



# RESURRECTING IDLE EQUIPMENT

It's no secret that the construction industry is in a slump, or worse. Plus, winter months tend to be slow anyway. Individually, there's not much to do except keep looking for work, weather the season, take care of finances, and take care of the equipment you've elected to hold. As a group, you might be interested in learning more about what the industry is doing on the economic front, through Start Us Up USA! (Sidebar page 5.)

As you know, equipment sitting idle for any length of time is not good. But, when it's finally time to engage that equipment again, will it be ready? Will it be safe, efficient, and productive? The following suggestions, written specifically for our Kawasaki wheel loaders but applicable to most pieces of mobile construction equipment, will help you safely maintain and resurrect idle equipment.

# STORAGE MAINTENANCE

## 1. TREAT YOUR FUEL FOR FUNGUS

If you find yourself with idle diesel engines for over three months, you should definitely treat the fuel with an additive to prevent bacterial/fungal growth. There are a number of diesel-fuel stabilizers and treatments available such as Diesel Treat 2000® and Bio Kleen®. Follow the manufacturer’s instructions for these products, bearing in mind that the fuel with the additive should be circulated through the entire fuel system before putting the machine into storage. Simply having it in the tank is not enough.

Uncontrolled microbial growth can produce dense masses that can clog filters, pumps, and fuel lines. They also release organic acids that can accelerate the corrosion of metals within the tank, pump, and fuel lines.

## 2. DEVELOP AN EXERCISE PROGRAM

On a monthly basis, exercise your equipment. This step alone will keep your batteries charged and get fluids flowing through the gears to prevent dry seals. Start the engine and let it idle for 10–15 minutes.

Next, make a weekly/monthly checklist of your mobile equipment for maintenance actions that need to be taken. Then, assign specific people to execute the checklist on a regular basis.

*Here is our suggested plan of action for exercising the equipment:*

### BEFORE STARTING:

ACTION	EXECUTION
■ Check engine coolant	Visually check/add fluid
■ Check engine oil	Visually check/add fluid
■ Check hydraulic oil	Visually check/add fluid
■ Check T/C oil	Visually check/add fluid
■ Check brake oil	Visually check/add fluid
■ Check tire pressures	Use tire gauge/fill as needed

### START AND RUN:

ACTION	EXECUTION
■ Start the engine	Low idle speed for 5 minutes
■ Operate all hyd. cylinders	Full stroke at 10 times each cylinder
■ Run the machine	Drive forward/back as space allows/each gear
■ Operate steering	Full turn 5 times
■ Other moving portions	Operate 2-3 times each
■ Walk-around inspection	Check for visual leaks, loose parts, rust, etc.

## 3. RUST PREVENTION

There are three actions to take here. The first is to pull each cylinder in as tightly as possible to minimize cylinder-rod exposure to the elements. Second, shelter the machine. And third, use a rust-preventive spray grease such as “ZEP-IRONCLAD”, for 6-24 month protection depending upon film thickness. A fourth option is to “ARMORALL” the cab interior.



*Treat fuel with an additive to prevent bacterial/fungal growth.*



*Check fluid levels and add if necessary.*



*Retract cylinders as much as possible to minimize exposure to the elements.*



*Check tire condition and air pressure.*





**Use Kawasaki's KLEW oil-analysis testing before the loader goes back to work.**



**A careful walk-around visual inspection can catch a lot of problems.**



**Consider using rebuilt or exchanged components.**

## GOING BACK TO WORK

If your equipment has been idle for more than six months, and especially if it has been a while since the fluids have been changed, you need to perform fluid analysis on the engine oil, fuel, coolant, and hydraulic fluids. Kawasaki's own KLEW (Kawasaki Loaders Early Warning) oil-analysis program is designed to indicate potential major component failures — and is free in conjunction with all Kawasaki extended coverage program.

Testing will give you a benchmark for the condition of your equipment and, of course, the fluids. The tests may indicate wear problems that weren't addressed when the machine was idled, and show which fluids and filters need to be replaced.

You'll also need to check grease fittings and points to be sure grease hasn't pooled at low points. Check the condition of the tires and replace as needed to avoid preventable flats and blow-outs at the jobsite. Confirm all safety items are operational such as the Neutral Safety Start, horn, and back-up alarms. Are the handrails and steps secure?

And don't forget the fuel — is the fuel in the tank summer or winter fuel?

## IF YOU NEED TO REPLACE

If oil sampling and testing suggests the need to replace a component, consider using rebuilt or exchanged. We are, of course, glad to sell any new component you would like to buy, but there are several benefits in using remanufactured components such as Kawasaki's Rebuilt Components or Cummins ReCon:

- Less expensive than new, often significantly so.
- Factory-trained technicians who follow the correct procedures.
- Updates and improvements are automatically added.
- Factory-supplied warranty. Kawasaki even covers travel and mileage to repair or replace a Kawasaki Rebuild component.
- Fast turnaround.

### **KAWASAKI OFFERS A VARIETY OF REBUILD COMPONENT PROGRAMS:**

- **Full Exchange** – Complete components for transmissions, torque converters, axles, differentials, and cylinders.
- **Time & Materials Jobs** – The maximum cost is the exchange price. No hidden expenses.
- **The Guardian Program** – This is a "Fix-Before-Failure" program that rebuilds and returns components such as seals, bearings, and clutches.
- **Package Renewal Programs** – Machine overhaul program, customized to suit your needs.

Don't let idle status sideline your equipment for good and diminish its value. Follow our suggestions to minimize problems. And remember, any resulting damage from idleness because proper precautions weren't taken could create warranty issues down the line.

## START US UP, USA!

Start Us Up USA! is a joint effort by the Association of Equipment Manufacturers (AEM) and the Associated Equipment Distributors (AED). Together they represent a large portion of the manufacturers and distributors of construction equipment in the United States. The two have come together to create this grassroots campaign to bring attention to the critical situation facing the

construction industry, and to urge Congress to take immediate action on key solutions.

Specifically, the campaign is to get legislation passed that increases governmental spending on road and infrastructure within the U.S.

Government spending on infrastructure improvement peaked in 2002. SAFETEA-LU expired in September 2009. As a result, the highway program is operating under a series of short-term extensions. A multi-year

plan has been developed that would create market certainty and long-term projects, but it has been pushed aside during the long and heated discussions about national healthcare.

You can help. Get involved and let your voice be heard. Tell Congress to get its act together on full reauthorization of a multi-year plan, now! For more info go to [www.StartUsUpUSA.com](http://www.StartUsUpUSA.com) to learn more.