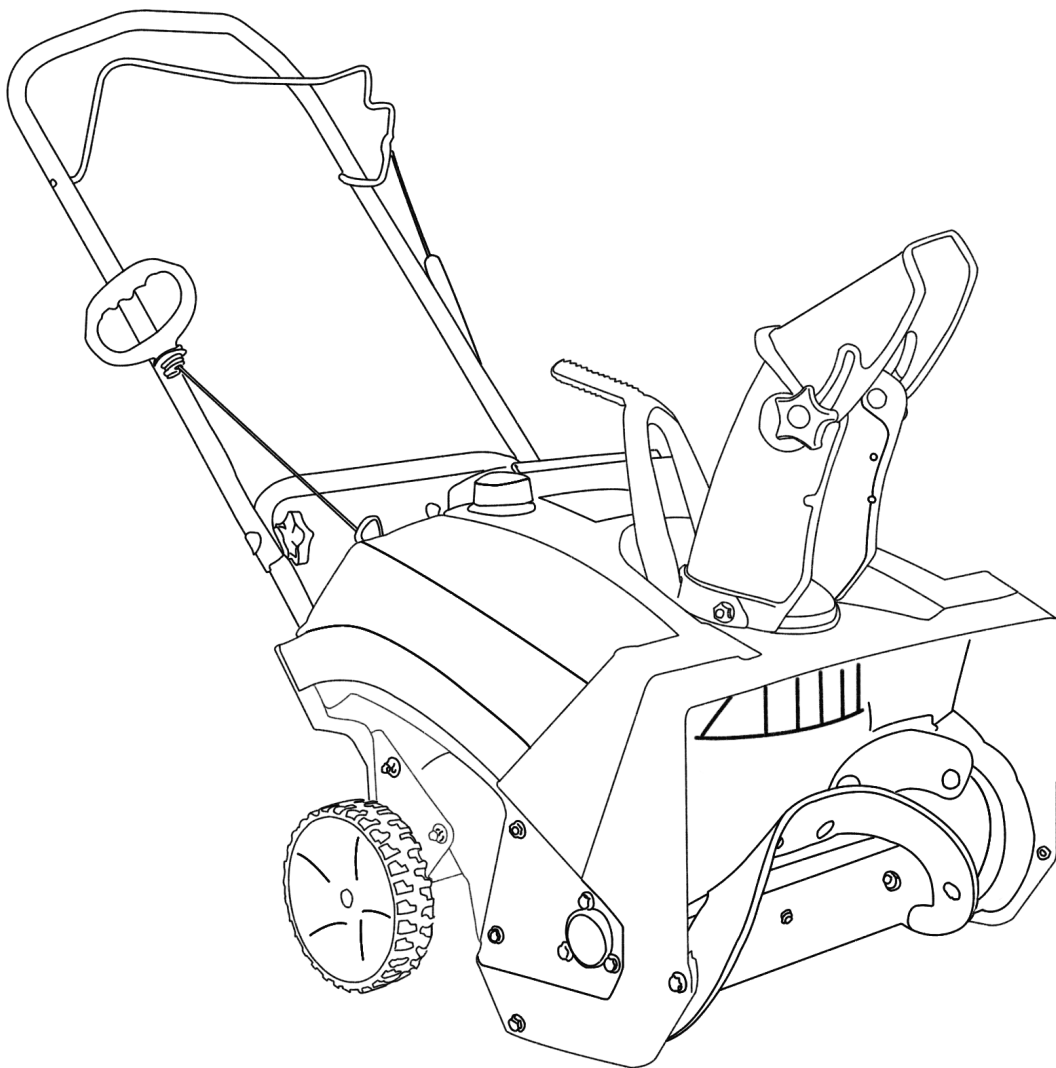




OWNER'S MANUAL **HSX1420**

20INCH SINGLE-STAGE SNOW BLOWER



FOR SERVICE CALL: 1-866-678-8989

WARNING : To reduce the risk of injury, user must read this manual before assembling, operating and maintaining this unit, You are responsible for operating the product properly & safely.

WARNING!

Read the following instructions before using the product!

These instructions below are for your safety. Please read through them thoroughly before use and retain them for future reference. Familiarise yourself with them to reduce hazards like personal injuries and damage to property.

TABLE OF CONTENTS

Safety Rules.....	2
Symbols.....	6
Product Specifications.....	9
Know Your Snow Blower.....	10
Assembly.....	11
Operation.....	15
Maintenance.....	20
Toubleshooting.....	25
Exploded View.....	26
Part List.....	28

SAFETY RULES

Safety warnings

1. This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product by a person responsible for their safety.
2. Children should be supervised to ensure that they do not play with the product.
3. Keep the area of operation clear of all persons, particularly small children, and pets.
4. Exercise caution to avoid slipping or falling, especially when operating in reverse.

Training

1. Read the operating and service instruction manual carefully. Be

thoroughly familiar with the controls and the proper use of the product. Know how to stop the product and disengage the controls quickly.

2. Never allow adults to operate the product without proper instruction.
3. Keep the area of operation clear of all persons, particularly small children, and pets.
4. Exercise caution to avoid slipping or falling, especially when operating in reverse.

Preparation

1. Thoroughly inspect the area where the product is to be used and remove all doormats, sleds, boards, wires, and other foreign objects.

2. Disengage all clutches and shift into neutral before starting the engine.
 3. Do not operate the product without wearing adequate winter garments. Wear footwear, which will improve footing on slippery surfaces.
 4. Handle fuel with care; it is highly flammable.
 - Use an approved fuel container.
 - Never add fuel to a running or hot engine.
 - Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
 - Replace gasoline caps securely and wipe up spilled fuel.
 5. Use a grounded three-wire plug-in for all units with electric drive motors or electric starting motors.
 6. Adjust the collector housing height to clear gravel or crushed rock surface.
 7. Never attempt to make any adjustments while the engine is running (except where specifically recommended by manufacturer).
 8. Let engine and product adjust to outdoor temperatures before starting to clear snow.
 9. The operation of any powered product can result in foreign objects being thrown into the eyes. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair.
- the discharge opening at all times.
 2. Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.
 3. After striking a foreign object, stop the engine, remove the wire from the spark-plug, thoroughly inspect the product for any damage, and repair the damage before restarting and operating the product.
 4. If the product should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
 5. Stop the engine whenever you leave the operating position, before unclogging the collector/impeller housing or discharge guide, and when making any repairs, adjustments, or inspections.
 6. When cleaning, repairing, or inspecting, make certain the collector/impeller and all moving parts have stopped. Disconnect the spark—plug wire, and keep the wire away from the plug to prevent accidental starting.
 7. Do not run the engine indoors, except when starting it and for moving the product in or out of the building. Open the outside doors; exhaust fumes are dangerous.
 8. Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
 9. Never operate the product without

Operation

1. Do not put hands or feet near or under rotating parts. Keep clear of

proper guards, plates or other safety protective devices in place.

10. Never operate the product near glass enclosures, automobiles, window wells, etc. without proper adjustment of the snow discharge angle. Keep children and pets away.
11. Do not overload the product capacity by attempting to clear snow at too fast a rate.
12. Never operate the product at high transport speeds on slippery surfaces. Use care when reversing.
13. Never direct discharge at bystanders or allow anyone in front of the product.
14. Disengage power to the collector/impeller when product is transported or not in use.
15. Use only attachments and accessories approved by the manufacturer of product (such as wheel weights, counterweights, cabs, etc.).
16. Never operate the product without good visibility or light. Always be sure of your footing, and keep a firm hold on the handles. Walk; never run.
17. Do not carry passengers.
18. Never operate the product without good visibility or light.
19. Take all possible precautions when leaving the product unattended. Disengage the power take-off, lower the attachments, shift into neutral, set the parking brake, stop the engine and remove the key.

Maintenance and storage

Check shear bolts; engine-mounted bolt, etc., at frequent intervals for proper tightness to be sure the product is in safe working condition.

1. Never store the product with fuel in the fuel tank inside a building where ignition sources are present such as hot water and space heaters, clothes dryers, etc. Allow the engine to cool before storing in any enclosure.
2. Always refer to owner's guide instructions for important details if the product is to be stored for an extended period.
3. Maintain or replace safety and instructions labels, as necessary.
4. Keep run the product few minutes after throwing snow to prevent freeze-up of the collector/impeller.

Additional warnings

1. If the product starts to vibrate abnormally, check it immediately. Excessive vibration can cause injury.
2. Always ensure the product is fully assembled before using it. Never attempt to use an incomplete product or one fitted with an unauthorised modification.
3. Do not overload the product.

Fuel handling

1. Follow the maintenance and repair instructions for this product. Never carry out any modifications of the product. Never change the preset rotary speed or the engine and product settings. Information about

maintenance and repair is provided in this user manual.

2. Never carelessly touch the product, you can burn yourself. While the product is in operation or shortly thereafter, its parts such as the exhaust pipe, engine, and other surfaces are extremely hot! Pay attention to the markings on the product.
3. Make sure that the air intake of the combustion engine is clear. Keep the air intake free of dust, dirt particles, gases and fumes.
4. Make sure that air circulation is adequate and good. The product must be easily accessible from all sides.
5. Always switch the product off and let it cool down, before refuelling it. Fuel is highly flammable. Never smoke when you are refuelling the product. Do not refuel the product if there is an open fire in the vicinity!
6. Always use suitable aids such as funnels and filler necks. Do not spill any fuel on the product or its exhaust system. There is a risk of ignition. However, if fuel should be spilled, then you must remove it carefully from all parts of the product. Any residue which may be present must be completely removed, before the product is operated!
7. Exhaust gases and fuel fumes are noxious. Fuel fumes can ignite. Never use the product in environments where there is a risk of explosion.
8. Never breathe in any fuel fumes, when you are refuelling the product. Never fill the tank in enclosed spaces, such as basements or sheds. There is a risk of poisoning and explosion!
9. Avoid skin contact with fuel.
10. Do not eat or drink, while you are refuelling the product. If you have swallowed fuel or oil, or if fuel or oil has got into your eyes, then seek medical advice immediately.
11. Close the tank lid immediately after filling the tank. Make sure that it is properly closed.
12. Do use caution when handling fuel. To avoid any accidental fires, move the product at least 3 metres (10') from the fuelling point before starting the engine.
13. If fuel is ignited, put out the fire with a dry powder fire extinguisher.

