

SNOW THROWER

Manual for user

5.5HP

6.5HP

7.0HP

9.0HP

11.0HP

13.0HP

GS, CE, EPA, CSA



Information on the identification plate

This information is very important for late identification of machine when ordering spare parts and using the Customer Service. You will find the identification plate in the vicinity of the engine. Copy all the information plate into the following space.

The manual is for the using of 5.5HP, 6.5HP, 7.0HP, 9.0HP, 11.0HP and 13.0HP snow blower.

For your safety
Use the machine properly

- This machine is intended only for use
- As a snow-clearing machine to remove snow from hard-surface paths and flat ground
 - In accordance with the specifications and safety instruction given in these operating instructions

All other usage is consideration to be contrary to the intended purpose of the machine.

Usage of the contrary to its intended purpose or the making of unauthorized changes to the machine rule out any liability on the part of manufacture.

The user is liable for damage to third persons and their property which occurs as a result of use the machine.

General notes on safety

As the user of this machine, please read this manual through carefully before operating machine. Follow these

- instructions and keep them for later use or in case of change of ownership.
- Do not allow any person under the age of 16 to handle this machine (it is possible that local regulation define the minimum age of the use).
- Keep other people, especially children, and domestic animals are away from danger area.
- Pay attention to national regulation in force if you are in charge of the machine on public roads or paths. Never use the machine to transport someone.
- When you are working with the machine, wearing gloves and protective goggles, closely fitting winter clothing and robust footwear with non-slip soles.
- Never refuel the machine in a closed space or when the rotation of some parts.
- Turn off the engine, remove the ignition key and the spark-plug connector whenever
- You are not working with the machine.
 - You leave it for a time
 - You make adjustments to it or undertaken maintenance or repair work.
- Let the engine cool down before you park the machine in a closed space.
- Store the machine and fuel in a safe place
- Be away from sources of fire (sparks, flames)
 - inaccessible to children
- Have the machine repair only by a professional workshop.

Operating the machine



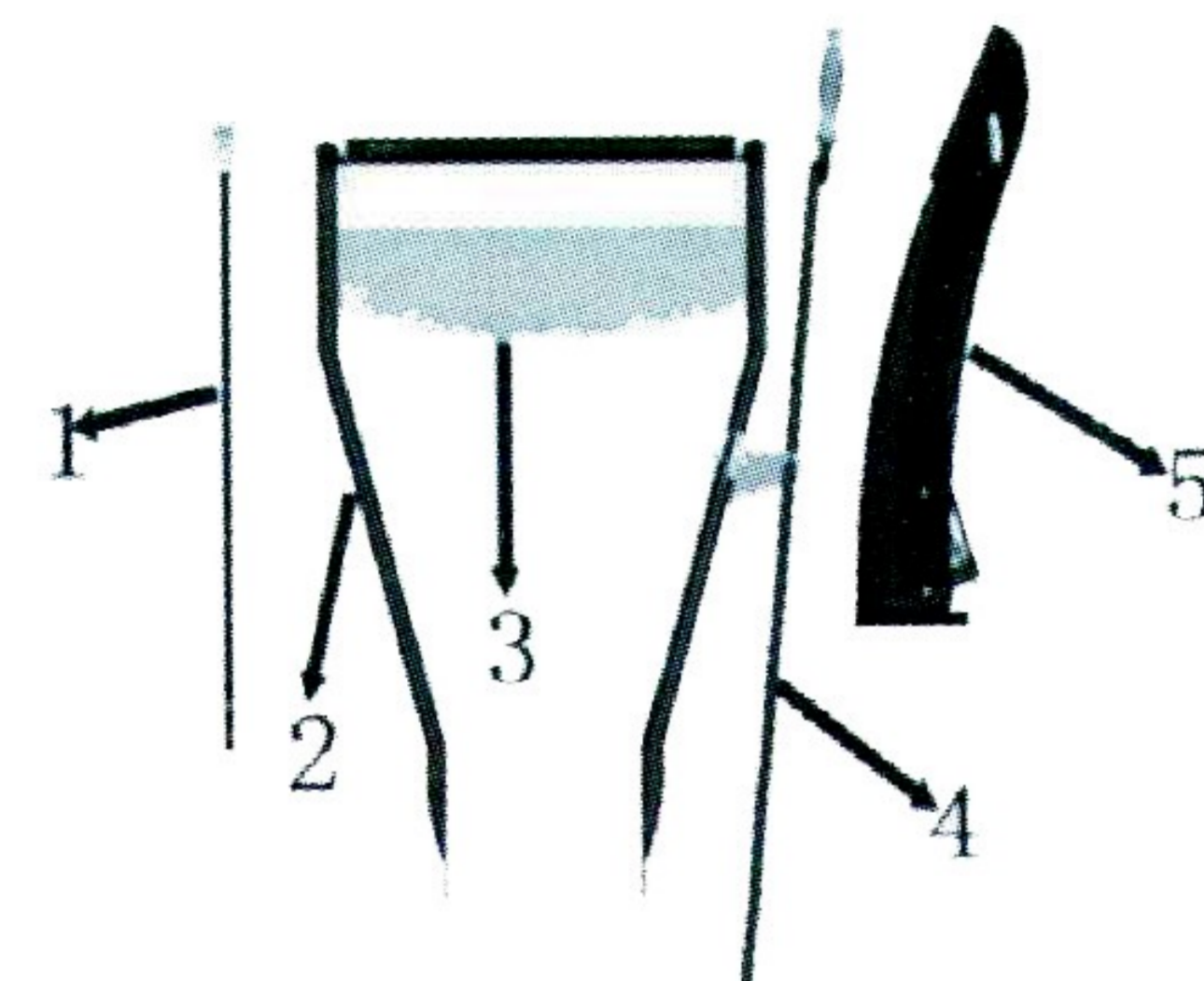
Risk of injury

Do not operate the machine without Wearing adequate winter garments. Wear footwear which will improve footing on slippery surface.

The operation of any powered machine can result in foreign objects thrown into eyes, always wear safety glasses or eye shields during operating or while performing an adjustment or repair. Before using the snow blower equipment, please thoroughly inspect the area and remove all doormats, sleds, boards, wires, and other foreign objects.

Unpacking and assembly

You will find the following parts when open the carton:



1. shift lever
2. handle
3. shift board
4. swing pole
5. throw-out chute

Assemble Instruction

Throw-out chute and shift lever assembling for 5.5/6.5/7.0HP snow thrower:

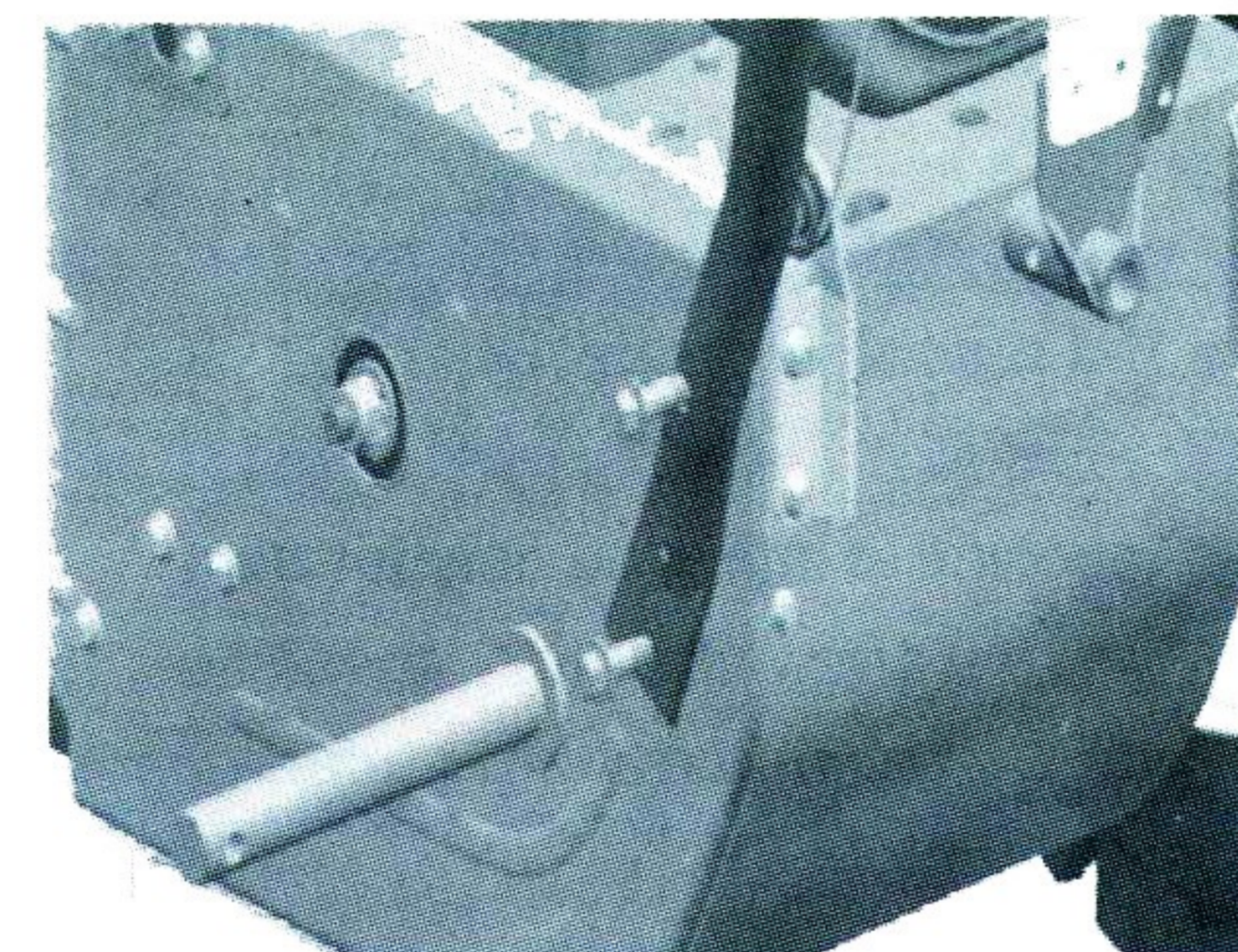
Step1: Please check whether all parts are included in the carton, if some are missed, please check distributors or factory.

Step2: Fix the handle and operation panel with the screw.

Refer to Picture 1:

Step3: Get out the wheels, install the handle bar to the frame, fix it by screws and then assemble the wheels.

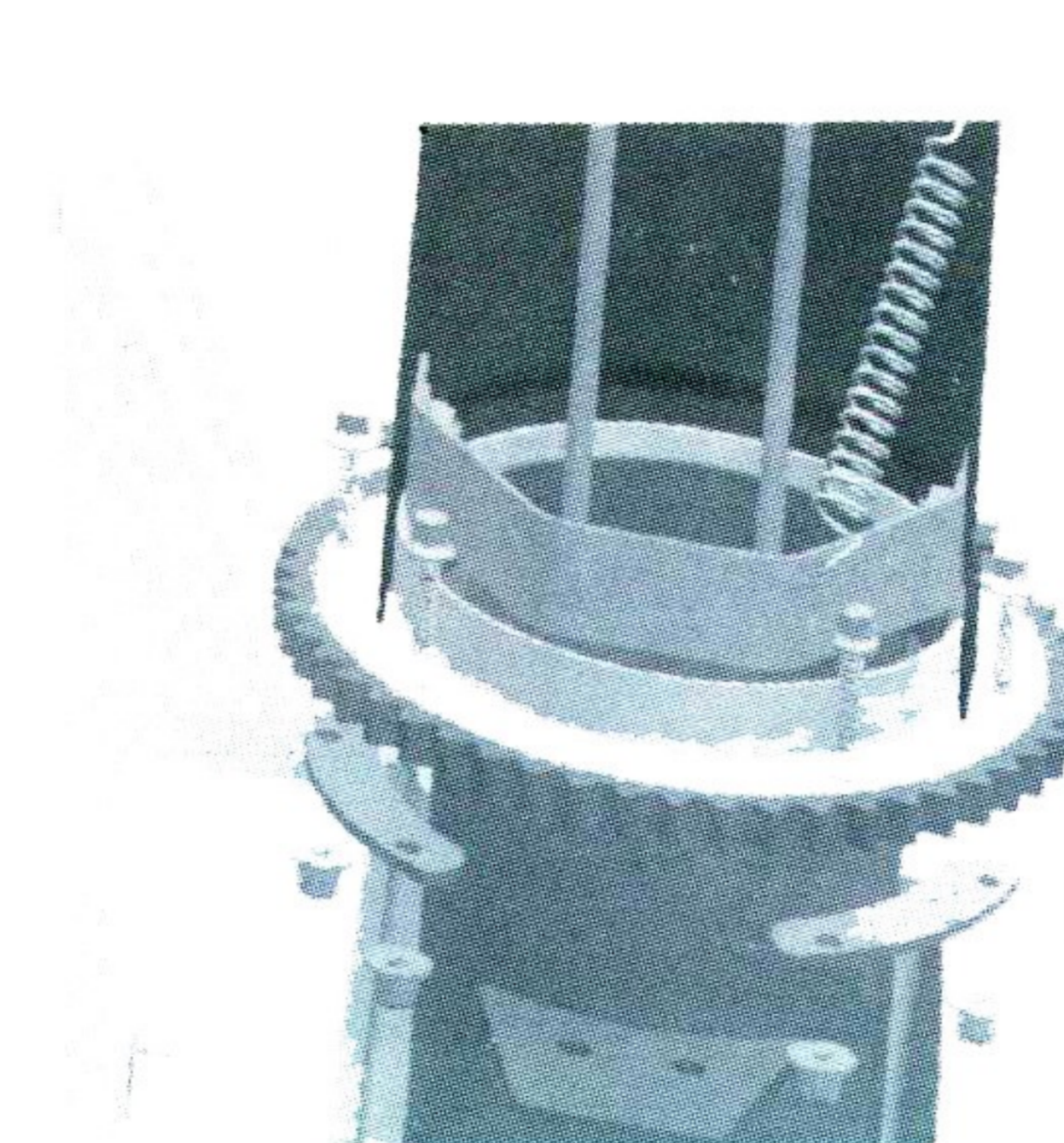
Refer to Picture 2:



Step4: 4-1) Get the throw-out chute out, assembling it with the arc-shaped clip plate.

4-2) Two sets arc-shaped clip plates' assembling please refer to the picture. The other two sets of arc-shaped clip plates assembling is same as previous.

