



THE OPERATOR'S 15-MINUTE ENGINE CHECK

A JOBSITE GUIDE TO MAXIMIZING UPTIME

On a busy construction site, you don't have time for downtime. A downed piece of equipment like a power buggy, trowel or pressure washer can bring the whole job to a halt.

The #1 cause of preventable issues is skipped maintenance.

Vanguard® engines are purpose-built for the dusty, high-utilization environments you work in. With clear, easy-access service points, the engine design helps you quickly get maintenance done right and prevent costly downtime. This guide provides a 15-minute daily check to maximize the productivity of your engine.

MAINTENANCE SHOULDN'T SLOW YOU DOWN

Our engines are designed for the realities of the jobsite, with intuitive features that help you get back to work.

- > **Look for Yellow:** All critical maintenance points (oil fill, dipstick, filters) are bright yellow. No guessing, no searching.
- > **Dipstick on Every Engine:** We offer a dipstick on every engine for a simple, reliable way to check the most critical fluid.



SAFETY FIRST: BEFORE YOU BEGIN

ALWAYS FOLLOW THESE STEPS BEFORE PERFORMING ANY SERVICE.



COOL DOWN

Allow the engine to cool down completely.



DISCONNECT

Disconnect the battery.



SECURE

Ensure that the equipment is secure and will not move.



THE 15-MINUTE JOBSITE CHECK

Perform this check daily to combat the dust, dirt and heavy use of a construction environment.



STEP 1 CHECK YOUR OIL

This is the single most important check. Lack of proper lubrication is the #1 cause of engine failure.

- Pull the dipstick; wipe it clean.
- Re-insert fully, then pull it out to check the level.
- If low, add oil using the yellow oil fill cap.

STEP 2 CHECK YOUR AIR FILTER

In dusty conditions, this is your engine's primary defender.

- Check the air cleaner cover for any damage or improper installation.
- Open the cover and inspect the filter.
- Clean or replace it based on your owner's manual (or more often in extreme dust).

STEP 3 CLEAN COOLING FINS

Overheating is a fast track to downtime. Dust, grass and concrete slurry can choke an engine.

- Use an air hose or brush to clear all debris from the cooling fins and the blower housing.

STEP 4 INSPECT FUEL SYSTEM

Visually check the fuel lines and fuel filter for any leaks, cracks or damage.

STEP 5 INSPECT SPARK PLUG

Make a quick visual check to ensure that the connection is secure, clean and undamaged.

KNOW YOUR FULL SERVICE INTERVALS

Your 15-minute check is your first line of prevention. To ensure long-term reliability and warranty protection, follow this full maintenance schedule — and always refer to your operator's manual for your engine's specific maintenance information.



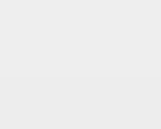
Every 8 Hours or Daily:

- Check engine oil level
- Clean area around muffler and controls



Every 100 Hours:

- Replace spark plugs
- Change engine oil
- Replace oil filter (if equipped)
- Service air filter*
- Service pre-cleaner (if equipped)*
- Service exhaust system



Every 250 Hours:

- Check valve clearance and adjust if necessary



Every 400 Hours or Annually:

- Replace air filter
- Replace fuel filter
- Service cooling system*
- Clean oil cooler fins*

*In dusty conditions or when airborne debris is present, clean more often.

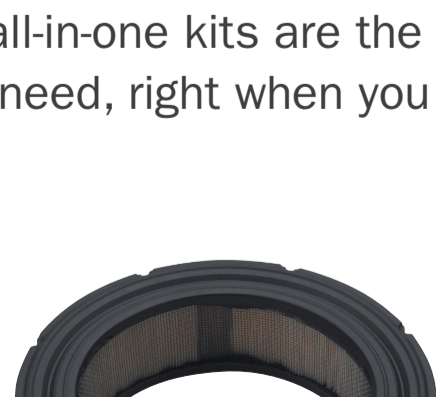
SUPPORT THAT WORKS AS HARD AS YOU DO

We back our engines with the support you need to stay productive.

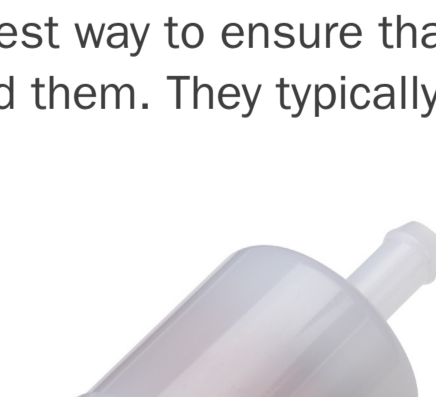
Be prepared for field maintenance by keeping a Vanguard Maintenance Kit in your truck. These all-in-one kits are the easiest way to ensure that you have the genuine parts you need, right when you need them. They typically include:



Vanguard Genuine Oil



Air Cleaner



Fuel Filter



Spark Plug



The Digital Manual

Scan your engine's QR code to instantly get operator's manuals, parts lists and specs on your phone.



The Expert Network

Backed by the largest dealer network in North America, you're never far from genuine parts and expert service to get you back up and running.