

CUTTING EDGE FABRICATION YAMAHA YXZ1000

**Taking homebuilt
to a new level!**

By the staff of Dirt Wheels

□ Ralph Fickett and his son Shawn are long-time off-road diehards who have embraced the world of UTVs. Ralph has been involved with quads, dirt bikes and snowmobiles; in fact, any toy with a gas engine, so he was open to the UTV world. He jumped in when Can-Am came out with the first Maverick 1000. Before starting his own fab shop, Cutting Edge Fabrication, Ralph's son Shawn worked for Phil Blurton's No Limit Race Development. Blurton's shop is about 1 mile from the Fickett home. Ralph asked Phil if he needed help, because Shawn was a very good welder and mechanic for his age. Phil agreed to try

him out, and Shawn stayed with No Limit for two years. He still helps Blurton out if he needs it, and that is why the father-and-son team were at this year's KOH.

The pair had some specific ideas on what they wanted for their UTV project, and that included searching for a machine that was a "driver's car." This was not a sponsored deal, so they were also looking for an affordable model. Soon they had narrowed the search down to a manual-shift Yamaha YXZ1000.





Despite stiffer springs for the longer suspension arms, this YXZ is set up for a plush ride. The wide stance lets the car feel stable and planted in turns.

CUTTING EDGE YXZ1000R

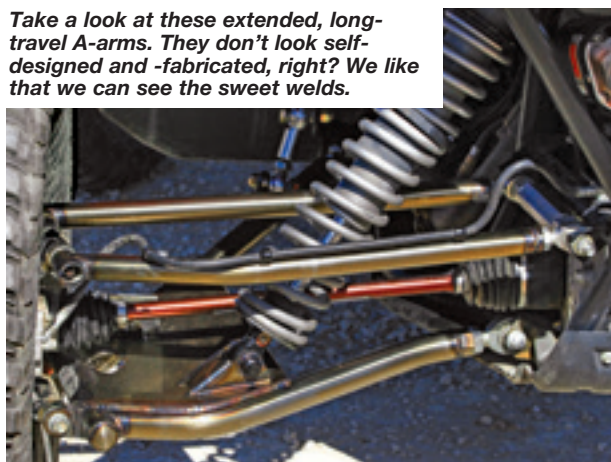


Owner-fabricated pieces are all over this YXZ. That includes the clean but simple interior and dashboard.

Shawn Fickett went with +3.5-inch long-travel arms to make them compatible with aftermarket parts like these Summers Brothers axles.



Take a look at these extended, long-travel A-arms. They don't look self-designed and -fabricated, right? We like that we can see the sweet welds.



Even though they live in a densely populated area of California, where it should have been easy to find one, it proved to be a challenge. Actually, finding one was easy, but finding a clean one was not. Eventually, they found a manual-shift 2016 Yamaha YXZ with a mere 300 original miles on it. The downside was it being 200 miles from their home. In California, that can be a real trek. The clean machine pulled at them, and even though they could have paid far less for a more "experienced" machine, the drive and extra cash were worth it.

The Ficketts put together a clean project that has a great look and strong performance. The self-built cage is set up for a quick-release roof panel.

The Ficketts didn't get all fancy with the look of the car, but had the clear powdercoated cage and Method wheels with blue lock rings and a nice contrast.



PARTS LIST

BAJA DESIGNS: (800) 422-5292, www.bajadesigns.com
 Baja Designs Soltek
 4 HID pod lights.....N/A
BF GOODRICH:
www.bfgoodrichracing.com
 KR2 32-inch tires.....\$1200
CUTTING EDGE FABRICATION:
 (916) 340-4082,
www.cuttingedge-fab.com
 Two-seat race cage\$1,550
 3.5 inch custom long-travel kit.....\$2999
 2019 YXZ hub conversionN/A
DRAGONFIRE RACING:
www.dragonfireracing.com
 EVO 5-point harnesses.....\$300

DYNOJET: www.dynojet.com
 Power Commander 5.....\$500
EIBACH: www.Eibach.com
 Shock spring upgrade.....\$700
METHOD RACE WHEELS: (866) 779-8604, www.methodracewheels.com
 401-R 15-inch.....\$1200
PACKARD PERFORMANCE: (801) 335-4013, www.packardperformance.com
 Supercharger\$2800
 Short-throw shifter\$275
RTIC COOLERS:
www.rticcoolers.com
 RTIC 20 Cooler.....\$100
TUBE WORKS: www.tubeworks.com
 70/30/15 wide-ratio trail kit.....\$2,000

RUGGED RADIOS: (888) 541-7223, www.ruggedradios.com
 RRP696 2-place intercom
 with 60-watt radio\$1,508
SUMMERS BROTHERS RACING:
 (909) 395-5555,
www.summersbrothersracing.com
 300M axle shafts.....\$1,000
SWITCH PROS:
www.store.switchpros.com
 SP9100\$550
WARN INDUSTRIES:
 (800) 543-9276, www.warn.com
 Front winch.....\$350
YAMAHA GYTR:
www.yamahamotorsport.com
 Billet clutch basket kit.....\$1000

Like many full builds, the Ficketts started out with a stronger race cage for safety and looks. The difference is that Shawn is both the brains and brawn behind Cutting Edge Fabrication, and he made his own cage from scratch. It is a thing of beauty with welds so fine that he chose to have the cage powdercoated in clear to show off the TIG-welding craftsmanship. That wasn't the end of the Cutting Edge Fabrication work, either. Shawn designed and built all of the +3.5-inch long-travel suspension arms from scratch.

