

EXPLORING EQUIPMENT

SETTING UP A PREVENTATIVE MAINTENANCE PROGRAM

Next time you are tempted to grumble about what a pain it is to track preventative maintenance, consider what breakdowns have already cost your facility.

Idle workers by the side of their disabled truck waiting for a tow truck produced angry customers and overtime to cover the missed work. The cost of new equipment was an unpleasant surprise, especially when you had hoped the equipment would last two to three years longer.

Many landscape contractors make the mistake of thinking that their fleet size and differing types of equipment make them too small and unique to maintain a preventative maintenance (PM) program. They also believe that a good PM program will be too complicated and expensive to generate any real savings, given their limited resources.

Good, regularly scheduled preventative maintenance for your vehicles and equipment will save you many times over *and* it does not need to be complicated or difficult to administer,

How to Begin

There are many ways to establish a PM program. Some people use notebooks while others use computers. Use a method you know your employees will follow. Computer programs have the added advantage of not taking up filing cabinet space. Also, once the program is setup, the computer does the calculations for you.

In general, a PM program consists of setting up routine maintenance schedules, conducting the maintenance and tracking equipment performance. The following is one way to set up a program. ■ **Schedule Inspection Intervals.** Establish PM intervals for the different types of equipment you are maintaining. Inspect all equipment and vehicles at certain fixed intervals. These can be time (days, weeks, months) inter-

vals, hourmeter intervals, and/or mileage intervals.

The easiest and most practical intervals to start with for a beginning PM program are time. Base the intervals on an inspection every few weeks or months. Starting with time-based PM intervals eliminates the need to be dependant on meter readings, which much of your equipment may not have. The equipment service manual is a good place to refer for recommended service intervals. The manual will contain the manufacturer's recommendations for items, such as oil changes, component replacements, and adjustments. If different intervals are suggested for light, medium, or severe service, always choose the severe service interval.

Some manufacturers may suggest multi-level intervals that you do not have the maintenance staff to handle. If this is the case, set PM intervals that will maintain clean oil, keep the warranty in force, and guarantee safe operation. Ask your maintenance personnel to contribute input as to optimal intervals.

Sell your staff on the *proactive* approach of preventative maintenance rather than *reactive* approach making costly repairs. You can tell them that PM programs have proven their cost savings at every level of equipment maintenance over a broad spectrum of industries and businesses.

■ **Inspection Records.** After you set PM intervals, the second step is establishing a PM inspection record. Start this by using a loose-leaf binder, with each page being a PM record for a separate piece of equipment. Enter the equipment number and description at the top of the page and enter the date, PM type, and meter reading (if applicable) as each PM step is completed. At the beginning of each week, check each page to see which pieces are due that week.

Alternate methods include using a large blackboard schedule or a PC-based PM software program. Typically, if your equipment base (licensed vehicles, off-road equipment, chain saws, string trimmers, etc.) exceeds 75 units, it will be much more time efficient to use a computerized program.

■ **PM Checklists.** The third step is to establish PM checklists to follow the PM for different types of equipment. For example, you may have a 25-step inspection procedure for a pickup truck (change oil and filter, grease chassis, rotate tires, etc.) and only a six-step inspection for a chain saw (check oiler operation, replace spark plugs, sharpen chain, etc.).

■ **Repair History Logs.** The fourth step is to establish a repair history log for each piece of equipment. This can be as simple as recording the date and a short description of the repair in a loose-leaf binder. For a larger equipment base, it will probably be more time effective to use some type of computer-based log. This log is your feedback mechanism to determine if the PMs are being done correctly or alert you to change or to *fine tune* the checklist. For example, if you are seeing a large amount of broken chains in the repair log for your saws, you may want to change the inspection checklist to include, "Inspect for bad links and replace as necessary."

A preventative maintenance program for your equipment need not be an overwhelming or expensive process. It does take a certain amount of discipline, commitment, and clerical effort. Its benefits in increased productivity and decreased expenses will repay these efforts many times over. Your equipment will last much longer, you will have fewer field breakdowns and major component failures, and your operators will be safer and more productive. □

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