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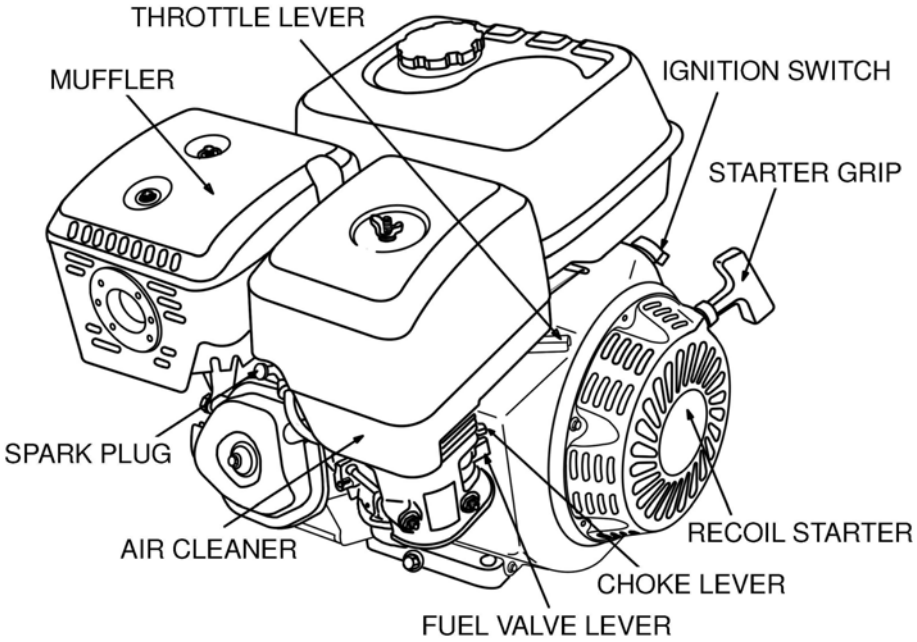
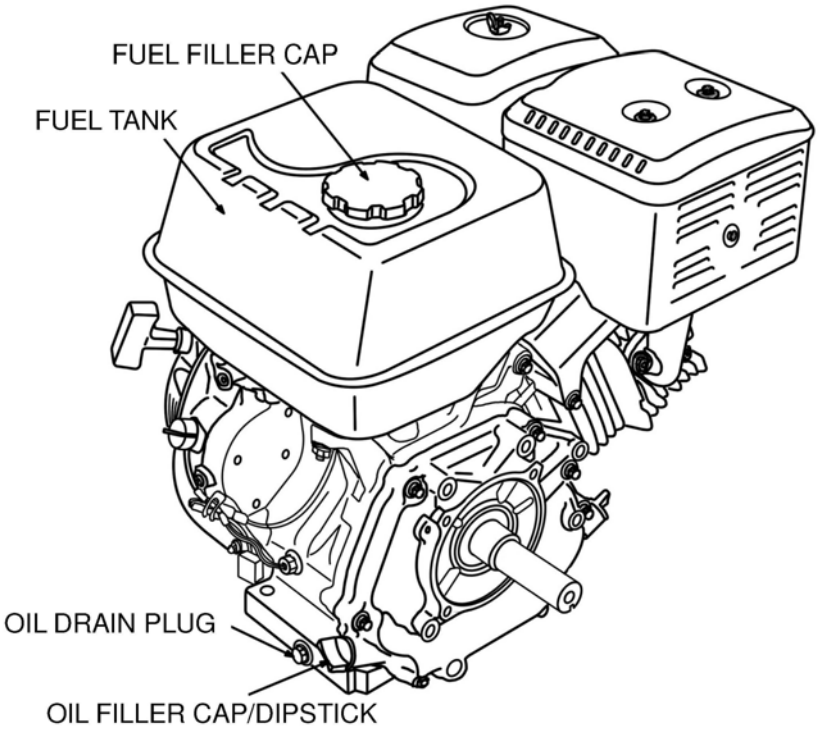

THROTTLE LEVER
MUFFLER
IGNITION SWITCH
STARTER GRIP
SPARK PLUG
AIR CLEANER
RECOIL STARTER
CHOKE LEVER
FUEL VALVE LEVER

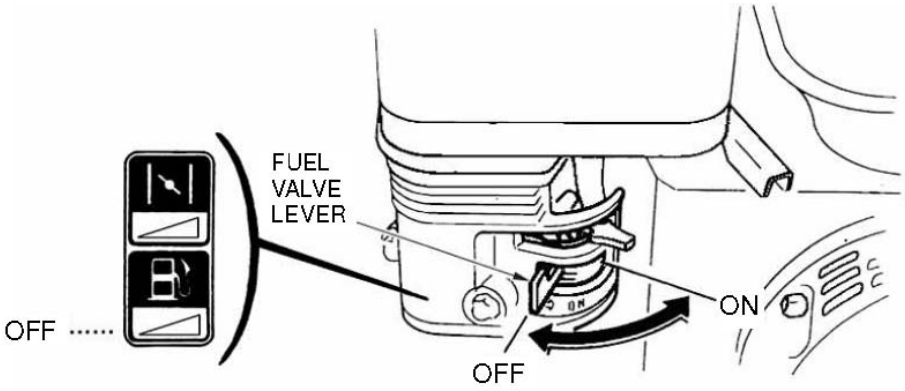

FUEL FILLER CAP
FUEL TANK
OIL DRAIN PLUG
OIL FILLER CAP/DIPSTICK

GB

3. CONTROLS

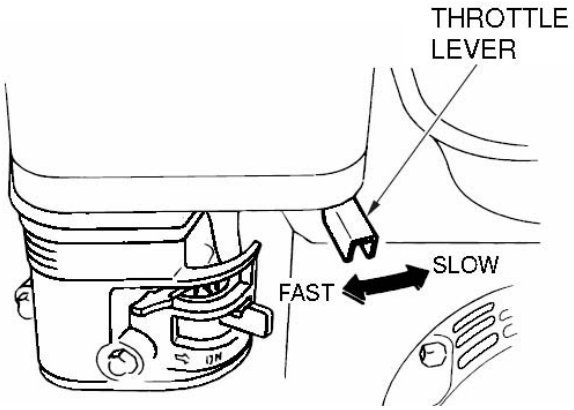
Fuel Valve Lever

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.
When the engine is not in use, leave the fuel valve lever in the OFF position to prevent carburetor flooding and to reduce the possibility of fuel leakage.



Throttle Lever

The throttle lever controls engine THROTTLE LEVER speed.
Moving the throttle lever in the directions shown makes the engine run faster or slower.



Engine Switch

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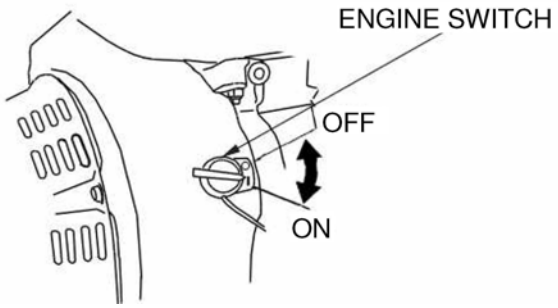
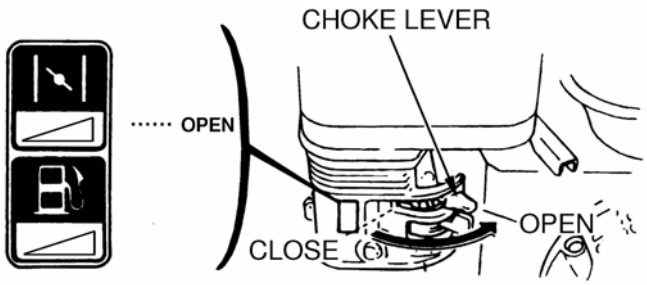
The engine switch enables and disables the ignition system.
The engine switch must be in the ON position for the engine to run.
Turning the engine switch to the OFF position stops the engine.

ALL ENGINE EXCEPT D TYPE



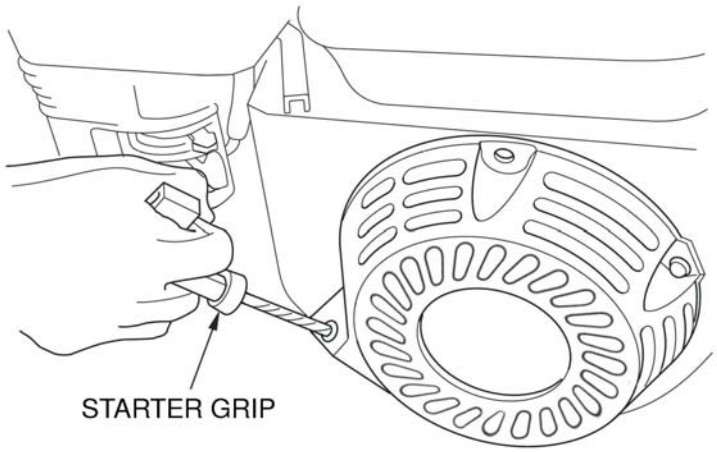
Choke Lever

The choke lever opens and closes the choke valve in the carburetor.
The CLOSE position enriches the fuel mixture for starting a cold engine.
The OPEN position provides the correct fuel mixture for operation after starting, and for restarting a warm engine.
Some engine applications use a remotely-mounted choke control rather than the engine-mounted choke lever shown here.



Recoil Starter Grip

Pulling the starter grip operates the recoil starter to crank the engine.



4. CHECK BEFORE OPERATION

For the safety of the operator and bystanders, and to maximize the service life of this equipment, it is very important to take a few moments before operating the engine to check its overall condition. Be sure to correct any detected problems, or have a servicing dealer correct it, before operating the engine.

⚠WARNING

Improperly maintaining this engine, or failing to correct a problem before operation, could cause a malfunction in which the operator could be seriously injured. Always perform a preoperation inspection before each operation, and correct any problem.

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

Check the General Condition of the Engine

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

tightened.

Check the Engine

Check the engine oil level. Running the engine with a low oil level can cause engine damage. The Oil Alert system (applicable engine types) 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. Check the air filter. A dirty air filter will restrict air flow to the carburetor, reducing engine performance. 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.

GB

5. OPERATION

SAFE OPERATING PRECAUTIONS

Before operating the engine for the first time, please review the ***IMPORTANT SAFETY INFORMATION*** and the section titled ***BEFORE OPERATION***.

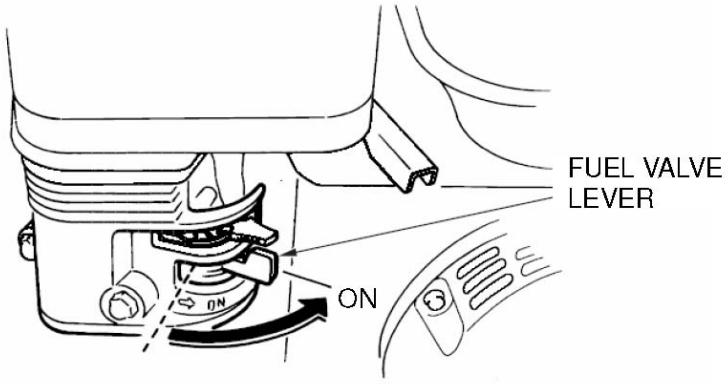
⚠WARNING

Carbon monoxide gas is toxic. Breathing it can cause unconsciousness and even kill you. Avoid any areas or actions that Expose you to carbon monoxide

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 lever to the ON position.



2. To start a cold engine, move the choke lever to the CLOSE position.
   To restart a warm engine, leave the choke lever in the OPEN position.
   Some engine applications use a remotely-mounted choke control rather than the engine-mounted choke lever shown here.

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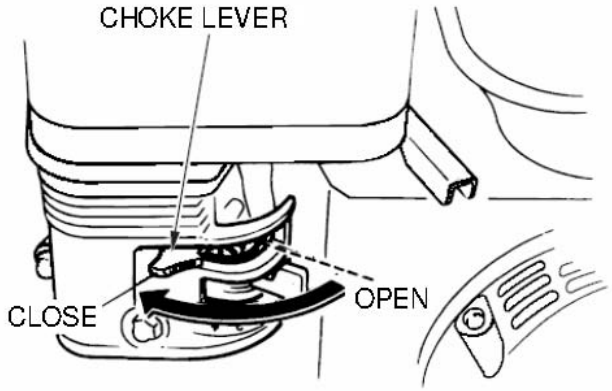
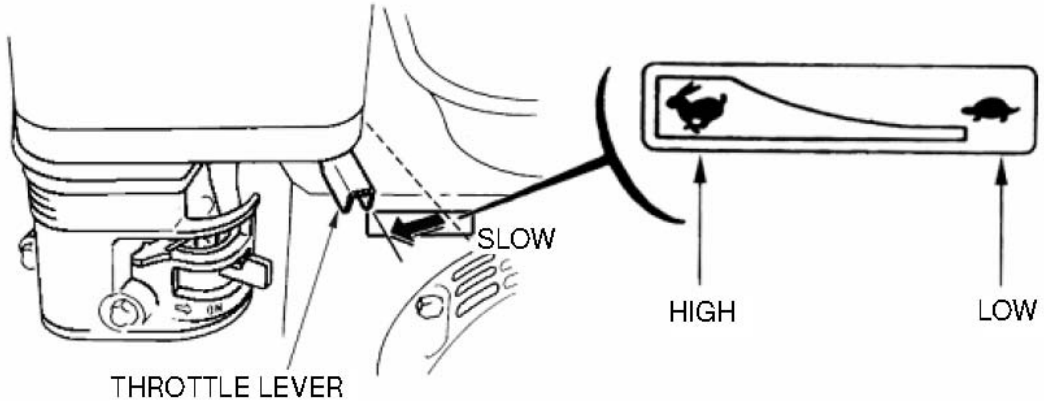
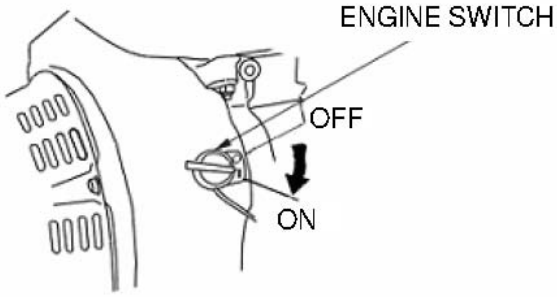


3. Move the throttle lever away from the SLOW position, about 1/3 of the way toward the FAST position.

   Some engine applications use a remotely-mounted throttle control rather than the engine-mounted throttle lever shown here.



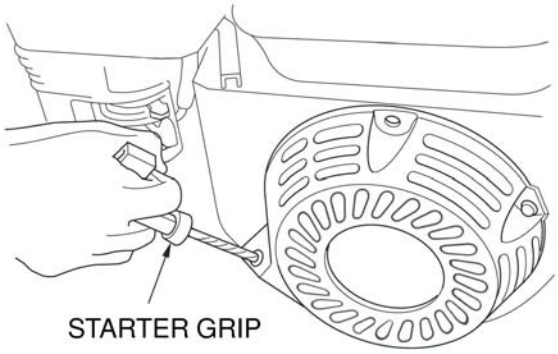
4. Turn the engine switch to the ON position.



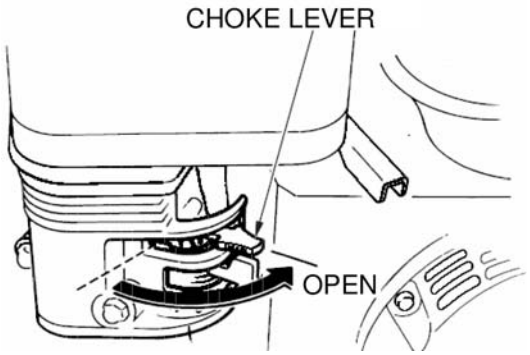
5. Operate the starter.

   RECOIL STARTER (all engine types):
   Pull the starter grip lightly until resistance is felt, then pull starter briskly.

   Return the starter grip gently.



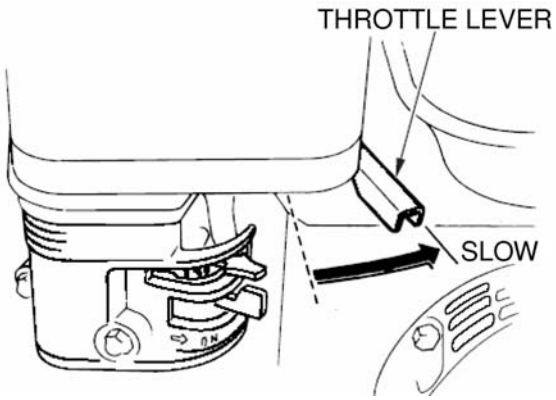
6. If the choke lever has been moved to the CLOSE position to start the engine, gradually move it to the OPEN position as the engine warms up.



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.
   Some engine applications use a remotely-mounted throttle control rather than the engine-mounted throttle lever shown here.



