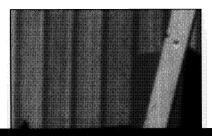


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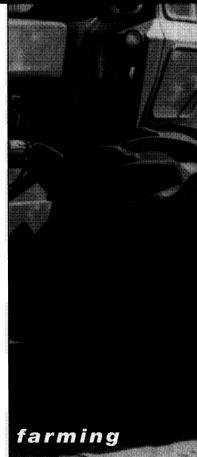




OPERATOR'S MANUAL







Portable Generators 5GRBA 378A / 7GRBB 377A

SAFETY PRECAUTIONS

Before operating the generator set, read the Operator's Manual and become familiar with it and your equipment. Safe and effective operation can be achieved only if the equipment is properly operated and maintained. Many accidents are caused by failure to follow fundamental rules and precautions.

The following symbols, found throughout this manual, alert you to potentially dangerous conditions to the operator, service personnel, or the equipment.

A DANGER This symbol warns of immediate hazards which will result in severe personal injury or death.

A WARNING This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.

A CAUTION This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

Fuels, electrical equipment, batteries, exhaust gases and moving parts present potential hazards that could result in severe personal injury. Take care in following these recommended procedures.

FUEL AND FUMES ARE FLAMMABLE. Fire, explosion, and severe personal injury can result from improper practices.

- DO NOT fill fuel tanks with the engine running. Fuel contact with hot engine or exhaust is a potential fire hazard
- DO NOT SMOKE OR ALLOW AN OPEN FLAME near the generator set or fuel tank.
- DO NOT SMOKE while servicing batteries. Lead acid batteries emit a highly explosive hydrogen gas that can be ignited by electrical arcing or by smoking.
- When transporting the Generator, turn the valve to the OFF position and keep the engine level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

Exhaust Gases are Deadly

- Engine exhaust contains CARBON MONOXIDE is a poisionous gas that can cause death. Operate the generator set outdoors where exhaust gases can be discharged directly into the open air.
- DO NOT operate the generator in confined areas where exhaust gases can accumulate.
- DO NOT operate the generator where exhaust fumes can be drawn in windows, doors or vents.

Moving Parts Can Cause Severe Personal Injury or Death

- Before performing any maintenance on the generator set, disconnect the spark plug wire (and the starting battery negative [-] cable on electric start sets) to prevent accidental starting.
- Keep hands away from moving parts.
- Do not wear loose clothing or jewelery while servicing

- any part of the generator set. Loose clothing and jewelery can become caught in moving parts. Jewelery can short out electrical contacts and cause shock or burning.
- Make sure that fasteners on the generator set are secure. Tighten supports and clamps, keep guards in position over fans, drive belts, etc.
- If adjustments must be made while the generator set in running, use extreme caution around hot manifolds, mufflers and moving parts, etc.

Electrical Shock can Cause Severe Personal Injury or Death

- Disconnect starting battery before removing protective shields or touching electrical equipment. Use rubber insulative mats placed on dry wood platforms over floors that are metal or concrete when around electrical equipment. Do not wear damp clothing (particularly wet shoes) or allow skin surface to be damp when handling electrical equipment.
- Use extreme caution when working on electrical components. High voltages can cause injury or death.
- Follow all applicable state and local electrical codes.
 Have all electrical installations performed by a qualified licensed electrician. Tag open switches to avoid accidental closure.
- Remove all unecessary grease and oilfrom the unit.
 Accumulated grease and oil can cause overheating and engine damage, and present a potential fire hazard.
- DO NOT CONNECT GENERATOR SET DIRECTLY TO ANY BUILDING ELECTRICAL SYSTEM.Hazardous voltages can flow from the generator set into the utility line. This creates a potential for electricution or prope damage. Connect only through an approved device and after building main swith is open. Consult an electrician in regard to emergency power use.

General Safety Precautions

- Have a fire extinguisher nearby. Maintain extinguisher properly and become familiar with its use. Extinguishers rated ABC by the NFPA are appropriate for all applications. Consult the local fire department for the correct type of extinguisher for various applications.
- Benzene and lead, found in some gasoline, have been identified by some state and federal agencies as causing cancer or reproductive toxicity. When checking, draining or adding gasoline, take care not to ingest, breathe the fumes, or contact gasoline.
- Used engine oils have been identified by some state or federal agencies as causing cancer or reproductive toxicity. When checking, draining or adding oil, take care not to ingest, breathe the fumes, or contact used oil ot its vapor.
- DO NOT store anything on the generator set such as oil cans, oily rags, chains, wooden blocks, etc. A fire could result or operation could be adversely affected. Keep the generator set clean and dry at all times.
- Do not work on this equipment when mentally or physically fatigued, or after consuming any alcohol or drug that makes the operation of equipment unsafe.

