Intake System Check.

Checking a few systems before you start the engine is the mark of a professional that takes care of their equipment. Most of us would at least claim to check the oil and coolant. A lot of the systems we check are monitored by gauges or warning lights these days.

One system that has had very little in the way of technological advancement in recent history is the intake system. There are gauges and sensors out there that will monitor the pressure differential between the outside air and post-filter intake, but they are typically subjective and relatively inaccurate. Not to mention that they won't tell you anything other than it might be time to change the air filter. That gauge will tell you everything is fine forever if there's a leak.

A large percentage of the oil consumption warranty claims submitted are due to contaminated intake air. These "dusted" engines are easily identifiable by the excessive wear on the cylinder liners and piston rings. Unfortunately, by the time you notice an oil consumption problem, it's too late.

We all know the importance of getting adequate clean air to the engine, but short of changing the filter regularly, what can we do to ensure it?

Adding a quick visual inspection of the intake system to your pre-start-up routine is a good start. Check the hose and/or tubing between the air filter housing and the intake manifold. Make sure that all of the connections and lines are secure and free from wear or damage. Most air filter housings have clamps or wing nuts to hold them shut and maintain a seal on the filter element – Make sure that these are all in place and tightened appropriately.

Regular air filter maintenance will help as well. A new, free flowing air filter will put less of a strain on the intake connections, making a leak less likely to occur. If you find yourself thankful that you have a cab on your equipment (or wishing you had one!) because of the cloud of dust that you're driving through, you might consider taking a close look at the air filter after you've finished up.

These two points will keep your engine breathing easy for many years. For concerns about your specific make and model equipment see the manufacturers operation and maintenance manual.