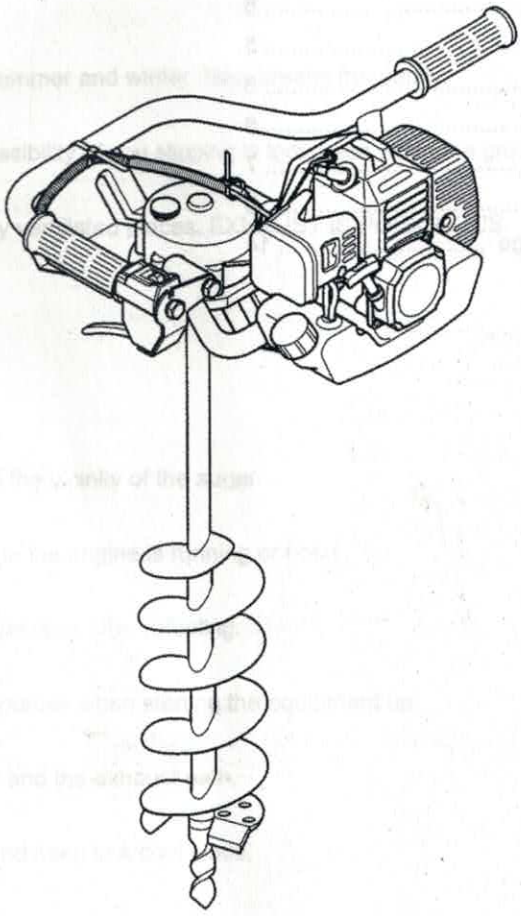
Parklander Operator's manual

AUGER

PRO-AG500



Read the following instructions before use.

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To the user

Thank you for purchasing the Parklander auger. This manual has been compiled to give you a complete understanding of how to assemble, operate and store the equipment. Be sure to read this manual thoroughly before using your auger.
Parklander develops and perfects products on a continuous basis.
For this reason, you may find that some of the latest improvements to the actual product may be missing from this manual.

Contents

A. Safety rules and precautions

To ensure the safety of you and others,
READ the following precautions before using the equipment.

Dress

1. Wear a long-sleeved shirt and long pants closed at the cuff.
2. Do not wear a neck-tie or other loosely dangling garments. Such articles may become entangled in the drill when working.
3. Wear protective goggles to protect eyes from flying objects.
4. Wear a work cap when working on flat ground and a helmet when working on slopes.
5. Wear work shoes equipped with no-slip tread.
6. Wear ear plugs or other adequate device to protect the ear drum from noise.

Environmental precautions

1. Do not work for long periods of time in summer and winter. Take breaks frequently.
2. Do not use the auger in the rain. The possibility of you slipping is increased when the ground is wet.
3. Do not use the auger indoors or in poorly ventilated places. EXHAUST IS POISONOUS.

Strictly NO FIRE

This equipment runs on gasoline.

1. Do not smoke or introduce live flames in the vicinity of the auger.
2. Do not remove the gas cap or refuel while the engine is running or hot.
3. Wipe the auger body dry of any spilled gasoline after refueling.
4. Ensure at least 3 m distance from fuel sources when starting the equipment up.
5. Keep flammables away from the muffler and the exhaust path.
6. Store fuel in approved containers only and keep in a cool place.

Checks before start-up

1. Check all bolts and nuts are securely tight.
   Tighten where necessary.
2. Check the drill is well filed and void of chipping, cracking or bending. NEVER use a drill when damaged.
3. Use only Parklander approved parts for repairs and maintenance.

