

Mod. 147-7175 Ser# 0709-0047

ROBO

Eng

STG1170A(C)E-02 User's Manual

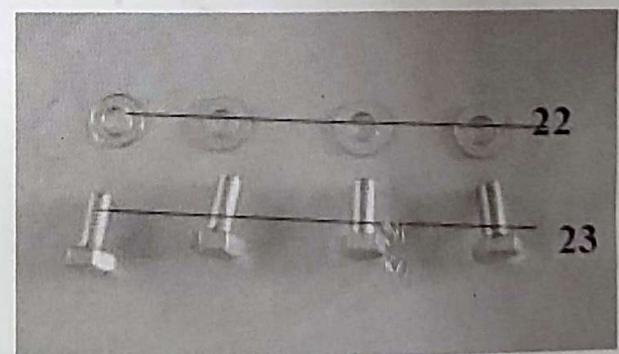
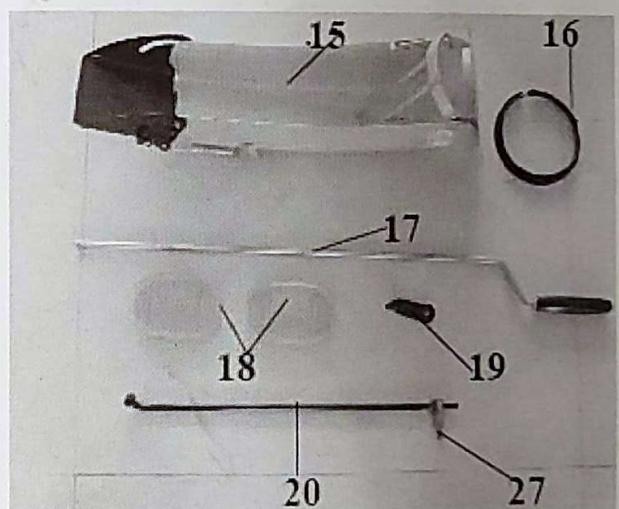
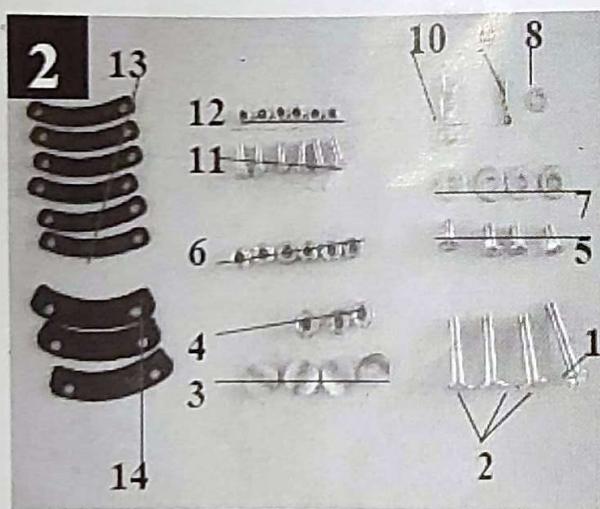
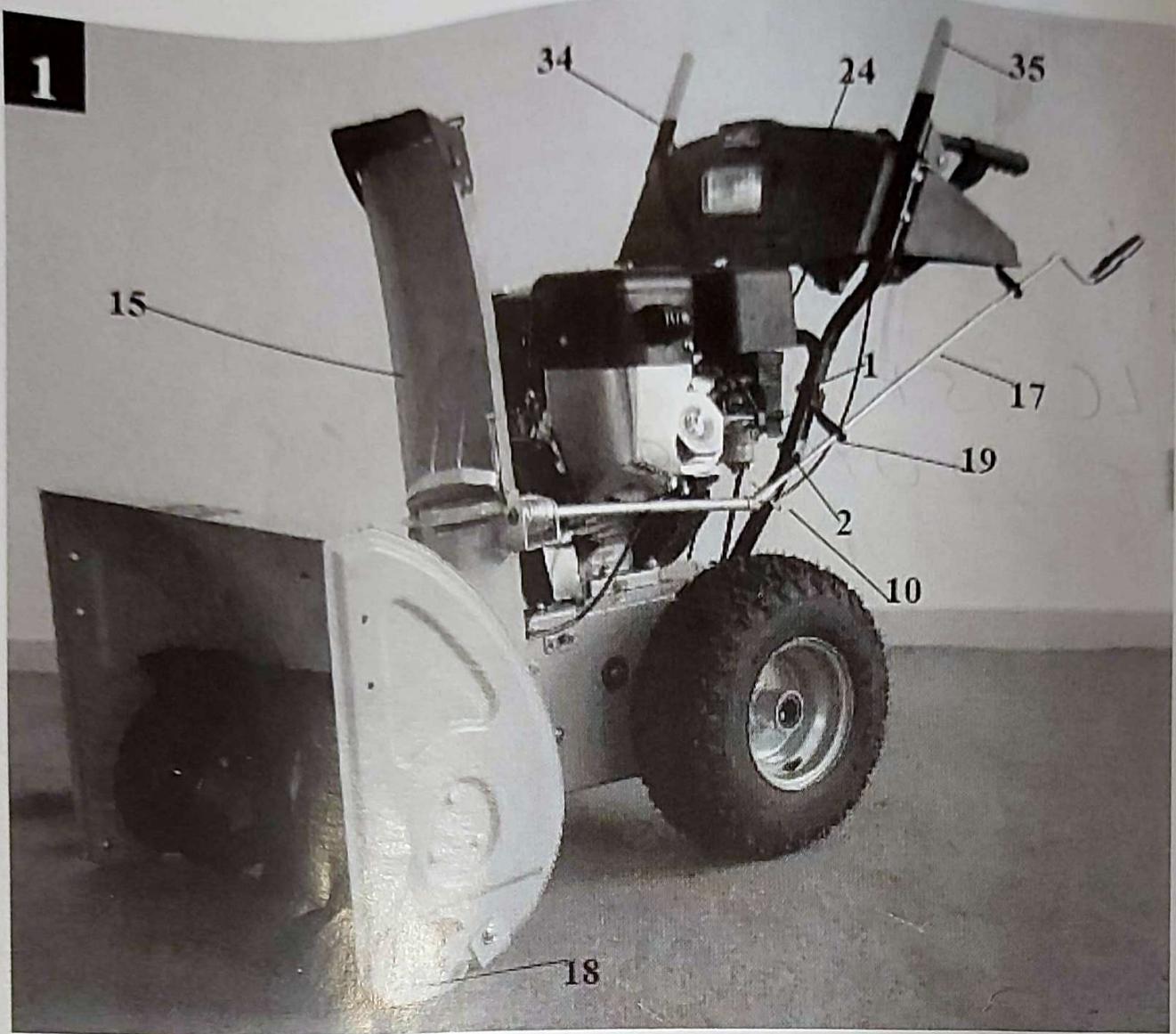
