ALL POWER

Gasoline Engine

OWNER'S MANUAL

MODEL NO. GE420

Congratulations on your purchase of an All Power™ GE420 Gasoline Engine!

Thank you for purchasing a **All Power™** engine. We want to help you to get the best results from your new engine and to operate it safely. This 'Owner's Manual' will provide you with a good basic understanding of the operation and maintenance of this machine. **Every effort has been made to ensure the accuracy and completeness of the information in this package. We reserve the right to change, alter and/or improve the product and this document at any time without prior notice.**

This manual should be considered a permanent part of the engine and should remain with the engine if resold.

IMPORTANT INFORMATION

This manual contains important notations that you need to know and understand to protect YOUR SAFETY and to PREVENT EQUIPMENT PROBLEMS.

This is a safety alert symbol. This is used to alert you to potential personal injury hazard. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ WARNING ⚠

A **WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.

A **NOTE** indicates special precautions that must be taken to avoid damage to the machine or other property.

READ AND UNDERSTAND ALL SAFETY PRECAUTIONS IN THIS MANUAL BEFORE OPERATING. FAILURE TO COMPLY WITH INSTRUCTIONS IN THIS MANUAL COULD RESULT IN PERSONAL INJURY, PROPERTY DAMAGE, AND/OR VOIDING YOUR WARRANTY. ALLPOWER™ AMERICA WILL NOT BE LIABLE FOR ANY DAMAGE DUE TO FAILURE OF COMPLYING THESE INSTRUCTIONS.

Engine Type	4-Stroke, OHV, Single Cylinder
Bore x Stroke	3.5" x 2.6" (90 x 66mm)
Displacement	420cc
Compression Ratio	8:1
Net Torque	21 lbs ft (28.47Nm)
Fuel Consumption	1.4 GPH
PTO Shaft Rotation	Counterclockwise
Ignition System	Transistorized Magneto
Starting System	Recoil Starter/Electric Starter
Spark Plug	F7TC
Carburetor	Butterfly

Lubrication System	Splash
Governor System	Centrifugal Mass Type
Air Cleaner	Dual Element
Cooling System	Forced Air
Oil Capacity	1.16 Qt (1.1 L) SAE 10W-30, APISJ or SL
Fuel Tank Capacity	1.85 Gal (Unleaded gasoline with a pump octane rating of 90 or higher)
Evaporative Emissions	Low permeation hose and purge joint provided
Exhaust Emissions	Certified for use in all 50 states
Dimensions	18.7" x 16.3" x 18.7"
Dry Weight	83.6 lbs

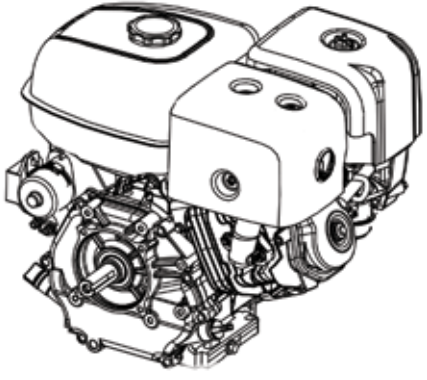
IMPORTANT SAFETY INFORMATION

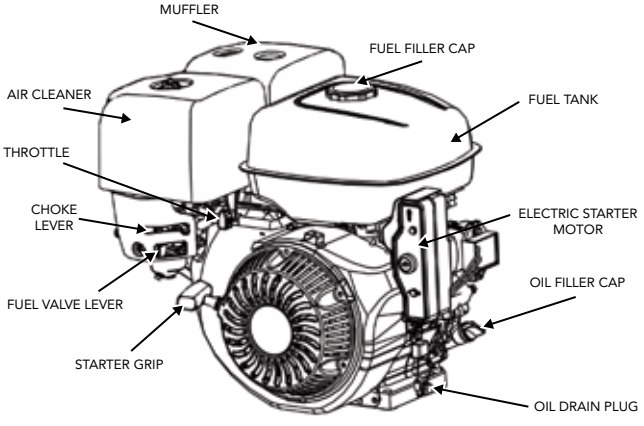
Most accidents with engines can be prevented if you follow all instructions in this manual and on the engine. Some of the most common hazards are discussed below, along with the best way to protect yourself and others.

⚠ WARNING ⚠

The warning, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that COMMON SENSE AND CAUTION ARE FACTORS WHICH CANNOT BE BUILT INTO THIS PRODUCT, BUT MUST BE SUPPLIED BY THE OPERATOR.

- Read and understand this owner's manual before operating the engine. Failure to do so could result in personal injury or equipment damage.
- Know how to stop the engine quickly and understand the operation of all controls. Never permit anyone to operate the engine without proper instructions.
- Do not allow child to operate the engine. Keep children and pets away from the area of operation.
- Do not operate engine in explosive atmospheres such as in the presence of flammable liquids, gases or dust. Engines create sparks, which may ignite the dust or fumes.
- Dress properly. Do not wear loose clothing or jewelry. Keep you hair, clothing and gloves away from moving parts. Loose clothes, jewelry and long hair can be caught in moving parts.
- Gasoline is extremely flammable and gasoline vapor can explode. Refuel outdoors in a well-ventilated area, with the engine stopped. Never smoke near gasoline and keep other flames and sparks away. Always store gasoline in an approved container. If any fuel is spilled, make sure the area is dry before starting the engine.
- The muffler becomes very hot during operating and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing it indoors.
- To prevent fire hazards and to provide adequate ventilation for stationary equipment applications, keep the engine at least 3 feet away from building walls and other equipment during operation. Do not place flammable objects close to the engine.
- Exhaust gas contains poisonous carbon monoxide. Avoid inhalation of exhaust gas. Never run the engine in a closed garage or confined area.
- Review the instructions provided with the equipment powered by this engine for any additional safety precautions that should be observed in conjunction with engine startup, shutdown, operation or protective apparel that may be needed to operate the equipment.
- Do not overload the engine. Use the correct engine for your application. The correct engine will do the job better and safer at the rate for which it is designed.





TECHNICAL INFORMATION

Battery Connections for Electric Starter (applicable types only)
Use a 12-volt battery with an ampere-hour rating of at least 18 Ah.

Be careful no to connect the battery in reverse polarity, as this will short circuit the battery charging system. Always connect the positive (+) battery cable to the battery terminal before connecting the negative (-) battery cable, so your tools cannot cause a short circuit if they touch a grounded part while tightening the positive (+) battery cable end.

⚠ WARNING ⚠

A battery can explode and cause serious injuries to anyone nearby, if you do not follow the correct procedure. Keep all spark, open flames, and smoking materials away from the battery.

Battery posts, terminals and related accessories contain lead and compounds. Wash hands after handling.

IS YOUR ENGINE READY TO GO?

For your safety, and to maximize the service life of your equipment, it is very important to take a few moments before you operate the engine to check its condition. Be sure to take care of any problem you find, or have your servicing dealer correct it, before you operate the engine.

⚠ WARNING ⚠

The warning, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that COMMON SENSE AND CAUTION ARE FACTORS WHICH CANNOT BE BUILT INTO THIS PRODUCT, BUT MUST BE SUPPLIED BY THE OPERATOR.

Before beginning your pre-operation checks, be sure the engine is level and the engine is in the OFF position.

Always check the following items before you start the engine:

Check the General Condition of the Engine

1. Look around and underneath the engine for signs of oil or gasoline leaks.
2. Remove any excessive dirt or debris, especially around the muffler and recoil starter.
3. Look for signs of damage.
4. Check that all shields and covers are in place and all nuts, bolts and screws are tightened.

Check the Engine

1. Check the engine oil level. Running the engine with a low oil level can cause engine damage.
2. The oil sensor will automatically stop the engine before the oil level falls below safe limits. However, to avoid the inconvenience of an unexpected shutdown, always check the engine oil level before startup.
3. Check the air filter. A dirty air filter will restrict air flow to the carburetor, reducing engine performance.
4. Check the fuel level. Starting with a full tank will help to eliminate or reduce operating interruptions for refueling.

Check the Equipment Powered By this Engine

Review the instructions provided with the equipment powered by this engine for any precautions and procedures that should be followed before engine startup.