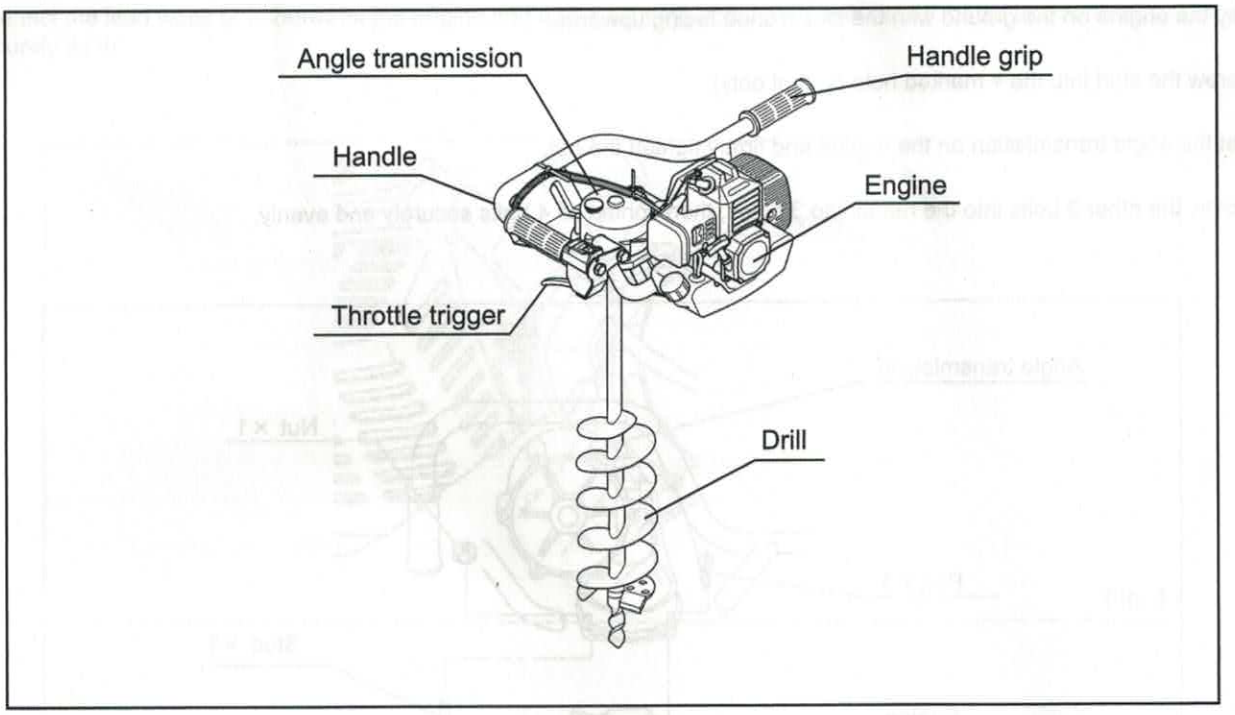
Cautions during usage

1. Do not allow other persons within 5m of the worksite.
   It is DANGEROUS for pets and children to be near the equipment when operating.
2. Use caution when drilling through rock laden ground. This equipment may rotate in reverse.
3. It is DANGEROUS to use the auger in an awkward or uncomfortable position. Lay sturdy planks before starting, and work only when a safe posture is ensured.
4. Be sure to stop the engine before allowing persons to approach within 5m of the equipment. Make sure anyone approaching the auger approaches it from the front.
5. ALWAYS stop the engine and take the necessary cautions when suspending work or moving to another location.
6. Do not allow children or anyone who is unskilled in equipment usage, to operate the equipment.
7. NEVER touch the drill while the engine is running.
   Be sure the engine is OFF and the drill has stopped rotating before handling it.
8. BEWARE of the drill when rotating. Keep feet, hands and other body parts, and clothes away from the drill.
9. Make sure the drill is completely still when placing it on the ground.
10. Idle the engine when the drill is excessively loaded or when rotation has stopped.
11. When deep drilling, do not attempt to complete work in 1 stretch. Extract soil in 2 or 3 steps.

Precautions after usage

1. Before servicing the auger or making repairs, ALWAYS stop the engine, remove the plug cap from the spark plug, and allow the engine to cool down.
2. Before storing the auger, drain all remaining fuel and wipe the equipment clean of dirt and weeds.
   NEVER store the auger near live flames.

B. Names of parts and specifications



Specifications

Model		PRO-AG500	
Transmission		Automatic centrifugal clutch	
Reduction ratio		35 : 1	
Drilling rotational speed (rpm)		170	
Drilling rotational direction		Clockwise	
Lubricant		SAE 80-90 gear oil	
Weight (kg) (Without drill)		9.2	
Dimensions L x W x H (Without drill) (mm)		590 × 375 × 270	
Engine		TB50	
Vibration levels ISO 7916 (m/s²)	Idle speed	L	R
		8.6	5.6
	Max. RPM	L	R
		9.8	7.4
Noise levels ISO 7917 (dB(A)av)		95	
Measured sound power level ISO 10884 (dB(A)av)		102	
Displacement (cm³)		49.4	
Max. Output (kW)		1.42	
spark plug		NGK BMR6A	
Fuel tank capacity (cm³)		900	
Fuel mix ratio Gasoline : Oil		50 : 1	

Drilling diameter (Max. depth : 560mm)	Diameter	ϕ35, 60, 80, 100, 150, 200, 250

* Specifications are subject to change without notice.

C. Assembly

1. Installation of engine (Fig. 1)

(1) Lay the engine on the ground with the clutch shoe facing upwards.

(2) Screw the stud into the * marked hole (1 spot only).

(3) Set the angle transmission on the engine and firmly tighten the nut.

(4) Screw the other 3 bolts into the remaining 3 holes, then tighten all 4 bolts securely and evenly.

