



2014 **FourTrax Rancher Utility** ATV Series

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2014 Honda FourTrax Rancher Utility ATV Series

Over the years, Honda's liquid-cooled fuel-injected 420cc FourTrax® Rancher® ATV series has built a huge number of loyal followers—and for good reason. Whether the day calls for multiple tasks on a job site, chores around the homestead or a ride in the woods just for fun, the Rancher formula really hits a sweet spot by combining hard-working full-size ATV capabilities in a package with manageable dimensions. These are incredibly versatile machines packed full of Honda quality and reliability, and the Rancher's pricing makes each model a real value in today's market.

In large part, credit for the Ranchers' extreme popularity and versatility must go to the multiple drivetrain configurations available to meet most any rider's checklist. But the great news for 2014 is that these FourTrax Rancher models now feature an all-new chassis with a redesigned frame featuring new, longer-travel suspension plus a lot more. In addition, that new chassis can be easily identified because it's wrapped in all-new bodywork with distinctively aggressive styling and added functionality.



A Wealth of Transmission Options

Honda's unbeatable variation in drivetrain styles in this series gives consumers an extraordinary variety in choices: The two-wheel-drive FourTrax Rancher is available with manual gearbox or in ES configuration, featuring Honda's highly regarded Electric Shift Program (ESP®) that makes gear shifts as easy as touching a button; the FourTrax Rancher 4x4 adds TraxLok® 4WD capabilities; the FourTrax Rancher 4x4 ES adds ESP push-button shifting to that 4WD equation; and the Rancher 4x4 Automatic DCT features Honda's heralded Automatic Dual Clutch Transmission (DCT), a five-speed fully automatic transmission that also gives the rider the option of ESP mode.

For 2014, the Rancher 4x4 Automatic DCT now employs a new-generation DCT with an elevated level of sophistication: new updated dual-zone shift logic offers improved adaptation to all riding conditions based on rider and vehicle inputs. The result: the best-performing Automatic DCT we've ever put in an ATV that offers the right gear, at the right time, all the time, all automatically—to create a whole new level of riding compatibility.

To top things off, the Rancher 4x4 model and 4x4 Automatic DCT Rancher also offer the option of Electric Power Steering. Below you'll find a chart that helps with quick correlation between models and technical features, and in the accompanying sidebar you'll find additional detailed information regarding these different transmission systems and TraxLok technology. But regardless of how you look at things, it all adds up to a wealth of wonderful Rancher choices for off-road work or play.



	Rancher	Rancher ES	Rancher 4x4	Rancher 4x4 EPS	Rancher 4x4 ES	Rancher Automatic DCT	Rancher Automatic DCT EPS
TRAXLOK 2WD/4WD			✓	✓	✓	✓	✓
ELECTRONIC POWER STEERING				✓			✓
MANUAL TRANSMISSION	✓		✓	✓			
ELECTRIC SHIFT PROGRAM		✓			✓	✓	✓
AUTOMATIC DCT TRANSMISSION						✓	✓
ELECTRONIC FUEL INJECTION	✓	✓	✓	✓	✓	✓	✓





Upgrades Galore for 2014

For 2014, these brand-new Ranchers incorporate a host of upgrades, starting with an all-new double-cradle steel frame developed with Computer Aided Engineering. This new frame features increased stiffness for even more precise handling, while more effectively transferring energy for a smoother ride.

An all-new swingarm with an enclosed rear axle was also developed to add strength and rigidity to the chassis. As another plus, this design allows the swingarm rather than the rear final gear bearings to support rear-wheel loads—a design that adds to driveline durability. This new swingarm mounts in new rubber swingarm pivot bushings that absorb input loads at the swingarm/frame junction, which adds to improved ride comfort. As a side benefit, since these rubber bushings are bonded to the inner and outer swingarm collars, dirt cannot enter into the swingarm pivot area—and that adds to long-term durability. In addition, this new rear axle setup locates the sealed mechanical rear drum brake inside the right rear wheel for improved protection and increased ground clearance. Larger, dual hydraulic disc brakes up front offer added stopping power.

This new chassis also incorporates brand-new suspension front and rear. The shocks feature new damping characteristics plus an increase in travel to 6.7 inches at both ends for a plush and controlled ride. These shocks also offer adjustable spring preload that allows for quick and easy suspension tuning to match varying loads and riding conditions. Also, new sealed steering knuckle bearings add extended durability and a full-length composite lower skidplate with integrated front brush guard add protection.

