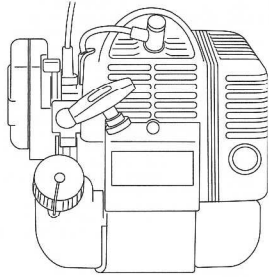


OWNER'S MANUAL



KAWASAKI ENGINE	
TYPE	TH43-DX · TH48-DX

Thank you for buying this TH series Kawasaki Engine. For your safety, read this Owners Manual and understand it thoroughly before operating this ENGINE. Read warning labels which are on the engine and understand them. If any label is missing, damaged, or worn get a replacement from your Kawasaki engine dealer and install it in the correct position.

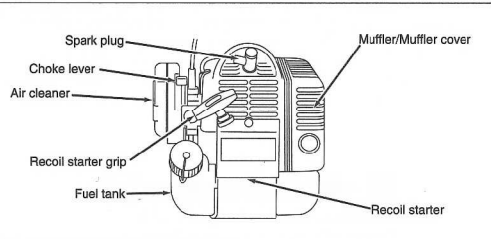


P / N 99976-2027-03

WARNING

- Do not run the engine in a closed area. Exhaust gas contains carbon monoxide, an odorless and deadly poison.
- Gasoline is extremely flammable and can be explosive under certain condition.
 - Stop engine and allow the engine to cool before refueling.
 - Do not smoke. Make sure area is well ventilated and free from any source of flame or sparks including the pilot light of any appliance while refueling, servicing fuel system, draining gasoline and/or adjusting carburetor.
 - Do not fill the tank so the fuel level rises into the filler neck or level surface of level gauge. If the tank is overfilled, heat may cause the fuel to expand and overflow through the vents in the tankcap.
 - Wipe off any spilled gasoline immediately.
- To prevent fire hazard:
 - Keep the engine at least 1 m (3.3ft) away from buildings, obstructions and other burnable objects.
 - Do not place flammable objects close to the engine.
 - Do not expose combustible materials; to the engine exhaust.
 - Do not use the engine on any forest covered, bush covered or grass covered unimproved land unless spark arrester is installed on the muffler.
- To avoid getting an electric shock, do not touch the spark plug, plug cap or spark plug lead during engine running.
- To avoid a serious burn, do not touch a hot engine or muffler. The engine becomes hot during operation. Before you service or remove parts, stop the engine and allow the engine to cool.
- Do not place hands or feet near moving or rotating parts.
- Always remove the spark plug lead from the spark plug when servicing the engine to prevent accidental starting.

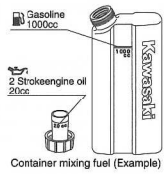
1. LOCATION OF PARTS :



2. FUEL AND OIL :

The fuel is mixture of gasoline and oil. A50 to 1 mixture is recommended (50 parts gasoline to 1 part oil).

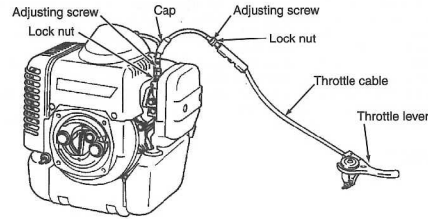
Mix it thoroughly before pouring it into the fuel tank. Recommended engine oil: High quality 2-stroke engine oil JASO Service Classification: FC class Before filling the fuel tank always shake a container of 50:1 premixed fuel that has been left standing to avoid the possibility of fuel/oil separation.



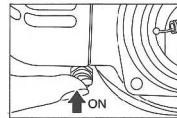
CAUTION
Running on gasoline only will cause the engine to seize.

3. ADJUSTMENT OF THROTTLE CABLE :

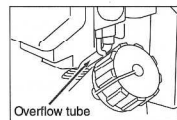
- When setting the engine to working machines (cutter, etc.), adjust the throttle cable in the following manners:
 - Be sure to fix the throttle lever and the throttle cable to the stipulated positions.
 - Locate the position of the adjusting screws at the upper part of the carburetor or the center of throttle cable to allow the outer wire play of the throttle cable to be around 0.5 to 1.0 mm, and fix them by lock nuts.



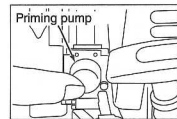
4. STARTING :



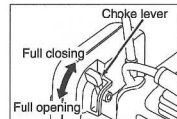
- Turn engine switch to "ON".



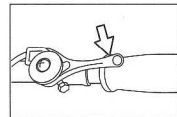
- Push the priming pump. With the throttle lever fully closed, push the priming pump slowly several times until the fuel comes out of the overflow tube. When the overflow comes, stop pushing the priming pump.



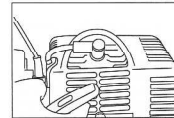
- NOTE :**
- A fuel overflow caused by pushing the priming pump is made so as to return into the fuel tank. There is no fear of flooding the engine and so push the priming pump enough to get the engine starting.



- Use the lever to fully close the choke. (In an intense hot weather or when the engine is still warm, use the half choke or none at all.)



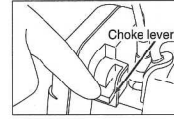
- Open the throttle lever halfway.



