

Volvo Construction Equipment Building Tomorrow

4 ESSENTIALS FOR DAILY WHEEL LOADER MAINTENANCE

Eric Yeomans, product manager, wheel loaders

Beyond operating skill, a seasoned wheel loader operator should be knowledgeable in daily maintenance. Not only does daily maintenance help extend machine life and increase uptime, it also helps increase productivity.

I recommend performing daily maintenance and inspection at four key times: before starting the machine, while the equipment is warming up, during operation and during machine shut down. Follow this helpful list to get the most from your wheel loader.

1. Prestart checks

The prestart check should be your most thorough and involved. A walkaround inspection before you start helps determine if there are any damaged, loose or worn parts, fluid leaks or other problems. It's a good idea to develop a checklist of things to look for each time you use the equipment. Some key items to check for include:

- Tire pressures and tire damage
- Any loose, worn or damaged parts
- Fan belt wear and tension
- Battery connections for corrosion
- Oil or coolant leaks
- Engine oil and other vital fluid levels
- Grease the machine according to the manufacturer's recommendation

- Ensure that the mirrors adjusted and that windows and mirrors are clean

Ensuring a clean air filter system plays a large role in the degree of engine wear and engine performance, so if your loader is equipped with an air precleaner, take the time to dump out any excess dust or debris that has accumulated. As the final step before starting your loader, record the hour meter reading. Monitoring this helps you determine when periodic maintenance is needed.

2. Warm it up

Letting the engine run for five to 10 minutes upon start up - even in hot weather - allows the oil pressure to build and lubricate the engine's moving parts. A warm-up also allows the cooling system to reach proper operating temperature. If you hear anything unusual during engine warm-up, shut down and try to find the problem. After the warm-up, make sure the fuel tank is full and the fuel gauge is functioning. Also make sure the electric system is charging, and that oil pressure and temperature both read in the safe zone. As a final step before starting work, test the brakes and move the bucket through a series of normal operations.

3. While you work

Be sure to continually monitor equipment performance during operation; listen for unusual noises, check all gauges and be aware of any changes that may appear on the operator's display. Maintaining proper bucket capacity eliminates overloading the machine, helps control spillage which minimizes tire damage, and will certainly benefit your productivity. Forcing too much into the bucket can result in spinning tires (tire damage), slower cycle times, production losses and higher fuel consumption.

4. The shut-down routine

Try to park the machine on level ground, lower the bucket to the ground, and apply the parking brake. Let your engine idle for about three to five minutes before shutting down to allow the turbo charger to cool down correctly. Once you shut down, record the machine hours on the hour meter against the recorded start-up time. It's also a good idea to prepare your loader for the next day's work by hosing down any dirt and debris, and by filling the fuel tank and DEF tank to minimize risk for condensation in the tanks.

While the well-trained operator is essential to ensuring daily upkeep of the machine, service and support programs such as Volvo ActiveCare Direct — the 24/7/365 active machine monitoring and reporting service — can also help identify and diagnose any potential issues in realtime, before they grow into a larger issue. Volvo wheel loaders are also designed with ease of serviceability in mind — take our recent H-Series 2.0 updates for example.

Meet The Expert:

Eric has spent more than 40 years with Volvo, dating back to 1977 where he began his career at a Volvo CE dealership. He has worked in a variety of roles within Volvo, as well as Volvo dealers —including customer support management, telematics management and product management positions. Today, as product manager for wheel loaders in North America, works with the regional product requirements Volvo's district teams, dealers, representing the regional requests by providing product training, support and design input.



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