

SEARS, ROEBUCK and CO., Hoffman Estates, IL 60179 U.S.A.

SAFETY RULES



CAUTION: ALWAYS DISCONNECT SPARK PLUG WIRE AND PLACE WIRE WHERE IT CANNOT CON-TACT SPARK PLUG, TO PREVENT ACCIDENTAL STARTING WHEN SETTING UP, TRANSPORTING, ADJUSTING OR MAKING REPAIRS TO YOUR GENERATOR.



IMPORTANT

THIS GENERATOR IS DESIGNED FOR OUTDOOR USE ONLY. USING THIS GENERATOR INSIDE ANY BUILDING OR ENCLOSURE, INCLUDING THE GENERATOR COMPARTMENT OF A RECREATIONAL VEHICLE (RV), IS DANGEROUS. FIRE OR AN EXPLOSION MAY RESULT. NO USER PERFORMED MODIFICATIONS, INCLUDING VENTING OF EXHAUST AND/OR COOLING VENTILATION, WILL ELIMINATE THE DANGER.

- If this unit is used for backup power in the event of a utility power failure, take the following steps: BE-FORE CONNECTING THE GENERATOR TO AN ELECTRICAL SYSTEM OPEN THE MAIN CIR-CUIT BREAKER OR MAIN SWITCH SERVING THE SYSTEM TO ISOLATE THE GENERATOR SYSTEM FROM THE ELECTRIC UTILITY. FAIL-URE TO ISOLATE THE GENERATOR AND UTIL-ITY SYSTEMS MAY RESULT IN DAMAGE TO THE GENERATOR AND MAY ALSO RESULT IN INJURY OR DEATH TO ELECTRIC UTILITY WORKERS DUE TO BACKFEED OF ELECTRI-CAL ENERGY.
- This generator supplies dangerously high electrical voltages. Use care to prevent extremely hazardous and possibly lethal electrical shock. Never permit any unqualified person(s) to operate or service the unit.
- DO NOT operate this equipment in the rain, while standing in water, while barefoot, or while hands or feet are wet. Dangerous electrical shock will result.
- The spark arrestor muffler can become extremely hot. DO NOT operate this equipment in areas where combustible material such as grass, leaves or paper products can come in contact with the muffler.
- Maintain all wiring, extension cords, etc., in good condition. Worn, bare, frayed, or otherwise damaged wiring and cord sets may cause dangerous electrical shock and may also result in damage to equipment and/or property.
- The National Electrical Code requires that the generator be properly connected to an approved earth ground. Local electrical codes may also require proper grounding of the unit. See ASSEMBLY section for more grounding information.
- Wire gauge sizes of wiring and cord sets must be large enough to handle the maximum electrical load to which they will be subjected. Most devices require, cord sets rated 125 AC volts at 20 to 30 amperes or 250 AC volts at 20 amps (or greater). Some devices may require a higher or lower rating. Refer to the Owner's manual of the electrical device for the manufacturer's recommendations. Cord sets that are too small in diameter or too long will overheat, become damaged and may cause property damage and/or electrical shock.
- The generator engine consumes oxygen and gives off DEADLY carbon monoxide gas through its exhaust system. This dangerous gas, if breathed in sufficient concentrations, can cause unconsciousness or even death. Operate this equipment out-

doors only, in well ventilated areas where exhaust gases cannot accumulate and endanger people or animals.



- Gasoline is extremely FLAMMABLE and its vapors are EXPLOSIVE. Comply with all laws regulating the storage and handling of gasoline. DO NOT permit smoking, open flames, sparks or heat in the vicinity while handling gasoline. Avoid spilling gasoline on a hot engine. DO NOT fill fuel tank while engine is running or hot. Clean off any spilled gasoline before starting engine.
- DO NOT fill fuel tank completely full. Allow room at top of tank for fuel expansion or fuel may expand and overflow onto a hot engine.
- Drain all gasoline from tank before transporting your generator inside your car or other vehicle.
- DO NOT store the generator with fuel in tank where gasoline vapors might reach an open flame, spark, or pilot light, as on a furnace, water heater, dryer, etc. FIRE or an EXPLOSION might result.
- DO NOT insert any object or tool through cooling air slots or openings of the engine or generator, even if the engine is not running. Damage to the unit or personal injury may result.
- DO NOT attempt to change the engine governed speed.. Factory settings are correct when you receive the unit. Excessively high engine speeds may result in injury or damage to equipment.
- DO NOT use the unit if it has been damaged. Repair or replace all damaged or defective components before you run the unit.
- DO NOT permit children to operate or service the generator.
- Read your Owner's Manual carefully. Only persons who are familiar with these safety rules and have been properly instructed in the use of this product should be permitted to use the product.



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS "ATTENTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED." CONGRATULATIONS on your purchase of a Sears Craftsman Generator. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest Sears Service Center/Department or call the 1-800 number listed on the front of this manual. We have competent, well-trained technicians and the proper tools to service or repair this unit.

Please read and retain this manual. The instructions will enable you to assemble and maintain your generator properly. Always observe the 'SAFETY RULES."

MODEL NUMBER

ER 580.326720

SERIAL

NUMBER_

DATE OF PURCHASE

THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON A DECAL ATTACHED TO THE GENER-ATOR STATOR CAN.

YOU SHOULD RECORD BOTH SERIAL NUMBER AND DATE OF PURCHASE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

MAINTENANCE AGREEMENT

A Sears Maintenance Agreement is available on this product. Contact your nearest Sears store for details.

CUSTOMER RESPONSIBILITIES

- Read and observe the safety rules.
- Follow regular schedule in maintaining, caring for and using your generator.
- Follow the instructions under "Maintenance" and "Storage" sections of this Owner's Manual.

