANGER: BATTERY ELECTROLYTE FLUID IS AN EXTREMELY CAUSTIC SULFURIC ACID SOLUTION THAT CAN CAUSE SEVERE BURNS. DO NOT PERMIT FLUID TO CONTACT EYES, SKIN, CLOTHING, PAINTED SURFACES, ETC. WEAR PROTECTIVE GOGGLES, PROTECTIVE CLOTHING AND GLOVES WHEN HANDLING A BATTERY. IF YOU SPILL THE FLUID, FLUSH THE AFFECTED AREA IMMEDIATELY WITH CLEAR WATER.

⚠ DANGER: DO NOT USE ANY JUMPER CABLES OR BOOSTER BATTERY TO CRANK AND START THE GENERATOR ENGINE. IF ANY BATTERY HAS DISCHARGED, REMOVE IT FROM THE VEHICLE FOR RECHARGING.

SERVICE AND ADJUSTMENTS

Engine Speed:

Engine speed is completely computer-controlled. There is no adjustment for speed on the unit. The computer adjusts the engine speed using a electronic governor throttle control. The computer monitors the demand for power adjusts the engine speed accordingly. This allows the engine to produce only the power required, resulting in fuel economy as well as lowering the overall noise emitted.

NOTE: The computer will disable the electrical load capabilities of the generator and enter a fault condition if you accelerate the throttle manually or any other way.

THROTTLE LINKAGE ADJUSTMENT

If needed, you can adjust the length of the linkage rod between the electronic governor lever arm and the carburetor throttle lever arm. This adjustment helps to establish the proper travel relationship between the two lever arms. If this adjustment is not properly set, the computer will NOT have control of the full range of engine speed. If the rod adjustment is set too short, the computer will not have access to wide open throttle or "full power" conditions. If the rod adjustment is set too long, the computer will not have access to closed throttle or "no power" conditions.

Use the following procedure to assure the linkage rod is properly adjusted (see Figure 9):

1. Start the generator, then shut it down right away. As the engine coasts to a stop, observe from above the engine as the throttle lever on the carburetor rotates counterclockwise.
2. There should be a gap of 0.003 inch (0.08-0.5mm) between stop tab on throttle lever arm and the stop block on the carburetor die casting (Figure 9).

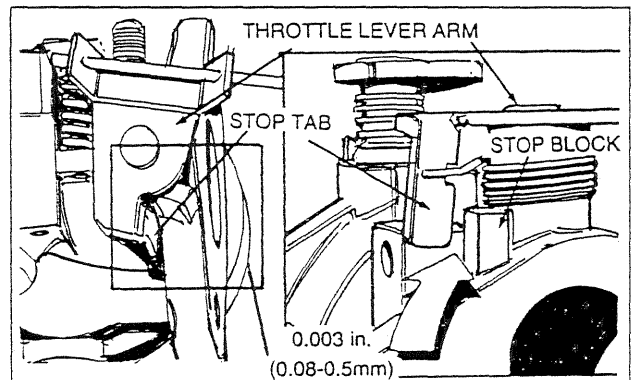


Figure 9 — Gap Between Stop Tab and Stop Block

CAUTION: Do not overbend the spring clip or the clip will lose its clamping force.

3. With pliers, lightly compress the spring clip on the carburetor lever arm. This allows the linkage rod to slide freely through the clip. While the clip is compressed, rotate the throttle lever in the appropriate direction to increase or decrease the gap until there is 0.003 inch (0.08-0.5mm) clearance (Figure 10).

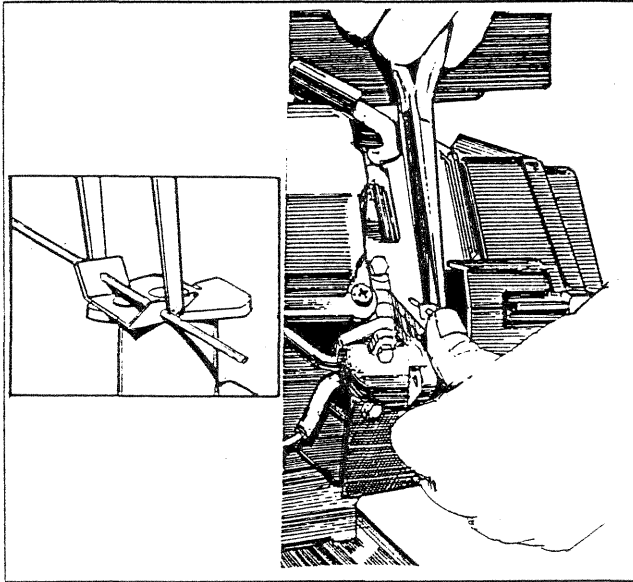


Figure 10 — Adjusting Throttle Linkage

4. Release spring clip so you can secure adjustment. This allows the carburetor and the electronic governor to be synchronized.

ADJUSTING THE CARBURETOR

There is one air/fuel mixture adjustment jet on the carburetor — the idle jet. The idle jet controls the air/fuel mixture from light to no load conditions.

It may be necessary to readjust the idle jet if the engine is operated at a significantly different altitude than the factory (900 feet above sea level). The air fuel mixture needs to be adjusted leaner at high altitudes. If the unit is moved back to a low altitude, the jets must be returned to a richer setting.

CAUTION: Do not adjust the air fuel mixture excessively lean. If the air/fuel mixture is operated excessively lean, the engine may be damaged. Follow the adjustment procedure for both jets to assure proper fuel mixture.

ADJUSTING THE IDLE JET

- Carefully turn the idle jet screw (Figure 11) inward (clockwise) until it just closes.

CAUTION: The idle jet screw can be damaged if you turn it too far.

- Turn the idle jet screw outward (counterclockwise) 1-1/8 turns.

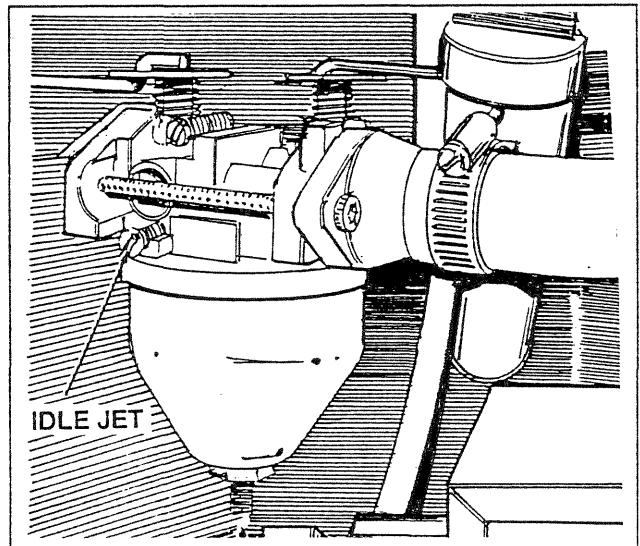


Figure 11 — Location of Idle Jet

ADJUSTING VALVE CLEARANCE

After the first 50 hours of operation, you should adjust the valve clearance in the GN-190 engine.

