2012 KAWASAKIS

Kawasaki introduces radically new ZX-14R and Ninja 650 sportbikes to keep the good times rolling

by Scott Rousseau

Ninja ZX-14R(SE)

KAWASAKI LEADS THE Japanese OEMs in overall US motorcycle sales for the second consecutive year. Far from thriving in a still-ailing US economy—its motorcycle sales declined 6% from October 2009 through October 2010—Kawasaki is still weathering the storm better than its larger rivals and continues to pump out interesting new models. Over the past few years, the "Good Times" company has completely redesigned its Vulcan 1700 cruiser line and introduced three exciting new sportbikes, the Z1000, Ninja 1000 and ZX-10R supersport. These, along with other perennial favorites such as the ZX-6R, KLR650 and KLX250S and an aggressive electronic media marketing strategy, have helped Kawasaki carry 15.38% of the market vs. 13.97% for Honda, 13.03% for Yamaha, and 7.17% for Suzuki.

For 2012, Kawasaki is releasing two more redesigned sportbikes, the flagship Ninja ZX-14R and the Ninja 650. Now carrying the same "R" designation found on Kawasaki's race-bred superbike and supersport models, the ZX-14R packs more displacement and more power than ever before in an all-out effort to dominate its main rival, the Suzuki Hayabusa. The Ninja 650 features an all-new chassis, new bodywork and engine revisions aimed at improving its power delivery. On the cruiser front, Kawasaki is incorporating a new system called the Kawasaki Air Management System (KAMS) to combat engine heat on its flagship Vulcan VN1700 Voyager full-dress tourer.

Ninja ZX-14R, $14,699

Introduced in 2006, Kawasaki's Ninja ZX-14 significantly upped the ante in its high-stakes race with the Hayabusa. Perhaps fearing a reprisal from Suzuki, Kawasaki unveiled the biggest and baddest Ninja to date, a boulevard beast with a claimed 209 hp (including the ram air effect) and 119 lb.-ft. of torque on tap.

Kawasaki engineers stroked the ZX-14R's liquid-cooled, inline four-cylinder big-block motor an additional 4mm. Bore and stroke are now 84.0 x 65.0mm, increasing displacement from 1352cc to a massive 1441cc. A larger engine requires more air to make power, so the ZX-14R's cylinder head now features CNC-shaped combustion chambers and, borrowing a page from its racing ZX-10R sister, polished and reshaped intake ports with longer intake valves for straighter ports. Naturally, the ZX-14R's camshafts feature increased lift and revised profiles to maximize its breathing potential, and they're driven by a new, stronger cam chain with a revised tensioning system designed to withstand the punishment of the more radical cams at high rpm.

To shave as much reciprocating weight as possible, the ZX-14R's forged pistons have thinner crowns, and their undersides are now cooled by a new oil-jet cooling system that Kawasaki claims reduces engine temperature significantly. And as the ZX-14R's compression has also been bumped up from 12.0:1 to 12.3:1, increasing combustion chamber temperatures, the engine can use all the cooling help it can get. The ZX-14R's connecting rods have also been beefed up to handle the strain of high rpm and a longer stroke, with stronger small ends (piston side). They're also made of a stronger material. Also in the name of strength, the crankshaft main journal sizes have been increased from 38mm to 40mm.

Pulling air through a larger, thicker air filter element that boasts 40% more airflow capability, the ZX-14R's fuel injection, a Mikuni system with 44mm throttle bodies, has also been revised via an automatic idle adjustment to reduce emissions. Out back, the ZX-14R's reshaped, large-volume mufflers also feature catalyzers to reduce emissions even further. Kawasaki claims the major benefit of this hot rodding is that the ZX-14R's forward thrust is noticeably stronger above 4000 rpm, but Kawasaki engineers also worked at keeping the ZX-14R civil by reworking its dual gear-driven counterbalancers to keep the engine smooth throughout the powerband.

To better manage the ZX-14R's new-found power, its six-speed transmission gets heat-treated gears, and a racing-derived slipper clutch replaces the non-slipper unit of ZX-14s past. But there's even bigger news in the form of Kawasaki Traction Control (KTRC), a technology not previously found on the Ninja ZX-14, although it was introduced on Kawasaki's revised Concours 14 sport-tourer for 2010. The KTRC features three different driving modes, including full power, medium power and a low-traction mode for wet or slippery conditions. It's easily controlled by a toggle/push switch mounted on the left handlebar, and system intervention is displayed via a seven-segment bar graph on the LCD info-screen on the instrument panel.

Kawasaki engineers used the existing ZX-14's over-the-engine, monocoque-style chassis as the basis for the ZX-14R, but more than half of the previous frame's aluminum castings and forgings have been modified and retuned for different flex and rigidity characteristics. The ZX-14R's aluminum swingarm, which has been beefed up with more gusseting for increased rigidity, is also 10mm longer than the ZX-14's. Other changes include revised front and rear suspension designed to improve bottoming resistance, machined 10-spoke wheels that reduce unsprung weight by 3.3 lbs.—a good thing, as the ZX-14R's curb weight has increased over 17 lbs., now 584.3 lbs. compared to 567.0 lbs. for the 2011 ZX-14. We're guessing that it'll make good use of its dual 310mm front and 250mm rear petal disc brakes, which have also been updated with a more rigid disc material and different pad compounds for increased stopping performance and a more linear feel at the lever.

