



2015 FOURTRAX RANCHER AUTOMATIC DCT WITH IRS

ATV REC/UTILITY SERIES



CONTENTS

03 **2015 Honda FourTrax Rancher Automatic DCT with IRS**

Honda's premier Rancher version gets even better

04 **Editorial Narratives**

Story concepts on the Rancher's great features and heritage

07 **Engineering Spotlight**

Honda's Automatic DCT gearbox—the industry's first and only

08 **Building Character**

Honda R&D ATV Test Project Leader Brian Walters

10 **Image Gallery**

Studio and action photography assets for the 2015 Honda Rancher Automatic DCT with IRS



2015 Honda FourTrax Rancher Automatic DCT with IRS

HONDA'S PREMIER RANCHER VERSION GETS EVEN BETTER

Offering incredible versatility and value, the FourTrax Rancher has long been an important product in Honda's ATV lineup. The Rancher line is available in an array of configurations that are sure to appeal to just about anyone. For customers looking for a Rancher that's equipped with the most features, the Rancher Automatic DCT with IRS is the logical choice. With new-generation independent rear suspension (IRS), updated automatic dual-clutch transmission (DCT), TraxLok 2WD/4WD and Electric Power Steering, Honda's top-of-the-line 420 ATV packs an amazing collection of features into the lightweight, agile Rancher chassis, and completes the package with updated styling and Honda's renowned quality and reliability. With the 2015 FourTrax Rancher Automatic DCT with IRS, ATV performance and comfort are more attainable than ever.

Important Safety Information: Recommended for riders 16 years of age and older. Honda recommends that all ATV riders take a training course and read their owner's manual thoroughly.



Editorial Narratives

STORYLINES AND TOOLS

10 Noteworthy Features of the 2015 Honda Rancher

The 2015 Honda Rancher Automatic DCT with IRS is the best Rancher yet.

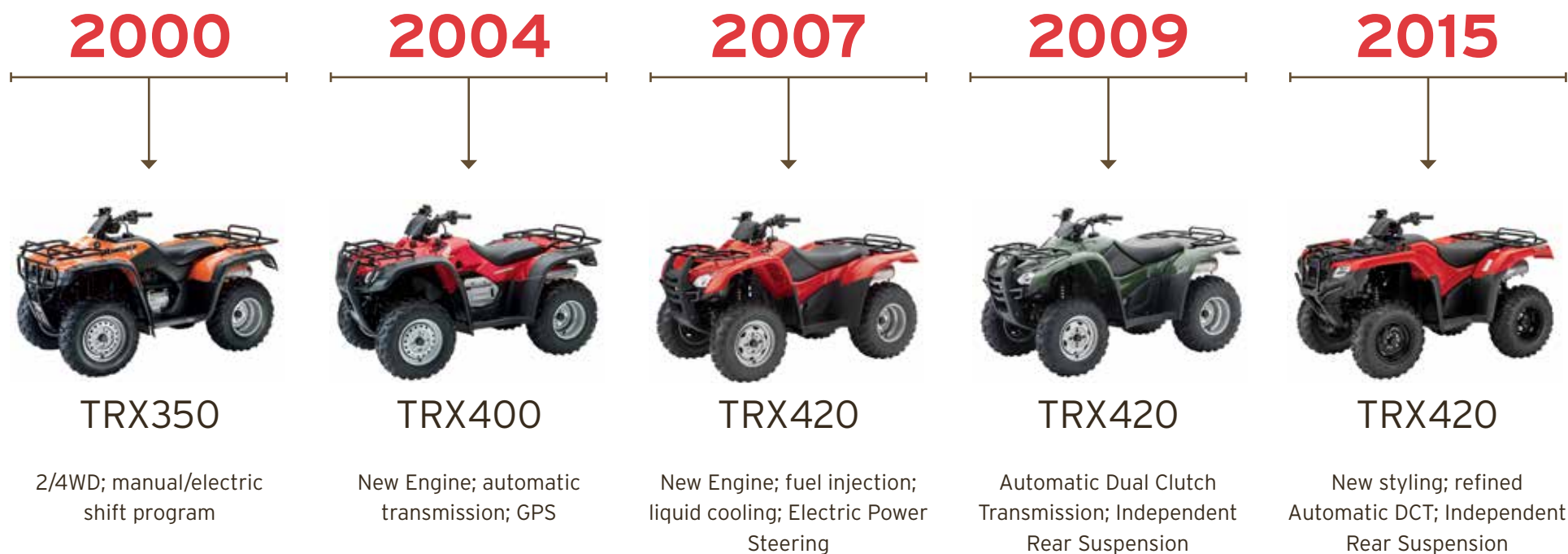
More comfortable and with all-new styling, the 2015 Rancher Automatic DCT with IRS offers Honda reliability in the most capable Rancher to date. There are many reasons for people in the ATV market to seriously consider the Rancher Automatic DCT with IRS. Here are 10:

- 1. INDEPENDENT REAR SUSPENSION:** With a new frame, an increased ground clearance of 9.2 inches, and 8.5 inches of rear-wheel travel, the 2015 Rancher's dual-arm independent rear suspension brings better ride quality and increased traction, making daily chores more fun and weekend adventures more comfortable.
- 2. THICKER, SOFTER SEAT:** Spending a long day aboard the Rancher just got a little nicer. For 2015, it receives a new thicker and softer seat making even the bumpiest trail more tolerable.
- 3. DIGITAL METER:** The 2015 Rancher gets a new, easy-to-read digital gauge with speedometer, odometer, trip meter, hour meter, gear-position indicator and clock. It also includes a maintenance minder to help riders stay on top of routine servicing.
- 4. ELECTRIC POWER STEERING:** Offered on 4WD versions of the Rancher (including the Rancher Automatic DCT with IRS), Honda's Electric Power Steering reduces rider fatigue by varying electronic assistance based on speed and rider input. Over rough terrain, handlebar kickback is reduced and feedback is consistent in all conditions. A new, three-point mounting setup increases rigidity for more precise steering.
- 5. NEW REVERSE LEVER:** Like other Honda FourTrax models, the Rancher receives a new lever for simplified engagement of reverse. Its intuitive placement and function make maneuvering that much easier. Pushing the same lever out sets the parking brake.
- 6. 450 WATT AC GENERATOR:** Rancher users can power all their accessories with ease thanks to the increased-output generator on the 2015 Rancher. With 450 watts, it increases output by 21 percent.
- 7. AUTOMATIC DUAL CLUTCH TRANSMISSION:** Delivers smooth, seamless power in automatic mode. Or, at your option, lets you switch drive mode to manual electric shift. There are no belts to slip when wet, or to burn up or break.
- 8. 170MM REAR DISC BRAKE:** Inboard rear disc brake combines with the independent rear suspension and increased suspension travel to achieve improved ground clearance, increasing rider confidence aboard the 2015 Rancher Automatic DCT with IRS.
- 9. ENGINE:** Programmed Fuel Injection (PGM-FI) instantaneously adjusts for any riding condition, producing trouble-free operation in the cold and at altitude. Fuel injection also reduces emissions and increases fuel efficiency. The longitudinal orientation of Honda's liquid-cooled Rancher engine offers greater drivetrain efficiency and increased power by reducing the number of 90-degree driveline changes between the engine and the driveshaft.
- 10. NEW COLORS:** The Rancher 4x4 Automatic DCT with IRS is offered in red, orange and (new for 2015) Honda Phantom Camo. With any option, you'll look good on the trail.



Honda Rancher: An ATV Icon

The FourTrax Rancher line is the best-selling ATV in Honda's history, with over 900,000 sold since its introduction. Following is a look at the Rancher's milestone models:



Editorial Narratives & Assets

STORYLINES AND TOOLS

HONDA ATVS: IN IT FOR THE LONG HAUL



With powertrains that are built to outlast everything else on the market, Honda ATVs have a well-deserved reputation for reliability. It's common to come across units that are still used regularly despite ages well into the double-digits. One example is Craig West's 1998 TRX300, a precursor to the original, 2000 Rancher. A recently retired businessman who lives on a 73-acre ranch in the Sierra Nevada foothills of Sonora, California, West rides his ATV almost exclusively for utility purposes. "We graze cattle to keep the grass down, but the main thing we do is cut firewood," he says. "The land is covered with oak trees, and although I never cut them down, they often fall on their own. It's hilly property, and we access the fallen trees on the ATV and tow out the wood in a trailer. We also use it to haul tools and supplies for repairing the fences."

The little TRX was slightly used when West purchased it in '99, and he figures it has been utilized an average of once per week ever since. Amazingly, it's still on its original tires, but apart from a dent in the gas tank (the result of a wayward falling limb during a vigorous pruning session), it still looks surprisingly good. "I wait for it to die, but it just keeps running," he laughs. "That's what Hondas do. I think I've changed the battery once in 15 years, and I do the basic maintenance every third year or so."

West's children (a college-age son and a daughter in high school) grew up alongside the ATV, and these days they regularly ride it when helping Dad around the ranch. The kids now possess impressive trailer-backing skills that were honed both with the TRX itself and with the trailer upon which it is sometimes carried. West says the 300 has practically become a member of the family, but after pausing for a moment, he reconsiders. "Well, I have to admit I wouldn't mind having the additional power of the newer models," he says. "I could probably really haul a lot of wood with one of those...."