⚠ WARNING ⚠

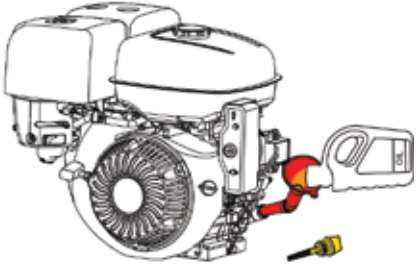
Exhaust contains poisonous carbon monoxide gas that can build up to dangerous levels in closed areas. Breathing carbon monoxide can cause unconsciousness or death.

Never run the engine in a closed, or even partly closed area where people may be present.

ENGINE OIL LEVEL CHECK

Check the engine oil level with the engine stopped and in a level position.

1. Remove the filler cap/dipstick and wipe it clean.
2. Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.



3. If the oil level is low, fill to the edge of the oil filler hole with the recommended oil.
4. Screw in the filler cap/dipstick securely.

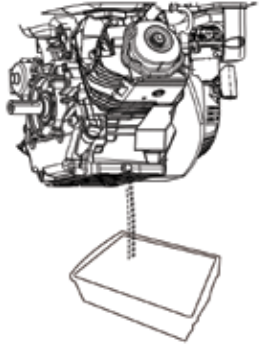
NOTE: Running the engine with a low oil level can cause engine damage.

The oil sensor will automatically stop the engine before the oil level falls below safe limit. However, to avoid the inconvenience of an unexpected shutdown, always check the engine oil level before startup.

ENGINE OIL CHANGE

Drain the used oil while the engine is warm. Warm oil drains quickly and completely.

1. Place a suitable container below the engine to catch the used oil, then remove the filler cap/dipstick, drain plug, and washer.



2. Allow the used oil to drain completely, then reinstall the drain plug, washer, and tighten drain plug securely.
3. Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash, pour it on the ground, or down a drain.
4. With the engine in a level position, fill to the outer edge of the oil filler hole with the recommended oil.

NOTE: Running the engine with a low oil level can cause engine damage.

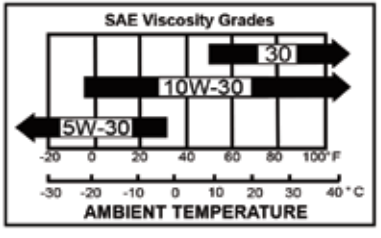
The oil sensor will automatically stop the engine before the oil level falls below safe limit. However, to avoid the inconvenience of an unexpected shutdown, always check the engine oil level before startup.

5. Screw in the filler cap/dipstick securely.

ENGINE OIL RECOMMENDATIONS

Oil is a major factor affecting performance and service life. Use 4-stroke automotive detergent oil.

SAE 10W-30 is recommended for general use. Other viscosities shown in the chart may be used when the average temperature in your area is within the recommended range.



The SAE oil viscosity and service classification are found on the label on the oil container.

REFUELING

With the engine stopped an on a level surface, remove the fuel tank cap and check the fuel level. Refill the tank if the fuel level is low.

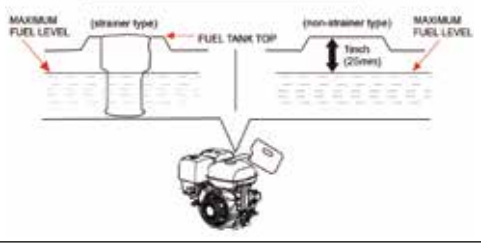
⚠ WARNING ⚠

Gasoline is highly flammable and explosive.
You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks and flame away
- Handle fuel only outdoors
- Wipe up spills immediately

Refuel in a well-ventilated area before starting the engine. If the engine has been running, allow it to cool. Refuel carefully to avoid spilling fuel.

Never re-fuel the engine inside a building where gasoline fumes may reach flames or sparks. Keep gasoline away from appliance pilot lights, barbecues, electric appliances, power tools, etc.



Spilled fuel is not only a fire hazard, it causes environmental damage. Wipe up spills immediately.

NOTE: Fuel can damage paint and plastic. Be careful not to spill fuel when filling your fuel tank.

FUEL RECOMMENDATIONS

Use unleaded gasoline with a pump octane rating of 90 or higher.

These engines are certified to operate on unleaded gasoline. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.

Occasionally you may hear a light "spark knock" or "pinging" (metallic rapping noise) while operating under heavy loads. This is no cause for concern.

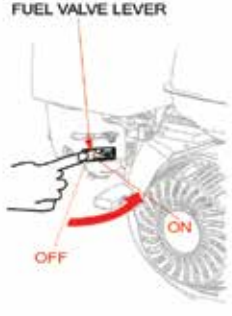
If spark knock or pinging occurs at a steady engine speed, under normal load, change brands of gasoline.

NOTE: Running the engine with persistent spark knock or pinging can cause engine damage. Before operating the engine for the first time, please review the IMPORTANT SAFETY INFORMATION.

Review the instructions provided with the equipment powered by this engine for any safety precautions that should be observed in conjunction with engine startup, shutdown, or operation.

STARTING THE ENGINE

1. Move the fuel valve to the ON position.



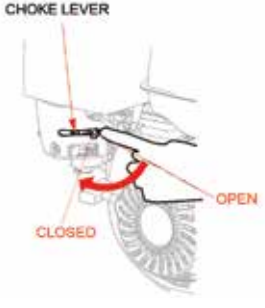
The fuel valve opens and closes the passage between the fuel tank and the carburetor.

The fuel valve lever must be in the ON position for the engine to run.

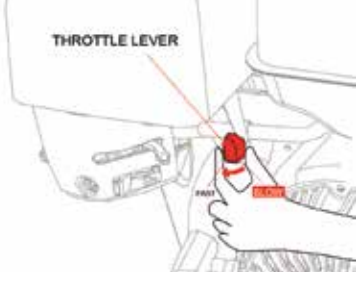
2. To start a cold engine, move the choke lever to the CLOSED position.

   To restart a warm engine, leave the choke lever in the OPEN position.

   Some engine applications use a remote-mounted choke control rather than the engine-mounted choke lever shown here.

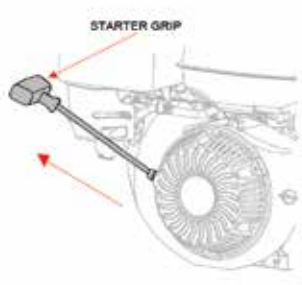


3. Move the throttle lever away from the SLOW position, about 1/3 of the way toward the FAST position.



4. Turn the engine switch to the ON position.

5. Start the engine.



RECOIL STARTER (all engine types)

Pull the starter grip lightly until you feel resistance, then pull briskly. Return the starter grip gently.

ELECTRIC STARTER

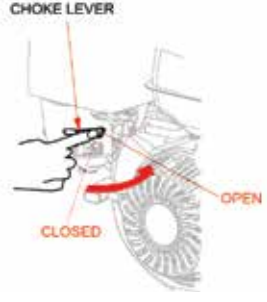
Turn the key to the START position, and hold it there until the engine starts.

If the engine fails to start within 5 seconds, release the key, and wait at least 10 seconds before operating the starter again.

NOTE: Using the electric starter for more than 5 seconds at a time will overheat the starter motor and can damage it.

When the engine starts, release the key, allowing it to return to the ON position.

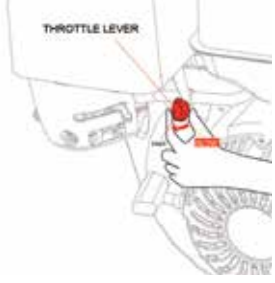
6. If the choke lever has been moved to the CLOSED position, to start the engine, gradually move it to the OPEN position as the engine warms up.



STOPPING THE ENGINE

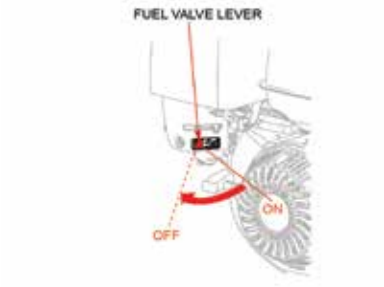
To stop the engine in an emergency, simply turn the engine switch to the OFF position. Under normal conditions, use the following procedure:

1. Move the throttle lever to the slow position.



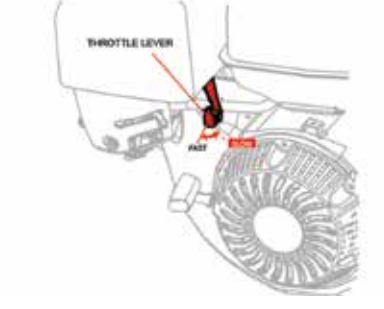
2. Turn the engine switch to the OFF position.

