

FLEET MAINTENANCE

THE INTEGRAL ROLE OF CLEANING IN PREVENTATIVE MAINTENANCE

White Paper



FLEET MAINTENANCE

Best Practices for Fleet Cleaning

Incorporating cleaning into a fleet's maintenance schedule can be just as essential as traditional preventative maintenance.

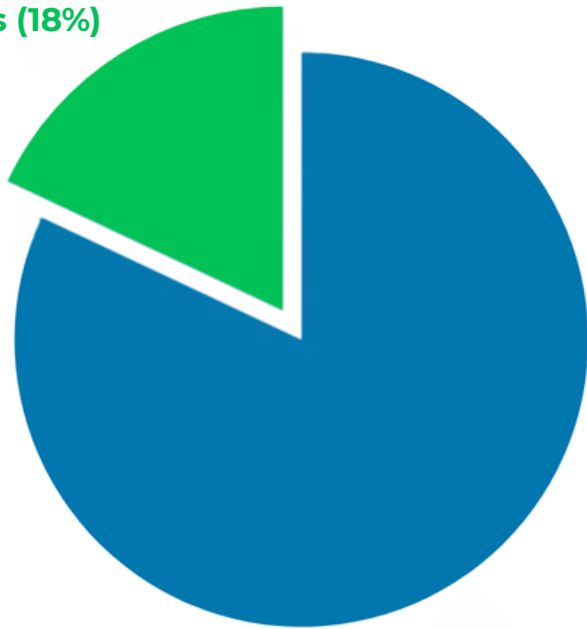


FLEET MAINTENANCE

In today's economic environment, businesses face increasing pressure to control costs and extend asset life. In 2022, the Transportation Research Institute (ATRI) reported that total operational expenses rose by 21.3% year-over-year - one of the sharpest cost increases in the industry's history. While rising fuel prices played a role, maintenance expenses have become a significant contributor as well.

With the impact of availability and cost of parts and new units, more fleet managers are looking to keep their equipment longer.

**Maintenance
Savings (18%)**



Preventative maintenance, including regularly scheduled cleanings is a part of that solution. According to the U.S. Department of Energy and the Federal Energy Management Program, preventive maintenance can deliver 12% to 18% in cost savings compared to a reactive maintenance approach.

Additionally, predictive maintenance, which uses monitoring data to assess equipment conditions, can add another 8% to 12% in savings. These savings stem from reduced unplanned downtime, extended equipment life, and fewer costly repairs.

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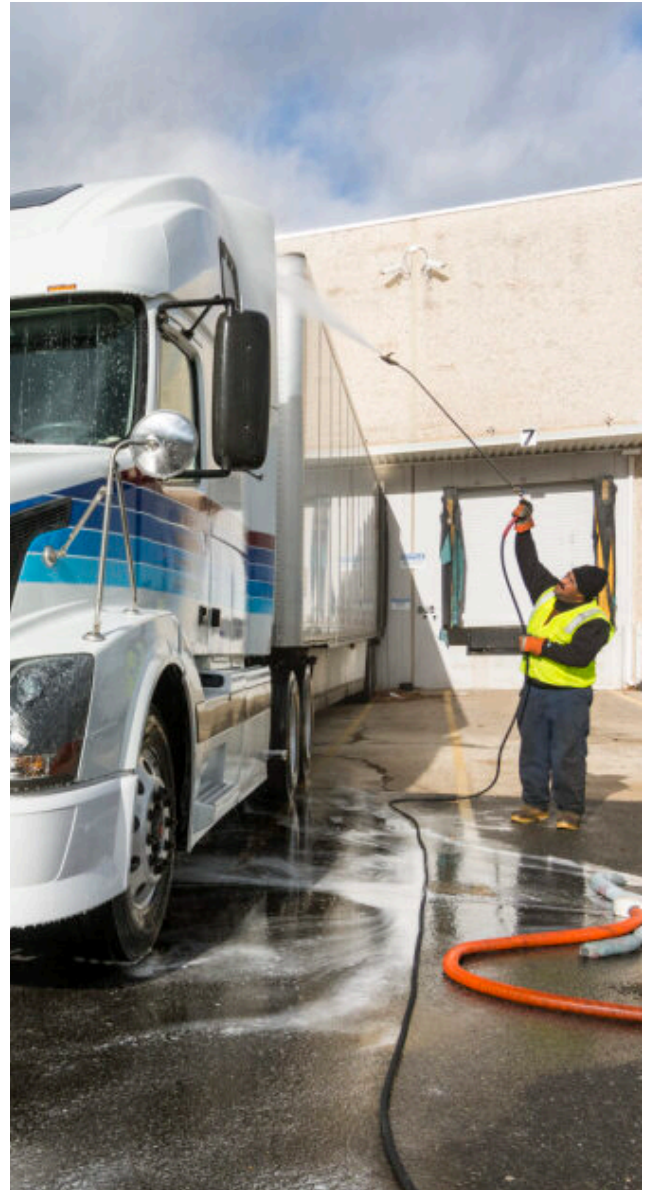
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Executive Summary

Fleet maintenance is crucial for operational efficiency, safety, and cost management in businesses reliant on vehicles. While traditional preventative maintenance (PM) emphasizes mechanical upkeep, integrating regular cleaning into maintenance schedules is equally vital.

