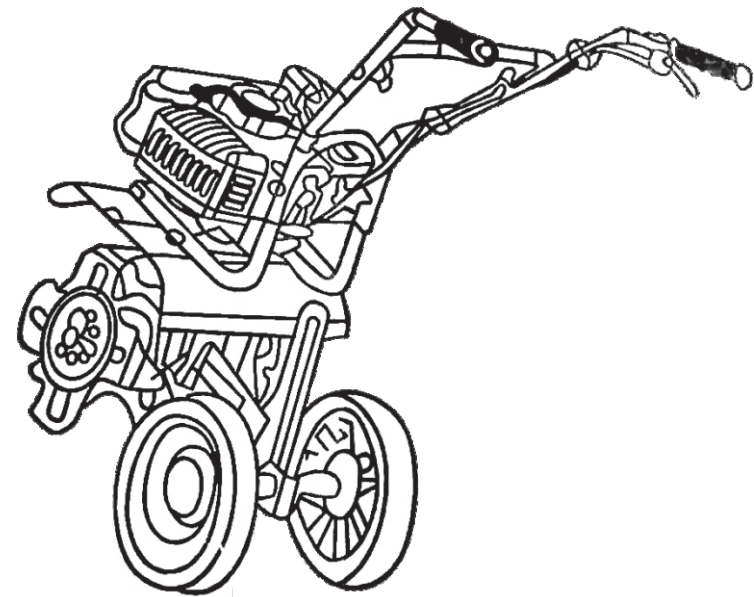


MINI TILLER USER'S MANUAL

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PREFACE

The mini rotating plough machine has character of reasonable constructions, beautiful outlook, etc. For better convenient operation, please strictly complying the following items:

I. Before operating the machine, please read the manual carefully, keeping the manual for reading at any moment.

II. The machine was designed for garden, Not using in other.

III. When machine is operation, prohibit touching the gear wheel.

IV. If you have any trouble, please contact your dealer or our company directly. They(We) will give you the good service.

In order to improve the quality, the changes of some parts which are changed according to the market will not be informed separately. Please give enough understanding.

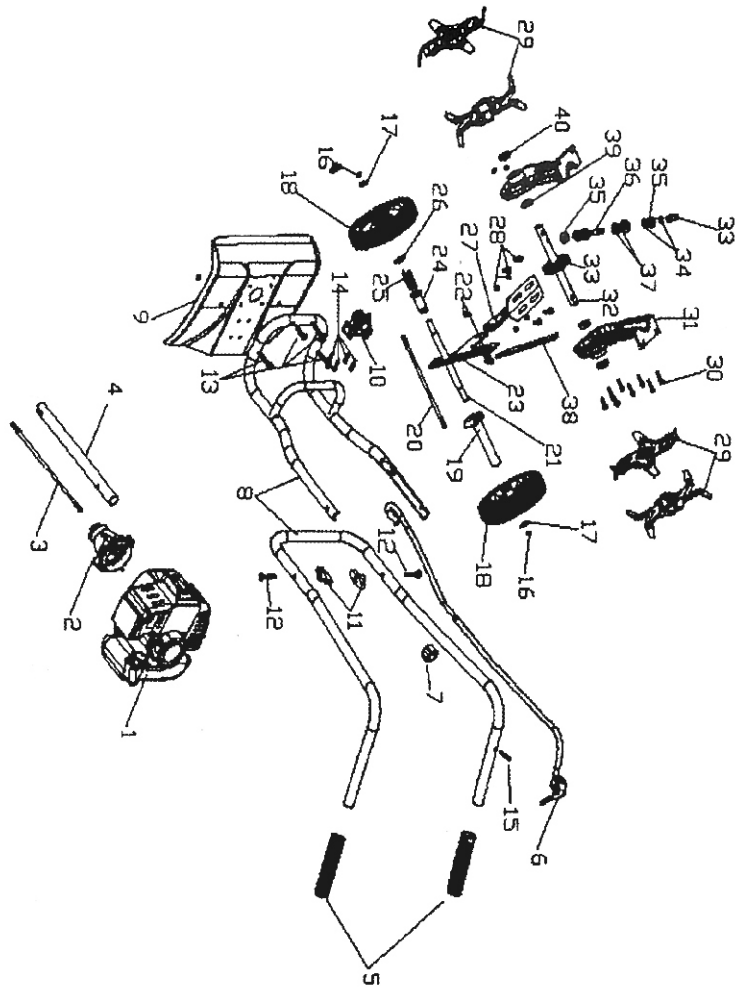
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FIG.I: THE SPARE PARTS LIST OF ROTATING PLOUGH MACHINE

