

BEST PLACES TO RIDE IN TENNESSEE

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Dirt Wheels

THE #1 UTV/ATV MAGAZINE

JUNE 2020

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X3 RC RR**
THIS MACHINE
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— VS. —
RANGER 1000
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MORE POWER?



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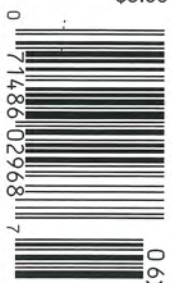
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WARNING: Much of the action depicted in this magazine is potentially dangerous. Virtually all of the riders seen in our photos are experienced experts or professionals. Do not attempt to duplicate any stunts that are beyond your own capabilities. Always wear the appropriate safety gear.

PROJECT ATV

DUNCAN DUNER

TRX470R sand slinger

By the staff of Dirt Wheels



Sliding corners can be difficult with paddle tires. ITP's Sand Star rear tires have a partial V-Blade design so you can still kick the rear out.



□ We never fully understood the vastness of gravity's effect on the inhabitants of this rotating ball of land and water that we call Earth. That was until we felt the pull of mystic wind-blown peaks and the sharp ridges of sand dunes.

Riders from far and wide are pulled to these various insatiable places with all manner of off-road machinery to scale the steeps and blast berms with some of the most impressive aftermarket upgrades around. The thrills, family times and even the spills keep us all going back because there is nothing quite like sand's attraction. The boys at Duncan Racing are no strangers to dunes, and build up customer machines, like Dennis Demink's 2005 Honda TRX450R to sling sand up the biggest faces.

DUNCAN DUNER



MOTOR PULL

Sand is deep and difficult to claw through, which can be strenuous on any machine. This engine gained one of Duncan Racing's 470cc National kits, because more horsepower is your friend in the sand. Here is the breakdown: DR starts with their HP4 valve-train kit, which includes porting and polishing the head, SERDI valve seat machining, heavy duty valve springs with titanium retainers, oversized +1mm stainless steel valves, HP valve guides and a Bill X11 camshaft. DR combines this valve-train kit with assembly knowledge gained over many years of engine modification. All of these parts and modifications work perfectly

together to make the Honda's cylinder head function much more efficiently.

Next, DR bores out the OEM TRX cylinder and installs a 12:1 compression JE custom piston with a fresh head gasket. Race gas is required to run a high compression piston, so VP C12 fuel fills the tank. Duncan's Fat Boy 4 complete stainless steel exhaust system and a truing of the OEM crankshaft rounds out this version of their National kit.

A DR pre-jetted 41mm FCR carburetor was installed on the '05 Honda to import more fuel to the big-bore engine. A 38mm FCR carb became the stock fuel system after 2006 on the TRX. Duncan's relationship with Vortex

Ignitions allows them to have pre-tuned, adjustable CDI X10's on hand, which changes ignition timing on the Honda. An airbox, and Pro Design's Pro Flow kit with a K&N Filter finishes off the power equation nicely.

More power means more stress on the certain engine components. The clutch system needed to be improved to allow the engine to feed the ponies out to the Sunstar sprockets and RK Premium ATV chain. A Hinson Racing clutch basket filled with Duncan's clutch kit solves the issue, and it is topped off with a Hinson quick-change clutch cover. Maxima Racing Oils fills the Honda's engine to keep things properly lubricated.



ITP A-6 wheels and Sand Star tires were installed on the front and rear of the TRX. The wheels were coated black by Powder1.



There are two LED light bars custom-mounted to Dennis' 450R for his nighttime sand-riding adventures.



A 14-degree-bend quad-high Flexx handlebar is attached to Roll Design's +1-inch anti-vibe stem and bar clamp.



A custom rear bumper was built for the Honda, with Duncan's Chrome front bumper up front.

POWER ISN'T EVERYTHING

You can't go much faster with more power if you don't enhance the control and handling of your ATV. That's where companies like Roll Design and Elka Suspension step in. Roll's MX Lobo II A-arms have one of the best suspension geometries in the business. They work well with Elka's Stage 5 front shocks. This pairing provides a wider front footprint and more travel compared to stock.

The rear retains the stock Honda swingarm in use with Elka's long-travel linkage and Stage 5 remote reservoir rear shock. A RPM Dominator II wide axle and Anti-Fade lock nut is finished up with ITP wheels and Sand Star tires. The front shocks come with triple-rate

springs, while the rear utilizes a dual-rate spring setup. All three shocks are high- and low-speed compression, rebound and spring preload adjustable. Roll Design offers complete kits with their preferred shock tuning, and adjustments added to the Elka's, which are dialed in for a specific rider weight and his style and skill.

The stock steering stem was tossed aside in place of a new +1-inch-taller anti-vibe Roll Design version. RD's handlebar clamp connects the steering stem and Fasst Company Flexx handlebar. Duncan relies on the aid of a GPR steering stabilizer to help Dennis keep the bar pointed in the right direction.

The stock clutch perch and parking brake assembly was replaced with Works Connection's EZ 1-2-3 perch and lever setup with a hot start lever included. The rear brake caliper's parking brake was blocked off with a plate from Duncan. Front and rear brake lines were then replaced with DR's Crown Series steel-braided brake lines, since the stockers weren't long enough to fit on the new Roll Design widened suspension.

