

Engine Stand Modified For ATV Repower

When the motor on his Honda Rancher ATV died, Don Bogardus decided to repower it with an old Kawasaki engine a friend had given him. First, however, he needed an easy way to remove the Honda engine and install the Kawasaki.

"I needed to get into the chassis of the ATV with the Kawasaki and measure for brackets and such, but I knew a regular engine crane would be too big," recalls Bogardus. "I saw the engine stand, and a light went off in my head. I realized I could add vertical arms to the engine stand and a boom to the verticals. A hydraulic jack attached to the verticals would provide lifting and lowering. Best of all, removing two bolts would return the engine stand to its original use."

He cut two 18-in. lengths of angle iron from an old bed frame for the verticals and bolted them to the engine stand.

"I welded a stand for the hydraulic jack, using a piece of 1/4-in. plate and a gusset with a hole through it so I could bolt it to the verticals," says Bogardus.

He used two 30-in. lengths of angle iron to build the boom for his mini crane. He bolted one end to the top of the uprights, but loosely enough to allow the boom to pivot.

At the point where the boom would rest on the jack's retracted ram, Bogardus added a clevis-like bracket to the boom. He welded a pipe cap sized for the ram end to the bracket.

At the far end of the boom, he put a bolt through the two pieces of angle iron. He hung



Hydraulic jack attached to the verticals provides lifting and lowering. Removing two bolts returns the engine stand to its original use.

a couple of chain links with a hook to the bolt.

"The gusset on the stand for the hydraulic jack lets me pivot it some as needed," says Bogardus. "The boom provides more pivot as I extend and retract the ram on the jack."

Contact: FARM SHOW Followup, Don Bogardus, 3375 Highway Route 20, Sloansville, N.Y. 12160 (ph 518-868-9309; don827522@gmail.com).

Hybrid Clamp Tackles Tough Repairs

"DIYers have long wanted clamps they can get tighter," says Shane Swanger, a professional engineer, inventor and owner of Viper Clamp. "I myself was sick and tired of worm-driven universal hose clamps because they don't lock and keep coming loose."

To tackle this issue, Swanger devised the Viper Clamp, a ratcheting zip-tie/universal hose-clamp hybrid. He initially targeted the automotive industry, where rubber-based fluid and air-filled hoses relax when heated, causing traditional hose clamps held in place only by friction to vibrate, loosen and leak.

Swanger began his innovation with a standard zip tie. After redesigning the teeth and developing a unique nylon 66 resin with a resin additive for below-freezing temperatures and sunlight resistance, he produced a zip tie capable of withstanding up to 100 lbs of torque. After adding a small ratcheting locking clip, he increased the force to 130 lbs without breaking or releasing. In December 2025, he sent his first batch of Viper Clamps to retail.

"Even if you over-tighten it with a tool, it'll fail at the ratchet, but the clamp will stay tight," he says. "A standard hose clamp or zip tie will fail in the loose position, causing leaks."

Swanger says the feedback he's received since the product went live has been insane. His updated Viper Clamp will hold about 250 lbs, and the ratchet is rated at 160 lbs, competitive with the highest-end stainless-steel universal clamps.

Currently, the available stock is 1/2 in.



"Even if you over-tighten it with a tool, it'll fail at the ratchet, but the clamp will stay tight," says Swanger.

wide and 14 1/2 in. long. Swanger is working to add 1/4-in., 3/16-in., and 3/8-in. options. A metal version is also in the works.

Manufacturing is moving to the U.S. The Viper Clamp is available on the website and in Home Hardware stores in Canada. Swanger is seeking dealers for U.S.-based hardware and automotive stores.

A pack of 10 clamps retails for \$19.99 plus S&H. Volume discounts are available.

Contact: FARM SHOW Followup, Viper Clamp, Salt Lake City, Utah (websales@viperclamp.com; www.viperclamp.com).

Tire System Detects Leaks Early

Tymate of Lille, France, is a global leader in automotive tire-pressure monitoring system (TPMS) solutions.

