

# 'PREVENT DEFENSE'

## for equipment

*Develop a preventive maintenance schedule for your vehicle and equipment fleet. It saves you money by reducing unexpected costs.*

by RON HALL / Managing Editor

**P**reventive maintenance (PM) is the most vital service that your trucks, and for that matter, other major mechanical equipment receives.

There are many good reasons for PM, but three are foremost:

- ▶ equipment safety;
- ▶ road call prevention (resulting in unbudgeted expenses and lost production), and
- ▶ protection of the equipment.

Vehicles and equipment age. Operator's habits vary. Without complete, easy-to-use records of the way your vehicles perform, and the way your mechanics service vehicles and equipment, you cannot know how well your PM program is working.

But what exactly is PM? Ron Turley, a nationally known fleet maintenance expert, describes it as a thorough, yet efficient, inspection of a vehicle or piece of equipment to determine its condition. It should be conducted using an easy-to-understand, easy-to-update form. The form is a general road map to the detailed inspection of each vehicle: a list of items to be examined, adjusted and, if necessary, replaced before anticipated failure.

The replacement of items nearly worn out can be planned for the next PM interval, the parts obtained and then time scheduled for this activity. The PM should

pinpoint and correct, if possible, any problems or potential problems before they cause a breakdown or bigger problems.

The items necessary for a complete program include:

- ▶ a good form that "leads" the mechanic through the PM,
- ▶ an accurate PM schedule. Generally, a PM is done at a scheduled number of vehicle miles or hours of operation,
- ▶ a well-trained mechanic,
- ▶ a quality control program.

"A lube and oil jockey will find little or nothing wrong with the vehicle," says Turley who, before starting his own business, managed the huge UPS vehicle fleet. "We want a problem finder.

"If all you're getting out of PM is an oil change and a grease job, it ought to take 12 or 14 minutes," he adds. "Generally, a PM will uncover some problems. If it never does, you might as well send your trucks to a Jiffy Lube."

But, even an ace mechanic should follow a pre-established PM procedure using a PM checklist. "A good PM form should lead the mechanic through the PM in a logical sequence," says Turley. The process starts as soon as the mechanic drives the vehicle into the shop and surveys the condition of its cab and instrumentation.

#### **A systematic inspection**

Then, using the PM checklist, the mechanic begins the systematic inspection of components such as battery and cables, fluids, brakes, shocks and springs, hydraulics, electrical wires and connections, tires and anything else that needs periodic attention. An efficient way to do this is to start at one end of the vehicle, say the left front wheel, then work in a circle around it, says Turley.

To be efficient, a PM should allow the mechanic to do everything he can reach

from one spot before he moves on to the next spot. It shouldn't require him to retrace his steps. In the process he notices such things as water and oil leaks, cracked sheet metal or frame members, crimped or rubbing hydraulic lines, loose or lost bolts, fraying belts.

While a vehicle/equipment PM should be thorough, it shouldn't be exhaustive. For instance, if a mechanic can check the calipers and brake pads without pulling a wheel, why pull it? Or, why change the oil in your vehicles at 3,000 miles if an oil sample analysis from your vehicles tells you that you don't need to change oil and filters until, say, 4,500 miles?

"You have just wasted 50 percent of your PM labor, and 50 percent of the cost of oil, and 50 percent of the cost of filters," says Turley who recommends having an oil company test samples from fleet vehicles.

#### **45 minutes max**

As a rule of thumb, the PM on a pickup truck should take place every 3,000 to 6,000 miles (or 90 days) and require no longer than 45 minutes; a medium diesel vehicle every 8,000-10,000 miles (or 120 days) and take from 1½ to 2 hours.

"A PM is not just a lubrication and an oil change. It's an inspection of a vehicle," says Turley. "A good PM program should uncover every little thing that's wrong with that vehicle, and sometimes the big things too, before the driver or operator complains. It will substantially improve the uptime of your vehicles." □

—Ron Turley Associates, Inc. offers fleet management software and support services. Call (800) 279-0549 (USA) and (800) 473-5338 (Canada) or E-mail: sales@rtafleet.com.