

# STIGA ROYAL LINE

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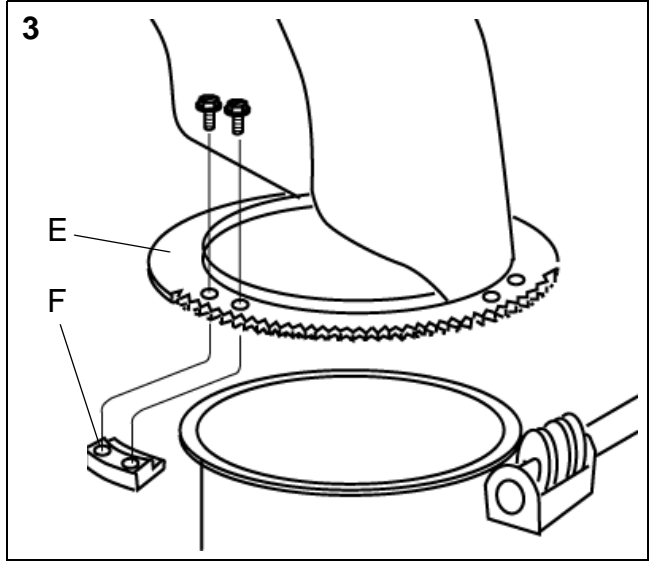
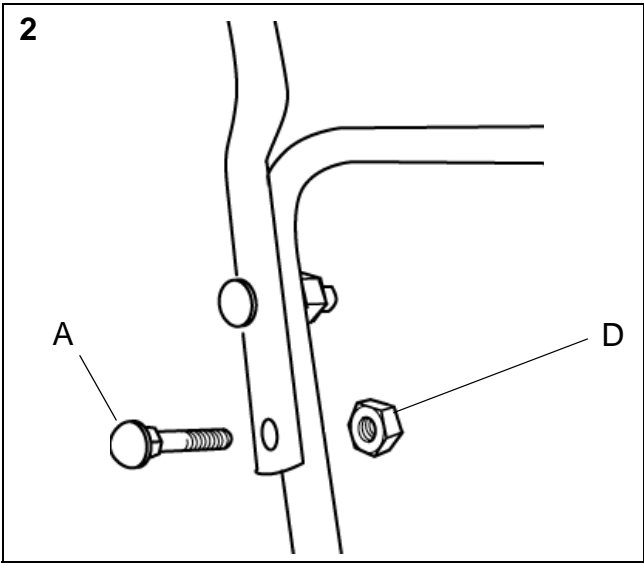
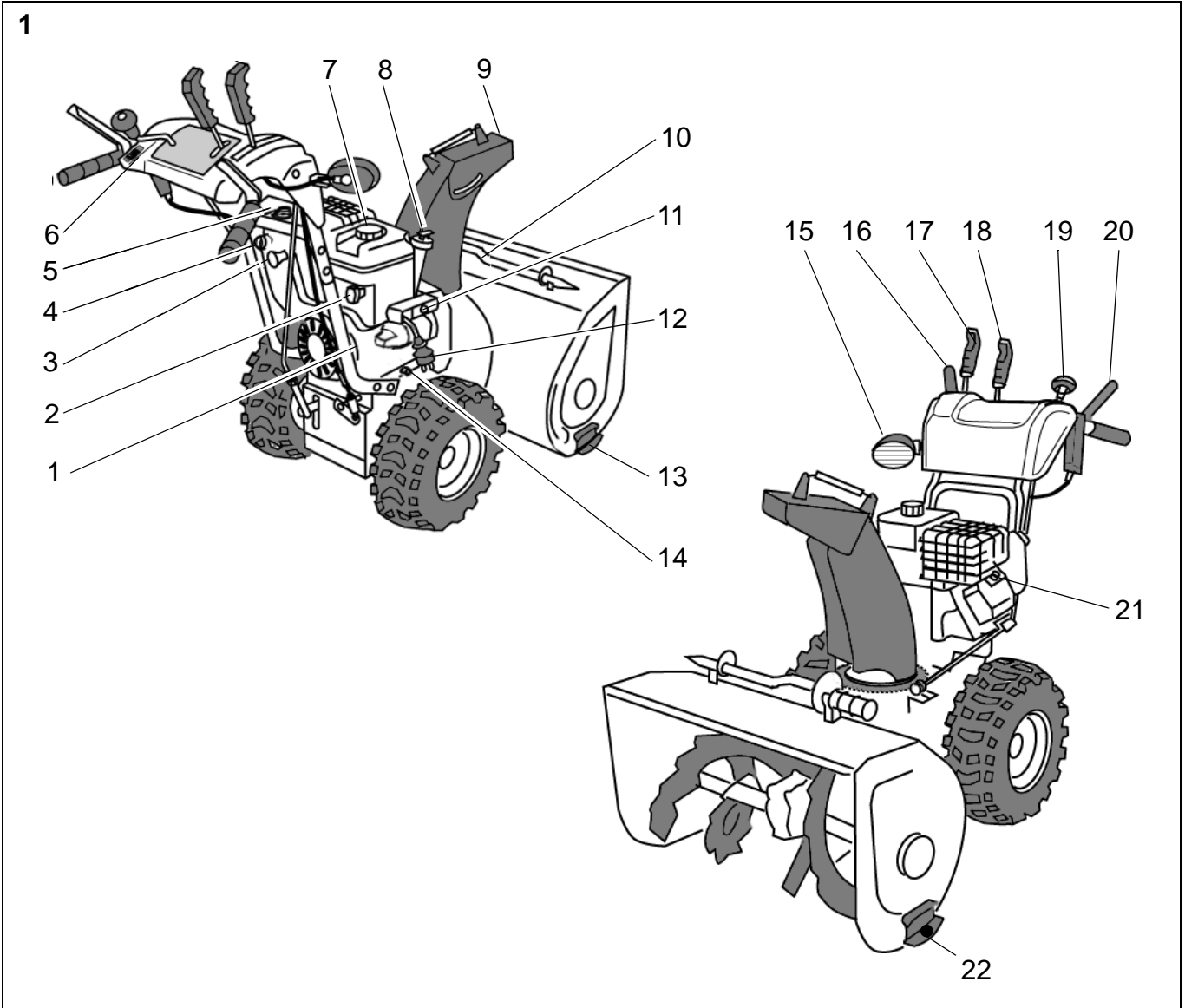
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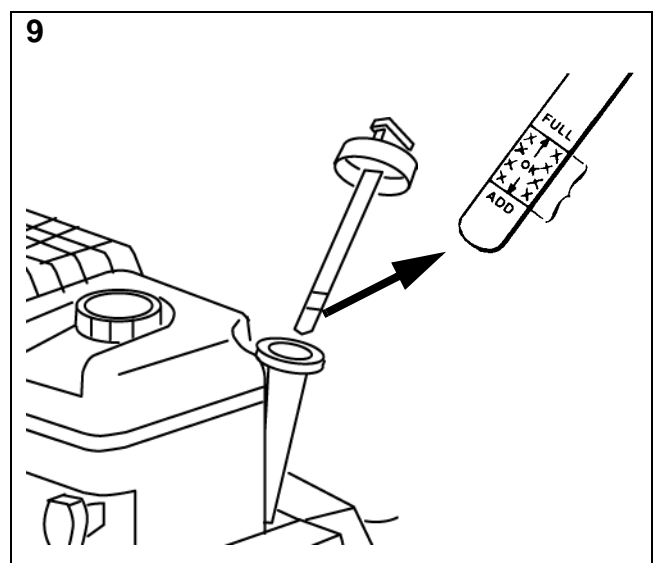
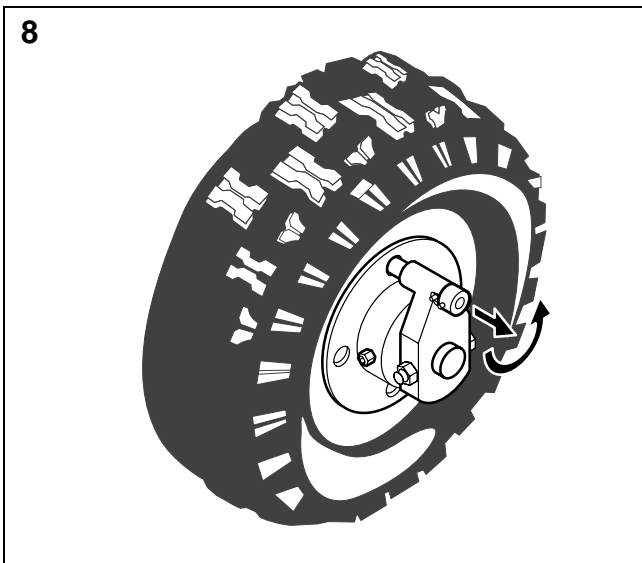
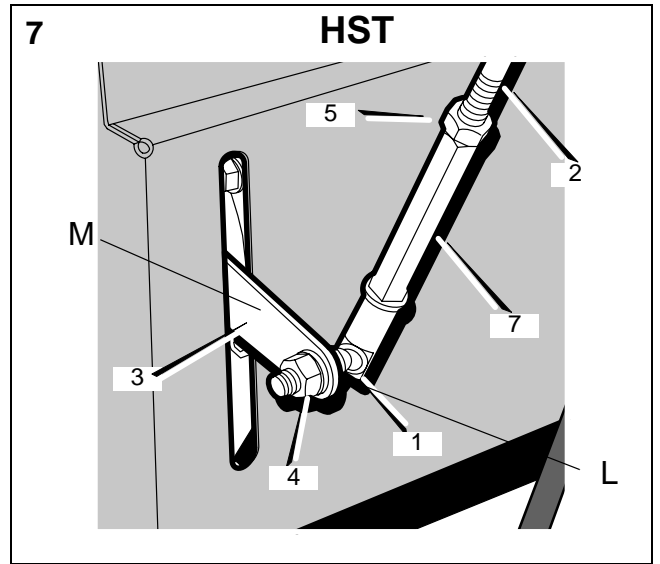
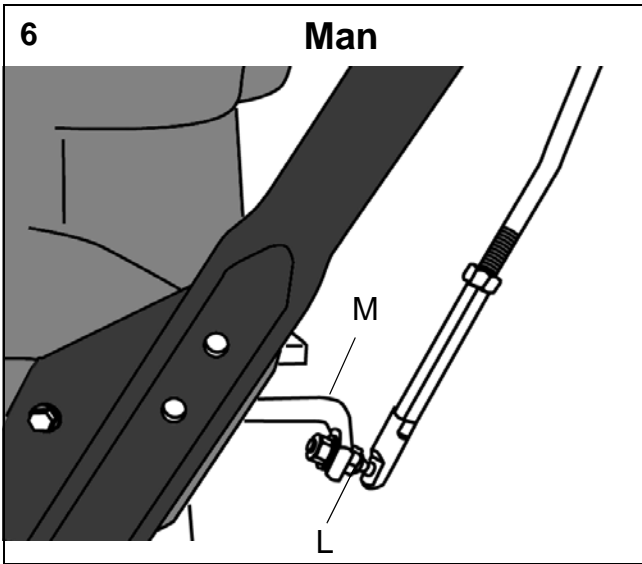
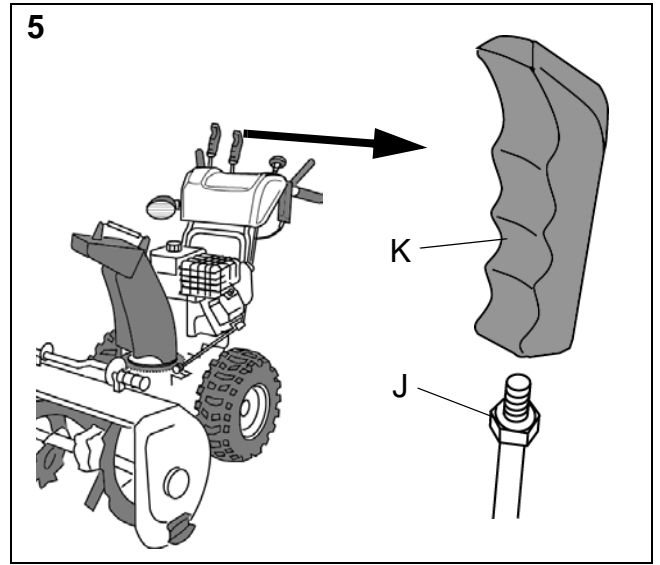
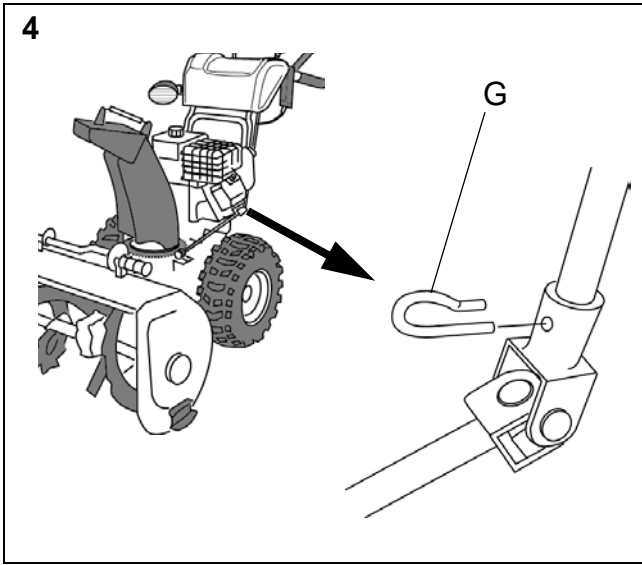
