



# Let's talk about ECU tuned equipment

# What contractors are promised... and what they actually get!

ECU tuning or modifying construction equipment software to boost performance or evade emission controls has become a significant issue across North America. Sometimes called chipping, tuning or ECU remapping, this service is being offered to contractors by a variety of individuals and companies.

While boosting performance for pennies on the dollar compared to the cost of buying higher-capacity equipment may look like an attractive proposition, it's not. It's against the law.

Do not ECU tune equipment without understanding the consequences. In this brochure, we'll detail the costs associated with chipping and show why, sooner or later, a contractor will pay those costs.

Depending on the type of equipment being chipped, the promised benefits can include greater horsepower and torque, higher operating speed and efficiency, lower fuel consumption and less time spent on the jobsite. Some of these vendors may also offer to modify or disconnect DEF systems that control emissions.

Let's face it, construction equipment is a significant investment and every hour on the jobsite comes at a high cost, too. But the hidden consequences of ECU tuning greatly outweigh potential savings from things like getting the job done in less time.

Don't let these "promised benefits" fool you. They come with high price tags, including:

**Loss of warranty**

Construction equipment manufacturers may void a warranty if the equipment is chipped or the ECU operating software is altered in any way.

**Accelerated engine wear**

The operating ranges of construction equipment are rigorously engineered and tested by manufacturers. If equipment is run at a higher horsepower, temperature or groundspeed than it was designed for, the equipment won't last as long as it should and will therefore have a lower trade-in value. Worse yet, an engine or drivetrain failure could occur during your busiest season. Increasing the manufacturer's specified groundspeed, while getting you from jobsite to jobsite quicker, could also contribute to an accident or even a fatality.

**Physical risk**

There are known cases where contractors have been injured or even killed by equipment that has been modified, in addition to dangerous emissions posing a risk to public safety.

**Violation of Federal emission laws**

Altering or removing DEF systems is illegal in the U.S. under EPA Regulations with potential fines of \$4,619 per day, per unit. The EPA is actively enforcing and protecting the environment from illegal tampering.



## Sooner or later, a **CONTRACTOR** pays

Equipment manufacturers, dealers and individual contractors each have their own perspective on construction equipment modification. When a piece of ECU tuned equipment fails or needs repair, however, a contractor ultimately pays the bill.

### **Costly repair bills**

Suppose a piece of equipment has been ECU tuned, needs repair and has no warranty (it's been voided by the manufacturer). The cost of the repair will be fully borne by the contractor who owns that equipment.

### **Compromised trade-in values**

When a contractor trades in ECU tuned equipment to purchase new equipment, the next owner of that equipment – a neighbor or someone else – might not get what they paid for. That modified equipment could need costly repairs and have a shorter operating life than expected. The contractor may also find new complications and negative side effects from improper manipulation.

### **Legal liability for DEF modification**

Removing or modifying emission controls in construction equipment could expose the contractor to significant enforcement penalties.

## 3 questions to ask before you get equipment ECU tuned

While ECU tuned equipment may look like an attractive proposition, it's not. As equipment dealers, we frequently see the serious problems and consequences associated with modified equipment.

Before getting your equipment chipped/tuned, we urge you to ask these questions:

- 1. Does this affect my equipment's warranty?** The fact is, equipment manufacturers may void a warranty if software is altered.
- 2. Does this affect the service I can get from my dealership?** Dealers can't service chipped equipment until the chip is removed and the engine is brought back to OEM standards.
- 3. How will this affect my engine and other parts?** Running equipment at a higher horsepower or torque than it's designed for causes accelerated engine wear, potential overheating and excessive stress on drivetrain components.

Equipment dealers respect your right to use your equipment as you see fit. However, it's important to understand the risks so you don't become a victim and pay the cost of illegal tampering.

*For more information, please contact your local equipment dealer.*

## When Construction Equipment is ECU Tuned...

*A dealer's perspective on the promises and impacts of altering construction equipment software.*

## ...sooner or later, A CONTRACTOR PAYS.



For more information, go to:  
**illegaltampering.com**