Vibration and noise reduction

To reduce the impact of noise and vibration emission, limit the time of operation, use low-vibration and low-noise operating modes as well as wear personal protective equipment. Take the following points into account to minimize the vibration and noise exposure risks:

1. Only use the product as intended by its design and these instructions.
2. Ensure that the product is in good condition and well maintained.
3. Use correct accessories for the product and ensure they in good condition.

4. Keep tight grip on the handles/grip surface.
5. Maintain this product in accordance with these instructions and keep it well lubricated (where appropriate).
6. Plan your work schedule to spread any high vibration tool use a longer period of time.

Emergency

Familiarise yourself with the use of this product by means of this instruction manual. Memorise the safety directions and follow them to the letter. This will help to prevent risks and hazards.

1. **Always be alert when using this product, so that you can recognise and handle risks early.** Fast intervention can prevent serious injury and damage to property.
2. **Stop the engine and unplug the spark plug connector if there are malfunctions.** Have the product checked by a qualified professional and repaired, if necessary, before you operate it again.
3. **In case of fire stop the engine and unplug the spark plug connector.** Take fire-extinguishing measures immediately if the garden power tool switch is no longer accessible.



WARNING! Never use water to extinguish a product on fire. Burning fuel must be extinguished with special extinguishing agents! We recommend that you keep a suitable fire extinguisher within reach in your work area!

Residual risks











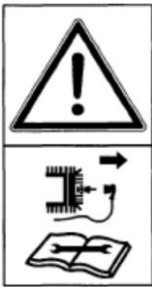


Even if you are operating this product in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the structure and design of this product:















Symbols

1. Health defects resulting from vibration emission if the product is being used over long periods of time or not adequately managed and properly maintained.
2. Injuries and damage to property due to broken application tools or the sudden impact of hidden objects during use.
3. Danger of injury and property damage caused by flying objects.
4. Burns, if touching hot surfaces.



WARNING! This product produces an electromagnetic field during operation! This field may under some circumstances interfere with active or passive medical implants! To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their doctor and the medical implant manufacturer before operating this product!

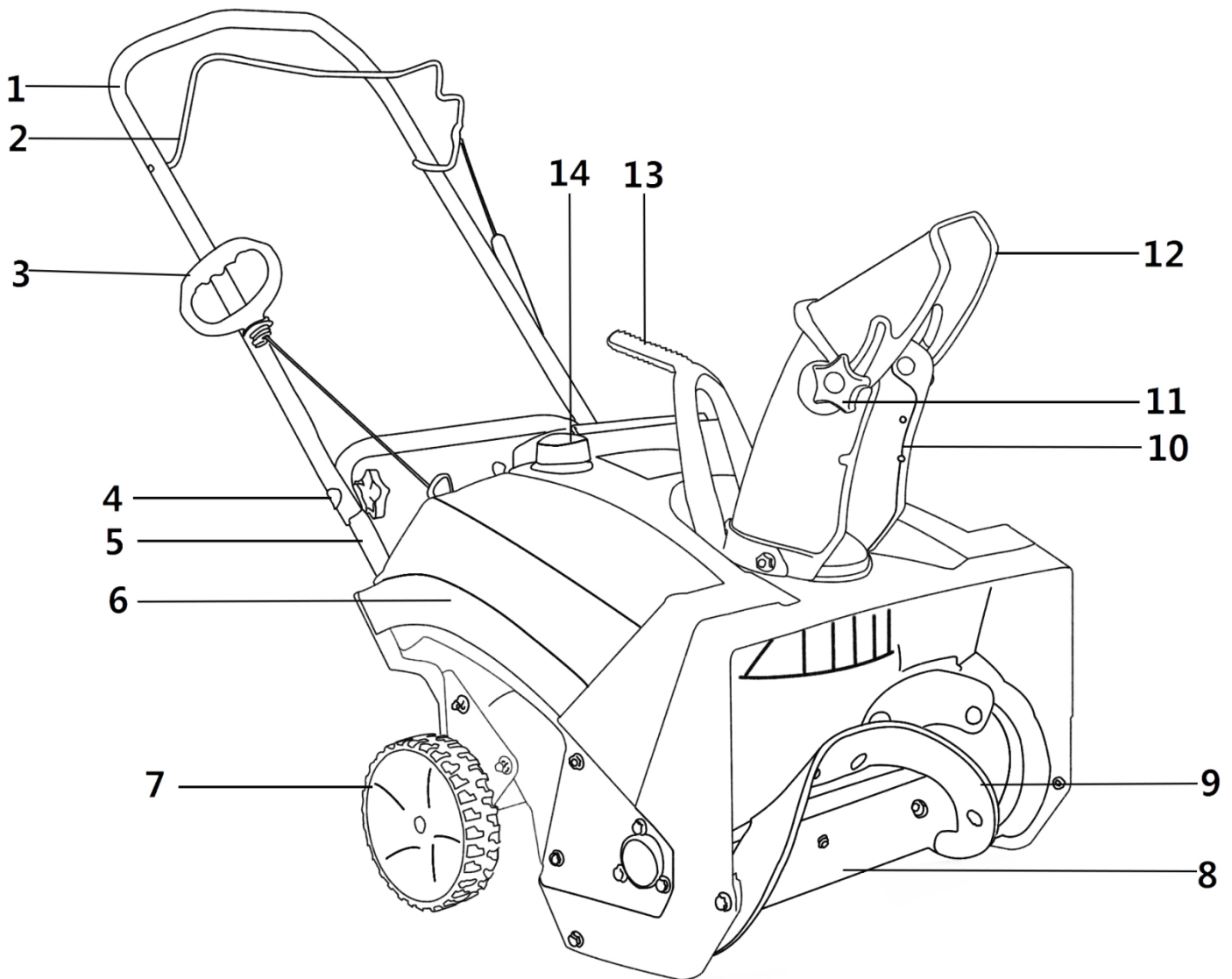
Symbol	Illustration	Symbol	Illustration
	Note		Open flames in the work area, around the product and in the vicinity of flammable materials are prohibited!
	Warning.		Do not smoke in the work area, around the product and in the vicinity of flammable materials!
	Read the instruction manual.		Do not expose the product to rain or wet conditions.
	Wear hearing protection. Wear eye protection.		Risk of fire / flammable materials
	Wear protective gloves.		Switch the engine off while you are refilling the tanks!
	Wear protective, slip-resistant footwear.		Do not open or remove safety shields while engine is running.
	Objects thrown by the product could hit the user or other bystanders. Always ensure that other people and pets remain at a safe distance from the product when it is in operation. In general, children must not come near the area where the product is.		When cleaning, repairing, or inspecting, make certain that all mowing parts have stopped. Disconnect the spark plug connector, and keep the connector away from the plug to prevent accidental starting.
	Wait until all moving parts have come to a complete stop before touching them. Auger continues to rotate after the product is switched off.		Only add unleaded fuel.

	Do not operate this machine in house		Add engine oil (Oil has been drained for shipping. And the engine must be filled before beginning to operate). Oil type 5W-30.
	Warning! Avoid injury from rotating working tool - keep hands, feet and clothing away.		Primer (press 3 times)
	Warning! Keep hands out of inlet and discharge openings while machine is running ,There are rotating blades inside		Choke – CLOSE position
	Warning! Rotating impeller, keep fingers / hand away.		Choke – OPEN position
	Do not operate on steep slopes!		Ignition key (if equipped) O : STOP position I : START position
	This product produces noxious exhaust fumes. If the product is used improperly, these fumes can lead to poisoning , a loss of consciousness or death!		Electric start button (if equipped)
	Hot surface, do not touch. High temperatures on the product's surfaces and structural parts that could cause burns, if they are touched. The product can also stayhot for a longer period of time after operation!		Auger control lever (if equipped): O : STOP position I : RUN position

PRODUCT SPECIFICATIONS

Model #	HSX1420
Description	Single-stage Snowthrower
Oil tank capacity	0.35L/11.8 OZ.
Engine oil type	5W-30
Fuel tank capacity	1.6L/0.4Gal
Fuel type	#93, unleaded fuel
Engine type	4-stroke
Start mode	Recoil start
Engine displacement	87cc
Net Power	1.65kW
Max. engine speed	3600rpm
Working width	20"
Max. snow height	12"
Discharge distance	0~9m
Discharge Chute Rotation	180 degree
Chute Deflector	60 degree
Wheels Diameter	7"

KNOW YOUR SNOW BLOWER



1 Handle

2 Auger Control

3 Starter Handle

4 Fixing screw(including washer and knob) for handle

5 Lower handle

6 Upper Cover

7 Wheel

8 Snow Scraper

9 Auger

10 Chute

11 Knob

12 Chute Deflector

13 Chute Direction Control

14 Fuel Tank Cap

ASSEMBLY



NOTE: The product is heavy, ask another person for assistance if required.

Unpack all parts and lay them on a flat, stable surface.

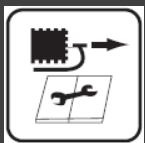
Remove all packing materials and shipping devices if applicable.

Make sure the delivery contents are complete and free of any damage. If you find that parts are missing or show damage do not use the product but contact your dealer. Using an incomplete or damaged product represents a hazard to people and property.

Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.



WARNING! The product must be fully assembled before operation! Do not use a product that is only partly assembled or assembled with damaged parts!



Follow the assembly instructions step-by-step and use the pictures provided as a visual guide to easily assemble the product.

Do not insert the ignition key!



NOTE: Take care of small parts that are removed during assembly or when making adjustments. Keep them secure to avoid loss.