3. Turn the fuel valve lever to the OFF position.



SETTING ENGINE SPEED

Position the throttle lever for the desired engine speed.



For engine speed recommendations, refer to the instructions provided with the equipment powered by this engine.

SERVICING YOUR ENGINE

Maintenance Safety

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

⚠ WARNING ⚠

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed. Always follow the procedures and precautions in the owner's manual.

SAFETY PRECAUTIONS

- Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards.
  - **Carbon monoxide poisoning from Engine exhaust**
    Be sure there is adequate ventilation whenever you operate the engine.
  - **Burns From Hot Parts**
    Let the engine and exhaust system cool before touching.
  - **Injury from moving parts.**
    Do not run the engine unless instructed to do so.
- Read the instructions before you begin and make sure you have the tools and skills required.
- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks and flames away from all fuel-related parts.

Remember that your servicing dealer knows your engine best and is fully equipped to maintain and repair it.

PERIODIC MAINTENANCE

Safety is an obligation of the owner. Regular maintenance is very important to ensure the best performance and longevity of the your generator. Please see the Table below for recommended maintenance.

Item: Perform at every indicated month or operating hour interval, whichever comes first.	**Routine**	**Each Use**	**Every**			
			First Month or 20 Hrs.	**50 Hours or 3 months**	**300 Hours or 6 months**	**30 Hours or every year**
Engine Oil	Check Level	O				
	Change		O		O	
Reduction Gear Oil	Check Level	O				
	Change		O		O	
Air Filter	Check	O				
	Clean			O(1)	O*(1)	
	Replace					O**
Sediment Cup	Clean				O	
Spark Plug	Check/Adjust				O	
	Replace					O
Spark Arrester (optional Parts)	Clean				O	
Idle Speed	Check/Adjust					O(2)
Valve Clearance	Check/Adjust					O(2)
Combustion Chamber	Clean	After every 500 Hrs. (2)				
Fuel Tank & Filter	Clean				O(2)	
Fuel Tube	Check	Every 2 years (replace if necessary) (2)				

⚠ WARNING ⚠

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed. Always follow the procedures and precautions in the owner's manual.

- **Emission related items**

* **Internal vent carburetor with dual element type only**

** **Replace paper element type only. Cyclone type every 2 years or 600 hours.**

(1) Service more frequently when used in dusty areas.

(2) These items should be serviced by your servicing dealer, unless you have the proper tools and are mechanically proficient.

(3) For commercial use, log hours of operation to determine proper maintenance intervals.

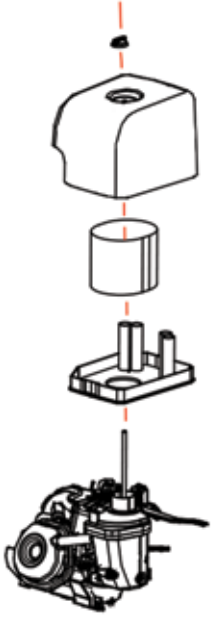
AIR CLEANER SERVICE

A dirty air filter will restrict air flow to the carburetor, reducing engine performance. If you operate the engine in very dusty areas, clean the air filter more often than specified in the MAINTENANCE SCHEDULE.

NOTE: Operating the engine without an air filter, or with a damaged air filter, will allow dirt to enter the engine, causing rapid engine wear.

Dual-Filter-Element Type

1. Remove the wing nut from the air cleaner cover and remove the cover.
2. Remove the wing nut from the air filter and remove the filter.
3. Remove the foam filter from the paper filter.
4. Inspect both air filter elements,and replace them if they are damaged. Always replace the paper air filter element at the scheduled interval.

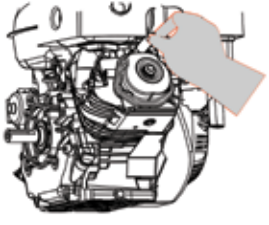


5. Clean the air filter elements if they are to be reused.
6. Wipe dirt from the inside of the air cleaner base and cover,using a moist rag. Be careful to prevent dirt from entering the air duct that leads to the carburetor.

SPARK PLUG SERVICE

Recommended spark plugs: LD F7TC

NOTE: An incorrect spark plug can cause engine damage.



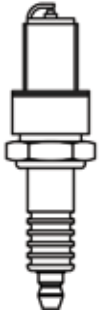
1. Disconnect the spark plug cap, and remove any dirt from around the spark plug area.

SPARK PLUG SERVICE (cont'd)

2. Remove the spark plug with a 13/16" spark plug wrench.

3. Inspect the spark plug. Replace it if the electrodes are worn heavy carbon buildup is found, or if the insulator is cracked or chipped.

4. Measure the spark plug electrode gap with a suitable gauge. The gap should be 0.028 - 0.031" (0.70 - 0.80 mm). Correct the gap, if necessary, by carefully bending the side electrode.



5. Install the spark plug carefully, by hand, to avoid cross-threading.

6. After the spark plug seats, tighten with a 13/16" spark plug wrench to compress the sealing washer.

   If re-installing the used spark plug, tighten 1/8 - 1/4 turn after the spark plug seats. If installing a new spark plug, tighten 1/2 turn after the spark plug seats.

7. Attach the spark plug cap.

NOTE: A loose spark plug can overheat and damage the engine. Over-tightening the spark plug can damage the threads in the cylinder head.

TROUBLESHOOTING GUIDE

The following troubleshooting guide is recommended for basic or common problems; if there's an issue with the generator that is not listed, **please call 1-888-896-6881.**

Problem	Probable Cause	Solution
Electric Start (applicable types): Check battery and fuse.	Battery discharged.	Recharge battery.
	Fuse burnt out.	Replace fuse.
Engine will not start or starts and runs rough.	1. Fuel valve OFF	1. Move fuel valve lever to ON
	2. Choke OPEN	2. Move choke lever to CLOSED unless engine is warm.
	3. Spark plug wire (cap) disconnected	3. Turn engine switch to ON.
	4. Faulty/bad spark plug	4. Refuel.
	5. Fuel not reaching carburetor	5. Drain fuel tank and carburetor. Refuel with fresh gasoline.
	6. Dirty air cleaner	6. Remove and inspect spark plug. Clean, gap or replace spark plug.
	7. Spark plug wet with fuel (flooded engine).	7. Remove and inspect spark plug. Dry and reinstall spark plug. Start engine with throttle lever in FAST position.
	8. Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	8. Take engine to qualified mechanic. Replace or repair faulty components as necessary.
Engine Lacks Power	1. Filter element (s) clogged.	1. Check air filter clean or replace filter.
	2. Poor connection or detective cord set	2. Drain fuel tank and carburetor. Refuel with fresh gasoline.
	3. Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	3. Take engine to a qualified mechanic. Replace or repair faulty components as necessary.

STORING YOUR ENGINE

Storage Preparation

Proper storage preparation is essential for keeping your engine trouble free and looking good. The following steps will help to keep rust and corrosion from impairing your engine's function and appearance, and will make the engine easier to start after storage.

Cleaning

If the engine has been running, allow it to cool for at least half and hour before cleaning. Clean all exterior surfaces,
touch up any damage paint, and coat other areas that may rust with a light film of oil.

NOTE: Using a garden hose or pressure washing equipment can force water into the air cleaner or muffler opening. Water in the air cleaner will soak the air filter, and water that passes through the air filter or muffler can enter the cylinder, causing damage.

NOTE: Water contacting a hot engine can cause damage, If the engine has been running, allow it to col for at least half an hour before washing.

Fuel

Gasoline will oxidize and deteriorate in storage. Old gasoline will cause hard starting, and it leaves gum deposits that clog the fuel system. If the gasoline in your engine deteriorates during storage, you may need to have the carburetor and other fuel system components serviced or replaced.

