



**ZENOAH
AIR-COOLED
2-STROKE
GASOLINE ENGINE**

G4K-D

OPERATION AND MAINTENANCE GUIDE

This guide explains about the safety precautions, starting procedures, and regular maintenance on the Zenoah Engine. To make the most use of it, please read through this guide before use.



Husqvarna Zenoah Co., Ltd.

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⚠ CAUTION



1. The fuel is flammable. Handle with care at all times. When refueling, stop the engine and let it cool down before pouring fuel. Keep open flames and sparks away from fuel.
2. When fuel is spilled, wipe off immediately and completely.
3. The exhaust gases contain harmful carbon monoxide. Never run the engine in a closed room or in anyplace where ventilation is poor.
4. The engine metal parts can burn your skin. Never touch the cylinder and muffler during operation or right after stopping the engine.
5. To prevent electrification, never touch the ignition plug or the plug wire during operation.
6. Before inspecting or servicing the engine, make sure to stop the engine and wait until it cools down.
7. When fuel has leaked out of the carburetor, the muffler, the fuel tank or other part, stop use of the engine and have it repaired.

⚠ DANGER

- The fuel used on this engine is highly flammable. When mixing gasoline and oil, keep open flame away. Do not smoke.
- Fuel mixing should be performed outdoors.
- Wipe off spilt fuel completely before starting the engine.
- Stop the engine before refueling.
- Keep the fuel container away from a fire or a stove.

⚠ CAUTION

Do not use oil for the 4-stroke engine use, alcohol contained gasoline, fuel contaminated by water or other foreign materials, or fuel exposed in sunbeam for a long time. Those can cause engine troubles.

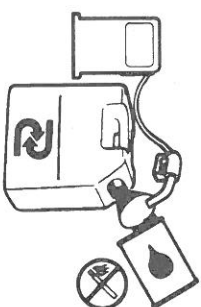
This engine is lubricated by oil specially formulated for the 2-stroke air-cooled gasoline engine use.

Prepare correct oil and alcohol-free regular gasoline(unleaded), and mix in the following ratio.

We recommend 25:1 (15:1 for first 20 hours)

- 2-stroke oil (JASO : FD grade or ISO : LEGD grade)
Gasoline 50 : OIL 1

- 2-stroke oil (JASO : FC grade or ISO : LEGC grade)
Gasoline 40 : OIL 1



FUEL INTO THE TANK

⚠ DANGER

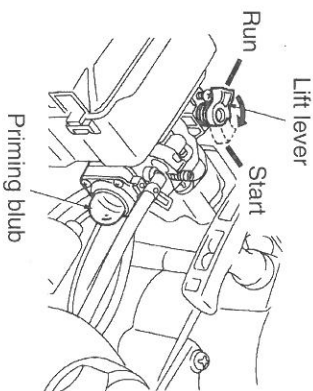
- Select a flat ground outdoors for fueling the engine. Keep open flame away. Do not smoke.
- When refilling the fuel tank on the way of operation, stop the engine before removing the tank cap.
- Keep 20% of the full tank capacity vacant. Should the tank be filled up fully, fuel may leak out of the cap during operation.
- Wipe off spilt fuel completely before starting the engine.

STARTING ENGINE

⚠ WARNING

- Never start the engine without the equipment attached in place. When starting the engine, keep your body and surroundings away from the movements of the equipment.

1. Shift switch of the equipment or engine to the RUN or ON position.
2. Push the priming bulb until fuel appears in the clear tube.
3. Set the lift lever of carburetor in the starting position by turning it to engine side with the finger.
It's unable to set the lift lever in the starting position unless the throttle lever is in the idle position.
(Restart the engine with keeping the lift lever in the running position, when right after stopping the engine.)
4. While holding the equipment firmly, pull out the starter rope swiftly. To avoid damage to the starter, return the rope before it is fully pulled out as keeping hold of the starter knob.
5. After the engine has started, run engine for 1 or 2 minutes at idle engine speed. Then return the lift lever to the running position by pulling throttle lever slightly.

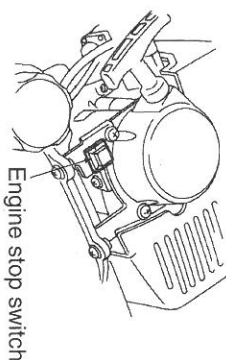


STOPPING ENGINE

⚠ CAUTION

IN CASE OF EMERGENCY, IMMEDIATELY STOP THE ENGINE.