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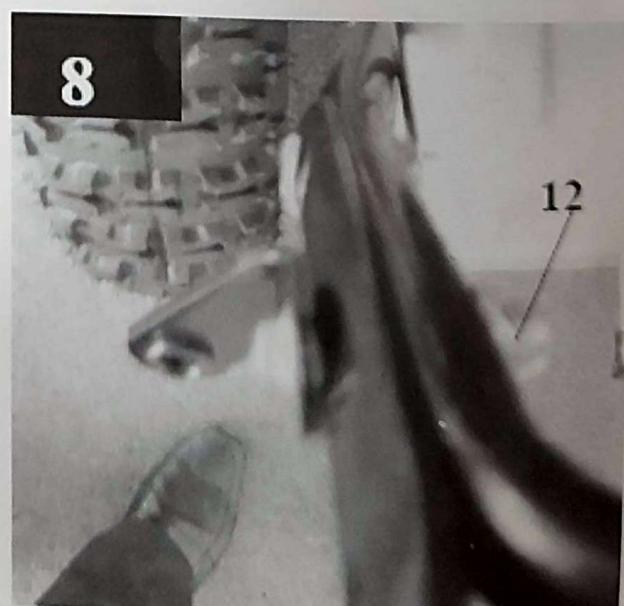
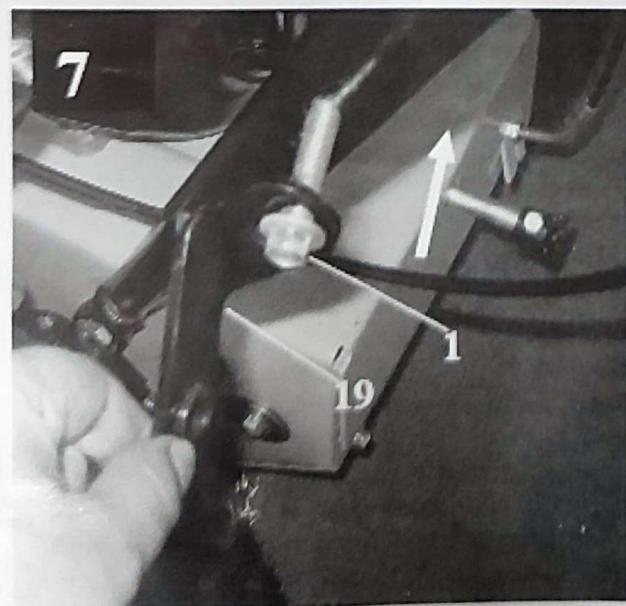
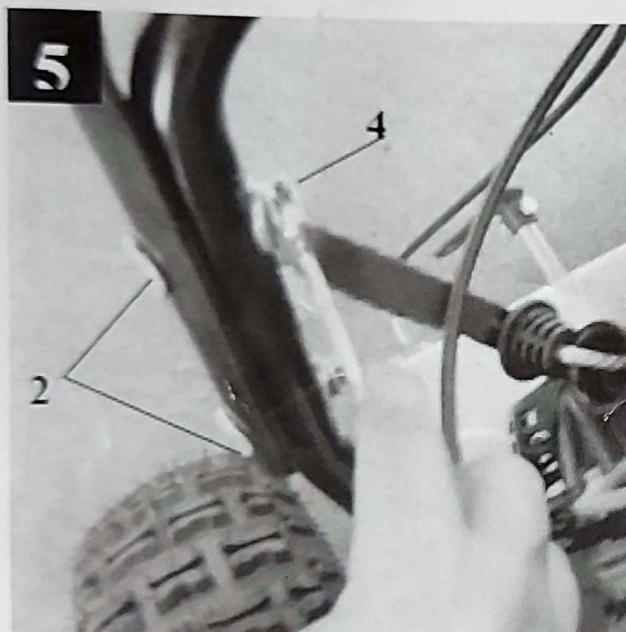
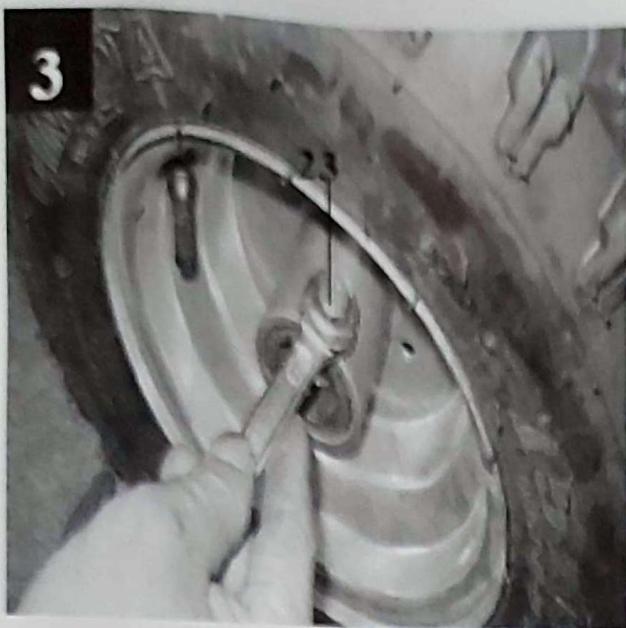
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