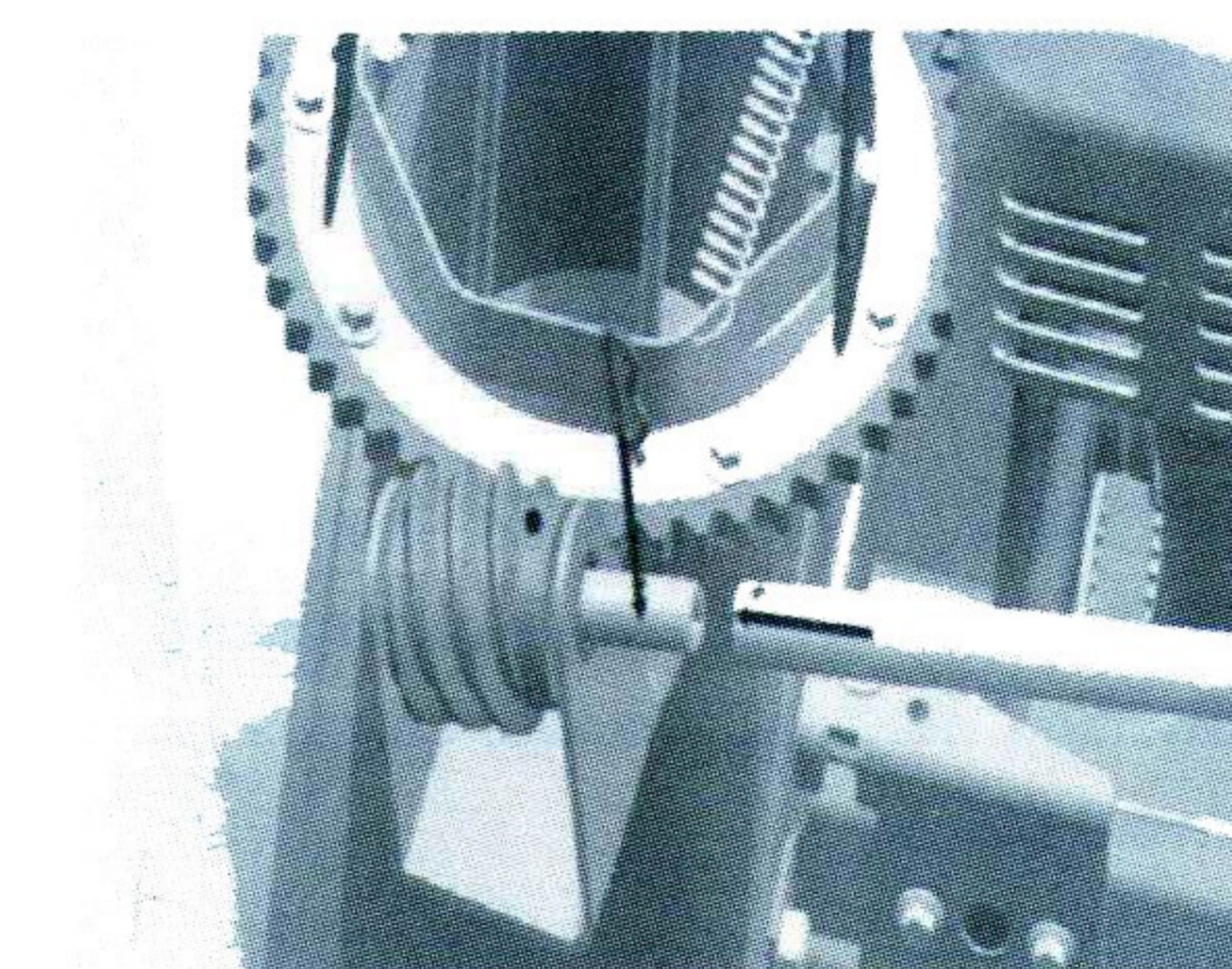
4-3) Tighten the screw as the picture.



Step 5: ■ Insert the swing pole as the arrow instructed.

■ Then insert the pin

■ Adjust the swing pole, make sure the whorl and the throw-out chute gear completely matched and tighten the swing pole by screw.



Step 6: Assembling shift lever

Picture 4

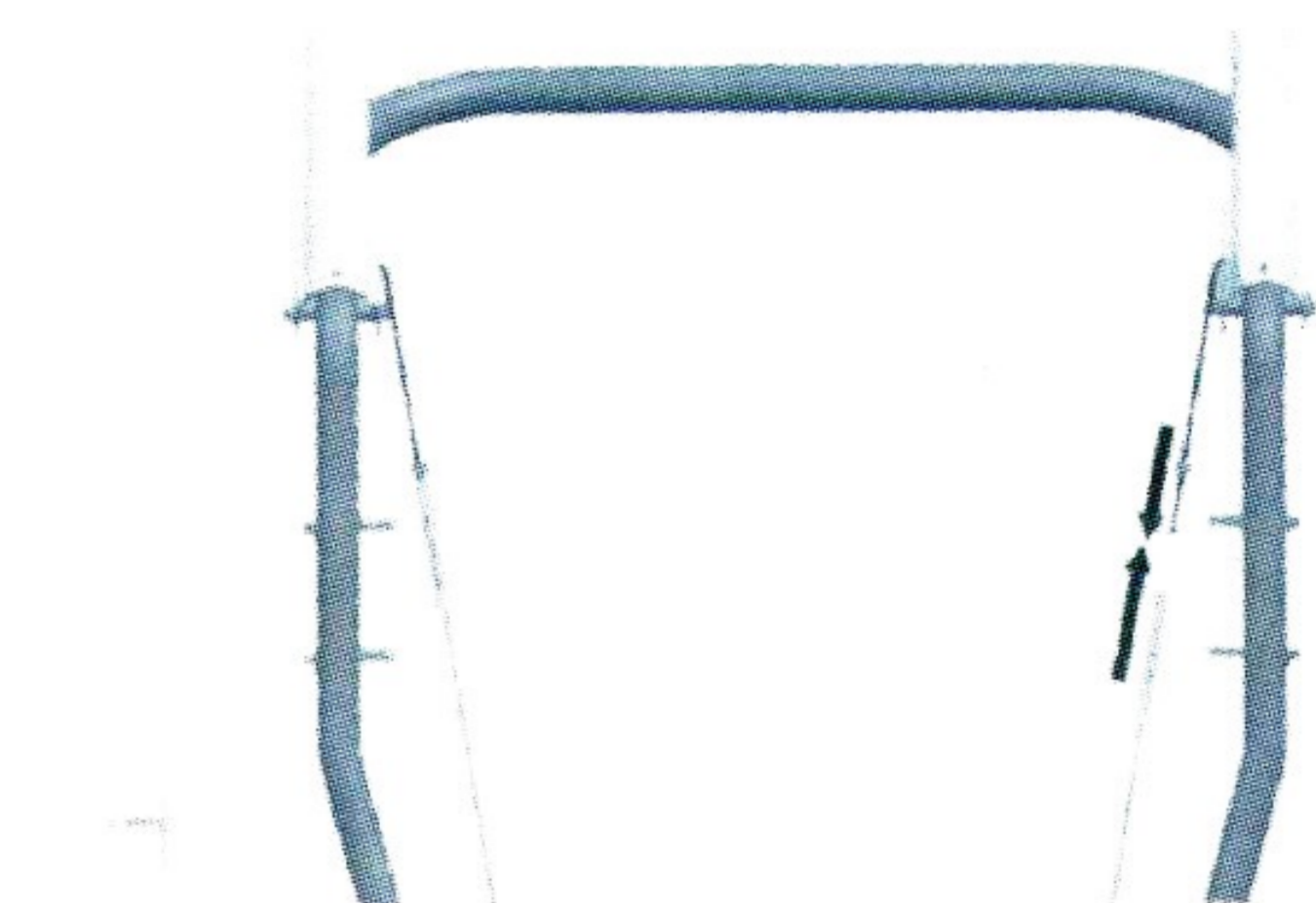


Step7: 7-1) Take off the sleeves of the coupling cables

7-2) Connect the sleeves to coupling levers

7-3) Connect the sleeves to the coupling cables

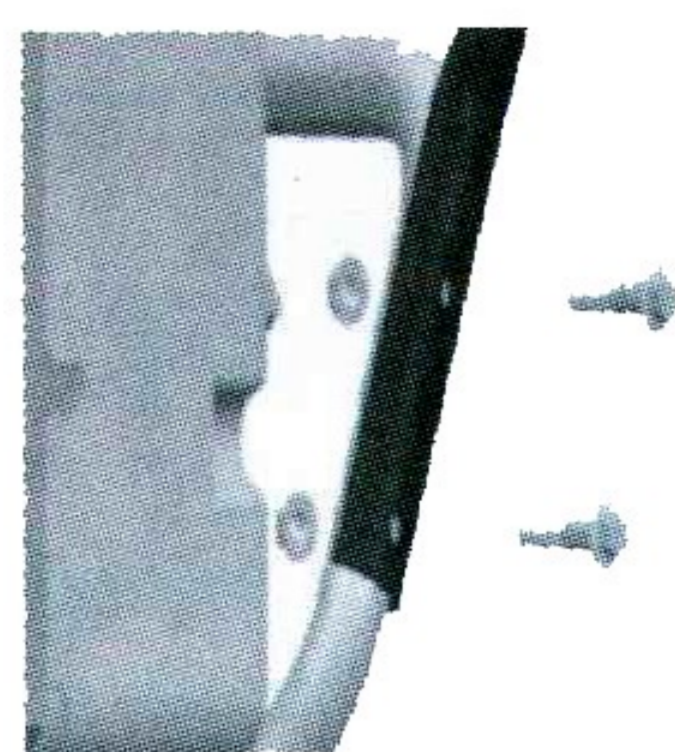
Picture 5



Throw-out chute and operation panel assembling for 9/11/13HP snow thrower:

Refer to the pictures of assembling for 9.0/11.0/13.0HP snow thrower.





Open the carton, assembling the handle and throw-out chute (as the picture shown, or refer to the 6.5hp assembling steps)

Step 1: Connect the soft shaft to the small worm shaft of throw-out chute.

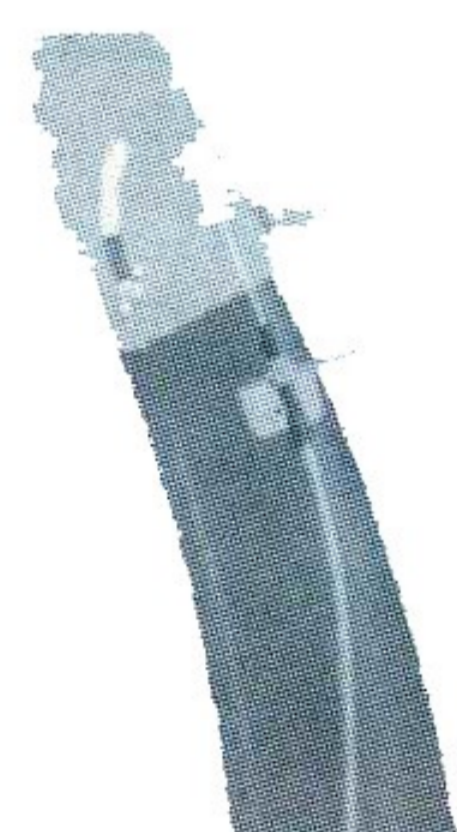
Picture 6



- According to the arrow direction, insert the soft shaft to the related hole and tighten the screw.
- Refer to the snow blower assembling

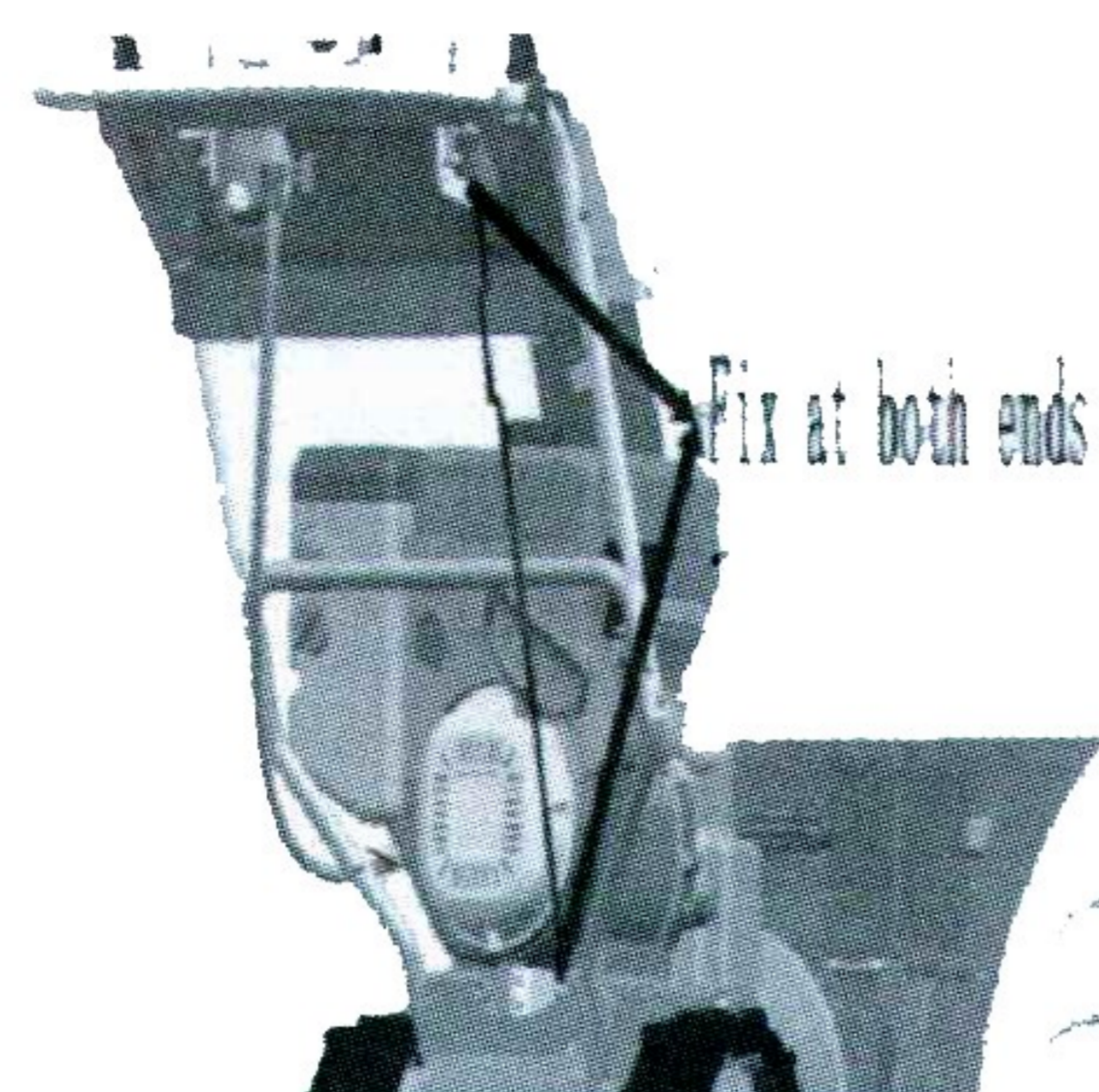
Step2: Control the throw-out chute rotating angle, assembling the cables for throw-out chute.

Picture 7



Assembling the gear connect pole and pay attention to the connecting for other cables.

Picture 8



Please refer to the following steps for assembling and adjusting:

Safe Feature

Picture 9



Suitable for 5.5/6.5/7.0/9.0/11.0/13.0HP snow thrower:

Safety devices are provided for your protection and must always function properly. You may not remove, change or circumvent them.

Coupling lever for the worm drive (1)

The worm driver switches off if the user releases this hold on the coupling lever.

Coupling lever for the drive system (2)

The drive system switches off if the user releases this hold on this coupling lever.