PRODUCT SPECIFICATIONS

Generator Specifications

RATED MAXIMUM POWER	3250 Watts (3.25 kW)
RATED VOLTAGE	120/240 Volts a-c
RATED MAXIMUM LOAD CURRENT	27.1/13.5 a-c amperes
RATED FREQUENCY	60 Hz at 3600 rpm
PHASE	Single Phase

Engine Specifications

RATED HORSEPOW	VER	6.5 a	t 360) rpm					
DISPLACEMENT		1910	C						
SPARK PLUG: Typ	e:	Chan or eq		RC12	YC or				
Set Gap	to:	0.030) inch	(0.76r	nm)				
MAXIMUM FULL TA		full load 5.5		3/4 10.5	1/4 14				
GASOLINE CAPAC	ITY	4 U.S. gallons							
OIL (620ml) su	mmer	SAE 30 Oil (SAE10W- 30) SAE 5W-20 or 5W-30							
wi	nter	SAE	5W-2	20 or 5	W-30				

NOTE: Your generator is equipped with a spark arrestor muffler. The spark arrestor must be maintained in effective working order by the owner/operator.

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

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ASSEMBLY

Your AC generator was completely assembled at the factory. It is ready for use after it has been properly serviced with the recommended lubricating oil and fuel.

IF YOU HAVE ANY PROBLEMS WITH THE ASSEMBLY OF YOUR GENERATOR, PLEASE CALL THE GENER-ATOR HELPLINE AT **1-800-222-3136.**

IMPORTANT: ANY ATTEMPT TO RUN THE ENGINE BEFORE IT HAS BEEN SERVICED WITH THE RECOM-MENDED OIL WILL RESULT IN AN ENGINE FAILURE.

TO REMOVE GENERATOR FROM CARTON

- Set the carton on a flat rigid surface with "THIS SIDE UP" arrows pointing upward.
- Carefully open the top flaps of shipping carton.
- Cut down corners at one end of shipping carton and lay that side of carton down flat.
- Remove packing material, carton fillers, etc.
- Remove generator from shipping carton.

CORD SETS AND CONNECTOR PLUGS 120 VOLTS DUPLEX RECEPTACLE

Use only high quality, well-insulated, extension cords with the 120-volt "duplex" type electrical receptacles (Fig. 1). All cord sets used should be rated 125 volts at 15 a-c amps or greater for most electrical devices.

Keep extension cords as short as possible, preferably less than 15 feet long to prevent voltage drop and wires from overheating.





120/240 VOLTS, 20 AMP RECEPTACLE

A 120/240 volts, 20 amp, locking type mating connector plug (Fig. 2) is required when using this receptacle. A 4-wire cord set, rated 20 a-c amperes at 250 volts (or greater), is required and must be connected to the plug and to the desired loads. The receptacle is NEMA L14-20R type of outlet. Use a L14-20P mating connector plug.





GROUNDING THE GENERATOR

The National Electrical Code requires that the frame and external electrically conductive parts of this generator be properly connected to an approved earth ground. Local electrical codes may also require proper grounding of the unit. For that purpose, a GROUNDING WING NUT is provided on the base of the cradle (Fig. 3). Generally, connecting a No. 12 AWG (American Wire Gauge) stranded copper wire to the grounding lug and to an earthdriven copper or brass grounding rod (electrode) provides adequate protection against electrical shock. Be sure to keep ground wire attached when you connect electrode. However, local codes may vary widely. Consult with a local electrician for grounding requirements in your area. Proper grounding of generator will help prevent electrical shock in the event of a ground fault condition in the generator or in connected electrical devices. Proper grounding also helps dissipate static electricity, which often builds up in unarounded devices.



FIG.3

OPERATION

KNOW YOUR GENERATOR

READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR GENERATOR. Compare the illustrations with your generator, to familiarize yourself with the locations of various controls and adjustments. Save the manual for future reference.



120-VOLT A.C. "DUPLEX" RECEPTACLES — May be used to supply electrical power for the operation of 120 volts at 15 amps A.C., single phase, 60 Hz, AC electrical lighting, appliance, tool and motor loads.

120/240-VOLT A.C., 20 AMP RECEPTACLE — May be used to supply electrical power for the operation of 120 and/or 240 volts at 20 amps A.C., single phase, 60 Hz, AC electrical lighting, appliance, tool and motor loads.

RECOIL STARTER — (not shown) Used for starting the GN engine.

RUN/STOP SWITCH — Set this switch to "RUN" before using recoil starter. Set switch to "STOP" to switch OFF engine. Located on engine block. CIRCUIT BREAKERS (A.C.) — Each receptacle is provided with a circuit breaker to protect the generator against electrical cverload. Breakers are "push to reset" type.

SPARK ARRESTOR MUFFLER — Exhaust muffler lowers engine noise and is equipped with a spark arrestor screen.

AIR CLEANER — Uses a dry type filter element and foam pre-cleaner to limit the amount of dirt and dust that gets in the engine.

FUEL TANK — Capacity of four U.S. gallons (15.2 liters).

CHOKE SWITCH - Used when starting-a cold engine.

OPERATION

IF YOU HAVE ANY PROBLEMS OPERATING YOUR GENERATOR, PLEASE CALL THE GENERATOR HELPLINE AT 1-800-222-3136.

BEFORE STARTING ENGINE

ADD OIL:

 Place generator on a level surface and remove one of the yellow Oil Fill Caps (Fig. 4) and add engine oil until level is at point of overflowing. Check engine oil level before starting each time thereafter. If oil level is below point of overflowing, fill to proper level. The recommended oils include (during summer months) SAE 30 oil. SAE 10W-30 is an acceptable substitute. During winter months use SAE 5W-20 or 5W-30. DO NOT USE 10W-40. Crankcase oil capacity is about 620ml or 21 fluid ounces.