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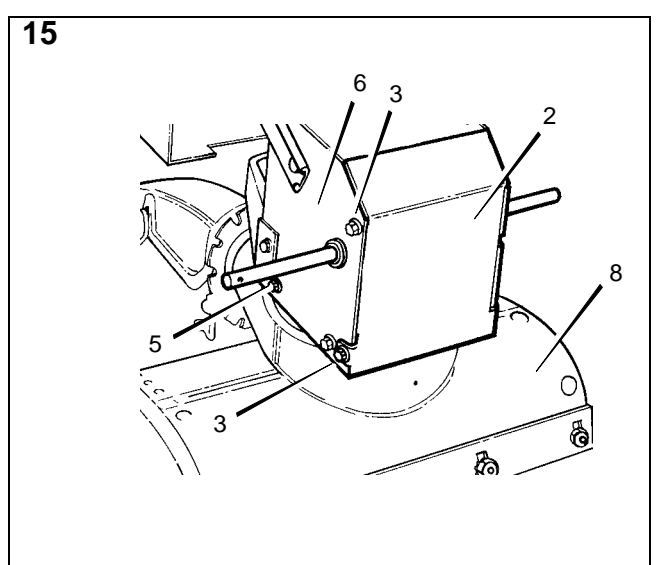
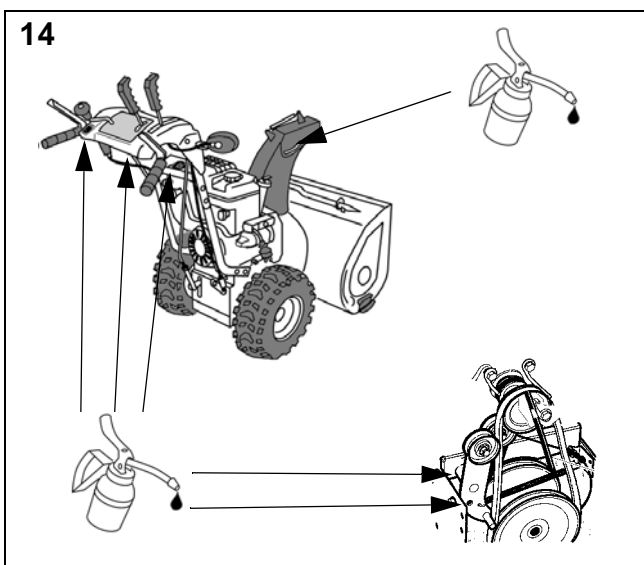
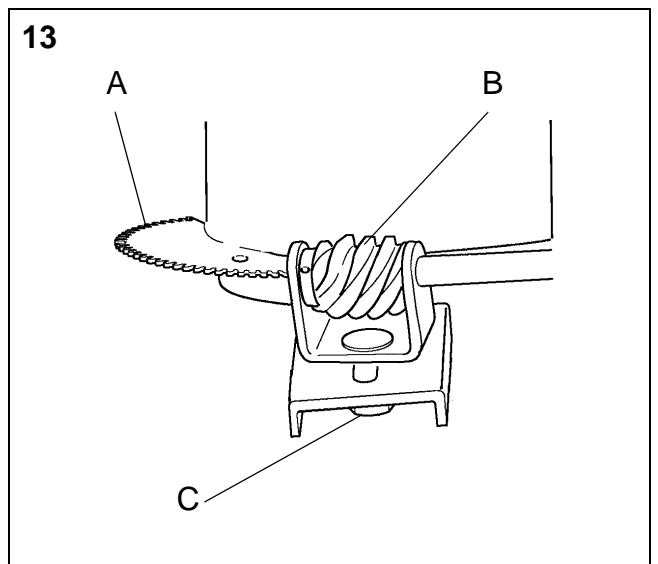
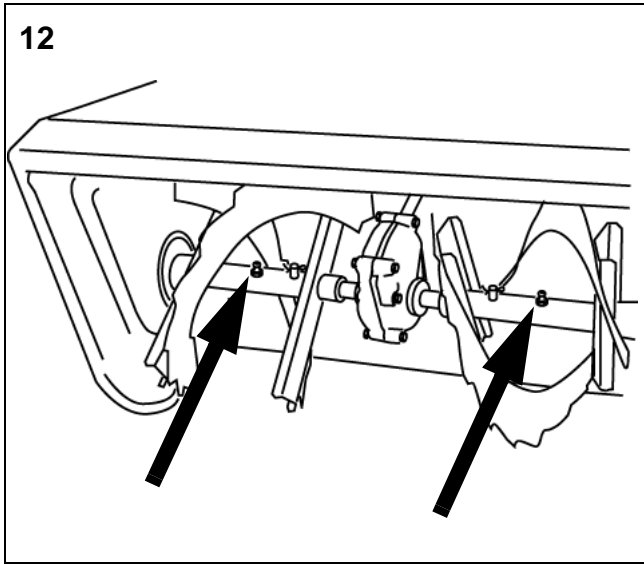
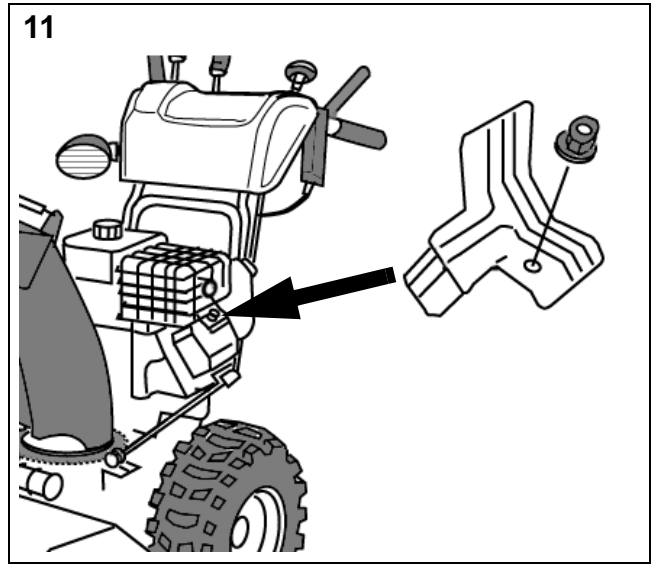
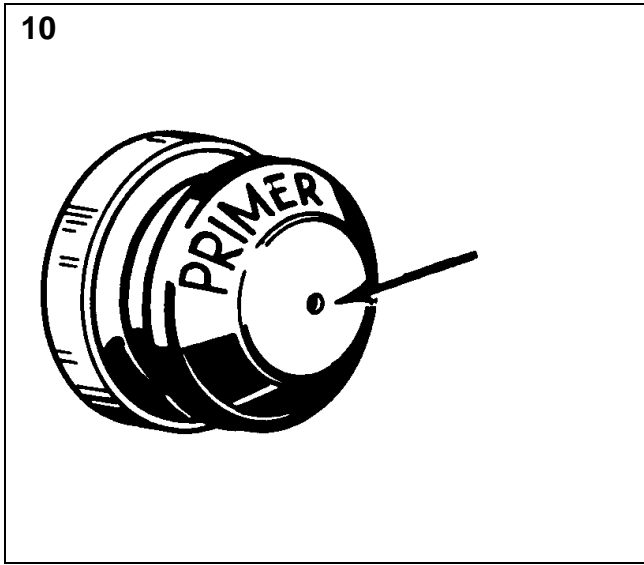
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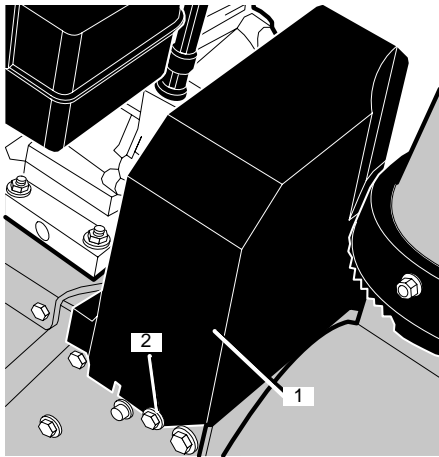
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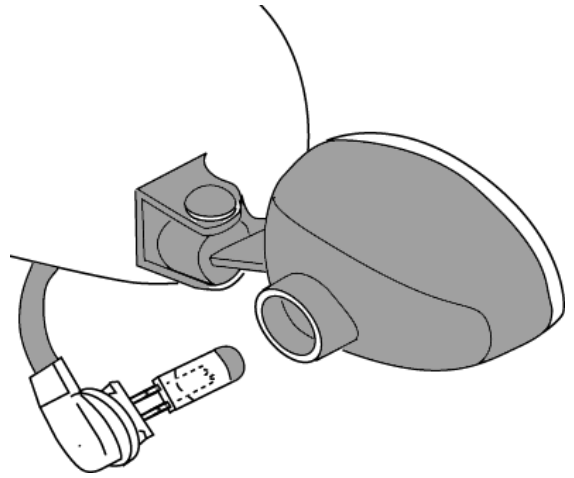




