Removable hitch makes turning possible without a glitch

By Chris Nowack

Every golf course could use a heavy-duty, removable hitch that will allow operators to tow apparatus without having to fight to install the draw pin or the worry of operators turning too sharply and causing damage.

I came up with this idea after asking my superintendent why he only used our 1989 3-wheel truckster for pulling our 100-gallon Spray Devices, Inc. (SDI) sprayer. His reply was that the 1989 Cushman was the only vehicle that had a hitch that was convenient to use and did not cause damage to the sprayer when making sharp turns.

I focused my attention on the Cushman we had bought with a GA-60 fairway aerifier. Being familiar with the 5th-wheel attachment that you install on the Cushman to tow the GA-60, I began to design some type of a drawbar that would work with the receiver that was already bolted to the frame of that Cushman. I wanted it to be quickly removable so we could still use the GA-60 aerifier when needed.

After having completed the first one, I installed it on our 1994 Turf Truckster. Total time involved in constructing and installing this hitch was about 4 1/2 hours.

I immediately saw that the benefits of this hitch were exactly what we were looking for and made them for all of our Cushman Turf Trucksters.

The first step to building these receiver-type hitches, is to obtain these parts and materials:

- Receiver assembly Cushman part #897007.
- Drawbar assembly “only needed if your Cushman does not have the newer style” Cushman part #892795.
- 4 pins and clips Cushman part #882770.
- 24-1/2 inches of 4-by-1-1/2-by-3/16-inch steel channel per hitch.
- 34 inches of 2-by-2-by-1/4-inch steel tube cut in 17-inch pieces per hitch.

To begin with, install the two pieces of 2-by-2 tube into the receiver (part #897007) openings, leaving 7 inches outside the end, with the end with the plates having the two holes drilled in them. This should leave a 1/2 inch of the tube outside the opposite end of the receiver openings.

Holding each tube, one at a time, towards the center of the receiver, mark the tubes where the four holes are drilled in the receiver. Remove the tubes and drill out the four holes to 1/2 inch for the four pins (part #882770).

Next take the drawbar assembly (part #892795) and center it.

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**Delhi mechanics school 'a success'**

"Participants from around the Northeast who attended the program gave us very positive feedback," said Dominic Morales, Delhi College Plant Sciences Department chairman. "They were enthusiastic about attending an intensive workshop designed to update their skills."

The school is a spin-off of Delhi's new Turf Equipment Management program. The one-year certificate program, developed in concert with the industry, will train students to maintain, repair and manage the golf course equipment. It's a natural addition to Delhi's golf education curricula, according to Morales.

Strong golf industry support for Delhi led to the Turf Equipment Management program, according to Morales. "Industry support also results in more than $100,000 each year in equipment donations from leaders such as Jacobsen, Toro, John Deere and Ransomes/Cushman/Ryan," he said. "There is a tremendous demand nationwide for trained technicians to maintain equipment on golf courses and landscape companies. In fact, there are about 50 job opportunities for every graduate of turf equipment programs."

For more information about the certificate program, people may contact the Plant Sciences Department Office at 607-746-4410 or the Delhi College Enrollment Services Office at 1-800-96-DELHI.

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**Hitch**

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on the piece of 4 by 1-1/2 by 3/16-inch channel, leaving the drawbar off center of the channel towards the bottom. Clamp the drawbar in place and weld it. Welding is a necessity in building this assembly.

When building this assembly, make sure that you weld the drawbar in place on the channel before the tubes. If not, the channel will warp from welding the drawbar and throw off the tubes from properly fitting into the receiver.

Cut off the piece of the drawbar that remains protruding from the back of the channel if you want to.

Then, using the receiver (part #897007) as a template, install the two tubes and four pins (part #882770). Stand the assembly upright and place your piece of channel with drawbar onto the two tubes. After placing the channel on the tubes, make sure the tubes are flush with the end of the channel and that the tubes are off center in the channel, with them being about 1/2 inch from the bottom angle. Tack-weld the tubes securely in place.

Remove the four pins from the receiver and remove the hitch. Finish welding the tubes securely to the channel. When you are finished, the hitch assembly should slide into the receiver and fit with no problem.

Finally, to install the receiver on the Cushman, remove the bed for the ease of accessibility to the rear frame area. Remove both rear shocks and slide the receiver into the Cushman frame and the receiver. Install 3/8-inch bolts in all the holes and tighten. Reinstall your bed.

You now have a heavy-duty, removable hitch that will allow you to tow all the things you normally tow without having to fight to install the draw pin or the worry of operators turning too sharply and causing damage.

If you have any problems or questions, please feel free to contact me at 155 Golf Ave., Pittsford, N.Y. 14534; work phone 716-381-4494; home phone 716-425-9142.