FIG.4

CAUTION: ANY ATTEMPT TO CRANK OR START THE ENGINE BEFORE IT HAS BEEN PROPERLY SERVICED WITH THE RECOMMENDED OIL RE-SULTS IN AN ENGINE FAILURE.

ADD GASOLINE:

 Use regular UNLEADED gasoline with the generator engine. Regular leaded gasoline may also be used if UNLEADED is not available. Fuel tank capacity is 4 U.S. gallons.

> CAUTION: DO NOT OVERFILL THE FUEL TANK. ALWAYS ALLOW ROOM FOR FUEL EXPANSION.

WARNING: NEVER FILL FUEL TANK INDOORS. NEVER FILL FUEL TANK WHEN ENGINE IS RUN-NING OR HOT. DO NOT LIGHT A CIGARET OR SMOKE WHEN FILLING FUEL TANK.

TO START THE ENGINE

CAUTION: NEVER START, OR STOP, THE EN-GINE-GENERATOR WITH ELECTRICAL LOADS CONNECTED TO THE RECEPTACLES WITH THE CONNECTED DEVICES TURNED ON.

- Start, store and fuel the unit in a level position.
- Open fuel shut-off valve.
- Locate the Run/Stop switch (Fig. 5) next to the engine cylinder head and set it to RUN.





 Close the choke to FULL position (Fig. 6) by sliding it to far position in direction indicated by arrow on air cleaner housing.



FIG.6

- Grasp the starter grip and pull slowly until you feel resistance. Then pull rapidly. Repeat if necessary with choke opened slightly.
- When engine starts, open choke gradually.

CONNECTING ELECTRICAL LOADS

- Let engine stabilize and warm up for about five minutes after starting.
- Plug in and turn on the desired 120 or 240 volts, single phase, 60 Hertz, a-c electrical loads.
- DO NOT connect 240 volts to 120 volts duplex receptacies.
- DO NOT connect 3-phase loads to panel receptacles.
- DO NOT connect any 50 Hz loads to the generator.
- Add up the rated watts of all lights, tool, appliance and motor loads you are powering at one time. This total should NOT be greater than (a) generator's rated wattage capacity or (b) circuit breaker rating of the receptacle supplying the power.

STOPPING THE ENGINE

- Disconnect all electrical loads and let engine run at no-load for about five minutes to stablize internal temperatures of engine and generator.
- Turn off the engine by moving the Run/Stop switch to STOP position.

LOW OIL PRESSURE SHUTDOWN SYSTEM

The engine is equipped with a low oil pressure sensor that shuts down the engine automatically when the oil pressure drops below 6 psi. If the engine shuts down by itself and the fuel tank has enough gasoline, check engine oil level.

INITIAL STARTUP

A delay built in the shutdown system allows oil pressure to build during starting. 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. As the system shuts down, the low oil light comes ON. However, once the engine has stopped rotating, this light will go OFF.

RESTARTING

If you try to restart the engine within 5 seconds after it shuts down, the engine may NOT start. The system needs 5 to 10 seconds to reset.

If you do restart the engine after such a shutdown and have not corrected the low oil pressure, the engine runs for about 10 seconds as described above and then stops.

DON'T OVERLOAD THE GENERATOR

Overloading a generator in excess of its rated wattage capacity can result in damage to generator and to connected electrical devices. Observe the following, to prevent overloading the unit:

- Add up the total wattage of all electrical devices to be connected at one time. This total should NOT be greater than the generator's wattage capacity.
- The rated wattage of lights can be taken from light bulbs. The rated wattage of tools, appliances and motors can usually be found on a data plate or decal affixed to the device.
- If the appliance, tool or motor does not give wattage, mulitply 120 volts times ampere rating to determine watts (volts x amps = watts).
- Some electric motors, such as induction types, require about two-and-a-half times more watts of power for starting than for running. This surge of power lasts for only a few seconds when starting such motors. Be sure you allow for this high starting wattage when selecting electrical devices to connect to your generator. First figure the watts needed to start largest motor. Add to that figure running watts of all other connected loads.
- The GUIDE below is provided to assist you in determining how many items your generator can operate at one time.

RUNNING

WATTAGE REFERENCE GUIDE

	RUNNING
	WATTS
*Air Conditioner (12,000 Btu)	1700
Battery Charger (20 amp)	500
Belt Sander (3")	
Chain Saw	1200
Circular Saw (6-12/")	800 to 1000
Coffee Maker	
*Compressor (1 HP)	
*Compressor (3/4 HP)	
Curling Iron	700
*Deep Freeze	
Disc Sander (9")	
Edge Trimmer	
Electric Nail Gun	
Electric Range (one element)	
Electric Skillet	1250
*Furnace Fan (1/3 HP)	
Hair Dryer	
Hand Drill (1")	
Hand Drill (1/2")	750 to 1000
Hand Drill (3/8")	
Hedge Trimmer	

	WATTS
Impact Wrench	500
*Jet Pump	800
Lawn Mower	
Microwave Oven	
*Milk Cooler	
Oil Burner on Furnace	300
Oil Fired Space Heater (140,000 Btu)	400
Oil Fired Space Heater (85,000 Btu)	225
*Paint Sprayer, Airless (1/3 HP)	600
Paint Sprayer, Airless (handheld)	
Radio	50 to 200
*Refrigerator	600
Slow Cooker	
*Submersible Pump (1-1/2 HP)	
*Submersible Pump (1 HP)	
Sump Pump	600
Table Saw (10)	1750 to 2000
Television	
Weed Trimmer	500
* Allow 2-1/2 times the listed watts for devices.	starting these

MAINTENANCE

GENERAL RECOMMENDATIONS

The Owner/Operator is responsible for making sure that all periodic maintenance tasks are completed on a timely basis; that all discrepancies are corrected; and that the unit is kept clean and properly stored. Never operate a damaged or defective generator.