When adjusting valve clearance, the engine should be at room temperature and the piston should be at Top Dead Center (TDC) of its compression stroke (both valves closed). Correct clearance is 0.001-0.003 inch (0.03-0.07mm). Adjust valve clearance as follows:

1. Loosen the rocker arm jam nut. Use an allen wrench to turn the pivot ball stud while checking clearance between the rocker arm and the valve stem with a feeler gauge (Figure 12).

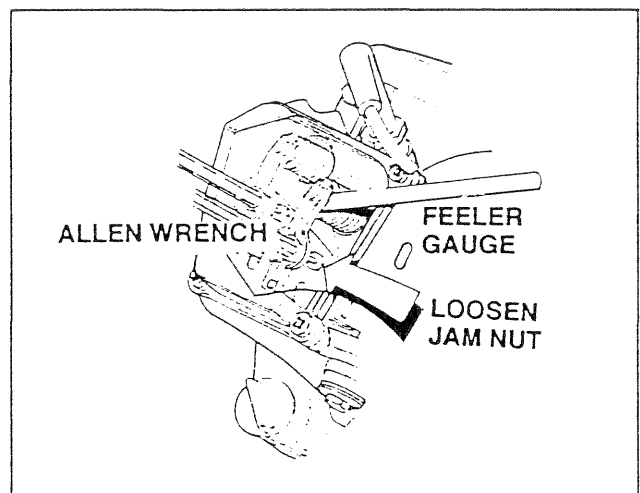


Figure 12 — Adjusting Valve Clearance

2. When valve clearance is correct, hold the pivot ball stud with the allen wrench and tighten the rocker arm jam nut with a crow's foot. Tighten the jam nut to 65-85 inch-pounds torque. After tightening the jam nut, recheck valve clearance to make sure it didn't change (Figure 13 on Page 15).

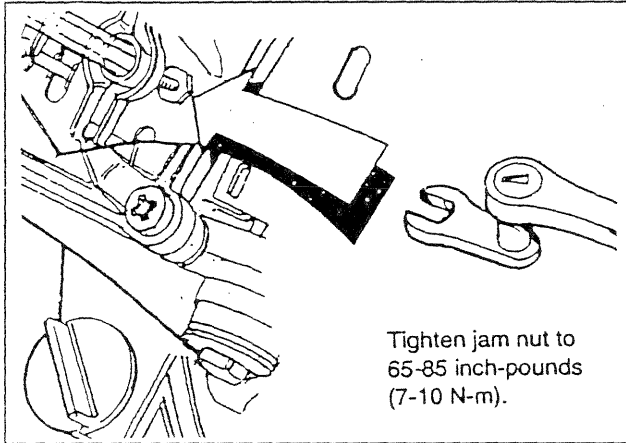


Figure 13 — Tightening Jam Nut

MAJOR SERVICE MANUAL

To obtain a service manual for your generator, order it from your dealer/distributor or contact the factory. Be sure to identify your unit's MODEL NUMBER and SERIES.

EXERCISING THE GENERATOR

Generac recommends that you start and operate the generator at least once every seven days. Let the unit run for at least 30 minutes to "exercise" the engine.

OUT OF SERVICE PROTECTION

If you cannot exercise the generator every seven days and it is to be out of service longer than 30 days, prepare the generator for storage as follows:

- Start the engine and let it warm up.

- While the engine is still warm from running, drain the oil completely. Refill crankcase with recommended oil. See "Specifications."
- Attach a tag to the engine indicating the viscosity and classification of the oil in the crankcase.
- Remove spark plug and add about 1/2 ounce (15ml) of clean, fresh engine oil into spark plug threaded openings. Crank engine several times to distribute oil, then install and tighten spark plug.
- Remove the battery and store in a cool, dry room on a wooden board. Never store the battery on any concrete or wooden floor.
- Clean and wipe the entire generator.

RETURN UNIT TO SERVICE AFTER STORAGE

To return the unit to service after storage, proceed as follows:

- Check tag on engine for oil viscosity and classification. Verify that the correct recommended oil is used in engine. If necessary, drain and refill with proper oil.
- Check battery. Fill all cells to the proper level with distilled water. **DO NOT USE TAP WATER IN THE BATTERY.** Recharge battery to 100% state of charge, or, if defective, replace the battery.
- Turn OFF all electrical loads, add gasoline, then start the engine.
- Let engine warm up.
- Apply electrical loads to at least 50% of the unit's rated wattage capacity.
- When engine is thoroughly warmed up, shut it down.

THE GENERATOR IS NOW READY FOR SERVICE.

