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MORE ISN'T ALWAYS BETTER. SO, CAN A TRICK 914-4 BE MORE FUN THAN A TRICK 914-6?

STORY AND PHOTOS BY ZACHARY MAYNE



After the usual handling modifications, reducing weight and adding power are two of the most common routes taken in the quest for a faster Porsche. And, when it comes to trick 914s, there is usually some combination of the two at work. Visit a typical weekend autocross or track day and you'll see extremes of both philosophies — 914s with powerful, big-bore 911 engines and bantam-weight flyers that attain faster lap times on less pounds and four cylinders.

The 914s pictured here are examples of both methodologies. Seeing them go to work, darting around cones in a parking lot or carving a fast line at the local road course, is a study in contrasts. Russ Kelso's 1972 914-6 3.6 has a significant power advantage over Pat Ferrell's 1973 914-4, so it's little surprise that Kelso, more often than not, posts a marginally quicker time. But Ferrell nips closely at his heels, a testament to how far a modest diet and an analytical approach can take you.

But what are these cars like to drive? Is might "better" than light? To get a better idea, we've come to Sandia Motor-speedway, located roughly 15 miles outside of Albuquerque. Its 14 turns and 1.7-mile length is a perfect venue for pushing a couple of 914s to their limits. Even before we've climbed into either of the two 914s, it's obvious they're very different cars. The 914-6 looks angry, with big flares and cantilevered slicks, while the 914-4 takes a more subtle approach



with stock, unadorned bodywork and street-legal tires. We decide to size up Ferrell's "less is more" approach first.

"I bought the car in 1990 as a father-and-son project," recalls Ferrell. "It was a running, driving project that needed paint and new tires. Originally, we got it because it was the cheapest Porsche we could build. Later, I realized the advantages of a mid-engine layout and low weight for autocrossing. My dad and I started with bigger tor-

sion bars, a front sway bar, and different shocks and coil springs in the rear."

In the early days of his ownership, Ferrell used the 914 as his college commuter and weekend autocrosser. When he graduated, it was time to buy a more practical daily driver, which meant his 914-4 could become a dedicated autocross and track day car. Ferrell knew he wanted to keep the car light and simple, two keystones of Porsche's own philosophy. There were

other inspirations, including a very simple and light 914 with a well-built four cylinder. Ferrell remembers seeing it as a kid.

"There was a website that featured the car, called '914 Lite,' some years back," he says. "It was a very clean 914-4 that had been lightened and had a stroked four in it." He also cites Porsche's 911R: "That car started many trends in 911 racing that continued for years. Super light, purposeful, and a sleeper, which I like."

He rebuilt his Type IV 2.0-liter flat four, enlarging it to 2.4 liters in the process. A couple of years ago, Ferrell decided he needed more power. He rebuilt the motor again, this time to 2.6 liters. The larger displacement was arrived at by installing 103-mm JE pistons. De Mello Machine in Lake Elsinore, California supplied those, along with a counter-balanced, 78-mm stroked crankshaft that uses Type IV main journals and Chevy connecting-rod journals. Chromoly H-beam connecting rods from Eagle mate the pistons. The big four's compression ratio is 10.75:1.

The cylinder heads feature larger, 44-mm intake valves and 38-mm exhaust valves with performance valve springs. Fuel delivery is handled by dual 44-mm IDF Webers. On the ignition side of the equation is an MSD 6A ignition; the points have been swapped for a Crane electronic pickup. A Kerry Hunter header and Supertrapp muffler with no baffles complete the package. Ferrell estimates the motor is putting out around 150 hp and, more importantly, 170 lb-ft of torque. The gearbox is the car's original 901 five-speed, rebuilt with shorter gears selected via a Weltmeister short-shifter.

Suspension is a simple but effective setup that relies on a 22-mm front anti-roll bar, 21-mm front torsion bars, Koni shocks, and 180-lb rear Hypercoil rear springs. In order to provide an added measure of safety and to stiffen the chassis, Ferrell

welded in a roll cage he fabricated out of DOM tubing. Says Ferrell: "It extends from the rear transmission mounts to the front A-arm mounts and is attached to the body." He also added a factory style weld-in reinforcement kit to the rear suspension.

Front brakes are 1977 911 gear, while the 914's original front calipers were moved to the rear. All four corners rely on solid, gas-slotted rotors, and Ferrell installed a brake-proportioning valve to allow him to dial in brake bias. Wheels are 15x7-inch Mahle "Cookie Cutters," shod with Kumho Ecsta V710 225/50R15 tires. The interior has been stripped of all non-essentials, such as the dashboard, sound-deadening materials, windows, door panels, and carpeting. The roll cage's front lower cross-bar sits where the dash did and mounts the gauges, including a prominent Autometer tach. Ferrell's 914 was stripped to bare metal and repainted 12 years ago.