CAUTION: DISCONNECT SPARK PLUG WIRE FROM SPARK PLUG AND PLACE WIRE WHERE IT CANNOT COME IN CONTACT WITH YOUR SPARK PLUG BEFORE WORKING ON YOUR GENER-ATOR.

GENERATOR MAINTENANCE

Generator maintenance consists of keeping the unit clean and dry. Operate and store the unit in a clean dry enviorment where it will not be exposed to exceesive dust, dirt, moisture or any corrosive vapors. Cooling air slots in the generator must not become clogged with snow, leaves or any other foreign material.

Check the cleanliness of the generator frequently and clean when dust, dirt, oil, moisture or other foreign substances are visible on its exterior surface.

NOTE: We DO NOT recommend using a garden hose to clean the generator. Water can enter the engine fuel system and cause problems. In addition, if water enters the generator through cooling air slots, some of the water will be retained in voids and cracks of the rotor and stator winding insulation. Water and dirt buildup on the generator internal windings will eventually decrease the insulation resistance of these windings.

TO CLEAN THE GENERATOR:

- Use a damp cloth to wipe exterior surfaces clean.
- A soft, bristle brush may be used to loosen caked on dirt, oil, etc.
- A vacuum cleaner may be used to pick up loose dirt and debris.
- Low pressure air (not to exceed 25 psi) may be used to blow away dirt. Inspect cooling air slots and opening on the generator. These openings must be kept clean and unobstructed.

CAUTION: NEVER INSERT ANY OBJECT OR TOOL THROUGH THE AIR COOLING SLOTS, EVEN IF THE ENGINE IS NOT RUNNING. DAMAGE TO THE UNIT OR PERSONAL INJURY MAY RESULT.

ENGINE MAINTENANCE

CHECKING OIL LEVEL

See OPERATION section on Page 5 for information on checking oil level. Oil level should be checked before each use or at least every eight hours of operation. Keep oil level maintained.

Change oil after first 8 hours of operation. Change oil every 50 hours thereafter. If you are using your generator under dirty or dusty conditions, or in extremely hot weather, change oil more often.

Change oil while engine is still warm from running, as follows:



 Clean area around oil drain plug, remove plug (Fig. 7) and drain oil completely into a suitable container.



FIG. 7

- When oil has drained, install and tighten oil drain plug.
- Remove oil fill plug and insert a clean fill funnel into plug opening. Fill engine crankcase with recommended oil until oil level is at point of overflowing. Do not overfill above the point of overflowing. About 21 ounces (620ml) is required. POUR SLOWLY.
- When engine crankcase is filled to proper level. Install and tighten oil fill plug.

RETORQUE HEAD BOLTS

After 50 hours of operation, retorque the head bolts for the GN engine to 4.0 kg/m (29 foot-pounds).

• The torque sequence is A, B, C, D, E (star pattern). See Fig. 8



FIG. 8

MAINTENANCE

SERVICE AIR CLEANER

Your engine will not run properly and may be damaged if you run it using a dirty air cleaner.

Clean or replace the air cleaner paper filter (Fig. 9) once every 25 hours of operation or once a year, whichever comes first. Clean or replace more often if operating under dusty or dirty conditions. Clean foam pre-filter every 25 hours of operation or sooner under dusty conditions.



CAUTION: NEVER RUN THIS UNIT WITHOUT THE COMPLETE AIR CLEANER SYSTEM INSTALLED ON THE ENGINE. THIS COULD RESULT IN PRE-MATURE WEAR TO THE ENGINE.



FIG.9

To clean or replace foam pre-filter:

- Remove air cleaner cover, then foam pre-filter.
- Wash pre-filter in soap water. Squeeze pre-cleaner dry in clean cloth (DO NOT TWIST). Saturate pre-cleaner in clean engine oil and then wrap pre-filter in clean dry cloth to squeeze out excess oil (DO NOT TWIST).
- Clean air cleaner cover before installing it.

To clean or replace paper air filter:

- Remove air cleaner cover; then remove foam pre-filter (service if necessary) and remove paper filter.
- Clean air filter by tapping it gently 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 pre-filter into cover. Next insert new paper filter into cover to hold pre-filter in place and assemble all of them to the base of the air cleaner.

REPLACE SPARK PLUG

Change the spark plug every 100 hours of operation or once each year, whichever comes first. This will help your engine to start easier and run better. Replace with Champion RC12YC or equivalent type spark plug. Set spark plug gap (Fig. 10) 0.030 inch (0.76mm).





CLEAN SPARK ARRESTOR SCREEN

The engine exhaust muffler has a spark arrestor screen. Inspect and clean the screen every 100 hours of operation or once each year, whichever comes first.



WARNING: LET THE MUFFLER COOL BEFORE WORKING ON IT. CONTACT WITH A HOT MUF-FLER OR ENGINE CAN CAUSE SEVERE BURNS.

NOTE: If you use your generator on any forest-covered, brushcovered or grass-covered unimproved land, it must have a spark arrestor. The spark arrestor must be maintained in good condition by the owner/operator.

- Clean and inspect the spark arrestor as follows:
- To remove the heat shield from the muffler (Fig. 11), remove the four screws that connect the sheild to the muffler.



FIG. 11

- Remove four screws that attach the spark arrestor screen.
- Inspect screen and replace if torn, perforated or otherwise damaged. DO NOT USE a defective screen. If the screen is not damaged, clean it with a commercial solvent.
- Reattach the screen and the heat shield.