SERVICE DEALER LOCATION

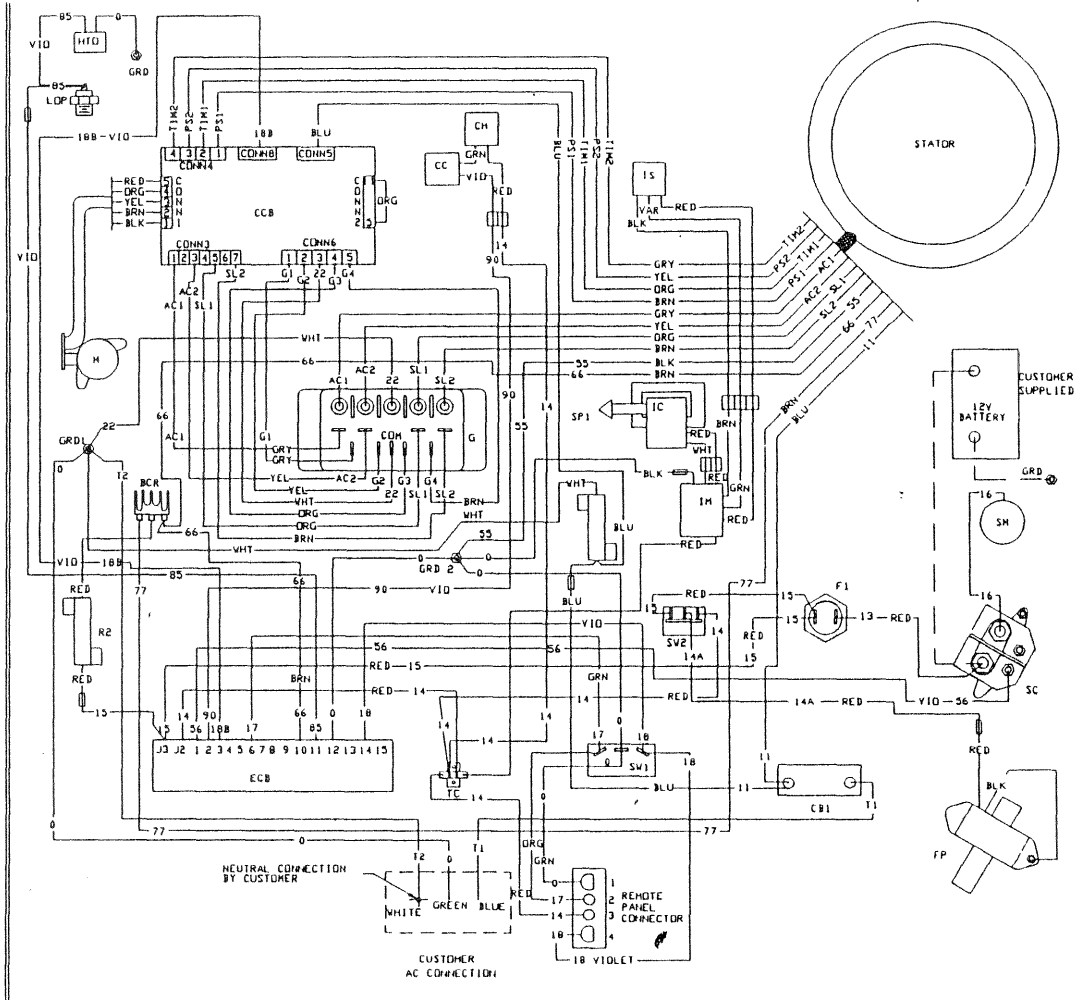
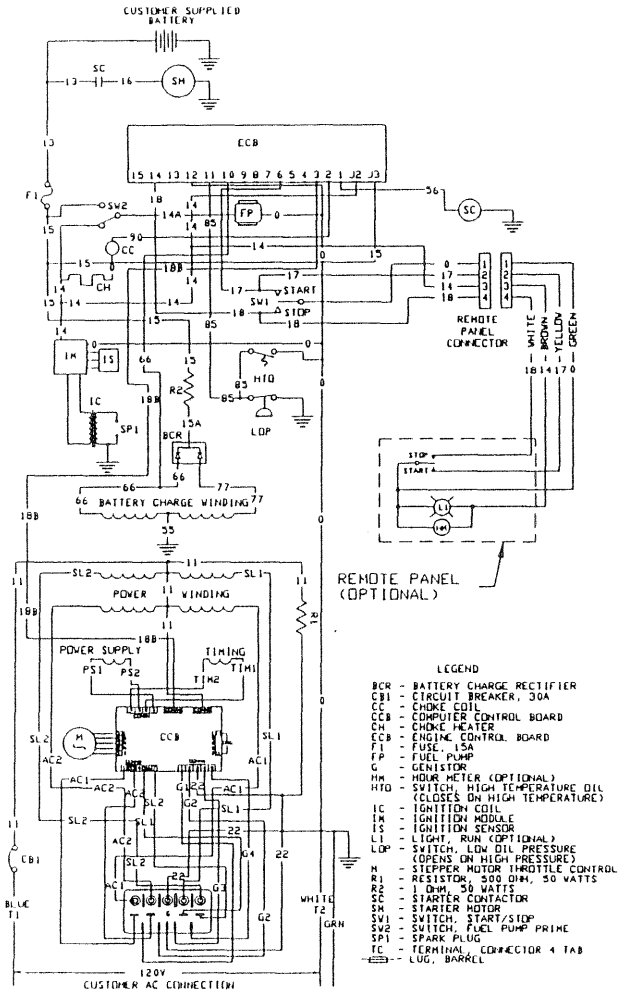
TO LOCATE THE NEAREST GENERAC SERVICING DEALER, PLEASE CALL OUR 800 NUMBER.

ONLY DEALER LOCATION INFORMATION CAN BE OBTAINED AT THIS NUMBER.