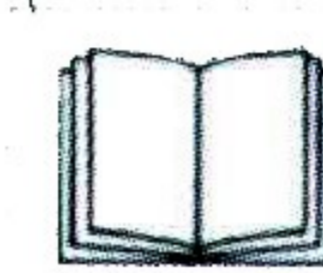
Symbols on the machine

At various place of the machine you will find safety and warning notice represented by symbols or pictograms.

The symbols have the following precise meanings:



Risk of injury or damage to property



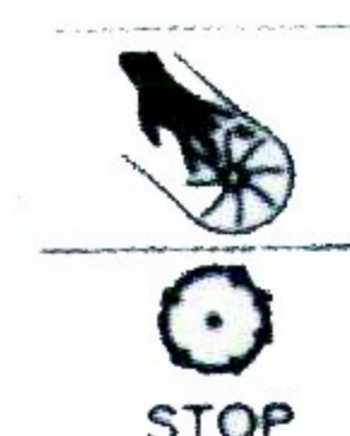
Read these manual carefully before operation.



Risk of being burnt. Keep distance from hot parts of machine.



Risk of injury from throw-out snow or solid objects.



Only touch parts of the machine when they absolutely stop.



Risk of injury from rotating parts. Keep hands and feet away from rotating parts.



Before using the machine for the first time (5.5, 6.5, 7.0, 9.0, 11.0, 13.0HP)

- It's necessary to check the oil level. Refill or top up with engine oil (see "engine instructions") as required.
- For transportation reasons, the tyres may show a higher tyres pressure. Check the tyre pressure and adjust accordingly (approx. 1 bar).
- Adjust coupling for the worm drive and drive system (Refer to picture 19 and 20).
- Adjust shift lever (Refer to picture 4 and 22) for 5.5HP, 6.5HP, 7.0HP, 9.0HP, 11.0HP, 13.0HP snow thrower.

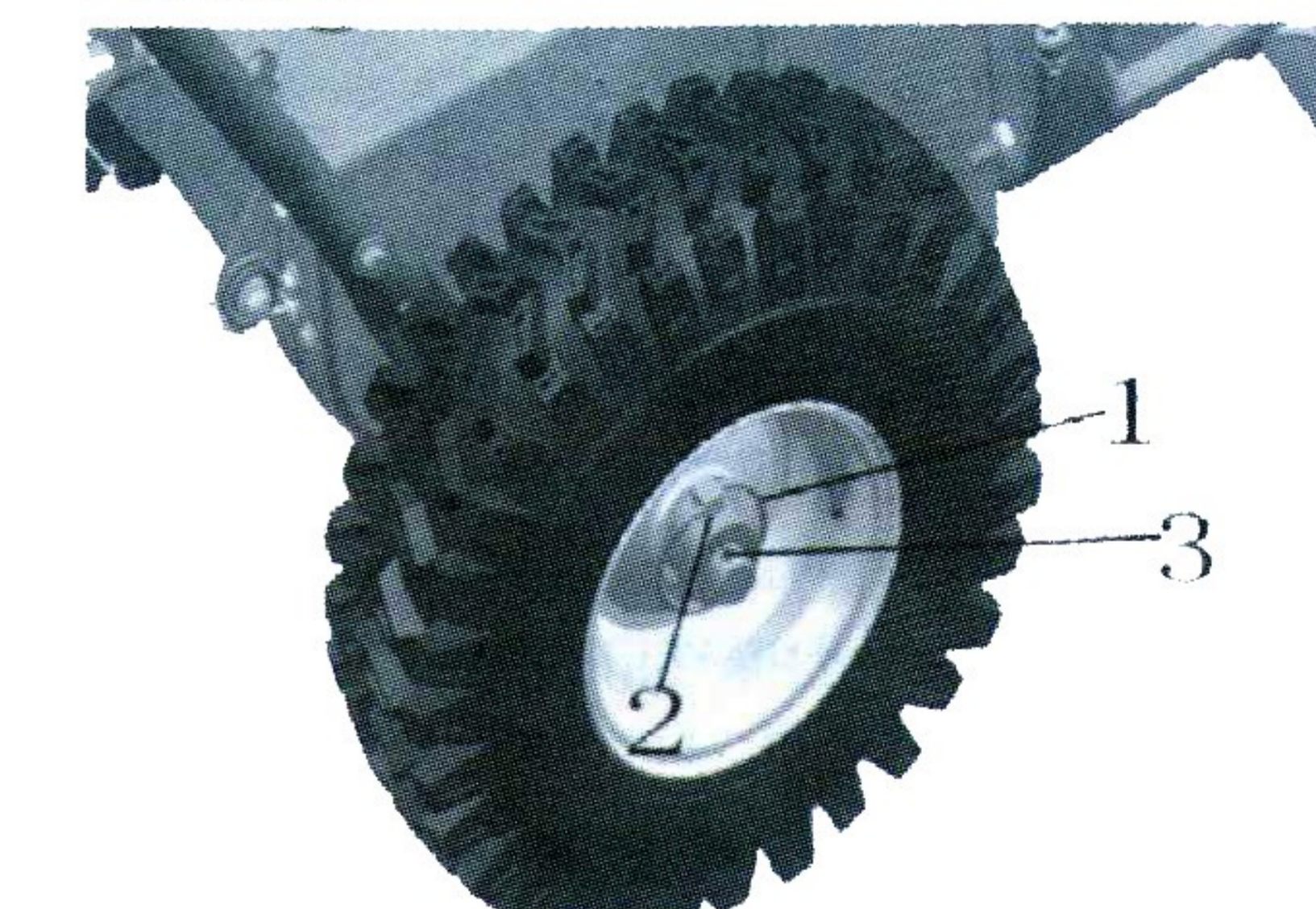
Before making any adjustments

- Turn off the engine
- Remove the ignition key and the spark-plug connector. Wait until the engine has cooled down.

Adjusting the machine to conform to the snow conditions:

For small and middle snow and curves' terrains, the connection between right wheel and driver can be disconnected. The machine then be easier to steer.

Picture 10



- Move the ring spring (1) to outer hole (3)

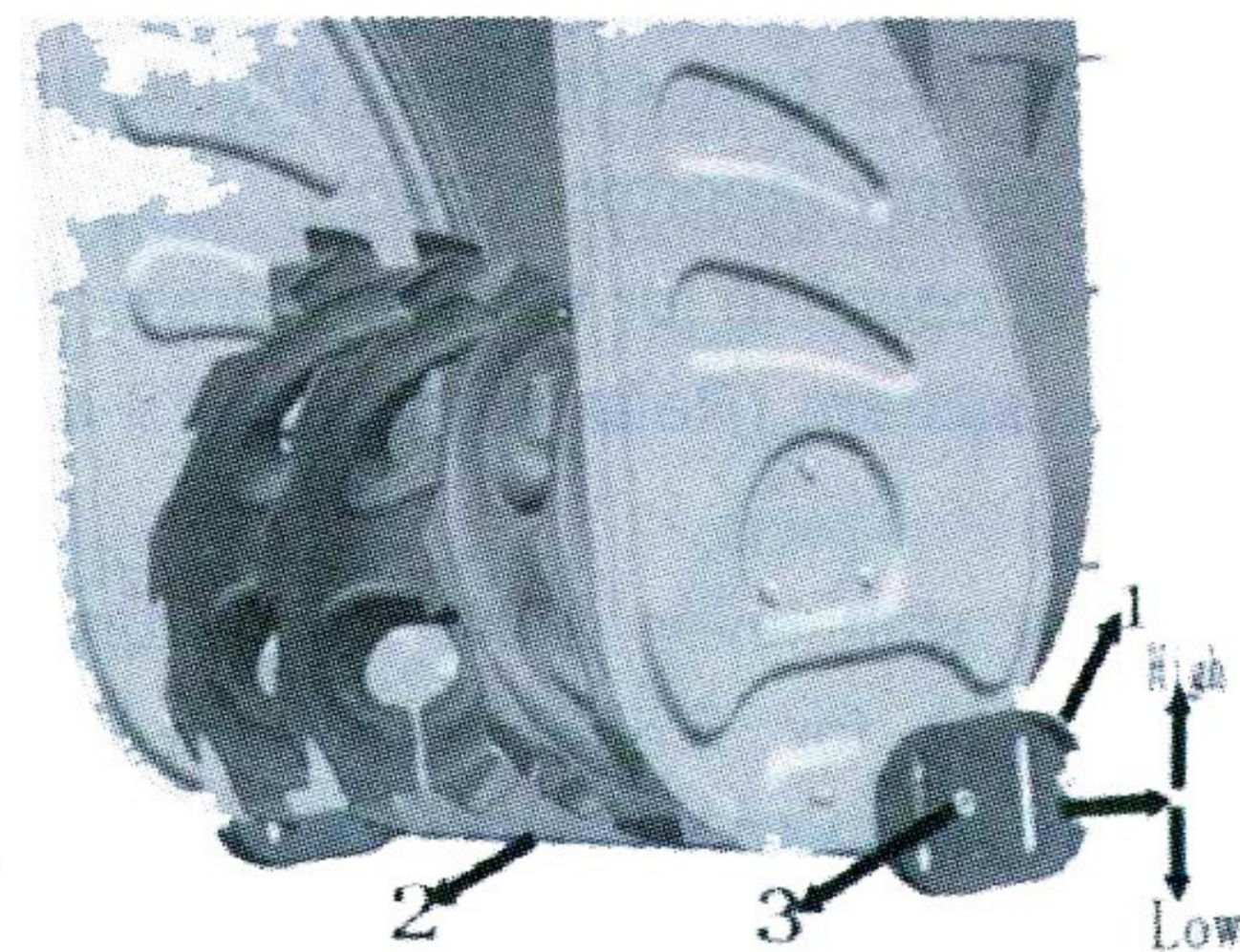
For heavy snow and iced-over paths, both wheels must be driven.

- Line up hole (2) of the wheel hub and the hole of the wheel axle.

Insert ring spring (1) to both holes (2).

Skids adjustment for (5.5HP, 6.5HP, 7.0HP, 9.0HP, 11.0HP and 13.0HP) snow thrower:

Picture 11



With the skids (1), the distance between the ground and the clearing plate (5) can be set in this way so that no objects on the ground (e.g. earth or stones) can be taken up.

- Loosen nuts (2) on the both sides of the machine.
- Adjust skids to conform to the ground distance:
 - Lower for uneven or non-hard surfaced paths.
 - Higher for even paths
 - Fasten the skids with nuts (2) in such a way that they uniformly touch the ground.

Fill up with fuel and check the oil level



Danger of explosion and risk of being burnt.

Fill up with fuel only in the open air and when the engine has been switched off and is cold. Do not smoke while filling up. Never fill up with fuel to top. If fuel overflows, let the overflowed fuel

evaporate completely before you start engine.

Store fuel only in suitable containers designed to take fuel.

- Check oil level, top up as required (see "engine instructions").
- Full up with fuel (for types of fuel see specifications in the engine instruction), close the fuel tank cap and wipe away remains of fuel.

Operating the machine



Risk of injury

Keep other people, in particular children and domestic animals away from the danger area.

Operating the machine only in a perfect and safe-to-operate condition. Inspecting the ground surface on which the machine will be operated and remove all objects which could be picked up and hurled out by the machine.

Working only when there is sufficient illumination. Always be sure of your feet, and keep a firm hold on the handle, walk, never run.

If the machine vibrating abnormally, stop the engine and check immediately for the cause of vibration, because vibration is always a warning of danger.

Work slowly and carefully, especially on uneven or non-hard-surfaced paths, or when you are moving backwards.

Never operate the machine without proper safety guards.

Do not overload the machine capacity by attempting to clear snow at too fast a rate.

Set the distance between auger and ground, be sure no extraneous material (e.g. stones) is taken up by the machine.



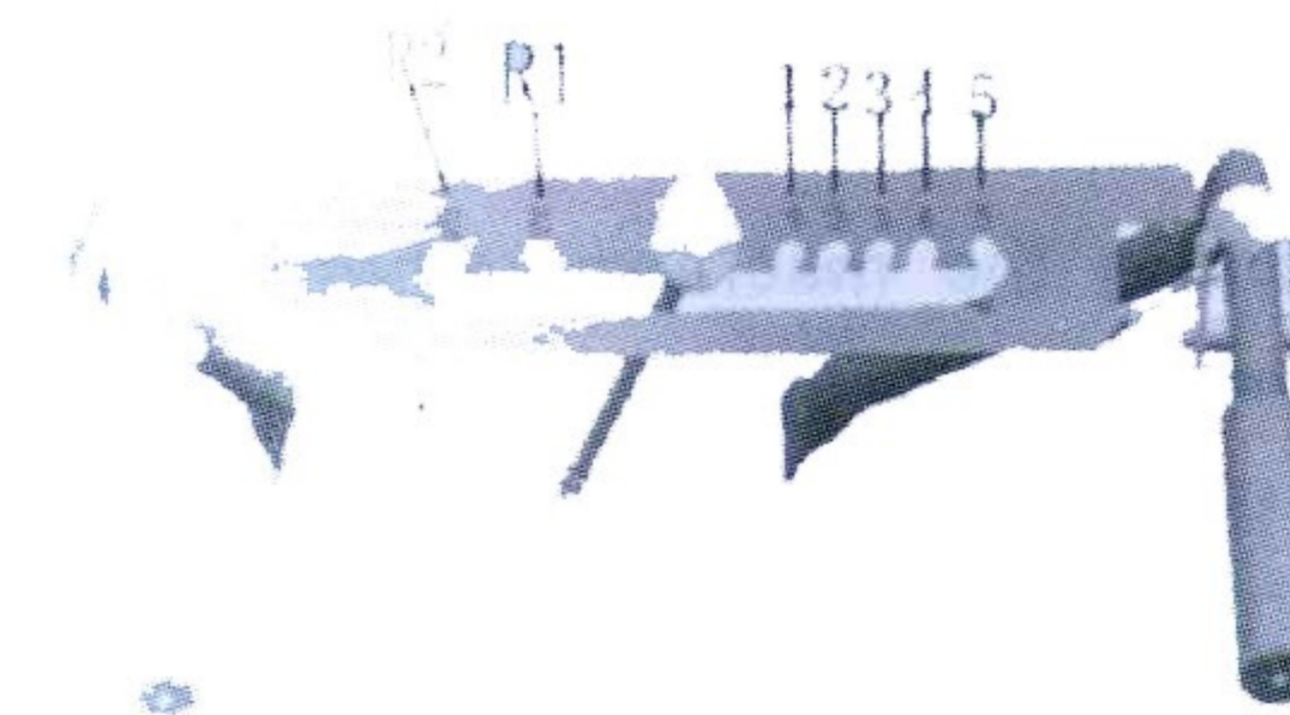
Caution

Risk of damage to the machine.

If the machine strikes extraneous material (e.g. stones) or exhibits unusual vibrations, switch off the machine and inspect it. Get any damage repaired before you work the machine again. Before you put the machine to work, let the engine run to arm up. When you have finished work, leave the engine running for a few minutes to eliminate the moisture.