The length of time that gasoline can be left in your fuel tank and carburetor without causing functional problems will vary with such factors as gasoline blend, your storage temperatures, and whether the fuel tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration. Very warm storage temperatures accelerate fuel deterioration. Fuel deterioration problems may occur within a few months, or even less if the gasoline was not fresh when you filled the fuel tank.

You can extend fuel storage life by adding fuel stabilizer that is formulated for that purpose, or you can avoid fuel deterioration problems by draining the fuel tank and carburetor.

ADDING A FUEL STABILIZER TO EXTEND FUEL STORAGE LIFE

When adding a fuel stabilizer, fill the fuel tank with fresh gasoline. If only partially filled, air in the tank will promote fuel deterioration during storage. If you keep a container of gasoline for refueling, be sure that it contains only fresh gasoline.

1. Add fuel stabilizer following the manufacturer's instructions.

2. After adding a fuel stabilizer, run the engine outdoors for 10 minutes to be sure that treated gasoline has replaced the untreated gasoline in the carburetor.

3. Stop the engine, and move the fuel valve lever to the OFF position.

DRAINING THE FUEL TANK AND CARBURETOR

1. Place an approved gasoline container below the carburetor, and use a funnel to avoid spilling fuel.
2. Remove the carburetor drain bolt and sediment cup, then move the fuel valve lever to the ON position.

⚠ WARNING ⚠

Gasoline is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks and flame away
- Handle fuel only outdoors
- Wipe up spills immediately

3. After all the fuel has drained into the container, re-install the drain bolt and sediment cup. Tighten them securely.

Engine Oil

1. Change the engine oil.

Engine Cylinder

2. Remove the spark plug.
3. Pour a tablespoon (5 - 10 cc) of clean engine oil in to the cylinder.
4. Pull the starter rope several times to distribute the oil in the cylinder.
5. Re-install the spark plug.
6. Pull the starter rope slowly until resistance is felt and the notch on the starter pulley aligns with the hole at the top of the recoil starter cover. This will close the valves so moisture cannot enter the engine cylinder. Return the starter rope gently.

Storage Precautions

If your engine will be stored with gasoline in the fuel tank and carburetor, it is important to reduce the hazard of gasoline vapor ignition. Select a well-ventilated storage area away form any appliance that operates with a flame, such as a furnace, water heater, or clothes dryer. Also avoid any area with a spark-producing electric motor, or where power tools are operated.

If Possible, avoid storage areas with high humidity, because that promotes rust and corrosion.

Unless all fuel has been drained from the fuel tank, leave the fuel valve lever in the OFF position to reduce the possibility of fuel leakage.

Position the equipment so the engine is level. Tilting can cause fuel or oil leakage.

With the engine and exhaust system cool, cover the engine to keep out dust. A hot engine and exhaust system can ignite or melt some materials. Do not use sheet plastic as a dust cover. A non-porous cover will trap

Storage Precautions (cont'd)

moisture around the engine, promoting rust and corrosion.

If equipped with a battery for electric starter types, recharge the battery once a month while the engine is in storage. This will help to extend the service life of the battery.

Removal from Storage

Check your engine as described in the *BEFORE OPERATION* chapter of this manual. If the fuel was drained during storage preparation, fill the tank with fresh gasoline. If you keep a container of gasoline for refueling, be sure that it contains only fresh gasoline. Gasoline oxidizes and deteriorates over time, causing hard starting.

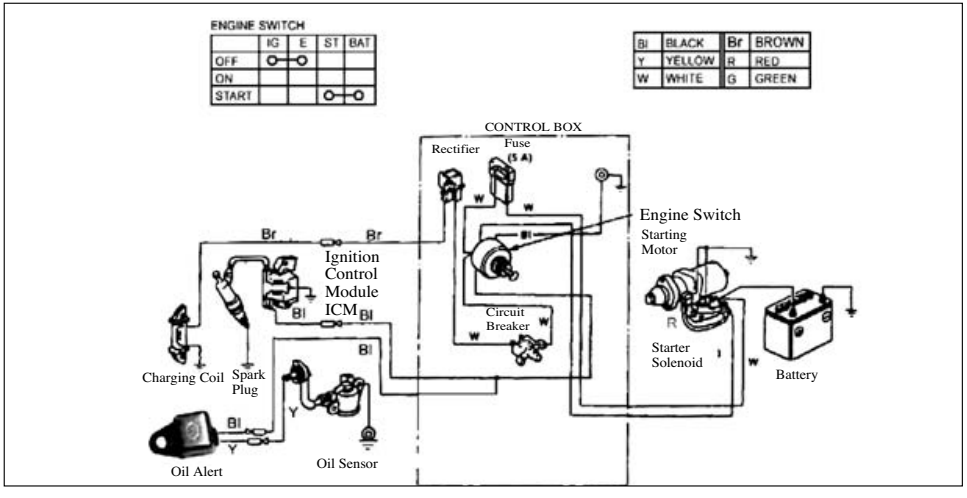
If the cylinder was coated with oil during storage preparation, the engine may smoke briefly at startup. This is normal.

TRANSPORTING

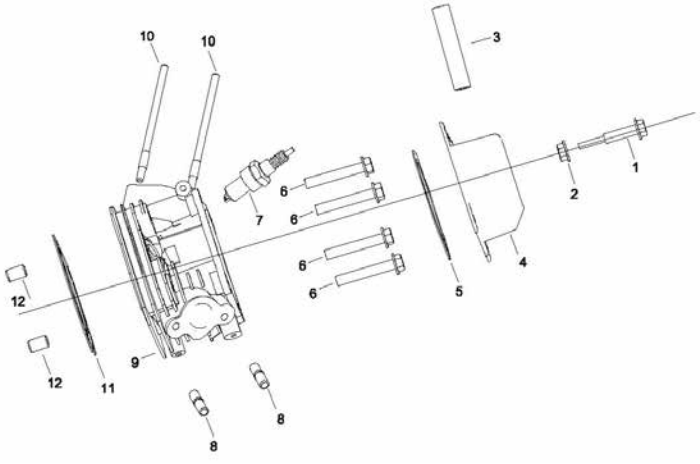
If the engine has been running, allow it to cool for at least 15 minutes before loading the engine-powered equipment on the transport vehicle. A hot engine and exhaust system can burn you and can ignite some materials.

Keep the engine level when transporting to reduce the possibility of fuel leakage.
Turn the fuel lever to the OFF position.

