

Tanaka® Engine

PF-330

Owner's manual

970-07250-200

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Fuel safety

- Mix and pour fuel outdoors and where there are no sparks or flames.
- Use a container approved for fuel.
- Do not smoke or allow smoking near fuel or the tool or while using the tool.
- Wipe up all fuel spills before starting engine.
- Move at least 3 m away from fueling site before starting engine.
- Stop engine before removing fuel cap.
- Empty the fuel tank before storing the tool. It is recommended that the fuel be emptied after each use. If fuel is left in the tank, store so fuel will not leak.
- Store tool and fuel in area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.

Maintenance safety

- Maintain the tool according to recommended procedures.
- Disconnect the spark plug before performing maintenance except for carburetor adjustments.
- Keep others away when making carburetor adjustments.
- Use only genuine replacement parts as recommended by the manufacturer.

Transport and storage

- Carry the tool by hand with the engine stopped and the muffler away from your body.
- Allow the engine to cool, empty the fuel tank, and secure the tool before storing or transporting in a vehicle.
- Empty the fuel tank before storing the tool. It is recommended that the fuel be emptied after each use. If fuel is left in the tank, store so fuel will not leak.
- Store tool out of the reach of children.
- Clean the unit carefully and store it in a dry place.

If situations occur which are not covered in this manual, take care and have a good judgement. Contact your dealer if you need assistance.
Pay special attention to statements preceded by the following words:

⚠ WARNING !

Indicates a strong possibility of severe personal injury or loss of life, if instructions are not followed.

CAUTION !

Indicates a possibility of personal injury or equipment damage, if instructions are not followed.

NOTE !

Helpful information for correct function and use.

I. EXPLANATION OF PICTORIAL LABELS (If so equipped)

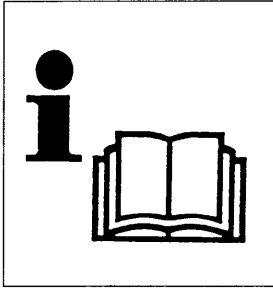


Fig.1-1



Fig.1-2

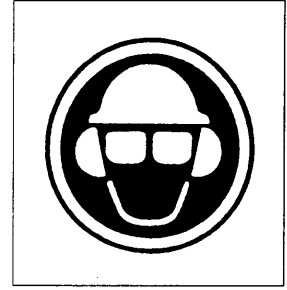


Fig.1-3

Read the entire operator's manual before using or servicing this unit (Fig.1-1)

Read, understand and follow all warnings and instructions in the manual and on the unit. (Fig. 1-2)

Always wear eye, head and ear protectors when using this unit. (Fig. 1-3)

II. WARNINGS AND SAFETY INSTRUCTIONS

Operator safety

- Never let a child or inexperienced person operate the machine.
- Never start or run the engine inside a closed room or building. Breathing exhaust fumes can kill.
- Keep hands away from turning equipment.

Tool safety

- Inspect the entire tool before each use. Replace damaged parts. Check for fuel leaks and make sure all fasteners are in place and securely fastened.
- Replace parts that are cracked, chipped or damaged in any way before using the tool.
- Keep others away when making carburetor adjustments.
- Use only accessories as recommended for this tools by the manufacturer.

III. OPERATING PROCEDURES

1. Fuel (Fig. 3-1)

⚠ WARNING !

This is a two-stroke engine. Always run the engine on fuel, which is mixed with oil. Provide good ventilation, when fueling or handling fuel.

Fuel

- Always use branded 89 octane unleaded gasoline.
- Use Tanaka two-cycle oil or a quality two-cycle oil at mixing ratio of 50 : 1 (Gasoline (A) :Oil (B)).
- Never use multi-grade oil (10 W/30) or waste oil.
- Always mix fuel and oil in a separate clean container. Always start by filling half the amount of fuel, which is to be used. Then add the whole amount of oil. Mix (shake) the fuel mixture. Add the remaining amount of fuel. Mix (shake) the fuel-mix thoroughly before filling the fuel tank.