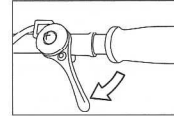
- Give the recoil starter grip a rapid and vigorous pull until the engine fires.

CAUTION

Don't pull the starter rope all the way. Rewind the rope slowly.



- After the engine starts with the choke fully closed, gradually move the choke lever back to the "OPEN" position. If the engine fires, but does not run continuously, repeat the starting procedure with the choke fully opened.

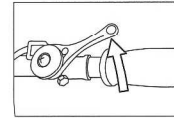


- After allowing a three-minute warming-up period, use the throttle lever to run the engine at the desired speed.

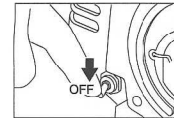
CAUTION

- Should the engine fail to start, do not try to pull the recoil starter too often with the choke closed as this will cause the fuel to flood into the cylinder and make starting even more difficult. In this case, open the choke fully and repeat the starting procedure.
- After starting, vary the engine speed a few times, by operating the throttle lever to draw out the remaining air in the carburetor.
- Do not allow the engine to run constantly at a high speed before the three-minute warming-up period is over.

5. STOPPING :



- Put the throttle lever to the slow position.



- Turn engine switch to "OFF" position.

6. ADJUSTMENT OF CARBURETOR :

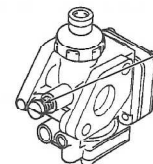
- Adjustment of idling Revolution: With the throttle lever fully closed, adjust the slow stop screw to allow such stable operating condition that follow-about of blades, etc., engine stop, and the like will not occur under idling operation. (The rated idling number of revolution: TH43, TH48 = 2800rpm)
- Fuel Adjustment: The carburetor has been adjusted to the optimum fuel supply at the time of delivery. Don't move the main jet adjust screw.

CAUTION

Should problems arise during carburetor adjustment, ask your dealer.

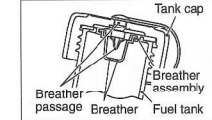
CAUTION

Whenever the carburetor needs adjustment, consult your dealer.



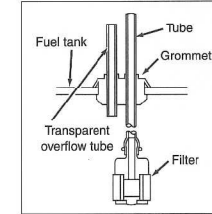
- Slow stop screw**
Turning clockwise: Revolution rises.
Turning counterclockwise: Revolution drops.

7. FUEL TANK CAP MAINTENANCE :



- A breather passage is incorporated in the tank cap. If the breather passage is clogged, the fuel will not flow into the carburetor, causing problems with starting or running the engine. At the same time, make sure that the base of the breather assembly firmly is fitted into the groove inside the tank cap as shown.

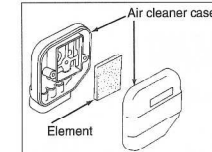
8. MAINTENANCE AND ADJUSTMENT.:



- Fuel Filter Cleaning**
Remove the grommet from the fuel tank. Pull out the fuel tube from the fuel tank, and then remove the fuel filter assembly from the fuel tube. Clean the fuel filter in a bath of high flash-point solvent. Dry the fuel filter before installing.

NOTE :

- If a fuel does not flow better with the fuel filter cleaned, replace the fuel filter with new one.



- Air Filter Element Cleaning**
Unscrew the air cleaner off the carburetor, split the air cleaner case, and take out the element. Clean the element in a bath of high flash-point solvent. Dry the element before installing.

CAUTION

More frequent maintenance is necessary when the engine is operated in dusty condition.

9. MAINTENANCE AFTER EVERY 50 HOURS OF OPERATION :

- Carbon Removal** ① in the Muffler Tail-pipe, ② in the Cylinder Exhaust-port, ③ on the Top of the piston, ④ on the Combustion Chamber
See your authorized Kawasaki Engine Dealer unless you have the proper equipment and mechanical proficiency.
- Spark Plug Cleaning
- Spark Plug Gap Check/Reset
Check the spark plug gap and reset it, if necessary to the specification.

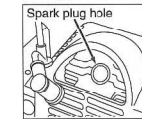
Spark plug	0.6 - 0.7mm (0.023 - 0.028 in.)
Recommended Spark Plug	NGK BMR6A

10. LONG-TIME STORAGE :

- If you do not expect to use the engine for a long period of time, drain the fuel tank with fuel and let the engine run at idling speed out of fuel before turning the engine switch to OFF position.

CAUTION

Do not leave the engine with gasoline in the fuel tank and the carburetor for a long period. This could cause difficult restarting, loss of power and other problems.



- Remove the spark plug, pour in 0.5 mL of new engine oil through the plug hole, pull the recoil starter several times, and reinstall the spark plug.
- Slowly pull the recoil starter until resistance is felt (until the piston is felt coming on its compression stroke i.e. both intake and exhaust ports have become closed by the piston).
- Store the engine in a clean and dry place.

11. SPECIFICATIONS :

	TH43-DX	TH48-DX
Type :	Air-cooled, 2-stroke single cylinder, gasoline engine.	
Displacement mL	43.2	48.6
Dry weight kg	3.6	3.6

The above specifications are subject to change without notice due to improvements in design and performance during production.