1-800-333-1322

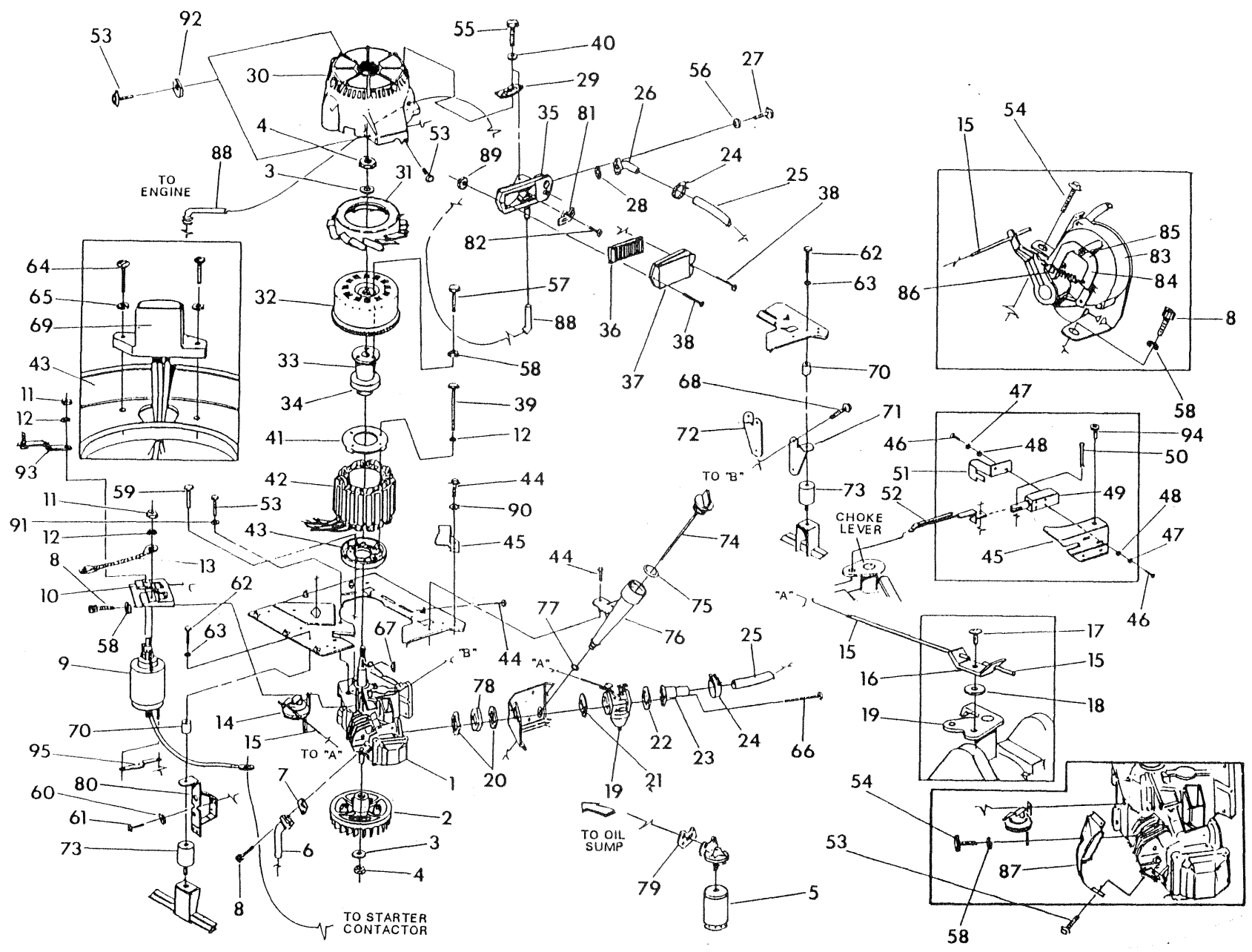
TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDY
Engine won't crank.	<ol style="list-style-type: none"> 1. 15 amp fuse is blown. 2. Loose corroded or defective battery cables. 3. Defective engine Start/Stop switch. 4. Defective starter contactor. 5. Defective starter motor. 	<ol style="list-style-type: none"> 1. Replace 15 amp fuse 2. Tighten, clean or replace as necessary. 3. Replace Start/Stop switch. 4. Replace contactor. 5. Replace starter motor.
Engine cranks but won't start	<ol style="list-style-type: none"> 1. Out of gas 2. Fuel pump is defective. 3. Open Wire #14 from Eng. Control Bd. 4. Clogged fuel filter or fuel line. 5. Engine is flooded. 6. Spark plugs defective. 	<ol style="list-style-type: none"> 1. Replenish fuel tank. 2. Replace fuel pump. 3. Reconnect wire. 4. Replace if clogged. 5. Wait 5-10 min. before trying. 6. Clean, regap or replace plugs.
Engine starts hard, runs rough.	<ol style="list-style-type: none"> 1. Air cleaner plugged or damaged 2. Plugged fuel filter or fuel line. 3. Defective spark plugs. 	<ol style="list-style-type: none"> 1. Clean or replace as needed. 2. Replace filter; unplug fuel line. 3. Clean, regap or replace plugs.
Engine starts, shuts down when Start/Stop switch is released.	<ol style="list-style-type: none"> 1. Engine oil level is low. 2. Engine is overheated. 3. Defective Low Oil Pressure System 4. Defective Engine Control Board 5. Defective Computer Control board. 	<ol style="list-style-type: none"> 1. Check oil; add as needed. 2. Check cooling system leaks. 3. Have serviced/replaced. 4. Have board serviced/replaced 5. Have board serviced/replaced.
Start/Stop Switch at STOP, engine continues to run	<ol style="list-style-type: none"> 1. Defective Start/Stop switch. 2. Open/disconnected wire #18 between Start/Stop switch and Engine Control 3. Open/disconnected wire #0 between Start/Stop switch & Engine Control Bd. 4. Defective Engine Control Board 	<ol style="list-style-type: none"> 1. Replace switch. 2. Reconnect or close wire. 3. Reconnect or close wire. 4. Replace board.
No AC output from generator.	<ol style="list-style-type: none"> 1. Check 30-amp circuit breaker. 2. Check vehicle circuit breaker & fuses 3. Transfer sw. set to NORMAL position 4. Generator internal failure. 	<ol style="list-style-type: none"> 1. Reset to ON or CLOSED. 2. Reset and replace, if necessary. 3. Set to GENERATOR position. 4. Take generator to an Authorized Generac facility.