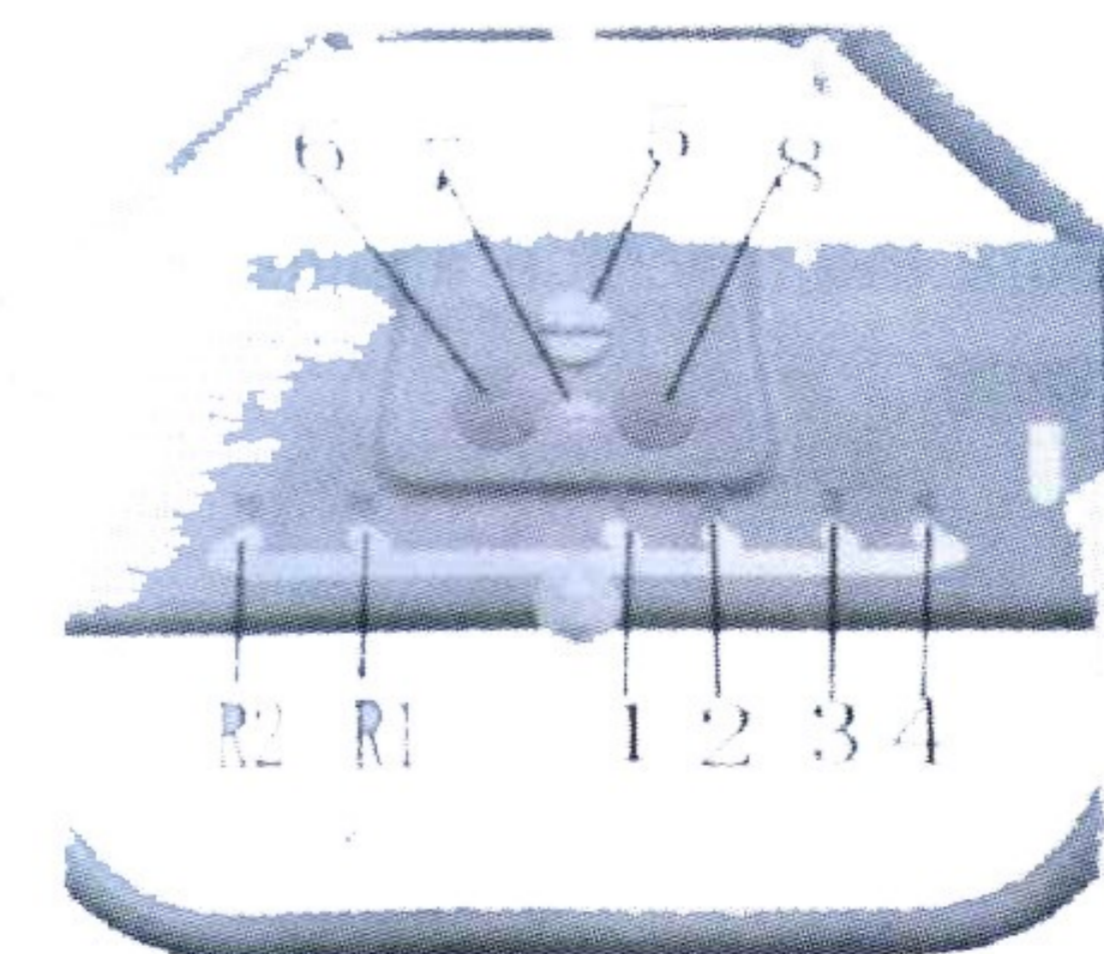
Simple operation panel for (5.5HP, 6.5HP, 7.0HP)

Picture 12



Luxury operation panel for (5.5HP, 6.5HP, 7.0HP)

Picture 13



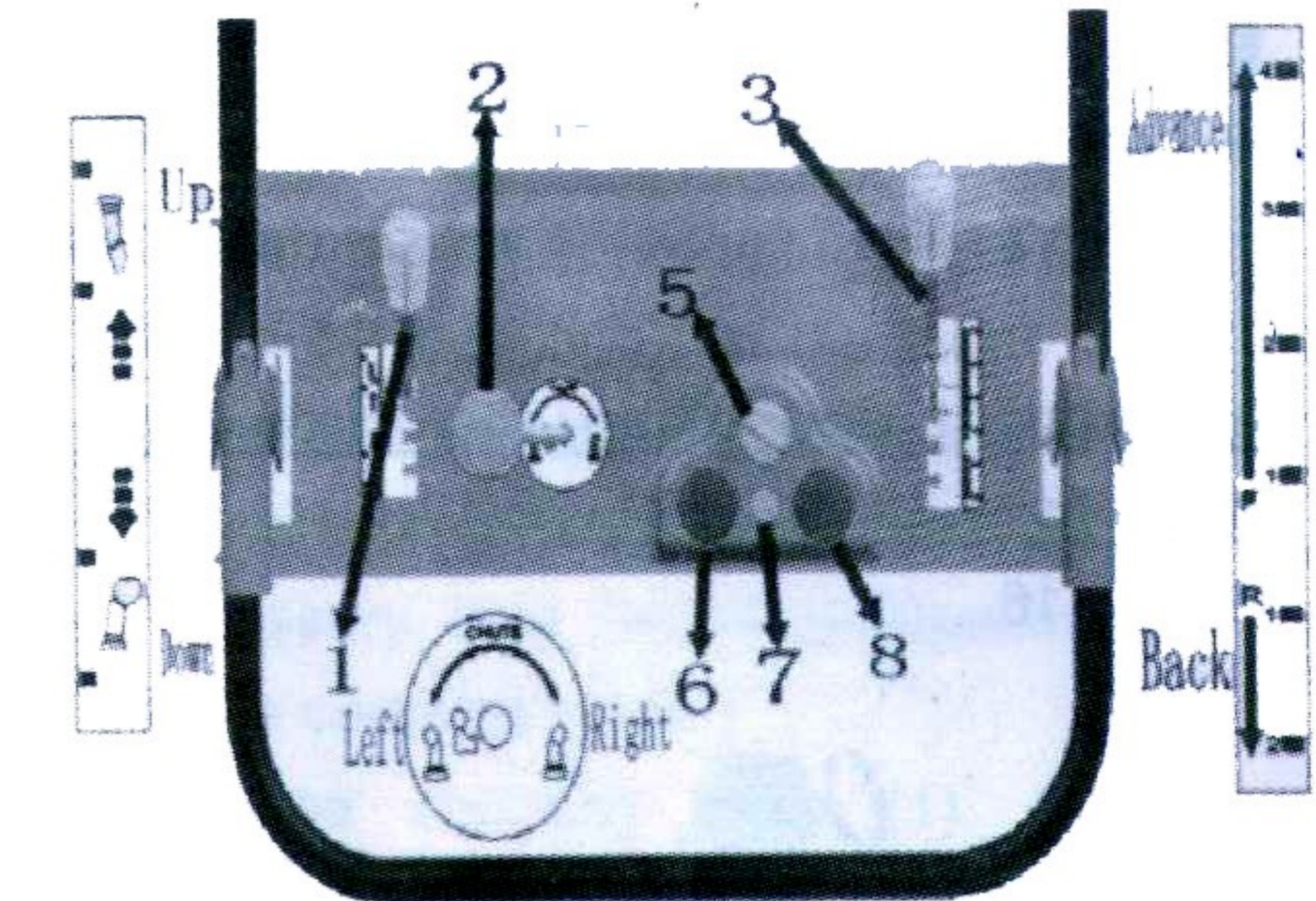
This luxury operation panel has two lamps. Switch on or off please choose (1) switch key.

Press (2) lamp key when in dark light.

When start failed or switch off immediately when start, please check (3) fuse holder. For emergency please use (4) stop key.

Operation panel for 9.0, 11.0, 13.0HP wheels snow blower:

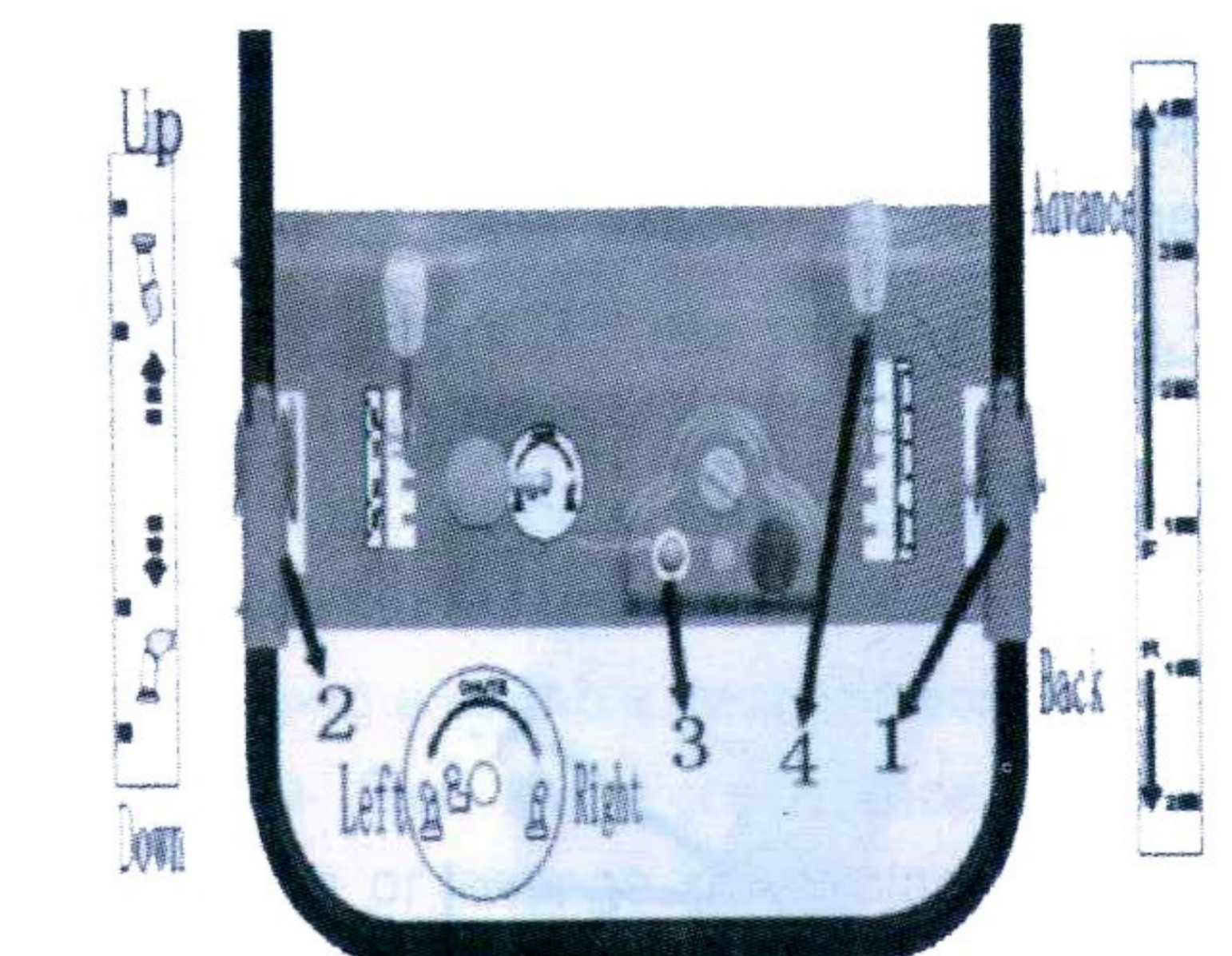
Picture 14



- Changing gear please refer to the actual snow blower.
- 5, 6, 7, 8 operation refer to picture(5)

Operation panel for 9.0, 11.0, 13.0HP caterpillar snow blower:

Picture 15



- Choose a forward gear, press coupling lever (1), start to walking.
- Press coupling lever (2) and hold, auger the turbine of throw out chute start to work.
- Press coupling levers (1 and 2) and hold, machine go forward and clear the snow.
- Please release the coupling lever (1)

when change gears, and move the shift lever.

Caution

Release the coupling lever (1 and 2), and choose a gear.

Refer to Picture 14

- Choose a gear (6)
- Forward: "1" (slow) to "5" (fast)
- Reverse "R1" (slow) and "R2" (fast)

Adjustment and clean the throw-out chute for 5.5/6.5/7.0HP.

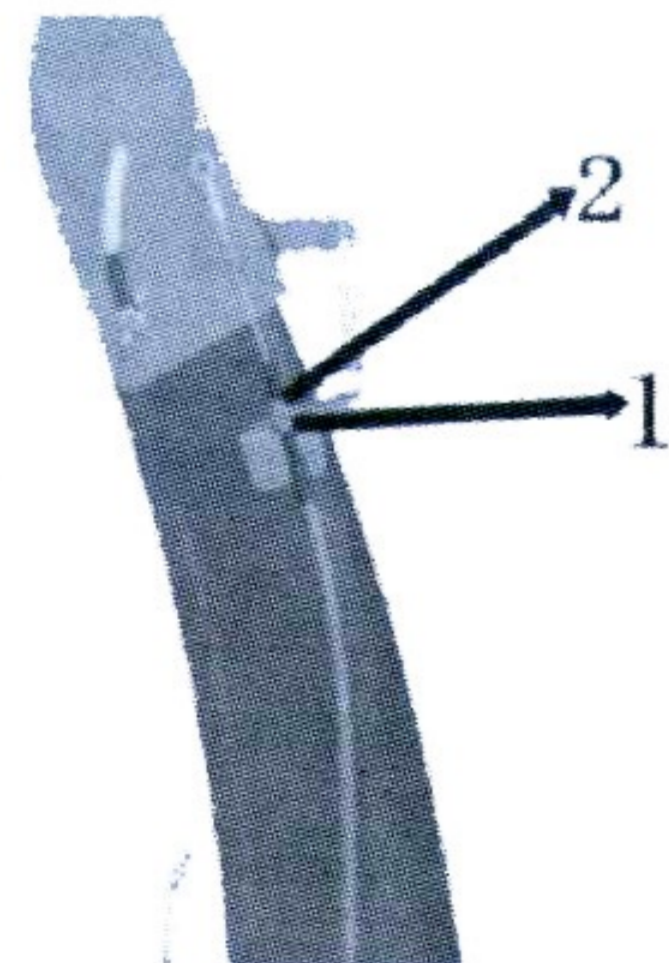
Picture 16



Adjustment and clean on throw-out chute for 9/11/13HPO.

Adjusting the height of throw-out chute on operation panel, please refer to picture 15.

Picture 17



- Adjusting 1 and 2 to control the height (refer to above picture)
- Cleaning the objects on the auger or throw-out chute

Risk of injury

Before doing any work on this machine

- Stop the engine.
- Wait until all rotating parts stop.
- Remove the ignition key and spark plug connector
- Use a wooden rod or a shovel to eliminate the blockage

Snow chain (operational)

In extreme weather condition, you can buy snow chain from our company.

Transportation

Self-walking

To maneuver or get across short distance.

- Start the machine.
- Select a forward or reverse gear.
- Press coupling lever for driving system/coupling bar and hold it down.
- Move the machine carefully.

Transporting the machine without its own power

- Risk of injury
- Before transportation:
 - Turn off the engine.
 - Remove the ignition key and the spark-plug connector.
 - Wait until the engine has cooled down.