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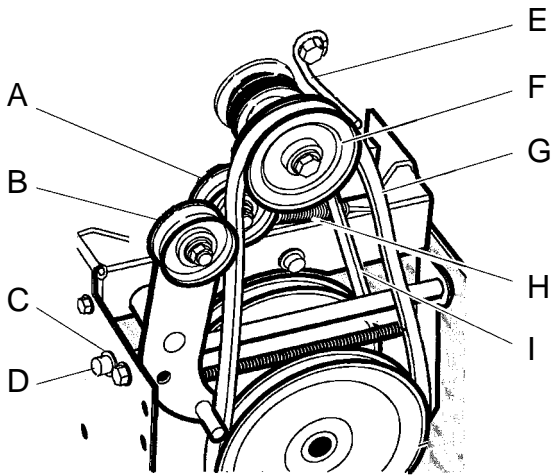


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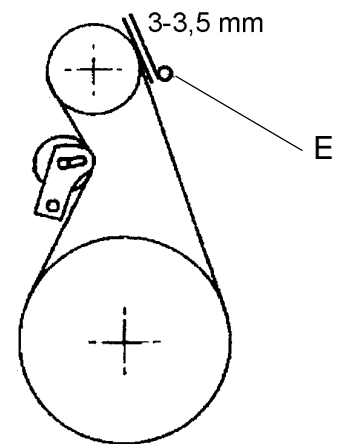
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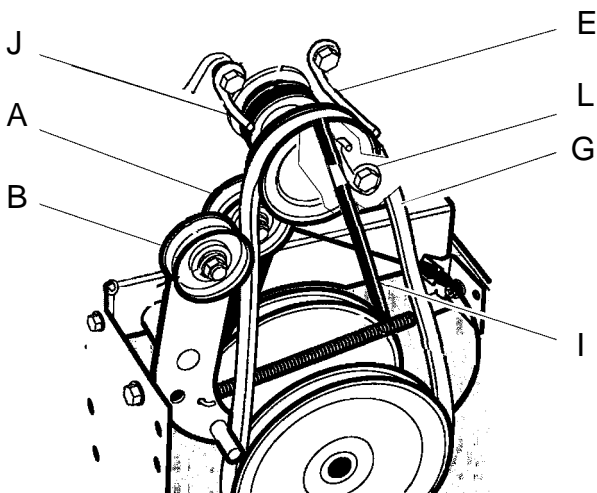
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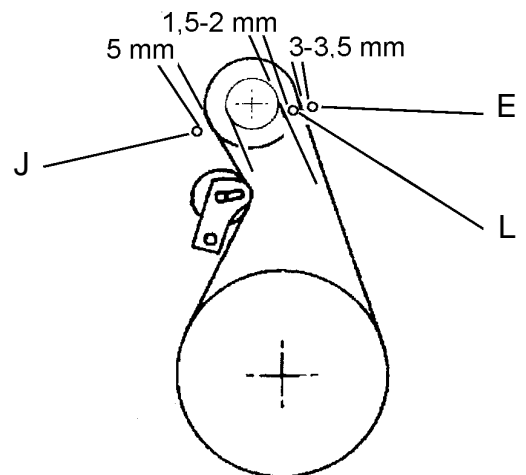
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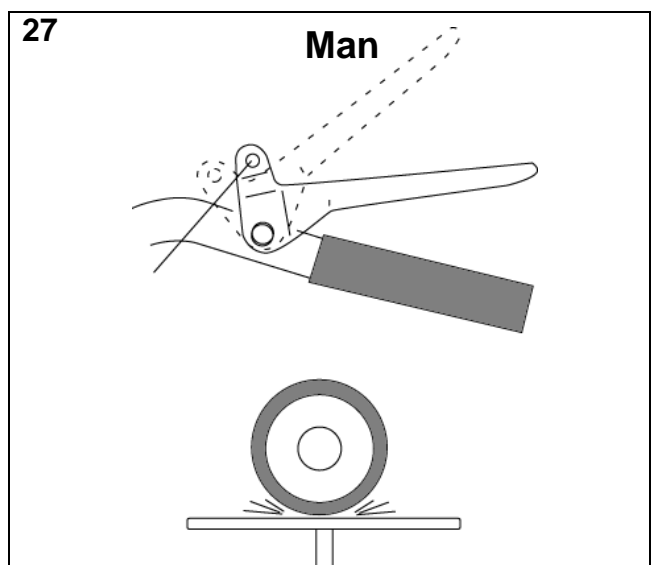
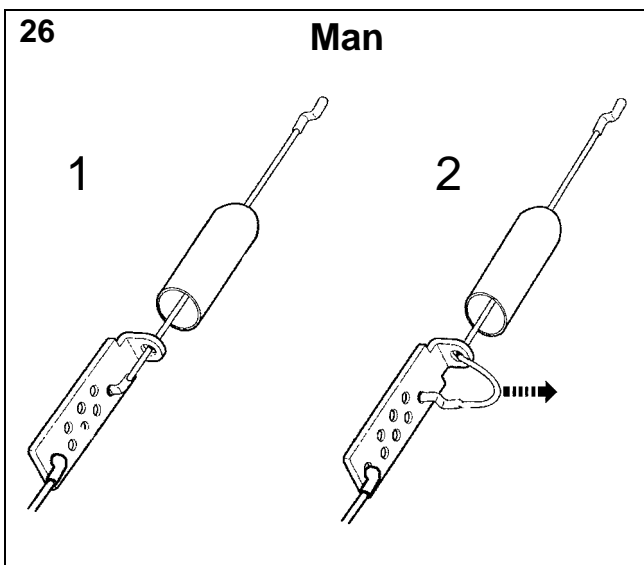
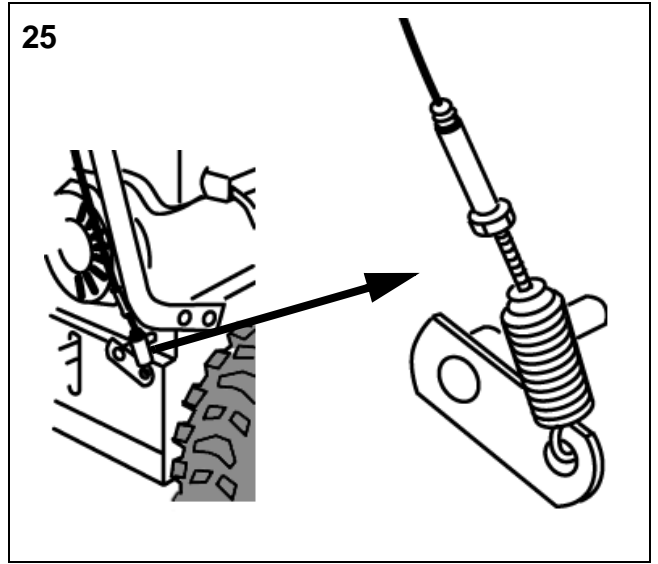
