

GASOLINE SWEEPER

ORIGINAL MANUAL

GASOLINE SWEEPER



HAZARD SYMBOLS AND MEAMINGS



WARNING: Hot Surface, Do not touch!



Read the user instruction



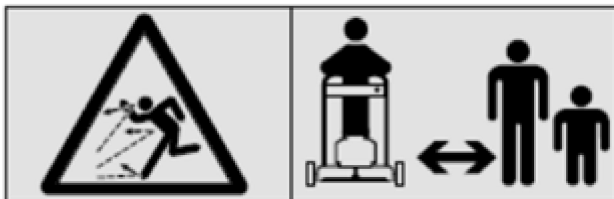
Wear eye protection



Wear ear protection



WARNING! Be aware of this, potential risk may injury your bodies



KEEP the bystander and children away

INTRODUCTION

Function of Sweeper

This sweeper is designed solely for the use in clean up, maintenance and similar **Operations**.

Use in any other way is considered contrary to the intended use. compliance with and strict adherence to operation, service and repair conditions, as specified by the manufacturer, are also essential elements of the intended use.

Terms used in Manual

Right-hand, left-hand, front and rear are determined from the operator's perspective facing forward in the normal operating position.

SAFETY STATEMENTS

DANGER

THIS STATEMENT IS USED WHERE SERIOUS INJURY OR DEATH WILL RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.

WARNING

THIS STATEMENT IS USED WHERE SERIOUS INJURY OR DEATH COULD RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.

CAUTION

THIS STATEMENT IS USED WHERE MINOR INJURY COULD RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.

NOTICE

THIS STATEMENT IS USED WHERE EQUIPMENT OR PROPERTY DAMAGE COULD RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.

THIS SYMBOL BY ITSELF OR USED WITH A SAFETY SIGNAL WORD THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY OR THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

GENERAL SAFETY PRECAUTIONS



WARNING

READ MANUAL PRIOR TO INSTALL

Improper installation, operation, or maintenance of this equipment could result in serious injury or death. Operators and maintenance personnel should read this manual as well as all manuals related to this equipment and the prime mover thoroughly before beginning installation, operation, or maintenance. Follow all Safety instructions in This manual and the prime Movers manual.



WARNING

READ AND UNDERSTAND ALL SAFETY STATEMENTS

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing or operating this equipment.



WARNING

KNOW YOUR EQUIPMENT

Know your equipment's capabilities, dimensions and operations before operating. Visually inspect your equipment before you start, and never operate equipment that is not in proper working order with all safety devices intact. Check all hardware to assure it is tight. Make certain that all locking pins, latches, and connection devices are properly installed and secured. Remove and replace any damaged, fatigued or excessively worn parts. Make certain all safety decals are in place and are legible. Keep decals clean, and replace them if they become worn and hard to read.



WARNING

PROTECT AGAINST FLYING DEBRIS

Always wear proper safety glasses, goggles or a face shield when driving pins in or out or when operation causes dust, flying debris, or any other hazardous material.



WARNING

LOWER OR SUPPORT RAISED EQUIPMENT

Do not work under raised booms without supporting them. Do not use support material made of concrete blocks, logs, buckets, barrels or any other material that could suddenly collapse or shift positions. Make sure support material is solid, not decayed, warped, twisted, or tapered. Lower booms to ground level or onto blocks. Lower booms and attachments to the ground before leaving the cab or operator's station.



WARNING

DO NOT USE YOUR HANDS! SEE ILLUSTRATION.

Wear safety glasses, protective clothing, and use a sound piece of cardboard or wood when searching for hydraulic leaks.

GENERAL SAFETY PRECAUTIONS



WARNING

DO NOT MODIFY MACHINE OR ATTACHMENTS

Modifications may weaken the integrity of the attachment and may impair the function, safety, life and performance of the attachment. When making repairs, use only the manufacturer's genuine parts, following authorized instructions. Other parts may be substandard in fit and quality. Never modify any RoPS (Roll over Protection System) equipment or device. Any modifications must be authorized in writing by the manufacturer.