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Improper service or replacement of parts can result in severe personal injury and equipment damage. Service personnel must be qualified to perform electrical and/or mechanical service.

A WARNING: A

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

INTRODUCTION

This manual describes the Dunlite by Onan series portable generator sets. Study this manual and comply with all warnings and cautions. Using and maintaining the set correctly will result in longer set life, better performance, and safer operation.

The Dunlite by Onan warranty statement (generator and control only) and Honda warranty statement (engine only)

comes with the genset manuals. A generator and control service and parts manual may be ordered through an Onan dealer or distributor.

Model Identification

When contacting an Onan® dealer for parts or service, provide the model and serial numbers from the genset nameplate (Figure 1). Write the model and serial number in the boxes provided in Figure 1 to make them easy to find.

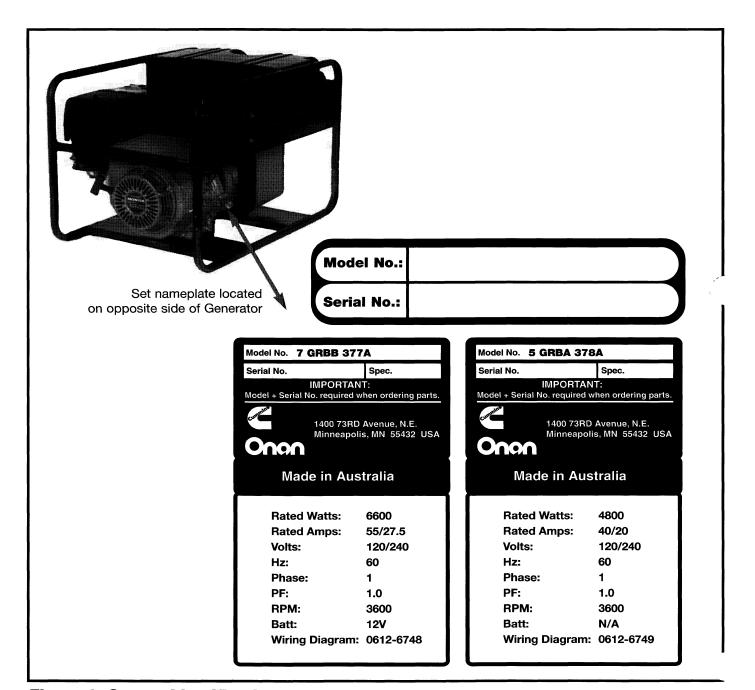


Figure 1. Genset Identification

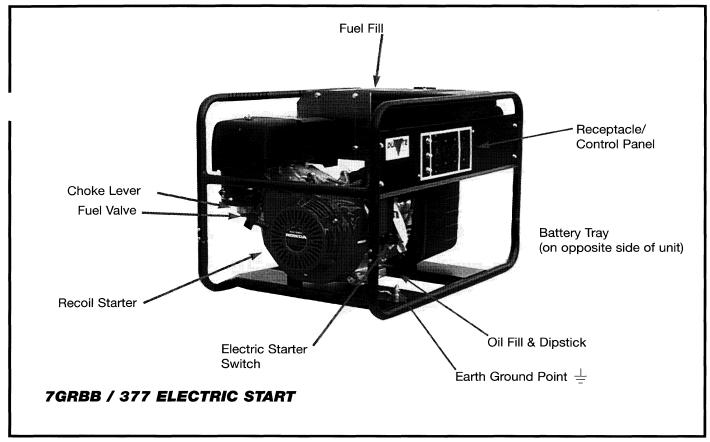


Figure 2. Component Locations

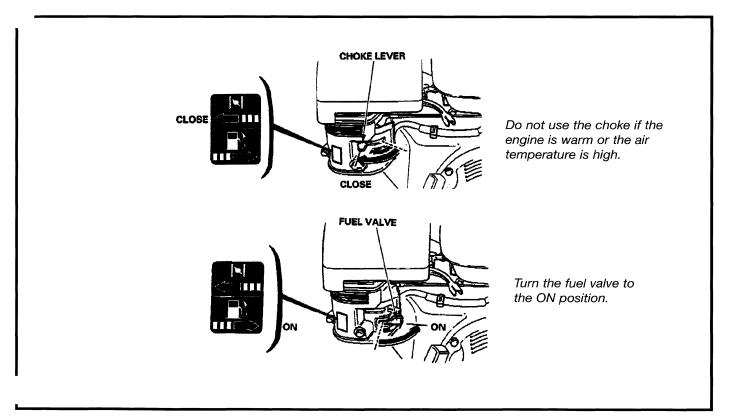


Figure 3. Component Locations

Fuel Recommendations

Use clean, fresh unleaded gasoline with an octane rating (anti-knock index) of 87 or higher.