Aboard the Ranchers that incorporate Honda's Electric Power Steering, a new attachment layout using a three-point mount for the EPS mechanism makes the entire unit more rigid in its placement, and that makes for even more precise steering. This EPS system is a next-generation setup for 2014 that incorporates new settings for improved linearity in steering response, reduced low-speed steering effort for enhanced maneuverability and decreased kickback traits for improved all-around steering action.





At the Heart of the Rancher

In the engine department, all Ranchers make good use of the rugged and proven OHV liquid-cooled, fuel-injected 420cc engine. In signature Honda style, these Rancher engines are longitudinally mounted to allow direct driveshaft alignment to both front and rear wheels for maximum drivetrain efficiency. The overhead-valve design provides compact engine dimensions for excellent ground clearance while maintaining a broad, easy-to-use powerband.

New mapping for the Programmed Fuel Injection (PGM-FI) system combined with new oxygen sensor feedback technology improves power delivery and throttle response, while also improving emissions and fuel efficiency for greater range and reduced tailpipe emissions. All models feature super-heavy-duty clutch construction for excellent driveability and towing capability. Downstream in the drivetrain, new tougher, plastic CV joint boots supply added durability thanks to their more puncture- and tear-resistant qualities.

Other changes for 2014 include a new fuel pump that is derived from Honda automobile technology; the pump mounts in the fuel tank for better heat isolation and offers an increase in filter life. All Ranchers feature increased AC output for 2014 to support electrical accessory needs: most models see a 16 percent jump to 416 watts, while the Automatic DCT model gains 21 percent to 450 watts. A stainless-steel exhaust system includes a USDA-qualified spark arrester/muffler designed for quiet operation and long-lasting performance.



More and More for 2014

Other more visible changes for 2014 include an all-new one-piece tank/side cover that allows easy access for maintenance—no tools are required for removal. This newly styled bodywork also provides better mud protection for the rider. Buyers who choose the new Honda Phantom Camo scheme will find it not only provides excellent camouflage properties that help the ATV blend into a wide range of field environments, but new Honda application processes also provide better graphic adhesion, excellent durability and improved resistance to fuel spillage to keep things looking better, longer.

A new meter display for all models (excluding the manual-shift 2WD Rancher) features added functions: an electronic fuel gauge, clock, coolant temperature gauge and a “maintenance minder” system that tracks both hours of run time plus miles driven. Also, the twin-headlight system has been redesigned and now features 35-watt headlights with a more focused light distribution pattern for improved visibility after dark. And a newly optimized rider triangle promotes added comfort, while a 0.8 inch-increase in seat foam thickness and softer seat foam density add further to rider comfort.

All things considered, this collection of new Rancher models for 2014 adds up to a dizzying array of choices. Throw in the 17 accessories available from Honda Genuine and Signature Accessories and the variations on the Rancher theme really get wild. Yet in the end, the decision of which model works best depends on the eye of the beholder, while taking into account the foreseeable uses that may crop up down the line. But regardless of the tasks at hand, with the 2014 Rancher lineup Honda continues to hit that sweet spot in the world of Multi Purpose ATVs.



Spotlight on Rancher Transmission Options and TraxLok

ATV riders find Honda's Rancher lineup to be especially attractive, thanks largely to the proliferation of transmission/drivetrain configurations available that meet just about every need imaginable. First, there's a traditional manual-shift five-speed that has proven to be extremely durable and is still favored by many riders.

Next, consider Honda's Electric Shift Program (ESP): a convenient alternative to the manual gearbox that makes gear shifts as easy as pressing the upshift or downshift button. With ESP, an onboard Electronic Control Module (ECM) monitors information

from four sensors—engine rpm, countershaft speed, shift drum angle and shift spindle angle—to control the speed of the electric-shift motor's gear and clutch engagement. Gear-engagement speed varies according to rider usage: The transmission shifts more quickly when the riding style turns sporty. A Neutral lockout at speeds greater than two mph ensures available engine braking when descending hills. For smooth shifting, the transmission cannot be shifted from Neutral to First gear or Reverse at engine speeds above 3000 rpm. ESP is not dependent on battery power; it operates whenever the engine is running. Should the rider ever need to shift manually, ES models are also equipped with an auxiliary shift lever in the toolkit.