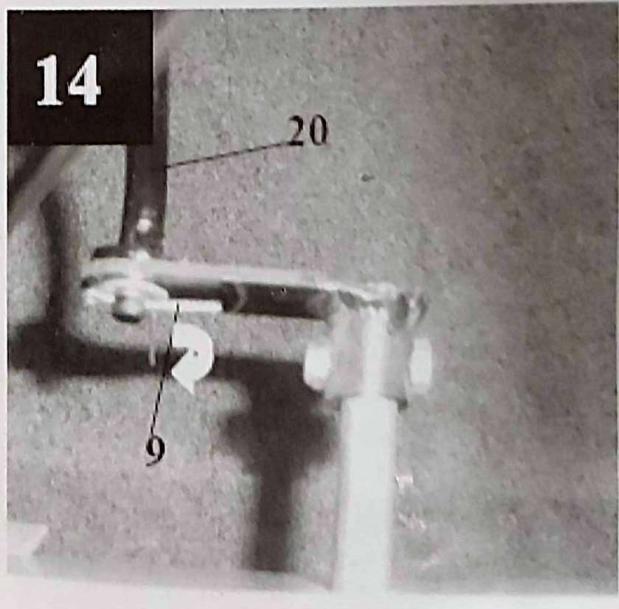
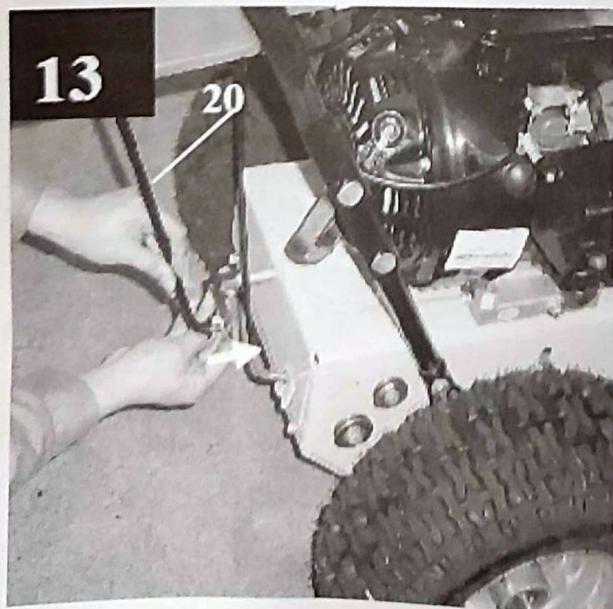
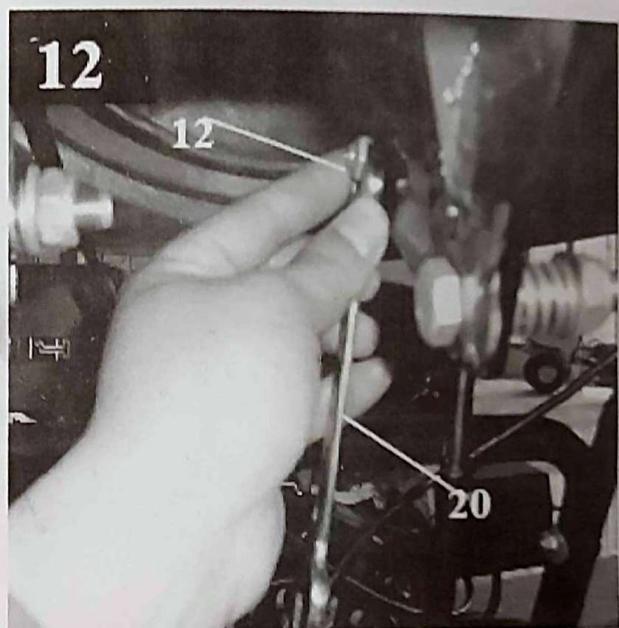
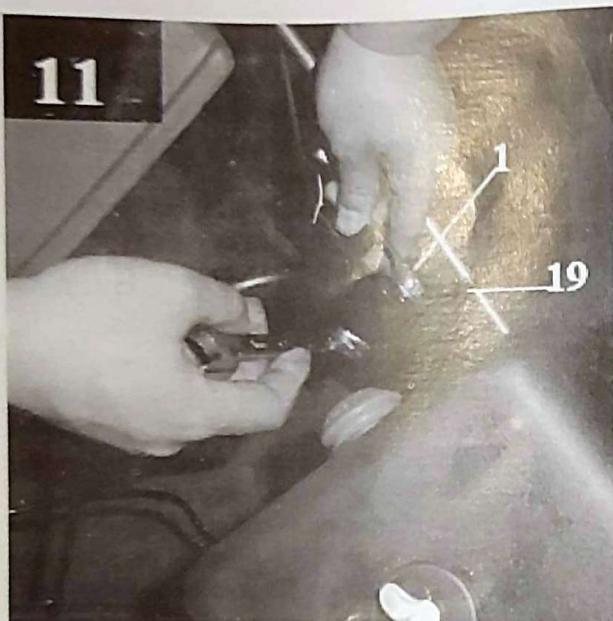
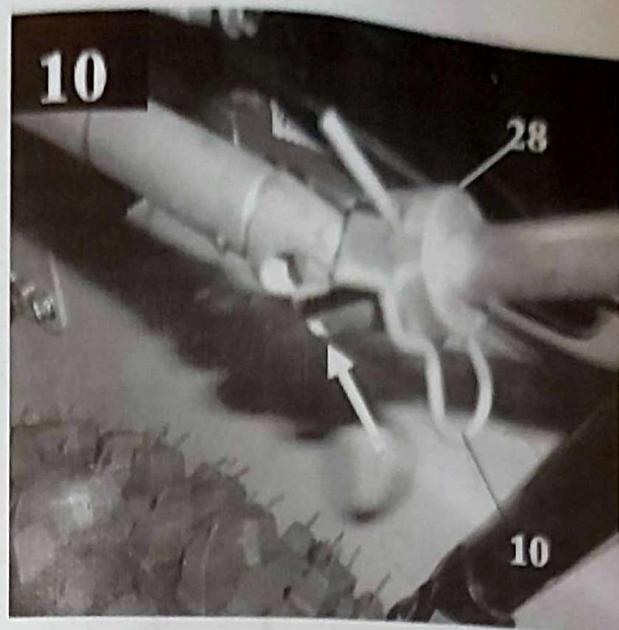
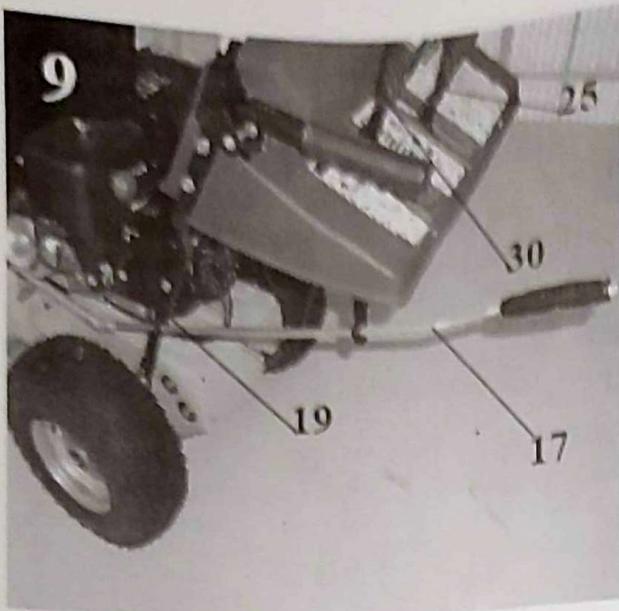


