

Kelley Engineering



Plus, ... Nozzles, Pump Repair, Custom Cables, and Custom Solutions!

At Kelley Engineering we have over 60 years of combined experience in spray, NH₃, and guidance technologies. This enables us to provide our customers with the solutions they want and superior support AFTER the sale. We use these products ourselves and that experience is invaluable to our customers. We can give you a true operator's opinion of a product and we have the hands-on experience to diagnose any problem your spray, NH₃, or guidance system may be experiencing. If you're not already a customer or just haven't been by in awhile, give us a call or look us up on the web and find out about the new product lines that we have added in the last few years (Ag Leader®, Trimble®, Raven®, Outback®, Nichols NH₃ knives) and see how we might serve you.

What's New . . .



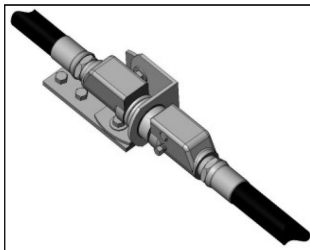
Equa-Flow "Sweet 16" from Squibb Taylor

NH₃ rate variation across the applicator has long been a concern. This year, thanks in part to one of our customers, we have selected Squibb Taylor's Equa-Flow manifold as our standard manifold. In testing at Iowa State University, this manifold performed just as well as the Impellicone manifold, but it costs less than 1/2 price and it has no moving parts to wear out. If you are variable rate applying NH₃, the Impellicone might be the better choice in that situation, but it depends upon the range of the application rates. We have replaced the factory 6" nipple into the manifold with this 30" formed nipple to eliminate the need to support your feed hose or replace it prematurely for installation.



New and Improved 8175 Anhydrous Ammonia Heat Exchanger from Hiniker

The heat exchanger features new cast machined end caps which result in 60% less pressure drop at 30 gpm from the previous model. The outlet port has been moved to the bottom for more efficient flow. Refrigerant inlet orifices are now provided for improved cooling capacity and less worries of row to row distribution problems (*We have been installing these orifices in the heat exchangers we sell for 20 years*). Larger vapor ports (3/4") were installed for more efficient heat transfer. The heat exchanger is factory pressure tested to 500 psi and a hydrostatic relief valve is now direct mounted to heat exchanger.



Flo-Max 1-1/4" Breakaway from Squibb Taylor

Flo-Max couplers are designed to safely disconnect the nurse tank hose from any tool bar in the event of a pull-away from the nurse tank, a nurse tank rollover, or any occurrence that would cause the nurse tank hose to become taut. The stainless steel construction of critical operating components eliminates corrosion to guarantee reliable operation in a break-away. "Replacement After 3 Years" is not a requirement for this coupler. For maximum flow with virtually no pressure drop, the Flo-Max design features "swing style" check valves that provide a "wide open through bore" in its operating position. It comes only in 1 1/4" NPT size for flow hungry applications. Ideal for cold weather applications.

EZ-Guide 500

Go Beyond Guidance



Kelley Engineering

www.agleader.com



- ▶ View coverage maps in real time so you can easily see covered area and perform fieldwork more accurately.
- ▶ Dual frequency receiver can be used for almost any field operation – planting, application, harvest and tillage.
- ▶ Provides on-screen map of guidance patterns – with support for 6 common patterns.
- ▶ Compatible with EZ-Steer assisted steering system.
- ▶ Compatible with EZ-Boom application control

The Complete Precision Solution



- ▶ SeedCommand helps you eliminate seed waste and reduce seed cost by turning planter sections on/off based on maps and already planted areas.
- ▶ Variety/Hybrid Mapping allows you to generate color maps while planting so you can see the location of each variety or hybrid.
- ▶ DirectCommand gives you variable rate control of liquid and granular products. Works with sprayers, spreaders and strip-till carts.
- ▶ Yield Monitoring allows you to see yield maps over as-planted maps in



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Product Highlights



**Do you have both Hiniker and Raven controllers on your farm?
Do you need a speed input for your Hiniker controller and the tractor?**

If so, the **Hiniker 8614** GPS Speed Sensor is worth a look.

What sets this unit apart? It comes already wired to a Hiniker speed interface and also features a Y cable. One signal can be used for a planter monitor, a Raven controller, or the tractor itself and the second signal is formatted **and calibrated** for Hiniker controllers. The interface also has 2 LEDs - One indicates when it has a satellite lock and the other indicates the speed signal. Great for troubleshooting! This unit is the most cost effective if you do not already own an interface. If you need to replace an interface or a wheel sensor, it's worth a look. This is a 1 Hz unit. **This combination is \$150 cheaper than buying the items separately and is a great alternative to a radar gun for side-dress application!**

\$320, Y unused
\$342, Dickey-John
\$349, Raven
Other options available

JOHN DEERE Speed Solutions

If you are using the John Deere® gps system and would like to get speed out of a Starfire I, Starfire I ITC or Starfire II ITC, we have solutions. The factory cable to get speed out of the Starfire receiver costs about \$150. We can custom make you a cable that can feed the tractor's system if your radar gun has failed for **\$40 less**. Plus, our cable is not a "one size fits all" cable. It will be the length you specify for your installation. Why have one more cable cluttering up the cab?