2. Turn the engine switch to the OFF position.

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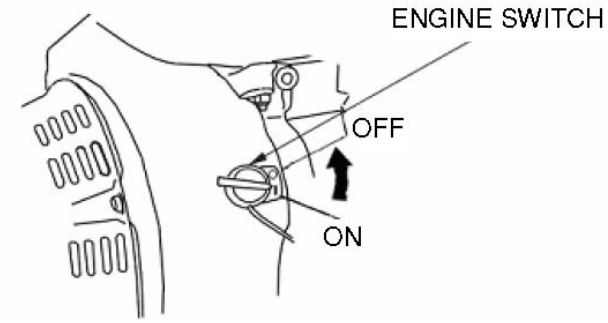
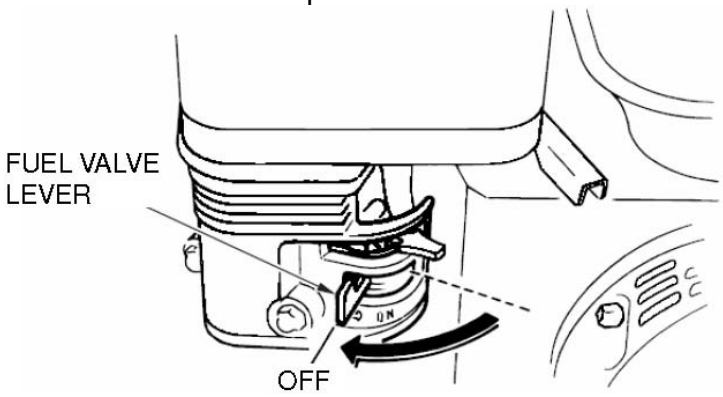


3. Turn the fuel valve lever to the OFF position.

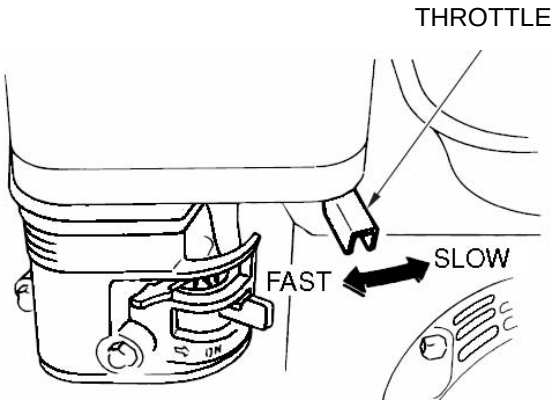


SETTING ENGINE SPEED

Position the throttle lever for the desired engine speed.

Some engine applications use a remotely-mounted throttle control rather than the engine-mounted throttle lever shown here.

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



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6. MAINTENANCE

THE IMPORTANCE OF MAINTENANCE

Proper maintenance is essential for safe, economical, and trouble-free operation. Proper maintenance will also help reduce air pollution.

⚠ WARNING

Improperly maintaining this engine, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed. Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

To help properly care for this engine, the following pages include a maintenance schedule, routine inspection procedures, and simple maintenance procedures using basic hand tools. Other service tasks that are more difficult, or require special tools, are best handled by professionals and are normally performed by a technician or qualified mechanic.

The maintenance schedule applies to normal operating conditions. If operating the engine under abnormal conditions, such as sustained high-load or high-temperature operation, or use in extremely wet or dusty conditions, consult a servicing dealer for further recommendations.

MAINTENANCE SAFETY

The following are important safety precautions. However, these precautions cannot warn the operator of every conceivable hazard that can arise in performing maintenance. Only the person performing maintenance can decide whether or not she/he should perform a given maintenance task.

⚠ WARNING

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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 any maintenance or repairs are administered. This will eliminate several potential hazards:

  - **Carbon monoxide poisoning from engine exhaust.**
    Be sure there is adequate ventilation whenever the engine is being operated or maintained.
  - **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 maintaining the engine, and ensure the operator has the required tools and skills necessary for maintenance.
- To reduce the possibility of fire or explosion, be careful when working around gasoline. Only use a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks and flames away from all fuel-related parts.

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

To ensure the best quality and reliability, use only new, genuine parts or their equivalents for repair and replacement.

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MAINTENANCE SCHEDULE

REGULAR SERVICE PERIOD Performed at every indicated month or operating hour interval, whichever comes first. ITEM			Each use	First month or 20 hrs	Every 3 month or 20 hrs	Every 6 month or 100 hrs	Every year or 300 hrs
●	Engine oil	Check level	○				
		Change		○		○	
●	Air cleaner	Check	○				
		Clean			○(1)		
		Replace					○☆
●	Sediment CUP	Clean				○	
●	Spark plug	Check-Clean				○	
		Replace					○
	Spark arrester (Optional parts)	Clean				○	
●	Idle speed	Check-Adjust					○ (2)
●	Valve clearance	Check-Adjust					○(2)
●	Fuel tank and strainer	Clean					○(2)
●	Combustion Chamber	Clean	After every 300 hrs (2)				
●	Fuel line	Check	Every 2 years (Replace if necessary) (2)				

● Emission-related items.

☆ Replace the paper element type only.

(1) Service more frequently when used in excessively dusty area.

(2) These items should be serviced by a servicing dealer unless operator has the proper tools and is mechanically proficient. Refer to manual for service procedures.

REFUELING

Fuel tank capacities

120F: 2.5 L 160F(D), 160F(D)-B, 160F(D)-C: 3.6 L

200F(D), 200F(D)-B, 200F(D)-C: 3.6 L

240F(D), 240F(D)-B, 240F(D)-C: 6.0 L

270F(D), 270F(D)-B, 270F(D)-C: 6.0 L

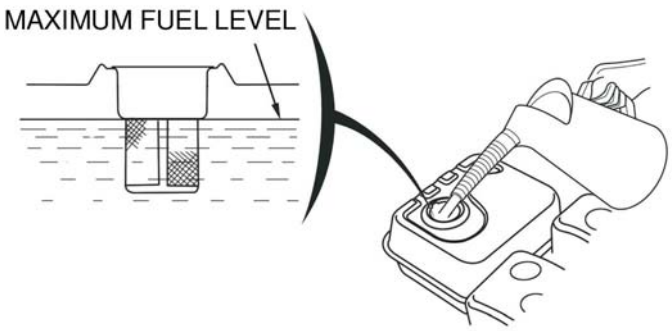
340F(D), 340F(D)-D, 390F(D), 390F(D)-D: 6.5 L

With the engine stopped, 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. Do not fill above the fuel strainer shoulder. After refueling, tighten the fuel tank cap securely.

Never refuel 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.

NOTICE ***Fuel can damage paint and plastic. Be careful not to spill fuel when filling the fuel tank. Damage caused by spilled fuel is not covered under warranty.***

FUEL RECOMMENDATIONS

Use unleaded gasoline with a pump octane rating of 86 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.

The operator may occasionally 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. If “spark knock” or “pinging” still persists, see an authorized servicing dealer.

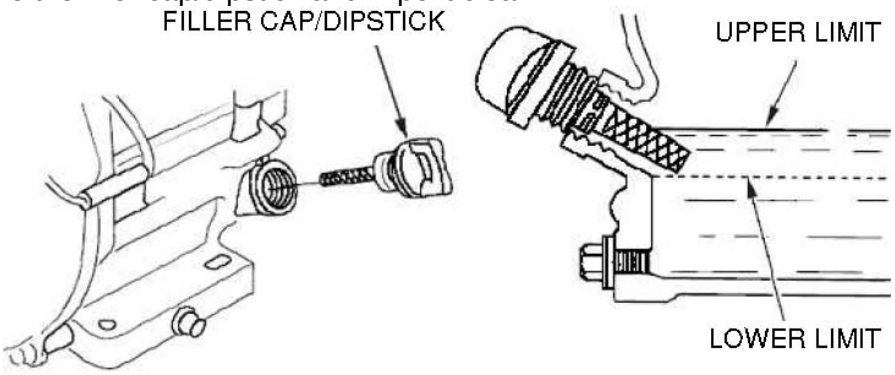
NOTICE

Running the engine with persistent “spark knock” or “pinging” can cause engine damage.

Running the engine with persistent “spark knock” or “pinging” is considered misuse, and the Distributor’s Limited Warranty does not cover parts damaged by misuse.

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.

NOTICE *Running the engine with a low oil level can cause engine damage.*

The Oil Alert system (applicable engine types) 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, and then remove the filler cap/dipstick and the drain plug.
3. Allow the used oil to drain completely, and then reinstall the drain plug, and tighten it securely.

Please dispose of used motor oil in a manner that is compatible with the environment. It is highly recommended that suggest you take used oil be collected in a sealed container and taken to a local recycling centre or service station for reclamation. Do not throw oil in the trash; pour it on the ground; or down a drain.

3. With the engine in a level position, fill to the outer edge of the oil filler hole with the recommended oil.

Engine oil capacities:

120F: 0.63 US qt (0. 6 L)

160/200F(D), 160/200F(D)-B, 160/200F(D)-C: 0.63 US qt (0.60 L)

240/270/340/390F(D), 240/270F(D)-B: 1.2 US qt (1.1 L)

240/270 F(D)-C, 340/390F(D)-D: 1.2 US qt (1.1 L)

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

The Oil Alert system (applicable engine types) will automatically stop the engine before the oil level falls below the safe limit.

However, to avoid the inconvenience of an unexpected shutdown, fill to the upper limit, and check the oil level regularly.
4. Screw in the filler cap/dipstick securely.

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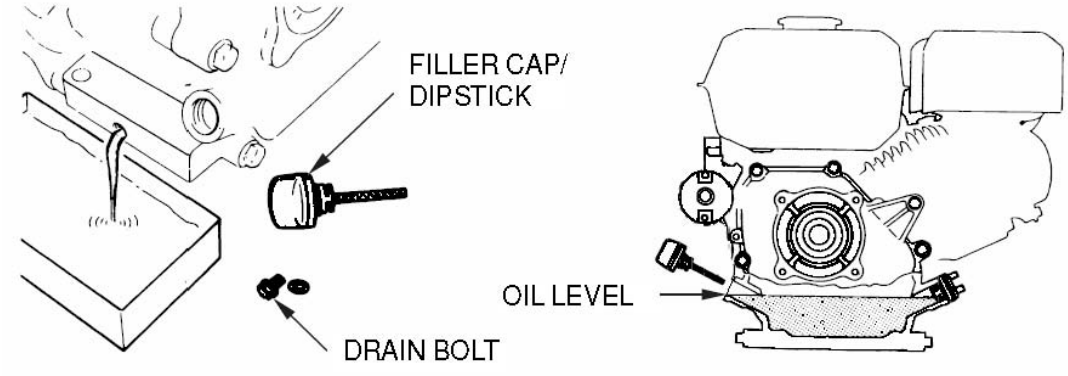
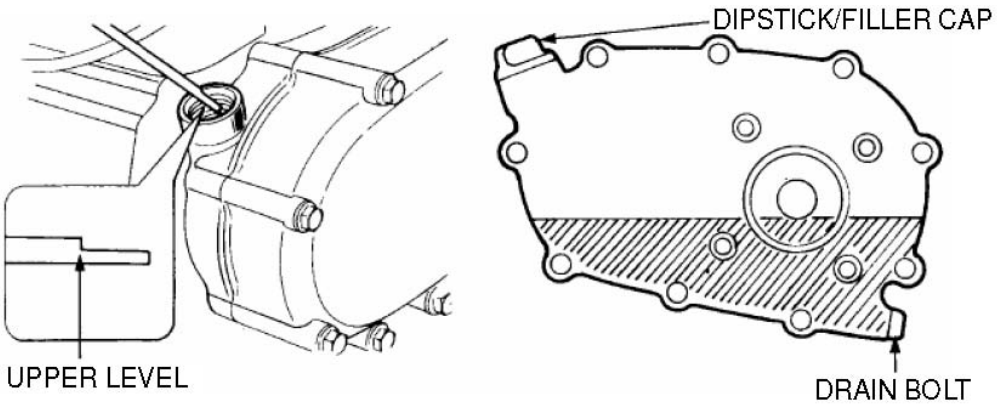


REDUCTION GEAR OIL (Only on equipped models)

(1/2 reduction with automatic centrifugal clutch)

1.Remove the oil filler cap and wipe the dipstick clean.
2.Insert the dipstick into the filler neck but do not screw it in.
3.If the level is low, fill to the upper level mark with the same oil recommended for the engine.

Oil capacity of 160/200/240/270F(D)-B: 500 cc

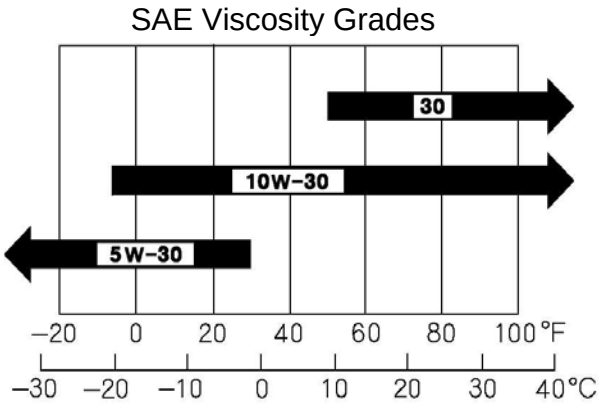


SERVICING YOUR ENGINE

ENGINE OIL RECOMMENDATIOS

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 the operating area is within the

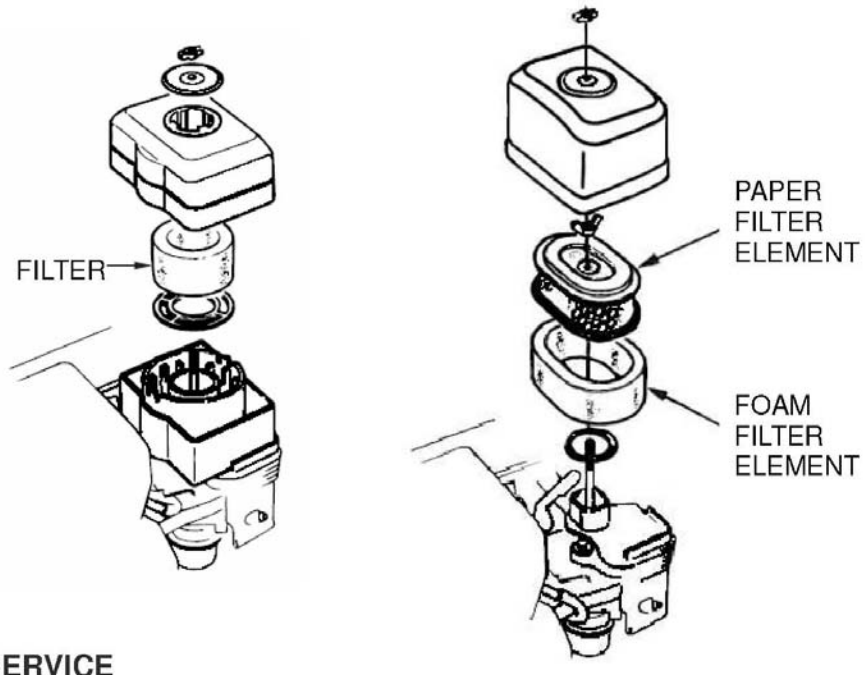
recommended range.



The SAE oil viscosity and service classification are in the API label on the oil container. It is highly recommend that API SERVICE Category SE or SF oil be used.

AIR FILTER INSPECTION

Remove the air cleaner cover and inspect the filter. Clean or replace dirty filter elements. Always replace damaged filter elements. If equipped with an oil-bath air cleaner, also check the oil level.



AIR CLEANER SERVICE

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

NOTICE

Operating the engine without an air filter, or with a damaged air filter, will allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by the Distributor's Limited Warranty.

Dual-Filter-Element Types

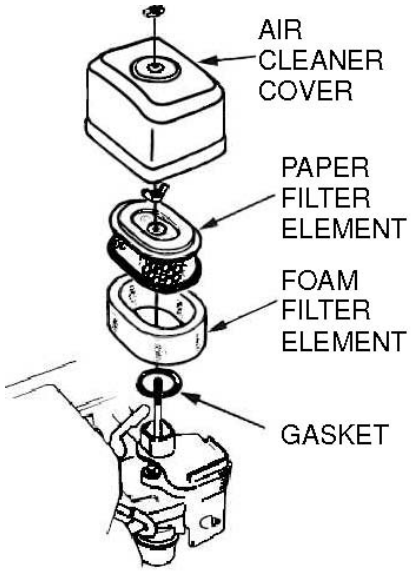
1.Remove the wing nut from the air cleaner cover, and remove the air cleaner cover.

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 if damaged. Always replace the paper air filter element at the scheduled interval.

5.Clean the air filter elements if they are to be reused.



Paper air filter element: Tap the filter element several times on a hard surface to remove dirt, or blow compressed air [not exceeding 30 psi (207 kPa)] through the filter element from the inside. Never try to brush off dirt; brushing will force dirt into

the fibres.

Foam air filter element: Clean in warm soapy water, rinse, and allow to thoroughly dry; or clean in a nonflammable solvent and allow to thoroughly dry. Dip the filter element in clean engine oil, and then squeeze out all excess oil. The engine will smoke when started if too much oil is left in the foam.

6.Wipe dirt from the inside of the air cleaner base and cover, using a moisten clean cloth careful to prevent dirt from entering the air duct that leads to the carburetor.