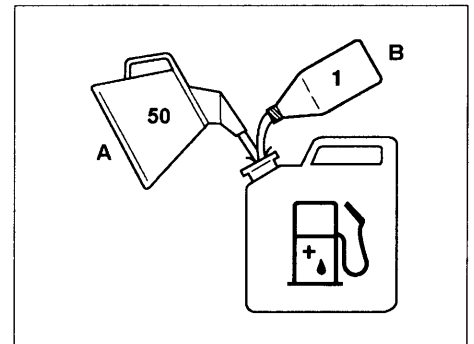


Fig.3-1

Fueling

⚠ WARNING !

- Always shut off the engine before refueling.
 - Slowly open the fuel tank, when filling up with fuel, so that possible over-pressure disappears.
 - Tighten the fuel cap carefully, after fueling.
 - Always move the unit at least 3 m (10 ft.) from the fueling area before starting.
- Before fueling, clean the tank cap area carefully, to ensure that no dirt falls into the tank. Make sure that the fuel is well mixed by shaking the container, before fueling.

2. Starting (Fig. 3-2)

1. Set ignition switch (if so equipped) to (RUN) position.
* Push priming bulb (4) several times. (If so equipped) (Fig. 3-2)
2. Set choke lever (1) to (CHOKED) position.
3. Pull recoil starter handle briskly, taking care to keep the handle in your grasp, and not allowing it to snap back.
4. Once the engine is running, move the choke to the run-position.

NOTE !

At this stage if engine does not start, repeat procedures from 2 to 4.

5. After starting engine, allow the engine about 2-3 minutes to warm up before subjecting it to any load.

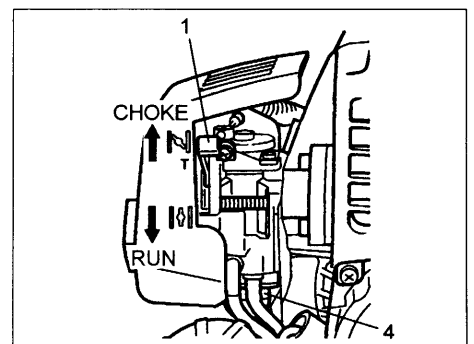


Fig.3-2

3. STOPPING

1. Gradually decrease the engine speed to an idle speed, and then move ignition switch (if so equipped) to STOP position.

IV. MAINTENANCE

Carburetor adjustment (Fig. 4-1)

⚠ WARNING I

Never start the engine without the complete clutch cover assembled! Otherwise the clutch can come loose and cause personal injuries.

In the carburetor, fuel is mixed with air. When the engine is test run at the factory, the carburetor is basically adjusted. A further adjustment may be required, according to climate and altitude. The carburetor has one adjustment possibility:

T = Idle speed adjustment screw

Idle speed adjustment (T)

Check that the air filter is clean. When the idle speed is correct, the equipment will not rotate. If adjustment is required, close (clockwise) the T-screw, with the engine running, until the equipment starts to rotate. Open (counter-clockwise) the screw until the equipment stops. You have reached the correct idle speed when the engine runs smoothly in all positions well below the rpm when the equipment starts to rotate.

If the equipment still rotates after idle speed adjustment, contact your service workshop.

NOTE I

Standard idle rpm is 2500~3000 rpm.

⚠ WARNING I

When the engine is idling the equipment must under no circumstances rotate.

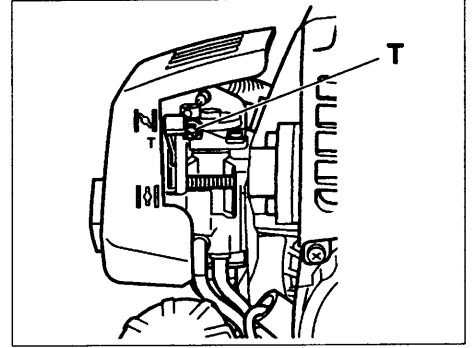


Fig.4-1

Maintenance schedule

Below you will find some general maintenance instructions. For further information please contact your service dealer.

Daily maintenance

- Clean the exterior of the unit.
- Check that nuts and screws are sufficiently tightened.