EXPLODED VIEW — GENERATOR & ENGINE ACCESSORIES

Drawing No. 90332



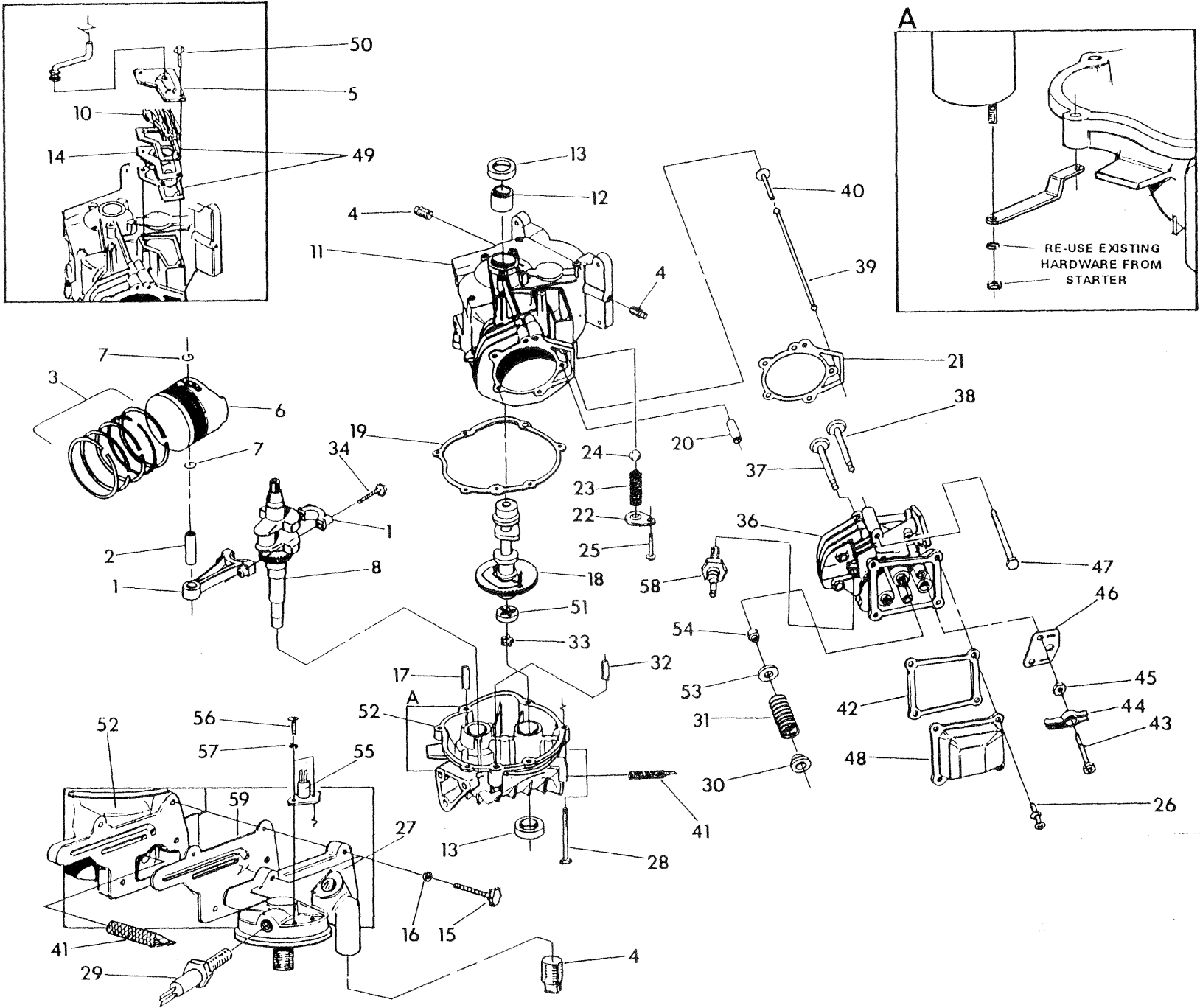
REPAIR PARTS — GENERATOR

Drawing No. 90332

ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	86923	1	Long Block Engine	49	90136	1	Choke Solenoid
2	85194	1	Fan Flywheel	50	36544	1	3/32" x 1/2" long Cotter Pin
3	83312	2	Conical Washer	51	89473	1	Bi-metal and Heater Assembly
4	81810	2	M16-1.5 Hex Nut	52	86736	1	Choke Control Linkage
5	70185	1	Oil Filter	53	45756	5	M6-1.0 x 10mm Taptite Screw
6	86730	1	Exhaust Outlet Tube	54	83512	1	M8-1.25 x 15mm Taptite Screw
7	80314	1	Exhaust Gasket	55	45770	4	M5-0.8 x 10mm Capscrew
8	40976	4	M8-1.25 x 20mm Capscrew	56	51713	2	M5 Flat Washer
9	87266	1	12*Volts Starter	57	42907	3	M8-1.25 x 16mm Capscrew
10	87278	1	Starter Bracket	58	22129	3	M8 Lock Washer
11	22187	2	1/4-20 Nut	59	74906	4	M6-1.0 x 20mm Capscrew
12	22097	6	1/4" (M6) Lock Washer	60	22129	3	M8 Lock Washer
13	90141	1	Ground Strap	61	39253	3	M8-1.25 x 20mm Capscrew
14	92059	1	Stepper Motor Speed Control	62	22511	3	3/8"-16 x 1-1/4" Capscrew
15	86706	1	Throttle Control Rod	63	22237	3	3/8" Lock Washer
16	89477	1	Adjustment Clip	64	55822	2	M4-0.7 x 8mm Screw
17	89478	1	Retaining Snap	65	22264	2	M4 Lock Washer
18	90192	1	Carburetor Washer	66	89050	2	M6-1.0 x 90mm Screw
19	92194	1	Carburetor Assembly	67	82774	1	4 x 19mm Woodruff Key
20	82776	2	Carburetor Spacer Head Gskt.	68	59637	4	3/8"-16 x 3/4" Screw
21	78631	1	Carburetor/Skirt Gasket	69	86697	1	Assembly Ignition Sensor
22	91846	1	Carburetor/Inlet Adaptor Gskt.	70	86704	3	Engine Mount Spacer
23	86709	1	Carburetor Inlet Adaptor	71	86701	1	Engine Mount Front Bracket
24	48031H	2	1/25" band Hose Clamp	72	86702	1	Engine Mount Rear Bracket
25	92220	1	Carburetor Inlet Hose	73	38353	3	Rubber Mounts
26	87993	1	Air Cleaner Outlet Elbow	74	89263	1	Oil Fill Cap Assembly
27	49815	2	M5-0.8 x 16mm Capscrew	75	90071	1	1.062" I.D. O-Ring
28	90536	1	Air Cleaner Outlet Gasket	76	86689	1	Oil Fill tube
29	90021	1	Air Cleaner Support Bracket	77	90072	1	0.562" I.D. O-Ring
30	86670	1	Upper Housing Fan	78	86708	1	Carburetor Spacer
31	87996	1	Generator Fan	79	87478	1	Oil Filter Adaptor Gasket
32	85973	1	Magnet Housing Assembly	80	86703	1	Starter Side Engine mnt. Brkt.
33	86693	1	Magnet Housing Hub	81	90613	1	Breather Canal Cover
34	86855	1	Hall Ignition Cage	82	59635	1	#8 x 3/8" Plastite Screw
35	86673	1	Air Box Base	83	82713	1	Stepper Motor Speed Control
36	78601	1	Air Filter Element	84	89551	1	Lever Restraint Bracket
37	86674	1	Air Box Cover	85	59636	1	#4 x 3/8" Plastite Screw
38	78609	2	Air Cleaner Cover Bolt	86	88905	1	Extension Spring
39	83601	4	M6-1.0 x 80mm Capscrew	87	90402	1	Engine Top Wrapper
40	49226	4	M5 Lock Washer	88	89062	1	Breather Hose
41	80934	1	Stator Retaining Ring	89	51716	2	M5 Hex Nut
42	86822	1	Assembly Stator	90	23762	2	#10 Ext. Shakeproof Washer
43	86692	1	Stator Adaptor	91	22447	3	1/4" Int. Shakeproof Washer
44	74908	7	M5-0.8 x 10mm Taptite Screw	92	91654	3	Blower Housing Washer
45	86735	1	Choke Mount Cover	93	92033	1	Divider Plate Bracket
46	47488	4	4-40 x .188" Screw	94	23484P	1	Snap Bushing
47	22159	4	No. 4 Lock Washer	95	92032	1	Lower Bracket - starter
48	31879	4	No. 4 Flat Washer				