SERVICE AND ADJUSTMENTS

ENGINE SPEED



Your generator runs at a constant speed. This constant operating speed is maintained by a mechanical, flyweight type, fixed speed governor. DO NOT try to adjust the governed speed setting for the following reasons:

- High engine speeds are dangerous and increase the risk of personal injury or damage to equipment.
- Low engine speeds impose a heavy load on the engine when sufficient engine power is not available and may shorten engine life.
- The generator will supply correct rated AC frequency and voltage only at the proper speed. Some connected electrical devices could be damaged by incorrect frequency and/or voltage.

ADJUSTING THE CARBURETOR

The carburetor of your generator is preset at the factory. DO NOT TAMPER WITH THE CARBURETOR, as this will void the emission control system warranty. If your generator is used at altitudes above 5,000 feet, you should consult with an authorizes Sears Service Facility regarding high altitude jetting changes.

ADJUSTING VALVE CLEARANCE

After the first 50 hours of operation, you should adjust the valve clearance in the 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 0.05-0.1mm. Adjust valve clearance as follows:

- 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 (Fig. 12).
- When valve clearance is correct, hold pivot ball stud with allen wrench and tighten rocker arm jam nut with a crows foot. Tighten the jam nut to 65-85 inch-pounds torque. After tightening the jam nut, recheck valve clearance to make sure it did not change (Fig. 13).



FIG. 12



FIG. 13

SERVICE RECOMMENDATIONS

MAINTENANCE OPERATION	Every 8 Hours or Daily	25 Hours or Every Season	50 Hours or Every Season	100 Hours or Every Season
Check Oil Level	X			
Change Oil			See Note 1	x
Retorque Head Bolts			X	
Service Air Filter		See Note 2		
Replace or Clean Spark Plug				X
Clean Spark Arrestor Screen				X
Adjust Valve Clearance			X	
Prepare Unit for Storage	Prepare	unit for storage if it is to r	emain idle for more that	n 30 days.

NOTE 1: Change oil after first 8 hours of operation and then every 50 hours thereafter. Change sooner when operating under heavy load or in dusty or dirty environment or in high ambient temperature.

NOTE 2: Clean more often when operating the unit under dirty or dusty conditions.

STORAGE

The generator should be started at least once every seven days and allowed to run at least 30 minutes. If this cannot be done and you must store the unit for more than 30 days, use the following information as a guide to prepare it for storage.

STORAGE INSTRUCTIONS

WARNING: NEVER STORE ENGINE WITH FUEL IN THE TANK INDOORS OR IN ENCLOSED, POORLY VENTILATED AREAS, WHERE FUMES CAN REACH AN OPEN FLAME SPARK OR PILOT LIGHT AS ON A FURNACE, WATER HEATER, CLOTHES DRYER OR OTHER GAS FURNACE.

ENGINE

• Run engine for about five minutes to warm it.

NOTE: If you did use "gasohol," drain fuel tank, then run engine until engine stops from lack of fuel.



NOTE: Using a fuel additive such as Sears Craftsman[®] Fuel Stabilizer, or an equivalent, will prevent gum deposits from forming in the generator's fuel system.

• While engine is still warm, drain oil from crankcase. Refill with fresh oil. See BEFORE STARTING EN-GINE on Page 5 for oil recommendations. Remove spark plug and pour about 1/2 ounce (15ml) of engine oil into cylinder. Crank slowly to distribute oil.

CAUTION: AVOID SPRAY FROM SPARK PLUG HOLE WHEN CRANKING ENGINE SLOWLY.

- Install spark plug. Do not connect spark plug wire.
- Clean dirt, oil and grease from cylinder, cylinder head, fins, blower housing, rotating screen and muffler area.
- Close fuel shut-off valve, located beneath the fuel tank.

GENERATOR

- Clean the generator as outlined on Page 7 ("To Clean the Generator").
- Check that cooling air slots and openings on generator are open and unobstructed.

OTHER STORAGE TIPS

- Do not store gasoline from one season to another.
- Replace your gasoline can if it starts to rust. Rust and/or dirt in your gasoline can cause problems when you use it with this unit.
- Store in clean and dry area.



DANGER: STORAGE COVER IS FLAMMABLE. DO NOT PLACE THE STORAGE COVER OVER A HOT GENERATOR. LET THE UNIT COOL FOR A SUFFI-CIENT TIME BEFORE PLACING THE COVER ON THE UNIT. IF YOU PLACE THE COVER ON THE UNIT BEFORE GENERATOR IS COOL, THE COVER COULD START ON FIRE.