Activities such as undercarriage washing and engine cleaning can prevent costly repairs, extend asset life, and enhance vehicle performance. This white paper examines the significance of cleaning in fleet maintenance, its contribution to vehicle longevity, and the value it offers businesses in terms of cost savings and operational efficiency.



THE IMPORTANCE OF PREVENTATIVE MAINTENANCE FOR FLEETS

Fleet management encompasses regular inspections, repairs, and vehicle upkeep. While standard PM practices like oil changes and brake checks are essential, cleaning is a critical component often overlooked. Preventative maintenance aims to minimize downtime, reduce repair costs, and prolong asset life; regular cleaning directly supports these objectives.

Best Practices for Fleet Cleaning

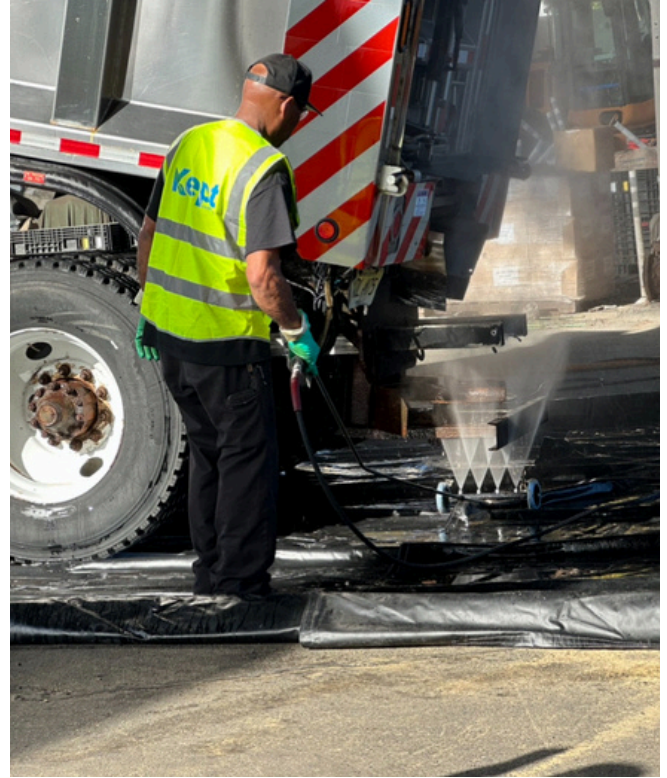
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1

Undercarriage Cleaning and Corrosion Prevention

Corrosion is inevitable - but it doesn't have to be costly. Over time, corrosion can eat away at suspension systems, brake lines, and even the vehicle's frame. With the right maintenance you can slow this down and keep your fleet on the road for longer. Regular undercarriage cleaning removes corrosive substances, protecting the vehicle from rust and degradation. It's a simple, but powerful way to protect your vehicles.



- **Corrosion Prevention:** oxidation can deteriorate metal parts, leading to rust that weakens the vehicle's structure and poses safety risks. Regular cleaning helps prevent this.
- **Cost Reduction:** Maintaining a clean undercarriage reduces the likelihood of costly repairs or the need to replace corroded parts.
- **Improved Resale Value:** A well-maintained vehicle with a clean undercarriage retains its resale value better, contributing to a higher return on investment.

2

Engine Cleaning for Improved Efficiency and Longevity



Engine cleanliness is vital for maintaining operational efficiency and preventing overheating. A dirty engine, clogged with oil, grime, and debris, can suffer from reduced cooling efficiency, leading to overheating and increased wear on key components. Regular engine cleaning ensures the cooling system functions properly and that sensitive components remain free of debris that could cause malfunctions.

- **Prevents Overheating:** A clean engine allows the cooling system to function effectively, reducing the risk of overheating and engine failure.
- **Increases Visibility:** A clean engine makes it easier for mechanics to identify leaks, cracks, or potential issues early, allowing for more accurate and timely repairs.
- **Reduces Wear and Tear:** Engine cleaning prevents grime buildup that can cause friction and wear on internal parts, leading to smoother operation and potentially extending the engine's life.