The ZX-14R's new bodywork is updated as well, with a more aggressive nose fitted with a quad headlight assembly and a large ram-air duct to feed the airbox. The ZX-14R retains the Ferrari

Ninja 650

Testarossa-style sidefins on its fairing, but they're more pronounced on the 14R, and the bodywork's venting system is claimed to do a better job of keeping engine heat away from the rider and passenger. A re-sculpted tail section features flush-mounted turn signals. Ergonomically speaking, smaller riders will appreciate the ZX-14R's reshaped seat which makes it easier to reach the ground.

The ZX-14R's new instrument panel and controls include a newly finished gauge cluster. A multi-function switch on the left handlebar allows the rider to scroll through its functions, which include the traction control functions, odometer and tripmeters, fuel consumption, range, battery voltage and external temperature. Similar to the Concours 14, an "eco" indicator on the LCD screen also lets riders know when they're getting the best fuel mileage.

The ZX-14R is available in Metallic Spark Black or Candy Surf Blue for $14,699, while an SE model with Golden Blazed Green and special graphics costs an additional $200.

Ninja 650, $4199

Kawasaki has gone through the Ninja 650 with a fine-toothed comb to refine its engine performance, improve its handling and enhance its looks.

The 650R's liquid-cooled, fuel-injected 649cc parallel twin was already capable of street-friendly midrange power and torque with excellent driveability and a smooth running thanks to its 180° crank assembly and balancer shaft to mellow engine vibration, but Kawasaki engineers focused on giving it even more grunt through the middle of the powerband. The key change, says Kawasaki, is in the 650R's exhaust system, which now features a connector pipe between its headers and a new three-chamber muffler design. The new exhaust system is designed to increase overall driveability as well as response.

The engine is tucked into an all-new twin-pipe perimeter frame designed to increase rigidity when compared to the trellis layout of the previous 650. Its wheelbase, rake and trail numbers are basically unchanged, but the new chassis is 50mm narrower through the midsection for a slimmer feel. A new backbone-type subframe also increases carrying capacity by 10%. The chassis also incorporates a new swingarm with a D-shaped cross section to optimize the chassis flex and rigidity characteristics. The 650's non-adjustable 41mm conventional telescopic fork and preload adjustable single rear shock absorber have revised settings to match the new chassis, and its dual 300mm front disc brakes and 220mm rear brake are claimed to offer a slight increase in braking power over last year's model. The Ninja 650 rides on new Dunlop Roadsmart II tires, a 120/70x17 up front and a 160/60x17 out back. Claimed curb weight is 460.8 lbs., compared to 449.8 lbs. for the previous model.

The Ninja 650's ergonomic comfort is said to be enhanced via a 20mm wider handlebar and a two-piece seat assembly topped with foam that's wider and thicker than before. Both the bar and saddle are rubber-mounted, along with the footpegs, reducing vibration to the rider. The 650's new instrument panel features an analog tachometer located above an LCD info-center that displays speed, odometer, dual tripmeters, fuel consumption and remaining range.

Kawasaki describes the Ninja 650's all-new bodywork as more sharply defined and more like its race-winning supersport machines, with flowing lines and a tapered brow that blends nicely with the rest of the bike. The new body parts are also intended to make the bike more aerodynamic and to route engine heat away from the rider more effectively than before. The 650's windscreen is also adjustable to three different positions to tailor wind protection.

What Else Is New?

Kawasaki recognized that the big 52° V-twin engine powering its Vulcan VN1700 Voyager full-dress tourer presents challenges in reducing unwanted engine heat, particularly from the rear cylinder—as do other V-twin-powered cruiser brands we can think of—and the Voyager's leg shields only amplify the problem. To better manage this heat, the Kawasaki Air Management System (KAMS) routes radiator heat to the ground, below the engine. A secondary fan system also draws heat away from the rear cylinder and exhaust pipe and directs it to the ground on the left side of the motorcycle. Kawasaki claims the KAMS is particularly effective in warm weather, while stopped in traffic or for extended periods of low-speed operation, such as during staging for group rides or parades.

Other changes or upgrades to Kawasaki's 2012 streetbike lineup include an ABS version of the popular Ninja 1000 sportbike introduced in 2011. Also, along with the aforementioned ZX-14R, the Ninja 250, Vulcan 900 Classic and Vulcan 900 Custom will be available with Special Edition graphics for a slight premium.

Final Thoughts

In what is sure to be another challenging year, Kawasaki continues to put its best foot forward to attract new customers to the fold. With the mighty performance image of the new ZX-14R and the excellent value of the Ninja 650, we won't be surprised if it maintains its edge over its Japanese competitors.

Vulcan VN1700 Voyager