SAND SLINGER

Duncan Racing's National kits are worth the coin if you are looking for meaty yet reliable power increases. The bigger-bore 470cc engine puts out

DUNCAN DUNER

DR's National kits offer many different variations of performance enhancement. This kit included a cylinder bore to 470cc.



PARTS LIST

DUNCAN RACING INTERNATIONAL:

(619) 258-6306, www.duncanracing.com
Engine rebuild

(does not include parts) \$795

HP4 valve train kit \$1595

OEM cylinder mod to 470cc \$695

OEM trued crankshaft service N/A

Pre-jetted DR 41mm

FCR carburetor \$749

Fat Boy 4

Complete stainless exhaust \$699

Clutch kit \$199

Crown Series front brake lines \$119

Crown Series rear brake lines \$39.95

Chrome front bumper \$199

Custom rear grab bar \$NA

Graphics kit \$199

Parking brake block-off plate \$14.95

Chain case guard \$49.95

ROCKY MOUNTAIN ATV/MC:

(800) 336-5437,

www.rockymountainatvmc.com

Tusk nerf bars \$179.99

ROLL DESIGN

(760) 731-5920, www.rolldesign.com

MX Lobo II A-arms \$1595

Plus 1" steering stem \$299.95

Handlebar clamp \$99.95

ELKA SUSPENSION: (800) 557-0552,

www.elkasuspension.com

Stage 5 front shocks \$1795

Stage 5 rear shock \$1295

Rear linkage \$425

Rear reservoir mount \$149.95

Suspension limiter \$49.95

FASST COMPANY:

(877) 306-1801, www.fasstco.com

Flexx handlebar:

Quad high 14-degree bend \$349

GPR STABILIZER: (619) 661-0101,

www.gprstabilizer.com

Steering stabilizer \$525

HINSON RACING: (909) 946-2942,

www.hinsonracing.com

Clutch basket \$269

Quick-change clutch cover \$199

ITP TIRES:

(800) 827-1001, www.itptires.com

Sand Star front tires N/A

Sand Star rear tires: 20x11-10 N/A

Front A-6 Pro wheels: 10x5 N/A

Rear A-6 Pro wheels: 10x10 N/A

MAXIMA RACING OILS:

www.maximausa.com

Premium 10w-40 oil N/A

Chain Wax N/A

Brake fluid/DOT4 N/A

MOTION PRO:

(650) 594-9600, www.motionpro.com

Vortex twist throttle kit \$61.13

POWDER1:

(619) 588-9200, www.powder1.com

Powdercoat N/A

PRO DESIGN RACING: (714) 534-0620,

www.prodesignracing.com

Pro Flow kit w/ K&N filter \$149.95

RK CHAIN:

(760) 732-3161, www.rkexcelamerica.com

Premium ATV O-ring chain \$99

REDLINE PERFORMANCE

MACHINES: (928) 771-9363,

www.team-rpm.com

Dominator II axle \$419

Anti-fade lock nut \$216

SUNSTAR:

(937) 743-9049, www.sunstarmoto.com

Front sprocket 14T N/A

Rear sprocket 38T N/A

VORTEX IGNITIONS:

www.vortexcdi.com

X10 programmable CDI \$539

WORKS CONNECTION:

(530) 642-9488,

www.worksconnection.com

Clutch lever & perch assembly

w/ hot start \$195.85

around 50 horsepower compared to the stock 36-horsepower most TRX450Rs can muster. The low-end grunt increase was the most noticeable change, and the Sand Star tires helped the rear hook up very hard. Our photo rider Josh Row found it difficult to round a corner and twist the throttle without the front

end shooting up into the air. Midrange power was a lot stronger than stock, and the power kept pulling hard through the rest of the range. DR is coming out with a new exhaust system that will focus more on mid- to top-end power, but for the sand, their standard Fat Boy 4 is perfect.

The ride is buttery smooth and stable, thanks to the width increase and newfound suspension travel. The Elka and Roll combo is a match made in heaven! Hard hits, chop and landings were soaked up with ease. We did feel that the Fasst Company Flexx Quad High 14-degree-bend handlebar felt a

DUNCAN DUNER

Landings, hard hits and chop are easily soaked up with the new long-travel suspension improvements.



bit tall for shorter riders, and the lack of a grippy seat made hanging on a bit tricky in certain situations. Dennis is a tall rider, so the bar setup was just right for him. The Tusk nerf bars are a reasonably priced option to go with, but foot traction is a bit lacking for how much power and how well this DR-massaged quad handled. Taller or sharper teeth on the pegs might have helped out.

ROUND IT OUT

Loren and Leonard Duncan have once again created a rolling work of art with Dennis Demink's Honda TRX470R sand-slinger build. The custom DR graphics kit, black Powder1 powdercoating and Duncan's bumpers look great on the build, and the big LED lights are great for night riding. We can't wait to head to the dunes again and rip up the steeps on another DR build! □

Hinson's clutch basket and quick-change clutch cover were installed on the Honda with a clutch pack from DR.



(Below) Duncan Racing's complete stainless steel Fat Boy 4 exhaust system is heavy but built to last for years of aggressive riding. It helps the bottom and mid power.

(Below) The Tusk nerf bars are a big improvement over the stock footpeg setup and come at a reasonable price.



(Above) Roll Design's front A-arms are attached to a set of tuned Elka Stage 5 fully adjustable front shocks.