- Transporting the machine on or in a vehicle in a horizontal position.
- Secure the machine against rolling or slipping.



Risk of injury

Before doing any work on this machine

- Turn off the engine.
- Remove the ignition key and the spark-plug connector.

--- Wait until the engine has cooled down.



Caution

Risk of damage to the machine

When replacing parts of the machine use only original spare parts.

Clean the machine

- Park the machine on a firm, even and horizontal piece of ground.
- Remove any dirt sticking to it.
- Clean the machine by pouring water through the throw-out chute and leave it to dry.
- Clean engine with a cloth and brush.

Lubrication

Please lubrication all the rotating and mobile parts with light oil.

Adjust tyre pressure

Recommended tyre pressure approx. 1 bar.

Maintenance work on the engine.

See "engine instructions"

Assembling and checking for coupling cables:

Picture 18



- Press the left coupling lever (1) forwards (direction); at the same time press down rubber (3). Coupling cable (5) must be a little slacker. Slacken it if necessary (see "making adjustments to the coupling cable").
- Release coupling lever (1). There must be no slackness on the coupling cable (5) but it must not be taut either. Adjust if necessary (see "making adjustments to the coupling cable").
- The coupling lever (1) must allow itself to be pressed down completely. If it does not, the coupling cable is tightened too firmly and must be slackened (see "making adjustment to the coupling cable").

Adjust coupling for the drive system, please refer to picture 19.

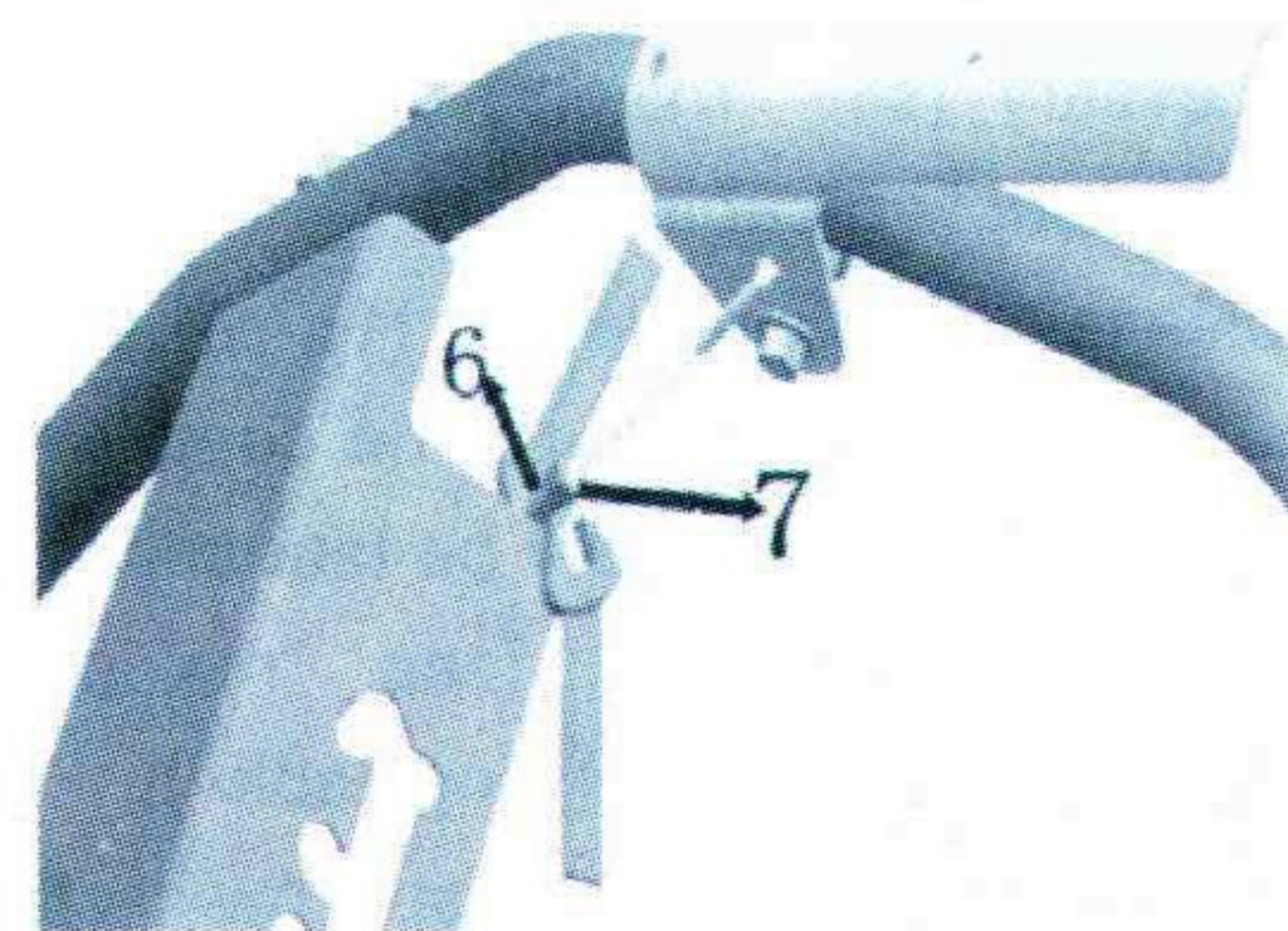
- Release coupling lever, pushing the machine forward.
- Choosing a suitable gear for working.
- If you feel some resistance when pushing or change gear, slacken the coupling cable (see "making adjustments to the coupling cable, picture 19").
- When working, press the coupling lever. The wheel/caterpillar tracks are working. If not, tighten the coupling cable a little (see "making adjustments to the coupling cable, picture 19").

- If problem can't be solved or have doubts, see "Checking the drive system".

■ Making adjustment to the coupling cable

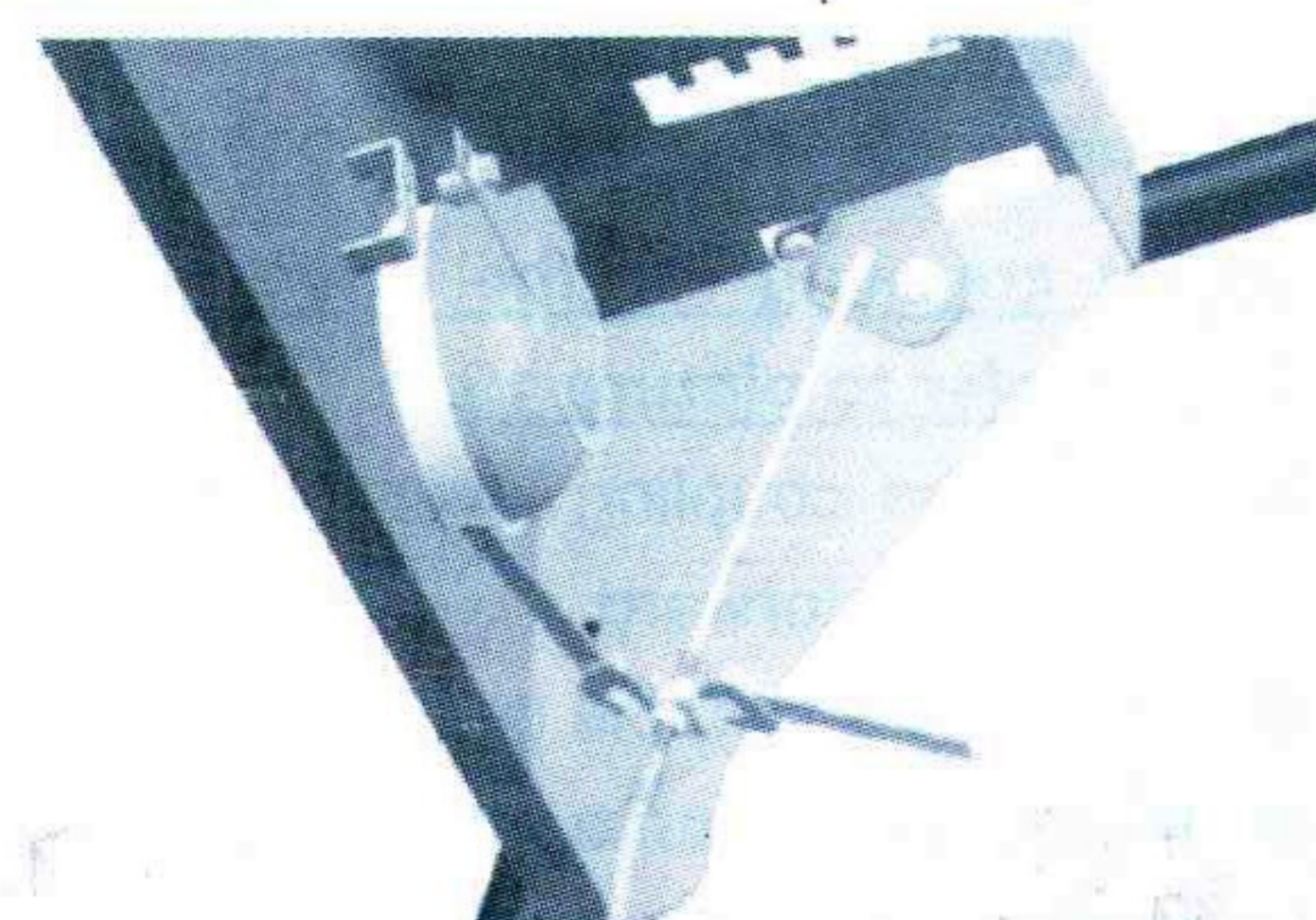
Auger and walking coupling cable adjustment for 5.5, 6.5, 7.0HP snow thrower

Picture 19



(9.0HP, 11.0HP and 13.0HP)

Picture 20



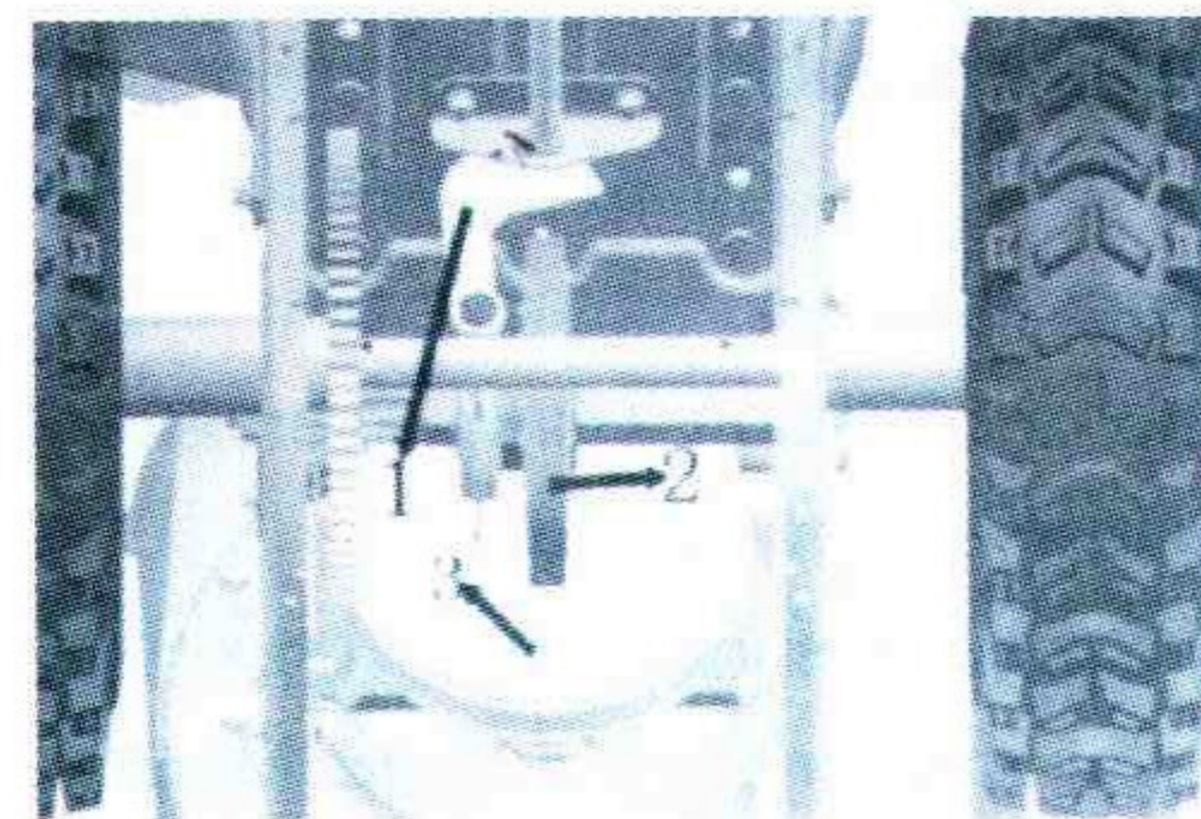
- Tighten: Loosen nut (7) and screw, adjusting sleeves (6) against it.
- Slacking: Loosen nut (7) and screw, adjusting sleeves (6) against it.

- Before making an adjustment of coupling cable spring, the spring must be hooked on another side. Check whether the coupling cable is correctly adjusted when the spring expands 2 to

3 cm.

Checking drive system on (5.5HP, 6.5HP, 7.0HP, 9.0HP, 11.0HP and 13.HP) snow thrower.