1. Return the throttle and cool down the engine.
2. Shift switch of the equipment or engine to the STOP or OFF position.
In case of push button switch, press on switch until the engine stops completely.



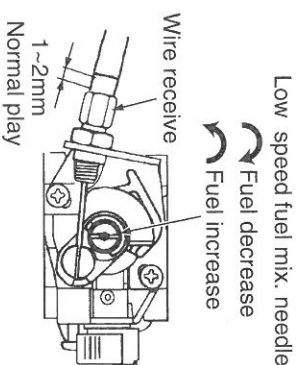
ADJUSTMENTS

■ THROTTLE WIRE

The normal play of the throttle wire is 1 or 2 mm. When the play is so large or too small, loosen the lock nut and reposition the wire receive on the carburetor side.

■ IDLING SPEED

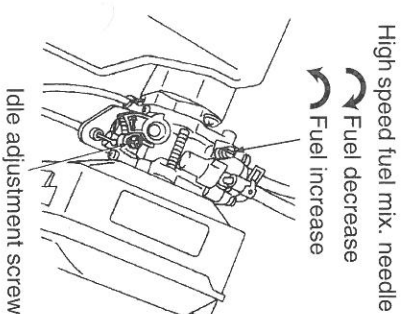
Check the idling engine speed. In case engine dies out or run too fast at idling engine speed, correct it by turning the idle adjustment screw. Idling speed is up by turning clockwise and down by turning counter-clockwise.



■ FUEL MIXTURE NEEDLES

(High speed / Low speed)
The fuel mixture needles (H/L) should be adjusted within the allowable range of the standard position.

	H	L
Std. position	1 and 1/2 turns back	1 turn back
Allowance	± 1/4 turns	± 1/4 turns



MAINTENANCE

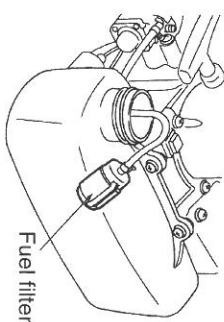
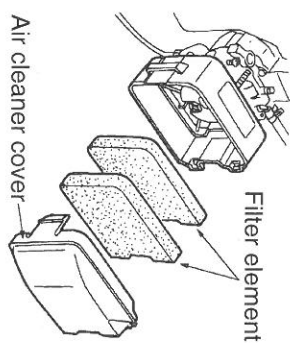
CAUTION

STOP THE ENGINE BEFORE INSPECTING AND REPAIRING IT.

AIR FILTER

A clogged air filter will reduce the engine performance. Check periodically and clean the air filter element in warm, soapy water as required. Dry completely before installing. When the element is broken or shrunk, replace with a new one.

Operation with a deformed or broken air filter will give severe damage to the engine inner parts.

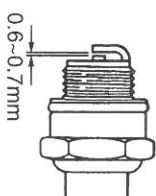


FUEL TANK CAP & FUEL STRAINER

When the engine seems to run short of fuel supply, check the air vent hole of the fuel tank cap and the fuel strainer for blockage.

SPARK PLUG

Starting failure and mis-firing are often caused by a fouled spark plug. Periodically clean the spark plug and check that the spark gap is within the correct range. For a replacement plug, use the specified type or the equivalents.



CHAMPION RCJ-6Y
NGK BPM7A

STORAGE

Old fuel left in the carburetor may cause starting failure. Before storing the unit, empty the fuel tank and drain the carburetor.

SPECIFICATIONS

Model	ZENOAH G4K-D
Cylinder layout	Vertical
Bore x Stroke mm	40 x 33
Displacement cc	41.5
Direction of crankshaft rotation	Clockwise (PTO view)
Fuel	2-stroke oil pre-mixed gasoline
Fuel tank capacity Liter	1.0
Carburetor type	Diaphragm type
Ignition system	CDI
Spark plug	CHAMPION RCJ-6Y / NGK BPM7A
Starting	Recoil starter
Stopping	Primary wire short-circuit
Air cleaner	Dry type
Overall size (L x W x H) mm	136 x 303 x 310
Dry weight kg	3.1

The specifications and technical data are based on the standard models.