3

Regular Cleaning to Reduce Drag

Commercial fleets operate in harsh environments - exposed to road salts, dust, and industrial pollutants that lead to corrosion over time. Regular cleaning helps protect vehicles by removing these corrosive elements before they cause lasting damage. Consistent washing, both inside and out, not only preserves the vehicle, but also supports better performance. Clean vehicles face less aerodynamic drag, which reduces engine strain and helps improve fuel efficiency - keeping your fleet running smoother and longer.

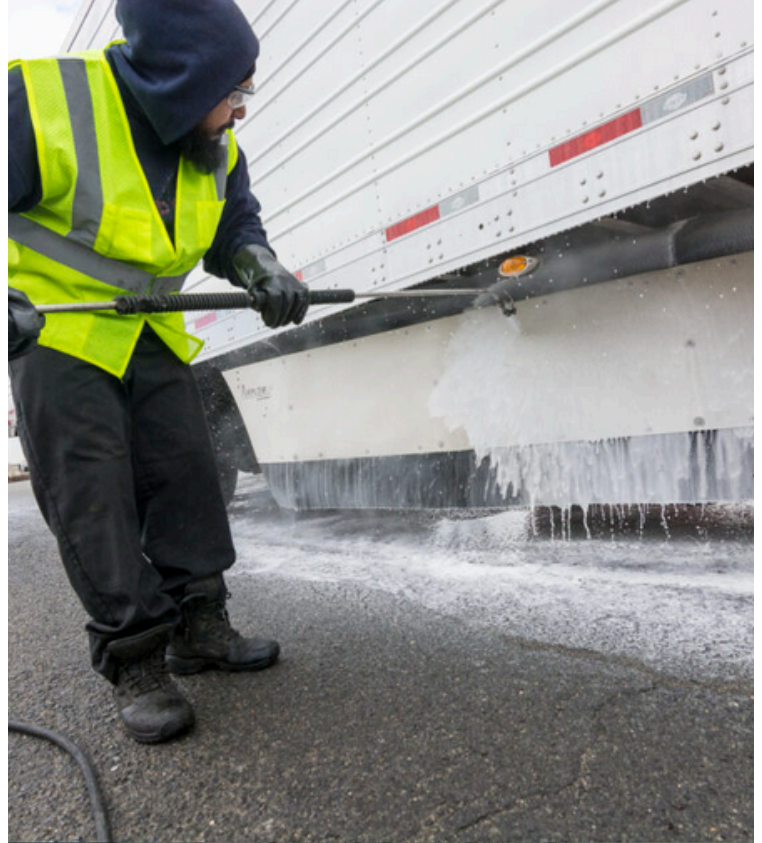


- **Enhanced Performance:** Accumulated dirt and grime can impact aerodynamics and fuel efficiency. Regular cleaning helps vehicles maintain peak performance.
- **Lower Operating Costs:** By improving fuel efficiency, regular cleaning helps reduce overall fuel costs, contributing to long-term savings.

4

Cleaning Schedules for Minimized Downtime

Cleaning schedules are more than just a calendar reminding you when your next cleaning is. They're a proactive strategy to reduce breakdowns, improve safety compliance, and extend the life of vehicles. Fleet downtime is costly, but by creating schedules designed specifically for your fleet, you can address corrosion issues before they become a major repair and operational disruption.



- **Prolonged Asset Life:** Vehicles that are cleaned regularly can experience extended lifespans, meaning fewer replacements and a better return on investment.
- **Fewer Breakdowns:** Regular cleaning, especially of vital components like the undercarriage and engine, reduces the likelihood of parts failing due to corrosion or debris interference.

Conclusion



Regular cleaning plays a pivotal role in the preventative maintenance of fleet vehicles. From undercarriage cleaning and salt removal to engine washing, each step helps prevent damage, extend vehicle life, and improve overall performance. Incorporating cleaning into a comprehensive maintenance program leads to significant cost savings, reduced downtime, improved fuel efficiency, and enhanced vehicle resale value. Businesses that prioritize cleaning alongside traditional maintenance practices can expect a return on investment through longer asset lifespans, reduced repair costs, and increased operational efficiency.

4 Areas for Preventative Fleet Cleaning

1

Undercarriage Cleaning and Corrosion Prevention

Regular undercarriage inspection and cleaning during winter and spring months.

2

Engine Cleaning for Improved Efficiency and Longevity

Removal of dirt, grime and buildup on and around engine and drivetrain.

3

Regular Cleaning to Reduce Drag and Improve Driver Experience

Deep cab cleaning, window cleaning and periodic wax and shine to keeps the cap safe, efficient and comfortable for the drivers.

4

Cleaning Schedules for Minimized Downtime

Routine cleaning and deep cleaning scheduled on rotation to keep fleet clean and reduce on-the-road cleanings.

Request a free no-obligation mobile cleaning quote for your fleet.

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