7.Place the foam air filter element over the paper element, and reinstall the assembled air filter. Be sure the gasket is in place beneath the air filter. Tighten the air filter wing nut securely.
8.Install the air cleaner cover, and tighten the cover wing nut securely.

Oil-Bath Type
1.Remove the wing nut, and remove the air cleaner cap and cover.

2.Remove the air filter from the cover. Wash the cover and filter in warm soapy water, rinse, and allow to thoroughly dry; or clean in a nonflammable solvent and allow to thoroughly dry.

3.Dip the filter in clean engine oil, and then squeeze out all excess oil. The engine will smoke if too much oil is left in the foam.

4.Empty the used oil from the air cleaner case, wash out any accumulated dirt with nonflammable solvent, and dry the case.

5.Fill the air cleaner case to the OIL LEVEL mark with the same oil that is recommended for the engine. Oil capacity: 2.0 US oz (56ml)

6.Reassemble the air cleaner, and tighten the wing nut securely.

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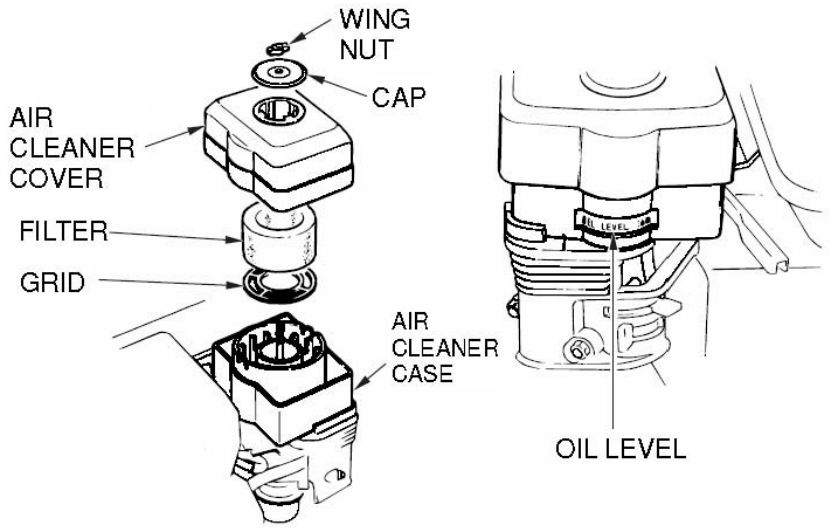

SEDIMENT CUP CLEANING

1. Move the fuel valve to the OFF position, and then remove the fuel sediment cup and O-ring.

⚠ WARNING

Gasoline is highly flammable and explosive.

The operator can be burned or seriously injured when handling fuel.

- Keep heat, sparks and flame away
- Handle fuel only outdoors.
- Wipe up spills immediately

2. Wash the sediment cup and O-ring in nonflammable solvent, then thoroughly dry.

3. Place the O-ring in the fuel valve. Install the sediment cup. Tighten the sediment cup securely.

4. Move the fuel valve to the ON position. Check for leaks. Replace the O-ring if there is any leakage.

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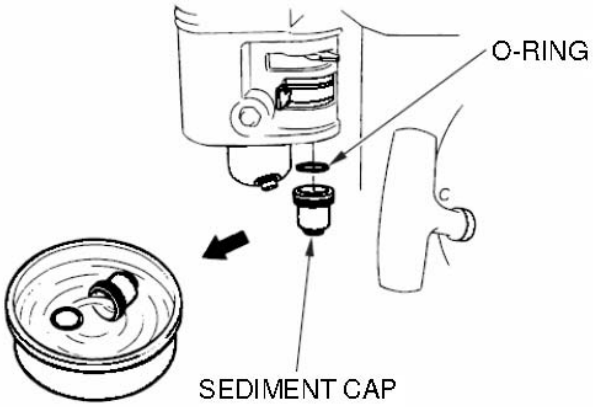


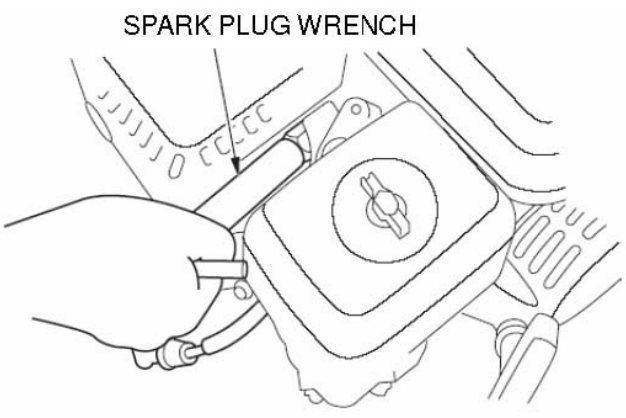
SPARK PLUG SERVICE

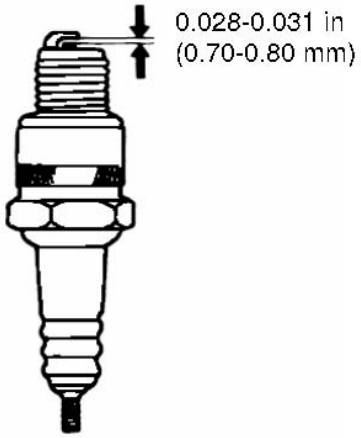
Recommended spark plugs: F7RTC or other equivalents.

NOTICE *An incorrect spark plug can cause engine damage.*

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

2. Remove the spark plug with a spark plug wrench.





3. Inspect the spark plug. Replace it if the electrodes are worn, 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 in (0.70–0.80 mm). Correct the gap, if necessary, by carefully bending the side electrode.

GB

5.To avoid cross –threading, carefully install the spark plug by hand.

6. After the spark plug is seated, tighten with a spark plug wrench to compress the water. If reinstalling the used spark plug, tighten 1/8–1/4 turn after the spark plug is seated. If installing a new spark plug, tighten 1/2 turn after the spark plug is seated.

NOTICE

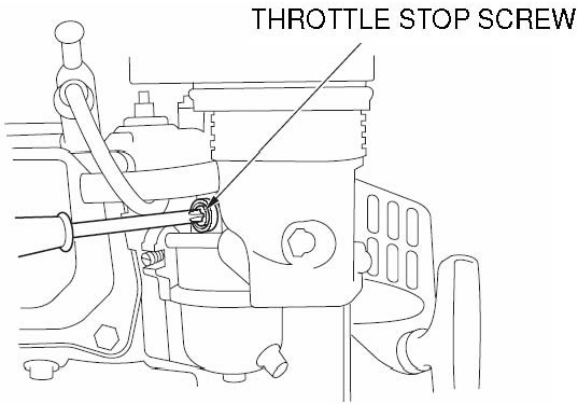
A loose spark plug can overheat and damage the engine.
Over tightening the spark plug can damage the threads in the cylinder head.

7. Attach the spark plug cap.

IDLE SPEED ADJUSTMENT

1. Start the engine outdoors, and allow it to warm up to operating temperature.

2. Move the throttle lever to its slowest position.
3. Turn the throttle stop screw to obtain the standard idle speed. Standard idle speed: 1,250–1550 RPM



SPARK ARRESTER SERVICE (optional equipment)

This engine is not factory-equipped with a spark arrester. In some areas, it is illegal to operate an engine without a spark arrester. Check local laws and regulations. A spark arrester is available from authorized servicing dealers.

The spark arrester must be serviced every 100 hours to keep it functioning as designed.

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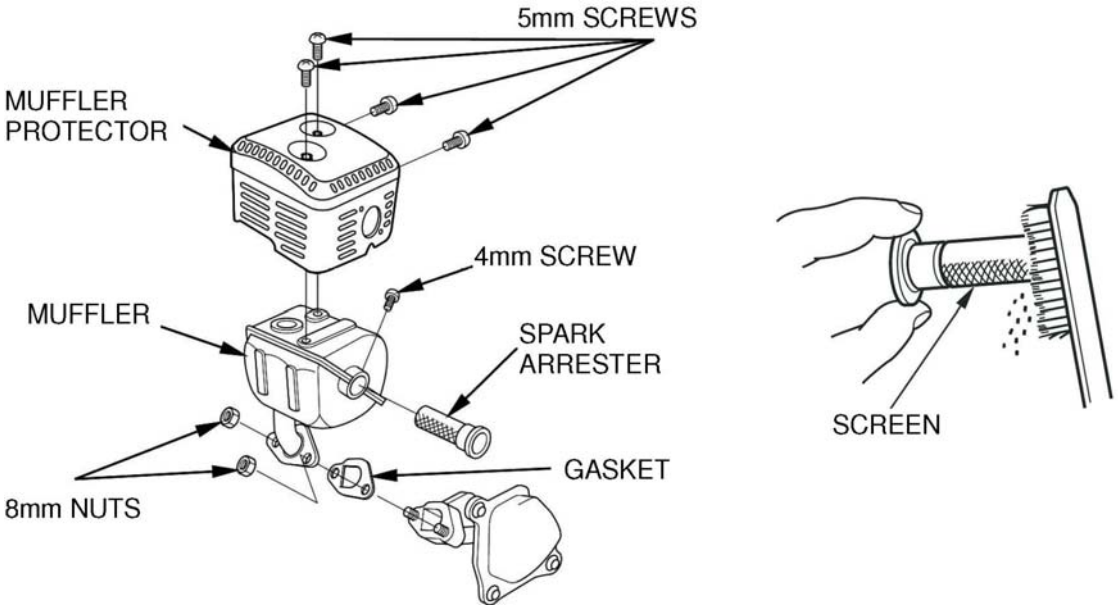
If the engine has been running, the muffler will be very hot. Allow the muffler to cool before servicing the spark arrester.

1. Remove the three 4 mm screws from the exhaust deflector, and remove the deflector.
2. Remove the four 5 mm screws from the muffler protector and remove the muffler protector.
3. Remove the 4 mm screw from the spark arrester, and remove the spark arrester from the muffler.



4. Use a brush to remove carbon deposits from the spark arrester screen. Be careful to avoid damaging the screen.
   The spark arrester must be free of breaks and holes. Replace the spark arrester if it is damaged.
5. Install the spark arrester, muffler protector, and exhaust deflector in the reverse order of disassembly.

7. STORAGE/ TRANSPORTING

STORING THE ENGINE

Storage Preparation

Proper storage preparation is essential for helping to keep the engine trouble-free and rust and corrosion free. The following steps will help keep rust and corrosion from impairing the engine's function and appearance, and will help make the engine easier

to start after storage.

Cleaning

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

NOTICE

- 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.

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

Fuel

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

The length of time that gasoline can be left in the engine's fuel tank and carburetor without causing functional problems will vary depending on gasoline blend, storage temperatures, and whether the fuel tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration. Warm temperatures accelerate fuel deterioration. Fuel deterioration problems may occur within a few months, or even less if the gasoline was not fresh when the fuel tank was filled.

The Distributor's Limited Warranty does not cover fuel system damage or engine performance problems resulting from neglected storage preparation.

Fuel storage life can be extended by adding a fuel stabilizer that is formulated for that purpose. Fuel deterioration problems can also be avoided by draining the fuel tank and carburetor.

ADDING A FUEL STABILIZER TO EXTEND FUEL STORAGE LIFE

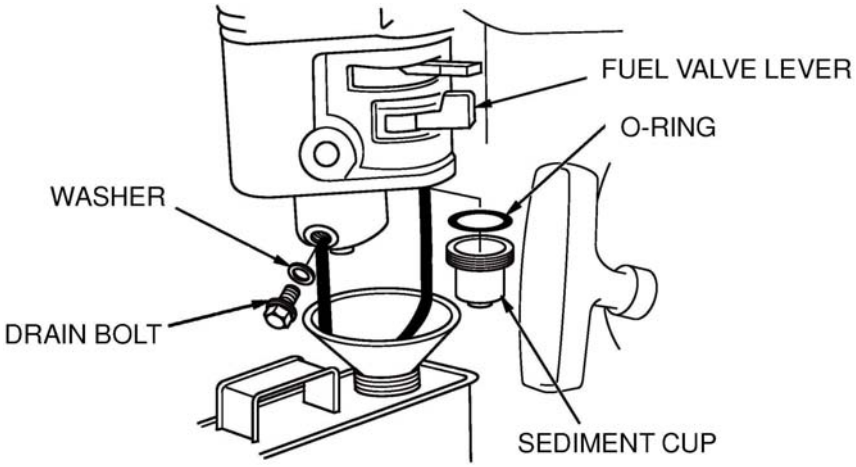
When adding a fuel stabilizer, fill the fuel tank with fresh gasoline. If only partially filled, air in the tank will promote fuel deterioration during storage. If a container of gasoline

is kept 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 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, and then move the fuel valve lever to the ON position.
3.After all the fuel has drain into the container, reinstall the drain bolt and sediment cup. Tighten securely.



Storage Precautions

1. Change the engine oil.

2.Remove the spark plugs.

3.Pour a tablespoon (5–10 cc) of clean engine oil into the cylinder.

4.Pull the starter cord several times to distribute the oil in the cylinder.

5.Reinstall the spark plugs.

6.Pull the starter cord slowly until resistance is felt. This will close the valves so moisture cannot enter the engine cylinder. Return the starter cord gently.

If this engine will be stored with gasoline in the fuel tank and carburetor, it is important to reduce the hazard of gasoline vapour ignition. Select a well-ventilated storage area away from 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, as 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 moisture around the engine, promoting rust and corrosion.

If equipped with a battery for an electric starter, 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 the engine as described in the chapter CHECK BEFORE OPERATION.

If the fuel was drained during storage preparation, fill the tank with fresh gasoline. If a container of gasoline has been kept for refueling, be sure that it contains only fresh gasoline. Gasoline oxidizes and deteriorates over time, causing hard-starting.

If the cylinders were 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 the operator and can ignite some materials. Keep the engine level while transporting to reduce the possibility of fuel leakage. Move the fuel valve lever to the OFF position.

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8. TROUBLESHOOTING

ENGINE WILL NOT START	Possible Cause	Correction
1. Electric starting: check battery	Battery discharged.	Recharge battery.
2. Check control positions	Fuel valve OFF.	Move lever to ON.
	Choke OPEN.	Move lever to CLOSE unless engine is warm.
	Engine switch OFF.	Turn engine switch to ON.
3. Check fuel.	Out of fuel.	Refuel.
	Bad fuel; engine stored without treating or draining gasoline, or refueled with bad gasoline.	Drain fuel tank and carburetor. Refuel with fresh gasoline.
4. Remove and inspect spark plugs.	Spark plugs faulty, fouled, or improperly gapped.	Gap, or replace spark plugs.
	Spark plugs wet with fuel (flooded engine).	Dry and reinstall spark plugs. Start engine with throttle lever in FAST position.
5. Take engine to an authorized servicing dealer, or refer to manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valve stuck, etc.	Replace or repair faulty components as necessary.

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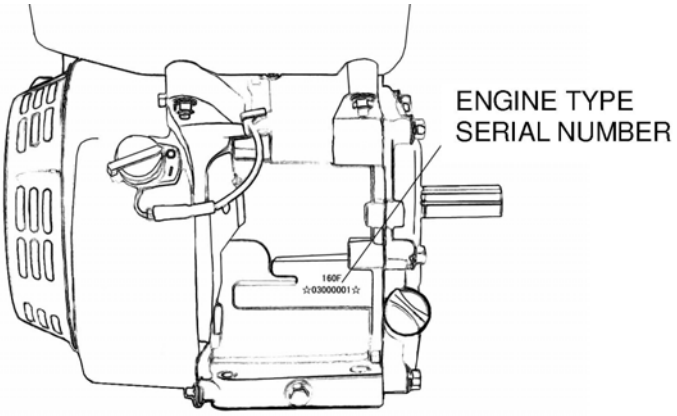
ENGINE LACKS POWER	Possible Cause	Correction
1. Check air filter	Filter element(s) clogged.	Clean or replace filter element(s).
2. Check fuel.	Out of fuel.	Refuel.
	Bad fuel; engine stored without treating or draining gasoline, or refueled with bad gasoline.	Drain fuel tank and carburetor. Refuel with fresh gasoline.
3. Take engine to an authorized servicing dealer, or refer to manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valve stuck, etc.	Replace or repair faulty components as necessary.

9. TECHNICAL & CONSUMER INFORMATION TECHNICAL

INFORMATION Serial Number Location



Record the engine's serial number in the space below. This serial number will be needed when ordering parts, and when making technical or warranty inquires.

Engine serial number:

Battery Connections for Electric Starter

Use a 12 V battery with an ampere-hour rating of at least 18 Ah.