Drawing No. 88929

EXPLODED VIEW — ENGINE (long block)



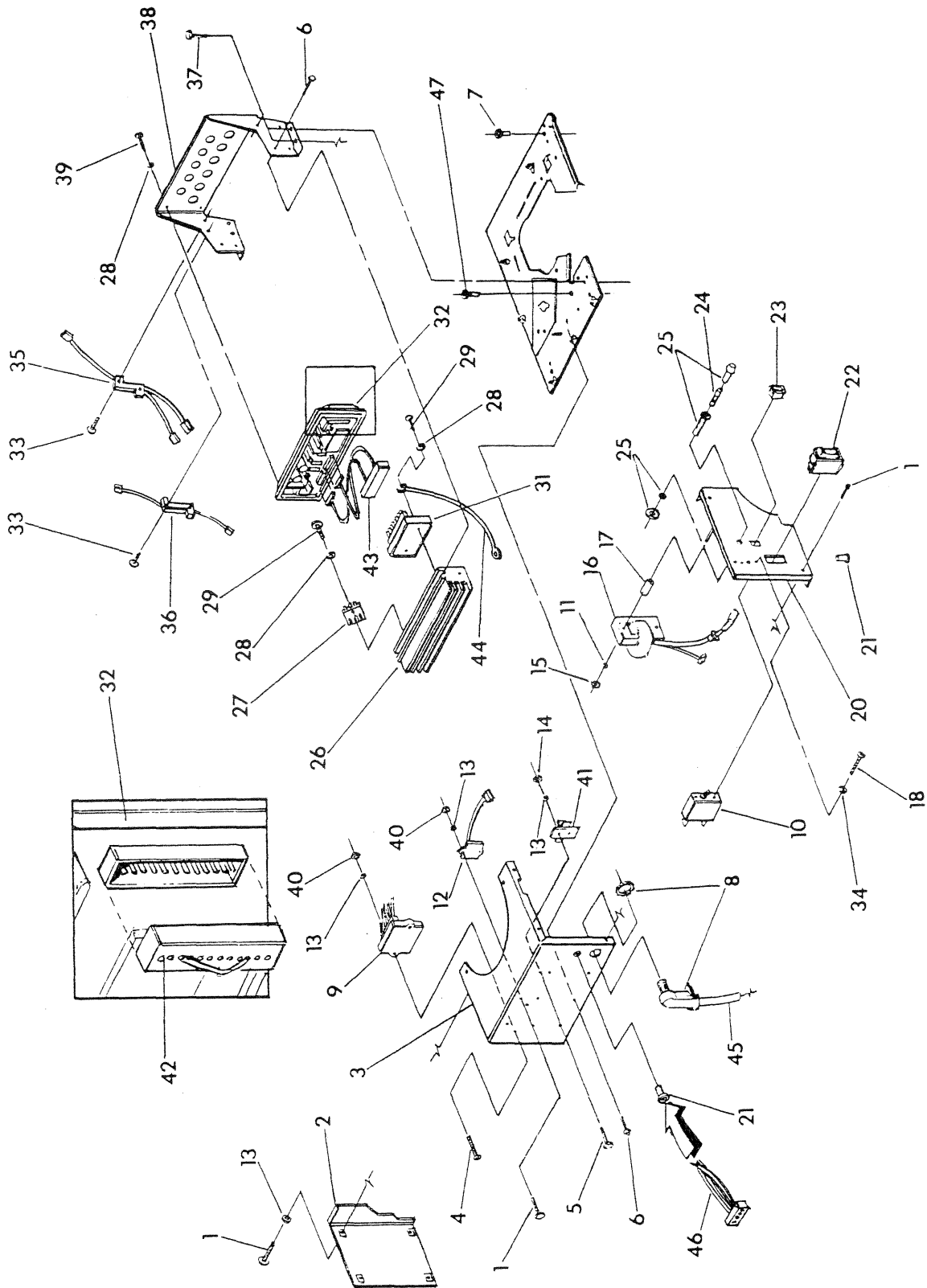
REPAIR PARTS LIST — LONG BLOCK

Drawing No. 88929

ITEM	PART NO.	QTY.	DESCRIPTION
1	78621	1	Connector Rod and Cap Assembly
2	76389	1	Piston Pin
3	78660	1	Piston Ring Set (standard size)
4	26073-A	3	1/4" NPT Pipe Plug
5	77176	1	Breather Cover
6	76386	1	70mm Dia. Piston
7	76390	2	Piston Pin Retainer
8	83379	1	Crankshaft and Gear Assembly
9	77175	1	Breather Valve Assembly
10	89923	1	Oil Breather Separator
11	90397	1	Crankcase Assembly
12	76349	1	Sleeve Bearing
13	81695	2	Crankshaft Oil Seal
14	82493	1	Breather Baffle Cup
15	74906	4	M6-1.0 x 20mm Hex Head Taptite Screw
16	22097	4	M6 Lock Washer
17	78699-A	1	10mm I.D. Dowel Sleeve
18	83335	1	Crankshaft Assembly
19	76350	1	Crankcase Flange Gasket
20	78699-B	1	12mm I.D. Dowel Sleeve
21	77165-B	1	Cylinder Head Gasket
22	78691	1	Oil Pressure Spring Retainer
23	76367	1	Oil Pressure Spring
24	76362	1	Oil Pressure Ball
25	78692	1	M5 Thread-forming Bolt
26	78606	4	M6-1.0 x 12mm Screw and lock washer
27	86675	1	Oil Filter Support
28	78661	6	M6-1.0 x 35mm HHFC/Lock Washer
29	60108	1	Oil Pressure Switch
30	77157	2	Valve Spring Retainer Valve
31	76398	2	Valve Spring
32	78632	1	Ø 10 x 20 Dowel Pin
33	83152	1	Inner Gerotor
34	76381	2	Connecting Rod Bolt
36	78623	1	Cylinder Head Casting Assembly
37	73121	1	Exhaust Valve
38	73120	1	Intake Valve
39	76392	2	Push Rod
40	83235	2	Tappet
41	86714	1	Oil Pickup Screen
42	77167	1	Rocker Cover Gasket
43	77161	2	Ball Pivot Stud
44	77160	2	Rocker Arm
45	76307	2	Rocker Arm Nut
46	77162	1	Push Rod Guide Plate
47	77168	5	M8 x 52mm Head Bolt
48	81691-B	1	Rocker Cover
49	78629	3	Breather Box Gasket
50	90388	2	M6-12mm Taptite Bolt
51	83153	1	Outer Gerotor
52	85190	1	Oil Sump
53	84186	2	Wear-valve Spring Washer
54	88155	1	Intake Valve Seal
55	90741	1	Thermal Oil Temperature Switch
56	74027	2	M5 x 5mm Screw
57	43182	2	M3 Lock Washer
58	72347	1	Spark Plug — Champion RC12YC
59	87478	1	Oil Filter Support Gasket

