"THE BIGGEST ENEMY TO STAYING UP AND





HEAVY-DUTY AIR CLEANERS FOR KOHLER COMMAND® AND COMMAND PRO® 18-28 HP ENGINES

RUNNING IS DIRT ...

"WHEN YOU'RE MOWING, THE DRIVE WHEELS AND THE MOWER ACTION CHURN UP GRASS AND DEBRIS," SAYS GARRY BUSBOOM, Director of Engineering, Exmark Manufacturing. "Is it a dust storm? No, most turf pros probably don't even notice it. But over the course of days, weeks, months, or a whole season, all it takes is tiny bits and pieces of dust and dirt to threaten the life of the engine. So you don't have to be mowing in a dry environment to need a heavy-duty, two-stage air cleaner like those Kohler and Exmark partnered to adopt and are now an industry standard."

Turf pros know that an air filter is already in place to protect an engine from dust and dirt. But there's a little catch: the air that flows through a *standard* air filter and carburetor comes from the cooling air intake that's located fairly low on a mower — close to that churn of dust and dirt created by the mower. *Heavy-duty* air cleaners draw from the much cleaner air above the engine plus, they're much more effective at filtering out the dust that can really damage an engine over time.

"If I were in the lawn maintenance business, I wouldn't think of a heavy-duty air cleaner as an option," says Busboom. "I'd immediately put one on every Exmark I was running. These cyclonic filters have become an industry standard for a very good reason: they're incredibly more effective than standard air filters, and they easily pay for themselves by keeping turf pros up and running longer."

HOW DO KOHLER TWO-STAGE AIR CLEANERS WORK?

First, a cyclonic, centrifugal action swirls dirt and ejects it from the cleaner before it even gets to the filter. Then, air is pulled through a main filter that traps any dust larger than 5 microns.

The Exmark Lazer 7 commercial mower features a KOHLER® 20 HP, 23 HP, or 27 HP engine.

A BIGGER AIR FILTER IS BETTER says Garry Busboom, Exmark Manufacturing

"That main filter may be housed in a compact canister," says Dan Luhman, Senior Account Executive, Kohler Engines, "but its effective filtering area is actually almost 1400 square-inches — 146% larger than a standard filter. That's about the size of a window in a typical residential home! Then, there's also an 8-micron safety filter to ensure that no debris falls into the carburetor when the primary filter is removed."

Busboom also points out that Exmark put the KOHLER heavy-duty air cleaner on KOHLER EFI engines that set the pace for the industry. "We wanted to protect the engine, of course," says Busboom, "but there was a side benefit as well: the two-stage air cleaner operates with so much less air restriction than a standard filter that an engine can really breathe free. It actually gave about a half horsepower of additional power out of the same engine. When you start thinking about that over the life of an engine, it adds up."

And still another benefit of a KOHLER heavy-duty air cleaner is perhaps the simplest: turf pros don't need to replace — or even check — air cleaners as often as standard air filters. This is a big time saver, plus fewer filter changes reduce the potential for misassembly or for failure to get a proper seal, giving dirt a path into the engine.

"SOME LAWN CARE PROS TRY TO CLEAN A STANDARD AIR FILTER EVERY WEEK - OR EVEN EVERY DAY,"

adds Busboom. "But this can actually be counterproductive because there is a lot of misunderstanding about what can or can't be done to clean a filter. Improper cleaning can create pin holes - or tears that can open the door to dirt ingestion by the engine."

That can lead to what Busboom refers to as a "double whammy": the need to pay for the repair or replacement of an engine, plus the loss of income during repairs or replacement. When a machine is down, turf pros may even have to absorb the cost of renting another machine or paying employees overtime to keep up with work.

As Luhman puts it, "The real pros aim for one thing: productivity. So they never run without a heavy-duty KOHLER filter. It's really that simple."



Demand the Power. Seek the Innovation. KohlerEngines.com 1-800-544-2444 Ext. FW9

"FILTER MINDER" Assurance





Direct-mount: Filter Minder attaches to air cleaner.

Remote-mount: Filter Minder includes 10' hose.

WANT TO KNOW WHEN TO CHANGE AN AIR FILTER?

The KOHLER Filter Minder detects an air inlet restriction — a clear indication of an air cleaner that has done its job, but now needs replacement.

"Some lawn care professionals check their air cleaners regularly, but you can't just look at a filter to determine whether it needs to be replaced. And a log of the hours on the filter doesn't work either because it doesn't take working conditions into account," says Busboom. "Because the Filter Minder checks for a vacuum that would be created by a restricted air flow, it takes the guesswork out of the process."

The Filter Minder is an optional accessory that often saves money because the user doesn't needlessly replace an air cleaner that's still operating efficiently. Busboom tells of turf pros reporting that they've never changed a filter for a whole season because the Filter Minder continually confirmed that no air flow restriction existed - a welcome assurance that the cleaner is protecting the engine from dirt and dust.