## ETHANOL DAMAGE TO SMALL ENGINES

Ethanol – an alcohol-based fuel made by fermenting and distilling plants that have been broken down into simple sugars – burns cleaner and releases less toxins into the environment. However, many questions are arising regarding what effects a higher level of ethanol will have on small-engine equipment.

## ALL GASOLINE SOLD LOCALLY HAS A MINIMUM 10% ETHANOL

Ethanol-based fuels can cause corrosion by attracting moisture from the air. Ethanol is also a solvent, which can loosen debris and deposits that have built up in a fuel tank over time, resulting in clogged fuel systems. As a solvent, ethanol has been linked to deterioration of plastic and rubber parts. This can lead to hard starting, rough running and even stalling of equipment. Ethanol causes 'geling', which can look like petroleum jelly, in your fuel system.

Ethanol blended gasoline causes engines to run leaner and hotter – which impacts small engine performance. It can shorten engine life and cause equipment to be prone to fuel leaks. Ethanol does eat away at rubber components which will impact fuel lines and critical carburetor components. Ethanol absorbs water and makes fuel unstable and destructive to engines when seasonal equipment is stored for months between usage seasons. Ethanol can also create pitting in engines and create valve damage.

## **SOLUTIONS**

When purchasing gasoline for your equipment add an ethanol treatment to the gasoline container.

Consider a higher octane purchase for your small engine equipment. Use your equipment regularly or run the fuel out of the engine before storing your yard maintenance equipment.

Keep your equipment covered or protected against rainfall.