You will need

(items not supplied)

- 10cm wrench
- Suitable personal protective equipment
- Fuel funnel with filter
- Fuel
- Engine oil
- Lubrication oil/Grease
- Fuel collecting container
- Oil collecting container

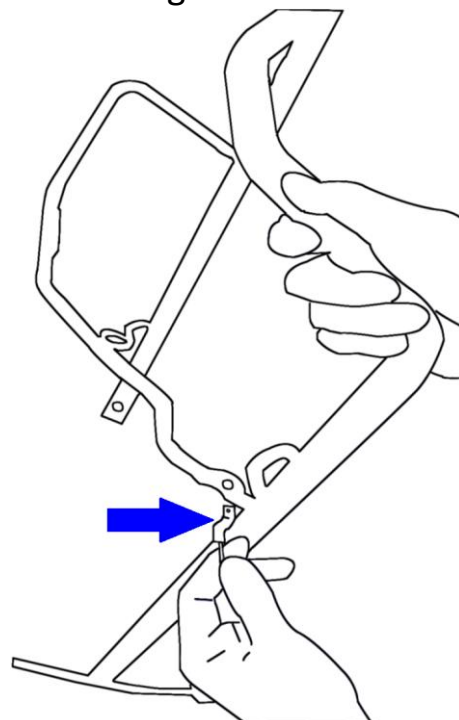
(items supplied)

- Spark plug wrench 1pc
- Oil funnel 1pc
- Ignition key 1pc

Assembly

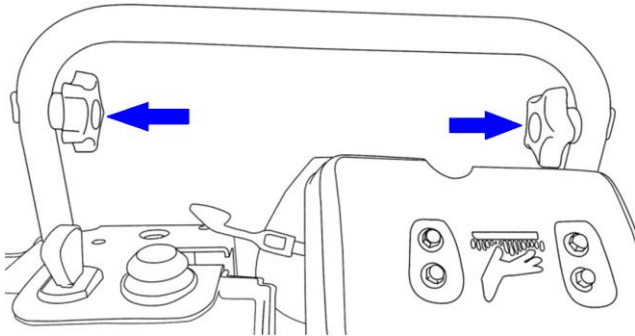
1. Auger Cable

Install the “Z” hook to the auger driver lever. **Auger Cable** Install the “Z” hook to the auger driver lever.

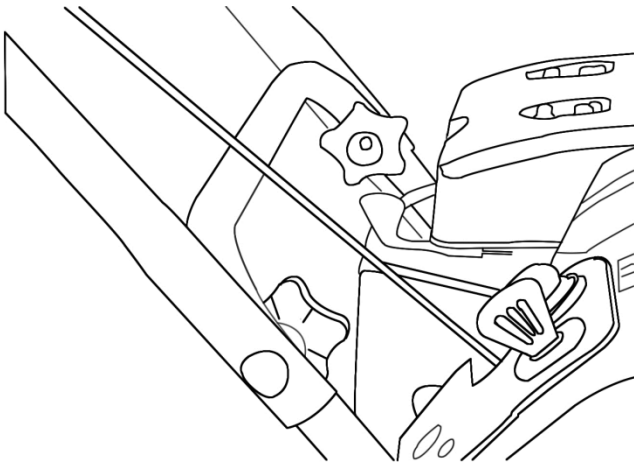


Upper Handle

1. Loosen the knobs on each side of the lower handle.

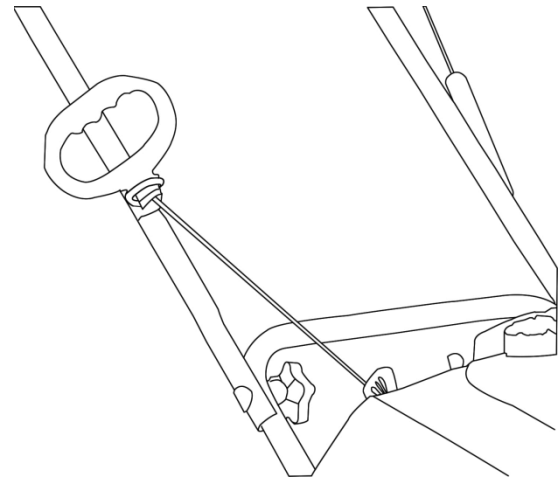
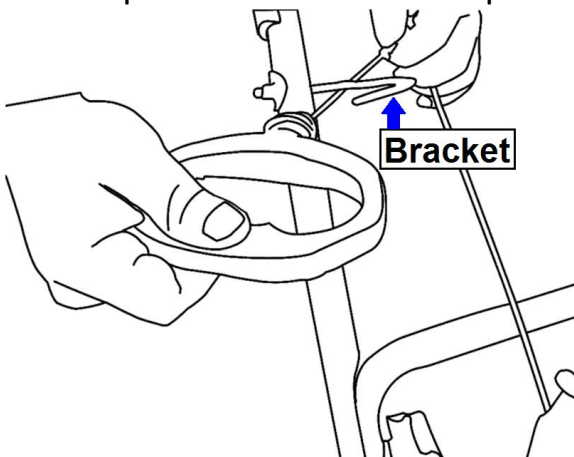


2. Align the holes in the upper handle with the holes in the lower handle. And secure the connection with the knobs, washers and screws.



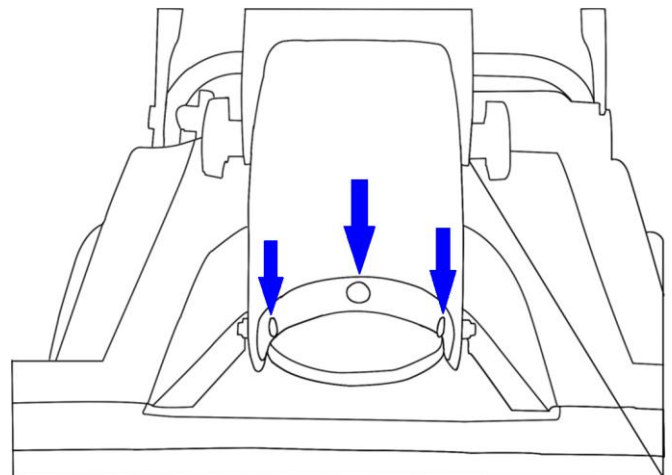
Note: Make sure the cables are not caught between the upper and lower handle

3. One hand holds recoil starting handle, another pulls rope firmly. Then set the rope into the bracket as photo.

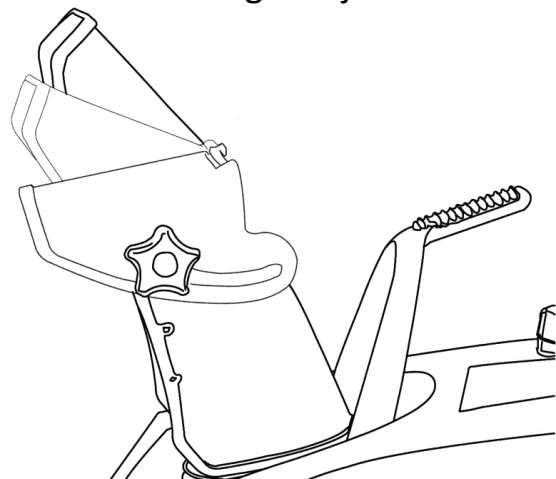


Discharge chute

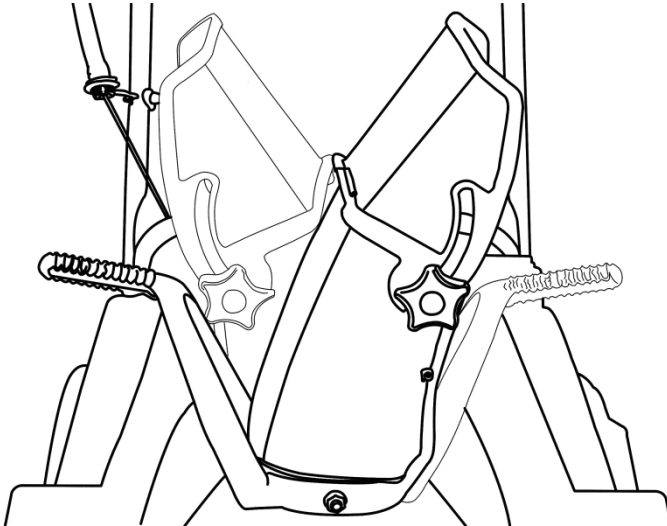
1. Unscrew the bolts from the lower chute. Fit chute on the discharge hole of thrower. Tip the lower chute backward until the hole in the chute ring is aligned with the hole in the lower chute. Attach the lower chute with bolt and nut.



2. Adjust the chute deflector in proper angle, and hold the knob outside to finish the angle adjustment.



3. Rotate the chute in proper direction by crank.



Engine oil and Fuel

This product is equipped with a 4-stroke engine. Before operation you must add proper fuel and engine oil.

1. Place the product on a stable, level surface. We recommend laying a non-flammable sheet underneath.
2. Use proper funnels. Avoid splitting and overfilling the tanks.



WARNING! Ensure that there are no naked flames around the product!

Do not smoke while filling fuel and oil!

3. Always dispose fuel, used oil and objects contaminated with them in accordance with local regulations.

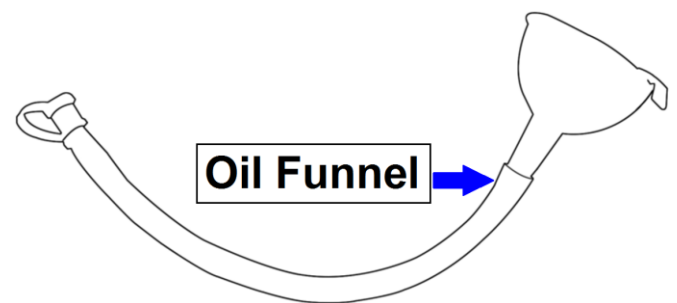
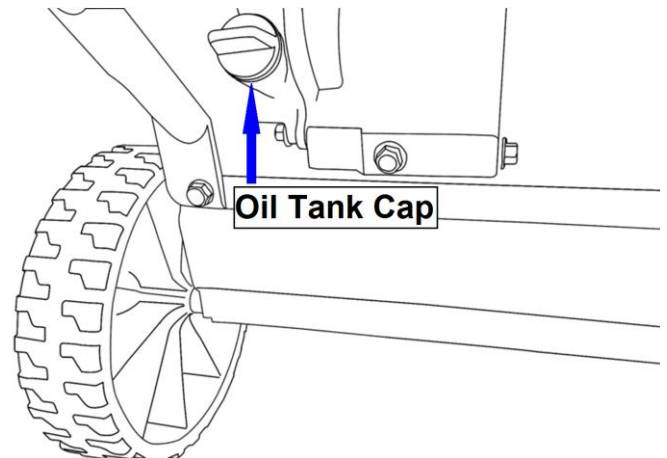
Engine oil



WARNING! This product is not supplied with oil. However, for

Before operating this product it is essential to fill it with proper oil (see "Specification")!