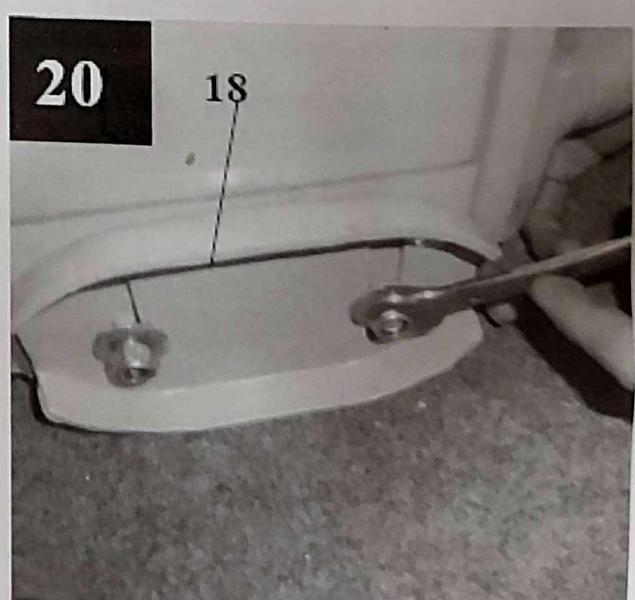
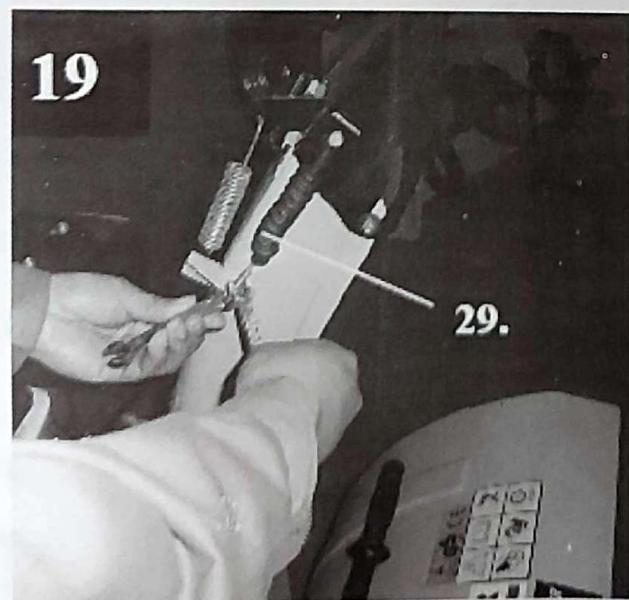
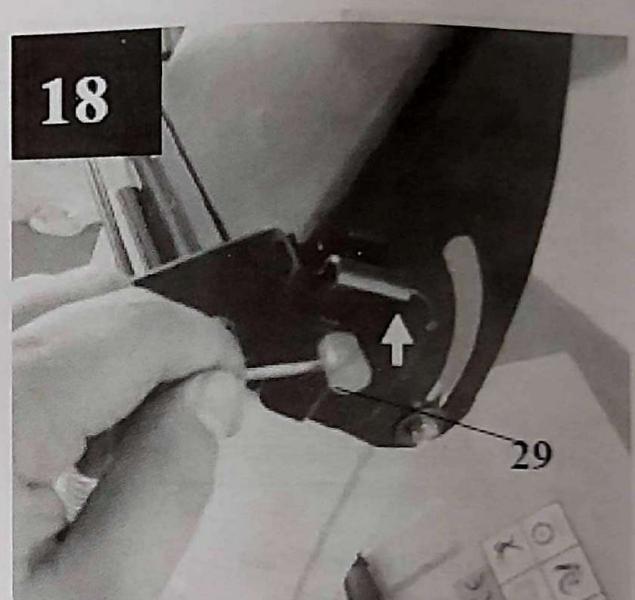
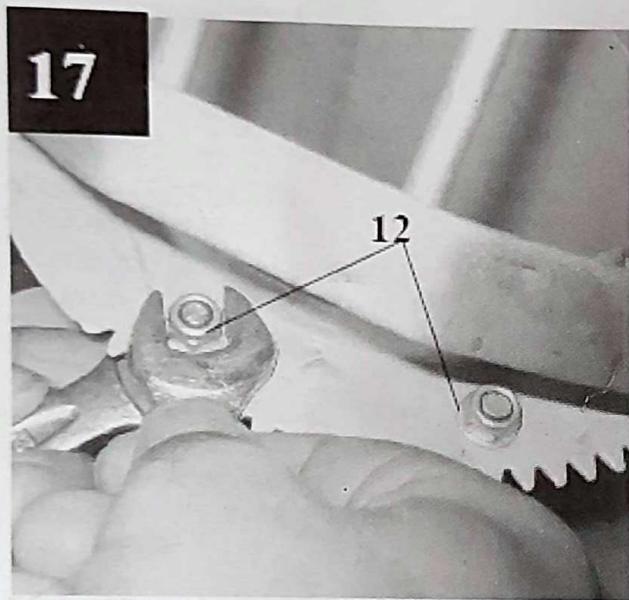
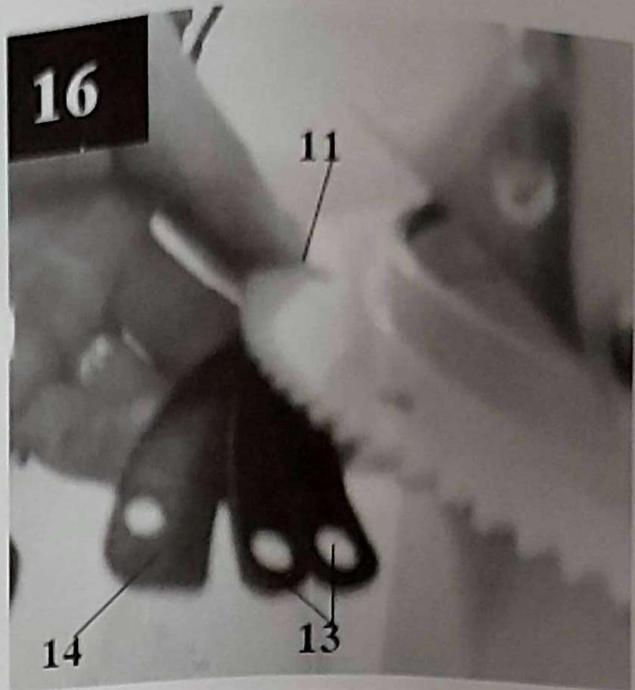