WARNING

SAFELY MAINTAIN AND REPAIR EQUIPMENT

- Do not wear loose clothing, or any accessories that can catch in moving parts. If you have long hair, cover or secure it so that it does not become entangled in the equipment.
- Work on a level surface in a well-lit area.
- Use properly grounded electrical outlets and tools.
- Use the correct tool for the job at hand. Make sure they are in good condition for the task required.
- Wear the protective clothing equipment specified by the tool manufacturer.



WARNING

SAFELY OPERATE EQUIPMENT

Do not operate equipment until you are completely trained by a qualified operator in how to use the controls, know its capabilities, dimensions, and all safety requirements. See your prime movers manual for these instructions.

- Keep all step plates, grab bars, pedals, and controls free of dirt, grease, debris, and oil.
- Never allow anyone to be around the equipment when it is operating.
- Do not allow riders on the attachment or the prime mover.
- Do not operate the equipment from anywhere other than the correct operators position.
- Never leave equipment unattended with the engine running or with this attachment in a raise position.
- Do not alter or remove any safety feature from the prime mover or this attachment.
- Know your work site safety rules as well as traffic rules and flow. When in doubt on any safety issue, contact your supervisor or safety coordinator for an explanation.



WARNING

FALL HAZARD DO NOT OPERATE NEAR UNGUARDED EDGES.

- This sweeper is NOT intended for roof top use.
- When operating sweeper, adhere to all government rules, local laws and other professional guidelines for your sweeping application.

SAFETY SIGNS & LABELS



There are several specific signs on this sweeper. The exact location of the hazards and description of the hazards are reviewed.

Placement or replacement of Safety Signs

1. clean the area of application with nonflammable solvent, and then wash the same area with soap and water.
2. Allow the surface to fully dry.
3. Remove the backing from the safety sign, exposing the adhesive surface.
4. Apply the safety sign to the position shown in the diagram above and smooth out any bubbles.

Instructions

1. keep all safety signs clean and legible.
2. Replace all missing, illegible, or damaged safety sign
3. Replacement parts, for parts with safety signs attached, must also have safety signs attached.

ENGINE OPERATION

NOTICE: THE MOTOR IS DELIVERED WITHOUT OIL AND GASOLINE.

Oil Filling:

Place the motor in a horizontal position. Remove the plug and fill with oil right to the edge. (Figure 1)

Fuel

Use lowest available octane unleaded fuel. When filling, place the machine in a horizontal position. always replace old fuel. always stop the motor when fueling. Never fill up with fuel on a hot motor. Never use gasoline mixed with oil.

Operation - Start and Stop

Cold Motor

Activate the motor choke. Set the throttle control on full speed. (Figure 2)

first, pull the starting rope a couple of times, shortly, until it feels tight. Pull the starting rope slowly to the point where it feels tight, place your left hand on the motor in order to hold back, and pull the starting rope hard once. when the motor runs, deactivate the choke.

NOTICE: NEVER LET THE STARTING ROPE WIND AGAIN BY ITSELF.

Follow it all the way back with your hand. If the motor will not run in spite of several attempts this may be caused by the fact that there is too much fuel in the cylinder/carburetor, and that the spark plug has become moist. Remove the plug and wipe it off.

Stop the Motor:

Set the throttle control in position "Stop". Set the throttle lever to idle and let the motor run for 12-20 seconds before the lever is moved to stop. Never leave the sweeper without stopping the motor.

NOTICE: Do not turn off the motor by switching on the choke, as this may result in damage to the motor.

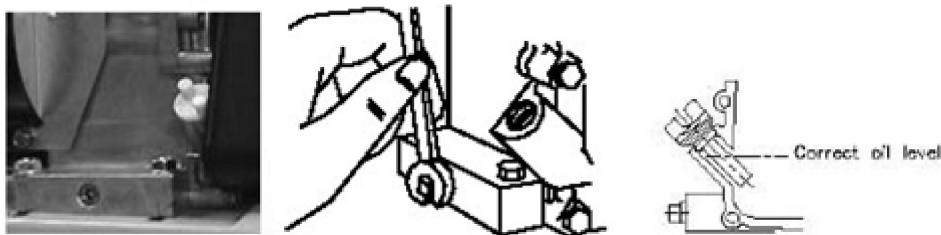


Figure 1



Figure 2

OPERATION



CAUTION

A SWEEPER IS A DEMANDING MACHINE.