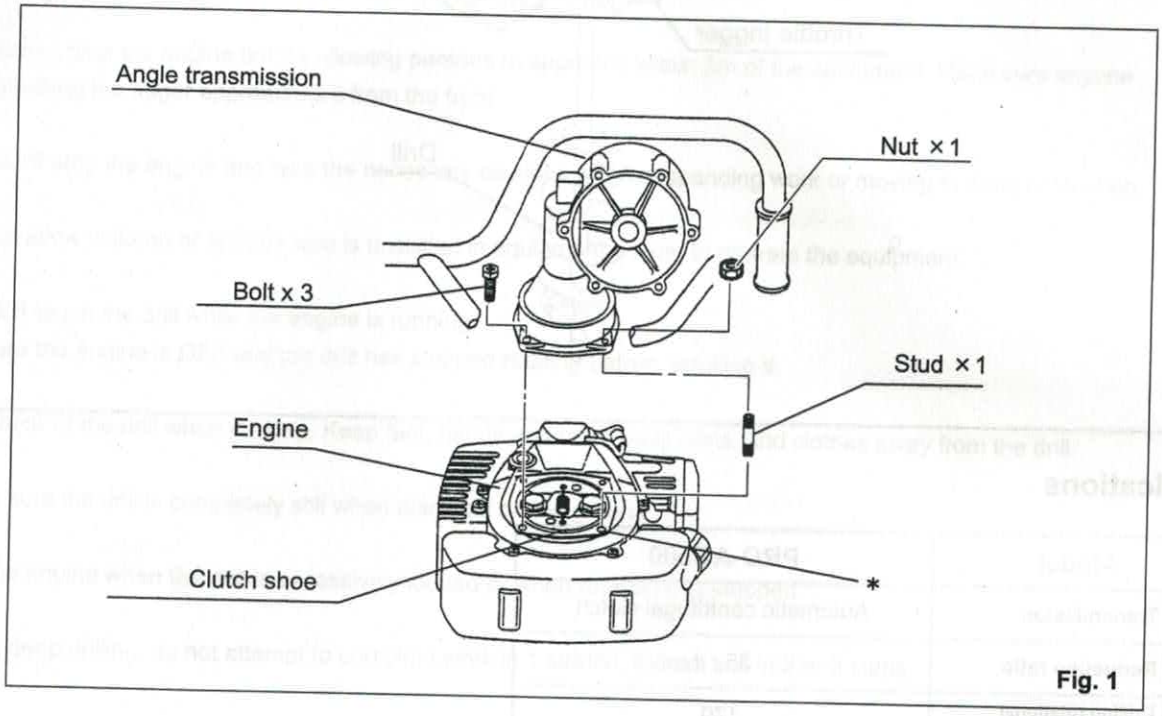


Fig. 1

2. Connection of throttle wire (Fig. 2)

(1) Remove the air filter cover (A).

(2) Fit the throttle wire (B) into the stay (C).

(3) Fix the throttle wire end (B) in the dent of the wire holder (D).

(4) Fix the throttle wire (B) into the stay (C), and then adjust the lock nuts (E) to set the play of the throttle wire (B) 0.5~1.0mm.

(5) Fix the air filter cover (A).

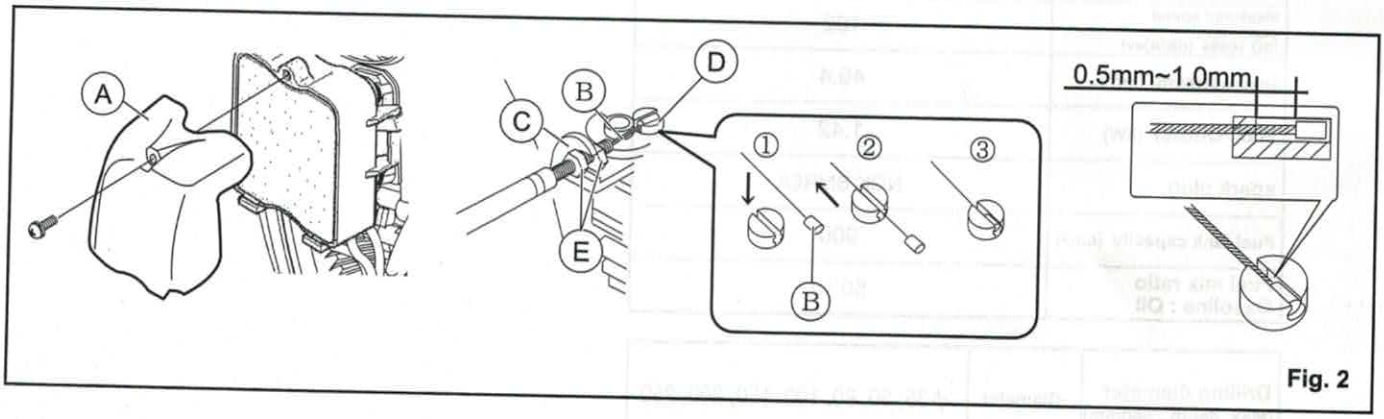


Fig. 2

3. Connection of lead wires (Fig. 3)

Connect the lead wires (x 2) between the engine and angle transmission. Make sure colors match and connections are securely tight.

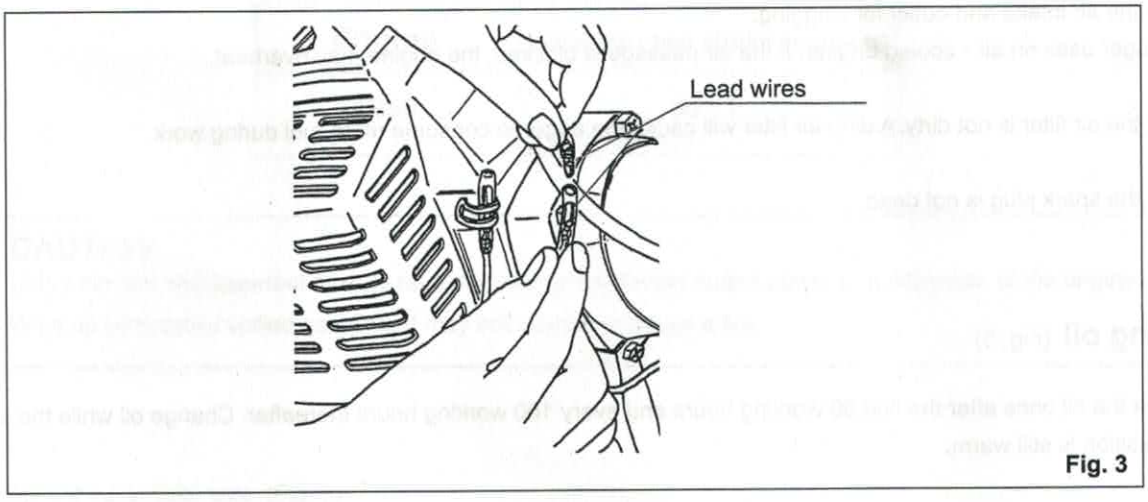


Fig. 3

4. Installation of drill (Fig. 4)

(1) Slide the clip band upward and pull the pin out from its hole.