During some times of the year only mandated "oxygenated" gasolines may be available; these are acceptable for use, but not preferable. Using leaded gasoline will result in the extra maintenance required for removing combustion chamber and spark plug deposits. Do not use gasoline or gasoline additives (de-icers) containing methanol, which can be corrosive to fuel system components.

A CAUTION Do not use gasoline or gasoline additives containing methanol. Methanol can be corrosive to fuel system components.

Avoid using highly leaded gasolines and lead additives. Extra engine maintenance will be required.

▲ WARNING Gasoline is highly flammable and can cause severe personal injury or death. Do not smoke if you smell gasoline or are near fuel tanks or gasoline-burning equipment or are in an area sharing ventilation with such equipment. Keep flames, sparks, pilot lights, electrical arcs and arc-producing equipment and all other sources of ignition well away.

Engine Oil Recommendations

Consult your Honda engine Operations Manual.

Starting Batteries

A set with an electric starter requires a 12 volt starting battery (Physical size: L180mm, W120mm, H160mm, Min 18 amp hrs). Prompt starting requires sufficient battery capacity and battery cable size. Neither cranking performance nor starter service life will be adequate with an undersized battery.

See Maintenance and any instructions available from the battery manufacturer for battery maintenance. Note that as long as the set is run regularly, the automatic battery recharging system on the engine should maintain battery charge. See OUT-OF-SERVICE PROTECTION under Starting and Running the Set regarding battery care during storage for prolonged periods.

Exhaust System

EXHAUST GAS IS DEADLY! Generator sets must never be operated inside buildings or other enclosed spaces without ample fresh air ventilation.

Do not operate near windows, doors, or vents, deadly carbon monoxide can be drawin into the occupied building.

STARTING AND RUNNING THE SET

A WARNING **Exhaust Gas is Deadly!**

Exhaust gases contain carbon monoxide, an odorless and colorless gas. Carbon monoxide is poisonous and can cause unconsciousness and death. Symptoms of carbon monoxide poisoning include:

Dizziness

• Throbbing in Temples

Nausea

Muscular Twitching

Headache

Vomiting

• Weakness and Sleepiness

Inability to Think Coherently

IF YOU OR ANYONE ELSE EXPERIENCE ANY OF THESE SYMPTOMS, GET OUT INTO THE FRESH AIR IMMEDIATELY.

If symptoms persist, seek medical attention. Shut down the engine and do not operate it until it has been inspected and repaired.

Make certain the exhaust system is properly installed. Inspect it every time the engine is started and after every eight hours of continuous operation.

Pre-Start Checks

Before the first start of the day and after every eight hours of operation perform the maintenance listed in the Periodic Maintenance Schedule of this manual. Keep a log of maintenance and the hours run, and perform any maintenance that may be due. If the set has been in storage, return the engine to service as instructed in aturning The Genset To Operation under OUT-OF-ERVICE PROTECTION in this section.

A WARNING Moving parts can cause severe personal injury or death. Hot exhaust parts can cause severe burns. Stay clear of hot or moving parts. Make sure all protective shields and guards are secure in place before starting up the equipment.

Control Panel

Figure 4 illustrates the control panels. Different sets use different receptacle panels.

Components

On/Stop Switch (Recoil-only Start Model): Allows the engine to be started and run when the switch is in the On position. Stops the engine when turned to the OFF (Switch on the sample engine is labled "ON / OFF") position.

Start/On/Stop Switch (Electric Start Model): Turning the key switch to the Start position begins engine cranking. When engine starts, release the switch and it will return to the On position. To stop the engine, turn the vitch to the Stop position.

NOTE: The engine can be recoil started when the switch is in the On position.

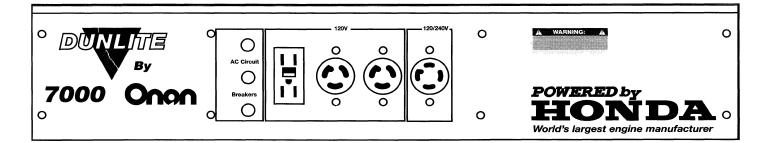
Low Oil Level: Consult your Honda engine Operations Manual.

Earth Ground Lug Terminal: Allows the generator set to be grounded to earth ground.

Additional Controls

Fuel Valve: Controls fuel flow to engine. Setting fuel valve to Open position allows fuel to flow to engine. Set fuel valve to Closed position when generator set is not in use. See Figure 3.

Choke Lever: Restricts air flow to the carburettor for starting a cold engine. See Figure 3.



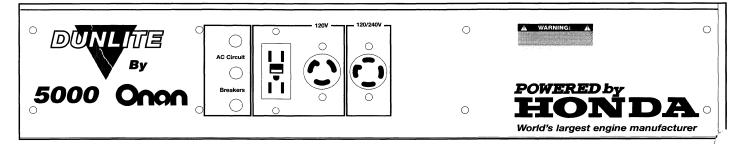


Figure 4. Control Panel

Starting Procedure

After checking the generator set as described in the Pre-Start Checks and disconnecting all loads from the generator set, follow each of the steps in sequence.