Picture 21



Caution



Risk of damage to the machine

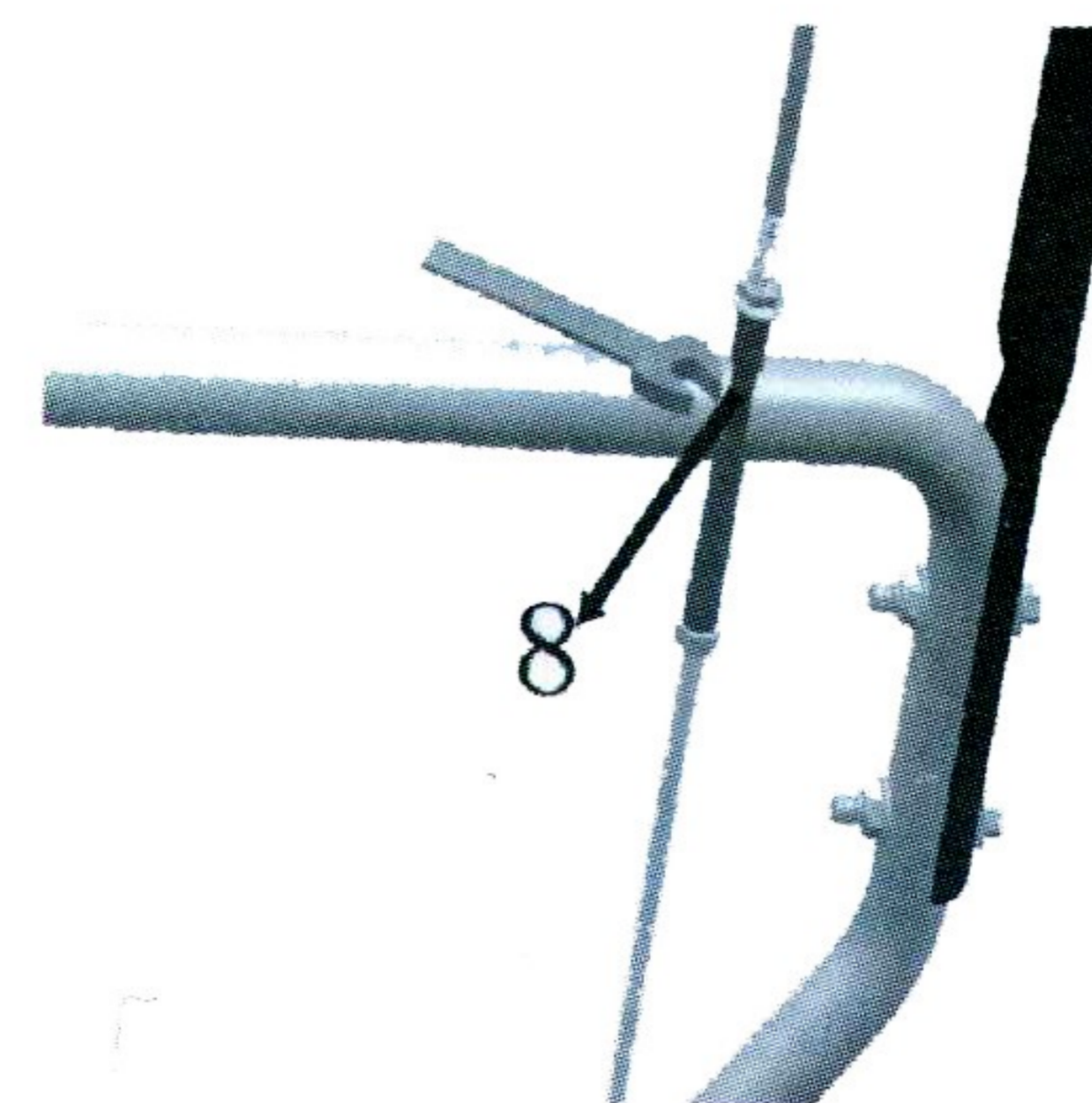
Take care when tipping the machine

- The machine stays balance
- No fuel or oil runs into the air filter
- Switch off the oil key

- Loosen screw on frame cover if necessary tip the machine forwards
- When coupling lever of drive system (1) change to all gears the friction wheel (2) should not come into contact with the drive wheel (3) If it does slacken the coupling cable (see "making adjustments to the coupling cable").
- Keep clean of drive wheel and the rubber of friction wheel, they must be free of grease.
- If necessary remove ice on parts which is ices over.

Adjusting the shift lever

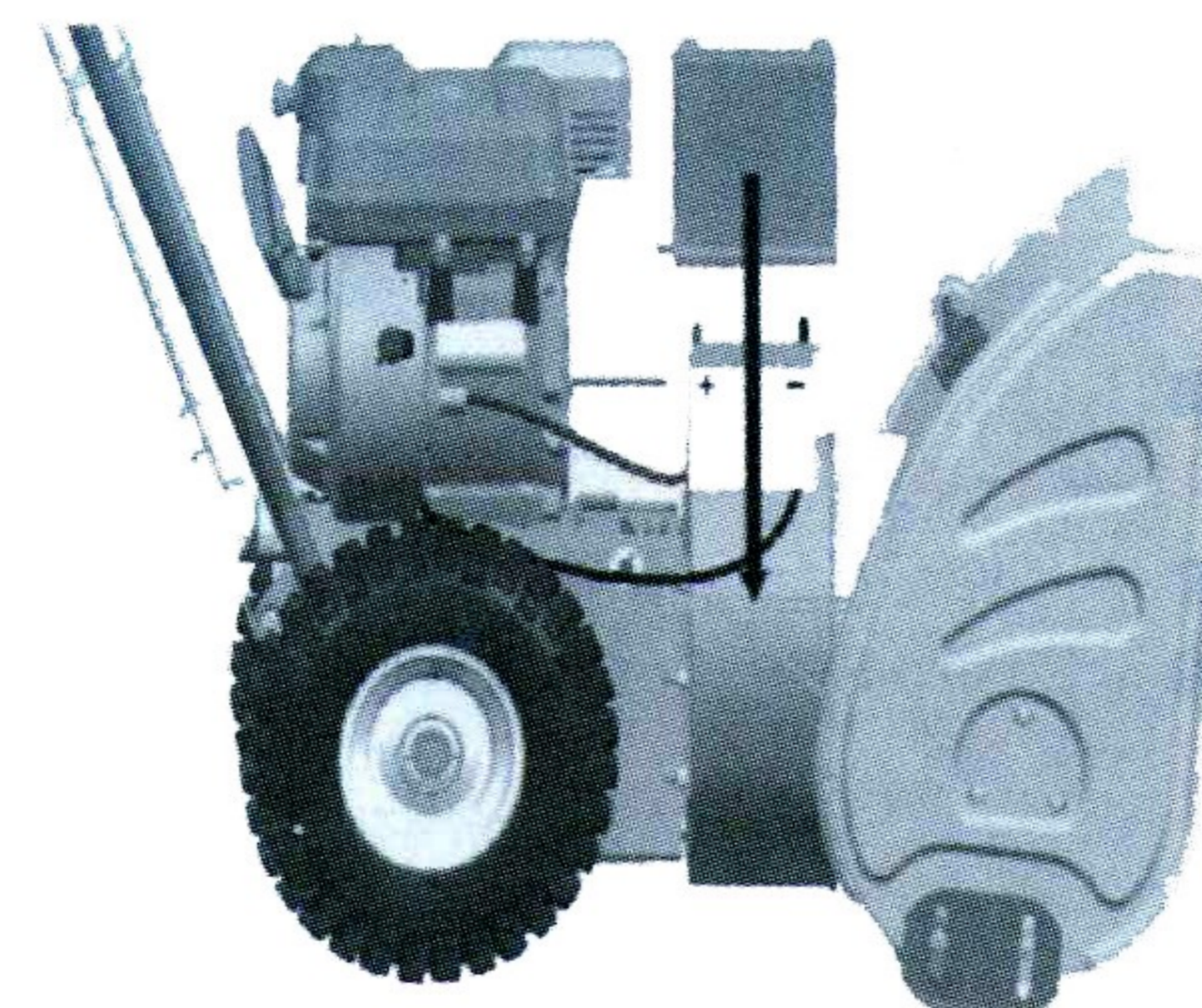
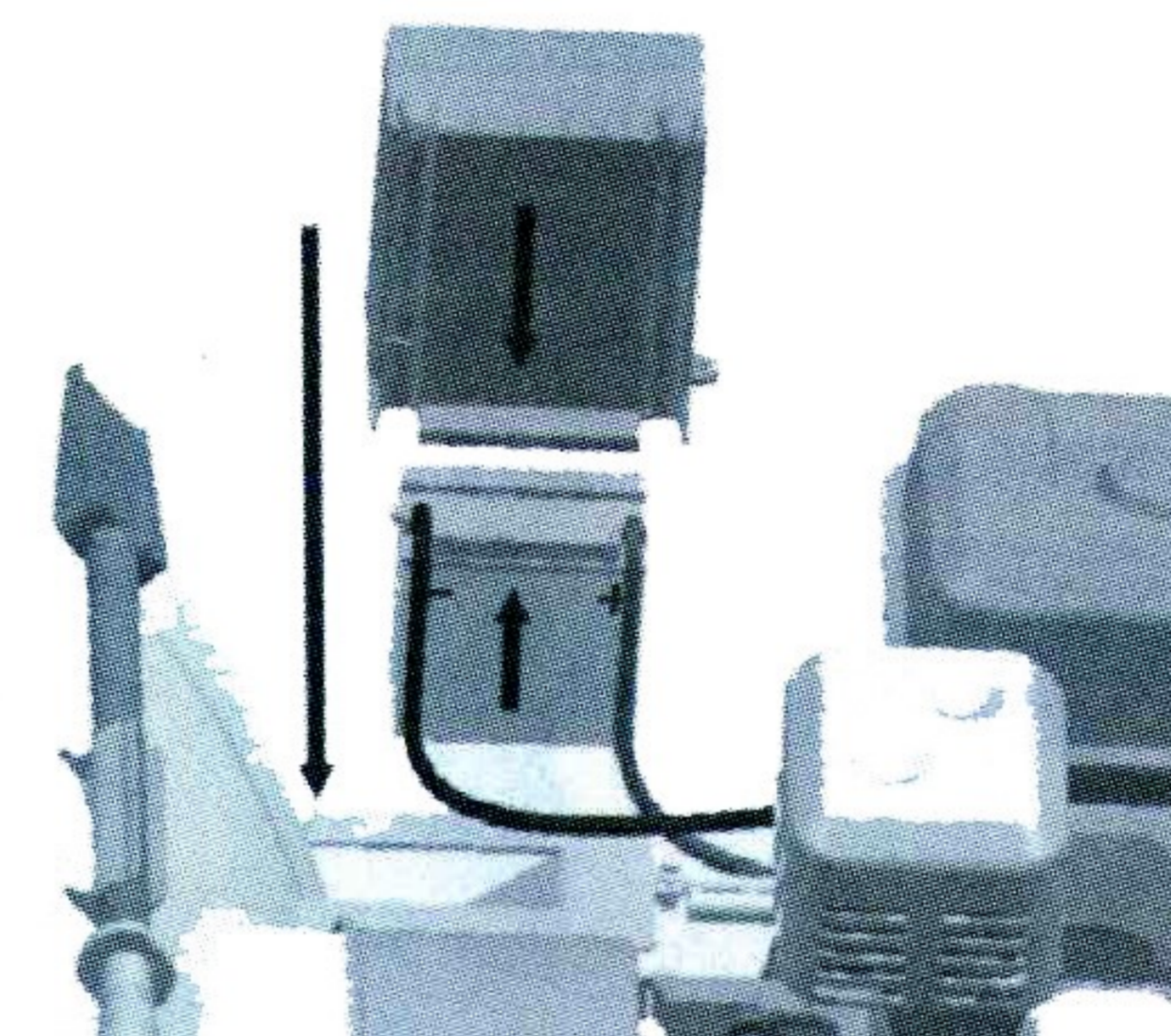
Picture 22



- When shift lever gear is not clear, adjust (8)
- Moving the shift lever to F2 or the fastest gear, and adjusting(8) to left or right..
- Then tighten the screw.

Assemble for battery

Picture 23 1)



- The battery for 5.5/6.5/7HP could connect directly, no need to add

battery water.

- Add battery water before installing the battery cable for 9/11/13hp battery.
- The positive wire and negative wire of engine should be connected onto the positive terminal and negative terminal of battery, and fixed with bolt.
- Put the battery into the battery box, the battery wire should be get out from the hole on the battery box.
- Fix the battery box onto the battery holder.

Type One: For 12V DC Voltage start.

To start the engine, the electric starter must be connected to the mains power supply.

Use a 12-volt battery with an ampere-hour rating at least 6.5 Ah. Be careful not to connect battery in reverse polarity, as this will short circuit the battery charging system. Always connect the positive (+) battery cable to the terminal before connecting the negative (-) battery cable, so your tools can not cause a short circuit if they touch a grounded part while tightening positive (+) battery cable end.



Caution

A battery can explode if you do not follow the correct procedure, seriously injury anyone nearby. Keep all sparks, open flames, and smoking materials away from the battery.

- Connect the battery positive (+) cable to the starter solenoid terminal as shown.
- Connect the battery negative (-) cable to the engine mounting bolt, frame bole, or other good engine ground connection.
- Connect the battery positive (+) cable

to the battery positive (+) terminal as shown.

- Connect the battery negative (-) cable to the battery negative (-) terminal as shown.
- Connect the light and light switch with the cable and connect the cable to the battery positive (+), and battery negative (-).
- Coat the terminal and cable ends with grease.

Type Two: For 220~230V and 50Hz (110V and 60Hz) AC Voltage start



Risk of electric shock

Make sure that the main supply network is protected with fault current circuit-breaker. If required, have an appropriate circuit-breaker fitted, but only by a trained electrician.

For connecting the electric starter to the mains, use only extension cables (not supplied with the machine) which are approved for use in the open air and which are protected by an earth wire



Caution

If the electric starter is not connected properly, damage

could occur to the machine or in its vicinity
Make sure that the main supply network
--- is operating in conformity with the specifications on the starter identification plate at 220-230V and 50Hz (110V/60Hz).
--- is protected by an appropriate fuse system.

- 1) Push the fuel lock (under air filter) to "ON"
- 2) Push the choke lever to "CLOSE" (cold engine).

- 3) Connect extension cable first with the plug and then with a mains socket.
- 4) Press start button long enough (Max. 5 sec.) for the engine to start. For a cold start, wait at least 10 sec. before attempting to start the engine again.
- 5) Preheat the engine and push back the choke lever to "OPEN".
- 6) Separate the extension cable first from the mains and then from the electric starter.