EXPLODED VIEW — CONTROL PANEL

Drawing No. 88931

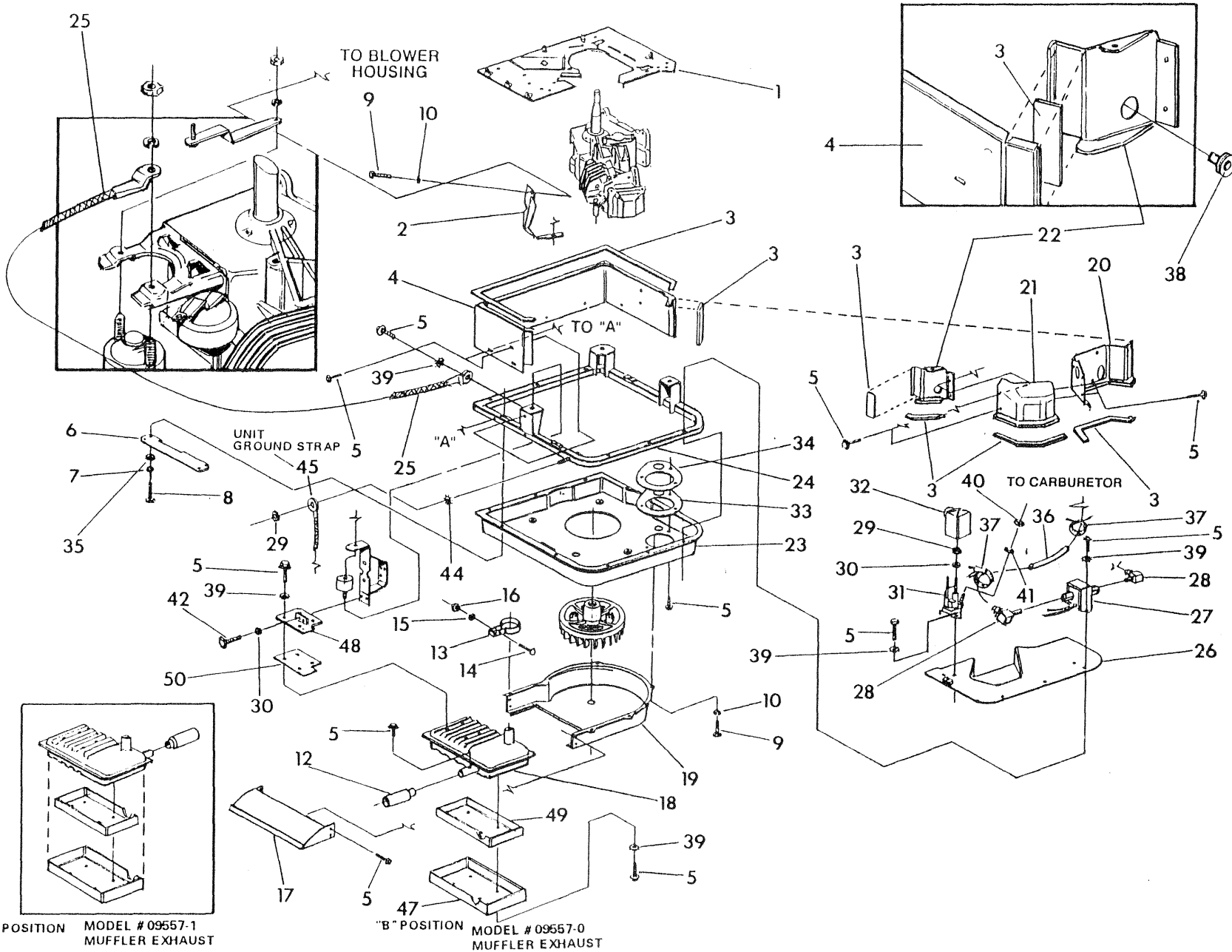


REPAIR PARTS LIST — CONTROL PANEL

Drawing No. 88931

ITEM	PART NO.	QTY.	DESCRIPTION
1	45770	10	M5-0.8 x 10mm Hex Head Capscrew
2	86739	1	Back Panel Cover
3	86740	1	Control Panel Box
4	55440	2	M5-0.8 x 25mm Hex Head Capscrew
5	75476	2	M4 x 16mm Phillips Pan Head Machine Screw
6	74908	8	M5-0.8 x 10mm Taptite Screw
7	23484M	1	Snap Bushing
8	39271	1	90-degree Connector
9	87121	1	RV Control Board
10	90145	1	30 amp Circuit Breaker
11	22097	2	M6 Lock Washer
12	86711	1	Ignition Module
13	49226	10	M5 Lock Washer
14	51715	2	M4 Hex Nut
15	49813	2	M6 Hex Nut
16	89049	1	Coil Assembly
17	89047	2	Ignition Coil Mount Spacer
18	74027	2	M3-0.5 x 5mm Phillips Pan Head Machine Screw
20	86733	1	Front Control Panel
21	23484E	2	Snap Bushing
22	75208	1	Rocker Switch
23	92113	1	Rocker Switch
24	22676	1	15 amp AGC Fuse
25	32300	1	Fuse Holder
26	80939	1	Controller Extrusion
27	65795	1	Battery Charge Rectifier
28	22264	4	M4 Lock Washer
29	75476	3	M4 x 16mm Phillips Pan Head Machine Screw
31	86275	1	Triac Module Genistor
32	83492	1	CCG Printed Circuit Board Assembly
33	91534	4	M3-0.5 x 8mm Taptite Screw
34	43182	2	M3 Lock Washer
35	89744	1	1 ohm Power Resistor
36	83491	1	500 ohm Power Resistor
37	45756	4	M6-1.0 x 10mm Taptite Screw
38	86722	1	Bracket, Circuit Board Heat Sink
39	49819	4	M4 x 6mm Phillips Pan Head Machine Screw
40	51716	4	M5 Hex Nut
41	75210A	1	Terminal Block
42	91281	1	12-pin Connector Assembly
43	86738	1	Triac Module Harness
44	91297-001	1	Ground Wire
45	91282	1	Customer Wire Harness
46	91269	1	Remote Panel Harness
47	23484D	1	Snap Bushing