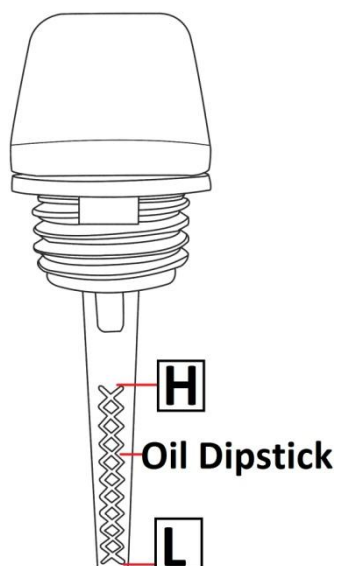
1. Set up the machine. Unscrew and remove the oil tank cap. Insert the oil funnel.



2. Gradually add good-quality engine oil (5W-30). Allow the oil to settle.



3. Check the oil level frequently while filling. Wipe the oil dipstick clean; refit and tighten the oil tank cap and then remove it again. The oil level must be between the "H (High)" and "L (Low)" markings. Add more oil if necessary. Do not overfill.



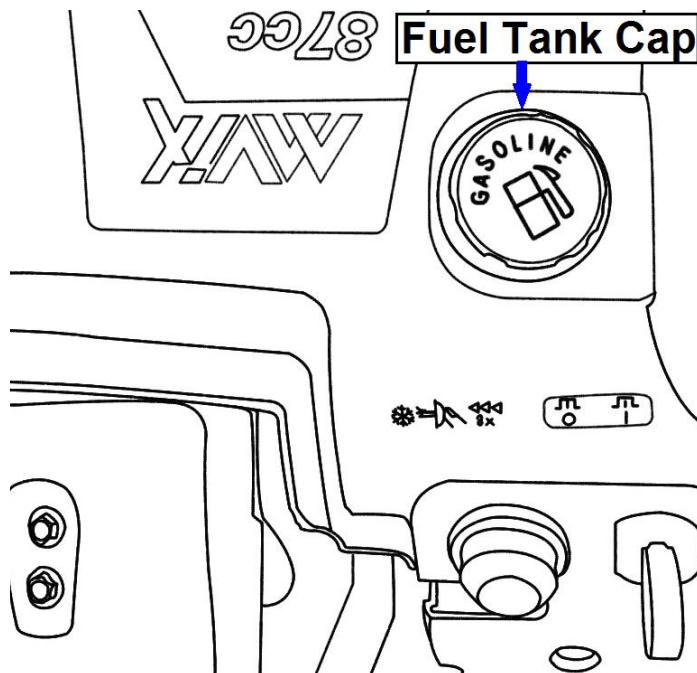
4. Wipe spilled oil with a soft cloth and screw the oil tank cap.

Fuel



WARNING! WARNING! This product is not supplied with fuel! Before operating this product it is essential to fill it with proper fuel! (see "Specification")

1. Always use clean, fresh unleaded petrol. Purchase fuel in quantities that can be used within 30 days.
2. Never mix oil with fuel. Avoid getting dirt, dust or water in the fuel tank.
3. Unscrew and remove the fuel tank cap. Then, close the tank cap.




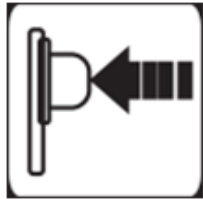
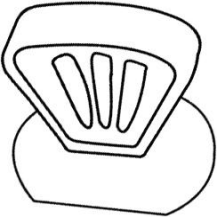



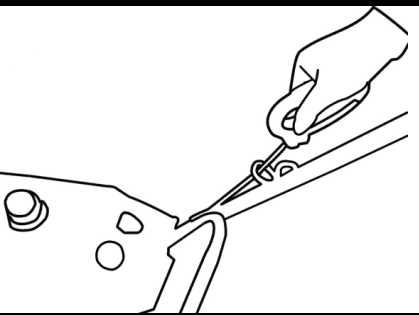


NOTE: Fuel deteriorates over time. It may be difficult to start the engine if you use fuel which has been kept for more than 30 days. Towards the end of the season, it is advisable to put only as much fuel in the tank as you need for each use, since it should be completely used up before storing the product. Empty remaining fuel from the tank when storing the product for over 30 days.

4. Wipe any spilled fuel with a soft cloth and screw the fuel tank cap.

OPERATION

Cold Start (low environment temperature -20°C)

If it has never started before your start or the engine stops for a while (more than 20min) after your start, follow below steps.

<p>1</p>  <p>Set choke to the CLOSE position.</p>	<p>5</p>  <p>Electric start (If equipped, 110V or 230V): ①connect extension cord to start and plug extension into 110V or 230V 3-wire, grounded outlet ②press starter button on engine until engine starts ③remove the connect extension cord from the grounded outlet.</p>
<p>2</p>  <p>Insert ignition key. DO NOT twist the key after it is inserted.</p>	<p>Note: DO NOT operate starter more than 15 seconds per minute, as overheating and damage can occur. (If engine does not start, refer to TROUBLESHOOTING in Care and Maintenance.)</p>
<p>3 Press primer 3 times.</p> 	<p>6</p>  <p>Run idle for 20-30 seconds to warm it up.</p>
<p>4 Pull recoil starter handle slowly until you feel a definite resistance (starter engaged) and then pull firmly to start the engine.</p>	<p>7 Set choke to the OPEN position.</p> 
	<p>NOTE: When moving the choke to the OPEN position and the engine speed gets inconsistent. Then move the choke to middle position</p>
 <p>WARNING! Allow the cable to return slowly and in a controlled manner each time it is pulled.</p>	<p>8</p>  <p>Operate your snowthrower.</p>

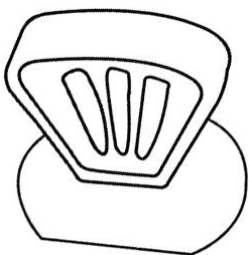
Warm Start

1



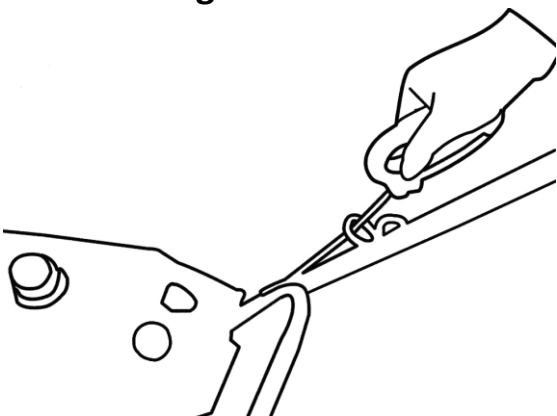
Set choke to the
OPEN position

2



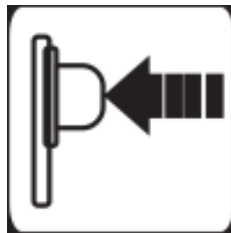
Insert ignition key.
DO NOT twist the
key after it is
inserted.

3 Pull recoil starter handle slowly until you feel a definite resistance (starter engaged) and then pull firmly to start the engine.



WARNING! Allow the cable to return slowly and in a controlled manner each time it is pulled!

4



Electric start (if so equipped, 110V or 230V):

① connect extension cord to start and plug extension into 110V.

or 230V 3-wire, grounded outlet.

② press starter button on engine until engine starts.

③ remove the connect extension cord from the grounded outlet.

NOTE: DO NOT operate starter more than 15 seconds per minute, as overheating and damage can occur. (If engine does not start, refer to TROUBLESHOOTING in Care and Maintenance) .

5



Run idle for 20-30 seconds to warm it up.

6



Operate your snowthrower.

Intended use

This product is intended for clearing garden paths, yards and private approach lanes from snow in domestic areas. The product may not be used on high plateaus like roof gardens. For safety reasons it is essential to read the entire instruction manual before first operation and to observe all the instructions therein.

This product is intended for private domestic use only, not for any commercial trade use. It must not be used for any purposes other than those described.

Clearing snow



WARNING! Foreign objects, such as rocks, broken glass, nails, wire, or string, can be picked up and thrown by the product, causing damage and serious personal injury! Ensure that no hidden objects are covered by the snow! Remove all foreign objects from the area to be cleared before operating the product!

1. Keep the area of operation free of foreign objects that can become thrown by the auger. Perform a thorough inspection of the area since some objects may be hidden from view by surrounding snow. If the product hits an obstruction or picks up a foreign object during use, stop the product, switch off and disconnect from the power supply, remove the obstruction, and inspect the product for damage. Repair or replace any damaged part before restarting and operating the product.

2. Keep children, pets, and bystanders away from the area of operation. Be aware that the normal noise of the product when turned on may make it difficult for you to hear approaching people.
3. Pay attention to the wind direction. If possible, move in the same direction as the wind so that the snow is not thrown against the wind (and thus back into your face and on the just cleared path).
4. Do not push the product with excessive force. You should push the product gently and evenly in accordance with the products throw rate.
5. Some parts of the product may freeze under extreme temperature conditions. Do not attempt to operate the product with frozen parts. If the parts freeze while the product is in use, stop the product, switch off and disconnect from the power supply, and inspect for frozen parts. Free all parts before restarting or operating the product. Never force controls that are frozen.