The suspension arms increase the travel and widen the car for better stability. Shawn chose to go with the 3.5-inch increase to make it easier to connect with other aftermarket parts, such as axles and tie-rods. In fact, they were able to use off-the-shelf Summers

Brothers 300M axle shafts. Shawn also chose to powdercoat the suspension arms in clear as well.

So far the shocks are the stock Fox units that came with the car, but with the longer arms they needed stiffer springs, so an Eibach shock spring upgrade was part of the suspension changes.

Even though we met the Ficketts in the Johnson Valley SoCal desert at King of the Hammers, they are from northern California. The off-roading around their home is rocky and technical. You wouldn't think a stick-shift Yamaha would be the perfect choice for their area, but the Ficketts showed us which scrapes the car earned on the infamous Rubicon trail!

When you are riding mountains and rocks, and especially 4x4 tech as brutal as the Rubicon, more clearance

is a must. To gain the clearance, they jumped the stock 27-inch tires on 14-inch wheels up to Method 401-R 15-inch race wheels wrapped with BFG KR2 32-inch tires. As part of the suspension and wheel mods and changes, the Ficketts performed a 2019 YXZ hub conversion to support a 4/156 lug pattern. We had heard that conversion wasn't possible. If you are creative and have the right machinery it is, so the Fickett Yamaha has 2019 hubs and 2019 rear brake rotors on all four corners. The hubs have to be turned down about 1/8- to 3/16th of an inch to get the shaft seal to make contact on the existing knuckle. The machining also aligns the new rotors with the existing brake calipers, so if you don't have a metal lathe, it cannot be done.

You can imagine what jumping the tire size 5 inches would do to the

Even with tires voted least likely for sand use, the Fickett YXZ proves that it has plenty of power on tap. A supercharger is like that.



CUTTING EDGE YXZ1000R



Running the stock Fox shocks with Eibach springs has not hurt the performance of this YXZ at all. It handles very nicely.

gearing with the stick-shift gearbox and foot clutch. It doesn't make the stock car trail-happy. The father and son team installed a Tube Works gear reduction kit for improved torque with the larger-diameter tires. Lowering

the gearing wasn't enough to meet expectations, so they bolstered the power entering the transmission with a Packard supercharger!

To optimize the supercharger performance, a Packard short-throw shifter, a Dynojet Power Commander 5 and a Weller-tuned exhaust joined the party, along with a GYTR billet clutch basket kit to handle the ponies.

With bright orange/red bodywork, the car already looked pretty great, so there was no reason to waste money on fancy graphics. But, they did personalize the machine. Ralph made the in-bed mount for the RTIC 20 cooler, but he says that Alpine Designs Off-Road (www.alpinedesignsoffroad.com) has one for sale. Communications are thanks to a complete in-car and car-to-car system from Rugged Radios. Wiring the added circuits was helped by parts from Switch Pros. The added circuits

also power Brite Saber LED fiber-optic whips. They are joined by YXZ Addicts whip flags. For lights, he went with Baja Designs' Soltek 4 HID pod lights mounted to the cage.

Mounted to the front of the cage is a 50-inch LED light bar. A friend bought it on Amazon, then damaged it in a dune roll-over. The Ficketts snatched it out of the dumpster and repaired it. Free dollars! At the front of the car is a Warn winch. It is a must-have accessory for trails like the Rubicon! Finally, the stock shoulder belts were replaced with DragonFire Racing harnesses.

WHY A YAMAHA YXZ1000?

The Ficketts like the way the YXZ drives compared to traditional belt-driven cars. They feel the YXZ is a real driver's car due to the fact that the driver controls the shift points and manages power delivery to the ground.



Obviously, this Yamaha is far from stock. We rode in the car as a passenger first. It is designed for rock- and trail-running, so the suspension was naturally a little soft in the Johnson Valley desert whoops.

It worked far better hitting them fast than it did just rolling through. Once we got onto smoother trails it became clear that this was a very quick machine. Going quick does require plenty of input from the driver. Certainly the Packard Supercharger and other engine mods boosted the overall power. And, with the lower gearing, it pulls well from gear to gear with the 32-inch tires.

Then it was our turn to drive. Like any Yamaha YXZ1000, revving the engine well in each gear helps it pick up the next gear cleanly. The difference is that the more powerful engine means the car pulls really hard when the rpm are up. We played on fast and tight

desert trails and on small areas of sand dunes. The BFG tires are not intended for dunes and deep sand, but we had plenty of power to get through.

Fickett's YXZ feels light and nimble but planted with the wider stance. We can see why they stuck with the stock seats. They feel fine with good comfort and support. We didn't drive it at night, but we're sure the plentiful lights do a good job. We did connect to the Rugged Radios intercom, and it worked great.

WRAPPING UP

This build is pretty unique. It was built on a budget by a young guy with help from family. They did most of the work on their own, including the almost-unprecedented self-built construction of the cage and suspension arms! Fickett does sell both the cage and the suspension arms. Every item on this YXZ was added for



Packard's compact little Supercharger is a great answer for those looking for upgraded, uplifted and yet more drivable power from the YXZ.

performance, strength or safety. It has a level of finish and style that made us search for the owners when we saw it parked. It is truly a calling card for Shawn Fickett's fab business. We love a calling card like that. □