▲ WARNING Inhalation of exhaust gas can result in severe personal injury or death. Do not operate the generator set in poorly ventilated areas such as indoors, inside tanks, confined areas, depressions, or any area where exhaust gases might accumulate. Locate the exhaust outlet so that exhaust gases will not accumulate during operation.

A WARNING Due to the danger of severe personal injury or death, do not operate the generator set in hazardous areas where it might ignite gases, combustibles, or explosive materials.

▲ WARNING Generator sets present the hazard of electrical shock that can result in severe personal injury or death. Never expose the generator set to rain, snow, or similar wet conditions when operating.

A WARNING The muffler becomes very hot during and after generator set operation and can cause severe burns. Do not touch hot muffler.

WARNING The voltage surge at start-up can damage appliances (TV sets, microwave ovens, computers, etc.). Always disconnect all loads before starting the generator set.

Electric Start Models

- 1. Open the fuel valve (Figure 3). NOTE: There is also another fuel valve on the bottom of the tank.
- 2. Set the choke lever to the CLOSE position (Figure 3). If engine is warm from previous operation, do not close the choke.
- 3. Start the engine by turning the Start/On/Stop switch to the START position. Release switch when engine starts and it will return to the On position. Gradually open the choke lever as the engine warms up. Let the engine warm up for three to five minutes before applying load.
- 4. Proceed to Adding Loads in this section.

Manual Start Models

- 1. Open the fuel valve, see Figure 3. NOTE: There is also another fuel valve on the bottom of the tank. Set the choke lever to the CLOSE position (Figure 3). If the engine is warm from previous operation, do not close the choke.
- .. Move the engine switch to the On position.
- With one hand on the generator set to steady it, grip the recoil handle and pull out smoothly and quickly.

Repeat as necessary. When the engine starts, gradually open the choke lever as the engine warms up. Allow the engine to warm up for three to five minutes before applying a load.

Adding Loads

ACAUTION Continuous overloading can cause high operating temperatures that could damage the generator set. Keep the load within the nameplate rating.

Adding AC Loads

- Note the rated output of the generator set (from the generator set nameplate or the Specifications section).
- Check the load rating of each load. Table 1 lists typical wattages for common appliances and tools.
- Add the wattages of the loads and make sure that the total wattage is not more than the genset rated output. Note the following example.

Example: The 4.8 kW models have a maximum power output of 4800 watts and a rated output of 4800 watts. A 2400 watt heater, 900 watt circular saw, 750 watt drill and a 100 watt light could all be operated at the same time. To operate a second saw rated at 900 watts, it would be necessary to disconnect the 2400 watt heater.

If a motor load and another load have a combined wattage close to the rated output of the generator set, start the motor load first and let it run at normal speed before connecting the other load. Motor loads consume much more power during start up than they do when they are running (some motors draw up to three times their running load).

4. Connect the AC loads to the receptacle(s) on the control panel. Make sure the cord and plug connector have ground terminals.

A WARNING Electrical shock can cause severe personal injury or death. Cord and plug equipment must have a ground terminal to provide additional protection.

High Altitudes

Maximum power decreases roughly four percent for each 1000 feet (310 m) above sea level, after the first 1000 feet). When operating the generator set at an altitude above 1000 feet, calculate the altitude derating to determine maximum AC load capacity.

TABLE 1. APPROXIMATE POWER USAGE OF COMMON APPLIANCES

Appliance or Tool	Approximate Running Watts	
Battery Charger	Up to 800	
Bench Grinder (8in)	1400	
Circular Saw (7-1/4 in.)	900	
Coffee Maker	850	
Drill (3/8in.)	400	
Electric Water Pump	550	
Electric Broom	200-500	
Electric Drill	250-750	
Electric Stove (per element)	350-1000	
Electric Water Heater	1000-1500	
Portable Heater	1500	
Refrigerator	600-1000	
Space Heater	1000-1500	
Sump Pump	350	
Television	200-600	
Trimmer (12-in. heavy duty)	500	
See text for starting watts of motor loads.		

▲ WARNING Batteries emit a highly explosive gas that can be ignited by electrical arcing, smoking, or other ignition source. When charging batteries, connect cables to the battery before connecting cables to the generator set. This will reduce the risk of arcing at the battery that could cause an explosion. When battery charging is complete, remove the cable at the generator set before removing cables from the battery. Always remove the negative (-) cable before the positive (+) cable, and replace it after the positive cable.