Adjust discharge direction and distance

Adjust the discharge direction in vertical and horizontal position before each use. The proper direction depends among others on the snow condition and working area.

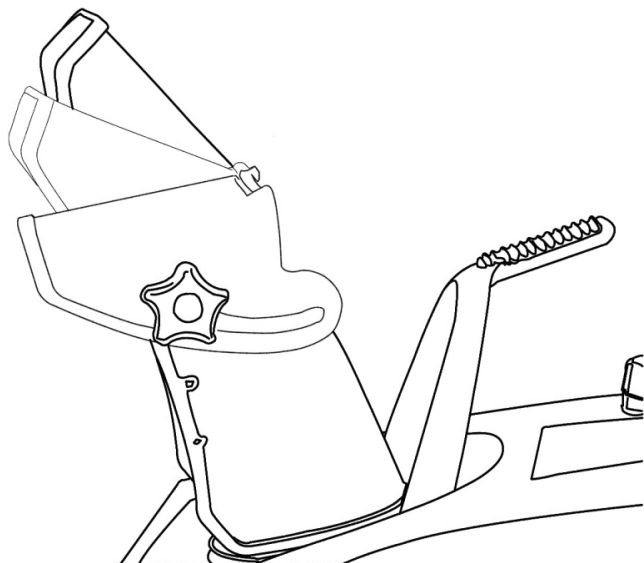
If the deflector is in a lower position the snow is thrown in a short distance; if the deflector is in an upper position the snow is thrown farther.



WARNING! Never direct the chute deflector at the operator, at bystanders, at vehicles or at nearby windows! The discharged snow and foreign objects accidentally picked up by the product can cause serious damage and personal injury! Always orient the discharge chute in the Opposite direction from where you, bystanders, surrounding vehicles, or windows are located!

The chute deflector on the top of the discharge chute controls the distance of the snow stream.

1. Loosen the fixation knobs on the both sides of the chute deflector.
2. Raise or lower the chute deflector to the desired distance.

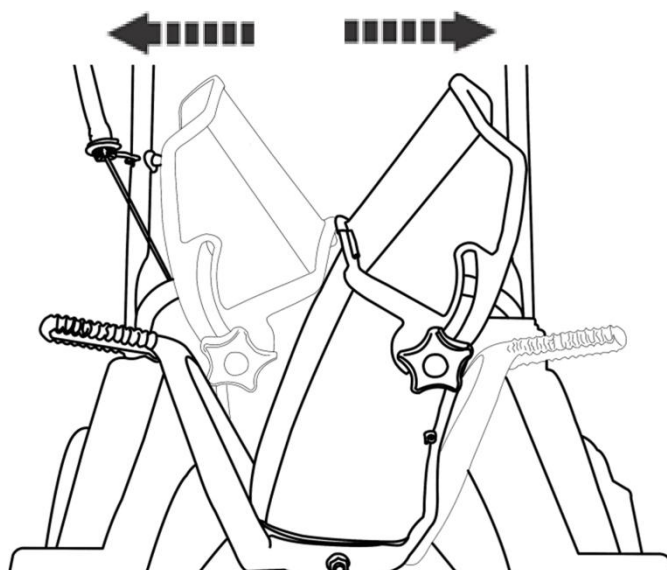


3. Retighten the fixation knobs.
4. The discharge chute can be adjusted approx. 180 degrees by rotating the crank. Rotate the crank clockwise to turn the discharge chute to the left; anticlockwise to turn the chute to the right.

Auger control lever

The auger control lever is located in the front of the handle. Pull the lever to

engage the auger. Release the lever to stop the snow throwing action.



NOTE: Also refer to auger control test prior to operating this product.

Auger control test



NOTE: Perform the following test before operating your product for the first time and the start of each winter season.

When the auger control lever is released and in the disengaged front position, the auger wire should have very little slack. It should not be tight.

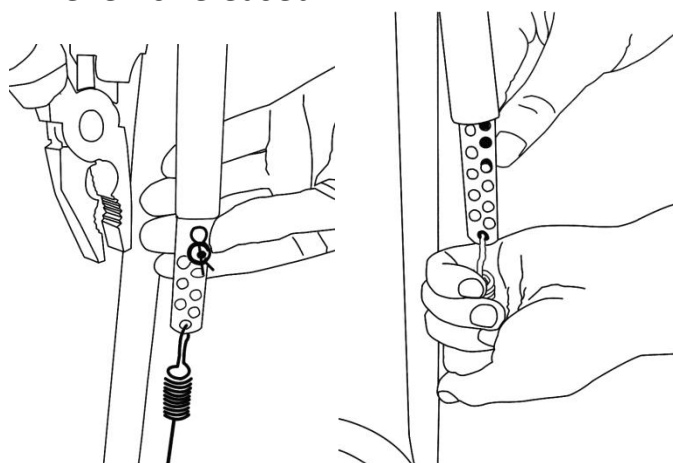
1. Stand behind the product.
2. Engage the auger.
3. Allow the auger to remain engaged for approximately ten seconds
4. Release the auger control lever.
5. Repeat the step 2, 3 and 4 for several times.
6. Confirm that the auger has completely stopped when releasing the lever.



Wear causes stretching on both the control cable and auger drive belt, periodic

adjustments may be necessary. If the auger seems to hesitate when rotating, proceed as follows:

1. Slide the cable boot off the cable adjustment bracket. Take off the clip and washer by a plier. Then, remove "L" hook from the cable adjustment bracket. See below photo A
2. One hand holds the lower auger cable. Lift it up and move the "L" hook to the next adjustment hole. See below photo B
3. Replace the clip and washer. Put the cable boot over the cable adjustment bracket.
4. To check the adjustment, start the snow thrower. Make sure the auger does not rotate when the auger drive lever is released.



A

B

Control lever push forward. The cable gets slightly slacked. When is the lever released the cable must be neither slacked nor tensed. If you find some play, it is necessary to adjust and tense the cable. When the cable is correctly tensed the lever must touch the handle when pushed. In different case is necessary to adjust the cable.

Carburettor

If the auger fails to operate at operational speed the carburettor may need to be adjusted. Please contact an authorised service centre or similar qualified specialist.

General operation

1. Check the product as well as accessories for damage before each use. Do not use the product if it is damaged or shows wear.
2. Double check that accessories are properly fixed.
3. Check the fuel and engine oil level, refill if necessary.
4. Push the product forward by its handle. Keep the handle dry and clean to ensure safe support.
5. Ensure that the air vents are always unobstructed and clear. Clean them if necessary with a soft brush. Blocked air vents may lead to overheating and damage the product.
6. Switch the product off immediately if you are disturbed while working by other people entering the working area. Always let the product come to complete stop before putting it down.
7. Do not overwork yourself. Take regular breaks to ensure you can concentrate on the work and have full control over the product.



WARNING! In some countries regulations define at what time of the day and on what Special days products are

allowed to be used and what restrictions apply! Ask your community for detailed information and observe the regulations in order to preserve a peaceful neighbourhood and avoid committing administrative offences!

MAINTENANCE

After use

1. Switch the product off, disconnect the spark plug connector and let it cool down.
2. Check, clean and store the product as described below.

The golden rules for care



WARNING! Always switch the product off, disconnect the spark plug connector and let the product cool down before performing inspection, maintenance and cleaning work!

1. Keep the product clean. Remove debris from it after each use and before storage.

2. Regular and proper cleaning will help ensure safe use and prolong the life of the product.
3. Inspect the product before each use for worn and damaged parts. Do not operate it if you find broken and worn parts.



WARNING! Only perform repairs and maintenance work according to these instructions! All further works must be performed by a qualified specialist!

General cleaning

1. Clean the product with a damp cloth. Use a brush for areas that are hard to reach.



NOTE: Do not use chemical, alkaline, abrasive or other aggressive detergents or disinfectants to clean this product as they might be harmful to its surfaces.

2. Check for any damage and wear. Repair damages in accordance with this instruction manual or take it to an authorised service centre before using the product again.

Maintenance Table

Part	To do	Before/after each use	5 hours	25 hours	50 hours / half year	100 hours / once a year
Engine Oil	Check	x				
Engine Oil	Change		x			
Spark plug	Check			x		
Spark plug	Clean					x
Spark plug	Replace	whenever necessary				
Valve play	Adjust	whenever necessary				
Exhaust area	Clean		x			

Removing blockages



WARNING! Wear protective gloves when removing blockages! Use proper tools to remove debris, e. g. a wooden stick! Never use your bare hands!

Warning! Rotating working tool, keep hands away! Do not insert your hands into the discharge chute.

1. Check the discharge chute for blockages and use the shovel to remove any.
2. Check the auger and remove possible clogging with the shovel, brush or blunt tool. Check to make sure the auger is in an undamaged condition. Contact an authorised service centre if parts are damaged and a replacement is necessary.

Auger



WARNING! Wear protective gloves when working on the auger to avoid injuries!

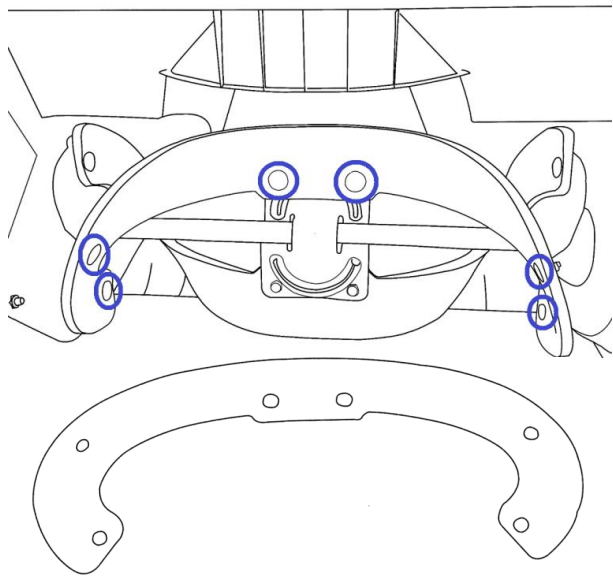
WARNING! Wait until all moving parts have come to a complete stop before touching them. Auger continues to rotate after the product is switched off.