Wiring Diagram
Oil Sensor/Electric Starter Types

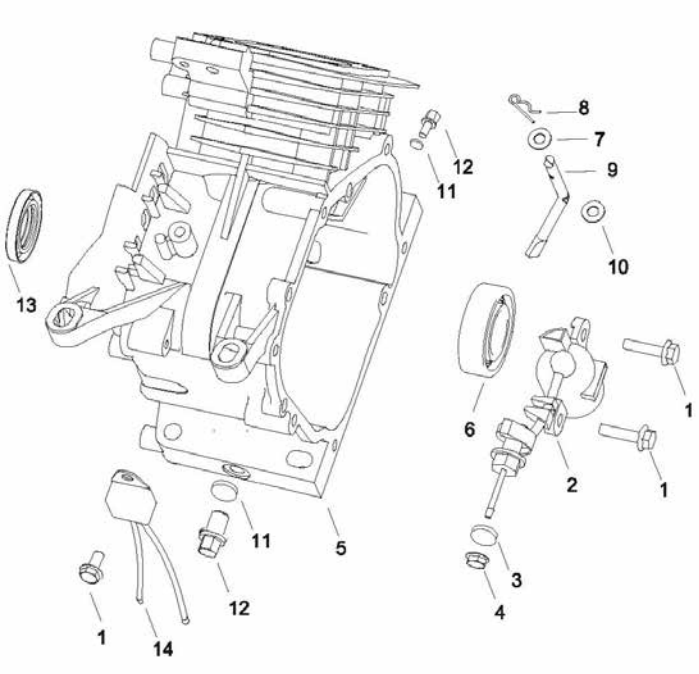


CYLINDER HEAD SYSTEM ASSY



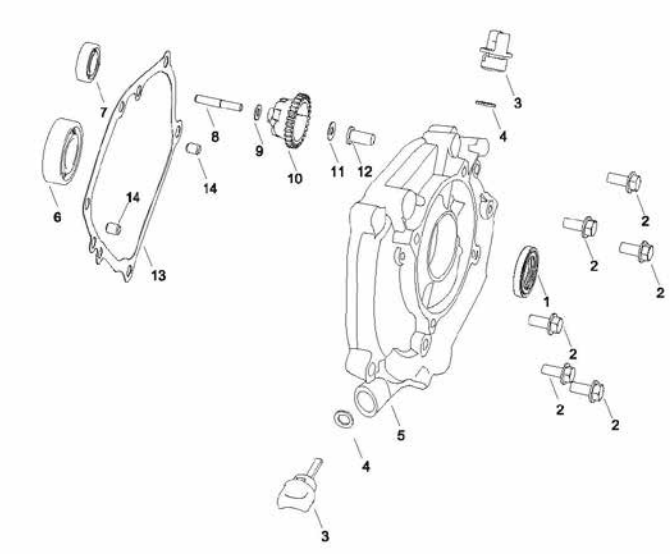
A		
APA #	**DESCRIPTION**	**PART #**
GE420-A-01-JD	HEAD COVER COMP BOLT	JF420-A-01
GE420-A-02-JD	HEAD COVER WASHER COMP	JF420-A-02
GE420-A-03-JD	TUBE	JF420-A-03
GE420-A-04-JD	HEAD COVER COMP	JF420-A-04
GE420-A-05-JD	HEAD COVER PACKING	JF420-A-05
GE420-A-06-JD	FLANGE BOLT (M10 X 80)	JF420-A-06
GE420-A-07-JD	SPARK PLUG	JF420-A-07
GE420-A-08-JD	EXHAUST PIPE STUD BOLT	JF420-A-08B
GE420-A-09-JD	CYLINDER HEAD COMP	JF420-A-09
GE420-A-10-JD	CARBURETOR STUD BOLT	JF420-A-10B
GE420-A-11-JD	CYLINDER HEAD SEALING PAD	JF420-A-11
GE420-A-12-JD	DOWEL PIN (ϕ10 X ϕ12 X 20)	JF420-A-12

CYLINDER BARREL



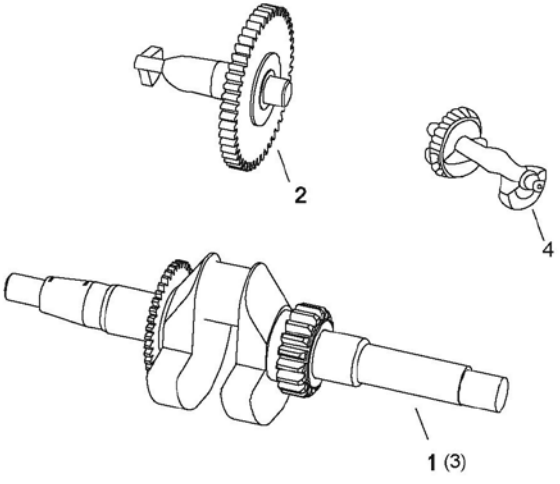
B		
APA PART #	**DESCRIPTION**	**PART #**
GE420-B-01-JD	FLANGE BOLT (M6 X 14)	JF420-B-01
GE420-B-02-JD	OIL LEVEL SWITCH ASSY	JF420-B-02
GE420-B-03-JD	O-RING (14 MM)	JF420-B-03
GE420-B-04-JD	FLANGE NUT (10 MM)	JF420-B-02
GE420-B-05-JD	CRANK CASE	JF420-B-02
GE420-B-06-JD	BALL BEARING (6207)	JF420-B-04
GE420-B-07-JD	WASHER (ϕ8.3 X ϕ17 X 1)	JF420-B-05
GE420-B-08-JD	LOCK PIN (10 MM)	JF420-B-06
GE420-B-09-JD	GOVERNOR ARM SHAFT	JF420-B-07
GE420-B-10-JD	OIL SEAL (ϕ8 X ϕ14 X 5)	JF420-B-08
GE420-B-11-JD	DRAIN PLUG WASHER (12 MM)	JF420-B-09
GE420-B-12-JD	DRAIN PLUG BOLT	JF420-B-10
GE420-B-13-JD	OIL SEAL (ϕ35 X ϕ52 X 8)	JF420-B-11
GE420-B-14-JD	OIL PROTECTOR	JF420-B-12

CRANKCASE COVER SYSTEM ASSY



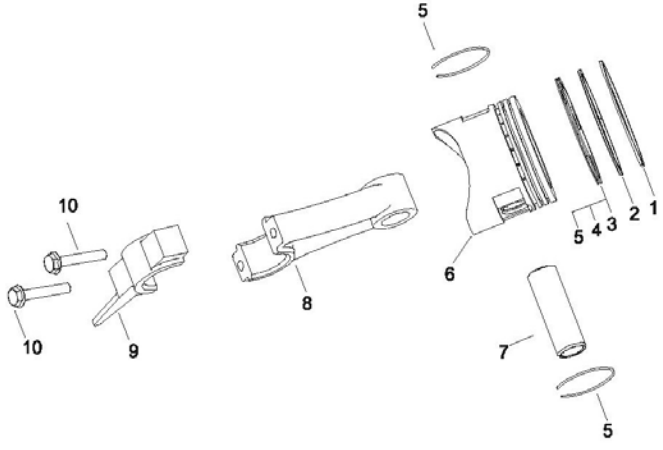
C		
APA PART #	**DESCRIPTION**	**PART #**
GE420-C-01-JD	OIL SEAL (ϕ35 X ϕ52 X 8)(ENGINE)	JF340-B-11
GE420-C-02-JD	FLANGE BOLT (M8 X 35)(ENGINE)	JF420-C-02
GE420-C-03-JD	OIL SCALE (ENGINE)	JF420-C-03
GE420-C-04-JD	OIL SCALE SEAL RING (ENGINE)	JF420-C-04
GE420-C-05-JD	CRANKCASE COVER(ENGINE)	JF420-C-05
GE420-C-06-JD	BALL BEARING (6207)(ENGINE)	JF420-C-06
GE420-C-07-JD	BALL BEARING (6207)(ENGINE)	JF420-C-07
GE420-C-08-JD	SLIDER SHAFT (ENGINE)	JF420-C-08
GE420-C-09-JD	GOV. GEAR WASHER (6 MM)(ENGINE)	
GE420-C-10-JD	GOVERNOR GEAR (ENGINE)	
GE420-C-11-JD	SLIDER WASHER (6 MM)(ENGINE)	
GE420-C-12-JD	GOVERNOR SLIDER (ENGINE)	
GE420-C-13-JD	CRANKCASE COVER PAD (ENGINE)	
GE420-C-14-JD	DOWEL PIN (8 X 12)(ENGINE)	

CRANKSHAFT SYSTEM ASSY



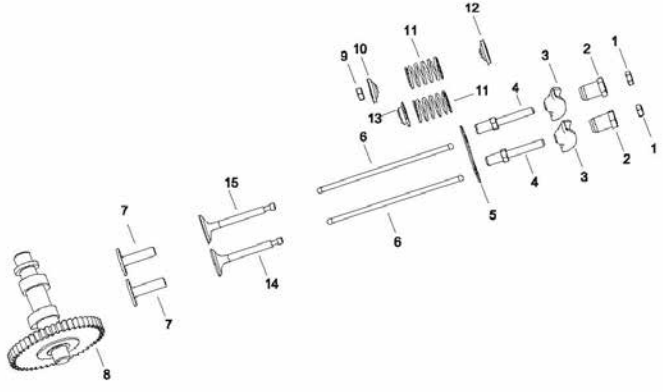
D		
APA PART #	**DESCRIPTION**	**PART #**
GE420-D-01-JD	CRANKSHAFT COMP (TAPPER SHAFT)	JF340-D-02
GE420-D-02-JD	BALANCER WEIGHT	JF340-D-03
GE420-D-03-JD	CRANKSHAFT COM (KEY SHAFT)	JF340-D-03
GE420-D-04-JD	BALANCER SHAFT ASSEMBLY	JF340-D-04