(2) Align the pin holes on the gear shaft and drill shank, and insert the drill over the shaft.

(3) Reinsert the pin through the pin holes and lower the band until covering the hole.

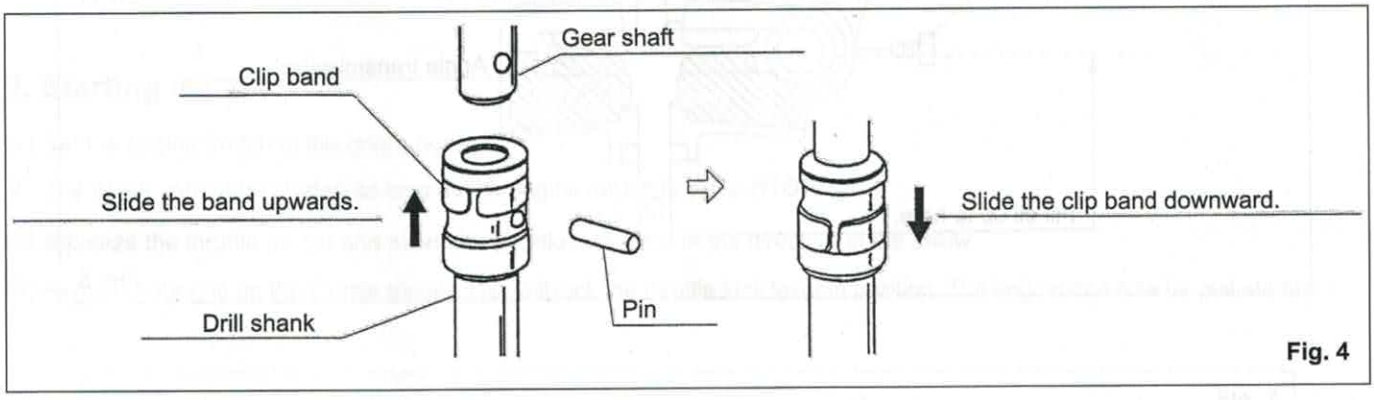


Fig. 4

D. Before usage

1. Checks

(1) Check parts are not loose or missing.
This goes ESPECIALLY for the spark plug.

(2) Check the air intake and outlet for clogging.
This auger uses an air - cooled engine. If the air passage is blocked, the engine may overheat.

(3) Check the air filter is not dirty. A dirty air filter will cause the auger to consume more fuel during work.

(4) Check the spark plug is not dead.

2. Adding oil (Fig. 5)

(1) Change the oil once after the first 50 working hours and every 100 working hours thereafter. Change oil while the angle transmission is still warm.

(2) Add 250 cc of oil. (SAE 80-90 gear oil)

(3) Do not add oil past the drain plug hole. To determine oil level, stand the auger on the drill. Oil level should be at the bottom of the drain plug hole.

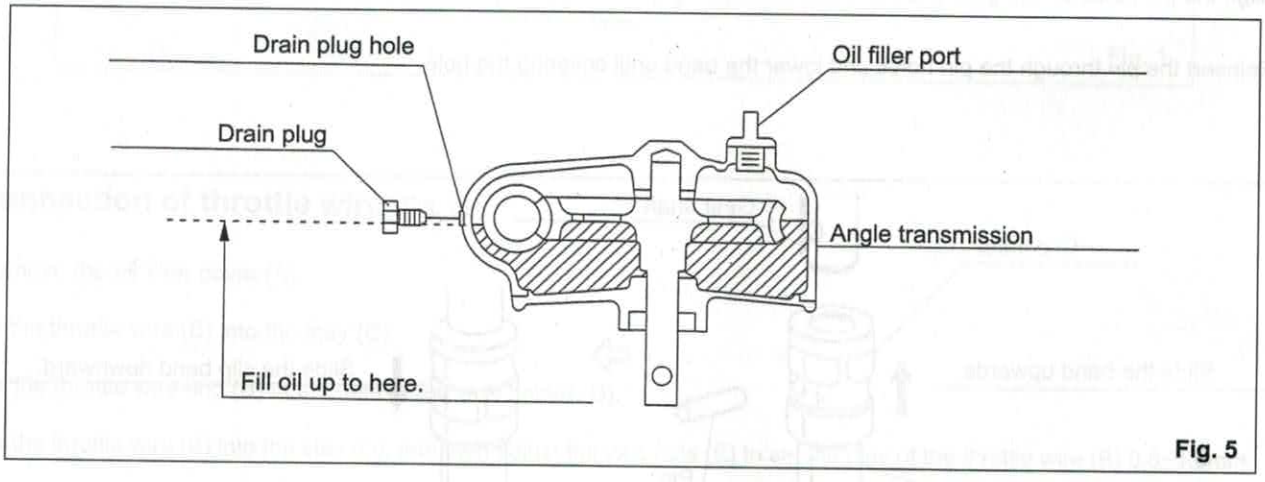


Fig. 5

E. Engine

1. Preparation before engine starting

(1) Fill the fuel tank with the correct mixture of regular automobile gasoline and two stroke engine oil.
Mixture ratio (by volume)