1. Remove snow from the auger after use using a proper brush or tool.
2. Check for any damage and wear. Have the auger replaced by a qualified specialist if it is bent, damaged or worn. Otherwise the performance and safety of the product cannot be guaranteed.

Auger Replacement

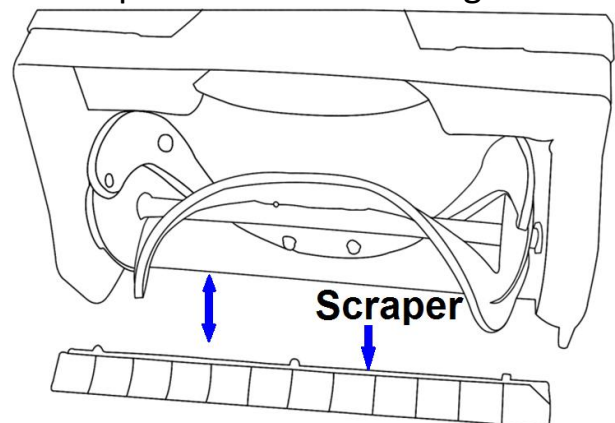
1. Loosen the 4pcs bolts and nuts by

wrench. Replace the old rubber auger with new one. Then, securely retighten bolts and nuts.

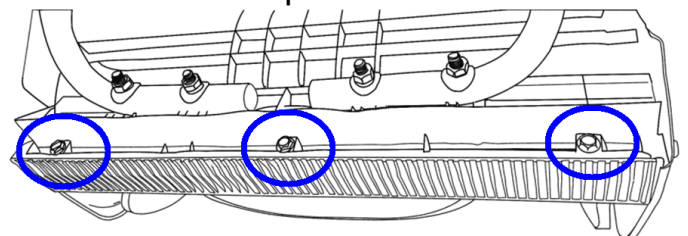


Scraper

1. The scraper is located at the base of the product beneath the guard.



2. Detach and remove the worn scraper from the product by removing the three bolts as photo.

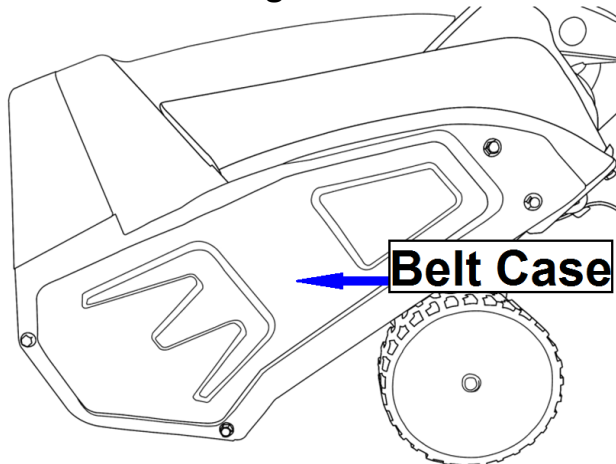


3. Install the new scraper and fasten it securely to the guard with the bolts nuts in reverse order.

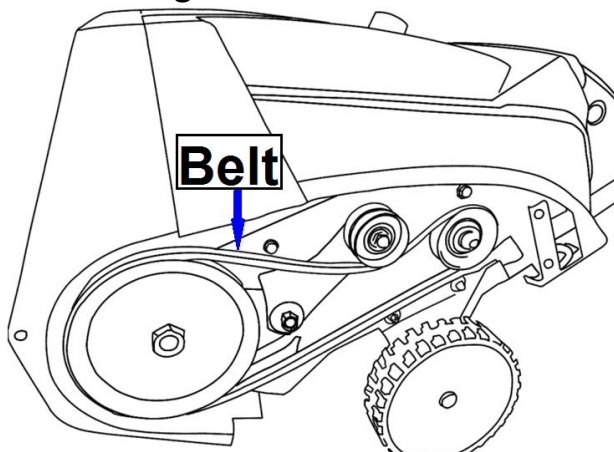
IMPORTANT: DO NOT allow Scraper too wear to far or Auger housing will become damaged.

Belt

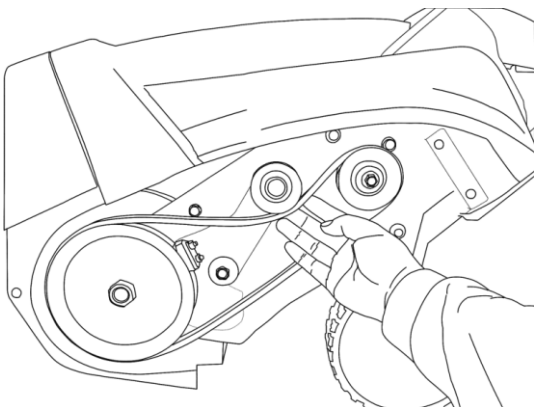
1. Loosen the bolts on the belt case and remove them together with the case.



2. Check the auger belt for any damage and wear. Have them replaced if they are damaged or worn. Otherwise the performance and safety of the product cannot be guaranteed.



3. Pull the belt out by hand as photo. And replace the old belt with new one.
4. Attach and secure the belt case with the bolts.



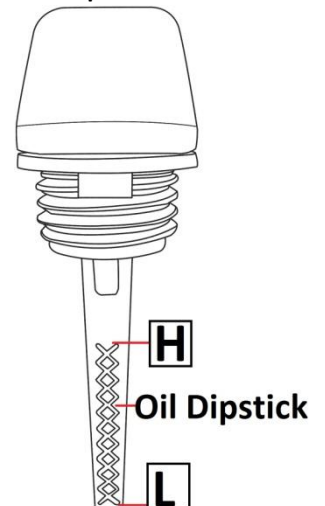
Engine oil



NOTE: Check the oil level and quality before each use and after every five hours of operation to be sure correct oil level is maintained.

Check

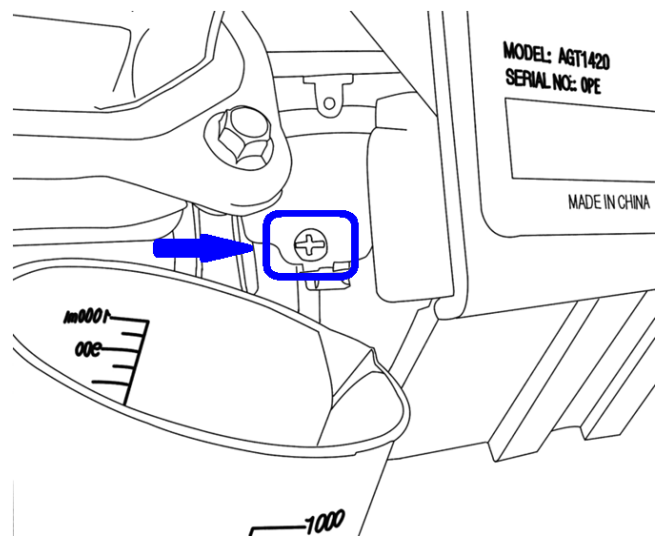
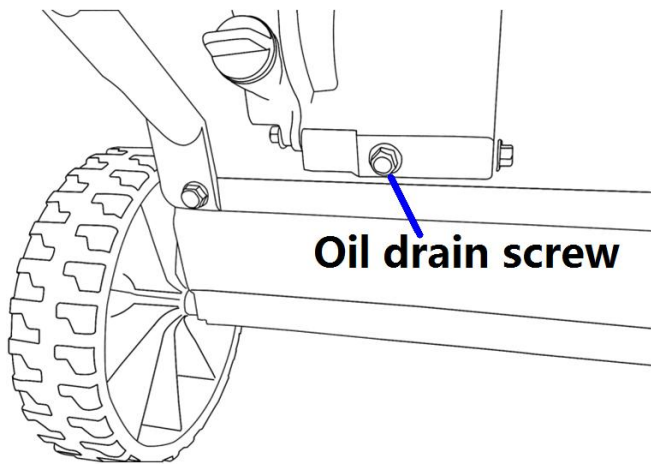
1. Unscrew the oil tank cap.
2. Wipe the oil dipstick clean; refit and tighten the filler cap and then remove it again. The oil level must be between the "H" and "L" markings.



3. Refill if the oil level is too low.
4. Drain oil if the oil level is too high.
5. The oil should be clear and thick. If the oil is sticky or contains dirt particles the oil must be changed.

Change

1. Place a suitable container under oil drain screw to collect drained oil.
2. Unscrew the oil drain screw and let the oil run into the container.
3. Screw the oil drain screw back in.
4. Wipe spilled oil up.
5. Refill the oil tank as described in section "Assembly - Engine oil and Fuel – Engine oil".



Fuel



NOTE: Fuel deteriorates over time. Engine starting may be

difficult if you use fuel kept for more than 30 days. Do not reuse any fuel that has been removed. Always empty the fuel tank when storing over 30 days.

1. Empty the fuel tank when storing the product over 30 days to avoid deterioration of the fuel.
2. Place a suitable container to collect drained fuel.
3. Open the fuel tank cap and turn side the machine to leave the fuel outflow.
4. Screw the cap back.
5. Wipe spilled fuel up.
6. Draining carburetor.
 - ① Place a container underneath the carburetor, and use a wide neck container or funnel for fuel not spattering, close fuel cock.
 - ② Remove the drain plug and sediment cup, then, open the fuel cock.
 - ③ Immediately reassemble sediment cup and drain bolt after fuel completely draining. And screw down.

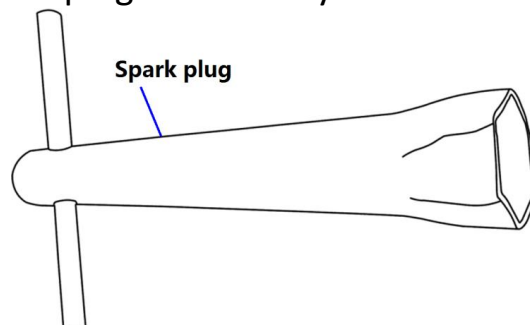
7. Before re-use refill the fuel tank as described in to section “**Engine Oil and Fuel – Fuel.**”



NOTE: Towards the end of the season, it is advisable to put only as much fuel in the tank as you need for each cut, since it tank should be completely used up before storing the product.