Engineering Spotlight

HONDA AUTOMATIC DCT: THE ULTIMATE ATV TRANSMISSION



Back in 2007, the Rancher AT became the first Honda vehicle to feature an automatic dual clutch transmission. Today, Honda is still the only manufacturer to apply this technology to ATVs (it's now also available on a number of Honda motorcycles). DCT offers the durability and the direct acceleration feel of a manual transmission, but with automated gear changes. For 2015, this acclaimed five-speed automatic gearbox has been refined even further.

Honda's DCT features two mainshafts (the first is hollow, and the second resides within the first), each holding its own clutch. The first mainshaft/clutch combination works with the odd-numbered gears while the second combination works with even-numbered gear sets. Through this arrangement, the next gear is always pre-selected, so when one clutch hands off to another for a gear-change, shifts are quick and smooth.

Automatic DCT offers a number of advantages over standard systems:

- **Reliability:** DCT is a sealed system, so it's protected from the extremely harsh environments common in ATV use. In addition, there's no belt to wear out or break.
- **Efficiency:** Because DCT uses actual gears rather than a belt and pulleys, there's significantly less power loss between the crankshaft and the wheels.
- **Smoothness:** Shifts are smooth and quick with automatic DCT, with minimal power gaps during shifting. In addition, the fact that shifts are controlled by the ECU means that clutch "feathering" is engineered in to ensure ideal gear changes, which is one reason that DCT is popular in pure-performance applications such as high-end sports cars.
- **Control:** Honda's automatic DCT offers the possibility of switching to manual, push-button Electric Shift Program (ESP). "Some users like to shift for themselves during sportier-style riding," explains Honda R&D powertrain engineer Scott Batdorf. "Also, for pure utility use, it can be nice if you're towing a big trailer." Additionally, whether in automatic or manual ESP, the rider benefits from true engine braking when descending.

For 2015, Honda has improved the DCT on the Rancher by revising the algorithm to reduce shift-shock even further, and to optimize the logic of the new-generation dual-zone shifting for improved shift timing. By analyzing data such as frequency of throttle-setting changes and throttle setting versus vehicle speed, the ECU automatically adjusts between two shifting maps—Cruise or Sport. "During casual riding, the map is set to keep revs lower, for comfort and fuel efficiency," says Honda R&D engineer David Karo. "If you start riding in a sportier manner, the ECU detects that and switches to a more aggressive map that changes the shift pattern to hold gears longer."



Building Character **SERIOUS FUN**

Brian Walters on developing the Rancher Automatic DCT with IRS

As a top motocross racer who won his class in the 1989 AMA Amateur Nationals at Loretta Lynn's and later competed as a pro in the AMA Supercross and White Brothers Four-Stroke series, Brian "Spud" Walters never imagined he would eventually find work developing ATVs. Nevertheless, now that he is ATV Test Project Leader at Honda R&D Americas, he finds himself drawing heavily on his motocross background. "When I took the job to help develop ATVs for Honda in 2007, I was kind of unsure," Walters admits, "but I adapted immediately.

"MY FEEL FOR CONTROLLING TWO-WHEEL VEHICLES ACTUALLY HELPED AND MADE IT EASIER TO UNDERSTAND THE DYNAMICS OF ATVS."

In the case of the 2015 Rancher Automatic DCT with IRS, Walters' background may have been most useful in developing the vehicle's recreational capabilities, as sensing what traits are best suited for that application comes naturally to the ex-racer. From there, it was a matter of developing the features that would provide those characteristics. One of those was the improved independent rear suspension compared to the Rancher's previous IRS version.

"THE NEW IRS BASE THAT WE'RE USING IS REALLY GOOD,"

Walters says. "It's very similar to that of the new 2015 Foreman Rubicon, but the action is a bit firmer, for a sportier feel—a great balance between comfort and stability. Compared to the Rubicon, the wheels are an inch smaller to achieve a lower overall vehicle, and the rider triangle—the relationship between the seat, handlebar and footpegs—is lower as well."

Meanwhile, Walters' development team drew inspiration for much of the vehicle's bodywork from the Rancher's swingarm version, resulting in a narrow seating area that provides a nimbler, more compact feel, along with the aggressive-looking front end. Walters also feels that the automatic DCT is perfectly suited for a recreational application.