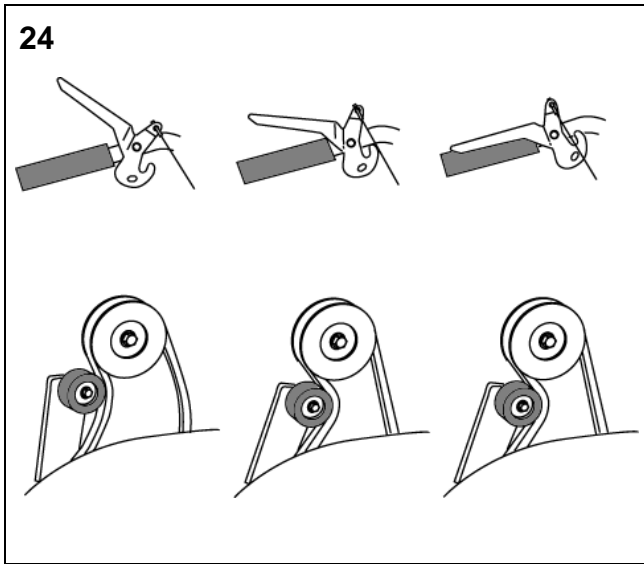
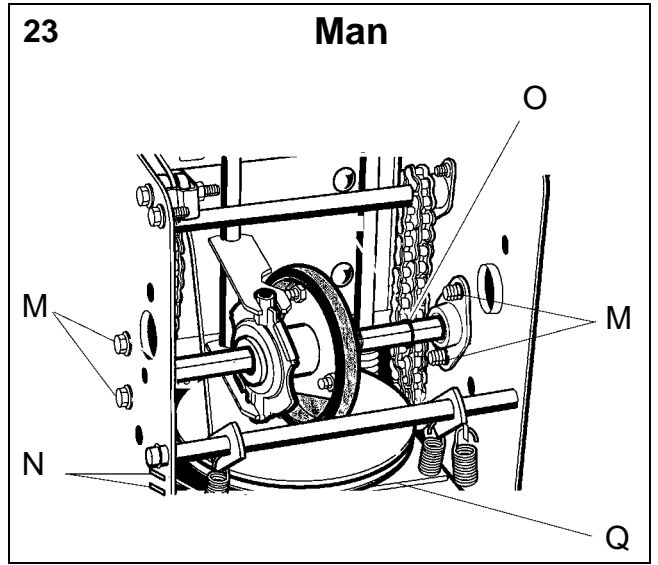
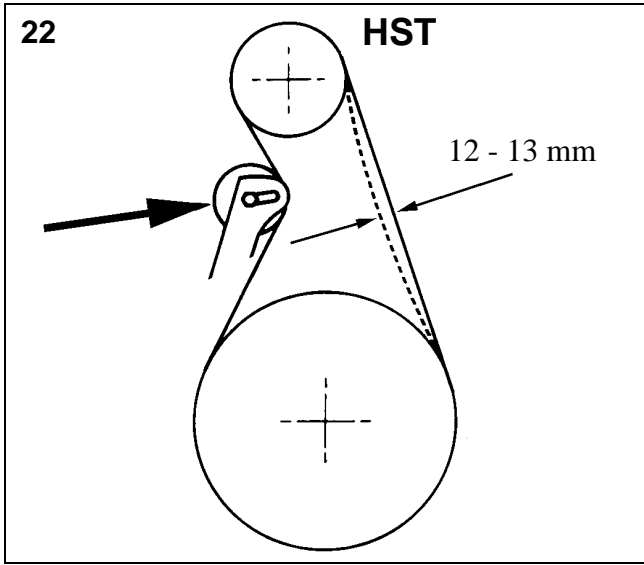
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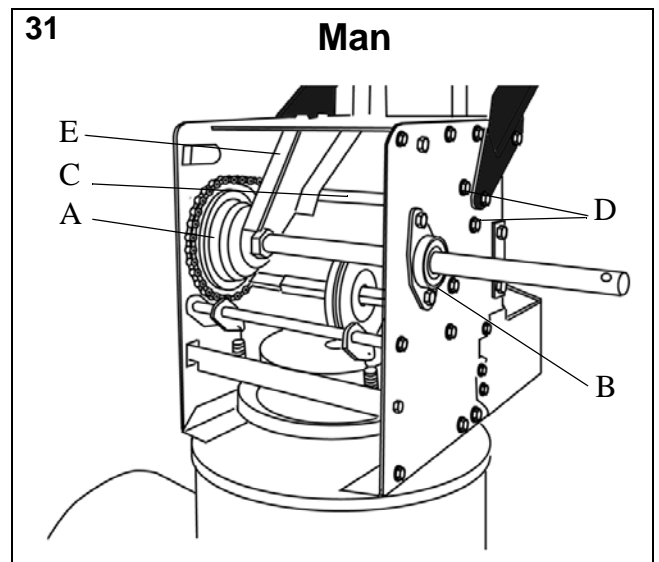
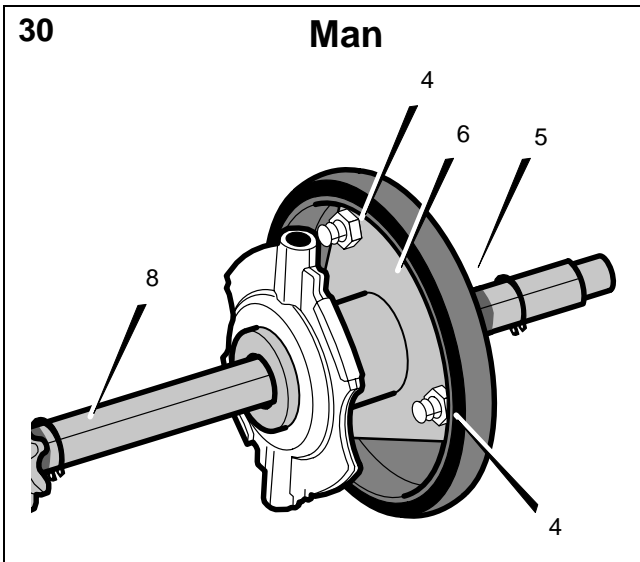
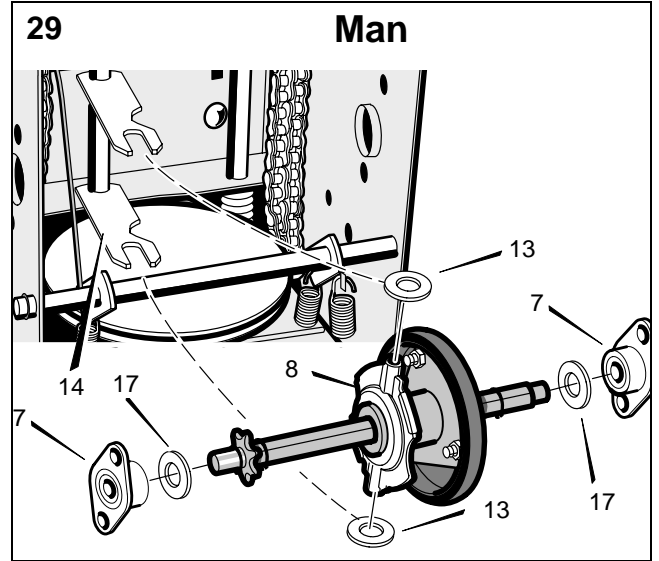
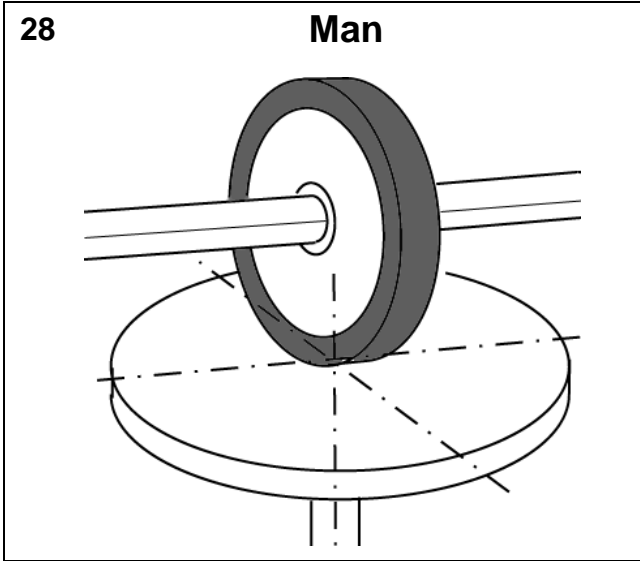


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## 1 SYMBOLS

The following symbols appear on the machine. They are there to remind you of the care and attention required in use. This is what the symbols mean:



Warning.