Spark plug

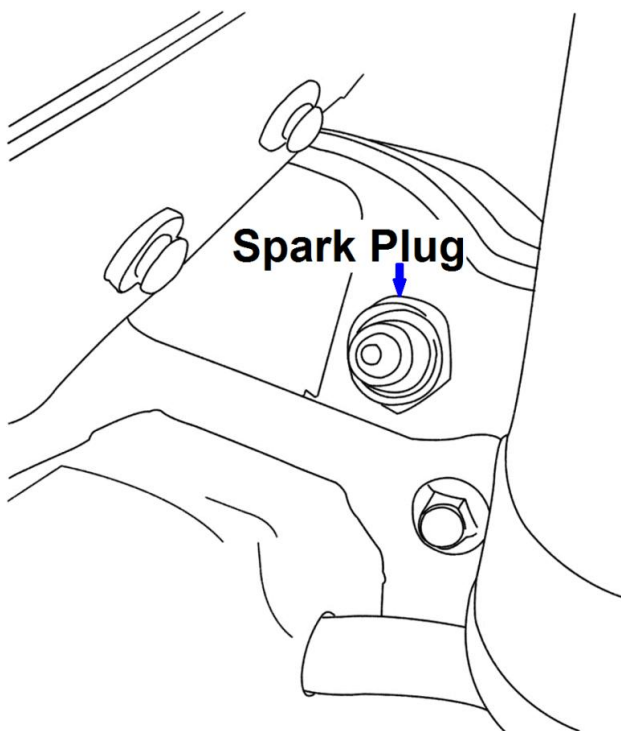
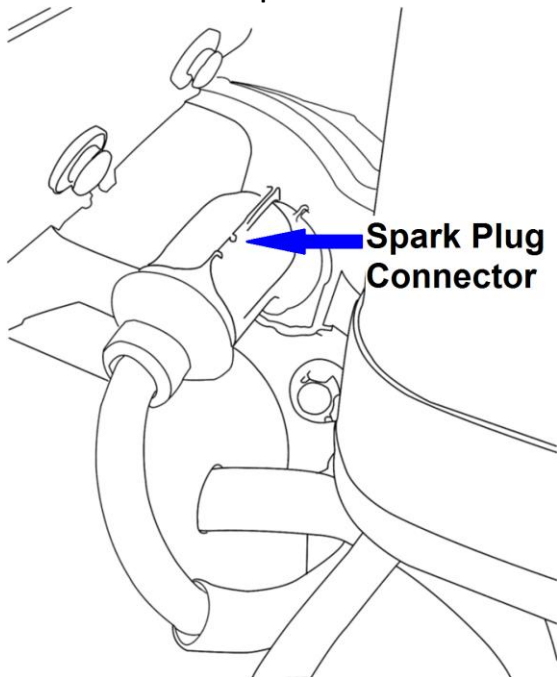
1. Inspect the spark plug every 25 hours or prior to long-term storage over 30 days if the use has not been this high. Clean or replace with a new spark plug if necessary.



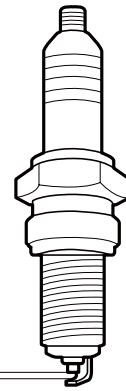
2. Unplug the spark plug connector.
3. Loosen the spark plug with the spark plug wrench and carefully remove it.
4. The colour of the electrode should be light-brown coloured.
5. Remove debris from the electrode with a soft wired brush; avoid heavy

cleaning of the electrode.

6. Dry the spark plug with a soft cloth if it is wet from petrol.



7. Check the spark plug gap. It should be 0.6-0.7 mm.
8. Replace with a new spark plug if either the electrode or the insulation is damaged.



9. When replacing the spark plug, first screw it in hand tight and then lightly tighten it with the spark plug wrench.



WARNING! Do not over tighten the spark plug to avoid any damage!

Storage

1. Clean the product as described above.
2. Store the product and its accessories in a dry, frost-free place.
3. Always store the product in a place that is inaccessible to children. The ideal storage temperature is between 10 and 30°C.
4. We recommend using the original package for storage or covering the product with a suitable cloth or enclosure to protect it against dust.
5. If you are not going to use the product for an extended period of time (more than 3 months) and before storing it for the winter, empty the fuel tank (Refer to "**Maintenance – Fuel**" for instructions how to empty the tank).

Transportation

1. Switch the product off and disconnect the spark plug connector before transporting it anywhere.

2. Do not try to carry the product alone!
Only transport it pushing forward. If it is necessary to lift the product ask another person for help.
3. Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles.
4. Secure the product to prevent it from slipping or falling over.

TROUBLESHOOTING

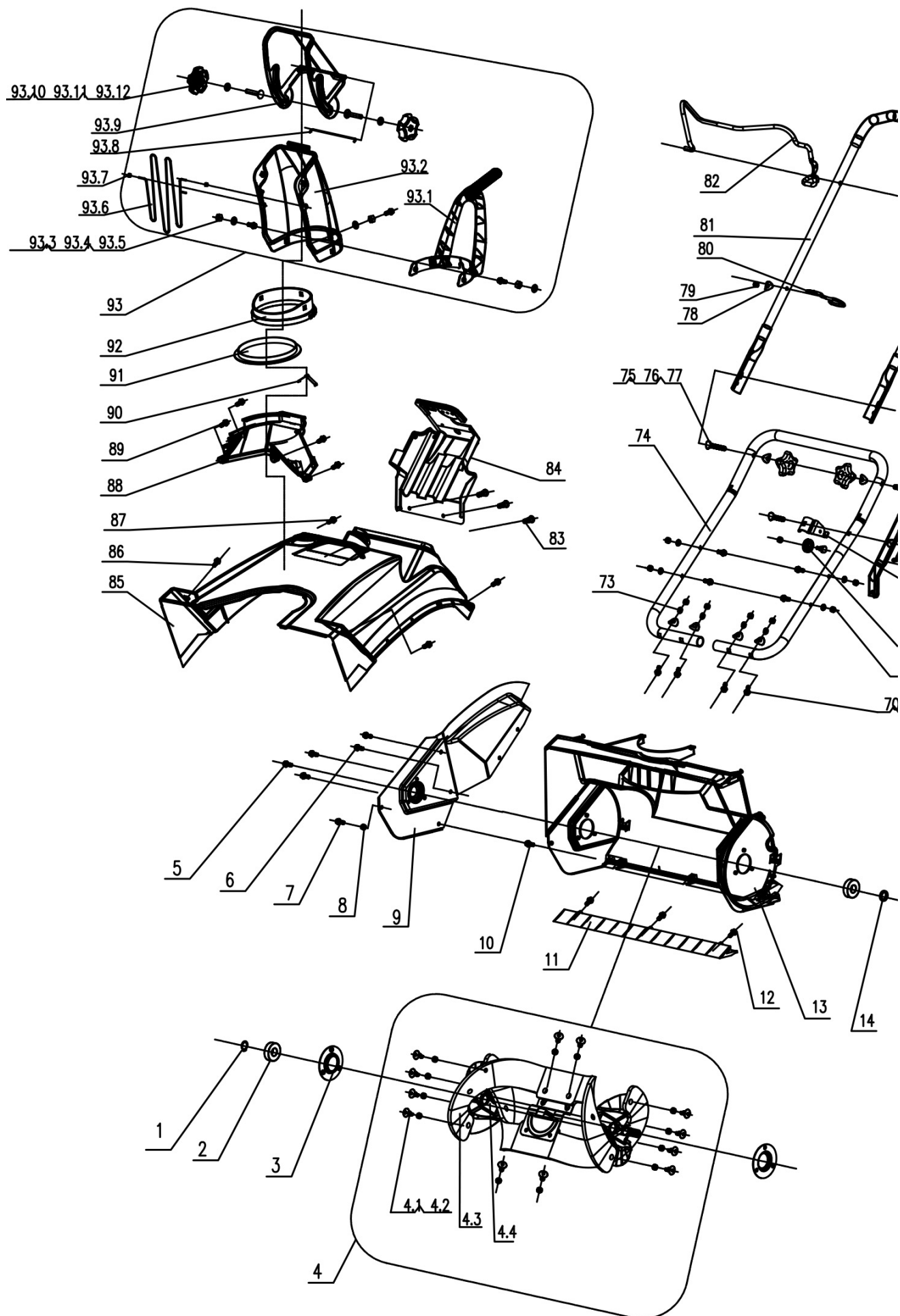
Suspected malfunctions are often due to causes that the users can fix themselves. Therefore check the product using this section. In most cases the problem can be solved quickly.