Only fully trained operators or trainee operators under supervision of a fully trained person should use this machine.

Before operating sweeper:

- Operate sweeper controls in an off-road location.
- Be sure that you are in a safe area, away from traffic or other hazards.
- Check all hardware making sure it is tight.
- Replace any damaged or fatigued hardware with properly rated fasteners.
- Check tire pressure before sweeping.
- Remove from the sweeping area all property that could be damaged by flying debris.
- Be sure all persons not operating the sweeper are clear of the sweeper discharge area. protection; and a dust mask.
- Always wear proper apparel such as a long sleeved shirt buttoned at the cuffs; safety glasses goggles or a face shield; ear protection; and a dust mask .

While operating sweeper



DANGER

FALL HAZARD DO NOT OPERATE NEAR UNGUARDED EDGES.

- This sweeper is Not intended for roof top use.
- When operating sweeper, adhere to all government rules, local laws and other professional guidelines for your sweeping application.
- Minimize flying debris - use the slowest rotating speed that will do the job.
- Keep hands, feet, hair and other loose clothing away from all moving parts.
- Before leaving the operator's position for any reason stop engine.

NOTICE : AVOID TRANSMISSION DAMAGE. Do not shift while in motion.



WARNING

Leave the brush hood (shield) and all other shields and safety equipment in place when operating the sweeper.

- When sweeping on rough terrain, reduce speed to avoid "bouncing" the sweeper. Loss of control can result.
- Never sweep toward people, buildings, vehicles or other objects that can be damaged by flying debris.
- Only operate the controls while the engine is running.
- While you operate the sweeper slowly in an open area, check for proper operation of all controls and all protective devices. Note any repairs needed during operation of the sweeper. Report any needed repairs.

OPERATION

Before each use

Perform daily maintenance as indicated in Maintenance Schedule.

Run the sweeper at a low idle, check for proper brush rotation and drive engagement.



WARNING

AVOID SERIOUS INJURY.

Check for large objects that could harm the operator or others if thrown by the sweeper. Remove these items before operating.

During use

Directing Debris

- Avoid excessive downward pressure on the brush sections to prevent excessive wear. A two to four inch wide pattern is sufficient for most applications.
- Direct debris by angling the brush head in that direction.
- Observe wind direction. Sweeping with the wind makes sweeping more effective and helps keep debris off the operator.
- The terms swing and angle are used interchangeably.

Brush head Angling

1. Push the locking handle down.
2. Position the brush head at the desired angle.
3. Release the locking handle.

Sweeping

To sweep:

1. Swing the brush head assembly the direction that you want to direct debris. (See brush head Angling)
2. Start the engine at idle.
3. Engage the brush drive. (Left control lever)
4. Increase engine rpm to sweeping speed.
5. Engage the traction drive. (Right control lever)

NOTICE : AVOID SWEEPER DAMAGE. Reduce travel speed to avoid hitting immovable objects.

Operating Tips

NOTICE : AVOID SWEEPER DAMAGE. Do not ram into piles.

Brush, engine & Travel Speeds

vary brush, engine and travel speeds to match sweeping conditions.

Large areas

when sweeping a large area, such as a parking lot, make a path down the middle and sweep to both sides. this reduces the amount of debris that the sweeper must sweep to one side.

Snow

Fast brush speeds and slow travel speeds are needed to sweep effectively. for wet and/or deep snow, increase to almost full throttle. this helps keep snow from packing up inside the brush hood.

In deep snow you may need to make multiple passes to get down to a clean surface.

To keep snow from blowing back onto a swept area, always sweep so the wind is at your back.

OPERATION

Dirt & Gravel

To keep dust at a minimum, plan sweeping for days when it is overcast and humid or after it has rained. Also, sweep so the wind blows at your back.

Low brush speeds and moderate travel speeds work best for cleaning debris from hard surfaces. Brush speeds that are too fast tend to raise dust because of the aggressive sweeper action.

