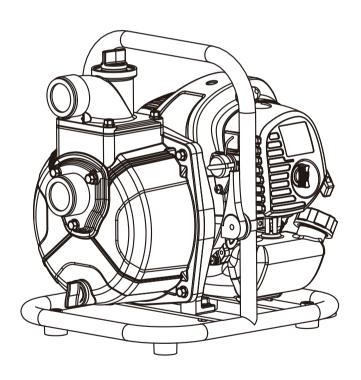
Gasoline Engine Pump

Instruction Manual



• LGP10 • LGP15

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Before using our water pump, please read this manual carefully to understand the proper use of your unit.

Thank you for purchasing this gasoline engine pump.

This instruction manual describes the installation, usage and maintenance of our water pump and provides important safety information. Keep your manual in a convenient place for quick reference.

This manual should be considered as a permanent part of this water pump and should remain with the pump if it is sold.

Please take care of the information with following typical symbols:

▲ DANGER

This symbol indicates a hazardous situation which, if not avoided, will result in death or serious injury.

▲ WARNING

This symbol indicates a hazardous situation which, if not avoided, could result in death or serious injury.

A CAUTION

This symbol indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

IMPORTANT: This symbol indicates a potentially hazardous situation which, if not avoided could result in property damage.

NOTE: This symbol indicates useful information.

The warning and safety instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when operating or cleaning tools and equipment. Always contact your dealer, distributor, service agent or manufacturer about problems or conditions you do not understand before operating the product.

▲ WARNING

1. SAFETY INFORMATION

User's responsibility

- Before using this product, carefully read and fully understand this instruction manual for proper operation and safety procedures. Failure to follow all instructions may result in personal injury or product damage.
- Be sure that you are familiar with quick stop procedures and control operation of the water pump.
- This machine shall be operated by adults only! Keep children and pets away from the working area.
- This pump is designed to transfer clean water. Never attempt using this pump to deliver dirty water or slurry, or any inflammable or corrosive liquids.
- Do not touch the hot muffler while the machine is working. Move the machine when it's stopped and cooled down.
- To prevent fire hazards, keep at least 1 meter of clearance on all sides of this machine during operation.

▲ DANGER

Adding gasoline

- Gasoline is highly flammable and explosive. Always shut down this machine before refueling. Refuel in a well-ventilated area. Make sure the filler cap is securely closed after refueling.
- No smoking is allowed and no open fire or sparks allowed to exist in areas where fueling is carried out or the fuel is stored.
- Be sure to remove the spilled gasoline as by wiping before starting this machine.

▲ DANGER

Carbon monoxide gas

 When in operation, the exhaust from this machine contains poisonous carbon monoxide gas. Breathing this poison gas can lead to eventually death. Use this machine ONLY outdoors in well-ventilated areas.

10. SPECIFICATIONS

Model	LGP10	LGP15	
Dimensions and Weight			
Total length	350 mm	355 mm	
Total width	290 mm	290 mm	
Total height	316 mm	365 mm	
Dry weight	8 kgs	9 kgs	

Engine

Model	G43	G43			
Engine type	Single cylinder, 2-stroke,	Single cylinder, 2-stroke,			
	forced air-cooled	forced air-cooled			
Displacement	42.7 cc	42.7 cc			
(Bore X Stroke)	(40 × 34 mm)	(40 × 34 mm)			
Ignition system	CDI	CDI			
Rotation direction	Counterclockwise	Counterclockwise			
Idle speed	3000 rpm	3000 rpm			
Fuel tank capacity	1 L	1 L			
Mixture ratio	40:1 (2-stroke engine oil	40:1 (2-stroke engine oil			
	and 90 octane gasoline	and 90 octane gasoline			
	or higher.	or higher.			

Pump

Inlet diameter	25 mm	38 mm
Outlet diameter	25 mm	38 mm
Maximum head	35 m	35 m
Maximum suction	8 m	8 m
Maximum flow	6 m³/h	15 m³/h
Self-priming time	≤120 s	≤120 s
at 5 m		

NOTE: Specifications are subject to change due to tehnical improvements without prior notice.