Engine	Gasoline : two stroke engine oil
TB50	50 : 1

CAUTION

- Using the fuel with incorrect mixture ratio may cause insufficient output power or malfunction of the engine.
- Wipe up completely spilled gasoline. It may soil clothes or cause a fire.

(2) Adjustment of the throttle wire (Fig. 6)

Adjust the play of throttle wire to 0.5 to 1.0 mm. Excessive play will cause a starting failure.

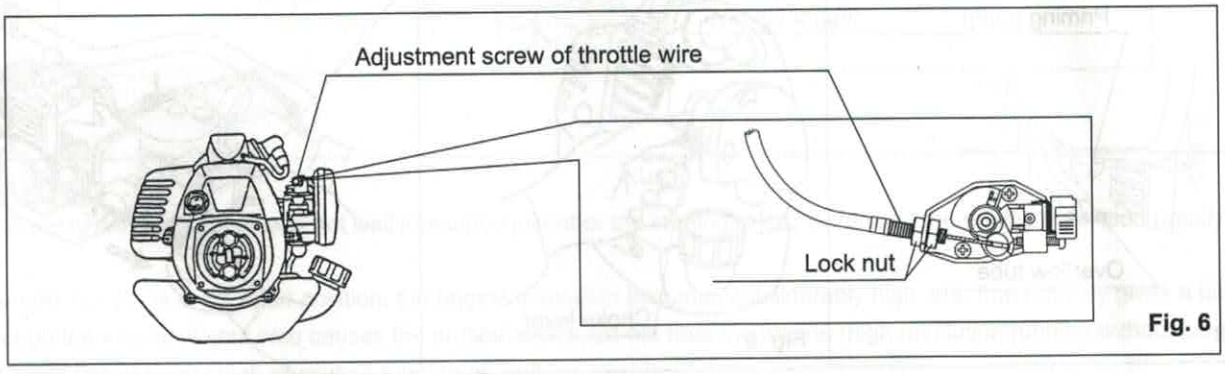


Fig. 6

2. Starting (Fig. 7)

(1) Set the engine switch to the (start) position.

* The auger cannot be started as long as the engine switch is set to STOP.

(2) Squeeze the throttle trigger and move the throttle lock lever in the direction of the arrow.

(3) Remove your grip on the throttle trigger. This will lock the throttle lock lever in position. The engine can now be pull-started.

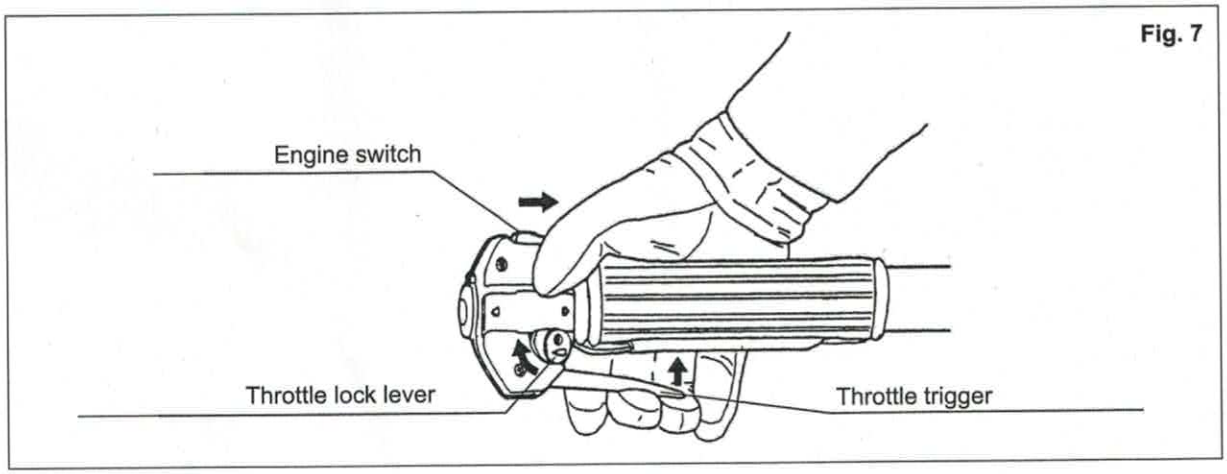


Fig. 7

(4) Slowly press the priming pump several times until fuel comes out of the overflow tube.
(Press more than 10 times) (Fig. 8)

(5) Move the choke lever to the fully closed position (mark side).
When fuel is remaining and the engine is warm, move the choke lever to the fully open position
(mark side). (Fig. 9)

(6) Grasp the recoil starter grip and pull it rapidly. (Fig.10)

(7) After starting, watch the engine condition and move the choke lever slowly to the full open position (mark side).
When the engine fires but does not start, move the choke lever to the full open position and again pull the recoil starter grip rapidly.