When we roll Ferrell's 914 onto the scales, it weighs in at 1,873 pounds. When you consider that this 914 still wears its original steel bodywork instead of lighter fiberglass body parts and has a full cage, you realize it's very light. The understated impression this 914 gives from the outside is dismissed as soon as we crank the ignition key, however. Its modified four fires up with a loud, exuberant racket.

The 901 gearbox's dogleg first gear takes a little muscle to call up, but the clutch is easy to modulate as we pull out and head onto the track. Our first lap is an exploratory one as, over the raucous din of the motor, Ferrell gives pointers on which gear he uses in various turns as



Flat four is substantially lighter than a flat six but sits further back, too. The stripped interior cries out for some serious seats...



well as what the quickest racing line is for this particular car at Sandia. With warm-up laps complete and reassurance building, I start pushing harder.

As Ferrell explained before our session, there's no need to push the motor much past 5500 rpm, since power pretty much flattens out after that. But there's a terrific sweet spot from the low end of the rev-range up to 5500 rpm that propels the feathery 914 forward on a wave of torque. The flat four doesn't rev as quickly as a 911 flat six does, but it more than makes up for that with its smooth, eager character. It's almost entirely lacking in flat spots, the 2.6's torque coming on strong in the mid-range and top-end. And that makes this 914-4 feel fantastic in a straight line.

As laps accrue and familiarity builds, cornering speeds increase correspondingly. Turn-in through the rim of the leather-bound Momo is quick and plenty of feedback filters into my fingers. With optimal mid-engine packaging, all 914s rotate nicely around their centers. But lowering one, stiffening one, and putting some sticky rubber on it takes merely nimble handing into truly inspiring territory.

Despite the lone anti-roll bar, there's almost no detectable roll on the transition from turn-in to full load. Outright mechanical grip is impressive, with enough lateral *g* forces building in the faster third- and fourth-gear corners to strain neck

One look at the business end of this 914-6 is all you need to know it has come a long way from its street-car roots. 901 gearbox soldiers on despite the 3.6-liter powerplant.

muscles. In fact, it's here that the seating becomes an issue. Even with its lower pad removed, which makes the side bolsters somewhat deeper, the stock 914 seat is hopelessly mismatched to the car's level of grip. That's probably why Ferrell has a race seat in his garage, waiting to be installed. Too bad it's not already in...

Slicing around corners at the edge of adhesion, the task of adjusting the 914's attitude mid-bend is go-kart easy. Tiny steering, throttle, or braking inputs allow precise adjustments. Overall, the car is neutral, with a minimal amount of understeer that provides more confidence nearing the limits. When it comes to slowing down, deceleration from the 911 brakes is more than sufficient, hauling the 914 down from triple digits on the main straight with secure stability.

Forethought is required to guide the 901 shifter up and down through the gears quickly and smoothly, but its control inputs match up with the rest of the car nicely. All up, Ferrell's 914 is one of the best-sorted track cars I've driven. Its pure, simple approach and thoughtfully dialed-in setup make it easy to hop into and immediately start enjoying fast laps. Pulling into the

staging area, I coast to a stop next to Kelso's menacing white 914-6.

Even before I've climbed in and fired its flat six, it is obvious that this is an entirely different kettle of fish. The fat-fendered bodywork is battered and bruised from years of on-track action, lending it the look of a battle-hardened veteran. And a veteran it is. In addition to autocrossing, Kelso races his 914 wheel to wheel every chance he gets. He bought this factory 914-6 nearly 20 years ago as a tub, with the intention of installing his own powerplant.

"It was owned by someone who raced it in GT2," says Kelso. "It has always been called a pig because it's heavy. Whoever put the cage in didn't scrimp on tubing." As the owner of Performance Motor Car Investments — a Porsche repair and tuning shop — in Corrales, New Mexico,

