Utility Vehicles for Turfgrass Management

By Daniel Ingham

Utility vehicles have, in the past few years, progressed well beyond their golf cart roots and beginnings. They serve as an all-purpose tool that many turf managers could not do without. As they become more sophisticated and more options are made available, they will be seen as a viable maintenance tool rather than just a way of transporting materials around a facility.

Utility vehicles can be outfitted as sprayers, topdressers, aerators, seeders, mowers, turf groomers, sweepers, dethatchers and more. This versatility makes them very attractive to turf managers, and in most cases they do not take up any more room than a large riding mower.

To further enhance the versatility of this class of vehicle, some manufacturers, such as Jacobsen and Toro, have added some twists that may interest turf managers. These companies are now equipping utility vehicles to operate hydraulic and pneumatic tools.

One of the main advantages of using hydraulic or pneumatic tools is the reduced maintenance. More than one tool may be operated by a single power source, reducing the number of engines that need to be serviced on a regular basis.

The hydraulic tool will also last as long or longer than most other power tools since there is no engine to wear out. Most maintenance involves replacing seals or sharpening blades.

The disadvantage to these tools is mobility. Because they generally require a power source that is too large to carry (at least in the case of pneumatic tools), they are not always practical for turf managers, especially if maintenance is required at more than one site. Utility vehicles that can operate these systems offer an alternative that can make the use of hydraulic and pneumatic tools more practical for turf managers.

Hydraulic Systems

Jacobsen/Textron’s entry into this arena is a systems approach to hydraulics. The SV-2322 from Jacobsen utilizes a dual-circuit hydraulic system with a live-hydraulic power takeoff (PTO) that enables it to power both attachments as well as hydraulic hand tools.

The SV-2322 allows hydraulic hand tools to be used through a quick disconnect on the side of the vehicle. The company makes tool accessories for the system, including a pistol-grip hand chainsaw, pole pruner and a line-clearing pruner. A 30-foot hose reel is also available. The vehicle is equipped with a storage rack for all necessary tools.

By using hydraulics, this system is integrated with the hydrostatic drive and PTO systems of the vehicle itself. The vehicle’s engine is the power source and will run your tools with few of the problems and hassles of an independent hydraulic power unit. Normal vehicle maintenance takes the place of maintaining a separate power source as well.

Hydraulics are much quieter than pneumatic tools that require a compressor, and using a utility-vehicle engine gains the noise advantage of a muffled four-stroke engine. However, a hydraulic system will begin to leak over time, and hydraulic fluid is not good for turf. Hoses must be kept clean of fluid. Hydraulic fluid dripping from a hose or a connection can kill grass and leave unsightly brown spots. Care must be taken to ensure that leaks do not develop and that those that do develop are quickly repaired.

Pneumatic Systems

Toro’s Workman 3000 Series utility vehicles enable the use of either pneumatic or electric power tools. To use electric tools, the Workman comes equipped with a built-in 120-volt, 35-amp, 4200-watt generator that can power everything from circular saws to heavy-duty electrical equipment such as arc welders. The Workman can be fitted with an integrated compressor unit and a lift platform in place of a regular bed. If a dump bed is desired, the Workman has a three-point hitch assembly that enables an engine/compressor unit to be carried piggyback. Both compressor configurations allow the use of a full range of pneumatic tools. This combination of generator, compressor and lift make the Workman a versatile tool for turf managers.

The advantage that a pneumatic system has over a hydraulic one is the lack of hydraulic fluid. There is no danger of leaking fluid to damage turf if maintenance of the system is neglected. The disadvantage is noise. Unfortunately, compressors are noisier than hydraulic units. Today’s compressors, however, are quieter than their predecessors and require less maintenance than a hydraulic system.

This new generation of utility vehicles can offer significant flexibility in turf maintenance applications. Turf managers who look into the options these systems provide may find something they were previously missing.

Photos and technical information provided by Jacobsen/Textron and Toro.