Ag Leader EZ Solutions

Do you need a 4 way splitter out of your EZ-Guide Plus or EZ-Guide 500 for Speed, Keypad, Run/Hold Switch, and GPS?

We can custom make you a splitter cable with the ends you need and the lengths you need to reduce cab clutter and the need for additional adapter cables.

Additionally, we can make speed adapter cables, remote switch cables, modify the power connection with an in-line fuse to fit into a JD powerstrip or the older accessory plug or any other application you may need.

Trailer Sprayers

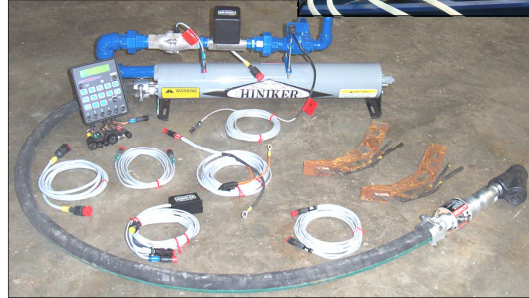
- ✓ New options available from multiple manufacturers
- ✓ Used trailers with stainless steel tanks in stock
- ✓ We can assemble, plumb, and test your sprayer prior to delivery.
- ✓ Nozzles in stock in quantities to retro-fit a boom
- ✓ Retro-fitting an older trailer a cost effective option

60 ft Hydraulic X-Fold Booms from Century

Great for retro-fitting an existing trailer sprayer or one of the used trailers we have in stock. A hydraulic lift kit is available if your sprayer doesn't have one. Units in stock!

Hiniker 8605 NH3 Twin Manifold System

(Single Manifold System Shown - Twin Manifold Systems do not wrap over the heat exchanger)



- Hiniker 8605 controller – GPS compatible
- Heat exchanger with orifices installed. **New 8175 (not shown) available now.**
- Flow meter, stainless steel + cables
- Servo with stepper motor + cables
- Run/Hold proximity sensor on 20' cable + 10' cable for cab
- Battery cable for 8605 controller
- Radar interface¹
- Hydraulic shut-off valve
- 16 port Equa-Flow manifold (Qty: 2)
- Mole liquid/vapor knife (Qty: 2)
- 1-1/4" bolt-on hose clamps (Qty: 2)
- 6' of 1-1/4" NH3 hose
- 1-1/4" filter
- 1-1/4" Flow-Max breakaway (Not shown)

- Not shown, but included with the complete system are the hydraulic hoses and fittings for the shut-off valve.

1 Not needed with 8614 GVS or wheel sensor

Our systems come completely assembled and ready to mount to your ammonia bar. We can provide you with everything from the tank to the knife and we stock all of the items that we use in our systems. We have a component swap program available on most items and parts on-hand to repair flow meters, servos, heat exchangers, cables, etc. On-site installation is also available.

Call for pricing

Application Tips

At Kelley Engineering, we back up our systems with:

- ✓ Free phone support
- ✓ Parts that are in stock
- ✓ On your farm service
- ✓ Component swap to keep you running²
- ✓ Component testing to pinpoint problems
- ✓ Heat exchanger maintenance and rebuilds
- ✓ Pump rebuilds
- ✓ Spray nozzle testing
- ✓ Fabrication and modifications

2 - Not available on all items

⚠ Check your Hiniker heat exchanger for orifices. They should be installed behind the hose barbs for 3/8" liquid lines.

⚠ Eliminate elbows in NH3 plumbing if possible; especially Street Elbows.

⚠ Use 1-1/4" plumbing whenever possible in the NH3 plumbing.

⚠ Raven and Hiniker flow meters can be interchangeable with an adapter cable.

⚠ EZ-Guide 500 and EZ-Boom make a good, low cost planter section auto-off solution

⚠ Check out our website for manuals, brochures, calibration sheets, and more!

Are you using the WAAS GPS correction signal?

If you have not used the system since July 31, 2007, you should call us or your dealer or your equipment's manufacturer about upgrading the software on your receiver.

Valve Warning

If you are still using the Spraying Systems 144A coil valves, it may be time to update. The coils tend to overheat and allow the valve to partially close. The controller will compensate by pushing more product out of the other boom sections, but this may not be noticeable from the cab.

Check out the coupon below to help reduce the cost of this upgrade.



Outback S-Lite

WAAS enabled sub-meter accuracy. Great for spraying, tillage, spreading, and yield monitors.

\$995

10% Off Coupon*

Good towards a one time purchase of Tee Jet nozzles, Tee Jet nozzle accessories, and Spraying Systems valves.

* - All other Tee Jet products, including Tee Jet guidance products are not covered by this offer. One coupon per customer. Mention or bring in this flyer to redeem the coupon.