TROUBLESHOOTING POINTS

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Drawing No. 97229

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CRAFTSMAN 3250XL AC DELUXE PORTABLE GENERATOR

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ITEM	PART NO.	DESCRIPTION
1	97195	CRADLE-XL (1REQ.)
2	84021 ENC08701	ENGINE SUPPORT (1 REQ.)
3 4	ENG98701 66365	GN191 6.5HP ENGINE (1 RÉQ.) ENGINE ADARTOR HOUSING (1 REG.)
7 5	84141G	ENGINE ADAPTOR HOUSING (1 REQ.) ROTOR ASSEMBLY (1 REQ.)
õ	91838G	STATOR ASSEMBLY (1 REQ.)
7	65791	BEARING (1REQ.)
8	67451	M8 FLAT WASHER (1 REQ.)
9	22129	M8 LOCK WASHER (2 REQ.)
10	86307	5/16-24 X 3/4 HEX HEAD MACH. SCREW (4 REQ.)
11	52122	5/16-24 X 6.5" HEX HEAD CAP SCREW (1 REQ.)
12	84508	45° VIBRATION MOUNT (2 REQ.)
13 16	52858 66476	M8 LOCKING NUT (8 REQ.)
17	88688	M6-1.00 X 12 HEX HEAD MACH. SCREW WITH LOCK WASHER (2 REQ.) MUFFLER ASSEMBLY (1 REQ.)
18	40976	M8-1.25 X 20 SOCKET HEAD CAPSCREW (2 REQ.)
19	89476	EXHAUST GASKET (1 REQ.)
20	83083	SPARK ARRESTOR SCREEN (1 REQ.)
21	75475	M4-0.7 X 10 PHILLIPS PAN HEAD MACH, SCREW (4 REQ.)
22	98247	CONTROL PANEL DECAL (1 REQ.)
23	81917	M4 X 10 ROLL PIN (1 REQ.)
25 26	66825B	REAR BEARING CARRIER (1 REQ.)
27	85652 45771	VIBRATION MOUNT (2 REQ.) M8 HEX NUT (2 REQ.)
30	74908	M5-0.8 X 10 TAPTITE (4 REQ.)
32	86308	M6-1.0 X 115 STATOR BOLT (4 REQ.)
33	84242	GROMMET (2 REQ.)
34	23365	#8 SHAKEPROOF WASHER (4 REQ.)
35	67022	RUBBER GROMMET (1 REQ.)
36	94396B	20AMP. CIRCUIT BREAKER (1 REQ.)
37	91825	BRUSH HOLDER ASSEMBLY (1 REQ.)
38 39	66849 95600	M5-0.7 X 16 TAPTITE (2 REQ.)
41	86494	CONTROL PANEL COVER (1 REQ.) M6-1.0 X 16 WING SCREW (1 REQ.)
42	86292	#10 x 16 SELF DRILLING CAP SCREW (1 REQ.)
43	77395	M6 FLANGE LOCK NUT (4 REQ.)
44	83465	TANK GROMMET (4 REQ.)
46	78831B	M6-1.0 X 60 (BLACK) HEX HEAD MACH. SCREW (4 REQ.)
47	80270	
48 49	78299	PLASTIC TANK BUSHING (1 REQ.)
49 50	85134 83311	FUEL CAP (1 REQ.) FUEL TANK (1 REQ.)
51	84042	HEAT SHIELD (1 REQ.)
52	84687	#2 1/4" INSULATION (1 REQ.)
53	85000	CLIP INSULATION (1 REQ.)
54	143-53621	GROUND WIRE (1 REQ.)
55	23762	#10 SHAKEPROOF (1 RÉQ.)
56	26850	M6 SHAKEPROOF (1 REQ.)
58	94396A	15AMP CIRCUIT BREAKER (1 REQ.)
60 61	38150 92982	#8 FLAT WASHER (4 REQ.)
62	98703	DANGER DECAL (1 REQ.) HEAT SHIELD DECAL (2 REQ.)
64	94603B	EMISSION CONTROL DECAL (1 REQ.)
66	93826	START DECAL (1 REQ.)
67	96409	1-800 DECAL (1 REQ.)
68	77816	MUFFLER WARNING DECAL (1 REQ.)
69	98717	DATA SHEET CODE DECAL (1 REQ.)
70	22264	#8 LOCK WASHER (4 REQ.)
71	51715	M4-0.7 HEX NUT (4 REQ.)
72 73	68759 77026	120V. 20A. DUPLEX OUTLET (1 REQ.) DATA DECAL (1REQ.)
74	68867	120/240V. 20A TWISTLOCK (1 REQ.)

REPAIR PARTS



OIL SWITCH AND OIL BLOCKOFF

ITEM	PART NO.	DESCRIPTION
1	94820	EXPANSION PLUG (1 REQ.)
2	91848	OIL FILTER GASKET (1 REQ.)
3	88758	OIL BLOCKOFF (1 REQ.)
4	92978	M6 x 20mm SCREW (2 REQ.)
5	99236	OIL PRESSURE SWITCH (1 REQ.)

RECOIL STARTER

		91 90 83 84 84 86 88 85 87 3
ITEM	PART NO.	DESCRIPTION
82	92984	TOP WRAPPER (1 REQ.)
83	45756	M6 x 10mm SCREW (4 REQ.)
84	78609	COVER BOLT (2 REQ.)
85	78608B	SEARS AIR BOX COVER (1 REQ.)
86	90695A	BLOWER HOUSING (1 REQ.)
~ 7	00700	

84	18009	COVER BOLT (2 REQ.)
85	78608B	SEARS AIR BOX COVER (1 REQ.)
86	90695A	BLOWER HOUSING (1 REQ.)
87	89739	LOWER WRAPPER (1 REQ.)
88	66476	M6 x 12mm CAPSCREW (9 REQ.)
89	95268	RECOIL ASSEMBLY (1 REQ.)
90	83015	RECOIL CUP (1 REQ.)

 90
 83015
 RECOIL CUP (1 REQ.)

 91
 78651C
 BACKPLATE (1 REQ.)



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	QTY. DESCRIPTION
7	78653	Run/Stop Switch (1 req.)	20	72347	Spark Plug• (1 req.)
8	85272	L.E.D. Assembly (1 req.)	21	86962	Governor Lever (1 req.)
9	84195	Low Oil Shutdown Decal (1 req.)	22	85953	Wear Washer (1 req.)
10	85620	Black Sleeving (1 req.)	23	83502	Adjust Screw (1 req.)
12	84329	3-pin Male Connector	24	83512	M8 x 15mm Taptite
		Housing (1 req.)			Screw (1 req.)
13	00185271	White Wire Assembly (1 req.)	25	78604	Governor Spring (1 req.)
14	22097	M6 Lock Washer (2 req.)	26	66476	M6 x 12mm Capscrew (1 req.)
15	82891	M6 x 30mm Screw (2 req.)	27	83503	M5 Lock Nut (1 req.)
16	81675	Ignition Coil (1 req.)	28	83781	Governor Bracket (1 req.)
17	84274	Tinnerman Clamp (1 req.)	29	86384	Governor Rod (1 req.)
18	87221A	Low Oil Shutdown	30	86037	Anti-lash Spring (1 req.)
		Module (1 req.)			-
19	45756	M6 x 10mm Screw (1 req.)			