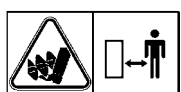
Read and understand the owner's manual before using this machine.



Remove the key, disconnect the spark plug wire, and consult technical literature before performing repairs or maintenance.



Danger - rotating fan.  
 Danger - rotating auger.  
 Keep hands out of discharge chute.  
 Keep hands and feet away from rotating parts.  
 Risk of burns.



Keep bystanders at a safe distance from the machine.  
 Never point the discharge chute towards bystanders.



Use hearing protection.

## 2 SAFETY INSTRUCTIONS

### 2.1 GENERAL

- Please read through these instructions carefully. Learn all the controls and the correct use of the machine.
- Never allow children or anyone who is not familiar with these instructions to use the snow thrower. Local regulations may impose restrictions as regards the age of the driver.
- Never use the machine if others, particularly children or animals, are in the vicinity.
- Remember that the driver is responsible for accidents that happen to other people or their property.
- Be careful not to trip or fall, especially when reversing the machine.
- Never use the snow thrower under the influence of alcohol or medication and if you are tired or ill.

### 2.2 PREPARATIONS

- Check the area to be cleared and remove any loose or foreign objects.
- Disengage all controls before starting the engine.
- Never use the snow thrower unless properly dressed. Wear footwear that improves your grip on a slippery surface.
- Warning – Petrol is highly inflammable.
  - a. Always store petrol in containers that are made especially for this purpose.
  - b. Only fill or top up with petrol outdoors, and never smoke when filling or topping up.
  - c. Fill with petrol before starting the engine. Never remove the filler cap or fill with petrol while the engine is running or still warm.
  - d. Screw the filler cap on tightly and wipe up any spilt petrol.
- Adjust the height of the auger housing to ensure it stays above gravel paths.
- Never, under any circumstances, make adjustments while the engine is running (unless otherwise specified in the instructions).
- Allow the snow thrower to adjust to the outdoor temperature before using it.
- Always use protective goggles or a visor during use, maintenance and service.

### 2.3 OPERATION

- Keep hands and feet away from rotating parts. Always avoid the discharge chute opening.
- Be careful when driving on or crossing gravel paths, pavements and roads. Be aware of hidden dangers and traffic.
- Never direct the discharge chute towards a public road or traffic.
- If the snow thrower hits a foreign object, stop the engine, disconnect the spark plug cable and carefully inspect the machine for damage. Repair the damage before using the machine again.
- If the machine starts vibrating abnormally, stop the engine and look for the cause. Vibration is normally a sign of something wrong.
- Stop the engine and disconnect the spark plug cable:
  - a. If the machine steers away from the driving position.
  - b. If the auger housing or discharge chute is blocked and must be cleaned.
  - c. Before beginning repairs or adjustments.
- Always make sure the rotating parts have stopped and all the controls are disengaged before cleaning, repairing or inspection.
- Before leaving the machine unattended, disengage all the controls, put it into neutral gear, stop the engine and remove the ignition key.
- Never run the engine indoors except when taking it in and out of its place of storage. In this case ensure the door to the storage place is open. Exhaust fumes are toxic.



- Never drive across a slope. Move from the top down, and from the bottom to the top. Be careful when changing direction on a slope. Avoid steep slopes.
- Never operate the machine with insufficient protection or without the safety devices in place.
- Existing safety devices must not be disconnected or disengaged.
- Do not alter the engine's regulator setting and do not race the engine. The possibility of personal injury increases when the engine is run at high revs.
- Never use the snow thrower near enclosures, cars, windowpanes, slopes etc. without properly setting the discharge chute deflector.
- Always keep children away from areas to be cleared. Get another adult to keep the children under supervision.
- Do not overload the machine by driving it too fast.
- Take care when reversing. Look behind you before and during reversing to check for any obstacles.
- Never point the discharge chute towards bystanders. Do not allow anyone to stand in front of the machine.
- Disengage the auger when the snow thrower is to be transported or is not in use. Do not drive too fast on slippery surfaces when transporting.
- Only use accessories that are approved by the machine's manufacturer.
- Never drive the snow thrower in bad visibility or without satisfactory lighting.
- Always ensure you have a good balance and a tight grip on the handle.
- Never use the snow thrower on a roof.
- Do not touch engine components because they are warm during use. Risk of burn injuries.

#### 2.4 MAINTENANCE AND STORAGE

- Tighten all nuts and screws so that the machine is in safe working condition. Check the shear bolts regularly.
- Always use genuine spare parts. Non-genuine spare parts can entail a risk of injury, even if they fit the machine.
- Never store the machine with petrol in the tank in buildings where the fumes can come into contact with open flames or sparks.
- Allow the engine to cool before putting the machine in store.
- Before a long storage, check the instructions for recommendations.
- Replace damaged warning and instruction stickers.
- Let the engine run a couple of minutes with the auger connected after use. This prevents the auger from freezing solid.

### 3 ASSEMBLY

Note: Instructions to the left and right sides start from the driving position behind the snow thrower.

#### 3.1 CONTENTS - OUTER PACKING

The packing contains:

- One snow thrower
- One adjustment lever
- One gear rod
- One discharge chute
- One set of instructions
- One assembly kit

#### 3.2 UNPACKING

1. Remove all loose items from the carton.
2. Cut the four corners of the carton and let the sides fall down.
3. Cut off the plastic straps.
4. Unscrew the screws (B) that fasten the shoes to the bedding. See fig. 1.
5. Cut the plastic tape holding the control wires on the underside of the handle.

#### 3.3 HANDLE, SEE FIG. 2

1. Loosen, but do not remove, the securing nuts in the upper holes.
2. Fold up the upper part of the handle. NOTE! Make sure the control wires do not jam.
3. Fit screws from the outside in the lower holes and assemble with the following parts:  
A Screws  
D Lock nut
4. Tighten the four nuts.

#### 3.4 SNOW DISCHARGE CHUTE, SEE FIG. 3

1. Place the discharge chute (E) on the flange against the worm gear.
2. Mount the carriage piece (F) with two screws
3. Adjust the chute worm gear. See 6.6.4.
4. Tighten the chute worm gear properly.

#### 3.5 ADJUSTMENT LEVER, SEE FIG. 4

1. Place the shaft through its hole in the control panel and into the angle joint.
3. Lock the joint with the locking pin (G).
4. Check the discharge chute by turning it fully in both directions. The chute should rotate freely.

#### 3.6 CONTROL KNOBS, FIG. 5

The assembly is performed as follows:

1. Screw the nut (J) onto the lever.
2. Mount the control knob (K) onto the lever.
3. Tighten the nut on the underside of the control knob.

**3.7 GEAR LEVER/SPEED LEVER**

Manual, see fig. 6.

HST, see fig. 7.

1. Set the lever in a suitable position to simply fit the angle link (L) into the hole in the gearbox lever (M).
2. Assemble the washer and the lock nut.
3. Tighten the nut.

**3.8 CHECKING THE CONTROL WIRES**

The control wires might need adjusting before using the snow thrower for the first time.

See ADJUSTING THE CONTROL WIRES below.

**3.9 TYRE PRESSURE**

Check the air pressure in the tyres. See "6.4".

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## 4 CONTROLS

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**The motor is equipped with a protection grid. The motor may never be started without the grid fitted or with a defect grid.**

See fig. 1.

**4.1 THROTTLE (2)**

Controls the engine's revs. The throttle has three positions:



1. Full throttle



2. Idling.



3. Stop position – the engine is short-circuited.

**4.2 CHOKE (5)**

Used when starting a cold engine: The choke has two positions:



1. The choke is open



2. The choke is closed (for cold starting)

**4.3 PRIMER (4)**

Pressing the rubber prime-starter squirts fuel into the carburettor intake pipe to make it easier to start a cold engine.

**4.4 IGNITION KEY (3)**

Must be fully inserted or the engine will not start. Do not turn the key!



1. Key fully inserted – engine can start.
2. Key pulled out – engine cannot start.

**4.5 STARTING HANDLE (1)**

Manual cord start with rewinding.

**4.6 DIPSTICK (X)**

For filling and checking the oil level in the engine. The dipstick has two level marks:  
FULL = maximum oil level  
ADD = minimum oil level

**4.7 FILLER CAP/FUEL METER(8)**

For filling with petrol. The filler cap is integrated with a fuel meter, which displays the petrol amount in the tank.