EXPLODED VIEW — ENGINE SHEET METAL AND BASE



REPAIR PARTS LIST — ENGINE SHEET METAL

Drawing No. 88930

ITEM	PART NO.	QTY.	DESCRIPTION
1	86705	1	Divider Plate
2	90402	1	Engine Top Wrapper
3	86718	1	Rubber Extrusion Seal
4	88480	1	Base Housing Wrapper
5	74908	26	M5-0.8 x 10mm Taptite Screw
6	88841	2	Customer Mounting Rails (ship loose)
7	22129	4	M8 Lock Washer
8	39414	4	M8-1.25 x 35mm Hex Head Capscrew
9	45770	5	M5-0.8 x 10mm Hex Head Capscrew
10	49226	7	M5 Lock Washer
12	89680	1	Spark Arrestor
13	74907	1	Exhaust Clamp
14	22257	1	3/8"-16 x 1-1/2" Hex Head Capscrew
15	22237	1	3/8" Lock Washer
16	27628	1	3/8" Hex Nut
17	89471	1	Air Out Deflector
18	86731	1	Muffler Assembly (Model 9557-0)
	86731-A	1	Muffler Assembly (Model 9557-1)
19	86715	1	Lower Fan Housing
20	86726	1	Carburetor Baffle Skirt
21	86671	1	Rocker Cover
22	86727	1	Spark Plug Side Skirt
23	86719	1	Belly Pan
24	86723	1	Frame
25	90141	1	Ground Strap
26	86724	1	Base Cover Plate
27	90475	1	Fuel Pump
28	28740	2	1/8" x 1/4" NPT 90-degree Barbed Fitting
29	22127	2	1/4"-20 Hex Nut
30	22097	4	1/4" (M6) Lock Washer
31	86729	1	Starter Contactor
32	90518	1	Contacto Boot
33	89048	1	Oil Filter Hole Seal
34	90537	1	Seal Retainer
35	22145	4	M8 Flat Washer
36	30340	1	1/4" Fuel Line (4" long)
37	48031	2	1/4" Hose Clamp
38	23484M	1	Snap Bushing
39	23762	7	External Shakeproof Washer
40	22471	1	No. 8 Hex Nut
41	22264	1	No. 8 Lock Washer
42	43146	2	M6-1.0 x 10mm Hex Head Capscrew
44	22447	1	1/4" (M6) Internal Shakeproof Washer
45	74260-103	1	Unit Ground Strap
47	91999	1	Muffler Heat Shield (Model 9557-0)
	92692	1	Muffler Heat Shield (Model 9557-1)
48	92000	1	Muffler Hanger Bracket
49	92001	1	Muffler Insulation – bottom
50	92002	1	Muffler Insulation – top

GENERAC'S THREE-YEAR LIMITED WARRANTY FOR RECREATIONAL VEHICLE NP GENERATORS

Generac warrants to the original purchaser that its generators will be free from defects in materials or workmanship for the period set forth below from date of original purchase. During said warranty period, Generac will, at its option, repair or replace any part which, upon examination by Generac or Generac Authorized Distributors and/or Dealers, is found to be defective under normal use and service.

THREE-YEAR WARRANTY SCHEDULE

1. All NP Series generators used in a recreational vehicle shall be warranted for a period of three (3) years or 2,000 hours of operation, whichever occurs first. All parts, labor, removal and reinstallation shall be covered for the first two years. Parts and labor on selected generator and engine parts shall be covered during the third year or 2,000 hours, whichever occurs first. These selected parts are limited to: the main Rotor and Stator, Computer Control Board (if applicable) with regard to the generator; the Cylinder Block, Cylinder Head, Crankshaft, Piston, Valve, Valve Lifter, and Manifolds with regard to the engine.
2. The drive train belt and pulleys on NP air-cooled generators used in recreational vehicles shall be warranted against failure due to defective materials or normal usage for the life of the generator. For the original owner, this drive train warranty shall include parts and labor plus \$50.00 payment upon return of the failed belt or pulley by the original owner. For succeeding owners, this power train warranty shall cover belt or pulley parts only.
3. Rental units, demonstrators, prime power, or commercial applications, such as construction or utility, are warranted for (1) one year or 2,000 hours, whichever comes first.

THIS WARRANTY DOES NOT COVER:

- Costs of maintenance, installation and startup.
- Failures due to (a) normal wear and tear from XL engine, or (b) accident, misuse, abuse, negligence or improper installation.
- Products which are modified or altered in a manner not authorized by Generac in writing.
- Any incidental, consequential or indirect damages caused by defects in materials or workmanship, or any delay in repair or replacement of defective parts.
- Failure due to misapplication.
- Telephone, telegraph, teletype or other communication expenses.
- Living or travel expenses of persons performing service.
- All and all transportation/travel expenses.
- Rental equipment used while warranty repairs are being performed.
- Overtime labor.
- Starting batteries, fuses, light bulbs, and engine fluids.

**** NORMAL WEAR:** As with all mechanical devices, engines need periodic parts service and replacement to perform well. This warranty will not cover repair when normal use has exhausted the life of a part or an engine.

THERE IS NO OTHER EXPRESS WARRANTY. GENERAC HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT PERMITTED BY LAW. THE DURATION OF ANY IMPLIED WARRANTIES WHICH CANNOT BE DISCLAIMED IS LIMITED TO THE TIME PERIOD AS SPECIFIED IN THE EXPRESS WARRANTY. LIABILITY FOR CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES UNDER ANY AND ALL WARRANTIES IS EXCLUDED. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

For service, see your nearest GENERAC authorized warranty service facility or call 1-800-333-1322. Warranty service can be performed only by a GENERAC authorized service facility. This warranty will not apply to service at any other facility. At the time of requesting warranty service, evidence of original purchase date must be presented.

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