

March 17, 2016

Robert Niblock
Chairman, President, CEO Lowe's Companies
1000 Lowe's Boulevard
Mooresville, NC 28117

Dear Mr. Niblock,

On behalf of the U.S. ethanol industry and the nearly 400,000 workers whose employment is dependent upon the success of renewable fuels, I am writing to seek your assistance in addressing a very serious issue we see with a new campaign to scare consumers away from the lawful and safe use of ethanol blended gasoline. Over the past several weeks, I have heard from numerous member companies and concerned citizens that several Midwestern Lowe's stores have been posting a sign warning consumers not to use ethanol in their small engines (see attached photo). The notion that ethanol cannot be used in these engines is without factual foundation and serves to discourage consumers from using these fuels, not just in small engines, but in their automobile as well.

Most of the statements found on the sign, titled, "Ditch the Ethanol," are simply incorrect and are contrary to the very guidance found in the owner's manuals on the shelves of your own stores. Below is a point by point rebuttal of the claims made on these signs, which I hope will encourage Lowe's to remove these signs in your stores to avoid further consumer confusion on what fuels are appropriate for the small equipment you sell at your stores.

1. Statement #1: Ethanol burns hotter and wears out your small engine faster.
 - a. Every small engine that you offer at Lowe's was designed and engineered to run on ethanol blends up to 10% ethanol. If you read any small engine owner's manual found at Lowe's, you will see this fact, and that all warranties cover the use of ethanol blends up to 10% ethanol. If this sign was intended for higher blends of ethanol, it should be clarified, and also should be noted that any blend of ethanol in small engine applications would be illegal. This would include E15 and E85. All blends above 10% are clearly labeled at the pump to ensure consumers know that they are not purchasing E10 (or 10% ethanol).
 - b. Ethanol is an alcohol and burns cooler than gasoline. Here is a post from the U.S. Department of Energy on the subject: *Ethanol helps keep engines clean, too. It burns more completely and at a slightly cooler temperature than gasoline. This means longer spark plug life and fewer combustion deposits -*
http://www1.eere.energy.gov/vehiclesandfuels/pdfs/basics/jtb_ethanol.pdf.

- c. Ethanol blended gasoline does not wear out your engine faster, or the manufacturers could not offer warranty to cover today's fuel. I have personally used E10 in all of my small engines for more than two decades, and have yet to have an issue. This statement makes it seem like Lowe's has some unique insight and data on engine wear that the own manufacturers that make the engines do not. We highly doubt that is accurate.
- 2. Statement #2: Most pump gas contains 10% or more ethanol.
 - a. It is true that most pump gas contains ethanol, but 10% ethanol or less, otherwise known as E10 (or fuel approved for all small engine use). Roughly 96% of all unleaded sold today contains 10% ethanol.
 - b. There are only ~180 stations that sell E15 and ~3,400 stations that sell E85, both of which are not approved for small engines. But, these two higher blends are definitely not commonplace in the 140,000 retail fuel stations.
- 3. Statement #3: Stale gas older than 30 days can corrode your engine.
 - a. If this is addressing ethanol blends only, we disagree. This is true of all gasoline, regardless of ethanol content. Here is a statement from your popular Remington RM2510 Wrangler String Trimmer owner's manual: *ALWAYS use fresh fuel (less than 30 days old)*. Note that it doesn't differentiate between ethanol-free or ethanol-blended fuels.
<http://cdn.remingtonpowertools.com/Content/manuals/stringtrimmers/RM2510-769-10118-00.pdf>
 - b. The owner's manuals of small engines state that if you are not going to use the fuel in your small engine's fuel tank, you should drain the tank or stabilize the fuel. This statement is made REGARDLESS of ethanol content. In fact, they typically say the exact same thing if you are using E0 (or gasoline without ethanol). Here is an excerpt from Troy-Bilt TB240, which is sold at Lowe's: *Engines stored between 30 and 90 days need to be treated with a gasoline stabilizer such as STA-BIL to prevent deterioration and gum from forming in the fuel system or on essential carburetor parts*. Again, note that this statement said nothing about ethanol content. (http://www.troybilt.com/wcsstore/TroyBiltUS-CAS/Attachment/ownersManuals/walkBehind/769-10198_TB230_TB240_TB270ES_TB280ES.pdf)
 - c. Proper storage of either fuel is critical in the shelf life of E0 or E10. If air is allowed to hit either fuel, they will begin to deteriorate quickly. Here is an excerpt from AutoBlog and Chevron: *One characteristic of gas is volatility, a term used to describe how easily and under what conditions the gas vaporizes so it can be efficiently burned in your engine. The most highly volatile components in gasoline also tend to evaporate over time. As they do, the remaining fuel's volatility and ability to combust properly degrades. The less volatile the fuel, the less effectively it burns in your engine. The result is diminished engine performance. Your engine may still start and run, but it probably won't run as well.*
(<http://www.autoblog.com/2008/03/31/does-gas-go-bad/>)