**4.8 OIL DRAINING PLUG (7)**

For draining the old engine oil when changing the oil.

**4.9 START BUTTON – ELECTRICAL START (14)**

Not visible in the figure. Activates the electric starting motor.

**4.10 ELECTRIC CABLE – ELECTRICAL START (11)**

The cable supplies power to the starting motor. Connect the cable to a 220/230 volt earthed socket via an earthed extension lead. It is wise to use an earth fault breaker.

**4.11 SPARK PLUG PROTECTION (21)**

The protection is easily removable by hand. The spark plug is located under the protection.

**4.12 GEAR LEVER, MAN (17)**

The machine has 6 forward gears and 2 reverse to regulate the speed.

**The gear stick must not be moved if the driving clutch lever is depressed.**

**4.13 SPEED LEVER, HST (17)**

The machine is equipped with a stepless hydrostatic transmission. The speed is regulated stepless forwards and backwards with the speed lever.

**4.14 CLUTCH LEVER- DRIVING (16)**

Engages the wheels when put into gear and the lever is pushed towards the handle.

Situated on the left side of the handle.

**4.15 CLUTCH LEVER- AUGER (20)**

Connects the auger and fan when the lever is pushed down towards the handle.

Situated on the right side of the handle.

**4.16 LEVER, CHUTE DEFLECTOR (18)**

Lever at the panel for adjustment of the chute deflector (X)



1. Lever forwards – longer throwing distance.



2. Lever backwards – shorter throwing distance.

**4.17 ADJUSTMENT LEVER (19)**

Changes the direction of the discharged snow.



1. Turn the lever clockwise – the discharge turns to the right.



2. Turn the lever anti-clockwise – the discharge turns to the left.

#### 4.18 SHOES (13)

Used to set the height of the auger housing above the ground.

#### 4.19 WHEEL LOCK

##### 4.19.1 HST

See fig. 8. Machines with hydrostat are equipped with easily disengaged wheel locks. This is essential when mowing the machine without the motor running.

Disengage/engage the wheel locks according to the following:

1. Pull out the knob (1).
2. Turn the knob 90° (1/4 of a turn) and release it.

##### 4.19.2 Man

Manual models are equipped with differential and have no wheel locks. The wheels can rotate with different speeds simultaneously as the machine is driving.

#### 4.20 CHUTE DEFLECTOR (18)

The chute deflector is adjusted with the lever (15) and determine the throwing distance.

#### 4.21 HANDLE HEATING (6)

The machine is equipped with electrical handle heating. To activate the heating, set the switch in the desired position:



Forwards - Light heating

Middle - No heating

Backwards - Full heating

The heating can be activated when the motor is running only.

#### 4.22 HEADLAMP (15)

The headlamp is always activated when the motor is running.

#### 4.23 CLEANING STICK (10)

At the top of the auger housing, a cleaning stick is attached. Use the cleaning stick to remove stowed snow and other obstructions



Never clean the snow channel with hands. Risk for serious personal injury.

## 5 USING THE SNOW THROWER

### 5.1 GENERAL

Never start the engine until all the above measures under ASSEMBLY have been carried out.



Never use the snow thrower without first reading and understanding the instructions and all the warning and instruction stickers on the machine.



Always use protective goggles or a visor during use, maintenance and service.

### 5.2 BEFORE STARTING

Some snow throwers are delivered without oil in the engine. Fill the engine with oil before using. The oil is supplied in a separate bottle.



**Do not start the engine until filled with oil. The engine can be seriously damaged without oil.**

1. Place the machine on a level floor.
2. Loosen the dipstick and fill with oil up to the FULL mark (fig. 9).
3. Use good quality oil marked A.P.I service SF, SG or SH. Use SAE 5W30 - 10W40 oil.
4. The crankcase holds: 0.8 litres.

**Always check the oil level before using. The snow thrower must stand on level ground when checking.**

### 5.3 FILL UP THE PETROL TANK

Always use lead-free petrol. Oil-mixed 2-stroke petrol must not be used.

NOTE! Bear in mind that ordinary lead-free petrol is perishable; do not purchase more petrol than can be used within thirty days.

Environmental petrol can be used, i.e. alkylate petrol. This type of petrol has a composition that is less harmful for people and nature.



**Petrol is highly inflammable. Always store fuel in containers that are made especially for this purpose.**



**Store the petrol in a cool, well ventilated place – not in the house. Store the petrol well out of reach for children.**



**Only fill or top up with petrol outdoors, and never smoke when filling or topping up. Fill with fuel before starting the engine. Never remove the filler cap or fill with petrol while the engine is running or still warm.**

Do not fill the petrol tank right to the top. After filling, screw the filler cap on tightly and wipe up any spilt petrol.



### 5.4 STARTING THE ENGINE (WITHOUT ELECTRICAL START)



**Do not touch engine components because they are warm during use. Risk of burn injuries.**



**Never run the machine indoors. The exhaust fumes contain carbon monoxide, a very toxic gas.**

1. Make sure the driving and auger clutch levers are disengaged (fig. 1).
2. Push the throttle to position .
3. Put in the ignition key. Ensure it clicks tight. Do not turn the key!
4. Turn the choke to position . Note: A warm engine does not need the choke.
5. Press the rubber primer-start 2 or 3 times. Make sure the hole is covered when pressing the primer-start (fig. 10). Note: Do not use this function when the engine is warm.
6. Pull on the starter cord until you feel resistance. Start the engine with a sharp pull.
7. When the engine starts, turn the choke anti-clockwise until it is fully open.

## 5.5 STARTING THE ENGINE (WITH ELECTRICAL START)



**Do not touch engine components because they are warm during use. Risk of burn injuries.**



**Never run the machine indoors. The exhaust fumes contain carbon monoxide, a very toxic gas.**

1. Attach the connecting cable to an earthed extension lead. Then connect the extension lead to a 220/230 volt earthed socket.
2. Make sure the driving and auger clutch levers are disengaged (fig. 1).
3. Push the throttle to position
4. Put in the ignition key. Ensure it clicks tight. Do not turn the key!
5. Turn the choke to position . Note: A warm engine does not need the choke.
6. Press the rubber primer-start 2 or 3 times. Make sure the hole is covered when pressing the primer-start (fig. 10). Note: Do not use this function when the engine is warm.
7. Starting the engine:
  - a. Press the start button to activate the starting motor.
  - b. When the engine starts, release the start button and open the choke by slowly turning the choke lever anti-clockwise to position .
  - c. If the engine stutters, close the choke immediately and gradually open it again.
  - d. First pull out the extension lead from the socket. Then remove the extension lead from the engine.

Note: The electrical starting motor has overload protection. The motor stops automatically when overheated. It will not restart until it has cooled, which takes about 5 - 10 minutes.

## 5.6 STOPPING

1. Release both clutch levers. Note. If the snow thrower continues rotating - see ADJUSTING THE CONTROL WIRES below.
2. Push the throttle to idling position . Let the engine run on idle a few minutes to melt the snow.
- 3a. Machines without an electric starter:  
With the engine running, pull out the start handle a few times to prevent the starting apparatus from freezing. An unusual rattling noise occurs. This does not damage the engine.
- 3b. Machines with an electric starter:  
With the engine running, keep the start button pressed in for a few seconds to prevent the starting motor freezing (see above for connecting electric cable). An unusual rattling noise occurs. This does not damage the engine.
4. Push the throttle to the bottom to position
5. Remove the ignition key. Do not turn the key!



**If the machine is left unattended, stop the engine and remove the ignition key.**

## 5.7 STARTING

1. Start the engine as above. Let the engine run a few minutes to warm before use.
2. Set the chute deflector.

3. Turn the adjustment lever and set the deflector to throw the snow in the direction of the wind.



**For manual models; The gear stick must not be moved if the driving clutch lever is depressed.**

4. Set the gear/speed lever to a suitable position.
5. Press down the auger clutch lever (16 in fig. 1) to activate the auger and discharge fan.



**Watch out for rotating auger. Keep hands, feet, hair and loose clothing away from any moving parts on the machine.**

6. Press down the auger clutch lever (20 in fig. 1). The snow thrower now moves forward or backwards depending on the gear you have chosen.
7. One-hand-control.



**For manual models only; Never actuate the gear lever when the one-hand-control or the drive lever is actuated. This will serious damage the friction wheel.**

The machine is equipped with one-hand-control. This means as follows:

1. Press down the left and the right lever.
2. Now, the right lever can be released to manoeuvre the snow throwing direction, snow throwing length and for the HST model, the speed.
3. When the left lever is released, the one-hand-control is deactivated and the right lever will also be released.

## 5.8 DRIVING TIPS

1. Always run the engine on full throttle or next best.



**The silencer and surrounding parts become very hot when the engine is running. Risk of burns.**

2. Always adapt the speed to the snowy conditions. Regulate the speed with the gear stick not the throttle.
3. Snow is more effectively removed directly after falling.
4. Always throw the snow in the direction of the wind if possible.
5. Adjust the shoes with the screws (13 in fig. 1) to suit the ground conditions:
  - On flat ground, e.g. asphalt, the shoes should be about 3 mm under the scraping blade.
  - On uneven ground, e.g. gravel paths, the shoes should be about 30 mm under the scraping blade.