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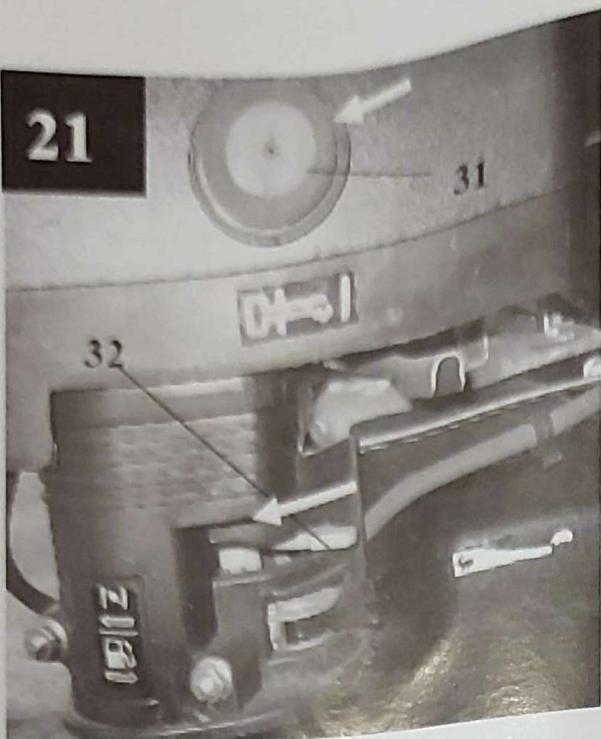
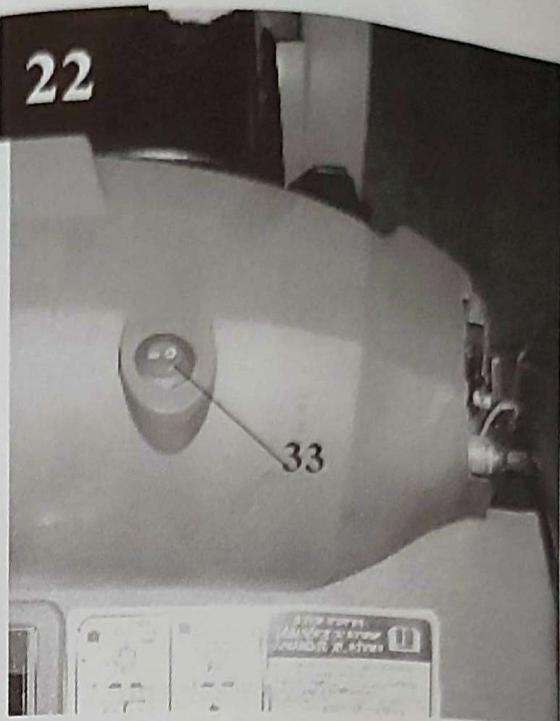
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Package