(8) Once the engine has been started up, gently squeeze the throttle trigger again and then release your grip.
The engine will idle.

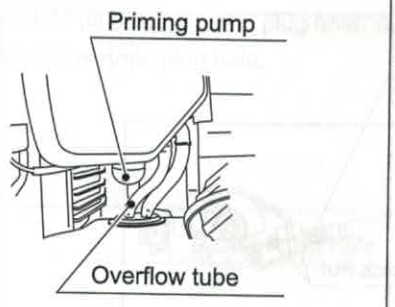


Fig .8

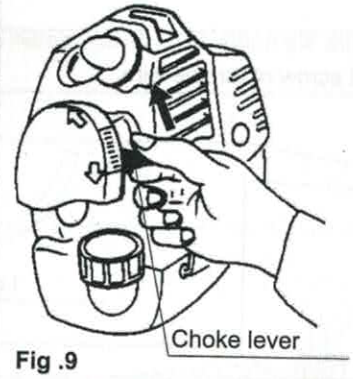


Fig .9

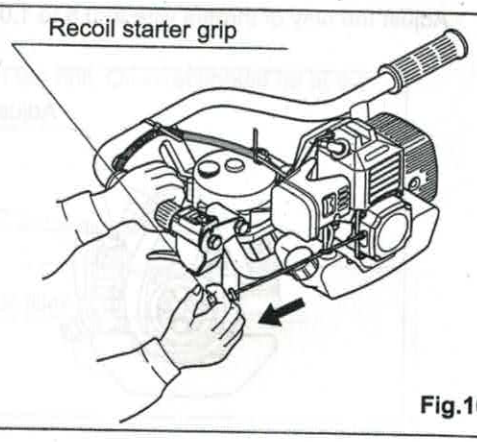


Fig.10

This engine is of the construction that the fuel returns to the fuel tank when the priming pump is operated.
Even if the pump is operated a little too much, the fuel will not be pumped up excessively. It should be operated sufficiently.
Because, when it is insufficient, a starting trouble may be raised.

3. Operation (Fig.11)

(1) After engine starts, move the throttle trigger to low speed position and warm up the engine for about one minute. As the engine becomes warm, smooth acceleration will be obtained.

(2) Perform the work by setting the throttle trigger to the required RPM.

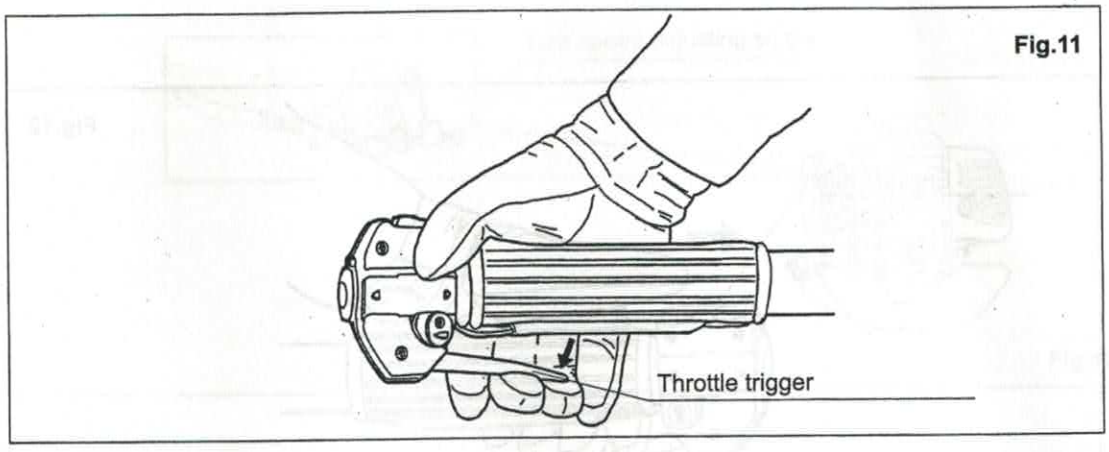


Fig.11

CAUTION

- Since every part of the engine is not well lubricated just after the starting, avoid increasing the engine revolution rapidly.
- When the throttle is in full open position, the engine revolution becomes considerably high, and that not only gives a bad effect on the engine life but also causes the engine failure. Do not race the engine (high revolution running without load), and avoid unnecessary high revolution running as well.

4. Stopping (Fig.12)

(1) Release your grip from the throttle trigger and let the engine idle.

(2) Move the engine switch to the STOP position.

- Replenish fuel before it is fully consumed. It will help to make the next starting easier.

[Note]
When the succeeding operation is not scheduled, empty the fuel tank and restart the engine to use up the fuel in the carburetor.

