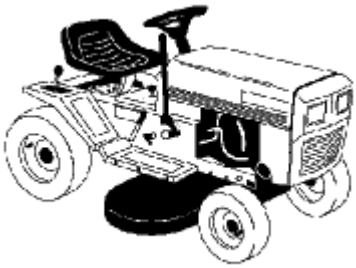
Landscaping – Garden Tractors – Fact Sheets



WHAT ARE SOME THINGS YOU SHOULD CONSIDER WHEN BUYING OR RENTING A TRACTOR?

Select a tractor that is suitable for the tasks and size of jobs that you will be undertaking. If you do many different kinds of tasks requiring a tractor, garden tractors have features, such as hydraulics and power take-off (PTO), and a number of possible attachments similar to those in full-size tractors. Garden tractors often come with a belly-mount rotary mower. Garden tractors are designed to be strong enough for use with plows, tillers, snow blowers, etc.

If the tractor is over 20 horsepower, be sure the tractor is equipped with a rollover protective structure (ROPS) and a seatbelt (ROPS, for example, are required in Ontario).



- If mowing lawns is the main task, then riding lawn tractors (less powerful than garden tractors) or smaller, rear-engine riding mowers may be more suitable.
- Look for safety features when purchasing new equipment. For example, some machines cannot be started if the blades are engaged or the mower is in gear. Some machines have weight/pressure sensitive systems that detect when the operator gets off the seat or machine and will shut off the moving blades.
- A good suspension system and extra padding will help absorb vibration from the machine if you will be operating the machine hours at a time.

What should you know before using a garden tractor?

- Read, understand, and follow instructions in the manufacturer’s operating manual.
- Be properly trained to safely operate a tractor.
- Know how to operate the equipment and use the attachments safely. Be familiar with the location and function of all the controls.
- Be familiar with the speed, ability to drive on slopes or rough ground, and the braking and steering characteristics of your tractor.
- Check the oil level and refuel the engine before starting work while the engine is cool. If refuelling is required before the job is completed, wait for the engine to cool if there is a likelihood that fuel can spill or splash on the hot engine.
- Make sure that shields, guards, and other safety devices (such as warning lights) are in place and working properly (for example, guards for power take off, mower input drivelines, drive belts, chains and gears).
- Replace or tighten all loose or damaged parts or guards. Keep the tractor in good working condition.
- Wear close-fitting clothing, long pants, non-slip footwear, hearing protection, and head protection suitable for the hazards that you may encounter. Tie back long hair and anything that may get tangled in moving or rotation parts.
- Check the area to be mowed. Clear the area of debris, and make sure that no people or pets can be hit by cuttings or items thrown when mowing.

What are some things you should do when operating a garden tractor?

- Make sure that the tractor is in neutral gear and that any attachment clutches are disengaged before starting the engine or motor.
- If the tractor is started inside a garage or other enclosure, it should be moved outside to prevent exposure to carbon monoxide that would build up inside.
- Perform a pre-operational check of the tractor before use. Make sure that the brakes work properly and that the gas throttle is in good working order.
- Always check behind you before you put the tractor in reverse. Look behind and downwards while backing up.
- Drive tractor up and down slopes rather than sideways for greater stability. Reduce speeds on slopes, sharp curves (when they cannot be avoided), and when on slippery, loose, or muddy surfaces.
- Add appropriate counterweights as recommended by the manufacturer if you are using attachments that are mounted on the front or back of the tractor.
- Before adjusting the machine or attachments, turn off machine, shift to neutral gear, set the brakes or take other precautions to prevent the equipment from moving, wait for all moving or rotating parts to stop, and disconnect spark plug wire, if accessible (or remove the ignition key).
- Turn off the machine and remove the key when the machine is left unattended. If attachments are attached, disengage the power take off (PTO) and lower attachments.
- Let engine idle a few minutes before shutting down.
- Have a qualified mechanic regularly service the tractor.
- Take rest and stretch brakes (such as 5 minutes per hour) to give your body a break from equipment vibration. Walk around to stretch your legs, and stretch your back and upper body.
- Make sure the seat and steering wheel are properly adjusted for your body. You should be able to reach and operate the pedals without moving your back

off the seat.

What should you avoid doing when using a garden tractor?

- Do not ride on the tractor’s hood or draw bar.
- Do not allow other people to ride on the tractor.
- Avoid sharp, fast turns, holes, ditches, embankments, etc. that may cause equipment to overturn.
- Do not park tractors where they can endanger the public.
- Do not tamper with or remove safety attachments, machine guards or safety labels. Use attachments that are designed specifically for the machine you are using and for the task you are doing.
- Do not clear or unclog the mower while the blades are moving.
- Do not drive across gravel or rocks when the blades are rotating.
- Do not leave a tractor unattended unless the power is off and the ignition key is removed.
- Do not drive with PTO running if it is not being used.

What are some safety rules for garden tractors fitted with front-end loaders?

Set-up:

- Read, understand, and follow instructions in the manufacturer’s operating manual and safety decals on the loader. Check what rear weights the equipment manufacturer recommends to be added when using a front-end loader.
- Know how to operate the equipment and use the attachments safely. Be familiar with the location and function of all the controls.
- Make sure that the hydraulic fluid is at the proper level.
- When checking for leaks in the hydraulic system, use a piece of paper or cardboard – never use your hands since oil from a pin-hole leak under high pressure can penetrate the skin. If this does happen, get immediate medical attention.
- Mark out turning areas when loading vehicles.

