

# Chainsaw use, maintenance & safety

**Editor's note:** This information was supplied by Husqvarna.

**T**HE OLD ADAGE, "The right tool for the right job" is vital when choosing a chainsaw. It is important to consider how often the saw will be used and what it will be used for. Look for design features that promote good balance and ergonomics, low vibration and high power-to-weight ratio. Operating the right saw will help reduce fatigue and the risk of injury that comes with it while increasing productivity. And when in doubt, ask a professional user for a recommendation based on the job at hand.

Regardless of application, the most overlooked aspect of chain saw operation is protective equipment (PPE). A properly outfitted operator wears protective chaps or pants, eye and ear protection, appropriate footwear, work gloves, and a helmet with visor. The proper protective equipment cannot eliminate the risk of injury completely but it can reduce the severity of an injury should an accident occur.

Leg protection comes in various types of chainsaw protective pants and chaps which contain material designed to reduce the risk or severity of an injury and give the operator extra reaction time when contact is made by a moving chain. They should be worn snug and overlap the top of the boot by 2 inches.

Head protection is essential since more injuries occur to an operator being struck by overhead limbs, branches or the tree itself than being cut by the chainsaw. The helmet should allow the user to look directly overhead and also bend over and touch toes without the helmet moving.

Eye protection should be panoramic with minimal field of view distortion and include UV protection. There are inexpensive anti-fog products available if that becomes an issue during the hot summer months.

Hearing protection reduces harmful decibel levels while maintaining communication abilities.

Footwear and hand protection should be appropriate to the known job hazards. Chainsaw protective gloves not only provide protection against cuts and scrapes but also oil and fuel.

Before pulling the cord, it is important that users conduct a visual inspection of the saw looking for any damage or leaks. Here are some key areas that need to be addressed:

**External**—Look for cracks, leaks, loose hardware and modifications to the saw. Check the chain tension so that it does not sag from the underside of the bar but, can still be rotated by a gloved hand. Make sure the muffler is securely attached and check for a broken or worn starter cord.

**Fluids**—Fill the gas tank with fresh correctly mixed fuel and the oil reservoir with chain oil. Fuel with an ethanol rating higher than E-10 should not be used.

**Air**—Check and clean the air filter regularly by blowing lightly inside to outside, brushing or tapping lightly, or soaking in water and mild detergent, rinsing and letting it dry for 24 hours.

**Cooling system**—Blow or brush the flywheel fins, cylinder head fins and air intake on the starter cover.

**Safety features**—Check that the chain brake, throttle lock control and stop switch are working and free of damage. Make sure the chain catcher is in place and the anti vibration sys-

tem is working properly. Safety features reduce the risk of accidents, but they must be fully operational to work.

**Bar, chain, sprockets**—Make sure the chain's cutting teeth are properly sharpened and depth gauge setting is correct. Inspect for visible cracks and wear in rivets and links. Remove the bar and check for a flat top rail. File burred side rail edges of the bar which can create drag while cutting. Clean out the bar groove and the chain oil hole that allows movement of oil from the saw to the bar groove. Rotate the bar regularly for equal wear. Check that the bar tip sprocket turns freely and that the teeth are rounded and not pointed. Check the wear on the chain drive sprocket and replace it when replacing the chain.

Preventative maintenance will help ensure the chainsaw is in top operating condition and will help ensure features designed to minimize exposure to potential hazards continue to work properly and increase operator safety.

When using the chainsaw, understanding the three reactive forces of a chain saw; push, pull and kickback will help prevent accidents. Never cut with the upper half of the tip of the bar. Kickback occurs when the tip of the bar comes in contact with an object or gets pinched during operation, causing the bar to "kick" up and back towards the operator and result in a loss of control and possible injury.

The common thread in pre-operation planning for chainsaw safety is that it is preventative in focus and emergency preparation is no different. It is imperative to know the answer to the question "what needs to be done if an emergency occurs" and develop a plan for specific situations. This will help identify potential hazards beforehand and create an organized response if an emergency occurs. First-aid training, a first-aid kit on-site, cell phone or mobile communication programmed to the nearest emergency care facility, directions and distance to that facility and communication with someone who knows where the worksite is, what type of job is taking place and how long the crew will be there are a few basic components to a good emergency plan. No matter what, never work alone. ■



## Advantage 3050 topdresser

The Advantage 3050 Topdresser by TurfTime Equipment spreads wet or dry materials in less time and with less soil compaction. The even 50 ft. wide spread pattern allows topdressing with fewer passes, reducing repeated impact of both the topdresser and the tractor. Four wide Galaxy turf tires give the Advantage 3050 the lightest footprint of any topdresser of its size. Operators will appreciate the 8 ft. hopper that holds 5 yards level or 6.5 yards heaped and eases spill-free loading with bucket or super sack. The Advantage 3050 has a wide belt and the largest spinners in the industry allowing higher spread rate than the competition.

**TurfTime Equipment, LLC**