- d. It should also be mentioned that the more serious problem associated with gasoline is oxidation, which is not an ethanol-related issue. This is from CNN: *Hydrocarbons in the gas react with oxygen to produce new compounds that eventually change the chemical composition of the fuel. This leads to gum and varnish deposits in the fuel system. These deposits and impurities can clog up gas lines and filters, as well the small orifices in a carburetor and the even smaller orifices in a fuel injector. Removing these deposits can be expensive and your vehicle may not run at all or run very poorly until they are removed.* Note that they are concerned with the hydrocarbons reaction, and again regardless of if ethanol is present.
(<http://www.cnn.com/2008/LIVING/wayoflife/04/09/aa.bad.gas/>)
- 4. Statement #4: Fuel stabilizers can reduce the harmful effects of ethanol blends.
 - a. Fuel stabilizers increase the shelf life of the fuel by reducing what I have already discussed. Beyond that, there is nothing to gain from using stabilizers in E10 over E0.
 - b. Many fuel stabilizers make claims that they cannot support. Unfortunately there is no regulatory oversight on these products, and consumers should make purchasing decisions on careful research.
- 5. Statement #5: Pure and pre-mixed fuel is your best bet for smooth running lawn equipment.
 - a. I realize that Lowe's sells Tru-Fuel, a non-ethanol, pre-stabilized fuel, at their stores, but this statement is nothing more than a commercial.
 - b. The cost of this fuel on a gallon basis in Olathe, Kansas, for example, is \$26.04 (cost from quart containers plus federal, state and local sales tax) compared to \$1.85/gallon for E10 at a local fuel station. Some of your small engine equipment sells for under \$100, some for under \$70. Do you expect consumers to purchase fuel that just three gallons will cost more than their piece of equipment? Especially when they read their own owner's manual and it says it is not necessary.
- 6. Statement #6: Vent-free gas cans reduce moisture buildup, which is good for your small engines.
 - a. Here is something we can agree on! However, it must be pointed out yet again that this is just as true with E0 as E10, or any other ethanol blend.
 - b. It is also important to reiterate that the components that evaporate in gasoline are those typically providing octane. If a vented fuel can is used for E0, octane will reduce with time making the gasoline virtually worthless for any application.
- 7. Statement #7: Always drain your equipment's fuel before storing for long periods.
 - a. Why is Lowe's encouraging consumers to waste fuel? As previously stated, all owner's manuals endorse fuel being stabilized.
 - b. If you are following your own advice, why would you drain fuel that costs \$26.04/gallon when the manufacturers of the small engine equipment says it is not necessary?

Mr. Niblock, the U.S. ethanol industry supports 85,967 direct jobs, and 271,440 indirect jobs. The industry has over 200 production facilities in 29 states with thousands of investors nationwide, not just in the Midwest. Ethanol has reinvigorated rural economies, enhanced U.S. energy security, reduced pollution in our nation's cities, and is the only liquid transportation fuel reducing greenhouse gas emissions and addressing global climate change. Ten-percent ethanol blended fuel is both safe and beneficial when used in small engines. There is NO reason for Lowes to be discouraging its use.

I am asking respectfully that Lowe's work with us to remove this misleading signage at your stores immediately. If that is not possible, and this signage is to remain the position of Lowe's going forward, we will be forced to entertain any and all legal means available to us to prevent the continued expression of false and misleading information and seek any and all available remedies and damages arising from your reckless and egregious conduct.

Regards,

A handwritten signature in black ink, appearing to read "Bob Dinneen", with a stylized flourish at the end.

Bob Dinneen
President and CEO