

# Billy Goat AE401H Aerator

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Being a single-man crew, I normally rent an aerator from local rental stores; however, I am now aerating enough that I'm considering purchasing one. During aeration season, I was worn out at the end of the day with what I got at the rental stores. I wasn't sure which one to buy, but I kept looking thinking there has got to be a better way.

When I was offered the chance to try a new style walk-behind aerator from Billy Goat Industries, I leapt at the chance. The unit I got to try was the Billy Goat AE401H. The AE401H is available with a 4 hp Honda engine and a 5.5 hp Briggs engine. Billy-Goat is a family-owned company that's been around since 1968. I toured the plant and was impressed that they truly design and manufacture what they sell. Innovation and constant improvements seem to be the theme at Billy Goat. At first glance, the Billy Goat AE401H looked similar to the blue, green and red units I've seen and rented. That's where the similarities end. Competitive rental units left my arms tired from having to either lift the entire handle and tines out of the ground, or having to reach down to lift the bale to pull the tines out of the ground. Billy Goat got around this by designing the bale so that when you slightly lift the handle the bale comes up automatically and locks the tines out of the turf. My shoulders sure thank them for that.



Billy Goat's AE401H aerator has a four-wheel design making it stable for flat or hilly terrain.

I liked how easy it was to maneuver the unit. Tilt the aerator back, spin it around on the rear wheels and you're ready to go on your next pass. Now, this is where their engineers earn even more kudos. You can easily push the bale down with a bump from your hand to reengage the tines into the turf, or you can use your knee to bump the bale as you drop the unit back onto all four wheels. This allows you to never have to take your hands off the handle.

The unit has a water tank on top of the tines. It has a large hole for easy filling and a plug on the back for easy draining. It holds 50 pounds of water. The tank being on top of the tines allows the weight to push the tines deeper than other aerators I've used. I was told that some landscapers who want even more weight for dry conditions fill the tank with sand. The unit with water weighs 292 pounds, which I found more than adequate to get the tine penetration my customers expect.

The easy-fill and empty tank didn't mean too much to me, but I can see how one-time renters would love this instead having to deal with steel weights or trying to fill and empty the front water wheel drum used on other units. I was also impressed with the Billy Goat's stability on hillsides. It's a stable four-wheel design instead of the three-wheel or two-wheel, and a drum design that I've found to be tippy on hillsides. I did have the engine die a couple of times on the hillside before I realized it hadn't gotten enough oil when it was assembled. The low oil sensor on the Honda engine shut the unit down and saved possible repair costs. Once oil was added it never died again. The 4 hp engine provided plenty of power. Middle throttle position ensured tine penetration and a comfortable, yet efficient, walking speed. Lifting handles on both sides of the unit serve the average customer well and provide tie-down points for trailer use. Tool-free, "fold-and-go" handles come standard and make the aerator compact for storage. This saves trailer space and is simple, yet rugged.

While reviewing the Billy Goat, I was shown how the unit could be placed on its nose if it required servicing. The Honda engine carburetor points up so there's no problem, just make sure your gas tank is no more than half full to avoid fuel spills. Once there, you can get to almost everything easily, and it makes cleaning the unit a breeze. Anything you can't get to can be reached by removing the water tank. Belt replacement is easy and requires three common wrenches. Removing the water tank takes all of two bolts, so no matter what you need to get to work on it's easy to get to. I also noticed that this unit has pulleys and sprockets that are welded onto a 1-inch solid steel shaft, as well as six pillow block bearings that have grease zerks. I would avoid directly hitting the bearings with a power washer, as I suspect this could cause problems.

Overall, this is a solidly built machine with easy maintenance and durability taken into account. I found the AE401H to be easy to operate, well designed, easy to work on, deep plugging and built with heavy use in mind. Whether you are the occasional user or the renovation specialist, the Billy Goat AE401H is an aerator I'd be proud to own and recommend.

*Think you've got what it takes to put some new gear through its paces? Can you write a complete sentence and craft a piece like this? Contact Publisher*

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