A first in the world of ATVs, Honda's premium Automatic Dual Clutch Transmission (DCT) in the Rancher 4x4 Automatic DCT model makes it a standout. As mentioned in the main body of the Rancher story, for 2014 the Rancher 4x4 Automatic DCT now employs a new-generation DCT with an elevated level of sophistication: new updated dual-zone shift logic offers improved adaptation to all riding conditions based on rider and vehicle inputs, effectively and intuitively adjusting shift points whether riding under normal or aggressive conditions. Thanks to this change, the DCT significantly reduces gear “hunting”—that is, shifting back and forth repeatedly between two gears—as it performs the most appropriate shift actions automatically. As a result, the net benefits to the rider are manyfold: better automatic transmission feel as the Rancher reacts more intuitively to the rider's operational style and intentions; enhanced power feel; increased response; reduced engine lugging; plus less fatigue and more rider comfort.

The key to the DCT design is the innovative dual-clutch configuration coupled with a two-piece mainshaft. The first mainshaft has first, third and fifth gears all driven by the first clutch. The second mainshaft is sleeved over the first shaft. It carries second, fourth and reverse gears, and it's driven by the second clutch. This design allows two gears to be engaged at the same time, and each gear is pre-shifted before power is applied. Shifting is then accomplished by disengaging once clutch and engaging the other.

One advantage to this DCT system is extremely quick shifts for less driveline lurching between shifts, especially under load, which means the chassis attitude remains more consistent during gear changes. When engaging downhill slopes, this system also provides true controlled compression braking. In addition, this automatic five-speed transmission's maintenance needs are greatly reduced, while power-transfer efficiency is improved to make the riding experience all the more enjoyable. Furthermore, since this DCT uses conventional transmission gears, it's as rugged and durable as Honda's conventional manual transmission. This fully automatic transmission also gives the rider the option of using the ESP push-button shifting mode as desired.

The Rancher 4x4 models also feature TraxLok selectable 2WD/4WD capabilities that enable the rider to quickly shift between the nimble handling of a 2WD and the extra traction of a 4WD ATV. TraxLok incorporates a two-way mechanical roller clutch with a series of hardened-steel rollers that lock up in a mere six degrees of rotation for a smooth, virtually instantaneous response while either accelerating or decelerating on flat ground or an incline. This system also operates in Reverse. To ensure smooth operation, the TraxLok system only engages when the speed differential between the front and rear wheels is less than six mph. Once engaged, the system remains engaged on downhills for true 4WD braking.

In addition, when TraxLok 4WD mode is engaged, a torque-sensitive limited-slip front differential reduces steering effort for a lighter feel. This torque-sensitive limited-slip front differential automatically sends power to whichever front wheel has the most grip. This system also allows both wheels to maintain essentially the same speed and drive regardless of traction conditions. It also virtually eliminates torque steer and drastically reduces the effort necessary to initiate a turn, thus shortening the turning radius and improving handling.



The American Flavor: 2014 Honda Rancher Design

The process of creating a new Honda model or a major redesign is a laborious task. There is no “magic formula;” literally thousands of decisions must be made to arrive at the final product.

In the case of the Honda Rancher ATVs, that process was especially challenging: How do you improve one of the most popular ATV designs? To find out, we queried the people responsible for this remarkable new design, the Honda Development Team at Honda R&D Americas, in Ohio.

Q: Where and how did the new design for the 2014 Ranchers begin to take shape?

A: The new Rancher was developed from concept to production by our U.S.-based Honda operations. The bold new styling was developed by our design team in Los Angeles, and every part on the new Rancher was designed, tested, and developed by our engineers in Ohio. The new Rancher is built at our facility in South Carolina. It is an ATV developed in the U.S. by a design and engineering team made up of Powersports enthusiasts who are passionate about the products they create.



Q: What were the overall goals for the new Rancher design?

A: Enhance utility, and reinvent recreation. Those were the key concepts. The Rancher is a multi-use vehicle for both utility and recreation. The previous-generation Rancher is very good for utility, but we felt that we could make big improvements in the recreation area: specifically, items related to handling and ride comfort. The development team’s goal was to maintain functionality and utility while making improvements to handling and ride comfort. The team also ensured that all of the Honda requirements and standards were achieved to maintain our legendary durability, quality and reliability.

Q: How were these goals determined?

A: We used a combination of direct customer feedback coupled with our local development engineers’ understanding of the ATV market.

Q: What kinds of feedback did you consider from Honda customers as well as other ATV customers?

A: When our development team visited Rancher customers, they were surprised to find that the overwhelming response to the question: “What would you change about your Rancher?” was: “Nothing.” We also learned what was important to the Multi Purpose ATV customer and tried to implement as many of those needs into the design of the next generation Rancher models.