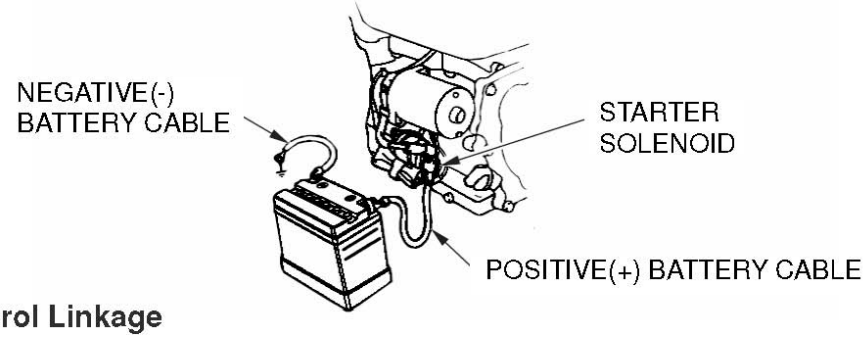
Be careful not to connect the battery in reverse polarity, as this will short circuit the battery charging system. Always connect the positive (+) battery cable to the battery terminal before connecting the negative (-) battery cable, so that tools cannot cause a

short circuit if they touch a grounded part while tightening the positive (+) battery cable end.

⚠WARNING

A battery can explode if the operator does not follow the correct procedure, seriously injuring anyone nearby. Keep all sparks, open flames, and smoking materials away from the battery.

1. Connect the battery positive (+) cable to the starter solenoid terminal as shown.
2. Connect the battery negative (-) cable to an engine mounting bolt, frame bolt, or other good engine ground connection.
3. Connect the battery positive (+) cable to the battery positive (+) terminal as shown.
4. Connect the battery negative (-) cable to the battery negative (-) terminal as shown.
5. Coat the terminals and cable ends with grease.



Remote Control Linkage

The throttle and choke control levers are provided with holes for optional cable attachment. The following illustrations show installation examples for a solid wire cable and for a flexible, braided wire cable. If using a flexible, braided wire cable, add a return spring as shown. It is necessary to loosen the throttle lever friction nut when operating the throttle with a remotely-mounted control.

120F, 160/200F(D), 160/200F(D)-B, 160/200F(D)-C:

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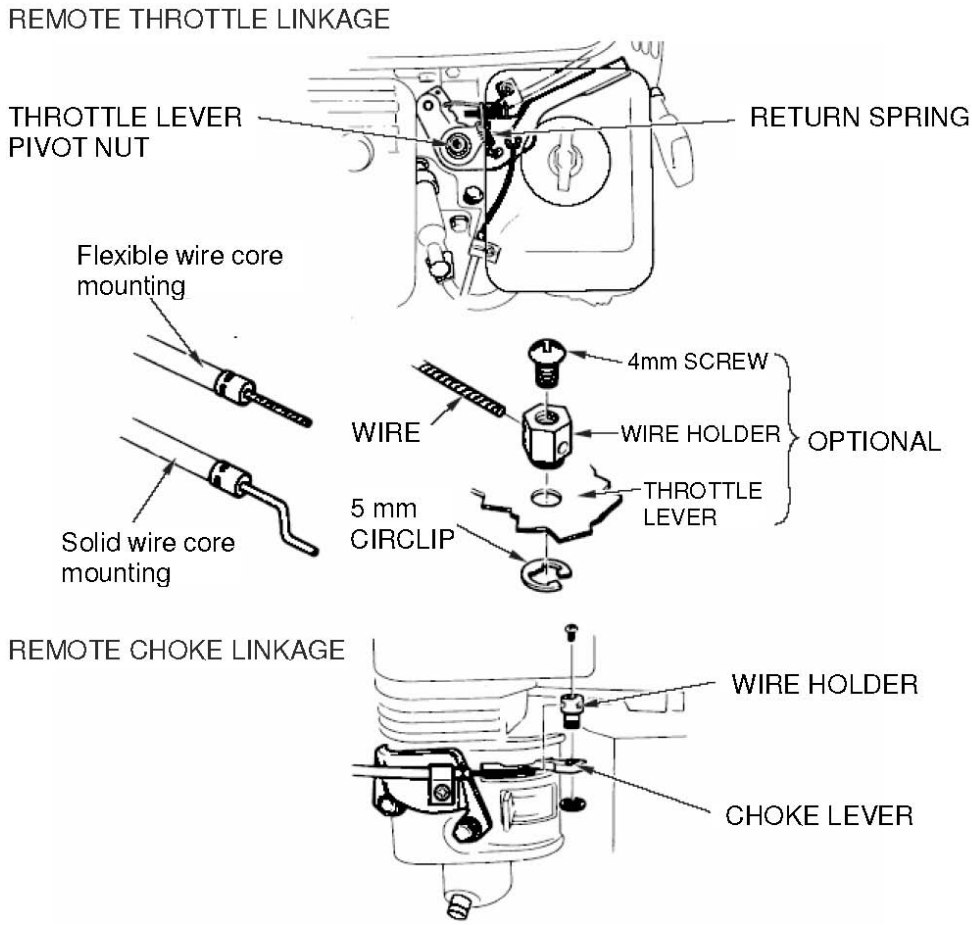

240/270/340/390F(D), 240/270F(D)-B, 340/390F(D)-D: REMOTE

Carburetor Modification for High Altitude Operation

At high altitudes, the standard carburetor air-fuel mixture will be too rich leading to decreased performance and increased fuel consumption. A very rich mixture will also ruin the spark plug and cause hard-starting. Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions.

High altitude performance can be improved by specific modifications to the carburetor. If operating the engine at altitudes above 5,000’ (1,500 m), have a servicing dealer perform this carburetor modification. When operated at high altitudes with the carburetor modifications for high altitude use, this engine will meet emission standards throughout its useful life.
Even with carburetor modification, engine horsepower will decrease about 3.5% for each 1,000' (300 m) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

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NOTICE

When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 5,000' (1,500 m) with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have a servicing dealer return the carburetor to original factory specifications.

Oxygenated Fuels

Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels.
To meet clean air standards, some areas use oxygenated fuels to help reduce emissions.

If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.

Before using an oxygenated fuel, try to confirm the fuel's contents. Some areas require this information to be posted on the pump.

ETHANOL ————(ethyl or grain alcohol) 10% by volume
Use gasoline containing up to 10% ethanol by volume. Gasoline containing ethanol may be marketed under the name ''Gasohol''.

MTBE ————— (methyl tertiary butyl ether) 15% by volume
Use gasoline containing up to 15% MTBE by volume.

METHANOL ——— (methyl or wood alcohol) 5% by volume

Use gasoline containing up to 5% methanol by volume, as long as it also contains cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5% methanol by volume may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of the fuel system.

If you notice any undesirable operating symptoms, try another service station, or switch to another brand of gasoline.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentages of oxygenates mentioned above are not covered under warranty.

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Emission Control System Information

Source of Emissions

The combustion process produces carbon monoxide, oxides of nitrogen, and hydrocarbons. Control of hydrocarbons and oxides of nitrogen is very important because, under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic.

The following utilizes lean carburetor settings and other systems to reduce the emissions of carbon monoxide, oxides of nitrogen and hydrocarbons.

Tampering and Altering

Tampering with, or altering, the emission control system may increase emissions beyond the legal limit. Among those acts that constitute tampering are:

- Removal or alteration of any part of the intake, fuel or exhaust systems.
- Altering or defeating the governor linkage or speed-adjusting mechanism to cause the engine to operate outside its design parameters.

Problems That May Affect Emissions

If any of the following symptoms are present, have the engine inspected and repaired by a servicing dealer.

- Hard-starting or stalling after starting.
- Rough idle.
- Misfiring or backfiring under load.
- Afterburning (backfiring).
- Black exhaust smoke or high fuel consumption.

Replacement Parts

The emission control systems on this engine were designed, built at the factory. It is highly recommended that the genuine parts are used whenever maintenance is done. These original-design replacement parts are manufactured to the same standards as the original parts for optimum performance. The use of replacement parts that are not of the original design and quality may impair the effectiveness of the emission control system.

GB

A manufacturer of an aftermarket part assumes the responsibility that the part will not adversely affect emission performance. The manufacturer or rebuilder of the part must certify that use of the part will not result in a failure of the engine to comply with emission regulations.

Maintenance

Follow the maintenance schedule. Remember that this schedule is based on the assumption that this engine will be used for its designed purpose. Sustained high-load or high-temperature operation, or use in excessively wet or dusty conditions, will require more frequent service.

Engine Tune-up

ITEM	SPECIFICATION
Spark plug gap	0.028–0.031 in (0.70–0.80 mm)
Valve clearance	IN: 0.15±0.02 mm (cold) EX: 0.20 ±0.02 mm (cold)
Other specifications	No other adjustments needed

CONSUMER

INFORMATION

Publications

These publications give additional information for maintaining and repairing the engine. Contact an engine dealer for ordering information.

GB

Parts Catalog

This manual provides complete, illustrated parts lists.

QUICK REFERENCE INFORMATION

Engine Oil	Type	SAE 10W–30,API SE or SF, for general use
	Capacity	120F: 0.6 L **160/200F(D):0.6 L** 240/270F(D):1.1 L 340/390F(D):1.1 L
Spark Plug	Type	F7RTC or other equivalents.
	Gap	0.028–0.031 in (0.70–0.80 mm)
Carburetor	Idle speed	1250–1550 RPM
Maintenance	Each use	Check engine oil. Check air filter.
	First 20 hours	Change engine oil.
	Subsequent	Refer to maintenance section or engine dealer.

GB

10. Specifications

Model	120F	160F(D)	200F(D)	160F(D)-B	200F(D)-B	160F(D)-C
Type	Single cylinder, 4-Stroke, Forced Air Cooling, OHV					
Rated power (kW/3600rpm)	2.5	3.1	3.8	3.1	3.8	3.1
Max. torque (N • m/rpm)	7.5/3000	10.5/3000	13/3000	20/1500	22/1500	20/1500
Fuel consumption(g/kW • h)	≤ 395					
Idle speed	1250–1550 rpm					
Speed Fluctuating Ratio	≤ 10%					
Transmission Mode	-	-	-	Clutch Mode		Chain M
Reduction Ratio	-	-	-	2：1		
Noise (≤)	70db (A)					
Bore *Stroke (mm)	60*42	68*45	68*54	68*45	68*54	68*45
Displacement (cc)	118	163	196	163	196	163
Compression Ratio	8：5：1					
Lubricating mode	Splash					
Starting Mode	Recoil start (Recoil start/ Electric starting)					
Rotation	Anti-clockwise (from P.T.O side)					
Valve Clearance	Input valve: 0.10–0.15 mm, output valve: 0.15–0.20 mm					
Spark plug clearance	0.7–0.8 mm					
Igniting Mode	**Transistorized magneto Ignition**					
Air cleaner	Semi-dry, Oil bath, Foam filter					
Dimension (L*W*H) （mm）	305*341*318	312*362*335	312*376*335	391*362*335	391*376*335	342*362*335
Net weight (kg)	13	15 (18)	16 (19)	19 (22)	20 (23)	15.5 (18.5)

GB

SPECIFICATIONS

Model	240F	270F(D)	240F(D)	270F(D)-B	240F(D)-C	270F(D)-C
Type	Single cylinder, 4-Stroke, Forced Air Cooling, OHV					
Rated power (kW/3600rpm)	5.1	5.8	5.1	5.8	5.8	3.8
Max. torque (N・m/rpm)	16.5.5/3000	19/3000	32/1500	20/1500	20/1500	24/1500
Fuel consumption(g/kW・h)	≤ 395					
Idle speed	1250–1550 rpm					
Speed Fluctuating Ratio	≤ 10%					
Transmission Mode	-	-	Clutch Mode		Chain Mode	
Reduction Ratio	-	-	2：1			
Noise (≤)	80db (A)					
Bore *Stroke (mm)	73*58	77*58	73*58	77*58	73*58	77*58
Displacement (cc)	242	270	242	270	242	270
Compression Ratio	8：2：1					
Lubricating mode	Splash					
Starting Mode	Recoil start (Recoil start/ Electric starting)					
Rotation	Anti-clockwise (from P.T.O side)					
Valve Clearance	Input valve: 0.10–0.15 mm, output valve: 0.15–0.20 mm					
Spark plug clearance	0.7–0.8 mm					
Igniting Mode	**Transistorized magneto Ignition**					
Air cleaner	Semi-dry, Oil bath, Foam filter					
Dimension (L*W*H)（mm）	380*430*410		440*430*410		405*430*410	
Net weight (kg)	25（28）	26 (29)	29 (32)	30 (33)	28 (31)	29 (32)

GB

SPECIFICATIONS

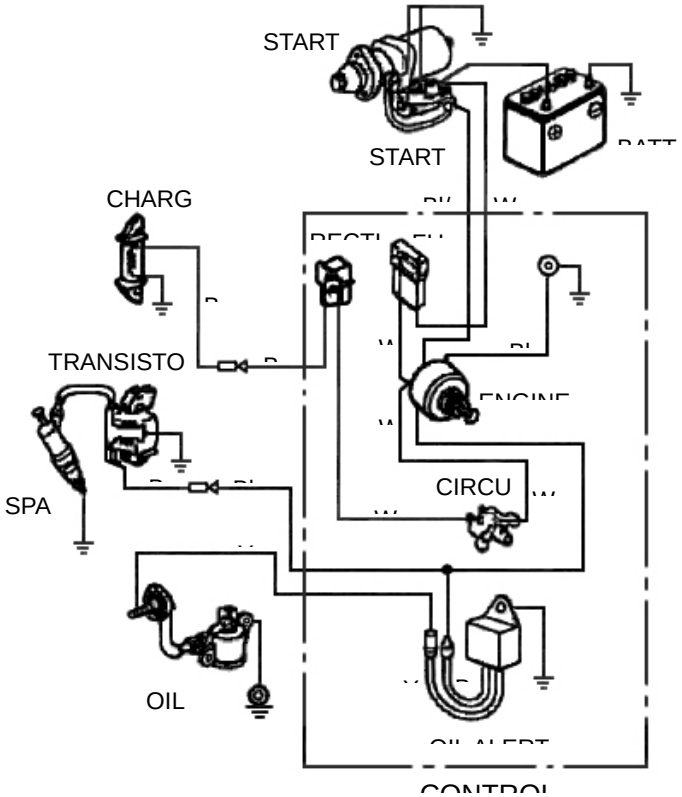
Model	340F(D)	390F(D)	340F(D)-D	390F(D)-D
Type	Single cylinder, 4-Stroke, Forced Air Cooling, OHV			
Rated power (kW/3600rpm)	7	8.3	7	8.3
Max. torque (N・m/rpm)	23.5/3000	26.5/3000	45/1500	50/1500
Fuel consumption(g/kW・h)	≤ 395			
Idle speed	1250–1550 rpm			
Speed Fluctuating Ratio	≤ 10%			
Transmission Mode	-	-	Gear transmission	
Reduction Ratio	-	-	2： 1	
Noise (≤)	70db (A)			
Bore *Stroke (mm)	82*64	88*64	82*64	88*64
Displacement (cc)	337	389	337	389
Compression Ratio	8：1			
Lubricating mode	Splash			
Starting Mode	Recoil start (Recoil start/ Electric starting)			
Rotation	Anti-clockwise (from P.T.O side)			
Valve Clearance	Input valve: 0.10–0.15 mm, output valve: 0.15–0.20 mm			
Spark plug clearance	0.7–0.8 mm			
Igniting Mode	**Transistorized magneto Ignition**			
Air cleaner	Semi-dry, Oil bath, Foam filter			
Dimension (L*W*H) （mm）	405*450*443		440*450*443	
Net weight (kg)	31 (34)		33 (36)	

11. Wiring Diagrams

ENGINE SWITCH

	IG	E	ST	BAT
OFF	O	O		
ON				
START			O	O

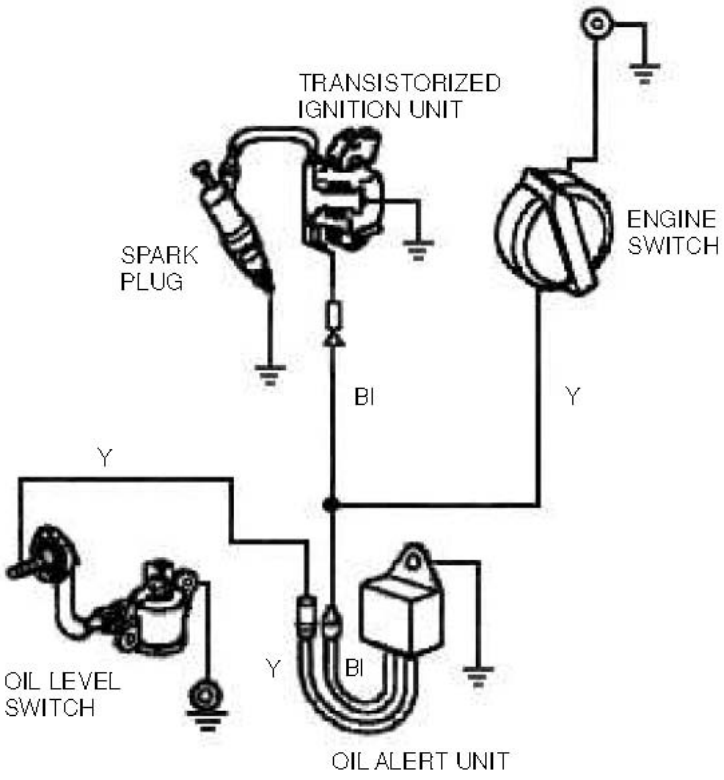
Bl	BLACK	Br	BROWN
Y	YELLOW	R	RED
W	WHITE	G	GREEN



WIRING DIAGRAMS

Engine Type with Oil Alert and Without Electric Starting

Bl	BLACK
Y	YELLOW
G	GREEN



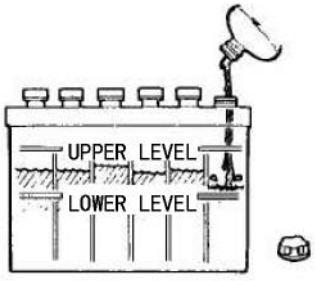
12. OPTIONAL PARTS

BATTERY

Use a battery rated at 12 V, 18 Ah or more.