Packaging is used to prevent the product from being abraded or damaged during transportation. It is made of recyclable raw material.

During equipment of the machine, the security operating procedure must be observed to avoid personal injury or machine damage.

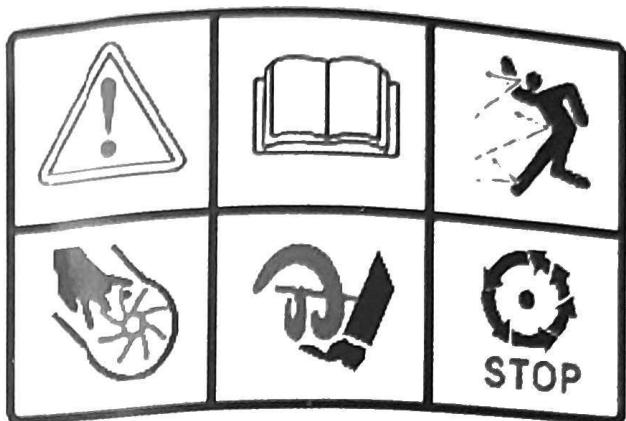
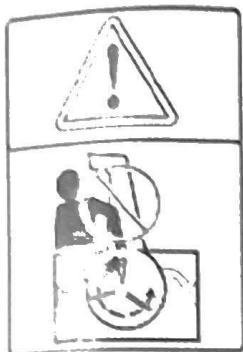
Firstly, carefully read and conform to the manual of operation rules. To have a good knowledge of the operation of the machine and some security rules, it is very important to operate the machine in strict accordance with the manual. Therefore, the manual shall be kept in a safe and conspicuous place so as to procure it timely for making a comparison with the machine.

When a client invests in a machine, the operation user's manual shall be provided along with the machine.

For any damage or compensation caused by improper use or operation of the machine, we are free from responsibilities.

1. Safety Tips

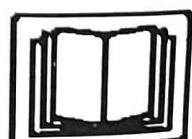
The explanatory labels and general safety hints attached to the machine are as below.



2. Main fittings along with the product

1. Outside hexagonal flange bolt M8*45 (Figure 2.1)
2. Blade bolt M8*40 (Figure 2.2)
3. Blade spacer (Figure 2.3)
4. Flange nut M8 (Figure 2.4)
5. Half round head square neck screw M8*16(Figure 2.5)
6. Locknut M8 (Figure 2.6)
7. Spacer (Figure 2.7)
8. Spacer (Figure 2.8)
9. Cotter pin (Figure 2.9)
10. 8-shaped latch (Figure 2.10)
11. Outside hexagonal screw M6*20 (Figure 2.11)
12. Locknut M6 (Figure 2.12)
13. Snow outlet spacer (Figure 2.13)
14. Snow outlet sheeting (Figure 2.14)
15. Snow outlet assembly (Figure 2.15)
16. Plastic washer for snow outlet seat (Figure 2.16)
17. Snow outlet rocker (Figure 2.17)
18. Ski (Figure 2.18)
19. Bracket under rocker (Figure 2.19)
20. Connecting rod for gear engagement (Figure 2.20)
21. Wheel assembly (Figure 2.21)
22. Spring washer (Figure 2.22)
23. Outside hexagonal bolt M8*20(Figure 2.23)
24. Control panel assembly (Figure 4.24)
25. Speed lever welding (Figure 9.25)
26. Lower handrail (Figure 4.26)
27. Connecting piece on fork stick (Figure 2..27)
28. Universal joint (Figure 10.28)
29. Snow outlet wire (Figure 18.29)

3. Declaration



Please carefully read this manual and keep it properly for future reference or contacting the distributor.

3.1 Please carefully read the product component lists related to the snow remover and its structure.

3.2 Please carefully read the product component lists related to the snow remover and its structure.

3.3 It is very important to have a good knowledge on how to properly control and operate the machine.

You should be aware of how to shut down the engine before you start to operate it.

3.4 Please observe the following safety tips:

A. Children below the age of 16 are prohibited to operate this machine and adults unfamiliar with the correct operation methods shall not operate the machine.

B. When you operate this machine, please ensure the machine is kept away from other persons, especially children and pets.

C. Please concentrate on operation, especially when driving back, to avoid slip.

3.5 This machine is designed to be operated on flat and compact road, special driving vehicle lane or courtyard to remove snow. Be sure to comply with security operation rules. It is not suitable for commercial, trade or industrial application. In case it is used for commercial, trade, industrial or equivalent commercial purposes, we assume no responsibility for guarantee of repair.

3.6 You must adhere to related regulations of your country when you are responsible for the removal of the snow on road.

3.7 You shall wear winter clothing, anti-skid shoes, gloves and goggles when you are operating the snow remover.



4. Environmental protection

Properly dispose of scrapped servicing materials, such as recycling packaging raw materials, metal and plastic materials.

5. Assembly (See Figure 3-24)

When you unpack the packaging case, please check all parts according to the packing list. In case of a lack, please contact the distributor for supplement.

5.1 Installation of wheel assembly: (See Figure 3)

As shown in Figure 3, sleeve the wheel assembly (Figure 2.21) into the differential axle, align it with the installation hole and sleeve the spring washer (Figure 2.22) onto the outside hexagonal screw M8*20 (Figure 2.23), and then insert the bolt into the hole and tighten it. The installation for another installation hole is the same.

5.2 Installation of control panel assembly (Figure 4.24) (See Figure 4-14):

Lift the control panel assembly with both hands and mount it onto the lower handrail (Figure 4.26), align it with corresponding hole, insert blade bolt (Figure 2.2) with suitable blade spacer (Figure 2.3) and flange nut M8 (Figure 2.4) used and then tighten them with related tools (Figure 4-6); afterwards, as shown in Figure 7, insert outside hexagonal flange bolt M8*45 (Figure 2.1) and bracket under rocker (Figure 2.19) into the corresponding holes as shown in Figure (7-8), use suitable locknut M8 (Figure 2.6), but do not tighten it with a tool firstly, then insert snow outlet rocker (Figure 2.17) into universal joint (Figure 10.28) hole as shown in Figure (9-10), and insert a 8-shaped latch (Figure 2.10) into the universal joint (Figure 10.28) hole, then tighten the nut in the bracket under rocker (Figure 2.19) (See Figure 11); finally install the connecting rod for gear engagement (Figure 2.20), firstly insert the connecting piece on the fork stick (Figure 2.27) into the installation hole under speed lever welding (Figure 9.25) as shown in Figure (12-14), and then mount locknut M8 (Figure 2.6), do not fix the connecting piece on the fork stick (Figure 2.27) immovably and the connecting piece on the fork stick (Figure 2.27) is capable of being rotated; install and open the cotter pin (Figure 2.9) as shown in Figure (13-14) to complete the installation of connecting rod for gear engagement (Figure 2.20); thus the installation of the whole control panel assembly is completed.