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	78621	Control Rod Assembly (1 req.)	27	76361	Governor Gear Thrust Washer (1 req.)
2	76389	Piston Pin (1 req.)	28	89230	M8-1.25 x 35mm Screw (6 req.)
3	78660	Piston Ring Set (1 req.)	29	99922	Spring Washer (1 req.)
4	89665A	Gear Cover Assembly (1 req.)	30	86293	Valve Spring Retainer (1 req.)
5	77168	M8 x 52mm Head Bolt (5 req.)	31	88401	Valve Spring (2 req.)
6	90325	Piston (1 req.)	32	84186	Valve Spring Wear Washer (2 req.)
7	76390	Pin Retainer Ring (2 req.)	33	83192	Geroter Set (1 req.)
8	83337	Crankshaft Assembly (1 req.)	34	86254	"O" Ring (1 req.)
9	78658	Governor "R" Pin (1 req.)	35	76349	Bearing (1 req.)
10	78659	Governor Arm Thrust Washer (1 req.)	36	21705B	Cylinder Head Assembly (1 req.)
11	89213B	Crankcase Assembly (1 req.)	37	90082	Exhaust Valve (1 req.)
12	76354	Governor Arm (1 req.)	38	90081	Intake Valve (1 req.)
13	81695	Oil Seal (1 req.)	39	88396A	Push Rod (1 req.)
14	76359	Governor Gear Assembly (1 req.)	40	83235	Tappet (2 req.)
15	78645	Governor Gear C-Ring (1 req.)	41	80336	Oil Pick-up Assembly (1 req.)
16	76365	Governor Spool (1 req.)	42	88397	Rocker Cover Gasket (1 req.)
17	72683	1/8" NPT Pipe Plug (1 req.)	43	77161	Pivot Ball Stud (2 req.)
18	98752	Camshaft Assembly (1 req.)	44	77160	Rocker Arm (2 req.)
19	89096	Crankcase Gasket (1 req.)	45	76307	Rocker Arm Jam Nut (2 req.)
20	88156	Valve Stem Seal (1 req.)	46	88403	Push Rod Guide Plate (1 req.)
21	217041	Cylinder Head Gasket (1 req.)	47	72657	1/4" NPT Pipe Plug (1 req.)
22	78691	Oil Pressure Relief Cover (1 req.)	48	88412	Rocker Cover Assembly (1 req.)
23	76367	Oil Pressure Spring (1 req.)	49	76329	Plastic Oil Fill Plug (1 req.)
24	76362	5/16" Ball (1 req.)		21942	Complete Long Block
25	78692	M5 Form Screw (1 req.)			
26	78606	M6-1.0 x 12mm Screw (4 req.)			



ITEM	PART NO.	DESCRIPTION	
31	90947	1	Breather Hose
32	90051	1	Manifold Head Gasket
35	80316	2	M6 x 30mm Screw
36	9 0948	1	Intake Manifold
39	91846	1	Carburetor /Air Box
			Gasket
41	80303	1	Canal Cover
42	78631	1	Carburetor Manifold
			Gasket
43	98469	1	Carburetor (190cc)
44	78607	1	Air Cleaner Base
45	66476	1	M6 x 12mm Capscrew
46	59635	1	#8 x 3/8" Plastite Screw
47	78601	1	Air Filter
48	78602	1	Precleaner
49	83504	1	Choke Knob





ITEM PART NO. DESCRIPTION

78	82774	Woodruff Key (1 req.)
79	77182E	Flywheel (1 req.)
80	83312	Conical Washer (1 req.)
81	81810	M16 Hex Nut (1 req.)

CRAFTSMAN 3250XL A-C DELUXE PORTABLE GENERATOR



Drawing No. 94998

TWO-YEAR LIMITED WARRANTY FOR DELUXE PORTABLE GENERATORS

SEARS warrants to the original purchaser that the alternator and engine for its portable generator will be free from defects in materials or workmanship for the items and period set forth below from the date of original purchase. This warranty is not transferable and applies only to portable generators driven by the GN-Series Sears warranted engine.

	CONSUMER*	COMMERCIAL*
Alternator	2 years (2nd year parts only)	1 year
Engine	2 years (2nd year parts only)	1 year

* NOTE: For the purpose of this warranty "consumer use" means personal residential household use by original purchaser. "Commercial Use" means all other uses, including rental, construction, commercial and income producing purposes. Once a generator has experienced commercial use, it shall thereafter be considered a commercial use generator for the purposes of this warranty.

During said warranty period, SEARS will, at its option, repair or replace any part which, upon examination by SEARS, is found to be defective under normal use and service**. Starting batteries are not warranted by SEARS. All transportation costs under warranty, including return to the factory if necessary, are to be borne by the purchaser and prepaid by him. This warranty does not cover normal maintenance and service and does not apply to a generator set, alternator or engine, or parts which have been subjected to improper or unauthorized installation or alteration, misuse, negligence, accident, overloading, overspeeding, improper maintenance, repair or storage so as, in SEARS's judgment, to adversely affect its performance and reliability.