NOTICE

⚠ WARNING Do not reverse polarity. Serious damage to the engine and/or battery may occur.

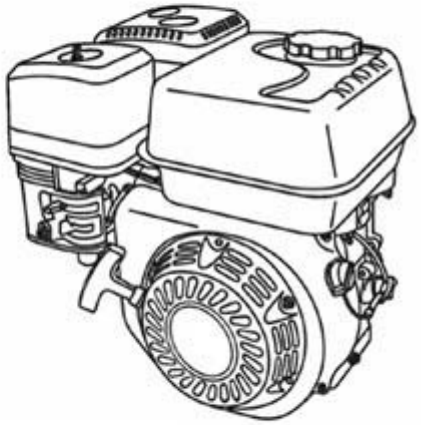


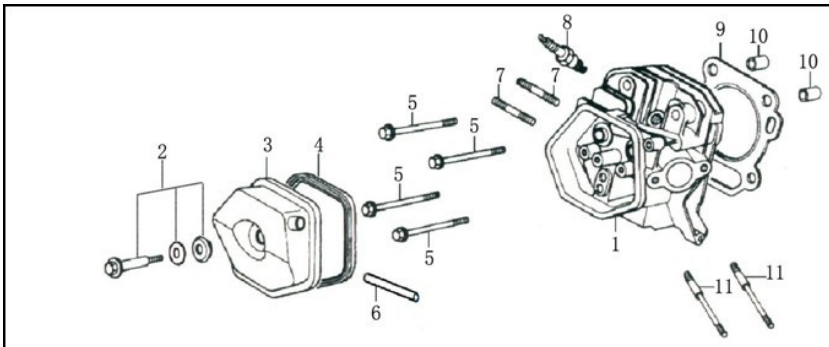
If you do not follow the correct procedure, a battery can explode—seriously injuring anyone nearby. Keep all sparks, open flames, and smoking materials away from the battery.

Check the electrolyte level to ensure that levels are between the marks on the case. If the level is below the lower mark, remove the caps and add distilled water to bring the electrolyte level to the upper mark. The cells should be equally full.

DRAWING OF ENGINE

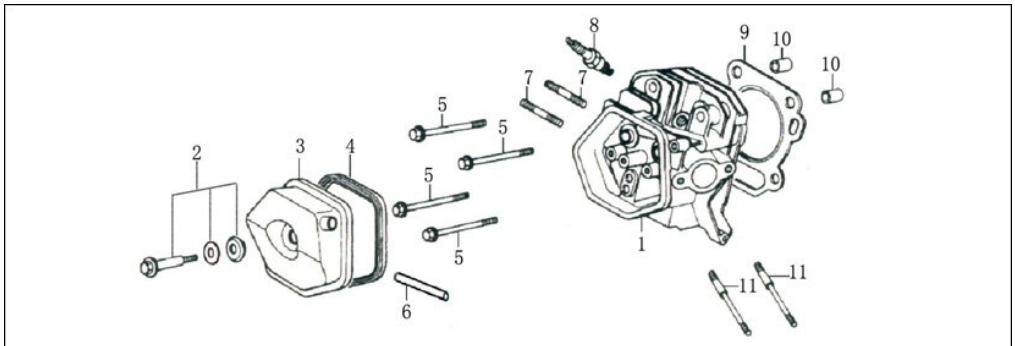
G240F(D)
G270F(D)
G340F(D)
G390F(D)
G420F(D)
G240F(D) --B
G270F(D) --B
G240F(D) --C
G270F(D) --C
G340F(D) --D
G390F(D) --D





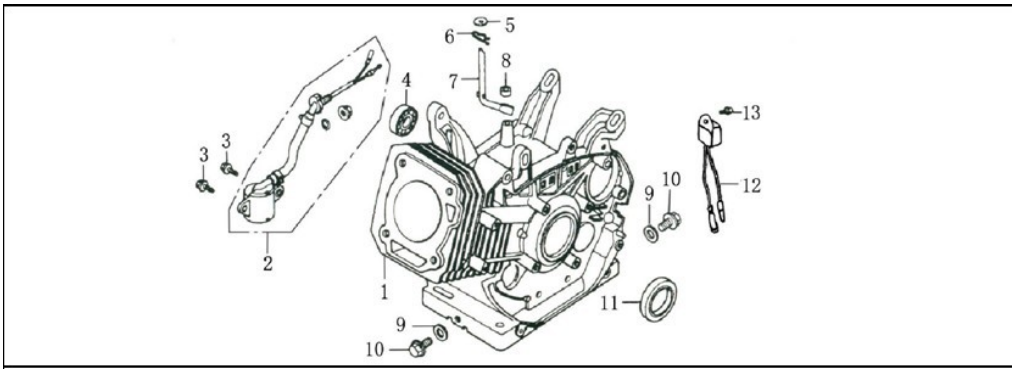
Cylinder head

No.	Part No.	Description	Reqd. QTY									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	120080277-T080	CYLINDER HEAD COMP	1	1	1	1	-	-	-	-	-	-
	120080278-T110	CYLINDER HEAD COMP	-	-	-	-	1	1	1	1	-	-
	120080338-T190	CYLINDER HEAD COMP	-	-	-	-	-	-	-	-	1	1
2	120420011-T110	BOLT COMP,HEAD COVER	1	1	1	1	1	1	1	1	1	1
3	120220009-T110	COVER COMP. HEAD	1	1	1	1	1	1	1	1	1	1
4	380840425-T110	PACKING, HEAD COVER	1	1	1	1	1	1	1	1	1	1
5	380140337-T110	BOLT, FLANGE, 10×80	4	4	4	4	4	4	4	4	4	4
6	380740460-T080	TUBE, BREATHER	1	1	1	1	-	-	-	-	-	-
	380740454-T110	TUBE, BREATHER	-	-	-	-	1	1	1	1	1	1
7	380180099-T110	BOLT, STUD, EXHAUST	2	2	2	2	2	2	2	2	2	2
8	270960025-T040	SPARK PLUG	1	1	1	1	1	1	1	1	1	1
9	120150100-T080	GASKET, CYLINDER	1	1	-	-	-	-	-	-	-	-
	120150078-T09F	GASKET, CYLINDER	-	-	1	1	-	-	-	-	-	-
	120150098-T100	GASKET, CYLINDER	-	-	-	-	1	1	-	-	-	-



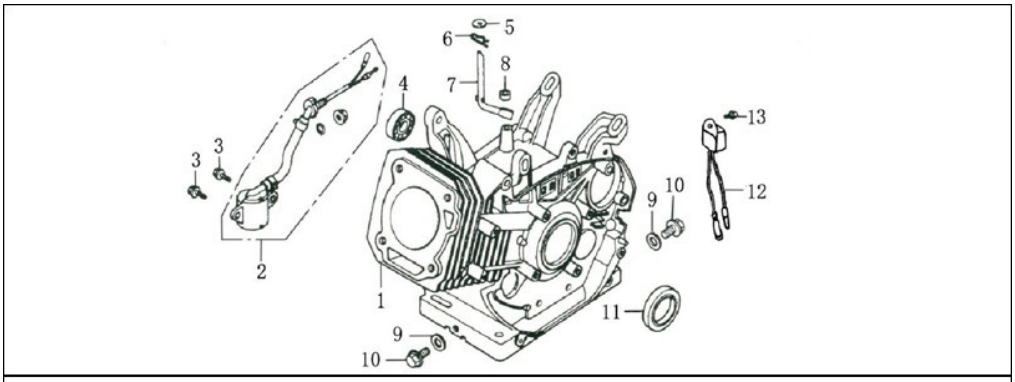
Cylinder head

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
10	380600116-T110	BOLT, STUD, INTAKE	2	2	2	2	2	2	2	2	2	2
11	380180092-T080	BOLT,STUD, EXHAUST	2	2	2	2	-	-	-	-	-	-
	380180091-T110	BOLT,STUD, EXHAUST	-	-	-	-	2	2	2	2	2	2



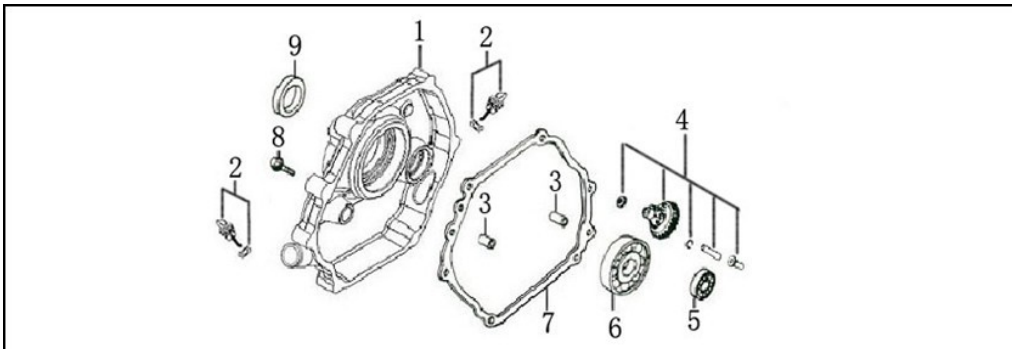
Crankcase

No.	Part No.	Description	Reqd. QTY									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	110810008-T080	CRANKCASE	1	-	-	-	-	-	-	-	-	-
	110810009-T081	CRANKCASE	-	1	-	-	-	-	-	-	-	-
	110810010-T090	CRANKCASE	-	-	1	-	-	-	-	-	-	-
	110810011-T091	CRANKCASE	-	-	-	1	-	-	-	-	-	-
	110810012-T100	CRANKCASE	-	-	-	-	1	-	-	-	-	-
	110810013-T101	CRANKCASE	-	-	-	-	-	1	-	-	-	-
	110810014-T110	CRANKCASE	-	-	-	-	-	-	1	-	-	-
	110810015-T111	CRANKCASE	-	-	-	-	-	-	-	1	-	-
	110810028-T120	CRANKCASE	-	-	-	-	-	-	-	-	1	-
	110810035-T121	CRANKCASE	-	-	-	-	-	-	-	-	-	1
2	281850152-0001	SWITCH ASSY., OIL LEVEL	1	1	1	1	1	1	1	1	1	1
3	380140215-0003	BOLT, FLANGE, 6×14	2	2	2	2	2	2	2	2	2	2
4	380630099-0001	BEARING, RADIAL BALL, 6202	-	-	-	-	1	1	1	1	1	1
5	380450522-T110	WASHER, 8*16*1.2	1	1	1	1	1	1	1	1	1	1



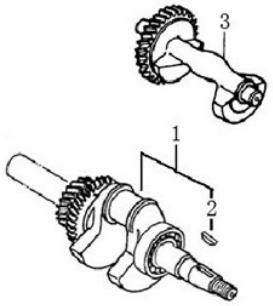
Crankcase

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
	171630003-T110	SHAFT, GOVERNOR ARM	-	-	-	-	1	1	1	1	1	1
8	380630339-T110	OIL SEAL, Φ8× Φ14×4	-	-	-	-	1	1	1	1	1	1
9	380430516-T110	WASHER, DRAIN PLUG, 12MM	2	2	2	2	2	2	2	2	2	2
10	110260024-T110	BOLT, DRAIN PLUG	2	2	2	2	2	2	2	2	2	2
11	380630336-T080	OIL SEAL, Φ30× Φ46×8	1	1	1	1	-	-	-	-	-	-
	380630337-T110	OIL SEAL, Φ35× Φ52×7	-	-	-	-	1	1	1	1	1	1
12	281890001-T040	ALERT UNIT, OIL	1	1	1	1	1	1	1	1	1	1
13	380140001-0006	BOLT, FLANGE, 6×12	1	1	1	1	1	1	1	1	1	1



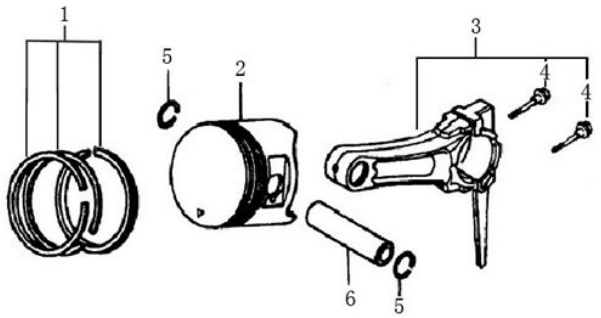
Crankcase cover

No.	Part No.	Description	Reqd. QTY									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	110820004-T080	CRANKCASE COVER	1	1	1	1	-	-	-	-	-	-
	110820016-T110	CRANKCASE COVER	-	-	-	-	1	1	1	1	-	-
	110820047-T110	CRANKCASE COVER	-	-	-	-	-	-	-	-	1	1
2	110690036-T190	CAP ASSY	2	2	2	2	2	2	2	2	2	2
3	380600119-T110	DOWEL PIN Φ8×12	2	2	2	2	2	2	2	2	2	2
4	171750008-T080	GOVERNOR KIT	1	1	1	1	-	-	-	-	-	-
	171750004-T110	GOVERNOR KIT	-	-	-	-	1	1	1	1	1	1
5	380630099-0001	BALL BEARING 6202	-	-	-	-	1	1	1	1	1	1
6	380630140-0002	BALL BEARING 6202	1	1	1	1	-	-	-	-	-	-
	380630141-0002	BALL BEARING 6202	-	-	-	-	1	1	1	1	1	1
7	110830010-T09F	GASKET, CRANKCASE COVER	1	1	1	1	-	-	-	-	-	-
	110830008-T11D	GASKET, CRANKCASE COVER	-	-	-	-	1	1	1	1	1	1
8	380140051-0005	BOLT, FLANGE 8X35	7	7	7	7	-	-	-	-	-	-
	380140005-0006	BOLT, FLANGE 8X40	-	-	-	-	7	7	7	7	7	7



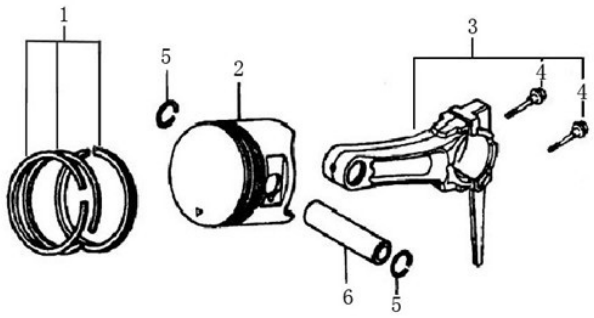
Crankshaft

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	130290058-T080	CRANKSHAFT ASSY	1	1	1	1	-	-	-	-	-	-
	130290067-T110	CRANKSHAFT ASSY	-	-	-	-	1	1	1	1	-	-
	130290112-T190	CRANKSHAFT ASSY	-	-	-	-	-	-	-	-	1	1
2	380620050-0001	KEY, SPECIAL WOODRUFF	1	1	1	1	1	1	1	1	1	1
3	130450008-T110	WEIGHT,BALANCER	-	-	-	-	1	1	1	1	-	-
	130450016-T190	WEIGHT,BALANCER	-	-	-	-	-	-	-	-	1	1



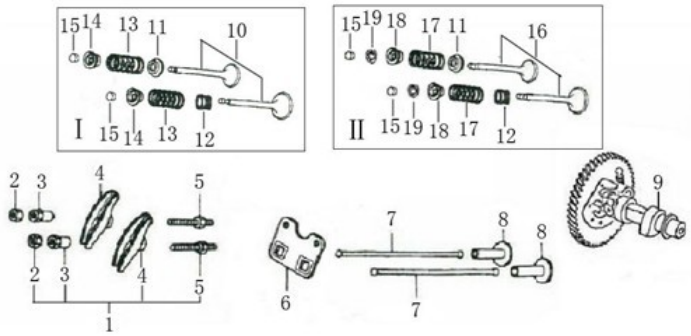
Piston/connecting rod

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	130070080-T080	RING SET, PISTON	1	1	-	-	-	-	-	-	-	-
	130070081-T090	RING SET, PISTON	-	-	1	1	-	-	-	-	-	-
	130070082-T100	RING SET, PISTON	-	-	-	-	1	1	-	-	-	-
	130070083-T110	RING SET, PISTON	-	-	-	-	-	-	1	1	-	-
	130070088-T370	RING SET, PISTON	-	-	-	-	-	-	-	-	1	1
2	130030082-T080	PISTON	1	1	-	-	-	-	-	-	-	-
	130030084-T090	PISTON	-	-	1	1	-	-	-	-	-	-
	130030085-T100	PISTON	-	-	-	-	1	1	-	-	-	-
	130030087-T110	PISTON	-	-	-	-	-	-	1	1	-	-
	130030103-T190	PISTON	-	-	-	-	-	-	-	-	1	1
3	130150040-T080	CONNECTING ROD ASSY	1	1	1	1	-	-	-	-	-	-
	130150043-T110	CONNECTING ROD ASSY	-	-	-	-	1	1	1	1	-	-
	130150049-T190	CONNECTING ROD ASSY	-	-	-	-	-	-	-	-	1	1
4	130180002-T110	BOLT, CONNECTING ROD	2	2	2	2	2	2	2	2	2	2