PISTON AND CONNECTING ROD SYSTEM ASSY



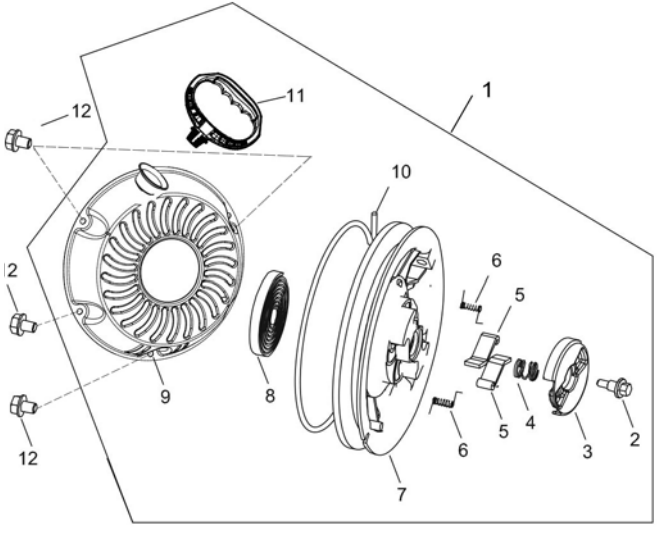
E		
APA PART #	**DESCRIPTION**	**PART #**
GE420-E-01-JD	COMPRESSION RING A	JF420-E-01
GE420-E-02-JD	COMPRESSION RING B	JF420-E-02
GE420-E-03-JD	OIL RING A	JF420-E-03
GE420-E-04-JD	OIL RING B	JF420-E-04
GE420-E-05-JD	PISTON PIN CLIP (20 MM)	JF420-E-05
GE420-E-06-JD	PISTON	JF420-E-05
GE420-E-07-JD	PISTON PIN	JF420-E-06
GE420-E-08-JD	CONNECTING ROD	JF420-E-07
GE420-E-09-JD	CONNECTING COVER	JF420-E-08
GE420-E-10-JD	CONNECTING ROD BOLT	JF420-E-09

RECOIL STARTER SYSTEM ASSY



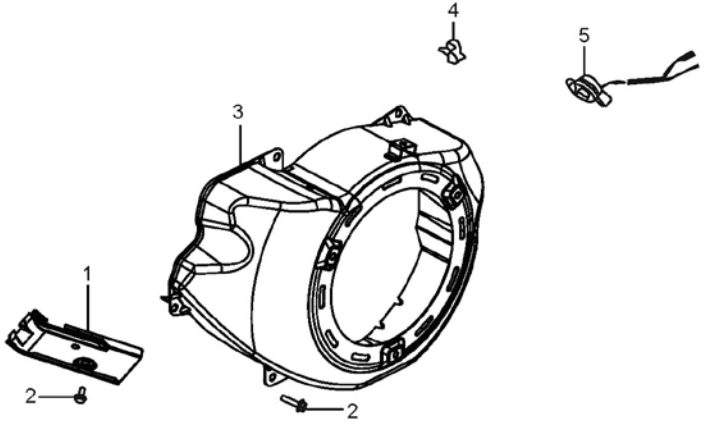
F		
APA PART #	**DESCRIPTION**	**PART #**
GE420-F-01-JD	LOCKNUT	JF340-F-01
GE420-F-02-JD	ADJUSTING NUT	JF340-F-02
GE420-F-03-JD	ROCKER ARM	JF340-F-03
GE420-F-04-JD	PIVOT BOLT (M8)	JF340-F-04
GE420-F-05-JD	PUSH ROD GUIDE PLATE	JF340-F-05
GE420-F-06-JD	PUSH ROD	JF340-F-06
GE420-F-07-JD	CAM FOLLOWER	JF340-F-07
GE420-F-08-JD	CAMSHAFT	JF340-F-08
GE420-F-09-JD	EX. VALVE HELMET	JF340-F-06
GE420-F-10-JD	EX. VALVE SPRING RETAINER	JF340-F-07
GE420-F-11-JD	VALVE SPRING	JF340-F-08
GE420-F-12-JD	VALVE SPRING SEAT	JF340-F-09
GE420-F-13-JD	IN. VALVE SPRING RETAINER	JF340-F-10
GE420-F-14-JD	IN. VALVE	JF340-F-11
GE420-F-15-JD	EX. VALVE	JF340-F-12

RECOIL STARTER SYSTEM ASSY



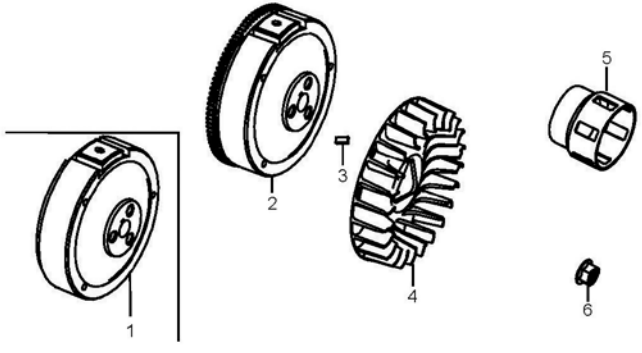
G		
APA PART #	**DESCRIPTION**	**PART #**
GE420-G-01-JD	RECOIL STARTER ASSY	JF340-G-01
GE420-G-02-JD	CENTER SCREW	JF340-G-02
GE420-G-03-JD	SPRING RETAINER	JF340-G-03
GE420-G-04-JD	FRICTION SPRING	JF340-G-04
GE420-G-05-JD	STARTER RATCHET	JF340-G-05
GE420-G-06-JD	RETURN SPRING	JF340-G-06
GE420-G-07-JD	RECOIL STARTER REEL	JF340-G-07
GE420-G-08-JD	RECOIL STARTER SPRING	JF340-G-08
GE420-G-09-JD	RECOIL STARTER CASE COMP	JF340-G-09
GE420-G-10-JD	RECOIL STARTER ROPE	JF340-G-10
GE420-G-11-JD	STARTER GRIP	JF340-G-11
GE420-G-12-JD	FLANGE BOLT (M6X8)	JF340-G-12

FAN COVER SYSTEM ASSY



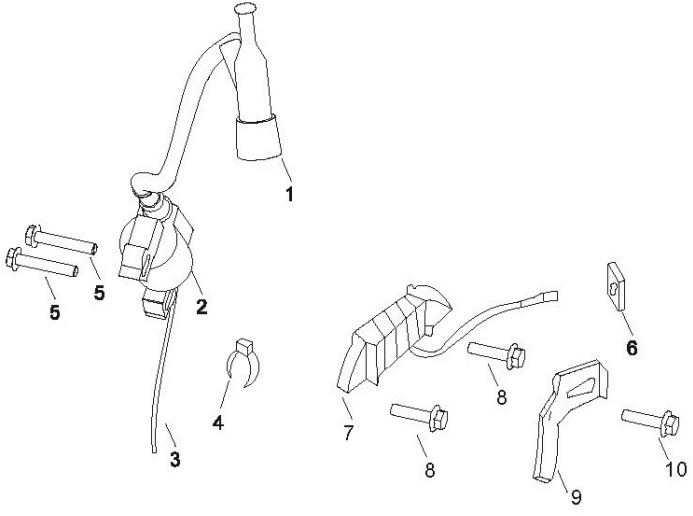
H		
APA PART #	**DESCRIPTION**	**PART #**
GE420-H-01-JD	SHROUD (ENGINE)	JF340-H-01
GE420-H-02-JD	FLANGE BOLT (M6 X 12) (ENGINE)	JF340-H-02
GE420-H-03-JD	FAN COVER COMP (ENGINE)	JF340-H-03
GE420-H-04-JD	CORD CLAMPER (ENGINE)	JF340-H-04
GE420-H-05-JD	ENGINE SWITCH ASSY (ENGINE)	JF340-H-05