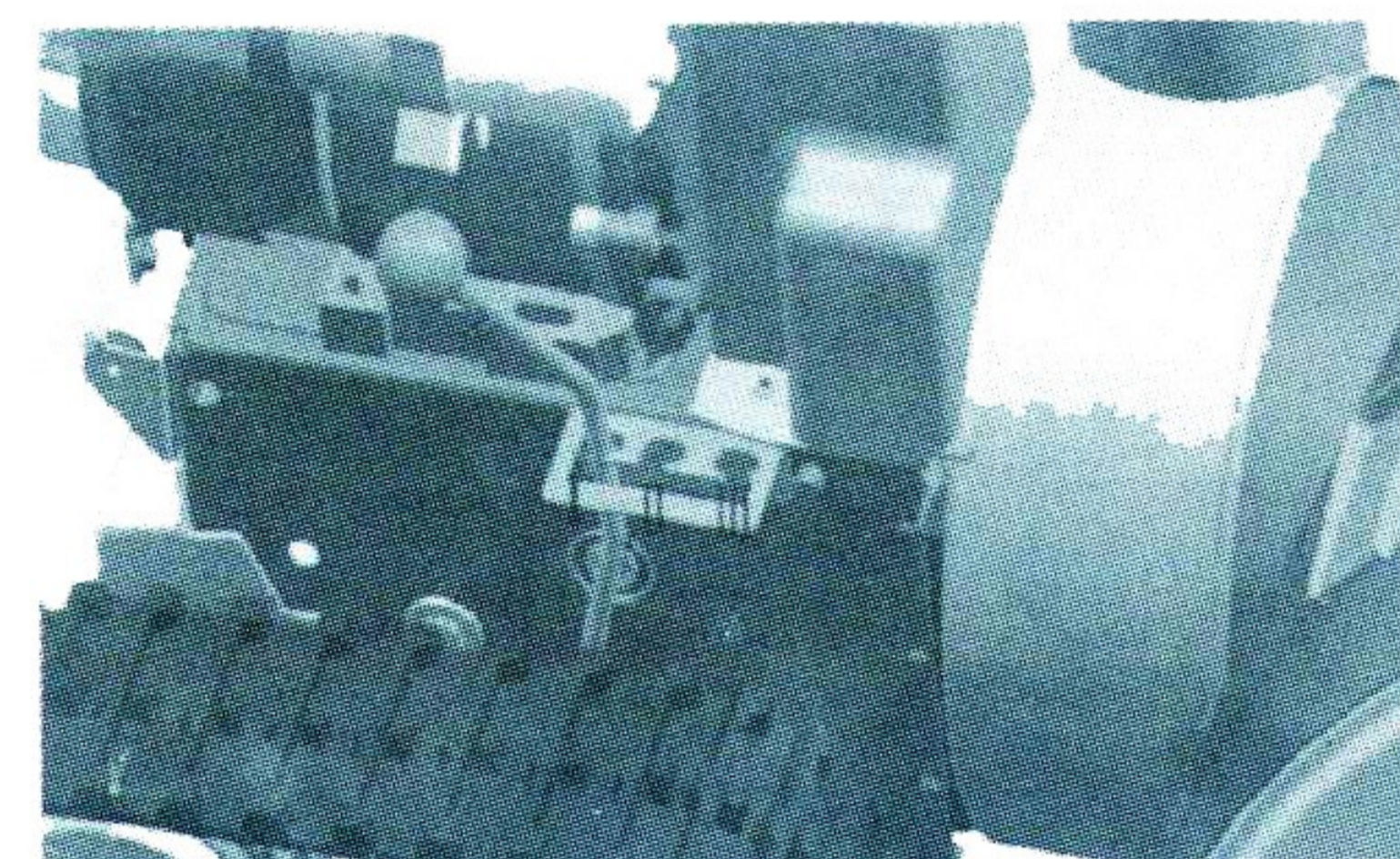
Stop the engine

- To avoid damage to the machine or starting problems arising from moisture, let the engine run for a few minutes before switch off (to dry out) (refer to engine instruction)

Two track and triangle track snow thrower operation panel instruction (caterpillar models)

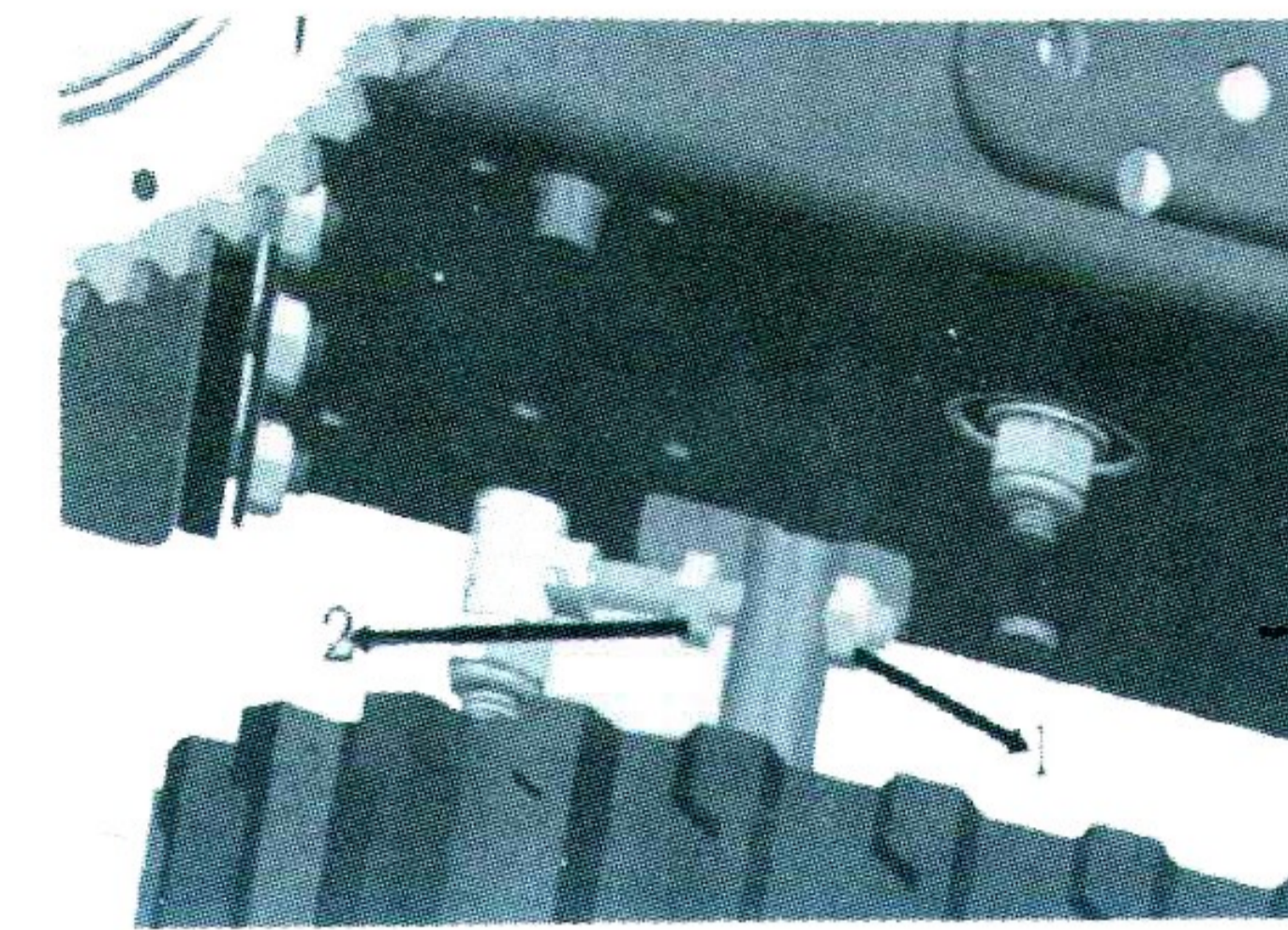
Two track models for 9.0, 11.0, 13.0HP

Picture 24

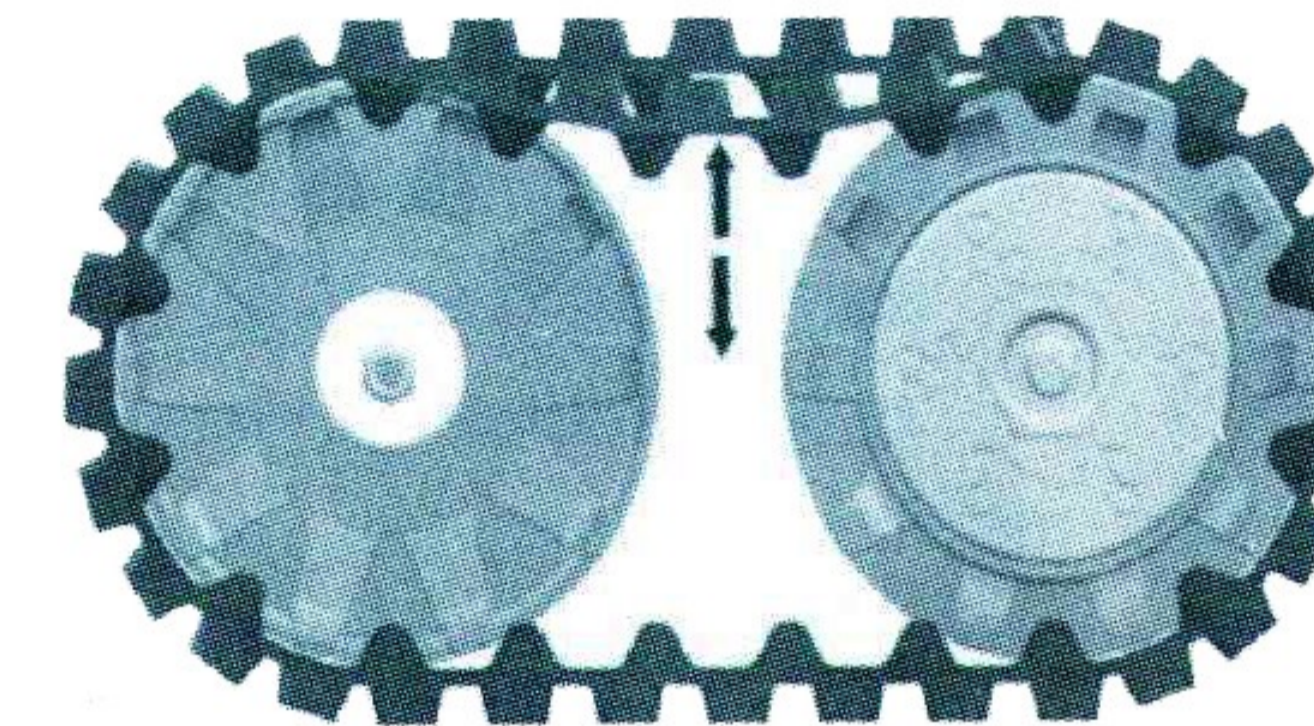


- Position I: Auger touch the ground for iced over snow.
- Position II: common snow
- Position III: For uneven path and walking.

Picture 24 (1)



(2)

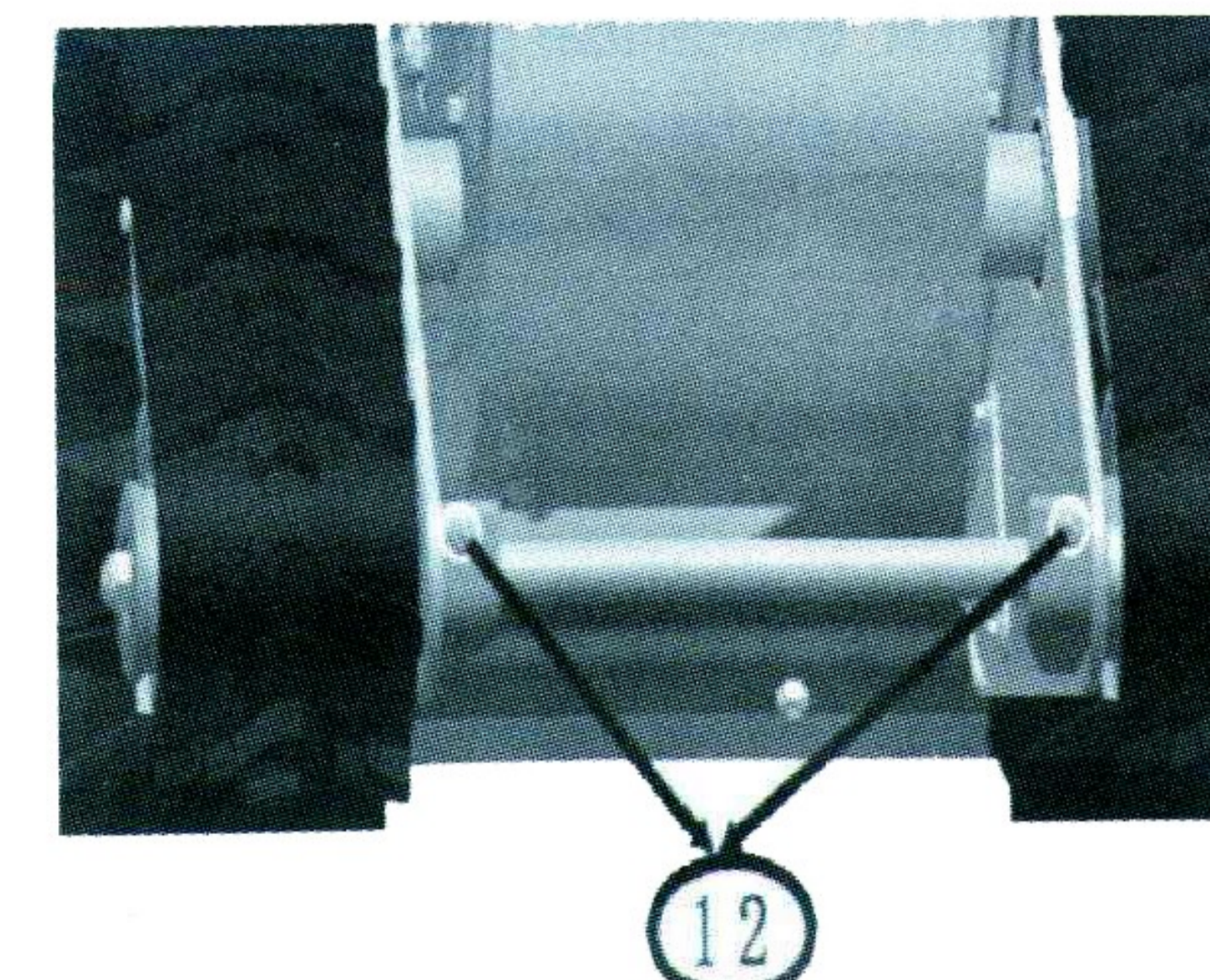


The caterpillar is correctly adjusted if it can be forced down 10-12 mm by hand. If bigger or smaller size, it must be adjusted:

- Rotate screw (1, 2) until the caterpillar has the correct tension:
 - to tighten, rotate in clockwise direction.
 - to slacken, rotate in anti-clockwise direction.

Adjusting and check for triangle track

Picture 25



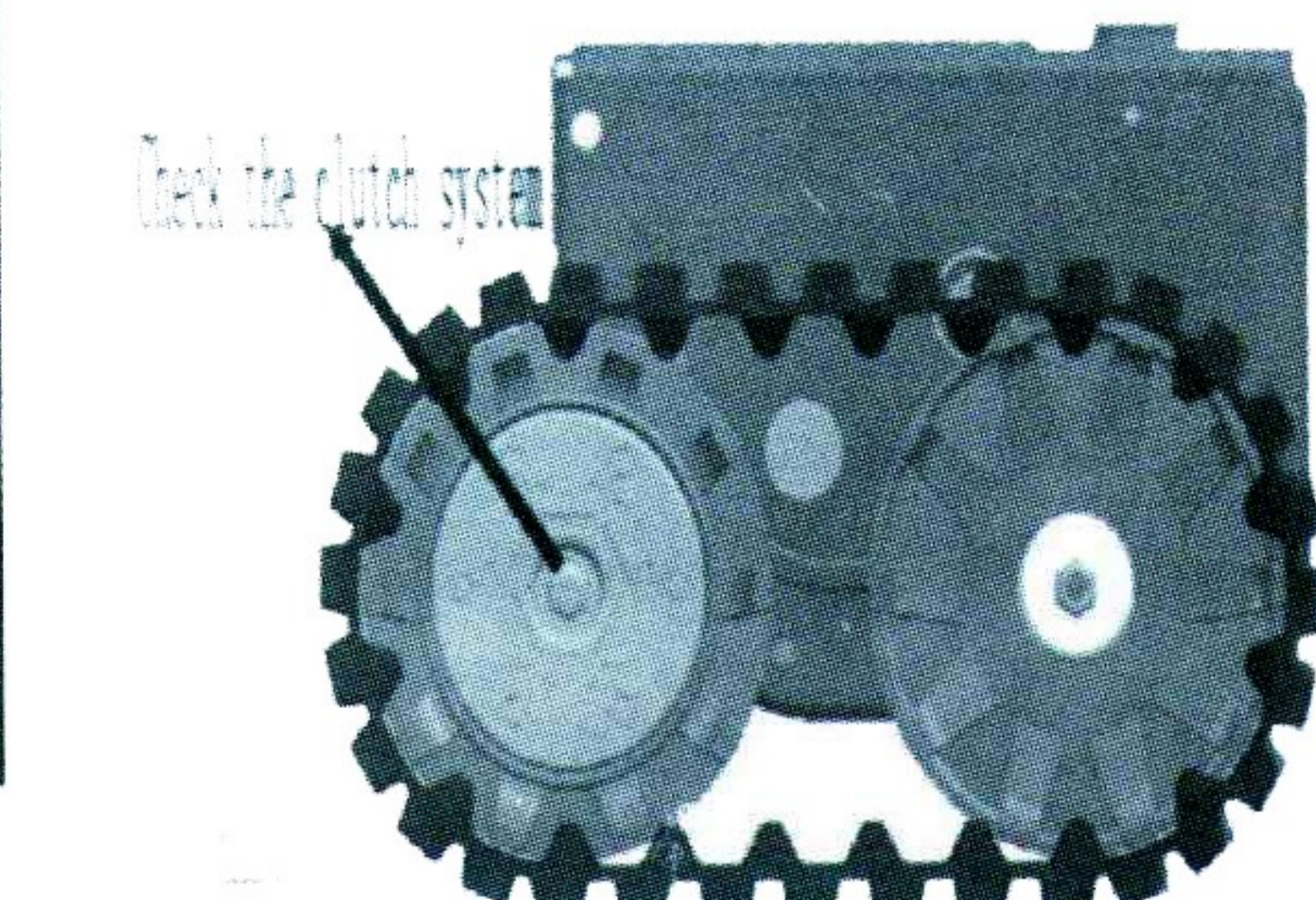
Replace the caterpillar

- Set machine on a secure and horizontal supports so that the caterpillar no longer touch the ground.
- Rotate nut (2) until the caterpillar track has the correct tension:
 - to tighten, rotate in clockwise direction.
 - to slacken, rotate in anti-clockwise direction.
- Replace caterpillar and adjust the nut (2) (see "adjust the caterpillar track")