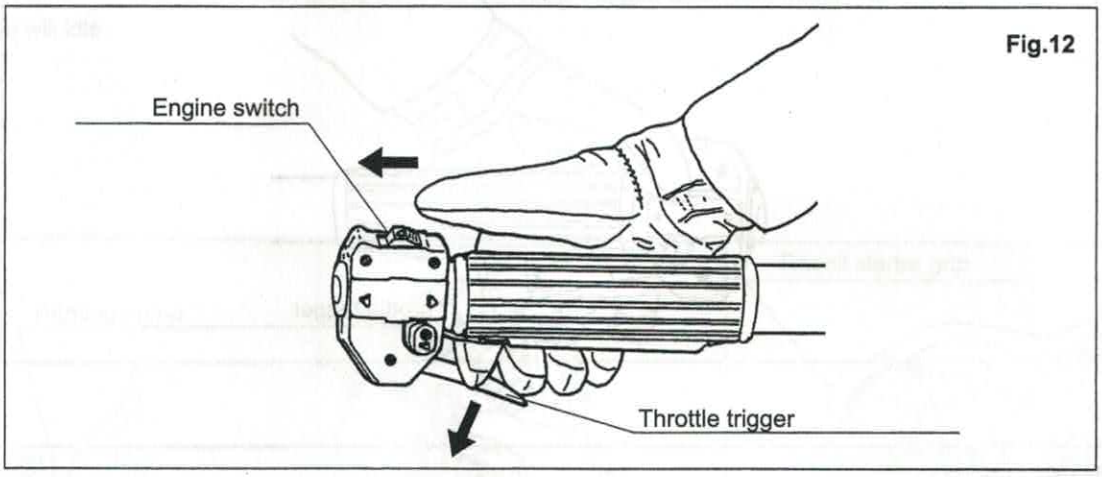
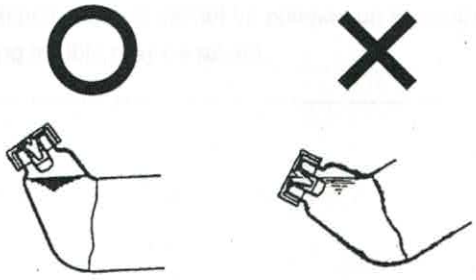


Fig.12

CAUTION

- During summer when the engine is stopped for rest, be careful that the inner packing of fuel tank cap is not submerged in the fuel as shown on the illustration. If the air hole is submerged in the fuel, the fuel may leak due to the increased inner pressure in the fuel tank.

- During operation and just after stopping, do not touch the engine unit, especially the muffler.



5. Adjustment of carburetor (Fig.13)

(1) Adjust the low RPM with the low speed adjusting screw.

- Right turns: RPM increases.
- Left turns: RPM decrease.

[Note]

The adjustment of the carburetor is usually not necessary, since it is adjusted at the optimum position when delivered from the factory. It the fuel mixture is adjusted extremely lean, it may cause the seizure of engine.

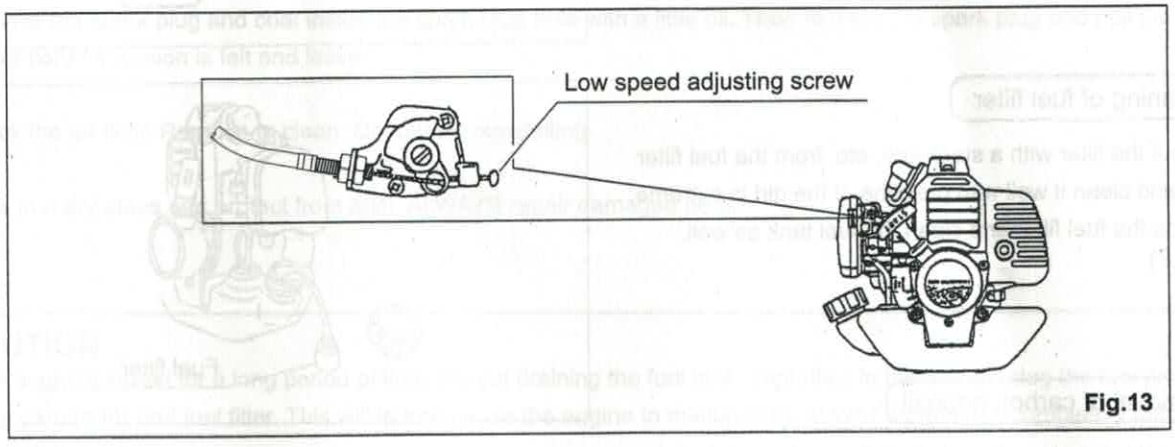


Fig.13

6. Daily Maintenance

Cleaning of air filter (Fig.14)

(1) Open the air filter cover. (Screw may be used depending on the specifications.)

(2) Remove the air filter element and check for deterioration. Replace it if necessary.

(3) Wash the air filter element with kerosene, put it in the engine oil and squeeze it by one hand.

(4) Replace it in the air filter case, and assemble the air filter cover.