5.3 Installation of snow outlet assembly (See Figure 15-19)

As shown in Figure 215, firstly sleeve the plastic washer for snow outlet seat (Figure 2.16) into the snow outlet seat, then place the snow outlet assembly (Figure 2.15) on it, insert outside hexagonal screw M6*20 (Figure 2.11) into one snow outlet sheeting (Figure 2.14) and two snow outlet spacers (Figure 2.13), then mount it into the hole corresponding to snow outlet assembly (Figure 2.15). Mount and tighten locknut M6 (Figure 2.12), the installation of the other two sides is the same as shown in Figure (16-17); finally install the snow outlet wire (Figure 18.29) and tighten the nut (See Figure 18-19).

5.4 Ski installation (See Figure 20)

Assemble the half round head square neck screw M8*16 (Figure 2.5) and ski (Figure 2.18) as shown in Figure 20, adjust the ski to a suitable height and tighten the nut. The ski for the other side can be installed in the same method.

6. Preparations before starting and operating the machine

6.1 Before using the machine, please check the area requiring snow elimination and take sleds, bricks, scrapped wires and other stuff away.

6.2 Before starting the engine, please loosen the clutch system which may be used in operation.

6.3 You must wear anti-skid to avoid slip when you operate the snow remover.

- 6.4 Before each use, please check whether the engine has sufficient engine oil (generally the machine shall be filled with around 1.1L 5W-30 engine oil for the first use); then fill with sufficient gasoline. Gasoline is combustible, so please pay more attention when filling gasoline.
- A Use conforming gasoline.
B It is prohibited to fill oil during running of the machine or the engine not cooled.
C Please fuel the machine outdoors. Indoor fueling is prohibited.
D Carefully open filling opening and clean the gasoline spilled.
- 6.5 Adjust the ski to proper height so as to remove the fine sands and small stones.
- 6.6 Unless especially stated by the manufacturer, any adjustment shall not be made during operation of the engine.
- 6.7 The machine can not start outdoor snow clearing until the temperature of the engine and the machine is consistent with the outdoor temperature.
- 6.8 Please wear goggles when you operate the machine to remove snow since the snow cast by the snow remover may be blown into your eyes.
- 6.9 Your body and clothes shall be kept away from the vent pipe, heating or rotating part of the machine.
- 6.10 Please be sure to check oil chest in use of the machine to ensure the fullness of gasoline in oil chest.
- 6.11 Adjust the clutch wire to make it flexible and reliable.
- 6.12 Please carefully operate the machine, especially when it crosses the street and moves backwards, to avoid accident.
- 6.13 If the auger of the snow remover bumps a barrier, please shut down the engine immediately (move away the wire on spark plug cover), then eliminate the snow and impurities inside; before you re-start the machine, please check whether the machine has any fault.
- 6.14 If the snow remover vibrates abnormally during operation, please shut down the engine immediately and examine the machine carefully (it is crucial).
- 6.15 Please be sure to shut down the engine when you adjust or repair the snow remover.
- 6.16 Be sure that the rotating parts of the snow remover have stopped running before you clean, repair and check the machine.
- 6.17 Do not use the machine indoors; if the engine is activated indoors, please open the door first and keep the gasoline odor and smoke out of the room.
- 6.18 Do not operate the machine on uneven or relatively steep road and pay more attention to your operate on the turn of a slope.
- 6.19 Do not operate the machine without necessary protective devices.
- 6.20 Please keep a clearance between the machine with glass materials, railings, vehicles, children and pets.
- 6.21 Do not attempt to throw snow to the maximum casting distance in operation.
- 6.22 When you operate the machine to remove snow in a relatively high slope, please maintain proper speed and especially take care in backward movement.
- 6.23 Please be sure nobody is in front when your operate the machine forwards, and do not make the snow outlet cap aim at the passerby.
- 6.24 If the machine is in operating status but cannot throw snow, please clear the stuff in spiral propeller and snow outlet chute.
- 6.25 Please use the spare parts certified by the manufacturer.
- 6.26 Please check whether the lighting system is in good condition first in case of operation at night.
- 6.27 Do not use the snow remover as a passenger carrier.
- 6.28 Please shut down the engine after using.
- 6.29 Please locate the gear properly and connect into the clutch, thus the auger moves forwards; for gear shifting, please loosen the clutch firstly.
- 6.30 During operation, please watch out for the direction of the snow outlet and make sure that the direction does not aim at the passerby.
- 6.31 When sweeping snow on a slope, the user shall ensure the machine will not overturn. Do not use the machine on a slope at over 20-degree.
- 6.32 After snow elimination: remove the snow in the machine since the freezing ice at the bottom of the machine may affect the next use.

7. How to operate the machine

Warning! Please carefully read the attentions for security in Part 6 before use of the machine.

7.1 How to start up the engine

- A. Close the damper (as shown in Figure 21) and push the damper (Figure 21.32) leftwards as indicated by the arrows;
- B. In cool machine state, please use thickening pump (Figure 21.31) before startup by pressing the red button of the pump for 2~3 times so as to easily start up the engine (See Figure 21).