**Always adjust the shoes so that gravel and stones are not fed into the snow thrower. There is a risk for personal injury if these are thrown out at high speed.**

Ensure the shoes are adjusted the same on both sides.


6. Adapt the speed so that the snow is thrown in an even stream.



**If snow fastens in the chute do not try to remove it before:**

- Releasing both clutch levers.
  - Stopping the engine.
  - Removing the ignition key.
  - Disconnecting the cable from the spark plug.
  - Do not put your hand inside the chute or auger.
- Use a wooden stick.

## 5.9 AFTER USE

1. Check for loose or damaged parts. If required, change damaged parts.
2. Tighten loose screws and nuts.
3. Brush all the snow from the machine.
4. Move all the controls backwards and forwards a few times.
5. Put the choke in position 
6. Disconnecting the starting cable from the spark plug.



**Do not cover the machine while the engine and silencer are still warm.**

## 6 MAINTENANCE

### 6.1 MAINTENANCE SCHEDULE

Service item	Frequency	Type	Fig./Par.
Motor oil change	After 2 hour and then every 50:th hour.	SAE 5W30 - 10W40	fig. 1/6.2
Drive belts, check	After 2 hour and then every year.		7.2
Auger shaft, lubricate	10 hour	Lithium grease	This
Chute worm gear, lubricate/check	10 hour	10W oil	This
Deflector, lubricate	10 hour	10W oil	fig. 14
Wires, lubricate	10 hour	10W oil	fig. 14
Linkages, lubricate	10 hour	10W oil	fig. 14
Tyre pressure, check	50 hour		This
Auger worm gear, check	50 hour	Winter weight worm gear oil	This
Spark plug check/replace	100 hour	RC124YC	This

### 6.2 OIL CHANGE

Change the oil the first time after 2 hours of operation, and subsequently every 50 hours of operation or once a season. Change oil when the engine is warm.



**The engine oil may be very warm if it is drained off directly after the engine is shut off. So allow the engine to cool a few minutes before draining the oil.**

1. Lean the snow thrower slightly to the right so that the oil draining plug (14 in fig. 1) is the lowest point of the engine.
2. Unscrew the oil draining plug.
3. Let the oil run out into a container.
4. Screw back the oil draining plug.
5. Fill with new oil: See BEFORE STARTING above for type and amount.

### 6.3 SPARK PLUG

Check the spark plug once a year or every hundred hours of use.

Clean or change the plug if the electrodes are burned. The engine manufacturer recommends: RC124YC or equivalent. Correct spark gap: 0.7-0.8 mm.

The spark plug is accessible under the protection plate in fig. 11.

### 6.4 TYRE PRESSURE

The air pressure should be equal in both tires for best performance. Be sure to keep caps on valves to prevent entry of debris into the valve stem when tires are filled. The recommended air pressures are shown in the table below.

Machine	Pressure
966 D	1.4 bar
1171 HST	1.0 bar
1381 HST	1.0 bar

### 6.5 CARBURETTOR

The carburettor is factory set. If adjustment is required, contact an authorised service station.

### 6.6 LUBRICATION



**No service must be carried out before:**

- The engine has stopped.
- The ignition key has been removed.
- The cable has been disconnected from the spark plug.

If the instructions say that the machine is to be lifted at the front and rested on the auger housing then the petrol tank must be emptied.



**Empty the petrol tank outdoors when the engine is cold. Do not smoke. Empty into a container designed for petrol.**

#### 6.6.1 Discharger

Lubricate the discharger flange and the adjustment lever worm gear every 10:th hour of use and before long time storage.

#### 6.6.2 The auger shaft

Lubricate the auger shaft lubricating nipples with a grease gun every 10th hour of use (fig. 12). Always lubricate the shaft when changing the shear bolts.

Dismantle the bolts for long time storage. Lubricate with the grease gun and then rotate the auger freely on the shaft before replacing the bolts.

#### 6.6.3 Worm gear

The worm gear is filled with special lubricant at the factory. Refilling is not normally required.

Loosen the plug once a year and check if the worm gear contains lubricant (fig. 12).

If it is leaking or has been repaired it must be refilled with lubricant. The worm gear holds 92 grams of lubricant at the most.

Use Benalene #900 Grease or similar.

### 6.6.4 Chute worm gear

See fig. 13.

If the discharge chute is difficult to operate, first lubricate the pinion gear (B) and ring gear (A). If it is still difficult to operate, adjust as follows:

1. Loosen the nut (C), which holds the pinion gear bracket in the slotted hole.
2. If the pinion gear is too tight against the ring gear, move it away slightly and then retighten the nut.
3. Check the operation again.

**Note! If the discharge chute will not stay in position, adjust the pinion gear (B) closer to the ring gear (A).**

### 6.6.5 Hexagonal shaft, Man

The hexagonal shaft, chain sprocket and chains are not to be lubricated. All bearings and bushings are permanently lubricated and require no maintenance.

Lubricating these parts will only result in the grease getting on to the friction wheel and disc drive plate, which could damage the rubber clad friction wheel.

For long time storage the above-mentioned parts should be lightly wiped with an oily rag to prevent rust.

### 6.6.6 Hydrostat, HST

The hydrostatic transmission is factory-filled with oil at the delivery. If it not has been opened (permitted to authorised personell only) and if no leakage exist, there is no need for filling-up. Normally, there is no need for oil change in the transmissio

## 7 SERVICE AND REPAIRS



No service must be carried out before:

- The engine has stopped.
- The ignition key has been removed.
- The starting cable has been disconnected from the spark plug.

If the instructions say that the machine is to be lifted at the front and rested on the auger housing then the petrol tank must be emptied.



**Empty the petrol tank outdoors when the engine is cold. Do not smoke. Empty into a container designed for petrol.**

### 7.1 TROUBLESHOOTING

Problem	Possible cause	Remedy
Engine fails to start.	Engine flooded.	Repeated tart attempts with full throttle choke OFF
	Water in fuel or old fuel.	Drain tank and refill with fresh fuel.
	Other.	Check carefyllly the start procedure according to this manual.

Engine starts hard or runs poorly.	Spark plug faulty.	Replace the spark plug.
	Fuel cap ventilation is blocked.	Clear the ventila-tion.
Auger does not rotate.	Foreign matter blocking.	Clean the auger with the supplied stick.
	Shear pin broken.	Replace the broken pin.
	Auger drive belt slipping.	Adjust the belt and wire.
	Auger drive belt broken.	Replace the belt.
Auger does not stop when the lever is released.	Auger drive belt is out of adjustment.	Adjust the belt.
	Auger drive guide is out of adjust-ment.	Adjust the guide.
Snowthrower veers to one side.	Tire pressure not equal.	Adjust the tire pres-sure
	Only one wheel drives.	Check the wheel locks.
	Shoes uneven adjusted.	Adjust scraper blade and shoes.
	Scraper blade une-ven adjusted.	Adjust scraper blade and shoes.

### 7.2 ADJUSTING THE SCRAPER BLADE AND SHOES

The scraper blade and shoes gets worn after a long term of use.

Adjust the scraper blade (always together with the shoes) until desired distance to the ground.

The scraper blade and the shoes are reversible and can be used on both sides.

See "5.8".

### 7.3 GENERAL ABOUT BELTS

The drive belts should be checked (and adjusted if required) for the first time after 2 – 4 hours use and then the middle of each season. They should thereafter be checked twice a year.

The belts are specially designed for this machine. They must be replaced by new genuine belts provided by your retailer or authorised service station.

When the belts are adjusted or replaced, the control wires must also be adjusted (see below).

## 7.4 THE AUGER BELT

### 7.4.1 Replacing the auger belt

Man, see fig. 18, 19.

HST, see fig. 20, 21.

1. Remove the ignition key.
2. Loosen the screws (3) and dismantle the bottom plate (2). See fig. 16.
3. Remove the belt protective cover (1) by loosening the screws (2). See fig. 16.
4. Loosen the belt guide (E) at the engine belt disc.
5. Remove the tension pulley (B) from the belt.
6. Replace the belt (G). NOTE! Only genuine STIGA belts are to be used.
7. Adjust the belt tension according to the instructions below.
8. Assemble the belt guide (E).
9. Reassemble the belt protection. See fig. 16.
10. Adjust the control wire according to the instructions "7.7".

### 7.4.2 Check and adjustment of the auger belt

Man, see fig. 18, 19.

HST, see fig. 20, 21.

1. Remove the ignition key.
2. Remove the belt protective cover (1) by loosening the screws (2). See fig. 16.
3. Loosen the tension-pulley (B) and move it about 3 mm towards the belt.
4. Tighten the tension pulley nut.
5. Check the belt tension by pressing down the auger clutch lever. With a finger, you should be able to push the belt about 12 - 13 mm without any great power (fig. 22).
6. Repeat the above procedure if further adjustment is required.
7. Reassemble the belt protection. See fig. 16.

### 7.4.3 Adjustment of auger belt guide

Man, see fig. 18, 19.

HST, see fig. 20, 21.

1. Remove the ignition key.
2. Remove the belt protective cover (1) by loosening the screws (2). See fig. 16.
3. Activate the auger clutch lever (20) in fig. 1.
4. Check the distance between the belt guide and the belt. See fig. 19/21 according the distance.
5. If adjustment is required, loosen the screw to the belt guide and set the correct distance.
6. Tighten the screw properly.
7. Reassemble the belt protection.