"Tymate was born from a vision shared by a group of passionate engineers and innovators in the heart of the automotive industry," says a Tymate customer service associate. "They came together with a collective expertise in automotive technology and tire monitoring systems, united by a belief that a reliable Tire Pressure Monitoring System (TPMS) could do more than just prevent accidents; it could enhance driving experiences for people everywhere. They understood the importance of maintaining optimal tire pressure for better fuel efficiency, extended tire lifespan, and, most importantly, the safety of drivers and passengers."

Today, Tymate has a strong presence across both personal and commercial vehicles.

"The TM7 is one of our most popular systems, and for good reason," says the associate.

It features a large color HD screen that displays clear, easy-to-read tire condition information at a glance. Five alert modes provide drivers with real-time updates on high pressure, low pressure, high temperature, rapid air leakage, and low sensor power, ensuring comprehensive safety coverage.

Dual power sources (USB-C and car cigarette lighter) enable flexible charging. Farmers and ranchers towing long trailers can benefit from the signal repeater (sold separately) to maintain connectivity on trailers 36 ft or longer.

"Our target customer is anyone who values safety, efficiency and peace of mind on the road," says Tymate's representative. "This includes farmers and ranchers, RV owners and campers, truck owners, commercial fleet operators, and everyday drivers. Anyone who wants a safer, more fuel-efficient driving



System displays real-time pressure and temperature for each tire within 5 to 10 min of driving. Drivers receive alerts as soon as any tire falls outside safe parameters.

experience can benefit."

The system is designed to be as user-friendly and hassle-free as possible. It offers plug-and-play convenience and universal compatibility, and installation for four tires takes just 15 min. It'll display real-time pressure and temperature readings for each tire within 5 to 10 min of driving. Drivers receive alerts as soon as any tire falls outside safe parameters.

"Above all else, we prioritize the well-being of drivers and passengers. Our products are meticulously engineered to exceed industry standards and withstand various road conditions. With Tymate TPMS, you can trust that your tire pressure is monitored with utmost precision. After all, every driver deserves peace of mind."

Interested readers can reach out through the contact form on the company's website.

Contact: FARM SHOW Followup, Tymate (sales@tymatetpms.com; www.tymatetpms.com).



JD Quick Tach brackets installed on IH loader arms.

IH To Deere Quick Tach Conversion

David Simpler found a practical way to use Deere loader attachments on his International Harvester 275.

"The IH was heavier in size and body weight than my Deere tractors," said Simpler. "Why not convert it?"

He found conversions for sale online, but they would've set him back nearly \$3,000. Instead, he stumbled upon a solution without even looking for one.

"I saw a Deere 440 loader with a 4-pin skid steer universal adapter plate for a universal quick tach on Facebook Marketplace," says Simpler. "The owner wanted only \$400. I figured the adapter plate was worth more than \$1,000. I bought the loader just to resell the adapter plate."

After he got it home and removed the adapter plate, he realized the loader bracket for the tractor subframe looked familiar. It had the right hole pattern to attach to his four-pin IH loader arms. The half-round part of the bracket that rested on the subframe

bracket matched the pattern for picking up Deere quick-tach attachments.

"I cut off about 6 in. from what had been the top of the brackets so it wouldn't interfere with attachments and flipped the brackets over," recalls Simpler. "They fit the 4-pin IH loader arms as expected. All I needed was a plate for the bottom pins to lock in the attachment."

When Simpler looked around his shop, he found what he needed. He had a rack of quality steel Bushhog knives. They even had holes at one end, the size he needed.

"They were the right thickness of metal, so I cut the ends off of two and welded them to my new quick tach brackets," says Simpler. "They work wonderfully, and now I can hook up to my grapple and bucket or other Deere attachments with my IH 275."

Contact: FARM SHOW Followup, David Simpler, 14 S. Shore Rd., Elkton, Md. 21921 (ph 443-350-1199; davidsimpler@yahoo.com).