- C. Please turn the switch to ON position, pull the startup wire to start up the engine or a: for startup by means of storage battery, please insert the key and turn it clockwise to "START", or b for startup by means of commercial power, please turn the switch to ON and insert the plug with consistent power level into the startup socket control box, keep pressing red switch button, then release the button until the startup, remove the plug.



It is prohibited to press the red switch button in the control box to avoid failure of the machine.

- D. After startup of the engine, keep the engine running at idle for 1-3 minutes to ensure stable and noise-free running, then open the damper.

- 7.2 How to shut down the engine: in normal condition, make sure the left and right handles of the machine in releasing status, idle run for 2-3 minutes and then turn the switch to "off" position to directly stop the machine.



During the running of a gasoline engine, to protect your body, please keep away from the muffler and do not directly face the air vent. Please attach more importance to the variation of the gasoline engine during running. In case of the occurrence of abnormal noise, violate vibration, idling, backfiring and other defective symptoms, please emergency-stop the machine immediately.



Emergency-stop method: turn the flameout switch to OFF or directly remove the spark plug.

- 7.3 Selection of snow outlet gears (Figure 9.30): move the spanner forwards, then the snow outlet moves downwards; otherwise it moves upwards.

- 7.4 Adjustment of speed lever (Figure 9.25):

- A. Turn the handle over the neutral position "N" forwards, the machine moves forward, the forward gears including gear 1~5;
 B. Turn the handle over the neutral position "N" backwards, the machine moves backwards, the backward gears including 2 gears. (It is prohibited to press travelling handle in section N position (Figure 1.34) to prevent the damage of speed shifting rubber wheel or shortening of service life.)

- 7.5 Operation of the left and right handles:

- A. The left one is the auger and throwing control handle (Figure 1.35):

In a releasing state, snow sweeping and throwing is not activated;

When pressing it downwards, snow sweeping and throwing begins.

- B. Operation of the right handle (Figure 1.34): the right handle of the machine is the driving wheel control handle:

In releasing state, the machine stops moving in any case;

When pressing it downwards, the machine can start move (move forwards or backwards at different speeds selected by the user).

- 7.6 Interlocking operation of the left and right handles:

The handles of the machine are provided with interlocking function. Firstly press the right handle tightly, and then press the left handle, afterwards, release the left hand and the left handle can be still in pressing state.

- 7.7 Turning operation: a differential is provided inside the driving device of the machine; a slight force in turning operation can turn direction.

- 7.8 Lamp switch (See Figure 22.33): when switching to "-" position, the lamp is on (indicator lights); in "O" position, the lamp is off.

8. Corrective and preventive maintenance

- 8.1 Regularly check the snow remover to ensure safe use.

- 8.2 Do not place the snow remover loaded with gasoline indoors; in case of indoor placement, please be sure to keep away from fire source.

- 8.3 If the snow remover is put in the garage, please carefully read the manual and keep the machine in strict accordance with related requirements in this manual.

- 8.4 Re-stick the security label if necessary.

- 8.5 After snow elimination, please keep the auger on idle-run for a while to avoid the freezing of the auger.

- 8.6 The storage battery must be recharged once every 3 months to ensure the service life of the battery.

8.7 Generally, after the first 20 accumulated hours of the running, the engine oil shall be replaced; afterwards, the engine oil shall be replaced once every 60 accumulated hours of running; when replacement, please turn off the bolt for engine oil cover firstly, then fill engine oil with about 1.1L of anti-freezing oil (5W-30 or 5W-40). For insufficient engine oil, the engine will automatically stop running. Do not start up the engine in such case. Or it may automatically stop running in a while. The engine can be started only under the condition of the fullness of engine oil.

9. Keys to machine storage

If the machine is required to be retained for a long time, please empty the fuel firstly, then clean the auger and all metal parts, apply a thin layer of oil to prevent rust. It shall be stored in a dry and clean place.

10. Keys to scrapped part disposal

The snow remover and spare parts are all made from metal, plastic and other materials. Scrapped parts and lubricant may be required for special disposal. Please consult the distributor or local council.

11. Technical parameters

Max. L ×W×H of the whole machine: 156cm×75cm*110cm

Net weight: 125kg

Max. throwing distance: 10-15m

Max. cleaning thickness: 54.5cm

Max. cleaning width: 70cm

Output power: 11HP/8.1KW

Fuel type: gasoline

Engine oil model and capacity: 5W-30 or 5W-40 (1.1L)

Startup mode: electric/manual

For the technical parameters of the gasoline engine, please refer to related manual.

12. Others

- 12.1** The guarantee period is determined by the importer of our company. Within the guarantee period, the seller or local sales agent can repair your product for any fault caused by the raw materials of the product or the product itself for free. If your product requires servicing, please contact the seller or local sales agent.
- 12.2** In case a fault occurred to your product, you can remove it according to the following troubleshooting guidelines. For any other doubt, please contact the seller.
- 12.3** The manual is prepared based on the latest product model when issuing it. The manufacturer may improve it without declaration.

13. Troubleshooting guidelines

When you want to check or debug the machine, firstly stop the engine. After repairing or inspection of the machine, keep the machine run for several minutes. Do remember: the parts on the engine may be heated due to the startup. Do not touch them by hands for fear of scalding.

Fault	Causes	Servicing
Unstable in operation Or inconsistent vibration frequency	Nut became loose Installation of auger is loose	Check nut Check the installation of auger.

The engine cannot be started	Throttle lever in improper position Spark plug does not work Fuel is not full Oil channel is blocked Engine oil is insufficient and model is inconsistent	Check throttle lever Re-place spark plug Filled with fuel Check throttle Check engine oil volume and model
Weak driving movement	Driving wire is over loose	Regulate the clutch wire Contact the distributor or consult the after-sale service.
Insufficient short-term flameout and nonadjustable	Snow outlet is blocked Over few engine oil	Clean snow outlet, adjust auger; Check engine oil volume or contact the distributor
Snow removed not fully	Ski is adjusted to a over high level	Adjust the ski to the proper height