No.	Parts name	Quantity	No.	Parts name	Quantity
1	engine	1	21	wheel sleeve	1
2	connect	1	22	bolt/nut	2
3	transmission shaft	1	23	up and down adjustment plate	1
4	aluminum pipe	1	24	sleeve	1
5	handle cover	2	25	spring	1
6	throttle lever	1	26	washer	1
7	wire clip	1	27	back bracket	1
8	handle	1	28	bolt/nut	4
9	shield	1	29	blade	4
10	aluminum base	1	30	bolt/nut	10
11	plastic nut	2	31	worm gear box house	1
12	bolt	2	32	rotate shaft	1
13	bolt	4	33	copper gear	1
14	bolt	4	34	clip spring	2
15	bolt	1	35	bearing	2
16	nut	2	36	worm shaft	1
17	washer	2	37	bearing	1
18	wheel	2	38	support pole	1
19	up and down adjustment base	1	39	bearing	2
20	screw rod	1	40	oil seal	2

FIG.I:ROTATING PLOUGH MACHINE EXPLOSIVE PICTURE



1.SAFETY

Special safety precautions must be observed when working with the machine.



I. Demand for protective clothing

- (1)Clothing must be sturdy and snug-fitting;
- (2)Wear flanged cap, wear dirt/fog-proof glasses;
- (3)Wear long boots or no-slippery shoes, prohibited wear slip-on shoes to operate.

II. Do not operate the machine in no accordance with these

- (1)person without knowledge of the machine
- (2)Over-tired or patients;
- (3)Drunk ;
- (4)Children.



III. Avert fire

- (1)Stop the machine when fill the fuel, prohibited fire and smoke;
- (2)Keep away fuel from the fire.



IV. preparative before operating

- (1)Check whether the screws and nuts are loose; check whether the passage is good.
- (2)Inspected all control rod and safe devices whether they are assembled right;
- (3)Prohibited using the machines which have fault.

V. Startup

- (1)make sure there is no others in the work area;
- (2)When the machines recoiled start, you must keep away from the gear wheel and close upon it, prevent it from moving, and make sure it is safe.

VI. Safe operation

- (1)when use the machine, please keep right posture ,close upon the handles;

- (2)When operating, forbid anybody enter the work area;
- (3)While the weather raining, please take care of the slippery ground;
- (4)When the gearwheel is locked, please stop the machine, start again after clean it off;
- (5)When scarifying, please move ahead and countermarch is prohibited;
- (6)When change the work area, stop the machine, then check whether the screws and nuts are loose.

VII. Examine and Repair

- (1)make sure the professional person maintains the machine;
- (2)Should inspect the machine termly, if appear abnormly when operating, must stop the machine for repairing at once;
- (3)Need for repairing or service, please contact to our dealer or our company.

2. TECHNICAL SPECIFICATION

Body	Transmit method	Centrifugal friction clutch
	Width of rotating plough	300mm
	Reduction ratio	32:1
	Net weight	17kg
Engine	Matching power	1E44F-5
	Discharging volume	49cc
	Method of starting	Recoil starting
	Igniting mode	Not pot of touch ignition
	Ratio of the mixing oil	Mixing rate between 90# gaso line and two-stroke oil is 25:1
	Standard power	1.65kw/6500r/min

FIG II: THE SPARE PARTS LIST OF ENGINE

No.	Parts Name	Quantity	No.	Parts Name	Quantity
1	Air filter cover screw M5x16	1	31	screw M5x12	1
2	air filter cover	1	32	recoil start	1
3	choke lever	1	33	start pulley	1
4	filter element	1	34	oil seal	2
5	filter element cover	1	35	right crank	1
6	Air filter screwM5x50	2	36	bearing	2
7	Air filter	1	37	crankshaft	1
8	carburetor	1	38	ball bearing	1
9	carburetor gasket	1	39	piston pin clip	2
10	intake base screwM5x20	2	40	piston pin	1
11	intake base	1	41	piston	1
12	intake base gasket	1	42	piston ring	2
13	small cover screw M5x14	1	43	locating pin	2
14	small cover	1	44	semicircle key	1
15	plastic cover	1	45	left crank	1
16	sticker	1	46	screw M5x30	4
17	screw M5x12	1	47	wind board	1
18	crank gasket	1	48	rubber sleeve	2
19	crank screwM5x20	4	49	flywheel	1
20	crank	1	50	spark plug	1
21	exhaust two heads screw M6x63	2	51	ignition cap	1
22	muffler gasket	1	52	ignition coil	1
23	muffler	1	53	screw M5x18	2
24	nut M6	2	54	rubber button	1
25	screw M5x12	1	55	cable	1
26	muffler cover	1	56	nut M8	1
27	screwM5x18	1	57	washer 8	2
28	muffler valve screw M4x8	2	58	block	1
29	muffler valve	1	59	wave washer	2
30	muffler valve gasket	1	60	screw	2