"IT'S DEFINITELY A LOT MORE RESPONSIVE THAN CVT, AND AS A RESULT, THERE'S MORE OF A FUN FACTOR,"

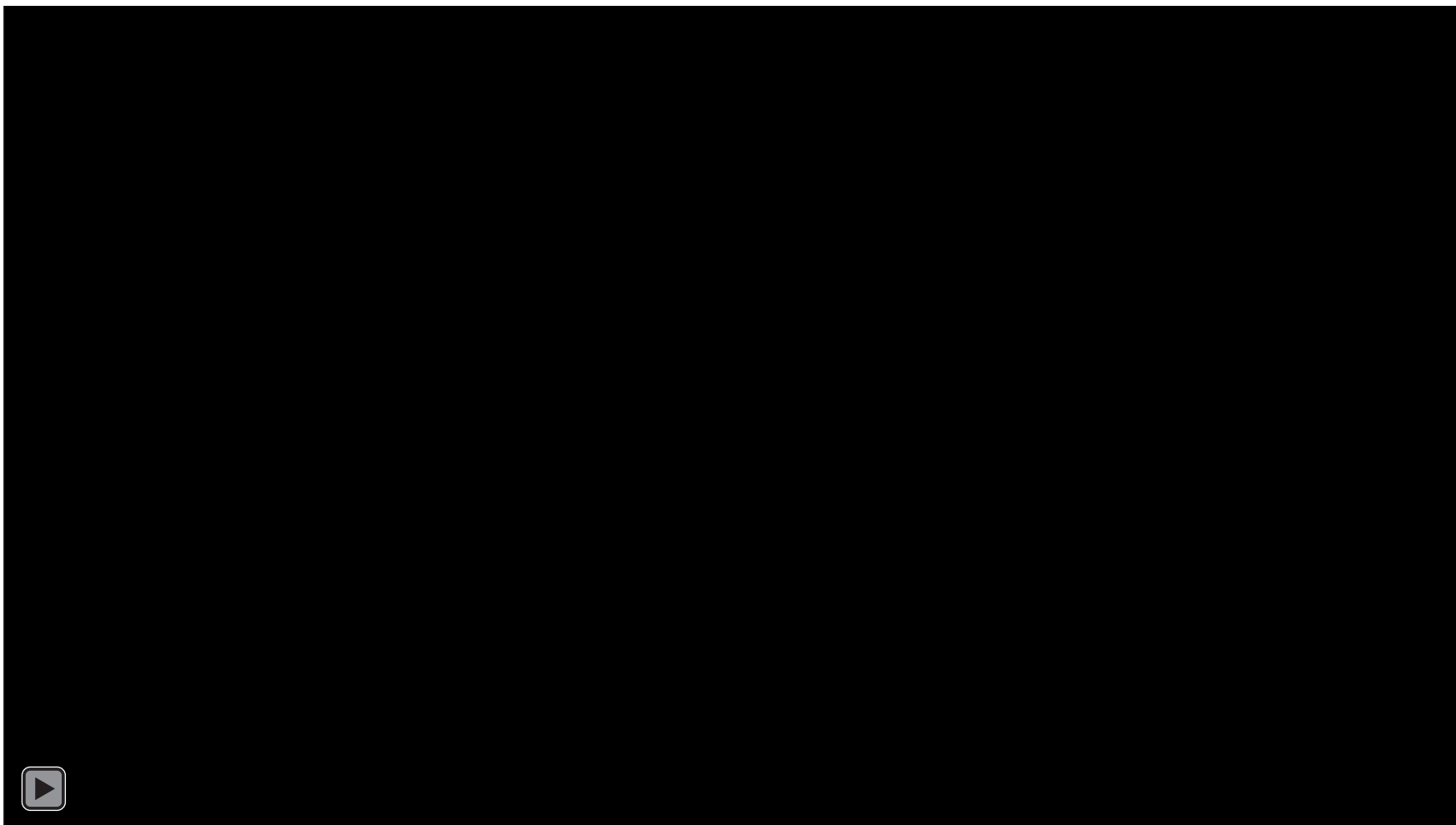
he explains. "It has a torquey feel, and since it's sealed and mechanical, you don't have to worry about water getting into it and messing with a belt."

That durability is vital for an ATV that's sure to see a significant amount of recreational use, and Walters is confident that the Rancher Automatic DCT with IRS is up to the task. "We definitely pushed this one pretty hard during testing," he says. "Obviously, it's not designed to be used on a motocross track, but we rode it hard and went through endless rock gardens and creek crossings. This ATV will hold up to almost anything you put it through."

If anyone would know, it's Spud.



Video: **TECH TALK**





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APPROVED IMAGE GALLERY

PAGE 10





2015 FOURTRAX RANCHER AUTOMATIC DCT WITH IRS

ATV REC/UTILITY SERIES