

# An all-terrain tractor

This articulated prototype keeps all its wheels on the ground.

**A**fter buying land in New Hampshire in 1963, Maury Collins quickly learned that a traditional tractor and the hilly, wooded countryside of New Hampshire weren't a natural fit. The solution: Collins compiled a list of the top 10 features he wanted in a tractor and developed a machine to match them.

What he built was an unusual, cab-forward, articulated rig that handles all types of terrain. Prototypes of what Collins calls the Workall tractor are now being tested, and the inventor is presently looking for a manufacturer.

**More stability.** The biggest difference between the Collins Workall and traditional-style tractors is that the Workall keeps all four wheels on the ground, no matter what the terrain, because it has a center joint that oscillates and articulates. It also features four independent hydraulic wheel motors, hydrostatic drive, no axles and no gearbox.

High on Collins' list of desired features were three things: good weight distribution, good visibility and an easily-accessible engine. As a result, the cab is placed up front for increased visibility, and the 50- to 60-hp engine is placed behind the driver. This equal weight distribution makes the tractor neither front- nor back-heavy, no matter what the job. A 2.3-liter, fuel-injected gas engine is used on this prototype, but Collins says a diesel

engine could easily be substituted.

The Workall includes a 540-rpm PTO and a Cat. I, 3-pt. hitch. Both can be used at the front or back. Standard farm attachments can be added to make the tractor multipurpose.

**Work in the woods.** In addition to farm use, the Collins Workall is designed for forestry applications. Its four standard agricultural tires with 24-in. rims provide 17 in. of clearance in brush or on rocky trails. For more

stability, 12-in. rims can be substituted and still provide 11 in. of clearance. The Workall's size and maneuverability make it easy to drive through the woods.

"The prototype is being tested continually," says Collins. "As areas needing improvement are found, they are modified on the prototype or noted to be incorporated into future machines. All changes are done with the user in mind," he adds. **FIN**



The upfront cab balanced by the rear-mounted engine reduces the driver's exposure to engine heat and noise and increases visibility.

Attachments can be added to the front or back of the Workall, making it ideal for chores on the farm or in the woods.