6.MAINTENANCE

I .Maintenance body

(1)you must check each screw on the machine to make sure there is no screw loosen when the machine works for one or two hours or when stopping to add oil;

(2)Add the lube in the gear case when the machine works 20 hours

(3)When the gear wheel damaged ,please repair or replace

II .Maintenance engine

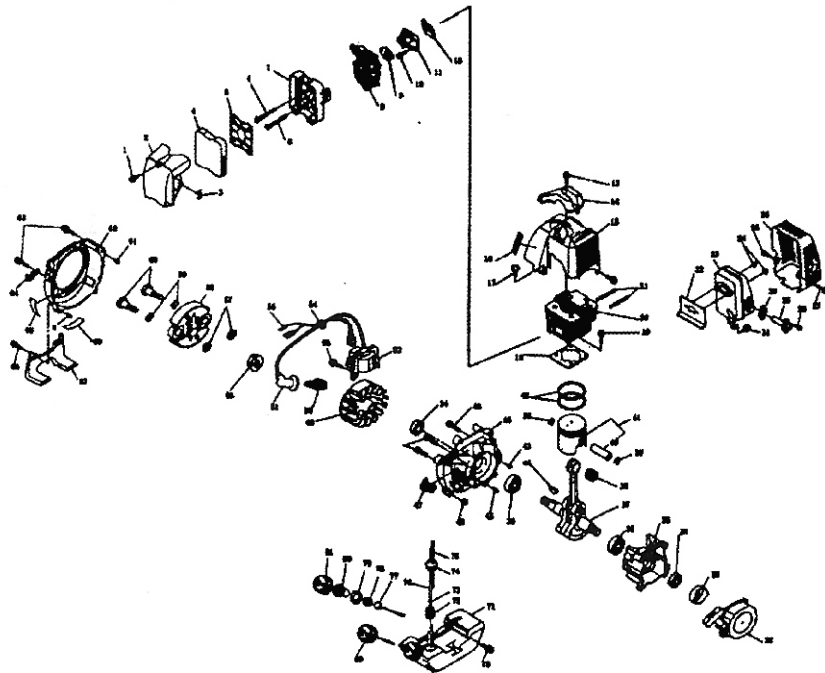
(1)maintenance plug

The electrode gap should be moderate and keep the plug cleaning, in order to keep could regulate the gap to 0.5-0.7mm, check frequently and adjust when the gap is too long or too short.

(2)Maintenance the air filter

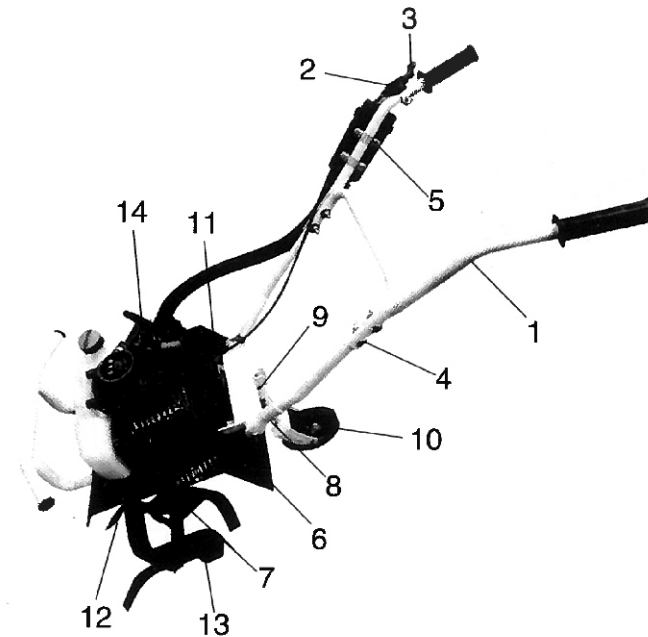
Surface of cleaner should be cleaned often, if the cleaner element were jammed, clesned the cleaner element and cleaner body by gas. put a drop of motor oil on the cleaner element and then worst it dry attach it to the inside cover.