To sweep gravel, use just enough brush speed to “roll” the gravel, not throw it.

Heavy Debris

Travel slowly - 1-2 mph. Sweep a path less than the full width of the sweeper.



WARNING

SAFELY OPERATE EQUIPMENT

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- Keep all step plates, grab bars, pedals, and controls free of dirt, grease, debris, and oil.
- Never allow anyone to be around the equipment when it is operating.
- Do not allow riders on the attachment or the prime mover.
- Do not operate the equipment from anywhere other than the correct operators position.
- Never leave equipment unattended with the engine running or with this attachment in a raise position.
- Do not alter or remove any safety feature from the prime mover or this attachment.
- Know your work site safety rules as well as traffic rules and flow. When in doubt on any safety issue, contact your supervisor or safety coordinator for an explanation.

1. The sweeper moves forward by quickly pushing down the top right lever. (Figure 3a)
2. The bushes are activated by quickly pushing down the left lever. (Figure 3b)
3. The sweeper is equipped with an instant shutoff, when you release the levers, the brush and machine stop.

WARNING



IN AN EMERGENCY, RELEASE LEVERS AS QUICKLY AS POSSIBLE AND STOP THE ENGINE.

Height adjustment of Caster Wheels & Brushes

Once the brushes get worn it is necessary to adjust the height of the brushes, i.e. how close they are to the surface to sweep. This adjustment takes place by moving the plastic rings of the brush caster wheels.

Remove the caster wheels and remove one plastic ring from the bottom (Figure 4). Mount the wheel again (Figure 5). This lifts up the caster wheel and the brushes will come closer to the surface. Finally, mount the plastic ring, sleeve and locking ring (Figure 6).

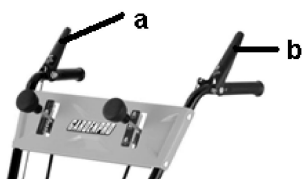


Figure 3



Figure 4



Figure 5



Figure 6

OPERATION

Swing the Brush

The brush can be swung 15° to either side. Press the steering knuckle arm for the brush, turn the brush and let go of the handle, so that the catch will fall correctly into place. (Figure 7)

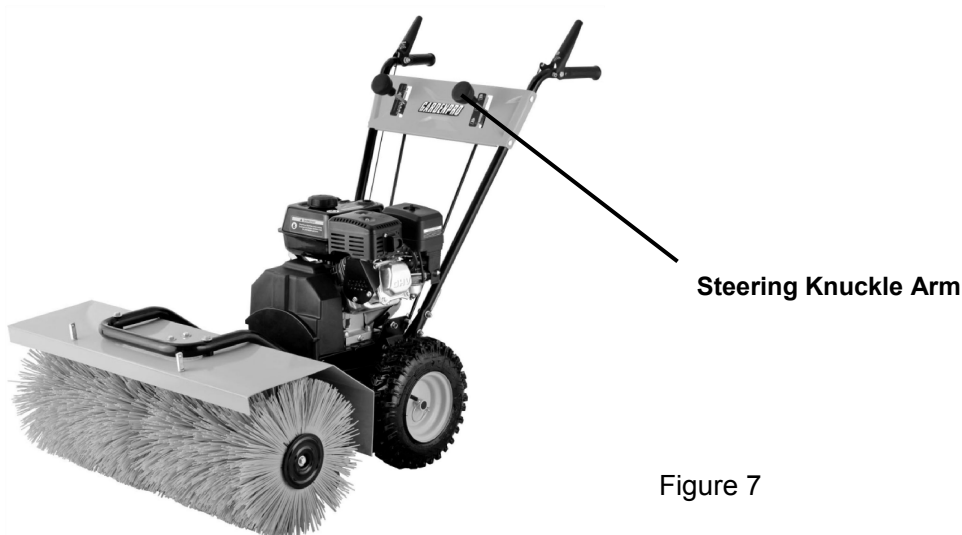
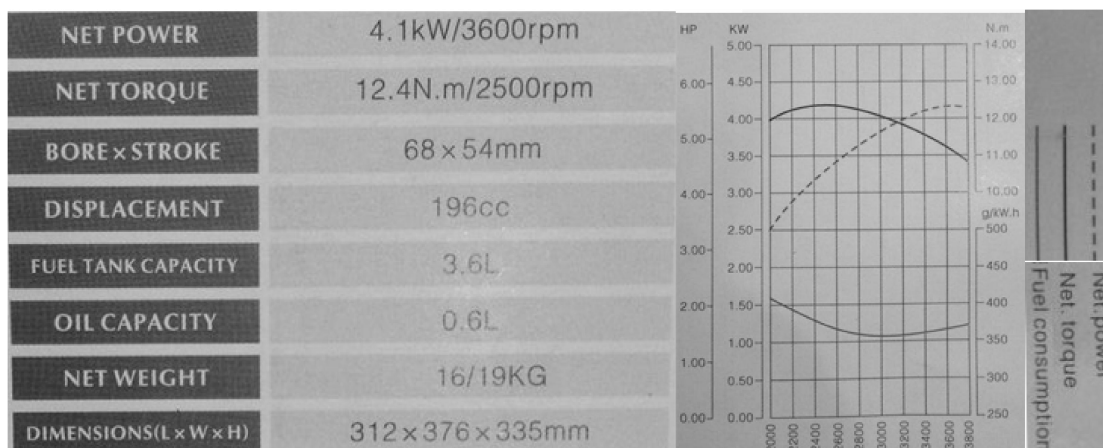