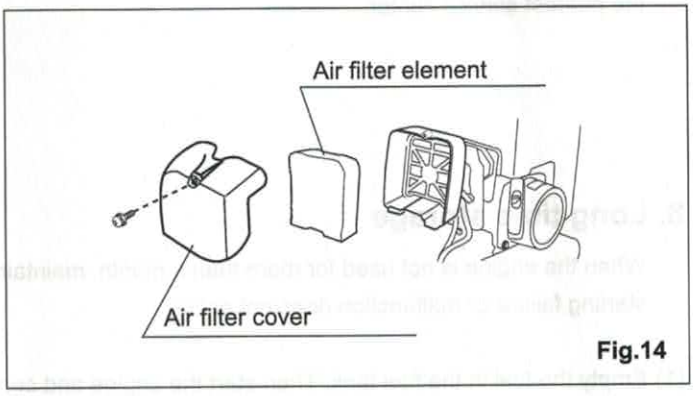


Fig.14

Checking for the tightness of screws

Check the screws periodically for tightness, and if any are loose tighten it again. (Fig.15)

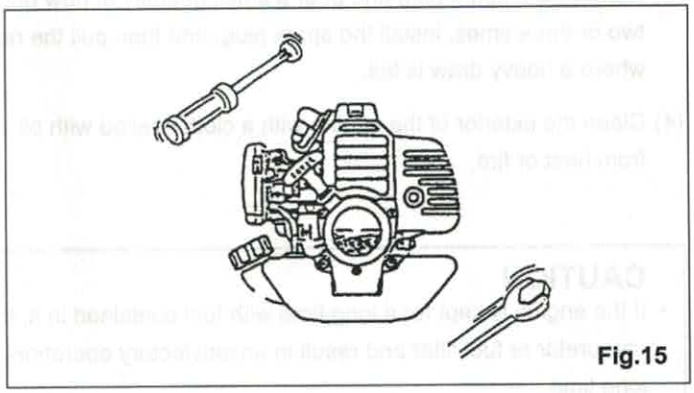


Fig.15

7. Maintenance for every 50 hours operation

Cleaning and adjusting of spark plug

Remove the carbon deposit on the electrode and insulator, and adjust the electrode gap to 0.6 to 0.7 mm. When installing, push on the spark plug cap securely. (Fig.16)

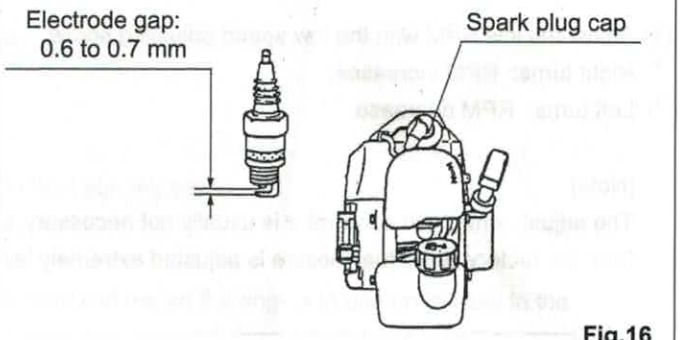


Fig.16

Cleaning of fuel filter

Pull out the filter with a steel wire, etc. from the fuel filter port, and clean it well with gasoline. If the dirt is extreme, replace the fuel filter and clean the fuel tank as well. (Fig.17)

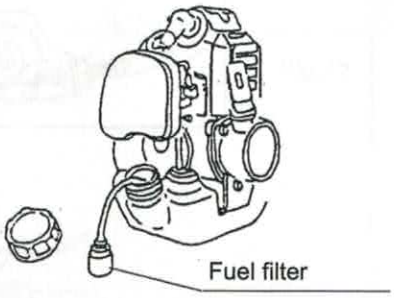


Fig.17

Removal of carbon deposit

Removal the carbon deposit from the muffler inlet and outlet, cylinder and piston.

*The engine maintenance technical and maintenance tools are necessary for this work. Please consult the dealer or the nearest service center.

8. Long time storage

When the engine is not used for more than a month, maintain and store it according to the following procedure so that starting failure or malfunction does not occur.

(1) Empty the fuel in the fuel tank. Then start the engine and continue operation until it stops by shortage of fuel.

(2) Clean the inside of fuel tank and the fuel filter with new gasoline.

(3) Remove the spark plug and pour a small quantity of new engine oil into the plug hole. After pulling the recoil starter grip two or three times, install the spark plug, and then pull the recoil starter grip again and stop the engine at the position where a heavy draw is felt.

(4) Clean the exterior of the engine with a cloth soaked with oil, and store the engine at a place where it is dry and away from heat or fire.

CAUTION

- If the engine is kept for a long time with fuel contained in it, the impurities in the fuel will clog the fuel passages of the carburetor or fuel filter and result in unsatisfactory operation. Empty the fuel without fail when the engine is stored for a long time.

F. Maintenance, checks and storage

(1) Before and after using the auger, check the auger body and service where necessary. Maintaining your auger in fit condition will ensure more efficient and safer operation.

(2) Check for loose or missing parts. Tighten where loose before using the equipment.

(3) When storing;

- Drain the fuel tank completely and restart the engine to bum any fuel remaining in the carburetor and fuel pipe.
- Remove the spark plug and coat inside the spark plug hole with a little oil. Then reinsert the spark plug and pull the starter cord till tension is felt and leave.
- Check the air filter. Remove to clean. Dry before reinstalling.
- Store in a dry place and protect from dust. ALWAYS repair damaged parts.

CAUTION

If the auger is stored for a long period of time without draining the fuel tank, impurities in the fuel will clog the fuel passage in the carburetor and fuel filter. This will in turn cause the engine to malfunction. ALWAYS drain fuel completely before storing the auger.

Dealer

If you bought the unit, make sure to have your dealer seal placed on the dealer's sealing space in the Operator's Manual for maintenance. (with dealer's name, address, telephone, fax, signature of person in charge)

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