Operation:

- Travel with the bucket as close to the ground as possible to maintain equipment stability and give the operator an unobstructed view.
- Look out for holes, rocks or obstructions which may cause a roll-over or loss of control.
- Load the bucket evenly (i.e. weight should not be lop-sided) and do not load beyond the limits or rated capacity of the equipment. You can lose stability and steering control.
- If the bucket does not lift in response to the controls, back up and then try again. You may have to stop to check if the bucket is caught on something or is overloaded. Follow proper shut down procedures before getting off the tractor.
- Lower the bucket when not using the loader.
- Keep the heavy end of the loader pointing uphill – back down slopes slowly. Avoid driving forward when going downhill with a loaded bucket.
- Operate controls from the driver’s seat, not standing beside the tractor.
- Do not use the loader for tasks it is not manufactured or designed to do, such as be a lift for people, a fence post puller, or a work platform.
- Repairs on front-end loaders should be carried out by trained personnel

only.
- Block or mechanically secure the bucket and lift and pivot arms of the front-end loader and chock wheels of the tractor before commencing any repairs. Check the service or repair manual.
- Lower the bucket and set the parking brake before getting off the seat.

Overturns

A tractor has a high centre of gravity when compared with a car or pickup truck. This fact makes them more prone to tipping over. It can take less than one second for a tractor to flip over backwards once the front wheels have left the ground.

- Never try to cross a ditch – always drive around them. It is only safe to back a tractor out if the drive wheels get lodged in a ditch.
- Never put boards or logs in front of the drive wheels when stuck in the mud. Back your tractor out slowly. Using boards or logs can tip a tractor backwards.

How can I prevent overturns?

- Do not make short, quick, high-speed turns.
- Be aware that an attachment like a raised front loader increases the tractors high centre of gravity, making it easier to tip. A raised and full bucket increases the centre of gravity even more. Keep the loaded bucket as low as possible when turning or transporting.
- Lock brake pedals together before driving at high speed. Do not apply uneven brake pressure.
- Keep tractor under control at all times and under all conditions. Obstructions (e.g., rocks and stumps) or depressions (e.g., furrows and potholes) can cause a tractor to roll, especially if the machine is traveling too fast.
- Never let a tractor “bounce” – this motion causes loss of steering control.
- Pull heavy loads and equipment at safe speeds.
- Avoid quick stops – a heavy load could push the tractor into a skid, and possibly a rollover.
- Use engine “braking” when going downhill. Shift to a lower gear before starting downhill.
- Keep away from ditches and streams – the tractor’s weight could cause the bank to shear.
- Never hitch a towed load higher than the tractor drawbar. Hitching too high is a major cause of rearward tractor flips.
- Use front chassis weights if needed to counterbalance rear-mounted implements and heavy drawbar loads.
- Always start forward motion slowly. Gunning the engine and jerking your foot off the clutch is a fast way to flip a tractor.

Backing down a grade is risky. If brakes are applied, the tractor could rotate around the rear axle and tip over backward. The faster the speed and the steeper the slope, the greater the potential for flipping.

- To back down a steep grade, do it slowly in a low gear; avoid using the brakes. Whenever possible, back tractors up steep slopes, and come down forward.

What are some safety tips for garden tractors fitted with a rotary mower?

- Read, understand, and follow instructions in the manufacturer's operating manual.
- Be familiar with your tractor-mower clearances.
- Replace or tighten all loose or damaged parts, especially the blade. Keep the tractor in good working condition. If the blade is nicked or damaged it should be sharpened and balanced.
- Make sure the discharge chute is present and pointed downward.
- Before mowing, check the area and remove any debris, trash, fallen branches, rocks, etc. that could interfere with the operation of the mower or cause harm if hazardous objects are ejected at high-speeds from the mower, depending on the rpm and length of the blade.
- Ensure that bystanders do not remain in the area while you are mowing.
- Turn off machine, disconnect spark plug wire, if accessible (or remove the ignition key), shifting to neutral gear, set the brakes or take other precautions to prevent the equipment from moving, and wait for all moving or rotating parts to stop before unclogging the equipment, emptying grass-catching attachments (if used), or doing any other work on the machine.
- Stop the equipment and inspect for damage if the mower blade or other attachment hits a hard object. If damaged it should be repaired (and blades balanced, if necessary) or replaced before starting the equipment again.
- Use caution when working in the vicinity of schools or parks where children may be at play.

What are some safety tips for using rotary tillers?

- As with all other machinery and equipment, read, understand, and follow operating and safety instructions in the manufacturer's operating manual. Know where all the controls are, what they do, and how to stop the equipment quickly.
- Keep safety shields in place and maintain them in good condition, especially the PTO (power take off) shaft guard if the rotary tiller is a rear-mounted unit.
- If a walk-behind rotary tiller (either gasoline-fuelled or electrical-powered) is being used, follow the manufacturer's safety precautions for using such equipment.
- Check the area for obstructions, such as wires, chains, cables and solid objects, near ground level. They can quickly entangle rotating tines and cause extensive damage.
- Remove roots, stones, and other "underground" things that the tiller blades could catch on or send things flying through the air.
- Do not operate close to ditches, fences or patios. The tines can catch and throw particles or throw the operator off balance (if a walk-behind rotary tiller is being used).
- Disengage power to the tiller and shut off the motor before checking for damage if the tines hit some hard object or before trying to clear any obstruction.
- Keep other people clear of the area while the rotary tiller is being operated.

What are some safety tips when using bulldozer or snow blades?

- Avoid striking obstructions with tractor. You could lose control and be

thrown from the seat. Pipes, curbs, roots and other obstructions will stop a garden tractor.

- Operate tractor at a moderate speed so that you can stop quickly.
- Lower the blade when the machine is parked.

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