This caterpillar model use the newest electromagnetic clutch system, please pay attention to the following:

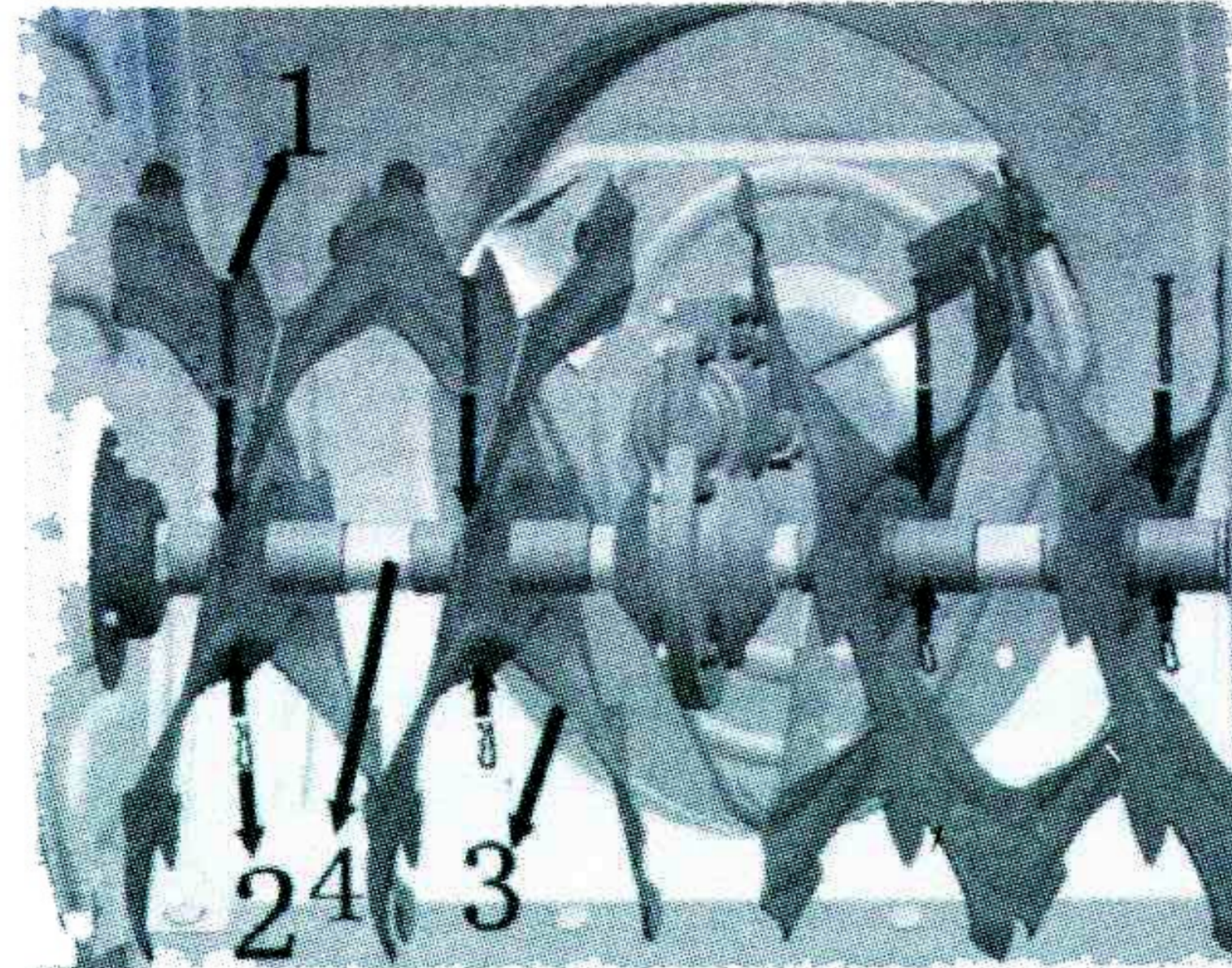
- Please check whether the cable is too slack when there is problem for walking.
- Check the guide bar whether in normal condition
- Check whether the cable is too slacken
- Check whether the wire is short circuit or damage
- Check the coil of the electromagnetic clutch whether in good condition
- Check the fuse.

Picture 26



Replace a shear bolt

Picture 27

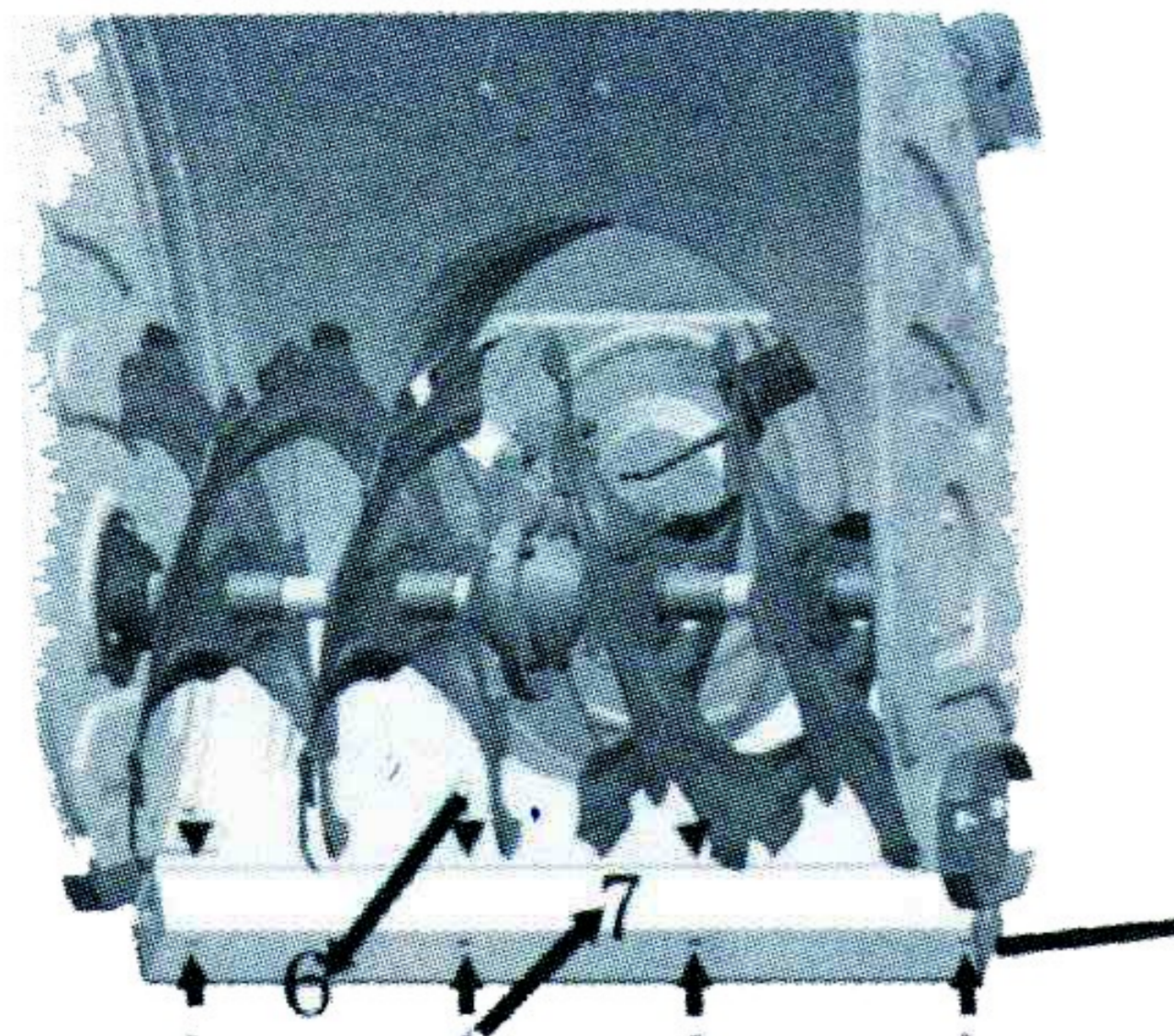


The worm (3) is fastened to the drive shaft (4) with shear bolt (1) and lock-nuts (2). The bolts will be broken (shear off) if the worm strikes solid extraneous objects, to avoid the whole machine broken. This bolt (1) and the nuts (2) may only be replaced with original spare parts.

- Remove the shear-off bolt and nut, clean thread and lubricate it
- Use a new shear bolt and lock-nut to replace the broken ones.

Replacing the clearing plate (For 5.5HP, 6.5HP, 9.0HP, 11.0HP and 13.0HP)

Picture 28



- Remove screw (6), washers (7) and

- nuts (8)
- Replace clearing plate (5)
- Screw new clearing plate to housing with screw, washer and nuts.

Preparing the machine for non-use



Danger of causing an explosion by fume igniting

Before you store this machine, empty the fuel tank, put the oil into a suitable container in a ventilated place (see "engine instructions").

When the machine will not be used for more than a month, e.g. after the winter:

- Clean the engine (see "adjust for engine").
- Clean machine.
- To protect from rusty, wipe over all mantel parts with an oily cloth or spray with spray lubricant.
- Park the machine in a clean, dry and closed place.

Warranty

The warranty term issued by our company and importer is valid in every country. We remedy faults to your machine free of charge within the scope of the warranty provided that the cause proves to be a material or manufacturing error. Should you need to call upon the warranty, please apply to the vendor of your machine or to the nearest dealer.

Maintenance

Maintenance schedule

Once in the season:

Have the machine checked over and

maintenance in a specialist workshop.

Each time before using the machine:

Check the oil level and top up as necessary.

Check all screw fittings for firm seating, tighten them if necessary.

Check the safety features.

Maintenance tasks	After use	10 hours	25 hours	50 hours	100 hours	End of season	As required
Clean throw-out chute, warm and warm casing	●						
Clean air filter		●					
Replace air filter ¹							●
Change oil ³				●			
Lubricate mobile and rotating parts						●	
Clean spark plug ¹			●				
Check tyre pressure, increase as required						●	
Clean air cooling system and exhaust ²						●	
Check coupling adjustment, readjust as required	●						
Have the carburetor setting checked							●
Inspect the clearing plate, replace worn-out clearing plate							●
Check skids replace worn-out skids in pairs							●
Check caterpillar track, readjust as required. Replace defective caterpillar track							●
Replace fuel filler cap							●
Have exhaust silencer replaced ²							●

1): See "Engine instructions"

2): Have this work carried out only by specialist workshop

3): First oil change after 5 hours

4): Oil change every 25 hours of heavy work

Troubleshooting

Risk of injury from starting the machine by mistake

Before doing any work on this machine

- turn off the engine
- Remove the ignition key and the spark-plug connector.\
- Wait until the engine has cooled down

Caution

Faults encountered when operating the machine sometimes have simple causes which you can remedy yourself. If you are in any doubt, or if you are expressly instructed to do so, seek the help of a specialist workshop.

Have repair work carried out only by a specialist workshop which will use original replacement parts.

Fault	Possible cause	Action take
Engine Dies not work	Fuel tank empty	Fill fuel tank
	Fuel has gone stale	Drain out fuel into a suitable container in the open air. Fill up tank with clean fresh fuel
	Engine is cold. Chock Lever is not set to "CLOSE"	Set the chock lever to "CLOSE"
	Throttle lever is not set to "SNOW"	Set throttle lever to "SLOW"
	Spark-plug connector not connected	Put spark-plug connector on the spark plug
	Air filter dirty	Clean air filter ¹⁾
	Spark-plug dirty or defective	Clean spark plug ¹⁾ . Have defective one replaced ²⁾ .
	Carburetor flooded	Set choke lever to "OFF" and start engine
Engine runs unevenly	Lever is not set to "CLOSE"	Set chock lever to "CLOSE"
	Spark-plug connector loosely connected	Connect spark-plug connect firmly
	Stale fuel, water or dirt in the fuel system	Drain off stale fuel into a suitable container in the open air ¹⁾ . Fill up tank with clean, fresh fuel
	Vent hole in fuel filler cap blocked	Clean fuel filler cap and vent hole
	Air filter dirty	Clean air filter ¹⁾

	Carburetor altered	Have carburetor reset ²⁾
Machine dies not work	Shear bolts broken off	Put in a new shear bolts (see "replacing a shear bolt")
	Worn or throw-out chute blocked	Stop engine and eliminate blockage
	Coupling cable for worm drive not correctly adjust	Adjust coupling cable (see "Adjust coupling for the worm drive" ²⁾)
Machine does not drive along	Coupling cable for drive system not adjusted correctly	Adjust coupling cable (see "Adjust coupling for the drive system")
	Friction-wheel runner torn	Have friction-wheel rubber replaced ²⁾
Excessive vibration	Loose parts or damaged worm	Stop the engine. Tighten loose bolts and nuts. Have damaged worm repaired ²⁾
Gear can only be changed with difficulty. (5.5/6.5/9.0/110)/13.0HP	Coupling cable for drive system not correctly adjust	Adjust coupling cable (see "Adjust coupling for the worm drive")
	Shift lever not correctly adjusted	Adjust shift lever (see "Adjusting the shift lever")
	Drive system iced up	Remove ice accumulation (See "Tightening the V-belt")

1): See "Engine instructions"

2): Have this work carried out only by specialist workshop.