Of course, this was good news for everyone except for the team that had been assigned to develop the next generation Rancher—how do you go about making happy customers even happier without alienating them? So given this very positive feedback, the development team asked themselves a question: How do we improve a product that everyone already seems to love?

This is where the advantage of having a unique development team comprised of highly skilled engineers who are also Powersports enthusiasts pays off. The development team scrutinized every aspect of the current Rancher with a unique perspective, a view that combined the outlook of both customer and development engineer. The result is our best ever Rancher—these 2014 models are more comfortable and better handling ATVs that are fully functional, wrapped up in all-new, rugged styling.

Q: How and where did you gather this Honda customer feedback?

A: Our development team visited customers, rode with customers at a variety of ATV events and attended focus groups all around the country to better understand the customer’s usage and preferences.

Q: Which demographic populations are important to Rancher sales?

A: The Rancher spans the entire range of off-road customer usage. The previous-generation Rancher already carried a strong reputation for its work usage and we have made no compromises to this functionality. With the improvements we have made to handling and ride comfort, we feel that more customers will expand their usage of the new Rancher for recreation and trail riding.

We also feel that the new aggressive styling will attract a wide range of customers. It’s a more aggressive and bold style that makes the new Rancher stand out from the crowd.

Q: What key design elements were included in prototype Ranchers?

A: The key focus of the development activity was to refine the frame and chassis design to achieve the best comfort and ride handling. The development team also ensured that each part met the stringent Honda requirements to maintain our legendary reliability. The team thoroughly tested and refined every aspect of the vehicle until all targets and criteria were satisfied.

Q: How were these design elements evaluated in early development?

A: In the early stages of development, the team used advanced CAE (computer aided engineering) to design and analyze every part of the vehicle. This in-depth engineering analysis allowed the development team to confirm the design of every part before a prototype vehicle was ever built. After the prototype vehicle was built, the team confirmed the actual vehicle to the targets and requirements and refinements were made and reconfirmed to achieve the final product.

Q: Which new elements bring the largest increases in performance? How and why?

A: The first thing that customers will likely notice about the new Rancher is the great new styling. But it's what's underneath this new bodywork that will be most appreciated—the handling and comfort of the new Rancher. The development team started with the proven 420cc engine and re-engineered every part around it. The all-new frame and swingarm have been designed to optimize strength, rigidity and comfort. The front and rear suspension components have been completely redesigned and the suspension travel increased. The ride position has been optimized and the seat thickness increased to create a comfortable riding position for a wide range of riders. All of these changes work together to create the most comfortable and best-handling Rancher.

Q: What key advantages will customers enjoy with this new-generation Rancher?

A: With this new-generation Rancher riders will enjoy everything past Ranchers have been famous for, plus improved handling and ride comfort, bold new styling and the best value possible in the ATV market.

Image Gallery



14_Rancher_4x4_Camo



14_Rancher_4x4_Olive



14_Rancher_4x4_Red



14_Rancher_DCT_EPS_Olive



14_Rancher_DCT_EPS_Orange



14_Rancher_ES_Olive



14_Rancher_ES_Red



14_Rancher_RR34_Camo



14_Rancher_RR34_Olive



14_Rancher_RR34_Orange



14_Rancher_RR34_Red



14_Rancher_Front



14_Rancher_Rear



14_Rancher_Overhead



14_Rancher_CVJoint



14_Rancher_DrumBrake



14_Rancher_DiscBrake1



14_Rancher_DiscBrake2



14_Rancher_Meter_On



14_Rancher_Swingarm



14_Rancher_Action_01



14_Rancher_Action_02



14_Rancher_Action_03



14_Rancher_Action_04

Image Gallery



14_Rancher_Action_05



14_Rancher_Action_06



14_Rancher_Action_07



14_Rancher_Action_08



14_Rancher_Action_09



14_Rancher_Action_10



14_Rancher_Action_11



14_Rancher_Action_12



14_Rancher_chart



HRA Ohio Center



HRA-O Materials Lab



HRA-O Safety Center - Barrier



HRA-O Safety Center - Sled



14_Rancher_A-ArmGuards_Front



14_Rancher_Frame/SkidPlate



14_Rancher_Frt_Soft_RackBag



14_Rancher_Rear_Soft_RackBag



14_Rancher_Fender_Bag



14_Rancher_Winch



14_Rancher_WinchMountKit



14_Rancher_Blade-Front



14_Rancher_Plow/PushTubes



14_Rancher_PlowMountKit



14_Rancher_XL_OutdoorCvr





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