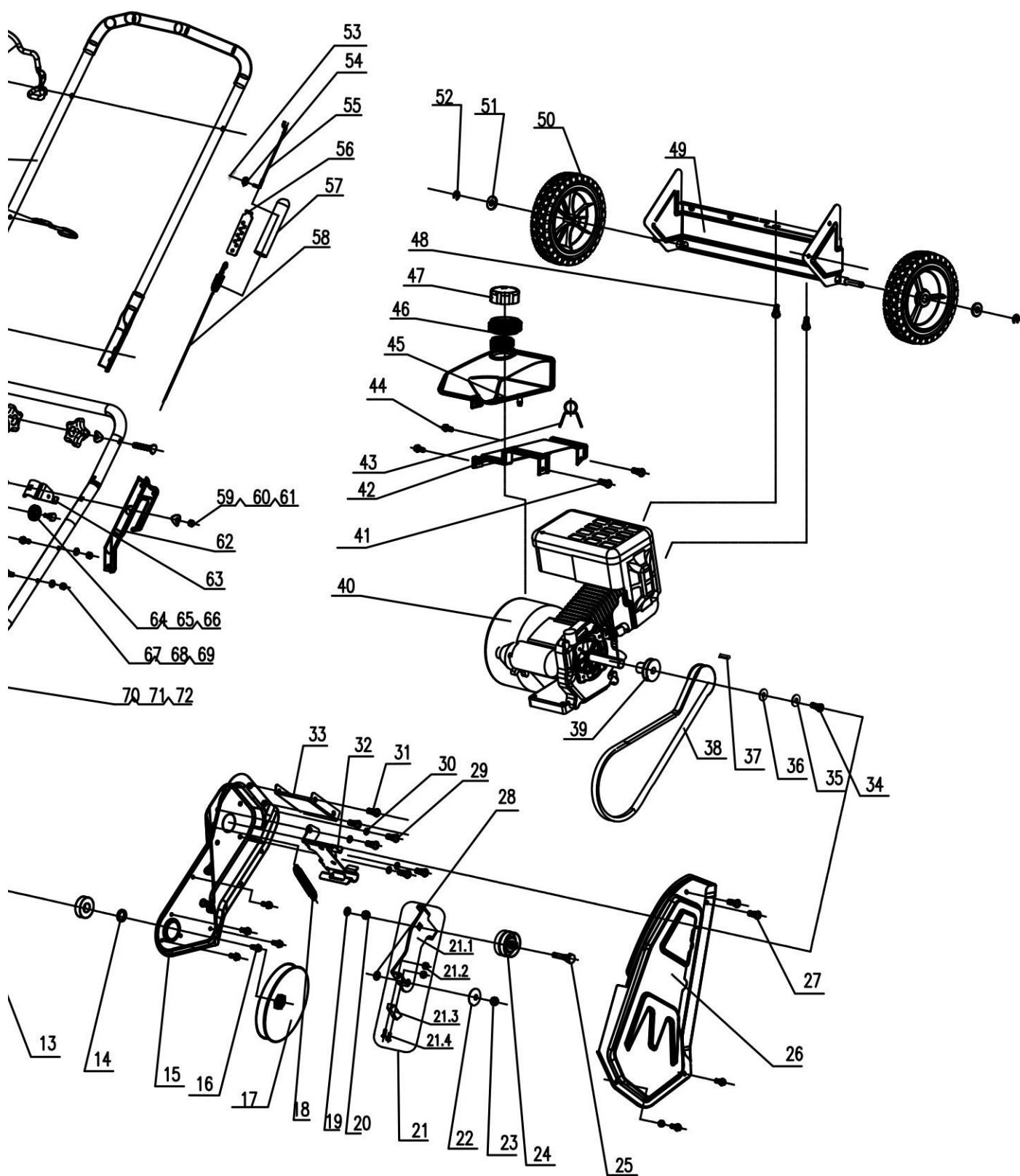


WARNING! Only perform the steps described within these instructions! All further inspection, maintenance and repair work must be performed by an authorised service centre or a similarly qualified person if you cannot solve the problem yourself !

Problem	Possible cause	Solution
1. Engine does not start	1.1. Not enough fuel in fuel tank	1.1. Add fuel
	1.2. Primer has not been pressed at cold start	1.2. Press the primer and restart
	1.3. Primer has been pressed at warm start	1.3. Dry spark plug
	1.4. Spark plug is wet	1.4. Dry spark plug
	1.5. Spark plug is damaged	1.5. Replace spark plug
2. Engine stops	2.1. Not enough fuel in fuel tank	2.1. Add fuel
	2.2. Auger is blocked	2.2. Remove blockage
3. Unsatisfactory result	3.1. Auger damaged, worn or bent	3.1. Have it replaced
	3.2. Auger/chute blocked	3.2. Remove the blockage
4. Excessive vibration/ noise or exhaust	4.1. Auger is damaged	4.1. Have it replaced
	4.2. Auger is blocked	4.2. Remove blockage
	4.3. Screws/nuts are loose	4.3. Tighten the screws/nuts
	4.4. Petrol/oil mixture is incorrect or the wrong oil has been used	4.4. Empty out unused fuel and refill with the correct ratio petrol/oil mixture

EXPLODED VIEW





PART LIST

Refe#	Description	Q'ty	Stock#
1	Shaft Cirdip	1	AGT1420-1
2	Ball Bearing	2	AGT1420-2
3	Bearing Pedestal	2	AGT1420-3
4	Auger Assembly	1	AGT1420-4
4.1	Gib-headed Bolt	12	AGT1420-4.1
4.2	Hex Lockout	12	AGT1420-4.2
4.3	Rubber Blade	2	AGT1420-4.3
4.4	Spiral Weldment	1	AGT1420-4.4
5	Trigonocephaly Bolt	3	AGT1420-5
6	Self-tapping Screw	4	AGT1420-6
7	Hex Flange Bolt	2	AGT1420-7
8	Hex Lockout	2	AGT1420-8
9	Plate Weldment R	1	AGT1420-9
10	Self-tapping Screw	2	AGT1420-10
11	87CC Scraper	1	AGT1420-11
12	Self-tapping Screw	3	AGT1420-12
13	Snow Scraper Cover	1	AGT1420-13
14	Shaft Sleeve	1	AGT1420-14
15	Bracket Weldment L	1	AGT1420-15
16	Trigonocephaly Bolt	3	AGT1420-16
17	Auger Pulley	1	AGT1420-17
18	Braking Spring	1	AGT1420-18
19	Flat Washer	1	AGT1420-19
20	Locknut	1	AGT1420-20
21	Braking Vane Ass.	1	AGT1420-21
21.1	Braking Vane	1	AGT1420-21.1
21.2	Hex Locknut	2	AGT1420-21.2
21.3	Rubber Block	1	AGT1420-21.3
21.4	Cross Head Screw	2	AGT1420-21.4
22	Wing Washer	1	AGT1420-22
23	Hex Locknut	1	AGT1420-23
24	Flat Idler	1	AGT1420-24
25	Hex Screw	1	AGT1420-25
26	Belt Cover	1	AGT1420-26
27	Trigonocephaly Bolt	2	AGT1420-27
28	Flat Washer	3	AGT1420-28

Refe#	Description	Q'ty	Stock#
29	Hex Flange Screw	4	AGT1420-29
30	Spring Washer	6	AGT1420-30
31	Trigonocephaly Bolt	2	AGT1420-31
32	Belt Holder	1	AGT1420-32
33	Belt Cover Bracket	1	AGT1420-33
34	Hex Flange Screw	1	AGT1420-34
35	Spring Washer	1	AGT1420-35
36	Flat Washer	1	AGT1420-36
37	Semicircular Key	1	AGT1420-37
38	Auger Belt	1	AGT1420-38
39	Small Pulley	1	AGT1420-39
40	Petrol Engine	1	AGT1420-40
41	Hex Flange Bolt	2	AGT1420-41
42	Oil Tank Bracket	1	AGT1420-42
43	Hose Clamp D12	1	AGT1420-43
44	Hex Flange Bolt	2	AGT1420-44
45	Fuel Tank	1	AGT1420-45
46	Bush	1	AGT1420-46
47	Fuel Tank Cap Ass.	1	AGT1420-47
48	Hex Flange Bolt	2	AGT1420-48
49	Engine Bracket	1	AGT1420-49
50	Wheel Ass.	2	AGT1420-50
51	Flat Washer	3	AGT1420-51
52	E-Collar	2	AGT1420-52
53	Pin	1	AGT1420-53
54	Gasket	1	AGT1420-54
55	Upper Auger Cable	1	AGT1420-55
56	Adjusting Plate	1	AGT1420-56
57	Rubber Sleeve	1	AGT1420-57
58	Lower Auger Cable	1	AGT1420-58
59	T Square Bolt 2	1	AGT1420-59
60	Cupper Washer	1	AGT1420-60
61	Hex Lockout	1	AGT1420-61
62	Handle Link Plate	1	AGT1420-62
63	Cable Bracket	1	AGT1420-63
64	Hex Lockout	1	AGT1420-64
65	Guide Roller	1	AGT1420-65
66	Shoulder Bolt 2	1	AGT1420-66
67	Square Bolt	4	AGT1420-67

68	Flat Washer	4	AGT1420-68
69	Hex Lockout	4	AGT1420-69
70	Square Bolt	4	AGT1420-70
71	Cupper Washer	4	AGT1420-71
72	Nut	4	AGT1420-72
73	Spring Washer	4	AGT1420-73
74	Lower Handle	1	AGT1420-74
75	Knob M8	2	AGT1420-75
76	Cupper Washer	2	AGT1420-76
77	Square Bolt 1	2	AGT1420-77
78	Cupper Washer	1	AGT1420-78
79	Hex Lockout	1	AGT1420-79
80	Recoil Starter Seat	1	AGT1420-80
81	Upper Handle	1	AGT1420-81
82	Auger Control	1	AGT1420-82
83	Hex Flange Bolt	3	AGT1420-83
84	Control Panel	1	AGT1420-84
85	Main Cover	1	AGT1420-85
86	Self-tapping Screw	2	AGT1420-86
87	Self-tapping Screw	2	AGT1420-87
88	Rear Chute Cover	1	AGT1420-88
89	Self-tapping Screw	4	AGT1420-89
90	Chute Lock sheet	1	AGT1420-90
91	Rotating Seat	1	AGT1420-91
92	Rotating Ring	1	AGT1420-92
93	Chute Ass.	1	AGT1420-9B
93.1	Direction Control	1	AGT1420-93.1
93.2	Discharge Chute	1	AGT1420-93.2
93.3	Cross Square Bolt	3	AGT1420-93.3
93.4	Flat Washer	3	AGT1420-93.4
93.5	Nut	3	AGT1420-93.5
93.6	Safety Bracket	1	AGT1420-93.6
93.7	Acorn Nut	2	AGT1420-93.7
93.8	Link	1	AGT1420-93.8
93.9	Upper Chute	1	AGT1420-93.9
93.10	Knob M8	2	AGT1420-93.10
93.11	Flat Washer	2	AGT1420-93.11
93.12	Square Bolt	2	AGT1420-93.12