

# HOT TIPS to keep TRUCKMOUNTS

# COOL

*Truckmounts run **hot**. Here are some steps you can take to keep everything operating smoothly.*

By Chris Ryan



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All photos courtesy of HydraMaster Corporation

Laptop computers, which are now the fastest-selling computer systems, have a tendency to “heat up.”

This is especially true of some of the newer machines that operate very fast and have been developed to run the latest operating systems, which are “power hungry.”

The reasons these machines generate so much heat is that the components, along with being faster and more powerful, are so much more complex than the systems used just a few years ago.

This is a problem for users because heat is harmful to computer components, resulting in expensive downtime and repair bills.

In addition, overheated computer parts generally exhibit a shorter maximum life span and may contribute to sporadic problems such as system freezes or crashes.

## Hot truckmounts

In many ways, the same thing can happen with truckmount carpet cleaning systems that become too hot with use.

As truckmount systems get more complex, they are able to produce greater vacuum power, temperature

**KEYWORD** truckmounts

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and pressure, all of which can improve cleaning performance.

But this enhanced performance has a price.

These systems typically generate considerably more heat within both the machine and the vehicle. As with laptop computers, the heat can harm the components of the machine, often requiring repair.

As many technicians have experienced during the summer months, the ambient temperatures inside a vehicle housing a truckmount unit can be 100-plus degrees Fahrenheit.

And, if the layout inside the vehicle is cramped and crowded, this can severely impede airflow, causing the interior to be even hotter.

Situations like this can lead to vapor lock in the fuel system as well as overheating on the solution or coolant side of the machine — all of which can cause downtime.

However, there are steps carpet cleaning technicians can take to keep their equipment cooler during the summer months ... often some of the busiest and most lucrative months of the year.

These added steps may take a little time and, in some cases, require a relatively small investment, but they can increase the life of equipment significantly, help avoid costly repair bills and eliminate dreaded downtime.

### Maximize air circulation

Good air circulation inside the vehicle is crucial, especially in regions that have triple-digit ambient temperatures.

This is why some truckmount manufacturers state that roof vents are recommended and encourage carpet cleaning technicians to

install a powered roof vent system.

This is a proven method for removing the collected heat at the roof of the van. These vent systems are of moderate cost and can often be purchased through recreational vehicle-type dealerships.

Air circulation can be further improved by simply opening the rear cargo doors during operation. This will usually give the machine a cross-breeze or allow the

heat to vent in two areas.

There are also some housekeeping issues to consider when it comes to minimizing heat buildup — for instance, the proximity of hose reel, shelving and accessories to the machine.

Depending on their location, these items can affect airflow around the machine. In some cases, moving the hose reel just a few inches farther from the machine can lower temperatures immensely.

## EXAMINE YOUR TRUCKMOUNT

Some additional problems that can cause a truckmount to overheat include:

- Excessive ambient conditions
- Clogged radiator
- Old coolant
- Low coolant
- Poor circulation.

## EQUIPMENT & TOOLS

Attention should also be paid to such things as the placement of the water softener, solution reels and freshwater tank, as well as the multiple accessories that end up stored in the “nooks and crannies” of the vehicle. These can all hamper airflow and cause overheating problems.

The cleanliness of the vehicle is also important. Vehicles that are clean and well organized tend to have better airflow and cooler operation.

### Check engine oil

Oil is the lifeblood of the truckmount’s engine.

It helps prevent the metal components within the engine from grinding together.

In order for it to do this, it must stay reasonably clean, which means regular oil changes.

It also means that the oil type be suited to the environment in which the equipment is used.

Engine oil is graded according to its weight or viscosity — which refers to how thick or thin the oil is.

The temperature requirements set for oil by the Society of Automotive Engineers (SAE) is 0 degrees Fahrenheit (low) and 210 degrees Fahrenheit (high).

Proper viscosity is the single most important criteria of the engine’s oil during both hot and cold months.

High-viscosity (heavy) oil is typically



*Use of the proper viscosity of oil — with regular oil changes — keeps your machine running cooler and will help it last longer.*

thicker and pours more slowly at room temperature than low-viscosity (thinner) oil.

However, when heated, oil loses some of its viscosity and, if the viscosity becomes too low, it will not adequately lubricate the engine’s moving parts, potentially causing serious damage.

This is more of a concern during the hot summer months when light, low-viscosity oil may become so much thinner with use that it leaves engine parts unprotected, opening the door to all kinds of serious repair problems.

This may sound complicated, but the problem can be easily avoided by simply checking the oil and replacing it if necessary by following the recommendations of the truckmount’s engine manufacturer.

However, as service reps around the country can attest, many truckmounts are brought in for repair because of oil-related problems every summer.

The correct weight of oil for the temperature can often be found on the product labels. (See “The right weight” sidebar).



*Keeping the grease fittings properly lubricated helps keep your machine from suffering downtime.*

And don't forget the grease fittings, if your truckmount has them. Fresh grease will increase the reliability of your machine.

## Care for hoses

The machine's high-pressure solution hoses typically take a lot of abuse compared to other pieces of carpet cleaning equipment, and this is especially true during the hot summer months.

Often, the hoses are strung across hot pavement, sidewalks or driveways during the workday.

Because many truckmounts can produce temperatures well above 240 degrees Fahrenheit, these hot, mistreated hoses can become problems just waiting to happen.

Technicians must check their equipment hoses frequently, looking for weak and damaged areas or aging.

This can help prevent more serious problems. Some things to look for include:

- The condition of the outer jacket: If the hose has a lot of external wear, it probably should be replaced rather than repaired. An outer jacket that is detached from the rest of the hose, or a melted or

distorted outer jacket, is a good indication that the hose has overheated.

- The condition of the internal tube: Always examine the inside of the "quick connect" of the hose. Many times, small pieces of debris are found clogging the quick connect. The debris may be coming from the inner lining of the hose and may be an indication that age, excessive heat or strong chemicals have severely weakened the inside of the hose.

## Save money

As a result of the economy, many carpet cleaning technicians are looking for new ways to cut costs, especially repair bills.

To this end, the importance of preventive maintenance of truckmount systems cannot be overly stressed.

Simple things such as changing the oil, improving the airflow within the vehicle, keeping the vehicle free of clutter and checking and replacing the hoses can keep the equipment running cooler and longer.

A little preventive maintenance may prove to be the best cost saver of them all.

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## THE RIGHT WEIGHT

Use the following weight of oil in the given temperatures:

### Weight

5W-20

5W-30, 10W-30

30W

### Temperature

-20° Fahrenheit to 40° Fahrenheit

0° Fahrenheit to 40° Fahrenheit

40° Fahrenheit and up