8. TROUBLESHOOTING

The engine will not start:

- 1). Is the fuel type correct?
- 2). Is there enough fuel?
- 3). Has the fuel reached the carburetor?
- 4). Is the fuel air cleaner blocked?
- 5). Is the spark plug generating sparks?
 Uninstall and check the spark plug, clear off the dirt from around the plug and dry it. Fit the spark plug into the plug cap. Replace the spark plug if necessary.
- 6). If the engine still refuses to get started, contact an authorized dealer.

The pump does not pump water:

- 1). Is it filled with enough amount of water?
- 2). Is the strainer clogged?
- 3). Is the hose clamp tightened?
- 4). Is the suction hose damaged?
- 5). Is the suction head too high?
- 6). If the pump stil fails to work, contact an authorized dealer.

9. STORAGE

Let the pump cool down. Wait at least 30 minutes after it stops. Clean the pump and coat rust-proof grease if necessary.

A CAUTION

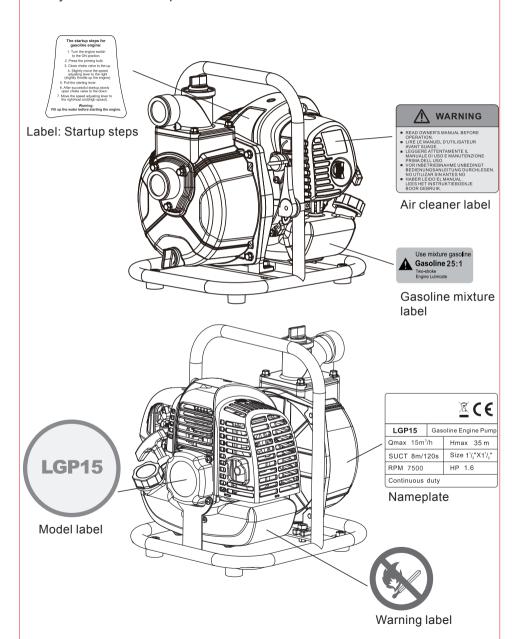
The cleaning water under pressure may go into air filter and muffler, or even go into cylinder which will result in corrosion damage.

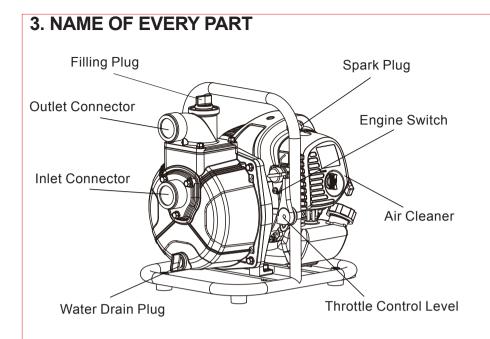
Before storing the pump for a long time:

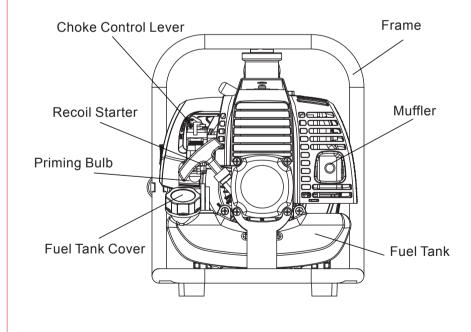
- 1). Make sure the storage area is free of moisture and dust.
- 2). Drain off the fuel.
 - a. Drain the fuel in the fuel tank into a suitable container.
 - b. Presse the priming bulb and drain the fuel inside carburetor into the fuel tank.
 - c. Drain the fuel in the fuel tank again after the fuel inside carburetor is drained off.
- 3). Remove the spark plug.
- 4). Put 2 ml of clean 2-stroke engine oil into cylinder.
- 5). Pull up the recoil starter two or three times to distribute the oil inside the cylinder.
- 6). Reinstall the spark plug.
- 7). Pull up the starter until a resistance is felt. In that case, both the inlet valve and outlet valve is closed to prevent corrosion inside the engine. Pull back the starter handle gently.
- 8). Cover up the pump to keep out dust.

2. LOCATION OF WARNING LABELS

These warning labels indicate potentially hazardous situations which could result in serious injury. Please carefully read and understand the symbols, safety information and precautions.