Circuit Breakers

If an AC circuit breaker opens, check to see if the generator set is overloaded. If so, remove some of the load from the generator set. Reset the circuit breaker by pushing in the indicator (reset after waiting a minimum of 10 seconds after tripping).

Grounding

Receptacles

Generator set receptacles are internally grounded to the generator set frame.

Earth Ground Lug Terminal \pm

Ground the generator set to earth ground by connecting a suitable ground wire to the earth ground lug terminal on the generator set frame, then connect the other end of the wire to a suitable earth ground according to local electrical codes and conditions. (Refer to Figure 2)

Do not connect grounds from appliance loads to the Earth Ground Lug terminal. Earth Ground Lug Terminal is for connecting the generator set to earth ground only.

Oil Alert System

The Oil Alert System is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil in the crankcase can fall below a safe limit, the oil Alert System will automatically stop the engine (the engine switch will remain in the on position). NOTICE If the engine stops and will not restart, check the engine oil level.

Stopping

- 1. Remove all loads from the generator set.
- **2.** Let the generator set run for three to five minutes to allow the engine to cool down.
- 3. Close the fuel valve.
- ▲ WARNING Gasoline presents the hazard of fire or explosion that can result in severe personal injury or death. Always close the fuel valve when the engine is not in use to reduce the risk of fuel leakage.
- **4.** Stop the generator set by turning the key or Start/On/Stop or On/Stop switch in the OFF position, until the generator set comes to a complete stop.
- **4.** To avoid severe burns or fire hazards, let the engine cool before transporting it or storing indoors.

Operating Recommendations High/Low Operating Temperatures

High Operating Temperatures:

See that nothing obstructs the airflow to and from the generator set.

- **2.** Keep the engine cooling fins clean. Air housings should be properly installed and maintained.
- Use the proper viscosity oil as recommended in the oil change description.

Low Operating Temperatures:

- Use fresh gasoline and keep the tank filled to avoid condensation.
- 2. Keep the spark plug clean and correctly gapped.
- **3.** Use the proper viscosity oil as recommended in the oil change description.

Extremely Dusty or Dirty Conditions

Observe the following procedures when operating the generator set in extremely dusty or dirty conditions.

- Keep the generator set clean and do not allow dust and dirt to accumulate.
- Clean the air cleaner more often than shown in the maintenance schedule.
- 3. Keep oil and gas in dust-tight containers suitable for storage of fuels.

Generator Set Exercise

irequent operation of the generator set can result in moisture condensation in the engine and difficult starting. Moisture accumulates because the engine does not run often enough to reach normal operating temperature. This moisture can cause damage to the engine.

To prevent moisture damage, run the generator set at 25 percent capacity electrical load (see Specifications section) two hours every four weeks. A long exercise period is more effective than several short periods.

Engine Break-In

Correct engine break-in provides the ideal fitting of all internal moving metal parts, which is essential for top engine performance. For controlled engine break-in:

- Operate the equipment as it is intended to be operated. However, for the first 1-1/2 hours, if possible, operate the equipment at half the available engine power, occasionally operating at full power for brief periods. Avoid prolonged low-power operation during break-in.
- 2. Proper engine oil is especially critical during break-in because of the higher engine temperatures that can be expected. See RECOMMENDED ENGINE OIL in Introduction. Change the oil if it is not right for the temperatures during the break-in period. See Table 3. Check the oil level twice a day or after every 4 hours of operation during the first 20 hours of operation.
- 4. Change the oil and after the first 20 hours of

operation and have the valves readjusted by a qualified technician.

Out-of-Service Protection

If you are unable to exercise the generator set regularly, and the set will not be in use for more than 120 days, the following procedure is recommended. Failure to provide out-of-service protection can result in difficult starting, rough engine operation and reduced engine life.

Preparing Generator Set For Storage

- Add a fuel preservative and stabilizer, such as OnaFresh, to the fuel supply. Follow manufacturer's instructions for using the fuel additive. Run the generator at 25 percent load (see Specifications section) for 10 minutes.
- Drain the oil case while still warm. Refill the crankcase and attach a tag indicating viscosity of oil used.
- ▲ WARNING Hot oil can cause severe burns if spilled or splashed on skin. Keep fingers and hands clear when removing oil drain plug, and wear protective clothing.
- **AWARNING** Fuel additives can cause a risk of personal injury. Read and follow manufacturer's instructions.
- **A WARNING** The Hot muffler is right next to the Air Cleaner!
- 3. Restart the engine and run for 20 minutes at 25% load. Then disconnect the load. Turn the fuel supply valve off and remove the air filter. As the generator set runs out of fuel, squirt fogger, such as OnaGardTM, into the carburettor intake, then reassemble the air filter.