## 7.5 DRIVE BELT, MAN

### 7.5.1 Replacing the drive belt, Man

See fig. 18, 19.

1. Dismantle the auger belt as described above.
2. Remove the left wheel.
3. Remove the locking ring (C) from the swing plate shaft (D). Pull out the shaft.
4. Remove the spring (H).

5. Replace the belt (I). NOTE! Only genuine STIGA belts are to be used.
6. Check that the tension pulley (A) is in line with the belt (I).
7. Reassemble the spring (H), shaft (D) and locking ring (C).
8. Check that the underside of the disc drive plate (Q) is situated between the marks (N). See fig. 23.  
NOTE! If the machine still does not drive properly, recheck the location of the disc drive plate (Q).
9. Reassemble all parts in the reverse order.

### 7.5.2 Adjustment of drive belt, Man

The belt has a spring-loaded tension pulley. Adjustment is not required. If the belt slips, change it.

## 7.6 DRIVE BELT, HST

### 7.6.1 Replacing the drive belt, HST

See fig. 20, 21.

1. Dismantle the auger belt as described above.
2. Loosen the beltguides (J, L) at the motor pulley.
3. Work off the used belt and fit the new. NOTE! Only genuine STIGA belts are to be used.
4. Assemble the belt guides (J, L) at the motor pulley. Adjust the belt guide according to the instructions below.
5. Reassemble all parts in the reverse order.
6. Adjust the control wire as described further "7.7".

### 7.6.2 Adjusting the drive belt, HST

1. Dismantle the belt cover (1) by loosening the screw (2). See fig. 16.
2. Adjust the tension pulley (A in fig. 20) until a belt play of about 45 mm. See fig. 32.



**Do not overtighten the belt. This will damage the belt and the bearings. Always check the belt tension according to the instructions below before using the machine.**

3. Check the adjustment according to the instructions below.
4. Reassemble the belt cover. See fig. 16.

### 7.6.3 Check the drive belt, HST

1. Disconnect the wheel locks.
2. Set the speed lever in the neutral position. Do not activate the clutch lever.
3. Start the engine and move the speed lever slow forwards. If the drive shafts rotate, the belt is too tight, and the tension pulley (A in fig. 20) shall be loosened and moved from the belt.
4. If the tension pulley was moved redo the adjustment and the check as described above.

## 7.7 ADJUSTING THE CONTROL WIRES

When the belts are adjusted or replaced, the control wires must also be checked/adjusted (see below).

### 7.7.1 Adjusting auger wire

1. Remove the ignition key.
2. Dismantle the belt cover (1) by loosening the screw (2). See fig. 16.
3. Actuate the auger drive lever and observe the tension pulley. When the auger lever is in its half way of movement against the handle, the pulley movement shall stop against the belt (the pulley is allowed to move a few mm during the last half of movement of the lever). See fig. 24.
4. If necessary, unhook the spring and adjust the wire at the screw, connected to the spring. See fig. 25.
5. Reassemble all parts in the reverse order.

### 7.7.2 Adjusting drive wire, Man

1. Remove the ignition key.
2. Lift the snow thrower forward and rest in on the auger housing.
3. Loosen the screws (3) and dismantle the bottom plate (2). See fig. 15.
4. Actuate the auger drive lever and observe the friction disc. When the auger lever is in its half way of movement against the handle, the friction disc shall touch the friction wheel. See fig. 28.
5. If necessary, unhook the wire at the adjusting plate and replace the wire in a suitable hole. See fig. 26.
6. Reassemble all parts in the reverse order.

### 7.7.3 Adjusting drive wire, HST

The drive wire, HST has no adjustment. The clutch is adjusted with the belt tensioning pulley. See "7.6.2".

## 7.8 FRICTION WHEEL, MAN

If the snow thrower does not move forward/backward the problem could be the driving belt, driving control wire or friction wheel. Check the friction wheel as follows.

### 7.8.1 Checking the friction wheel

1. Remove the ignition key.
2. Lift the snow thrower forward and rest in on the auger housing.
3. Loosen the screws (3) and dismantle the bottom plate (2). See fig. 15.
3. Put the gear stick in neutral position.
4. With the gear stick in the neutral position, the centre of friction wheel shall correspond with the centre of the friction disc. See fig. 28.
5. Adjustments are carried out as described below.
6. Reassemble in the reverse order.

### 7.8.2 Adjusting the friction wheel

1. Loosen the friction wheel linkage and set the friction wheel until the measurement in position 4 above is obtained.
2. If the friction wheel is heavy worn and adjustments cannot be carried out satisfactorily, replace in accordance with the following instructions.
3. Otherwise reassemble in the reverse order after adjusting.

### 7.8.3 Replacing the friction wheel

1. Disassemble the differential according to 7.9.
2. Disassemble the two bearing attachments (M in fig. 23).
3. Disassemble the shaft and bearing attachments. Note the location of the two washers (17 in fig. 29).
4. Replace the friction wheel on its hub (fig. 30).
5. Reassemble all the parts in the reverse order. Note the following when reassembling:
  - Check that the washers (17 in fig. 29) are correctly placed.
  - Check that the washers (13 in fig. 29) are correctly placed.
  - Check that the shaft (8 in fig. 30) rotates freely.
  - Check that the friction wheel and disc drive plate are totally free from oil and grease.

## 7.9 REPLACING THE DIFFERENTIAL

See fig. 31.

The differential (A) is replaced according to the following instructions:

1. Remove the ignition key.
2. Lift the snow thrower forward and rest in on the auger housing.
3. Disassemble the wheels.
4. Loosen the screws (3) and dismantle the bottom plate (2). See fig. 15.
5. Disassemble the bearing housings (B) with bearings at both sides.
6. Loosen the intermediate shaft (C) by disassembling the bearing screws (D) at both sides.
7. Slacken the chain tension by loosening the support bearing attachment (E). The support bearing attachment is loosened by disassembling the two screws at the top.
8. Remove the chain from the differential.
9. Pull out the shafts from the differential and remove the differential.
10. Check the chains. Replace if required. The chains shall not be lubricated. They are factory lubricated. Excessive grease can spoil the friction if it reach the friction wheel or the friction disc.
11. Check the bearings for dissonance and uneven friction at rotation. Replace if required.
12. Reassemble all parts in the reverse order.

## 7.10 REPLACING THE SHEAR BOLTS

The auger is fastened to the shaft by special bolts that are designed to break if something gets stuck in the auger housing.



**Always use genuine spare parts. Other types of bolts could cause serious damage to the machine.**

1. Stop the engine.
2. Disconnect the ignition cable from the spark plug.
3. Ensure all the rotating parts have stopped.
4. Remove the object that has fastened in the auger.
5. Lubricate the auger shaft (see above).
6. Align the holes in the shaft and auger.
7. Remove the broken bolt parts.
8. Assemble a new original shear bolt.



### 7.11 HEADLAMP BULB



**Only 27 W original spare part bulb is allowed to be used. Bulbs with higher power will damage the headlamp.**

The headlamp bulb is fitted to the headlamp by a bayonet socket. See fig. 17. To replace the bulb proceed as follows:

1. Turn the bulb about 30° CCW and pull it out.
2. Release the plastic locks at each side of the bulb and pull off the cable connection from the bulb.
3. Fit the new bulb in the reverse order.

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## 8 STORAGE

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**Never store the snow thrower with petrol in the tank in a confined area with bad ventilation. Petrol fumes could reach open flames, sparks, cigarettes etc.**

If the snow thrower is to be stored for a longer period than 30 days, the following measures are recommended:

1. Empty the petrol tank.
2. Start the engine and let it run until it stops due to lack of fuel.
3. Change the engine oil if it has not been done for 3 months.
4. Remove the spark plug and empty a little engine oil (about 30ml) in the hole. Crank the engine a couple of times. Screw back the spark plug.
5. Clean the whole snow thrower thoroughly.
6. Lubricate all the parts as shown in LUBRICATING above.
7. Inspect the snow thrower for damage. Repair if necessary.
8. Touch up any paint damage.
9. Rust protect the metal surfaces.
10. Store the snow thrower indoors if possible.

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## 9 IF SOMETHING BREAKS

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Authorised service workshops carry out repairs and guarantee service. Always use genuine spare parts.

Do you carry out simple repairs yourself? Always use genuine spare parts. They fit perfectly and make the work much easier.

Spare parts are available at your retailer and service station.

When ordering spare parts: Specify the model, year of purchase, the engine model and type number.

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## 10 PURCHASE TERMS

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A full warranty is issued against manufacturing and material defects. The user must carefully follow the instructions given in the enclosed documentation.

Exceptions:

The warranty does not cover damage due to:

- Neglect by the user to acquaint themselves with accompanying documentation
- Carelessness
- Incorrect and non-permitted use or assembly
- The use of non-genuine spare parts
- The use of accessories not supplied or approved by GGP

Neither does the guarantee cover:

- Wear parts such as drive belts, augers, headlights, wheels, shear bolts and wires
- Normal wear
- Engines. These are covered by the engine manufacturer's warranties, with separate terms and conditions.

The purchaser is covered the national laws of each by each country. The rights to which the purchaser is entitled with the support of these laws are not restricted by this warranty.



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