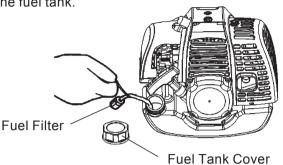






Cleaning the fuel filter

The fuel filter can be rinsed in hot water with detergent or can also be cleaned in non-inflammable or high-flash-point solvent. Dry it and put it back into the fuel tank.



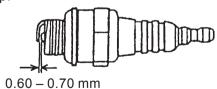
Maintaining the spark plug

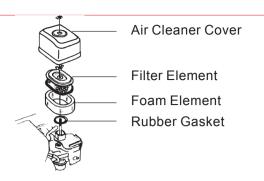
The recommended type of spark plug is L7T (TORCH) or equivalent.

A CAUTION

Take care not to touch the muffler due to high temperature on it's surface when the engine is running or just stops.

- 1). Remove the plug cap.
- 2). Remove the spark plug by the wrench.
- 3). Visually check the spark plug. Discard it if the electrode or insulation ring is damaged or the insulator is broken or cracked. Check the plug gap with a feeler gauge. The gap should be 0.60 0.70 mm. Vary the gap by moving the side electrode if necessary.
- 4). Thread the plug in by hand to prevent cross-threading.
- 5). Tighten the spark plug with the wrench to compress the washer.
- 6). Reinstall plug cap.





Cleaning filter element:

Slightly tap the filter element a few times, then blow it with compressed air (pressure \leq 207 KPa) from inside. Do not clean the filter element with brush, which will block the air passages of the element.

Cleaning foam filter element:

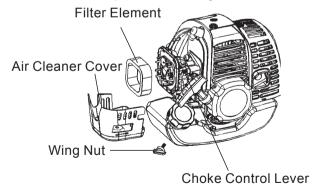
Wash the element in hot water with detergent or in a non flammable or high flash point solvent. Let it dry thoroughly and immerse it into clean oil and then squeeze out the excess oil.

- 5). Clean the lower part of air cleaner, air cleaner cover and rubber gasket.
- 6). Combine the filter element and foam filter element.
- 7). Reinstall the air cleaner element and the cover.

Maintaining the fuel filter

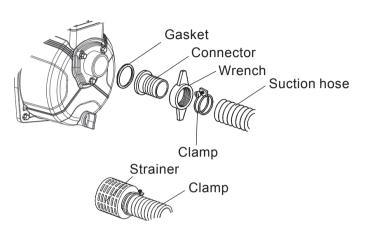
An unclear fuel filter may cause low or unstable engine speed.

- 1). Remove the fuel tank cover.
- 2). Take the fuel filter out of the fuel tank.
- 3). Check the fuel filter. Replace it if damaged.



4. PRE-STARTING OPERATION

IMPORTANT: Install the strainer on the end of the suction hose before operation. The strainer prevents foreign materials and protects the pump from block and component damages.



A CAUTION

To start this water pump, please check the following before each use:

- Confirm that gasoline has been properly added.
- Confirm that water has been fully added in the pump housing. Dry running will damage the mechanical seal.

Checking fuel level

Uncap the fuel tank and check the fuel level while the machine is not in operation. Pouring gasoline if the fuel level is found too low.

A CAUTION

Do not allow the fuel to overflow the fuel tank. Wipe up any spilled gasoline with a dry cloth immediately.

Fuel Tank Capacity:

LGP10: 1 L LGP15: 1 L

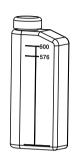
IMPORTANT:

Use an oil/gasoline mixture of 2-stroke engine oil and automotive unleaded gasoline with a Research Octane Number of 90 or higher.

NOTE:

How to use the ratio pot 25:1

Add gasoline to the line marked 576 ml and then add 2-stroke engine oil to the line marked 600 ml. Shake the pot evenly to finish the mixture.

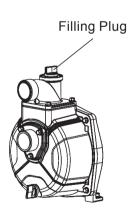


IMPORTANT:

- It is strictly prohibited to use 4-stroke engine oil.
- It is strictly prohibited to use pure gasoline.
- The carburetor or engine may work not properly in in case of non-use of mixed fuel for more than one month.

Checking and filling the pump with cooling water

The pump must be fully filled with priming water before it is put to operation.