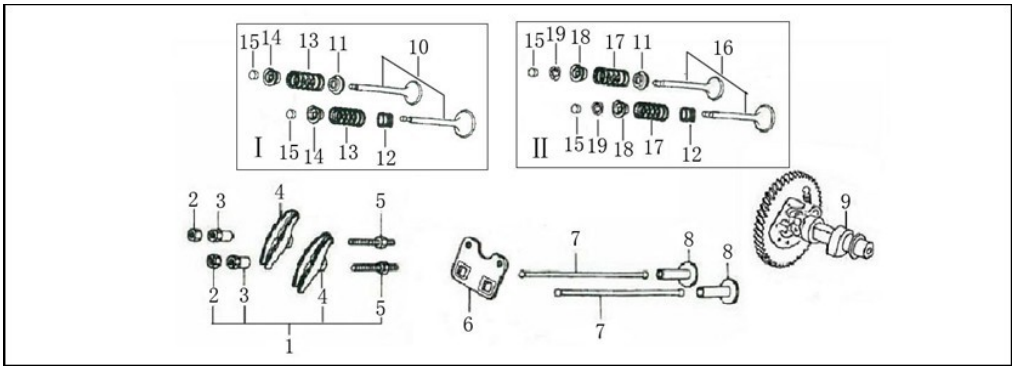
Piston/connecting rod

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
6	130060032-T080	PIN, PISTON	1	1	1	1	-	-	-	-	-	-
	130060034-T110	PIN, PISTON	-	-	-	-	1	1	1	1	1	1



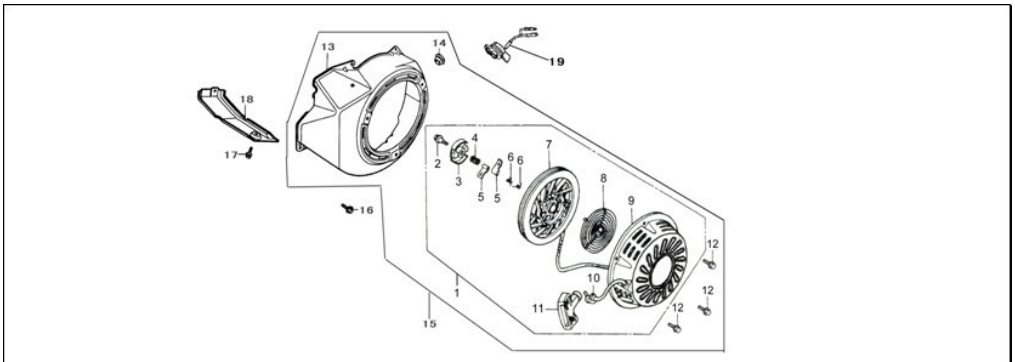
Camshaft

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	140450023-T110	ROCKER ARM ASSY.	2	2	2	2	2	2	2	2	2	2
2	140470001-T040	NUT, PIVOT ADJUSTING	2	2	2	2	2	2	2	2	2	2
3	140490012-T040	PIVOT ROCKER ARM	2	2	2	2	2	2	2	2	2	2
4	140460024-T110	ROCKER ARM	2	2	2	2	2	2	2	2	2	2
5	140480012-T040	BOLT POVIT	2	2	2	2	2	2	2	2	2	2
6	140710002-T110	PLATE , PUSH ROD GUIDE	1	1	1	1	1	1	1	1	1	1
7	140670005-T080	PUSH ROD	2	2	2	2	-	-	-	-	-	-
	140670006-T110	PUSH ROD	-	-	-	-	2	2	2	2	2	2
8	140690004-T110	LIFTER , VALVE	2	2	2	2	2	2	2	2	2	2
9	140020039-T080	CAMSHAFT ASSY	1	1	1	1	-	-	-	-	-	-
	140020041-T100	CAMSHAFT ASSY	-	-	-	-	1	1	-	-	-	-
	140020045-T110	CAMSHAFT ASSY	-	-	-	-	-	-	1	1	-	-
	140020056-T190	CAMSHAFT ASSY	-	-	-	-	-	-	-	-	1	1
10	500550025-T080	VALVE ASSY.	1	1	1	1	-	-	-	-	-	-
	500550027-T110	VALVE ASSY.	-	-	-	-	1	1	1	1	-	-
11	140360010-T110	SEAT, VALVE SPRING	1	1	1	1	1	1	1	1	1	1



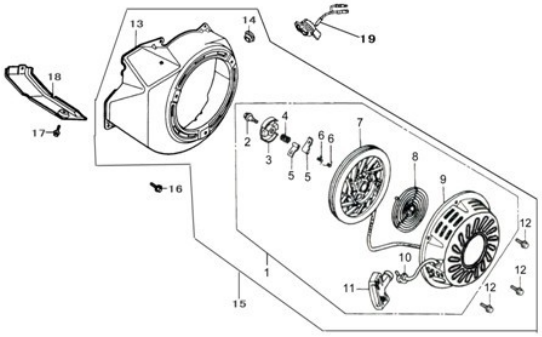
Camshaft

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
12	140400012-T110	SEAL, VALVE STEM	1	1	1	1	1	1	1	1	1	1
13	140340023-T110	SPRING,VALVE	2	2	2	2	2	2	2	2	-	-
14	140380018-T110	RETAINER, VALVE SPRING	2	2	2	2	2	2	2	2	-	-
15	140320002-T110	ROTATOR, VALVE	2	2	2	2	2	2	2	2	2	2
16	500550031-T09F	VALVE ASSY.	1	1	1	1	-	-	-	-	-	-
	500550030-T11D	VALVE ASSY.	-	-	-	-	1	1	1	1	-	-
	500550032-T190	VALVE ASSY.	-	-	-	-	-	-	-	-	1	1
17	140340025-T11D	SPRING,VALVE	2	2	2	2	2	2	2	2	2	2
18	140380021-T11D	RETAINER, VALVE SPRING	2	2	2	2	2	2	2	2	2	2
19	140390015-T11D	LOCKER, VALVE	4	4	4	4	4	4	4	4	4	4



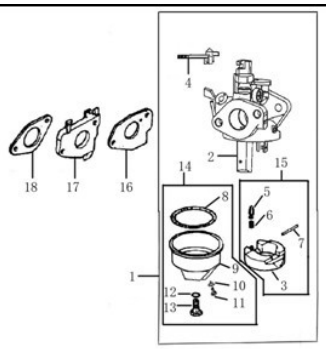
Starter

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	193500013-T080	STARTER ASSY.	1	1	1	1	-	-	-	-	-	-
	193500017-T110	STARTER ASSY.	-	-	-	-	1	1	1	1	1	1
2	380020067-T040	SCREW,SETTING	1	1	1	1	1	1	1	1	1	1
3	193550003-T040	GUIDE,RATCHET	1	1	1	1	1	1	1	1	1	1
4	381150342-T040	SPRING,FRICTION	1	1	1	1	1	1	1	1	1	1
5	193540003-T040	RATCHET , STARTER	2	2	2	2	2	2	2	2	2	2
6	381160090-T040	SPRING , RETURN	2	2	2	2	2	2	2	2	2	2
7	193520004-T080	REEL , RECOIL STARTER	1	1	1	1	-	-	-	-	-	-
	193520005-T110	REEL , RECOIL STARTER	-	-	-	-	1	1	1	1	1	1
8	193340019-T110	SPRING,RECOIL STARTER	1	1	1	1	1	1	1	1	1	1
9	193640004-T080	COVER COMP ., FAN	1	1	1	1	-	-	-	-	-	-
	193640007-T110	COVER COMP ., FAN	-	-	-	-	1	1	1	1	1	1
10	193530005-T110	ROPE	1	1	1	1	1	1	1	1	1	1
11	193560003-T040	KNOB , RECOIL STARTER	1	1	1	1	1	1	1	1	1	1



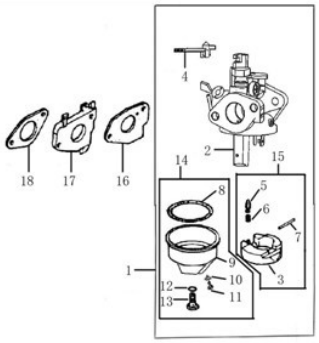
Starter

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
13	160210008-T080	COVER COMP ., FAN	1	1	1	1	-	-	-	-	-	-
	160210011-T110	COVER COMP ., FAN	-	-	-	-	1	1	1	1	1	1
14	381000094-T040	RUBBER PLUG	1	1	1	1	1	1	1	1	1	1
15	193490028-T080	RECOIL STARTER COMP.	1	1	1	1	-	-	-	-	-	-
	193490038-T110	RECOIL STARTER COMP.	-	-	-	-	1	1	1	1	1	1
16	380140001-0006	BOLT, FLANGE, M6x12	5	5	5	5	5	5	5	5	5	5
17	380140001-0006	BOLT, FLANGE, M6x12	1	1	1	1	1	1	1	1	1	1
18	160190005-T080	SHROUD	1	1	1	1	-	-	-	-	-	-
	160190006-T110	SHROUD	-	-	-	-	1	1	1	1	1	1
19	271660028-T040	SWITCH ASSY., ENGINE STOP	1	1	1	1	1	1	1	1	1	1



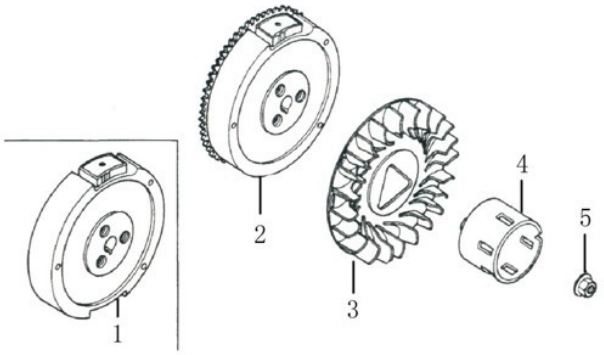
Carburetor

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	170020407-T080	CARBURETOR	1	1	-	-	-	-	-	-	-	-
	170020408-T090	CARBURETOR	-	-	1	1	-	-	-	-	-	-
	170020409-T100	CARBURETOR	-	-	-	-	1	1	-	-	-	-
	170020410-T110	CARBURETOR	-	-	-	-	-	-	1	1	-	-
	170020446-T190	CARBURETOR	-	-	-	-	-	-	-	-	1	1
2	170160030-T080	NOUMENON,CARBURETOR	1	1	-	-	-	-	-	-	-	-
		NOUMENON,CARBURETOR			1	1						
	170160031-T100	NOUMENON,CARBURETOR	-	-	-	-	1	1	-	-	-	-
	170160031-T110	NOUMENON,CARBURETOR	-	-	-	-	-	-	1	1	-	-
		NOUMENON,CARBURETOR	-	-	-	-	-	-	-	-	1	1
3	170280020-T110	FLOAT	1	1	1	1	1	1	1	1	1	1
4	170060027-T040	LEVER COMP.,CHOKE	1	1	1	1	1	1	1	1	1	1
5	170180025-T110	VALVE , FLOAT	1	1	1	1	1	1	1	1	1	1
6	381150334-T110	SPRING , VALVE SET	1	1	1	1	1	1	1	1	1	1



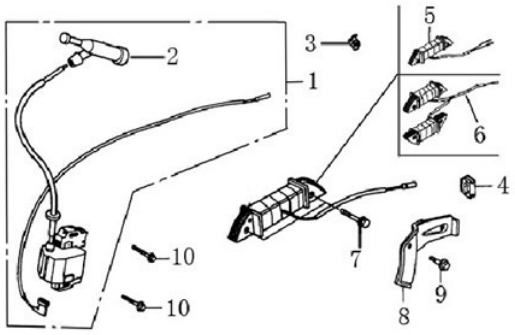
Carburetor

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
10	380450577-T040	GASKET, DRAIN BOLT	1	1	1	1	1	1	1	1	1	1
11	172930001-T040	BOLT,DRAIN	1	1	1	1	1	1	1	1	1	1
12	380450539-T040	GASKET, OIL CUP	1	1	1	1	1	1	1	1	1	1
13	380140353-T040	BOLT, OIL CUP	1	1	1	1	1	1	1	1	1	1
14	170240020-T110	OIL CUP ASSY.	1	1	1	1	1	1	1	1	1	1
15	170270025-T110	FLOAT ASSY.	1	1	1	1	1	1	1	1	1	1
16	170430049-T09F	PACKING, CARBURETOR	1	1	1	1	-	-	-	-	-	-
	170430073-T100	PACKING, CARBURETOR	-	-	-	-	1	1	-	-	-	-
	170430050-T11D	PACKING, CARBURETOR	-	-	-	-	-	-	1	1	1	1
17	170440039-T080	INSULATOR, CARBURETOR	1	1	1	1	-	-	-	-	-	-
	170440040-T100	INSULATOR, CARBURETOR	-	-	-	-	1	1	-	-	-	-
	170440041-T110	INSULATOR, CARBURETOR	-	-	-	-	-	-	1	1	1	1
18	170430061-T09F	PACKING, INSULATOR	1	1	1	1	-	-	-	-	-	-
	170430062-T11D	PACKING, INSULATOR	-	-	-	-	1	1	1	1	1	1



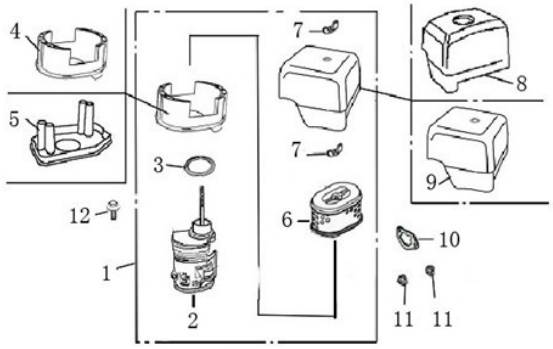
Flywheel

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	270020083-T080	FLYWHEEL COMP	1	-	1	-	-	-	-	-	-	-
	270020084-T110	FLYWHEEL COMP	-	-	-	-	1	-	1	-	1	-
2	270020080-T081	FLYWHEEL COMP. (SEAL-LAMP)	-	1	-	1	-	-	-	-	-	-
	270020073-T111	FLYWHEEL COMP. (SEAL-LAMP)	-	-	-	-	-	1	-	1	-	1
3	160180008-T080	FAN COOLING	1	1	1	1	-	-	-	-	-	-
	160180009-T110	FAN COOLING	-	-	-	-	1	1	1	1	1	1
4	193590004-T080	PULLEY, STARTER	1	1	1	1	-	-	-	-	-	-
	193590007-T110	PULLEY, STARTER	-	-	-	-	1	1	1	1	1	1
5	380370050-T110	NUT SPECIAL, 16JOM	1	1	1	1	1	1	1	1	1	1



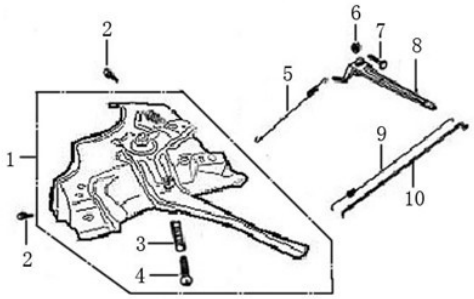
Ignition Comp

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	270920158-T080	COIL ASSY . , IGNITION	1	1	1	1	-	-	-	-	-	-
	270920170-T110	COIL ASSY . , IGNITION	-	-	-	-	1	1	1	1	1	1
2	270950040-T040	CAP ASSY., NOISE SUPPRESSOR	1	1	1	1	1	1	1	1	1	1
3	380930024-T110	HOLDER, STOP SWITCH	1	1	1	1	1	1	1	1	1	1
4	380930023-T110	GROMMET, CORD	1	1	1	1	1	1	1	1	1	1
5	270190001-T111	COIL ASSY., CHARGE	-	1	-	1	-	1	-	1	-	1
6	270190003-T111	COIL ASSY., CHARGE	-	1	-	1	-	1	-	1	-	1
7	380140024-0006	BOLT, FLANGE, M6X28	-	2	-	2	-	2	-	2	-	2
8	270280007-T081	CLAMPER, CORD	-	1	-	1	-	-	-	-	-	-
	270280008-T111	CLAMPER, CORD	-	-	-	-	-	1	-	1	-	1
9	380140001-0006	BOLT, FLANGE, M6X12	-	1	-	1	-	1	-	1	-	1
10	380140102-0004	BOLT, FLANGE, M6X25	2	2	2	2	2	2	2	2	2	2