** NORMAL WEAR: As with all mechanical devices, engines need periodic parts service and replacement to peform 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. SEARS 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 DIS-CLAIMED IS LIMITED TO THE TIME PERIOD AS SPECIFIED IN THE EXPRESS WARRANTY. LIABILITY FOR CONSE-QUENTIAL, 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 SEARS authorized warranty service facility. Warranty service can be performed only by a SEARS 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.

SEARS, ROEBUCK AND CO. Department 817 WA Hoffman Estates, IL 60179

FOR CALIFORNIA RESIDENTS ONLY WHEN SEEKING SERVICE IN CALIFORNIA CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and Sears Roebuck and Co., USA (Sears), are pleased to explain the emissions control system warranty on your 1995 and later lawn and garden equipment engine. In California new utility and lawn and garden equipment engines must be designed, built, and equipped to meet the State's stringent anti-smog standards. Sears must warrant the emission control system on your lawn and garden equipment engine for the periods of time listed below provided there has been no abuse, neglect, or improper maintenance of your lawn and garden equipment engine.

Your emission control system includes parts such as the carburetor and the ignition system. Where a warrantable condition exists, Sears will repair your lawn and garden equipment engine at no cost to you. Expenses covered under warranty include diagnosis, parts, and labor.

MANUFACTURER'S WARRANTY COVERAGE

The 1995 and later utility and lawn and garden equipment engines are warranted for two years. If any emission related part on your engine (as listed below) is defective, the part will be repaired or replaced by Sears.

OWNER'S WARRANTY RESPONSIBILITIES

As the lawn and garden equipment engine owner, you are responsible for the performance of the required maintenance listed in your Owner's Manual. Sears recommends that you retain all receipts covering maintenance on your lawn and garden equipment engine, but Sears cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the lawn and garden equipment engine owner, you should be aware that Sears may deny you warranty coverage if your lawn and garden equipment engine or a part of it has failed due to abuse, neglect, improper maintenance, unapproved modifications, or the use of parts not made or approved by the original equipment manufacturer.

You are responsible for presenting your lawn and garden equipment engine to a Sears authorized repair center as soon as a problem exists. Warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized service center or call Sears at 1-800-473-7247.

WARRANTY COMMENCEMENT DATE

The warranty period begins on the date the lawn and garden equipment engine is delivered to the original, end-use purchaser.

LENGTH OF COVERAGE

Sears warrants to the initial owner and each subsequent purchaser that the engine is free from defects in materials and workmanship which cause the failure of a warranted part for a period of two years.

WHAT IS COVERED

REPAIR OR REPLACEMENT OF PARTS

- Repair or replacement of any warranted part will be performed at not charge to the owner at an approved Sears servicing center.
- If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized service center or call Sears at 1-800-473-7247.

WARRANTY PERIOD

Any warranted part which is not scheduled for replacement as required maintenance, or which is scheduled only for regular inspection to the effect of "repair or replace as necessary" shall be warranted for 2 years. Any warranted part which is scheduled for replacement as required maintenance shall be warranted for the period of time up to the first scheduled replacement point for that part.

DIAGNOSIS

The owner shall not be charged for diagnostic labor which leads to the determination that a warranted part is defective if the diagnostic work is performed at an approved Sears servicing center.

CONSEQUENTIAL DAMAGES

Sears may be liable for damages to other engine components caused by the failure of a warranted part still under warranty.

WHAT IS NOT COVERED

All failures caused by abuse, neglect, or improper maintenance are not covered.

ADD-ON OR MODIFIED PARTS

The use of add-on or modified parts can be grounds for disallowing a warranty claim. Sears is not liable to cover failures of warranted parts caused by the use of add-on or modified parts.

HOW TO FILE A CLAIM

If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized service center or call Sears at 1-800-473-7247.

WHERE TO GET WARRANTY SERVICE

Warranty services or repairs shall be provided at all Sears authorized service centers.

MAINTENANCE, REPLACEMENT AND REPAIR OF EMISSION RELATED PARTS

Any Sears approved replacement part used in the performance of any warranty maintenance or repair on emission related parts will be provided without charge to the owner if the part is under warranty.

EMISSION CONTROL WARRANTY PARTS LIST

- 1. Carburetor Assembly
- 2. Ignition System
- a. Spark Plug, covered up to maintenance schedule. b. Ignition Module
- 3. Crankcase Breather Tube
- 4. Exhaust Manifold

SEARS

OWNER'S MANUAL

MODEL No.

580.326720

IF YOU NEED REPAIR SERVICE OR PARTS

FOR REPAIR SERVICE CALL THIS TOLL FREE NUMBER 1-800-4•REPAIR

(1-800-473-7247)

FOR REPLACEMENT PARTS IN-FORMATION AND ORDERING, CALL THIS TOLL FREE NUMBER: **1-800-FON-PART**

(1-800-366-7278)

CRAFTSMAN®

120/240 VOLTS / 3250 WATT A-C DELUXE PORTABLE GENERATOR

Each Portable Generator has its own model number. Each engine has its own part number.

The model number for your Portable Generator will be found on a decal attached to the unit.

The part number for your engine will be found on the Blower Housing of the engine adjacent to the spark plug.

All parts listed herein may be ordered through Sears, Roebuck and Co. Service Centers and most Retail Stores.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOL-LOWING INFORMATION:

- PRODUCT PORTABLE GENERATOR
- MODEL NUMBER --- 580.326720
- PART NUMBER
- PART DESCRIPTION

Your Sears merchandise has added value when you consider that Sears has service units nationwide staffed with Sears trained technicians....professional technicians specifically trained on Sears products, having the parts, tools and the equipment to ensure that we meet our pledge to you, we service what we sell.

SEARS ROEBUCK and CO., Hoffman Estates, IL 60179 U.S.A.