

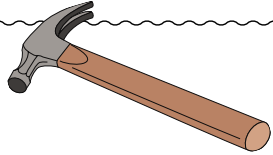


A friend of mine has a car phone and an answering machine for it. The message is, "Hi, I'm home right now, so I can't come to the phone. If you leave your name and number, I'll call you when I'm out."

– Steven Wright

Politics is the art of looking for trouble, finding it anywhere, diagnosing it incorrectly and applying the wrong remedies.

– Groucho Marx



When you have a hammer, all your problems look like nails.



CARS

Never lend your car to anyone to whom you have given birth.

– Erma Bombeck

Nothing ages your car as much as the sight of your neighbor's new one.

The only thing more disturbing than a neighbor with a noisy old car is a neighbor with a quiet new one.

A thief in Paris planned to steal some paintings from the Louvre. After careful planning, he got past security, stole the paintings and made it safely to his van. However, he was captured only two blocks away when his van ran out of gas.

When asked how he could mastermind such a crime and then make such an obvious error, he replied, "Monsieur, that is the reason I stole the paintings.

I had no Monet to buy Degas to make the Van Gogh." (And you thought your Encores author didn't have De Gaulle to include this on the jokes page.)



Oh well, I figured I had nothing Toulouse!

L&M AND encores

October 2008

GOVERNMENT REGULATIONS: Diesel Engines and Exhaust Emissions



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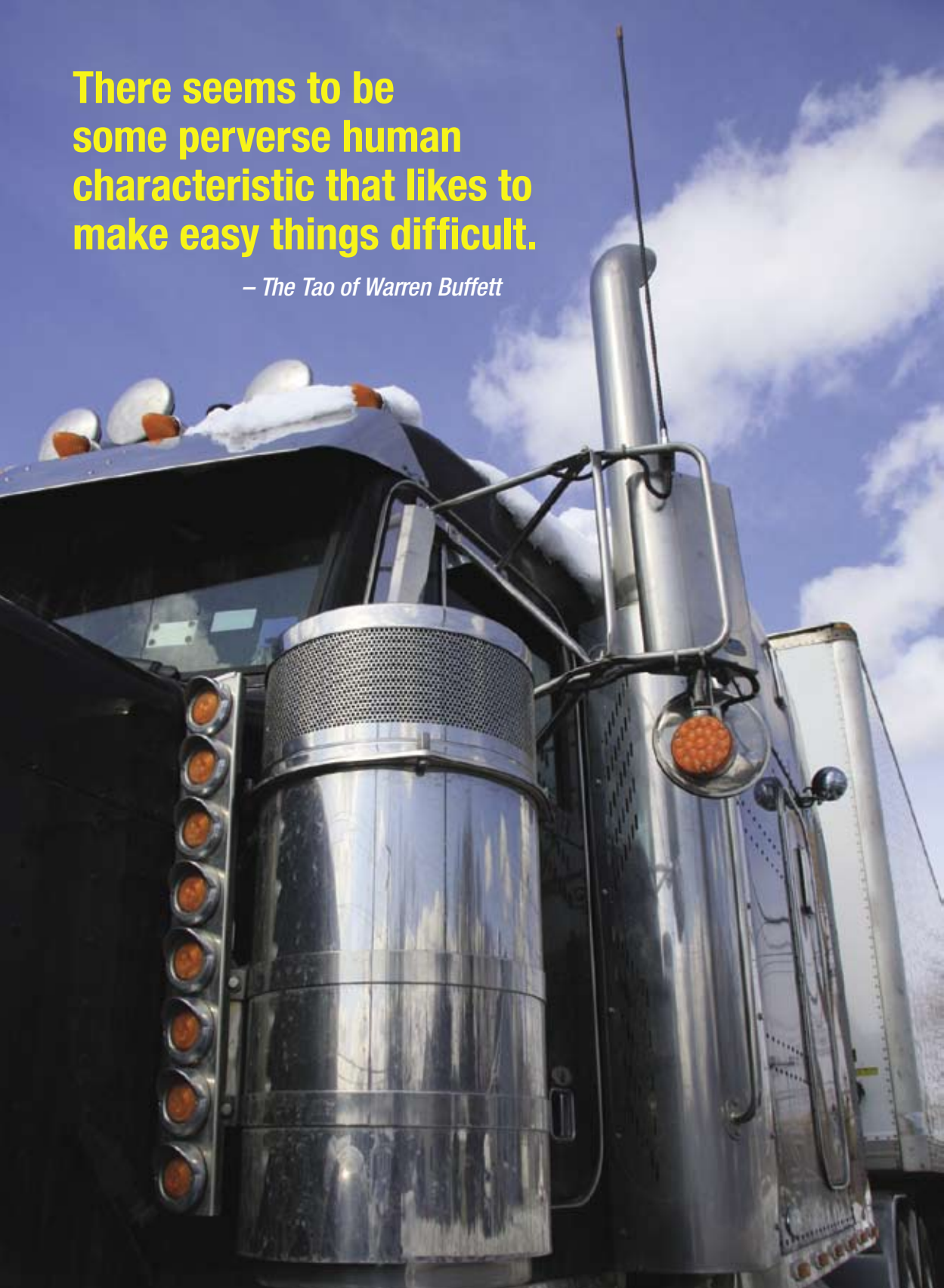
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There seems to be some perverse human characteristic that likes to make easy things difficult.

– The Tao of Warren Buffett



The regulations started in about 1996, applying to diesel engines of a certain (small) horsepower, which took in over-the-road trucks (semis primarily), and a lot of underground mining equipment. We have never done a lot of work on over-the-road trucks, but we have done a whole lot of work on underground mining equipment.

Next, on a timetable, regulations went into effect on larger and then the largest diesel engines. The government called the first regulations Tier 1, then Tier 2 and so forth. Our engineers are now working on Tier 4 with the engine manufacturers (mostly Detroit Diesel®, Cummins® and Cat®), which applies to diesel engines over 750 horsepower and goes into effect January 1, 2011.

The regulations primarily go after particulates and nitrous oxide (NOx). Particulates were most noticed as semis started up a hill and belched black smoke (see cover). We no longer see black smoke from over-the-road trucks.

Our engineers have worked with engineers from the engine manufacturers as well as the OEMs (Original Equipment Manufacturers) on earth-moving equipment (haul trucks, dozers, front-end loaders, graders, etc.) as well as a lot of engines used on oil and gas drilling equipment. Emissions have been dramatically reduced, but we do have a question. Every time a new Tier (1 through 4) is reached, the fuel consumption goes up. Emissions go down, but more fuel is used, so did we really gain? We do not know any way to calculate the final result, but we do wonder.

Another source of wonder is the automotive industry where the regulation is called CAFE (Corporate Average Fuel Economy). Note that we do not do any work on car-sized gasoline engines. The CAFE regulation simply states the automobile manufacturers' whole fleet of currently produced vehicles meet an average mile-per-gallon standard. We quote an article in the March 2002 issue of *Ward's Autoworld* by John McElroy:

“The more fuel efficient you make a car, the lower the operating cost becomes, and the more you encourage people to drive their cars.”

Again, did we really gain?

Alex Chisholm