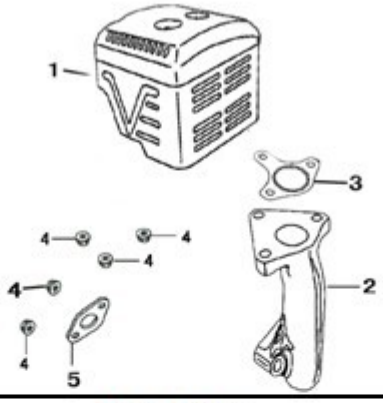
Air cleaner

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	180020314-T086	AIR CLEANER ASSY	1	1	1	1	-	-	-	-	-	-
	180020315-T114	AIR CLEANER ASSY	-	-	-	-	1	1	1	1	1	1
2	180280002-T080	ELBOW COMP., AIR CLEANER	1	1	1	1	-	-	-	-	-	-
	180280003-T110	ELBOW COMP., AIR CLEANER	-	-	-	-	1	1	1	1	1	1
3	380840432-T080	PACKING , ELBOW	1	1	1	1	-	-	-	-	-	-
	380840433-T110	PACKING , ELBOW	-	-	-	-	1	1	1	1	1	1
4	180330019-T080	NOSE , SILENCER	1	1	1	1	-	-	-	-	-	-
5	180330020-T110	NOSE , SILENCER	-	-	-	-	1	1	1	1	1	1
6	180100038-T080	ELEMENT ASSY. , AIR CLEANER	1	1	1	1	-	-	-	-	-	-
	180100035-T110	ELEMENT ASSY. , AIR CLEANER	-	-	-	-	1	1	1	1	1	1
7	380440002-0001	NUT , BUTTERFLY, M6	2	2	2	2	2	2	2	2	2	2
8	180070089-T086	COVER , AIR CLEANER	1	1	1	1	-	-	-	-	-	-
9	180070091-T114	COVER , AIR CLEANER	-	-	-	-	1	1	1	1	1	1
10	170430070-T11D	PACKING., AIR CLEANER	1	1	1	1	1	1	1	1	1	1



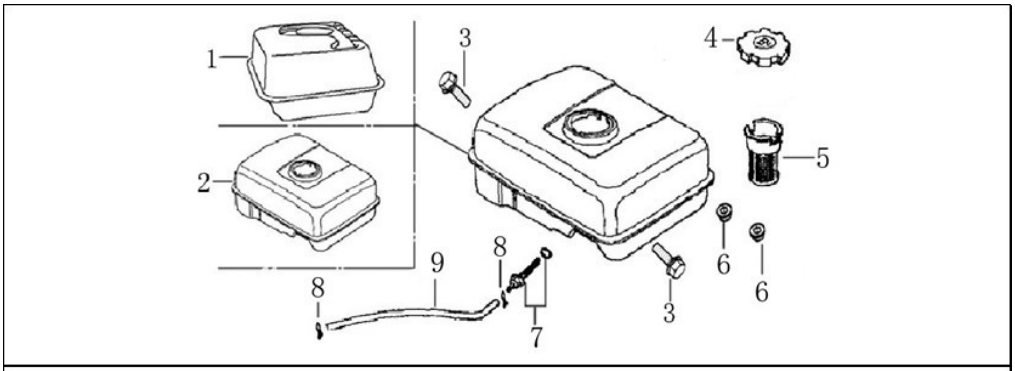
Control

No.	Part No.	Description	Reqd. QTY.									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	171680007-T080	CONTROL ASSY.	1	1	1	1	-	-	-	-	-	-
	171680008-T110	CONTROL ASSY.	-	-	-	-	1	1	1	1	1	1
2	380140001-0006	BOLT, FLANGE, M6X12	2	2	2	2	2	2	2	2	2	2
3	171660002-T110	SPRING,CONTROL ADJUSTING	1	1	1	1	1	1	1	1	1	1
4	380200017-0005	SCREW , M5×35	1	1	1	1	1	1	1	1	1	1
5	171600006-T080	SPRING , CABLE RETURN	1	1	1	1	-	-	-	-	-	-
	171600001-T110	SPRING , CABLE RETURN	-	-	-	-	1	1	1	1	1	1
6	380370048-0001	NUT, FLANGE M6	1	1	1	1	1	1	1	1	1	1
7	380250002-T040	BOLT, QUADRATE HEAD	1	1	1	1	1	1	1	1	1	1
8	171620002-T080	ARM, GOVERNOR	1	1	1	1	-	-	-	-	-	-
	171620003-T110	ARM, GOVERNOR	-	-	-	-	1	1	1	1	1	1
9	171610001-T110	SPRING, THROTTLE RETURN	1	1	1	1	1	1	1	1	1	1



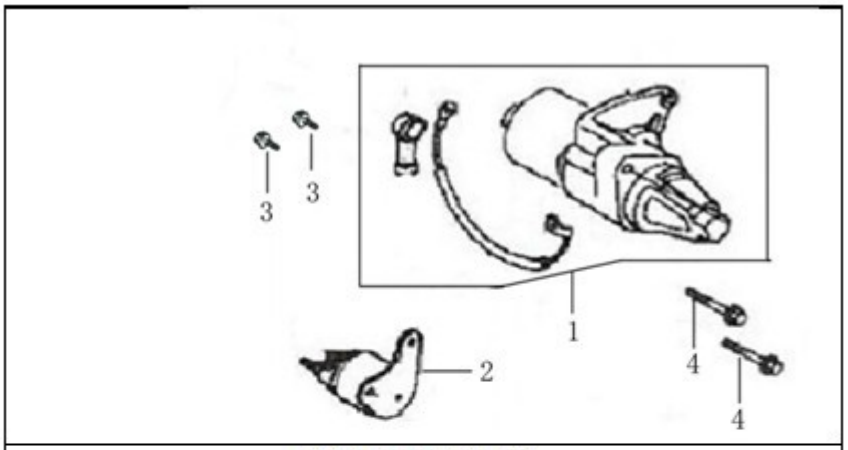
消声器（Muffler）

序号 No.	零部件图号 Part No.	Description	数量（Reqd. QTY.）									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	180570769-T086	MUFFLER ASSY.	1	1	1	1	-	-	-	-	-	-
	180570770-T114	MUFFLER ASSY.	-	-	-	-	1	1	1	1	1	1
2	180590092-T080	PIPE COMP., EX	1	1	1	1	1	1	1	1	1	1
3	180660033-T11D	GASKET, EX. PIPE	1	1	1	1	1	1	1	1	1	1
4	380340005-0005	NUT , HEX ., M8	5	5	5	5	5	5	5	5	5	5
5	180650090-T110	GASKET , MUFFLER	1	1	1	1	1	1	1	1	1	1



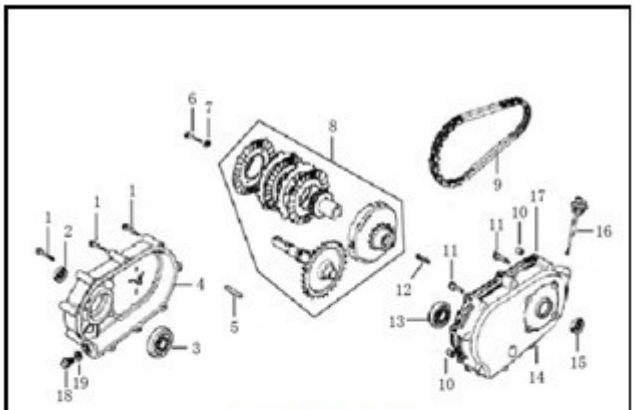
Fuel tank

No.	Part No.	Description	Reqd. QTY									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	170500510-T086	TANK COMP ., FUEL	1	1	1	1	-	-	-	-	-	-
	170500512-T114	TANK COMP ., FUEL	-	-	-	-	1	1	1	1	1	1
2	170500526-T080	TANK COMP ., FUEL	1	1	1	1	-	-	-	-	-	-
	170500531-T110	TANK COMP ., FUEL	-	-	-	-	1	1	1	1	1	1
3	380140091-0005	BOLT , FLANGE , M8×25	2	2	2	2	2	2	2	2	2	2
4	170870040-T040	CAP COMP ., FUEL FILLER	1	1	1	1	1	1	1	1	1	1
5	170720001-T040	FILTER , FUEL	1	1	1	1	1	1	1	1	1	1
6	380370007-0004	NUT , FLANGE , 8MM	2	2	2	2	2	2	2	2	2	2
7	170660077-T040	JOINT COMP, FUEL TANK	1	1	1	1	1	1	1	1	1	1
8	380950188-T040	CLIP , TUBE	2	2	2	2	2	2	2	2	2	2
9	380750182-T110	TUBE,FUEL	1	1	1	1	1	1	1	1	1	1



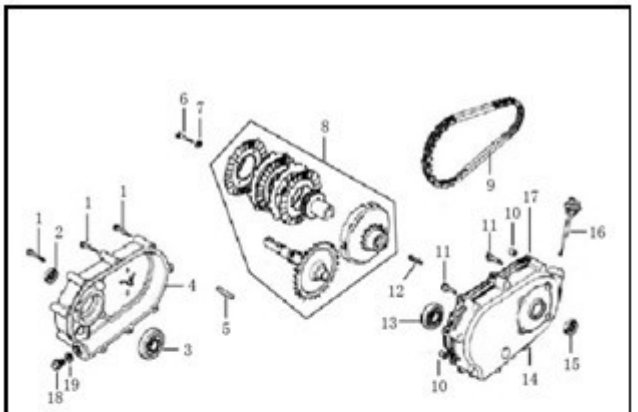
起动电机（Starter motor）

序号 No.	零部件图号 Part No.	Description	数量 (Reqd. QTY.)									
			G240F	G240FD	G270F	G270FD	G340F	G340FD	G390F	G390FD	G420F	G420FD
1	270360018-T081	STARTER MOTOR	-	1	-	1	-	-	-	-	-	-
	270360019-T111	STARTER MOTOR	-	-	-	-	-	1	-	1	-	1
2	270810095-T111	CONTACTOR ASSY A	-	1	-	1	-	1	-	1	-	2
3	380140167-0002	BOLT-WASHER, SXL2	-	2	-	2	-	-	-	-	-	-
	380140063-0002	BOLT-WASHER, SXL6	-	-	-	-	-	2	-	2	-	2
4	380140051-0005	BOLT,FLANGE, SXL6	-	2	-	2	-	2	-	2	-	2



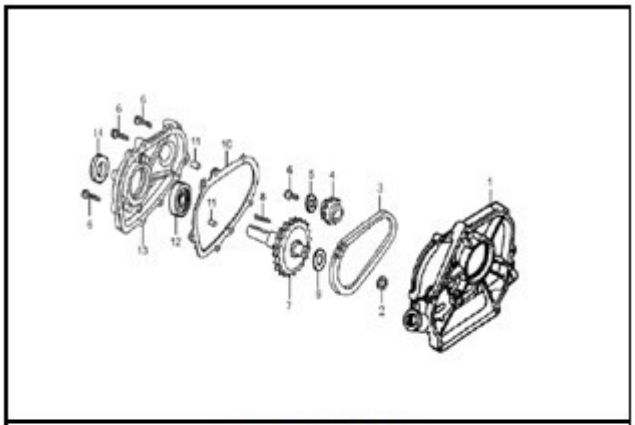
減速箱(RETARDER)

序号 No.	零部件图号 Part No.	Description	数量 (Reqd. QTY.)			
			G240F-B	G240FD-B	G270F-B	G270FD-B
1	380140185-0003	BOLT , FLANGE , 6×50	9	9	9	9
2	380650336-0001	OIL SEAL,30×46×8	1	1	1	1
3	380630140-0002	BEARING , RADIAL BALL	1	1	1	1
4	191920003-T082	RETARDER CASE COVER	1	1	1	1
5	380620062-0001	BOLT , DRAIN PLUG	1	1	1	1
6	380140028-0004	BOLT , FLANGE , 8×32	1	1	1	1
7	380450522-T110	WASHER,HOLDER 8×16×1.2	1	1	1	1
8	190010112-T082	CLUTCH ASSY.	1	1	1	1
9	260010131-T042	CHAIN , RETARDER	1	1	1	1
10	380600120-T040	PIN	2	2	2	2
11	380140004-0004	BOLT , FLANGE 8×20	4	4	4	4
12	380620055-0001	BOLT , DRAIN PLUG	1	1	1	1
13	380630137-0002	WASHER , DRAIN PLUG	1	1	1	1
14	191910002-T082	RETARDER CASE	1	1	1	1
15	380650336-0001	OIL SEAL,30×50×8	1	1	1	1



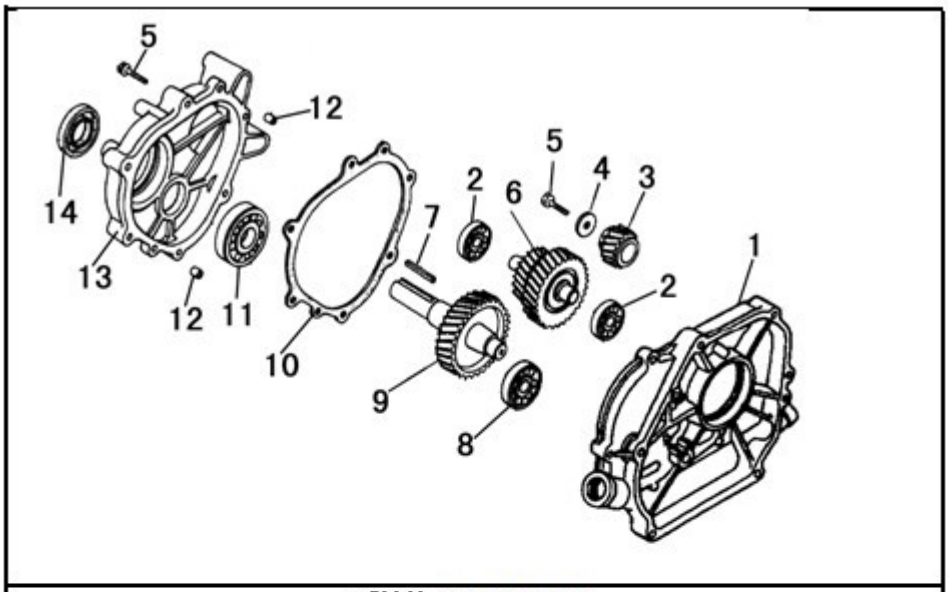
減速箱(RETARDER)

序号 No.	零部件图号 Part No.	Description	数量 (Reqd. QTY.)			
			G240F-B	G240FD-B	G270F-B	G270FD-B
16	110690011-T042	OIL STICK	1	1	1	1
17	191930009-T082	PACKING , RETARDER CASE C	1	1	1	1
18	110260024-T110	BOLT , DRAIN PLUG	1	1	1	1
19	380450516-T110	WASHER , DRAIN PLUG	1	1	1	1



减速轮(RETARDER)

序号 No.	零部件图号 Part No.	Description	数量（Reqd. QTY.）			
			G240F-C	G240FD-C	G270F-C	G270FD-C
1	110820018-T084	COVER, CRANKCASE	1	1	1	1
2	380630005-0001	BEARING , RADIAL BALL	1	1	1	1
3	260010133-T084	CHAIN	1	1	1	1
4	191950003-T084	CHAIN WHEEL	1	1	1	1
5	380450515-T560	WASHER 10×30×4	1	1	1	1
6	380140051-0005	BOLT, FLANGE 8×35	7	7	7	7
7	191960004-T084	OUTPUT SHAFT	1	1	1	1
8	380620035-0001	KEY	1	`	1	1
9	380450523-T044	WASHER 20×30×0.3	1	1	1	1
10	191930003-T084	PACKING	1	1	1	1
11	380600120-T040	PIN	2	2	2	2
12	380630140-0002	BEARING , RADIAL BALL	1	1	1	1
13	191920004-T084	COVER	1	1	1	1
14	380650336-T080	OIL SEAL, 30×46×8	1	1	1	1



減速箱 (RETARDER)

序号 No.	零部件图号 Part No.	Description	数量(Reqd. QTY.)			
			G340F-D	G340FD-D	G390F-D	G390FD-D
1	110820017-T112	CRANKCASE COVER	1	1	1	1
2	380630099-0001	BALL BEARING 6202	2	2	2	2
3	191950001-T112	SPLINE GEAR	1	1	1	1
4	380450525-T112	WASHER 8.5×39×4	1	1	1	1
5	380140005-0006	BOLT , FLANGE , 8×40	7	7	7	7
6	191980001-T112	GEAR COMP,	1	1	1	1
7	380620035-0001	KEY	1	1	1	1
8	380630005-0001	BALL BEARING 6204	1	1	1	1
9	191960001-T112	OUTPUT SHAFT	1	1	1	1
10	191930010-T112	GASKET, COVER	1	1	1	1
11	380630140-0002	BALL BEARING 6206	1	1	1	1
12	380600120-T040	DOWEL PIN Φ8×14	2	2	2	2
13	191920005-T112	COVER	1	1	1	1
14	380650336-T080	OIL SEAL, Φ30×Φ46×8	1	1	1	1