 OnaGard is a trademark of Onan Corporation.
- 4. When the generator set runs out of fuel and stops running, remove the spark plug. Squirt one tablespoon (about 30 ml) of clean engine oil into the spark plug hole. Turn the engine over for several revolutions. Replace the spark plug. Pull the recoil starter handle out slowly until compression is felt.
- 5. Electric start model only: Disconnect the cables from the starting battery negative (-) cable first to reduce the risk of arcing. Store battery in a cool dry place and connect to a charger every 30 days to maintain full charge.
- **WARNING** Battery electrolyte can cause severe eye damage and burns to the skin. Wear goggles, rubber gloves, and a protective apron when working with batteries.
- ▲ WARNING Batteries present the hazard of explosion, which can result in severe personal injury. Do not smoke or allow any spark, flame, pilot light, arc-producing equipment or other ignition sources around the battery area.

Cover the generator set and store in a dry protected area.

Returning the Generator Set to Operation

- 1. Perform an inspection of the generator set.
- Check tag on set to verify that oil viscosity is still correct for existing ambient temperature.
- 3. Electric start model only: Clean and check battery. Measure specific gravity (1.260 at 80F [27C]) and verify level to be at split ring. If specific gravity is low, charge until correct value is obtained. If level is low add distilled water and charge until specific gravity is correct. DO NOT OVERCHARGE.
- **A WARNING** Battery electrolyte can cause severe eye damage and burns to the skin. Wear goggles, rubber gloves, and a protective apron when working with batteries.
- **WARNING** Batteries present the hazard of explosion, which can result in severe personal injury.

- Do not smoke or allow any spark, flame, pilot light, arc-producing equipment or other ignition sources around the battery area.
- **4.** Check the condition of the air filter and check the engine oil level.
- 5. Open the fuel supply valve.
- 6. Start the generator set. Initial start-up may be slow due to oil in the cylinder. Smoke and rough operation will occur until the oil in the cylinder is exhausted. If the engine does not start, check the spark plug.
- 7. Apply 25-50 percent load to the generator set until it runs smoothly. Run the generator set for an hour.
- **8.** Remove the load and let the generator set run for three to five minutes to cool down. The generator set is now ready for operation.

MAINTENANCE

Periodic maintenance is essential for top performance. Under hot or dusty operating conditions some maintenance operations should be performed more frequently.

ep a log of maintenance performed and the hours run. cording maintenance will help you keep it regular and provide a basis for supporting warranty claims. ACCIDENTAL ACCIDENTAL STATEMENT OF THE GENERAL STATEMENT OF THE GENERAL

WARNING A hot generator set can cause severe burns. Always allow the generator set to cool before performing any maintenance or service.

Periodic Maintenance Schedule

Refer to the Honda Engine Owner's Manual, or contact your nearest Honda Service Centre.

Daily (8 Hour) Maintenance

The operator should check the following before the first start of the day and after every eight hours of operation:

- **1.** Inspect fuel lines and fittings for leaks. Repair leaks immediately.
- Look and listen for exhaust system leaks while the engine is running. Look for cracks and severe rusting in the muffler and tailpipe. Have all leaks repaired before continuing to operate the equipment.
- **WARNING** Hot exhaust parts can cause severe burns. Allow the engine time to cool before servicing the exhaust system.
- Check the engine for dirt and debris and clean the flywheel air inlet screen and cylinder cooling fins as necessary.

A clogged flywheel air inlet screen or dirty cooling fins can cause overheating and engine damage. Keep the cooling fins and air inlet screen clean..

4. Check the engine oil level. The equipment must be placed on a level surface and the engine stopped. To get an accurate reading, wait a minute or so to allow the oil to settle in the crankcase if the engine has been running. Remove the oil filler cap/dipstick and wipe it clean. Insert the filler cap/dipstick into the oil filler neck, but do not screw it in.

<u>A WARNING</u> Crankcase pressure can blow hot engine oil out the fill tube causing severe burns. Always stop the engine before removing the oil fill cap.

If the oil level indication is low, refer to the Honda Engine Owner's Manual for the appropriate grade of oil. Fill oil to the edge of the filler neck.

▲ CAUTION Too much oil can cause high oil consumption, high operating temperatures and oil foaming. Too little oil can cause severe engine damage. Keep the oil level between the Full and Add marks on the dipstick.

Reinstall the cap/dipstick after checking or adding oil, making sure the cap is properly seated.

Oil Change

NOTE: These generators do not use oil filters.

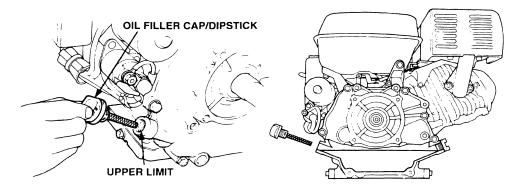
▲ WARNING State and federal agencies have determined that contact with used engine oil can cause cancer or reproductive toxicity. Do not contact or ingest. Use rubber gloves and wash exposed skin.