FLYWHEEL SYSTEM ASSY



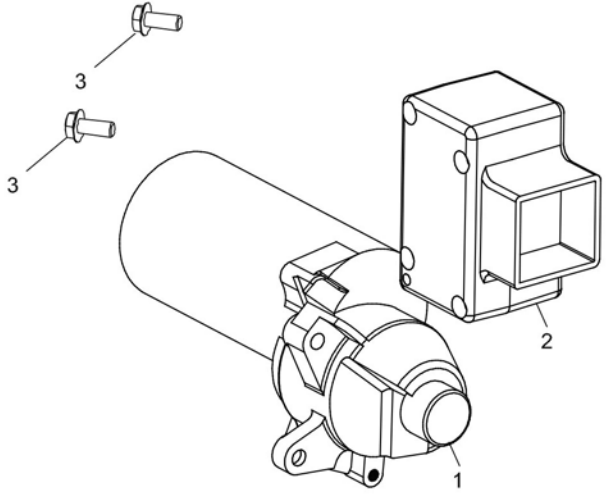
I		
APA #	**DESCRIPTION**	**PART #**
GE420-I-01-JD	FLYWHEEL (ENGINE)	JF340-I-01A
GE420-I-02-JD	FLYWHEEL (ENGINE)	JF340-I-01B
GE420-I-03-JD	KEY	JF340-I-02
GE420-I-04-JD	COOLING FAN (ENGINE)	JF340-I-03
GE420-I-05-JD	START PULLEY	JF340-I-04
GE420-I-06-JD	LOCKING NUT	JF340-I-05

IGNITION SYSTEM ASSY



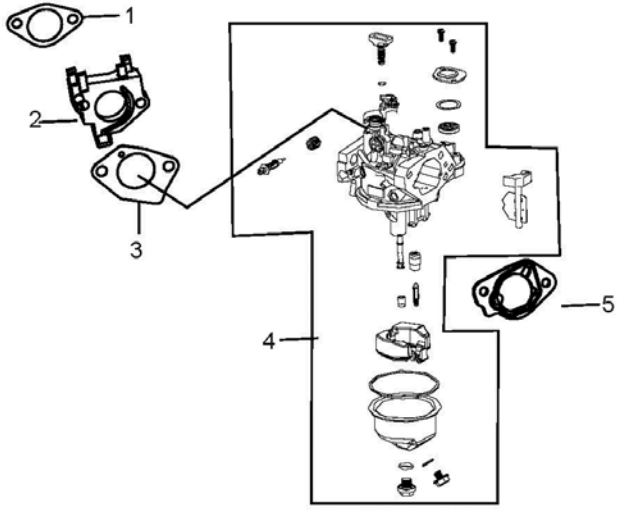
J		
APA PART #	**DESCRIPTION**	**PART #**
GE420-J-01-JD	SPARK PLUG CAP ASSY	JF340-J-01
GE420-J-02-JD	IGNITION COIL ASSY	JF340-J-02
GE420-J-03-JD	STOP SWITCH CORD	JF340-J-03
GE420-J-04-JD	STOP SWITCH CORD HOLDER	JF340-J-04
GE420-J-05-JD	FLANGE BOLT (M6 X 25)	JF340-J-05
GE420-J-06-JD	CORD GROMMET	JF340-J-06
GE420-J-07-JD	CHARGE COIL ASSY	JF340-J-07
GE420-J-08-JD	FLANGE BOLT (M6 X 40)	JF340-J-08
GE420-J-09-JD	CORD CLAMPER	JF340-J-09
GE420-J-10-JD	FLANGE BOLT (M6 X 20)	JF340-J-10

STARTER MOTOR SYSTEM ASSY



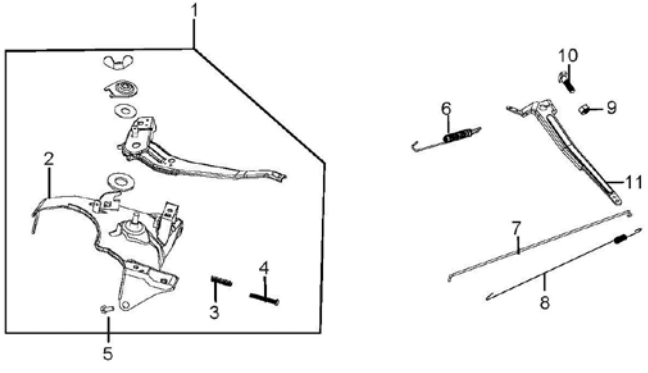
K		
APA #	**DESCRIPTION**	**PART #**
GE420-K-01-JD	UNIT STARTER MOTOR	JF340-K-01
GE420-K-02-JD	CONTACTOR ASSY	JF340-K-02
GE420-K-03-JD	FLANGE BOLT (M8 X 35)	JF340-K-03

CARBURETOR SYSTEM ASSY



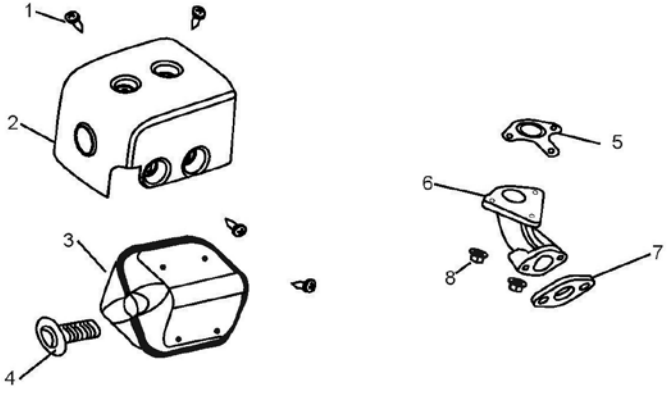
L		
APA PART #	**DESCRIPTION**	**PART #**
GE420-L-01	INTAKE PIPE GASKET	JF340-L-01
GE420-L-02	CARBURETOR INSULATING PLATE	JF340-L-02
GE420-L-03	CARBURETOR PAPER GASKET	JF340-L-03
GE420-L-04	CARBURETOR ASSY	JF340-L-04A
GE420-L-05	CARBURETOR IRON GASKET	JF340-L-05

CONTROL SYSTEM ASSY



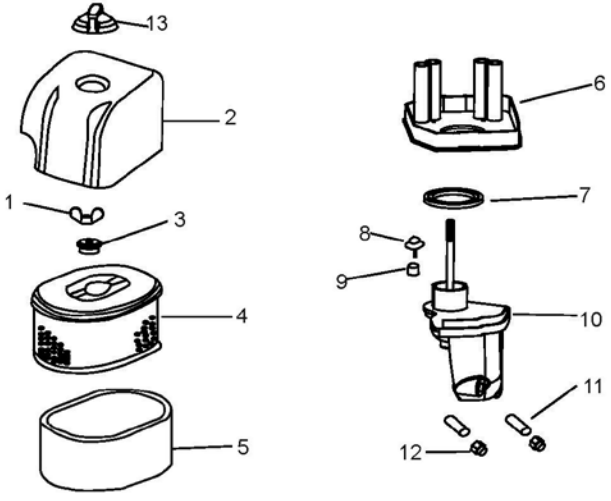
M		
APA PART #	**DESCRIPTION**	**PART #**
GE420-M-01-JD	CONTROL ASSY	JF340-M-01A
GE420-M-02-JD	CONTROL BASE COMP	JF340-M-02A
GE420-M-03-JD	CONTROL ADJUSTING SPRING	JF340-M-03
GE420-M-04-JD	CROSS POND SCREW (M5 X 34)	JF340-M-04
GE420-M-05-JD	FLANGE BOLT (M6 X 14)	JF340-M-05
GE420-M-06-JD	GOVERNOR SPRING	JF340-M-06
GE420-M-07-JD	THROTTLE RETURN SPRING	JF340-M-07
GE420-M-08-JD	GOVERNOR ROD	JF340-M-08
GE420-M-09-JD	FLANGE NUT (M6)	JF340-M-09
GE420-M-10-JD	GOVERNOR ARM BOLT (M6)	JF340-M-10
GE420-M-11-JD	GOVERNOR ARM	JF340-M-11