STG-1170T			
No	Code	English Name	QTY
1	SX-11-001 SX-11-001b	Handle spring	1 对
2	SX-11-002	clutch 1-2	1
3	SX-11-003	clutch 1-1	1 套
4	SX-11-004	Bracket 1-4	4 件
5	SX-11-005	clutch pin	1
6	SX-11-006	clutch 1-5	2
7	SX-11-007	spring 3	1
8	SX-11-008	Heated up handle sleeve	2
9	SA-001	Switch	2
10	SA-002	Plastic panel	1
11	SA-003	Cross pan head screw	2

12	SX-11-012-1B	steel plate joint drawing	1
13	SX-11-013	Steel plate	1
14	SA-004	hexagonal Screw	1
15	SA-005	lock nut	2
16	SA-006	hexagonal screw	1
17	SA-007	plain cushion	3
18	SJ-215	U fiche	4
19	SJ-224	gourd fiche	7
20	SA-008	saddle flexibility washer	4
21	SJ-209	adjuster lever weldment comp	1
22	SJ-210-1	adjuster damp fixing plate	2
23	SJ-223	bowl shrapnel	4
24	SX-11-258	Speed lever screw	2
25	SJ-209-4	adjusting joint rod	1
26	SJ-241	adjusting crank	2
27	SX-11-027	Not-Standard Screw 1	2
28	SX-11-028	Handle	2
29	SX-11-029	Handle holder	2
30	SX-11-030	Handle upper tube	1 对
31	SX-11-031-1A	Handle weldment comp (right)	1
32	SX-11-032-1A	Handle weldment comp (left)	1
33	SA-009	Nut	2
34	SA-010	hexagonal bolt	2
35	SJ-233	wire pin	5
36	SA-011	hatch pin	5
37	SA-012	Hexagon flange bolt	8
38	SA-013	lamp	1
39	SX-11-039	Handle lower tube	1
40	SA-014	Handle ball (with M12 screw)	1
41	SX-11-041	Fork stick 3	1
42	SX-11-042	block set	1
43	SA-015	plain cushion	4
44	SX-11-044	bushing 2	2
45	SX-11-045	Pedrail	2
46	SX-11-184	hexagonal shaft sheath	2
47	SX-11-047-1A	Fork Stick (Left)	1
48	SX-11-048	belt wheel	4
49	SX-11-049	Shaft sheath 3	4
50	SX-11-055B	Back chain wheel weldment Comp	2
51	SX-11-051	Panel 3	2
52	SX-11-052	Shaft bracket, rear belt wheel	2 套
53	SX-11-053	Hook	2
54	SX-11-054	Shaft	1
55	SX-11-36C	stepped clutch wire	2
56	SX-11-36E	chute wire	1
57	SX-11-254	back cover board 2	1

58	SX-11-058	Front shaft sheath	2
59	SX-11-059	Shaft sheath 2	2
60	SA-016	Pin key	1
61	SX-11-061A	sprocket 28 teeth	1
62	SX-11-062	Clutch 2-8	2
63	SX-11-063	Clutch 2-6	2
64	SX-11-064	Clutch 2-9	2
65	SX-11-168b	Man Synchronization Wheel	1
66	SX-11-066	Clutch 2-3	6
67	SX-11-067	Clutch 2-2	2
68	SX-11-068	Clutch 2-4	2
69	SX-11-069	Clutch 2-5	2
70	SX-11-070	Clutch 2-1	1
71	SA-017	Clutch snap spring	2
72	SA-018	Cross Screw	1
73	SA-019	plain cushion	1
74	SJ-018	Crank sleeve	1
75	SX-11-075-1	Chute Crank -1	1
76	SX-11-248	bracket stay bar, rear belt wheel	2
77	SX-11-36A-2	reverse wire	1
78	SX-11-36A-1	Forward wire	1
79	SA-020	lock nut	1
80	SA-021	hexagonal flange bolt	4
81	SA-022	Hexagon bolt	4
82	SA-023	hexagonal flange bolt	1
83	SJ-211	Shift frame weldment Comp	1
84	SX-11-147D	11P separate sleeve	1
85	SA-024	Step bolt	2
86	SA-025	Spring-type straight pin	1
88	SA-026	plain cushion	2
89	SA-027	lock nut	2
90	SX-11-090	Separate sleeve 3	1
91	SX-11-091	Paw	2
92		hexagonal flange bolt	2
93	SX-11-36D	stepped wire	1
94	SX-11-094	Shift spring	2
95	SX-11-253	back cover board 1	1
96	SA-029	hexagonal bolt	1
97	SA-030	lock nut	2
98	SA-031	hexagonal Screw	2
99	SA-032	lock nut	6
100	SJ-021C	Chute mat	6
101	SA-033	hexagonal screw	6
102	SX-11-36B	auger wire	1
103	SX-11-260	bracket weldment comp, Crank	1
	SX-11-260B	Crank below bracket	1

104	SJ-226	chute extension spring	1
105	SX-11-105-1 SX-11-106-1	Chute Comp	1 套
106	SJ-237	chute pedestal plastic circle	1
107	SJ-012	Discharge chute accessories	1 套
108	SJ-036	Discharge chute spring	1
109	SJ-111	slide	2
110	SJ-001	Fan	1 套
111	SA-034	oil seal	1
112	SJ-057	Washer	1
113	SA-035	Pin key	2
114	SX-11-114	Drive worm shaft	1
115	SA-036	Deep slot bearing	1
116	SJ-101	Pedestal	1
117	SJ-019	Drive shaft sheath	4
118	SJ-108	Output shaft sheath	2
119	SJ-038	Worm wheel	1
120	SA-037	hexagonal Screw	7
121	SJ-101A	Upper Pedestal	1
122	SX-11-122	Bushing 2A	2
123	SA-038	Deep slot bearing	1
124	SA-039	One direction thrust bearing	1
125	30-SX-11-125	right Auger	3
126	SJ-037	Spring 5	1
127	SA-040	plain cushion	2
128	SA-041	Washer	4
129	SJ-020	Shaft Sheath	2
130	SJ-024	Bearing cover	2
131	SA-042	hexagonal Screw	6
132	SX-11-132	Shave plate	1
133	SA-043	Step bolt	2
134	28-SX-11-134	Auger output shaft	1
135	30-SX-11-135	left Auger	3
136	SA-044	Bearing	1
137	SA-045	Square key	1
138	SA-046	hexagonal Screw	1
139	SA-047	plain cushion	1
140	SX-11-140	Big pulley	1
141	SJ-004	Rockered cover	1
142	SJ-050	Screw -1	1
143	SJ-239	washer	1
144	SX-11-144	Tension Plate 3	1
145	SJ-008B	Washer	1
146	SJ-008	Big tension pulley Comp (+ Bearing)	1
147	SX-11-147	Gear lever	1
148	SX-11-148	Orthogonal Iron	1

149	SX-11-149	Pulley sub panel 1	2
150	SJ-107	Washer	1
151	SJ-010A	Driving pulley	1
152	SJ-013B	Change pulley cover	1
153	SJ-007	Driving pulley Bracket	1
154	SA-048	Deep slot bearing	2
155	SJ-010B	Driving pulley shaft	1
156	SX-11-156	Hexagon Gear-shaft	1
157	SA-049	hexagonal flange bolt	2
158	SA-050	plain cushion	2
159	SA-051	Bearing	2
160	SJ-013C	Change pulley	1
161	SJ-008C	Pallet	1
162	SJ-013A	SJ Change pulley washer	2
163	SJ-013D	SJ Change pulley Circle	1
164	SA-052	V-belt	2
165	SA-053	plain cushion	1
166	SA-054	nut	1
167	SA-055	5M synchro-belt	1
168	SX-11-168A	main pulley	1 套
169	SX-11-170B	Mat	1
170	SX-11-170	Small Tension pulley Comp(+bearing)	1
171	SJ-035-1	Small Tension pulley spring	1
172	SJ-046	Tension convex washer	1
173	SX-11-173	Small Tension pulley	1
174	SA-056	hexagonal flange bolt	1
175	SJ-238	washer	2
176	SX-11-255	Helical gear	1
177	SA-057	Spring-type straight pin	1
178	SX-11-084-1	chute Crank2	1
179	SA-058	engine	1
180	SX-11-180	pulley cover	1
181	SX-11-181	Shift plate	1
182	SA-059	Snap Spring	1
183	SX-11-183	sprocket	1
184	SX-11-184	Hexangular shaft sheath	1
185	SA-060	Hexangula Screw	4
186	SX-11-186	Blower cover board 2	1
187	SX-11-187	Gear Box	1
188	SJ-008C	Mat	1
189	SX-11-189	Steel Cover	1
190	SA-061	lock nut	6
	SA-062	plain cushion	6
191	SX-11-191	Separate sleeve 1	2
192	SX-11-192	Fork stick -1	1
193	SX-11-193	Right fork stick	1

194	SA-063	lock nut	1
195	SA-064	plain cushion	2
196	SA-065	hexagonal Screw	1
197	SA-066	hexagonal Screw	1
198	SA-067	Spring Mat	7
199	SA-068	Plain washer	7
200	NJ-01	Auger bolt	6
201	NJ-02	lock nut	6
202	SA-070	lock nut	6
203	SA-071	Spring-type straight pin	1
204	SA-072	Step bolt	8
205	SA-073	lock nut	2
206	SA-074	plain cushion	2
207	SA-075	lock nut	1
208	SX-11-010	pulleyl bracket spring	1
209	SJ-021	Chute Bead	3
210	SA-076	plain cushion	6
211	SA-077	hexagonal screw	1
212	SA-078	hexagonal screw	2
213	SA-079	lock nut	10
214	SA-080	hexagonal screw	2
215	SA-081	hexagonal screw	2
216	SA-082	hexagonal Flange screw	2
219	SA-083	hexagonal screw	6
220	SA-084	hexagonal screw	1
	SA-085	plain cushion	1
221	SA-086	lock nut	4
222	SA-087	plain cushion	4
223	SA-088	pin	1
224	SX-11-224	Fork stick bolt	1
225	SA-089	lock nut	1
226	SX-11-242	Pedrail bracket bolt	4
227	SA-090	lock nut	4
228	SX-11-257	Cardan	1
229	SX-11-259	Helical tooth bracket	1
230	SJ-011A	Chute crank sleeve	1
232	SA-091	hexagonal flange screw	4
233	SA-092	lock nut	8
234	SA-093	hexagonal screw	2
	SA-094	gasket	2
235	SA-095	lock nut	2
236	SX-11-006-1A	screw	2
237	SA-096	plain cushion	4
238	SA-097	plain cushion	8
239	SA-098	hexagonal flange screw	1
240	SA-099	hexagonal flange screw	2

241	SA-100	hatch pin	3
242	SA-101	lock nut	4
243	FD-04-62	key chain	1
244	SA-102	lock nut	1
245	SA-103	plain cushion	1
246	SX-11-246	claw axle	1
247	SA-104	Clutch snap spring	2
248	SA-105	Semicircular key	2
249	SA-106	lock nut	1
250	SA-107	hexagonal screw	4
251	SA-108	cross bolt	2
252	SA-109	hexagonal flange bolt	2
253	SJ-028	handle washer	2
254	SA-110	hexagonal bolt	2
	SA-111	spring cushion	4
	SA-112	plain cushion	2
255	SA-113	plain cushion	2
256	SA-114	hexagonal flange bolt	4
257	SJ-23-25	Tension screw	2
258	SA-115	lock nut	2
259	SA-116	plain cushion	1
260	SA-117	plain cushion	2
261	SA-118	spring cushion	3
262	SX-11-262	Thermally insulated shroud	1
264	SX-11-209-1	adjuster lever weldment comp-1	1
265	SJ-251A	adjuster lever weldment comp-2	1
266	SA-119	disc breke	1
267	SX-11-36F	stepped self-lock wire	1
268	SA-121	hexagonal bolt	2
269	SA-122	hexagonal bolt	1
270	SA-123	lock nut	1
271	SSG5580A.23-01	28 wire circlip	2
272	SA-124	wire fixation lock	1
273	SJ-209-4-2	adjusting joint rod 2	1
274	SJ-252	Speed adjusting spring	1
275	SA-125	oil seal	2
276	SJ-151	shovel base	1
277	SJ-150	plastic shovel	1
278	SJ-010A-1	SJ cover of pulley	1
279	SA-126	nut bolt	6
280	SX-11-168C	sleeve	1
281	SX-11-091A	paw 3	2
282	SJ-300	pulley board	1
283	SA-127	chain	2
284	SA-128	chain	1
285	SA-129	key chain	1

286	SA-130	belt wheel	4
287	SA-131	flange screw	4
288	SA-132	flange nut	4
289	SA-133	plain cushion	2
290	SA-134	pin	1
291	28-SX-11-301	output shaft sheath 28-1	2
292	28-SX-11-300	output shaft sheath 28-2	4
以下为根据客户需求而定：		Options	
1		Battery	1
		Battery Cover	1
		Battery lock screw	1
		Battery lock nut	1

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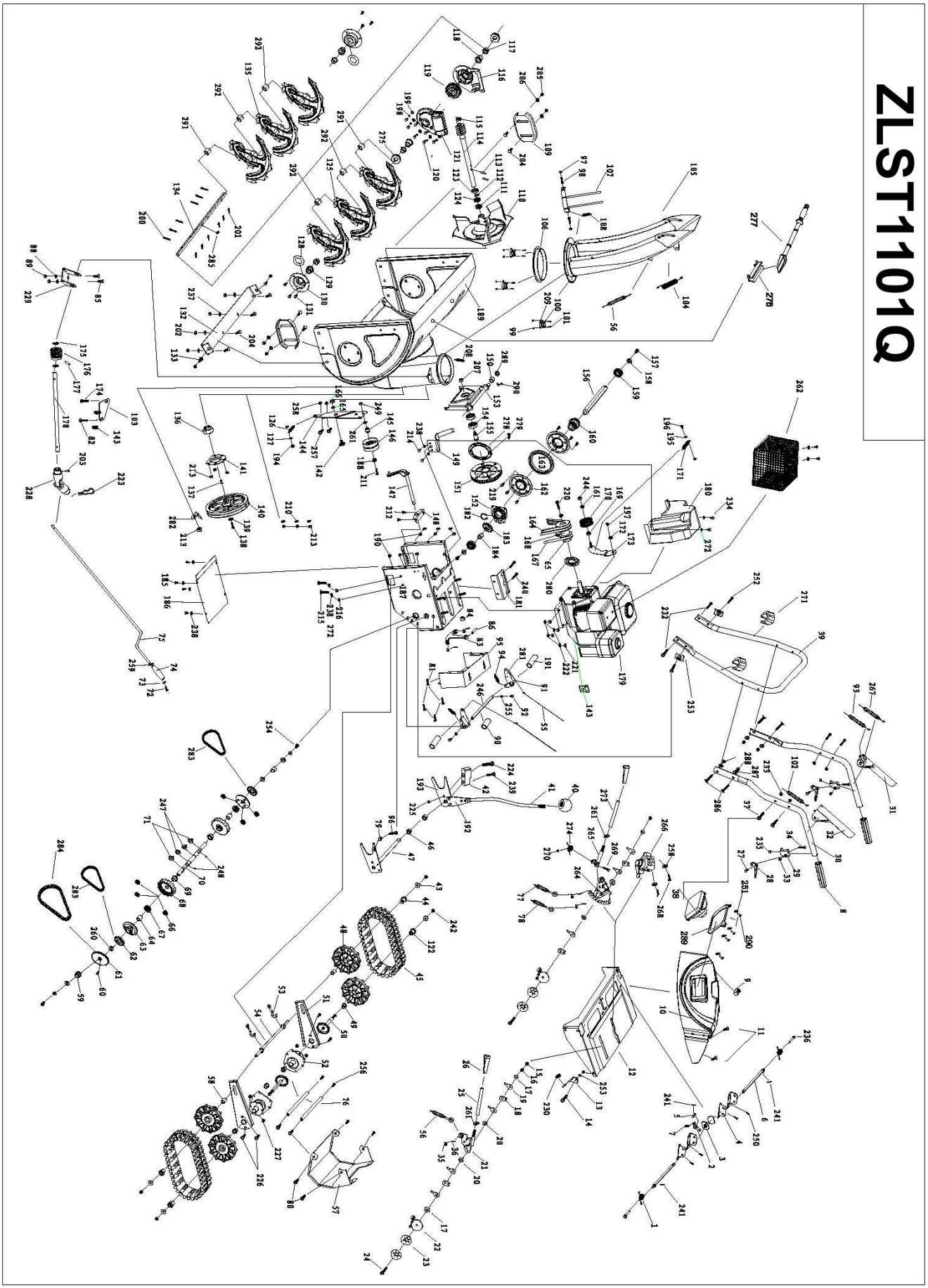

CE DICHIARAZIONE DI CONFORMITA'

Si dichiara che il prodotto è conforme alle seguenti normative ed ai relativi documenti:

2006/42/EC, che abroga la precedente 98/37/EC,
2004/108/EC, che abroga la precedente 89/336/EC,
2005/88/EC, che abroga la precedente 2000/14/EC,

e successive modifiche per le Direttive Europee Macchine, Compatibilità Elettromagnetica , Emissione Acustica Ambientale delle macchine ed attrezzature destinate a funzionare all'aperto ed ulteriori norme europee ove richieste.

Fossano, 20-06-2011

Giovanni VIGLIETTA
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