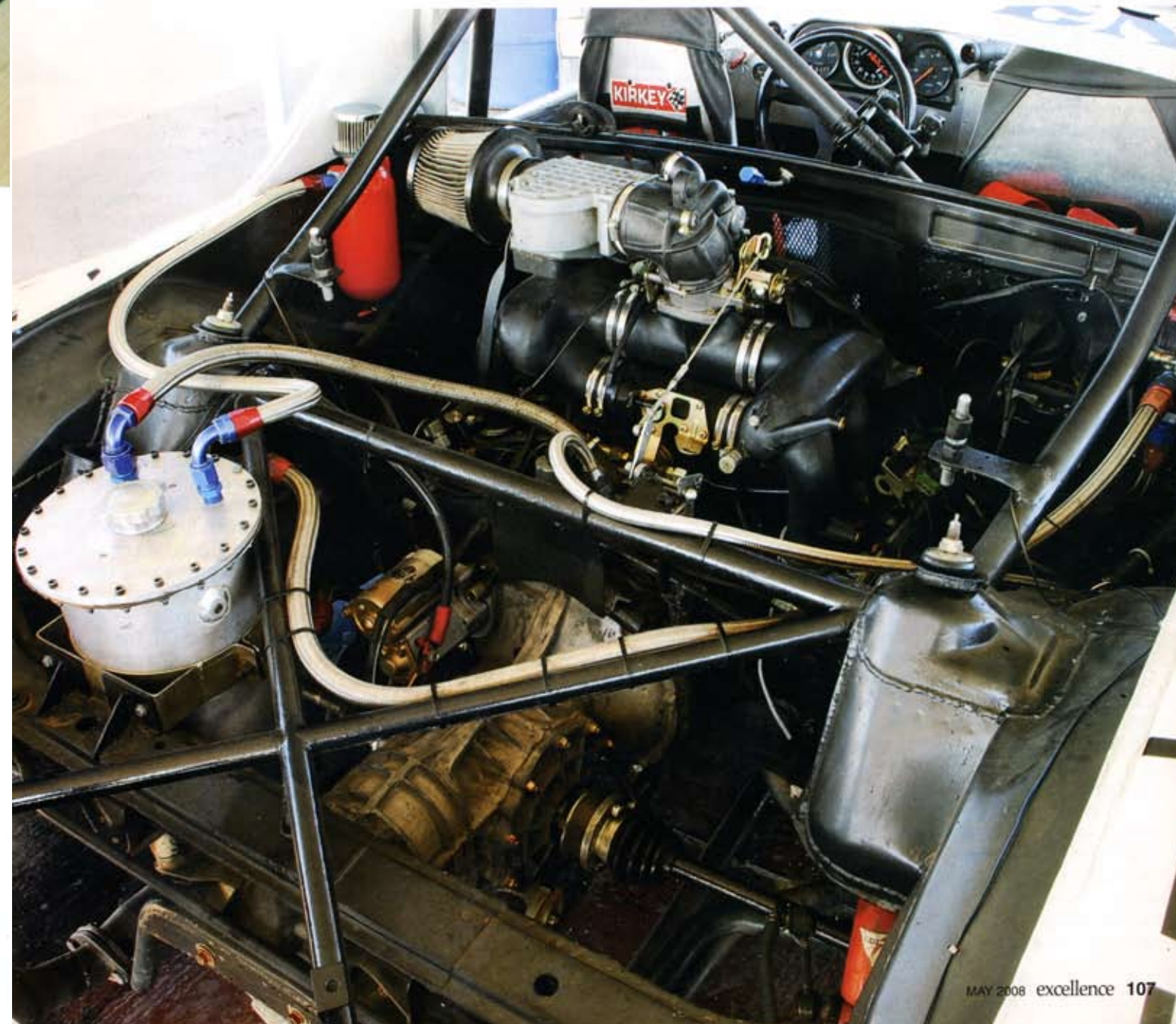
Kelso has built his share of 914 race cars. Despite it being a real 914-6, the first powerplant under Kelso's ownership was a supercharged, fuel-injected four. This was superseded by a 2.4-liter T flat six. A 2.7-liter RS-spec engine followed, but, in 2007, Kelso installed a 3.6-liter 964 flat six he found on eBay. Before installing the 3.6, he reshaped the intake and exhaust ports for optimal flow. But for a K&N air intake, headers from European Racing, and a Supertrapp exhaust, the 3.6 is otherwise stock. Kelso feels the 3.6 is good for more than 280 horsepower.

Surprisingly, Kelso still relies on the 901 transaxle he installed 15 years ago. The 'box has been rebuilt with shorter third, fourth, and fifth gears and mates up to the 3.6 via a Patrick Motorsports flywheel conversion. In order to allow the motor to

be fully exploited, Kelso installed a factory ZF limited-slip differential along with a Weltmeister short-shift kit.

On the handling side, his 914 uses a 22-mm anti-roll bar, 22-mm torsion bars, and Koni adjustable shocks up front. At the rear are a pair of 400-lb. Weltmeister springs, Koni adjustables, a factory 17-mm 914 rear anti-roll bar, and reinforced trailing arms. Brakes at all four corners are early 911S gear, and Kelso installed a Tilton brake-bias adjuster to allow fine-tuning. Wheels are 15x7-inch front and 15x8-inch rear Fuchs, shod with 22.5x9 cantilevered Goodyear racing slicks.