FIG.I: ROTATING PLOUGH MACHINE EXPLOSIVE PICTURE

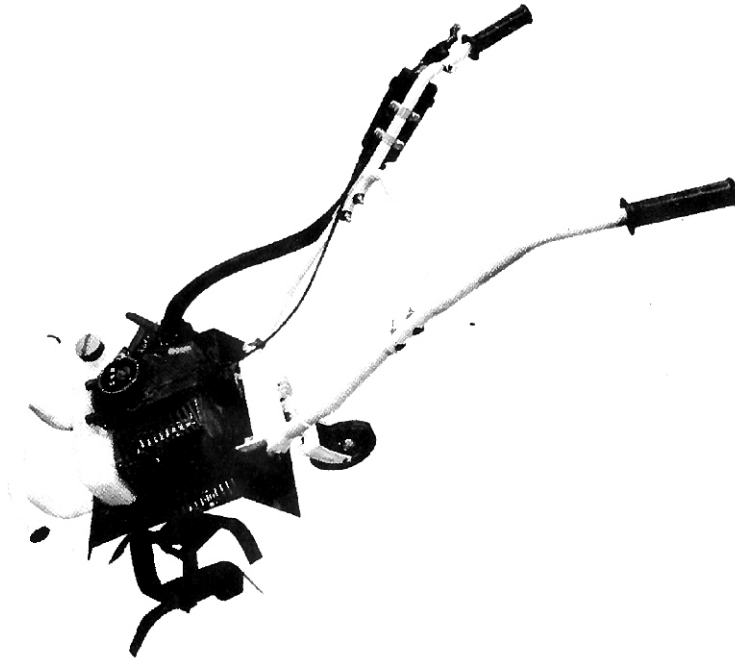


3.STRUCTURE

- | | | | |
|-------------------------------|--------------------|-------------------|----------------------|
| 1.handle | 2. switch key | 3. throttle lever | 4. handle bracket |
| 5.clip | 6.shield | 7. wheel bracket | 8.depth adjust plate |
| 9. depth adjust plate bracket | 10.wheel | 11. support bat | 12. Engine |
| 12.worm assembly | 13. blade assembly | | |



4. ASSEMBLING AND ADJUSTMENT



I: Assembling up and down handle(II)

Refer to Picture 1, up handle insert to down handle, conform the two holes, insert the screw and tighten it.

II: Assembly of throttle wire

A head of throttle wire connected to the carburetor, the other head connected the throttle lever assy. First, adjust the throttle lever at the bottom, and then insert the big head of the throttle wire to the hole of the throttle lever assy. pull the throttle wire for putting in the groove. Take care: turn the throttle lever handle for checking the startup. if dissatisfied the use, you can adjust the carburetor and the bolt.

III: Assembly of the stop switch

The long stop switch and throttle wire to the right handle to avoid loosing.

IV: Adjustment of the depth

There are three grooves in the connect plate, the wheels put in the highest groove when working. When not working, the wheels need putting in the middle or the bottom grooves(according to the tall of worker).

5. OPERATION

1. Adding oil

Mixing rate between 90# gasoline and two-stroke oil is 40:1

Take care: 1. forbid to use pure gasoline or the mixture oil rate at the above of 40:1 as fuel.



2. Adding fuel must be done under the instruction of the fireproofing

I. Start up

(1) Press the button of carburetor 5-6 times, until pour fuel from tube, then close the broker; Note: if engine is warm of the high temperature, you should put the choker on the full position.



(2) Open the accelerator 1/3-1/2;

(3) Pull the starter smoothly, after starting the engine, open choker fully.

Note: (1). Make sure there is nothing lock the gear wheels before starting

(2). when the gear wheels are running, make sure the gear wheels do not come up against anything or anybody.



II. Assignment

Strictly control the speed of the rotating plough, the speed should be at 0.5m/sec when the rotate speed arrive at 8000-9000/min.

In order to keep the good quality of the rotating plough, while working should be avoid any danger.

III. Stopping

(1) Put the throttle lever at the idle speed, make the engine run 2-3 minutes;

(2) Put the stop switch to the stop position

Note: In urgent case, put the throttle switch at the close position, and then close the stop switch. keep your hands away from rotating plough, the gear wheels are been turning after stopping the machine.