7. MAINTENANCE

Maintenance Schedule

Syste	em or component	Maintenance	Before use	10 hrs or every 1 month	25 hrs or every 3 months	50 hrs or every 6 months	100 hrs or every year	Remarks
	Spill of fuel	Cleanup	0					
	Fuel tank	Check & clean	0					Replace it if necessary
	Air cleaner	Check & clean		0				Replace it if necessary
Engine	Fuel filter	Check & clean				0		Replace it if necessary
	Spark plug	Clean and adjustment of plug gap		0				Replace it if necessary
	Cylinder radiator				0			
	Muffler	Clean					0	

NOTE: For commercial use, log hours of operation to determine proper maintenance intervals.

Maintaining the air cleaner

A dirty air cleaner will restrict air flow to the carburetor and result in less pump power. Service the air cleaner periodically to prevent carburetor malfunctions. More frequent maintenance will be necessary if the pump is working in an extremely dirty environment.

A CAUTION

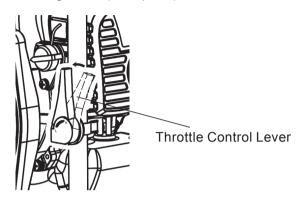
Never run the pump without an air cleaner or with a damaged air cleaner. The dirt or dust if sucked into the engine may quicken engine wear.

- 1). Move the choke control lever upward to the CLOSED position to prevent dust and dirt from the carburetor.
- 2). Unscrew the wing nut and remove the air cleaner cover.
- 3). Separate filter element from foam element.
- 4). Replace the element if damaged. Replace the paper filter element in accordance with maintenance schedule.

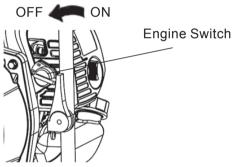
6. STOPPING THE ENGINE

Please follow the steps below to stop the engine:

1). Move the throttle lever to the right end (low speed).



2). Turn the engine switch to the OFF position.



NOTE: Turn the engine switch to the OFF position immediately to shut down the engine in an emergency.

5. STARTING THE ENGINE

A CAUTION

Confirm that fresh engine oil has been properly added.

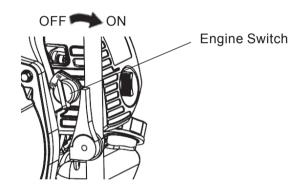
A CAUTION

Confirm that gasoline has been properly added in the fuel tank.

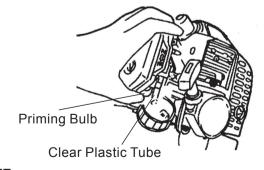
A CAUTION

Confirm that water has been properly added in the pump.

1). Turn the engine switch to the ON position.



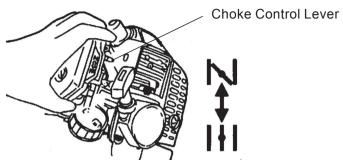
2). Press the priming bulb a few times until a fuel flow in the fuel return tube (clear plastic tube) is visually noticed.



NOTE:

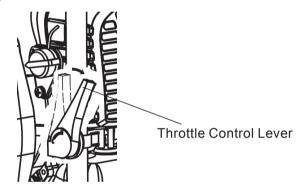
It's not necessary to press the priming bulb In case the engine is warm or fuel is found inside the clear plastic tube.

3). Move the choke control lever upward to the CLOSED position.

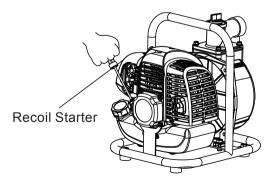


NOTE:Do not use the choke if the engine is warm.

4). Move the throttle control lever away from the LOW position, about 1/3 of the way toward the HIGH position.



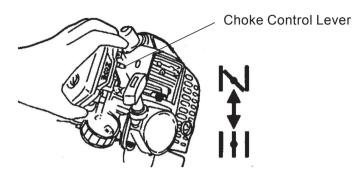
5). Pull the recoil starter lightly until a resistance is felt, then pull briskly.



CAUTION

Do not allow the recoil starter to snap back against the engine. Return it gently.

6). Move the choke control lever downward slowly to the OPEN position after the engine operates continuously.



7). Move the throttle control lever to the HIGH position (left end).