For scheduled oil change refer to the Honda Engine Owner's Manual.

- 1. Run the engine until it is warm. Stop the engine and disconnect the spark plug and, if so equipped, the battery (negative [-] cable). Make sure the set is level.
- **A WARNING** Accidental starting of the engine can result in severe personal injury or death. Always disconnect the spark plug and the battery (negative [-] cable) before changing oil.
- 2. Remove the oil fill cap.
- **WARNING** Crankcase pressure can blow hot engine oil out the fill opening causing severe burns. Always stop the genset before removing the oil fill cap.
- Place a pan under the oil drain opening and remove the oil drain plug. Reinstall the plug securely after the oil has drained completely.
- **4.** Refill with appropriate grade oil. See your Honda Engine Owner's Manual.

Oil Viscosity VS Temperature

Refer to the Honda Engine Owner's Manual.



- 5. Reconnect the spark plug and battery.
- **6.** Start the engine and run it for a short time while checking for oil leaks around the drain plug. Do not overtighten: tighten only as necessary to eliminate leaks.
- .. Used oil is harmful to the environment. Pour the used oil into a sealed container and deliver it to the nearest recycling center.

Air Cleaner Maintenance

Refer to your Honda Engine Owner's Manual.

Battery Care

To increase battery life, perform these routine checks and preventive measures.

▲ WARNING Accidental starting of the generator set during maintenance can cause severe personal injury or death. Disconnect both generator set starting battery cables before performing maintenance. Remove the negative (-) cable first to reduce the risk of arcing.

▲ WARNING | Ignition of explosive battery gases can cause severe personal injury. Do not smoke or allow any flame, spark, pilot light, arc-producing equipment or other ignition sources near the battery.

A WARNING Battery electrolyte can cause severe eye damage and skin burns. Wear goggles, rubber gloves, and a protective apron when working with batteries.

- Keep the battery case clean and dry. Wipe battery case with a damp cloth whenever dirt accumulates.
- 2. Make certain that the battery cable connections are clean and tight.
- 3. Identify the cable as positive (+) or negative (-) before making the connection. Always connect the negative (-) cable last to reduce the risk of arcing. Apply a light coating of petroleum jelly or non-conductive grease to battery connections to retard corrosion.
- 4. Maintain the electrolyte level by adding distilled water as needed to reach the split-level marker in the battery. The water component of the electrolyte evaporates, but the sulfuric acid component remains. For this reason, only add water to a low battery.
- 5. Use a battery hydrometer to check the specific gravity of the electrolyte in each cell. A battery should be charged if the specific gravity measures less than 1.215. When charging the battery, avoid overcharging. Stop charging battery when the electrolyte specific gravity reaches 1.260, at approximately 80°F (27°C).

Fuel Filter Replacement

▲ WARNING Fuel presents the hazard of fire or explosion that can cause severe personal injury or death. Do not permit any flame, spark, pilot light, cigarette, arcing switch or equipment, or other ignition source near the fuel system. Inspect for fuel leaks any time service is performed on the fuel system. Keep a fire extinguisher rated ABC near work area.

Clean or replace the fuel filter at the interval recommended in the Honda Engine Owner's Manual or if performance problems occur and bad fuel is suspected.

Spark Plug Maintenance and Replacement

Refer to your Honda Engine Owner's Manual.

Muffler Service

A WARNING A hot muffler can cause severe burns. Allow the generator set to cool before servicing the the muffler.

Refer to Honda Engine Owner's Manual.

MARNING Most part cleaning solvents are flammable and misuse can result in severe personal injury or death. Follow the manufacturer's recommendations. Work in a well ventilated area and do not allow any spark, flame, pilot light, cigarette, or other ignition source near the generator set. Keep a fire extinguisher rated ABC near work area.

Cleaning the Generator Set

Remove spilled oil and fuel from the generator set immediately with a dry rag. Dispose of cleaning rag properly. Do not allow dirt to accumulate on the engine cooling fins or on the control components and electrical connections. A damp cloth can be used to clean dust and dirt from the generator set. Cleaning solvents should not be used, because they can damage electrical connectors and components.

TROUBLESHOOTING

The following troubleshooting guide can be used for basic problem diagnosis. If these recommendations do not resolve the problem, contact an authorized Onan service center or Authorized Honda Dealer depending on the problem. If the engine does not start or runs poorly contact a Honda Authorized Service Centre.

If the engine runs but there is no AC output, contact an Onan Authorized Service Centre.

WARNING Many troubleshooting procedures present hazards which can result in severe personal injury or death. Only qualified service personnel with knowledge of fuels, electricity, and machinery hazards should perform service procedures. Review safety precautions on inside cover page.

