## Shop Talk: Maintenance Practices for Lowering Owning & Operating Costs

Steps to take in everyday fleet management to keep equipment costs down. By Brad Stemper, brand marketing manager, CASE Construction Equipment

The construction industry continues to grow as the economy improves; more jobs are out to bid – yet contractors still find themselves in a competitive environment where it's important to find every edge possible. One area where contractors can get more competitive is in lowering the owning and operating costs of equipment – and one of the greatest opportunities for lowering those costs is in fleet management/maintenance practices.

In this article, we'll look at three areas where fleet managers can help keep owning and operating costs down: remanufactured parts, planned maintenance contracts and telematics.

## Remanufactured Parts

The practice of OEMs remanufacturing parts has grown considerably in recent years, and has evolved to include thousands of parts and components in stock that can be shipped to equipment dealers upon request. The scope of product lines has grown as well, covering everything from skid steers and backhoe loaders to bulldozers and excavators. This can be a significant advantage for fleet managers as they race against the clock to get equipment back up and running. That's the first advantage: rather than having a machine "down" while a major component is rebuilt, or having to rent a replacement machine in its place, the customer can purchase a remanufactured part and have it installed immediately upon receipt. How much is that machine's productive time worth, and how much can be saved by getting it up and running sooner? Remanufactured parts come ready to install and can significantly lower downtime and repair costs.

Another advantage of a remanufactured part is purchase price. Depending on the part and the machine, a remanufactured part can cost up to 40 percent less than a comparable new part – all without sacrificing quality. Remanufactured parts go through an extensive process before they are considered worthy for recommissioning. Core parts are disassembled and cleaned. Flawed parts are immediately discarded. Approved parts are verified against design specs, brought up to spec if required, reassembled and tested extensively to meet original performance standards. There is no drop-off in quality between remanufactured parts and new/rebuilt parts – and they can provide an apples-to-apples cost savings in many cases.

Remanufactured parts can also feature warranties that are better than what a rebuilt part can offer, and may meet or exceed other OEM warranties. This provides fleet managers with peace of mind and protection against additional costs during the life of the warranty. Extended coverage plans for remanufactured parts are also

available that are transferrable to new owners – helping to improve the resale value of the machine.

## **Planned Maintenance Contracts**

Most manufacturers offer planned maintenance contracts, and some now offer them as a standard/free service at the time of purchase, depending on the size and type of equipment. For instance, CASE includes a three-year, 3,000-hour planned maintenance contract on select heavy equipment as part of its ProCare program.

Planned maintenance contracts offer contractors distinct advantages in managing equipment – especially for smaller companies where equipment maintenance/management may not be the core competency of anyone on staff. The local dealer service staff acts as an extension of the contractor, performing all regularly scheduled maintenance for the span of the contract. During that time, the equipment owner only worries about fueling and greasing the machine – everything else falls to the dealer. Combined with a telematics system (see next section), planned maintenance contracts empower the dealer service department to schedule service/downtime at a time most convenient to the contractor. Taking all things into consideration, the equipment owner can focus all of their attention and resources on productive work, versus maintenance.

Planned maintenance contracts also help ensure that only OEM-approved and compatible materials are used – helping to ensure proper operation and avoid any chance of voiding the warranty due to unauthorized maintenance materials/activities.

But what is the tangible savings to a company that takes advantage of a planned maintenance contract? Using the CASE ProCare program as a model, where the service is offered standard at the time of purchase, an anticipated hourly savings can be calculated depending on the size and style of machine. For instance, preventive maintenance on a 38,000-pound hydraulic excavator costs approximately \$3.18/hour¹ when you take labor and parts/materials into consideration. Extrapolate that out over the 3,000 hour life of the contract, and that equates to \$9,540 in savings associated with labor and materials.

## **Telematics**

Telematics offers a wealth of benefits related to productivity and performance, but monitoring maintenance activities – both proactively as it relates to preventive maintenance, and reactively as it relates to machine performance – may provide contractors with significant maintenance-related cost savings in the long run.

<sup>&</sup>lt;sup>1</sup> Estimated cost as of December 2014. Estimated hourly cost is not binding and is subject to change.

Tying it into planned maintenance contracts: telematics serves as a powerful monitoring technology for the partner dealer/service department. By having real-time visibility into machine hours, the service department can schedule regular maintenance at times most convenient to the contractor, including after hours or on weekends when it will have the least amount of impact on productivity. It's a powerful tool in helping minimize downtime – even for preventive maintenance.

Alerts can also be set up that immediately notify the fleet manager or dealer service department of abnormal operating conditions that may signify other problems within the machine. If the machine is running too hot, or the engine's RPM are noticeably higher than under regular operating conditions, these may be symptoms of a larger problem with the machine that requires attention. These alerts help address the problem before it grows into a larger issue, helping to prevent downtime and lost revenue.

Telematics can help identify wasteful operating practices, such as idle time. In fact, identifying and reducing idle time has been one of the most profitable uses of telematics in the construction industry today. Many contractors have been shocked at the amount of time a machine spends at idle once monitored by telematics. It's not uncommon to see idle times ranging from 40 to 50 percent of engine time, which has significant impacts on total engine hours, service intervals, fuel consumption and costs, effective utilization of warranty coverage and machine resale value. Telematics allows owners to identify these excessive idle times and coach operators on ways to reduce this wasteful activity – ultimately lowering operating costs.

These are just three ways equipment owners can lower owning and operating costs as it relates to fleet management and maintenance activities. There are a wealth of other activities that fleet managers can engage in – from ensuring fuel quality to timing wear item replacement to regularly scheduled PM to optimize downtime. Fleet management and maintenance personnel should audit their daily activities to see where they can save money – it'll help the whole company be more competitive.