Weekly maintenance

- Check the starter, especially cord and return spring.
- Clean the exterior of the spark plug.
- Remove it and check the electrode gap. Adjust it to 0.6 mm, or change the spark plug.
- Clean the cooling fins on the cylinder and check that the air intake at the starter is not clogged.
- Clean the air filter.

Monthly maintenance

- Rinse the fuel tank with gasoline.
- Clean the exterior of the carburetor and the space around it.
- Clean the fan and the space around it.

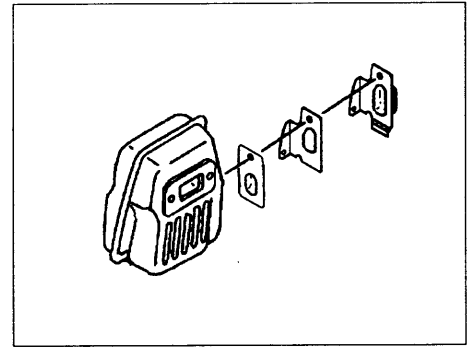


Fig.4-4

Air filter (Fig. 4-2)

The air filter must be cleaned from dust and dirt in order to avoid:

- Carburetor malfunctions.
- Starting problems.
- Engine power reduction.
- Unnecessary wear on the engine parts.
- Abnormal fuel consumption.

Clean the air filter daily or more often if running in exceptionally dusty areas.

Cleaning the air filter

Remove the air filter cover and the filter (1). Rinse it in warm soap suds. Check that the filter is dry before reassembly. An air filter that has been used for some time cannot be cleaned completely. Therefore, it must regularly be replaced with a new one. A damaged filter must always be replaced.

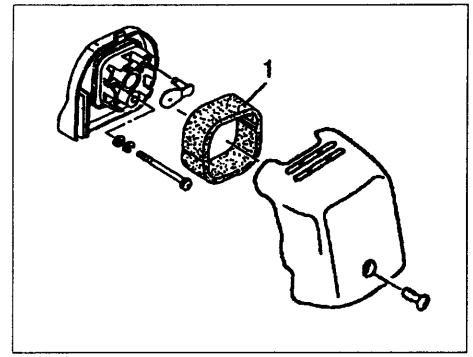


Fig.4-2

Spark plug (Fig. 4-3)

The spark plug condition is influenced by:

- An incorrect carburetor setting.
- Wrong fuel mixture (too much oil in the gasoline).
- A dirty air filter.
- Hard running conditions (such as cold weather).

These factors cause deposits on the spark plug electrodes, which may result in malfunction and starting difficulties. If the engine is low on power, difficult to start or runs poorly at idling speed, always check the spark plug first. If the spark plug is dirty, clean it and check the electrode gap, readjust if necessary. The correct gap is 0.6 mm. The spark plug should be replaced after about 100 operation hours or earlier if the electrodes are badly eroded.

CAUTION!

Always use the recommended spark plug type.

Muffler (Fig. 4-4)

Remove the muffler (if so equipped) and clean out any excess carbon from the exhaust port or muffler inlet from time to time in order to avoid power-loss.

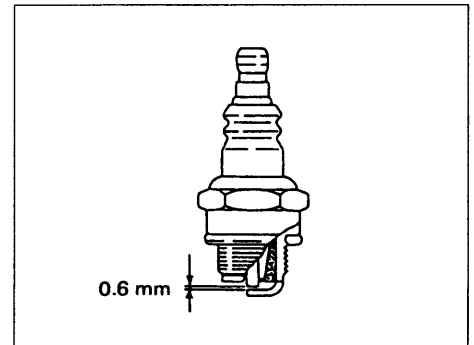


Fig.4-3

V. SPECIFICATIONS

Engine Model	PF-330
Type	Forced air cooled, 2 cycle, single cylinder
Displacement (ml)	33.0
Fuel	Mixed fuel of gasoline and oil 25~50:1
Fuel Tank (litter)	0.70
Ignition	Transistorized Electronic ignition
Spank Plug	CAMPION CJ6Y or equivalent
Carburetor	Diaphragm Type
Power Transmission Type	Centrifugal clutch

Note: To improve the performance, the specifications are subject to change without notice.