Problem	Probable Cause	Solution	
FAILS TO CRANK (ELECTRIC START MODELS)	 Low battery. Bad battery connection. Bad start switch. Bad starter motor. 	Check battery electrolyte level. Clean and tighten all battery and cable connections. See Honda Engine Owner's Manual.	
CRANKS SLOWLY (ELECTRIC START MODELS)	 Low battery. Bad battery connection. Oil is too heavy. Load is connected. Bad starter motor. 	 Check battery electrolyte level. Clean and tighten all battery and cable connections. Replace with recommended oil. Disconnect load while starting. See Honda Engine Owner's Manual. 	
ENGINE WON'T START	1. Out of fuel 2. Fuel supply shutoff valve closed. 3. Carbon deposits on spark plug. 4. Low oil level. 5. No spark.	1. Add fuel. 2. Fully open fuel supply valve. 3. Remove spark plug and clean. 4. Add oil if neccessary. 5. See Honda Engine Owner's Manual.	
EXHAUSTING BLACK SMOKE	Choke is shut. Dirty air filter. Rich fuel mixture.	Open choke. Clean or replace air filter. Reduce engine oil level. See Honda Engine Owner's Manual.	
UNIT RUNS THEN STOPS	Out of fuel. Low oil level. Excess oil.	Add fuel. Add oil. Reduce engine oil level.	
UNIT RUNS THEN SURGES	 Loose or worn spark plug lead. Faulty spark plug. Dirty fuel filter or generator set at too steep of an angle. Govenor out of adjustment Carburetor. 	 Check spark plug lead connection. Remove and clean or replace. Check fuel filter and angle of generator set. Contact a Honda service center. 	
NO AC OUTPUT VOLTAGE	Open AC circuit breaker due to an overload.	Remove all loads, reset breaker, check loads for defects. Do not exceed rated load specifications.	

A WARNING A hot generator set can cause severe burns. Always allow the generator set to cool before performing any maintenance or service.

SPECIFICATIONS

Specifications	5GRBA 378A	7GRBB 377A	
AC OUTPUT			
FREQUENCY (HERTZ)	60	60	
VOLTAGE	120/240	120/240	
WATTAGE (MAX.POWER)	5000	7000	
WATTAGE (RATED POWER)	4800	6600	
CURRENT RATED (AMPS)	40/20	55/27.5	
ENGINE DETAILS			
ENGINE TYPE	GX340 HONDA	GX390 HONDA	
ENGINES SPEED (RPM)	3600	3600	
FUEL	UNLEADED	UNLEADED	
ENGINE OIL CAPACITY	1.16qt (1.1L)	1.16qt (1.1L)	
SPARK PLUG GAP	0.027-0.031in	0.027-0.031in	
IGNITION SYSTEM	TRANSISTOR MAGNETO	TRANSISTOR MAGNETO	
STARTING SYSTEM	RECOIL	RECOIL / ELECTRIC	
HORSE POWER (CC)	11hp / 337CC	13hp / 389CC	
GENERATOR DETAILS		-	
DRY WEIGHT	174 lbs	217 lbs	
DIMENSIONS			
LENGTH (in)	33.6in	33.6in	
WIDTH (in)	22.8in	22.8in	
HEIGHT (in)	22.2in	22.2in	
FUEL TANK CAPACITY	4gal	4gal	
OPERATING HRS @80% LOAD	6.7hrs @80% LOAD	5.1hrs @80% LOAD	
BATTERY REQUIREMENTS		12V	

IMPORTANT INFORMATION FOR CALIFORNIA USERS

The Dunlite series Portable Gensets meets the requirements of California's Exhaust Emissions Standards for 1995 and later for Utility and Lawn and Garden Equipment Engines.

As a California user of this engine, please be aware that unauthorized modifications or replacement of fuel, exhaust, air intake, or speed control system components that affect engine emissions are prohibited. Unauthorized modification, removal or replacement of the engine label is prohibited.

You should carefully review Operator's and other manuals and information you receive with your genset. If you are unsure that the installation, use, maintenance or service of your genset is authorized, you should seek assistance from an approved Honda engine dealer or an approved dealer for your equipment.

California engine users may use the information below as an aid in locating information related to the California Air Resources Board requirements for emissions control.

Emissions Control Information

Engine Warranty Information	The California emissions control warranty statement is located in the same packet of information as this manual when the engine is shipped from the factory.	
Engine Valve Lash	See Specifications.	
Engine Ignition Timing	See Specifications.	
Engine Fuel Requirements	The engine is certified to operate on unleaded gasoline. See Fuel Recommendations in Introduction.	
Engine Lubricating Oil Requirements	See Engine Oil Recommendations in Introduction.	
Engine Fuel Mixture Settings	These engines have precision-manufactured carburetors which are not adjustable.	
Engine Adjustments	See Starting and Running the Set.	
Engine Emission Control System	The engine emission control system consists of internal engine modifications.	