The extensive cage ties into the strut mounts front and rear, adding considerably to the chassis' stiffness. The bodywork consists of fiberglass panels from American International Racing. Even so,





Despite appearances that would indicate otherwise, this wild 914-6 actually has to work hard to pass this modest 914-4...

Kelso's 914-6 weighs in at 2,249 pounds when it rolls onto the scales. While it's over 350 pounds heavier than Ferrell's 1,873-pound 914-4, Kelso's six has a far more favorable power-to-weight ratio.

Thanks to the elaborate roll cage, you don't use the door to get into Kelso's 914. After grabbing onto the upper part of the cage and swinging two legs over, you slither into the tight-fitting Kirkey seat. This cockpit is more intimidating than the yellow car's, thanks to the cage and a seat that's so tight it wraps around your upper torso and under your arms.

Twisting the key fires the 3.6, which has a barely muffled bark. At idle, the flat six sends tingles and pulses through the whole car. The clutch is heavier than the one in Ferrell's 914 — no surprise since it must channel a lot more power to its five-speed 901. Thanks to the weighty clutch, a throttle that's on the sticky side, and a light flywheel, getting away from a stop can be tricky. In fact, my first try causes the motor to stall. Twisting the key brings the 3.6 back to life with a raspy explosion and I get away from a stop with a flurry of revs and a smidge of wheelspin.

Out on track, things start happening fast. Compared to the relatively subdued 914-4, this 914-6 is an exercise in sensory overload, the most notable input being the rabid flat six behind you. On paper, 280+ horsepower doesn't sound like a lot. But, strapped to a lightweight 914 with closely

stacked gears, it provides genuine supercar performance. Straights on which the 914-4 accelerated spiritedly suddenly seem a lot shorter, the 914-6 lunging forward with a crazed shriek. Judging solely by the seat of my pants, it's considerably quicker than Ferrell's 914-4.

Through the first series of Sandia's turns, the steering is heavier than Ferrell's 914, though its feedback and immediacy are similar. Likewise, grip is phenomenal and a bit higher than Ferrell's car thanks to the wider track and wider racing tires. The same balance from the mid-engine layout is still evident, as is the willingness to rotate easily around its center. The Goodyear slicks aren't quite as predictable as the Kumhos when they break away, so it's not as easy to finely adjust this Porsche's attitude mid-bend. The rears either stick like glue or spin wildly on torque.

Which brings us to the biggest obstacle getting in the way of feeling immediately comfortable behind the wheel of Kelso's 914-6: serious and instant power oversteer. If the wheel is pointed a decent amount off center and you give the motor too much throttle, the back end swings out. It's huge fun to steer a car around a race track with the throttle, but it's also pretty intimidating when an unfamiliar car threatens to put you into a wall.

Go easy on the throttle out of turns and Kelso's 914-6 still explodes onto straights, accelerating forcefully up through the gears thanks to the quick-revving engine. A few laps later, I'm a little more comfortable with this 914's power-to-grip ratio — but it's obvious that more time behind its

wheel will be needed before I can really explore its performance envelope.

The other issue that hinders my ability to exploit this car is its 901 gearbox. If I've learned one thing about 901s, it's that each differs a little in the amount of effort needed to shift it — and the amount of precision it offers, or lack thereof. In a car with a relatively conservative amount of power, like Ferrell's four, it's not a big issue, as things are happening at a more manageable rate. In this 914, though, the engine revs so quickly and the car accelerates so hard that the deftness needed to guide the shifter can really hamper progress. You end up focusing on shifts as much as, or more than, braking and turn-in points.

My cool-down lap complete, I pull into the pits and shut the rumbling flat six down. There's no arguing with my higher heart-rate and sweatier palms. The closest comparison I can make between the two 914s using modern mid-engine Porsches, and perhaps it's a comparison too far, would be a Cayman S and a Carrera GT. The C-GT is faster and has more ultimate potential, but I'd put money on the 987 coming up as the faster, more accessible car in the hands of someone who has driven neither.

The point is that more isn't necessarily better — especially if you're unfamiliar with the machine in question. More sure is fun, though. And *challenging*. While there are 914-4s with more power out there, it's hard to imagine one with a chassis that works better than this one's. But I find myself wanting more, and I can't think of a better way to convince Kelso to let me have another go in his 914-6 than to name it the winner... ■