MUFFLER SYSTEM ASSY



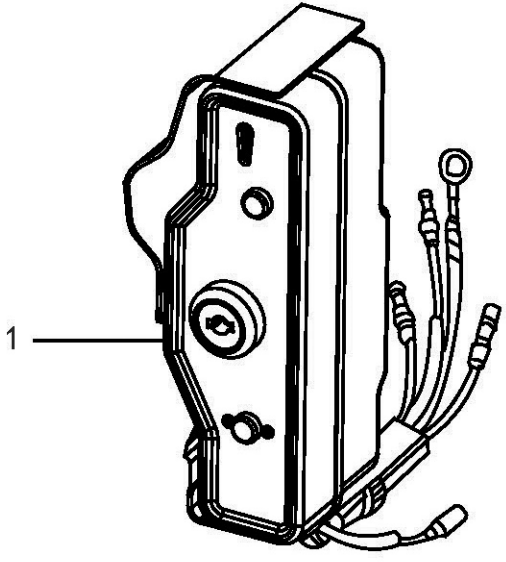
N		
APA PART #	**DESCRIPTION**	**PART #**
GE420-N-01-JD	TAPPING SCREW (M5X8)	JF340-N-01
GE420-N-02-JD	MUFFLER PROTECTOR COMP	JF340-N-02
GE420-N-03-JD	MUFFLER COMP	JF340-N-03
GE420-N-04-JD	SPARK ARRESTER (SILENT)	JF340-N-04
GE420-N-05-JD	EX. PIPE GASKET	JF340-N-05
GE420-N-06-JD	EX. PIPE COMP.	JF340-N-06
GE420-N-07-JD	MUFFLER GASKET	JF340-N-07
GE420-N-08-JD	FLANGE NUT (M8)	JF340-N-08

AIR CLEANER



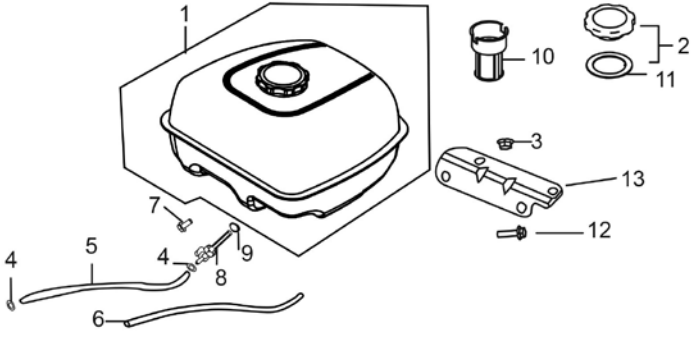
O		
APA PART #	**DESCRIPTION**	**PART #**
GE420-O-01-JD	AIR CLEANER COVER NUT A	JF340-O-01
GE420-O-02-JD	AIR CLEANER COVER	JF340-O-02
GE420-O-03-JD	AIR CLEANER GROMMET	JF340-O-03
GE420-O-04-JD	AIR CLEANER ELEMENT	JF340-O-04
GE420-O-05-JD	OUTER FILTER	JF340-O-05
GE420-O-06-JD	SILENCER NOSE	JF340-O-06
GE420-O-07-JD	ELBOW PACKING	JF340-O-07
GE420-O-08-JD	FLANGE BOLT (M6 X 20)	JF340-O-08
GE420-O-09-JD	AIR CLEANER COLLAR	JF340-O-09
GE420-O-10-JD	AIR CLEANER ELBOW COMP.	JF340-O-10
GE420-O-11-JD	AIR CLEANER COLLAR	JF340-O-11
GE420-O-12-JD	FLANGE NUT (M8)	JF340-O-12
GE420-O-13-JD	AIR CLEANER NUT B	JF340-O-13
GE420-O-14-JD	AIR FILTER COMP	JF340-O-14

CONTROL BOX ASSY



P		
APA PART #	**DESCRIPTION**	**PART #**
GE420-P-01-JD	ELECTRIC SWITCH CONTROL BOX ASSY	JF240-P-01

FUEL TANK SYSTEM ASSY



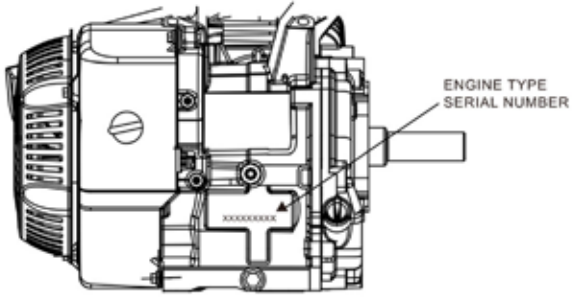
Q		
APA #	**DESCRIPTION**	**PART #**
GE420-O-01-JD	FUEL TANK COMP	JF290-Q-01
GE420-O-02-JD	FUEL FILLER CAP COMP	JF290-Q-02
GE420-O-03-JD	FLANGE NUT (M6)	JF290-Q-03
GE420-O-04-JD	TUBE CLIP	JF290-Q-04
GE420-O-05-JD	FUEL TUBE A	JF290-Q-05
GE420-O-06-JD	FUEL TUBE B	JF290-Q-06
GE420-O-07-JD	FLANGE BOLT (M6 X 25)	JF290-Q-07
GE420-O-08-JD	FLANGE TANK JOINT	JF290-Q-08
GE420-O-09-JD	O-RING (14 MM)	JF290-Q-09
GE420-O-10-JD	FUEL FILTER	JF290-Q-10
GE420-O-11-JD	FUEL FILTER CAP PACKING	JF290-Q-11
GE420-O-12-JD	FLANGE BOLT (M8 X 20)	JF290-Q-12
GE420-O-13-JD	BRACKET	JF290-Q-13

CONSUMER INFORMATION

MODEL NO.	
SERIAL NO.	
DATE OF PURCHASE	
PLACE OF PURCHASE	

Record your engine's model number, serial number, date of purchase and place of purchase in the spaces provided. Have this information available when ordering parts and when making technical or warranty inquiries.

Note: It is recommended that you place the completed sticker on the unit itself where it can be seen (e.g., gas tank.)



Machine Identification
The machine serial number is stamped in the location as shown.

LIMITED WARRANTY

All Power warrants to the original purchaser who uses the product in a consumer application (personal, residential or household usage) that all products covered under this warranty are free from defects in material and workmanship for one year from the date of purchase. All products covered by this limited warranty which are used in commercial applications (i.e. income producing) are warranted to be free of defects in material and workmanship for 90 days from the date of original purchase. Products covered under this warranty include air compressors, air tools, service parts, pressure washers and generators.

All Power will repair or replace, at All Power sole option, products or components which have failed within the warranty period. Service will be scheduled according to the normal work flow and business hours at the service center location, and the availability of replacement parts. All decisions of All Power with regard to this limited warranty shall be final.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RESPONSIBILITY OF ORIGINAL PURCHASER (initial User): To process a warranty claim on this product, DO NOT return item to the retailer. The product must be evaluated by an Authorized Warranty Service Center. For the location of the nearest Authorized Warranty Service Center call 888.896.6881.

Retain original cash register sales receipt as proof of purchase for warranty to work.

Use reasonable care in the operation and maintenance of the product as described in the Owner's Manual(s).

Deliver or ship the product to the Authorized Warranty Service Center. Freight costs, if any must be paid by the purchaser.

If the purchaser does not receive satisfactory results form the Authorized Warranty Service Center, the purchaser should contact All Power.

THIS WARRANTY DOES NOT COVER:

- Merchandise sold as reconditioned, used as rental equipment, or floor or display models.
- Merchandise that has become damaged or inoperative because of ordinary wear, misuse, cold, heat, rain, excessive humidity, freeze damage, use improper chemicals, negligence, accident, failure to operate the product in accordance with the instructions provided in the Owner's Manual(s) supplied with the product, improper maintenance, the use of accessories or attachments not recommended by All Power, or unauthorized repair or alterations.
- Repair and transportation costs of merchandise determine not to be defective.
- Costs associated with assembly, required oil, adjustments or other installation and start-up costs.
- Expendable parts or accessories supplied with the product which are expected to become inoperative or unusable after a reasonable period of use.
- Merchandise sold by All Power which has been manufactured by and identified as the product of another company, such as gasoline engines. The product manufacturer's warranty, if any, will apply.
- ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECTS, FAILURE OR MALFUNCTION OF THE PRODUCT IS NOT COVERED BY THIS WARRANTY. Some states do not allow the exclusion, so it may not apply to you.
- IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

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