Figure 7

Find information about the engine in the Motor manual instruction. (Figure 8)



WARNING

EXPOSURE TO RESPIRABLE CRYSTALLINE SILICA DUST ALONG WITH OTHER HAZARDOUS DUSTS MAY CAUSE SERIOUS OR FATAL RESPIRATORY DISEASE.

It is recommended to use dust suppression, dust collection and If necessary personal protective equipment during the operation of any attachment that may cause high Levels of dust.

SERVICE & REPAIR - GENERAL

- Repair or adjust the sweeper in a safe area, away from traffic and other hazards.
- Before adjusting or servicing remove spark plug wire from spark plug.

STORAGE

NOTICE:

- Do not store the sweeper with weight on the brush. Weight will deform the bristles, destroying the sweeping effectiveness.
- Do not store polypropylene brushes in direct sunlight. The material can deteriorate and crumble before the bristles are worn out.
- Keep polypropylene brush material away from intense heat or flame.

TECHNICAL SPECIFICATIONS

MODEL	KCB24	KCB24-F	KCB25	KCB25-F
Cleaning width/cm	61	61	80	80
Fuel Type	Gasoline	Gasoline	Gasoline	Gasoline
Start-up mode	E+Manul	Manual	E+Manul	Manual
Packing/cm	98*65*63	98*65*63	98*85*63	98*85*63
NW	63KG	62KG	70KG	69KG
L _{WA}	103 dB			

TROUBLESHOOTING

The engine does not start	Ensure that the spark plug is not defective
	Ensure that the spark plug cap is fitted correctly
The engine runs irregularly	Ensure that the choke is deactivated
	Ensure that there are no impurities in the fuel
The brushes will not rotate	Check whether the belt coupling is adjusted correctly.
	Check whether the v-belt is defective
The machine will not run	Make sure that the belt coupling is adjusted correctly
The machine does not sweep effectively	Check whether the v-belt is defective
	Check whether the brush distance to the surface is set correctly

MAINTENANCE

MAINTENANCE SCHEDULE

PROCEDURES	BEFORE EACH USE	25 HOURS	100 HOURS	AFTER EACH USE
Hardware - Inspect & tighten	✓			
Engine & Air Filter - check & clean if necessary	✓			
Oil, engine - check level	✓			
Wash Unit - Remove Grease & Debris				✓

Maintenance

If you need to change the belts, please contact the distributor or local agent. Do not change them by yourself.



Residual risks

Even when the machine is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the power tool's construction and design:

1. Damage to lungs if an effective dust mask is not worn.
2. Damage to hearing if effective hearing protection is not worn.
3. Damages to health resulting from vibration emission if the power tool is being used over longer period of time or not adequately managed and properly maintained.

WARNING

This machine 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 physician and the medical implant manufacturer before operating this machine.