

2012 Beta 350RR First Ride



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Raised on two wheels in the deserts of Nevada, the newest addition to the MotoUSA crew has been part of the industry for well over 15 years. Equal parts writer, photographer, and rider, "JDawg" is a jack of all trades and even a master of some.

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Ever experienced that moment when you thought you knew the truth, only to find out you really had no idea? I had one of those moments right before I rolled into Paso Robles, California to meet up with the staff of American Beta to take a ride on the new 2012 Beta 350 RR. As open minded as we try to be, I just figured the odds that the Beta could be better than its Austrian or Japanese competition were slim. I mean, how could it? Beta is just too small to do battle with the juggernauts of the off-road realm. I was sure it would be as cool and Italian motorcycle fans will want to own one if for no other reason than the right to be the only person to own one within a 500-mile radius. I figured there's just no way it could perform at the level offered by the dirt bikes from the big factories. Boy, was I wrong.



The 350 RR received a host of internal engine refinements and a new Brembo clutch master cylinder.

The 2012 Beta 350 RR receives an array of updates and refinements less than a year after the first 2011 350 RR units arrived in the U.S. Changes to the Beta-designed engine (KTM mills were used prior to 2010) include a redesigned head that incorporated a stiffened camshaft bridge, new valve retainers and a quieter cam chain tensioner. A new clutch primary gear and springs are mated with a new Brembo hydraulic clutch master cylinder, plus the oil volume has been increased to protect internals better. Chassis flex has been reduced through strategic gusseting and the use of larger diameter tubing in the frame.

Gone are the 50mm Marzocchis, replaced by a lighter 48mm Sachs fork that was designed specifically with Beta. Braking wave rotors are matched to Nissin calipers, and the plastic body kit features a new look and color.

That's a quite a large revamp for a bike that is less than a year old, but it has paid dividends for Beta on the trail. I'm going to spoil the surprise right now and say the 2012 Beta 350 RR is one of the best off-road motorcycles I've ever ridden. I know that is a bombshell of a claim and even a little hard to believe, but stay with me and I'll lay it all out for you.



First off, the 350 RR is a looker. The red bodywork and matching red frame are exactly what you would expect from Italian motorcycle company: sexy and sleek. Fit and finish is impeccable from top to bottom. From the feel of the levers to the shape of the seat and the slim tank all add to the polished image of the Beta. Photos do not do this bike justice.

Pulling the choke on the 39mm Keihin FCR-MX carburetor (no fuel injection for any Beta thus far), and thumbing the start button brings a surprisingly quiet purr from the liquid cooled, four-valve engine thanks to its stylish muffler. Once the mid-sized single is warm, starting became a bit more finicky due to the jetting being a tad rich on the bottom end. This was most likely due to the heat and altitude more than an issue with the settings of the carb. A quarter turn of the fuel screw is recommended, but for the price it would seem that adding fuel injection would be the best solution. Unfortunately, Beta says it will not happen in the near future. Once on the trail and moving, the fueling was dead-on and we never experienced a hiccup no matter how hard we pushed it.



The meaty mid-range makes getting the front wheel up easy with just a twist of the wrist.



The 2012 Beta 350 RR is a great handler in tight technical trails and rock gardens thanks to its 48mm Sachs front fork.

We were impressed with the power output of the 350 RR especially in the mid- to top-end. Down low, you can lug the Beta in the rocks and roots and take advantage of its excellent traction, but the engine feels a bit corked-up, most likely a side effect to the uber-quiet exhaust. A free flowing aftermarket system would probably wake the low-end power right up. Once the throttle is twisted a bit more the Beta comes to life and flat-out rips. So much so that we question why the Beta 400 RR is even in the lineup. We had a KTM 350 SX-F along as a chase bike, and the 350 RR's power output eclipsed the orange MXer. It feels like this bike could hang with most 450cc off-road bikes and is probably faster out of the box than some of the seriously detuned Japanese enduro bikes. Once again not at all what I expected out of a Beta.

The riding area we sampled with the 350 RR consisted mostly of tight single-track trails with big hill climbs and technical rock gardens. This really let us put the updated clutch to the test as we crawled, climbed and clawed our way over and through slow first-gear sections. The lever pull of the Brembo unit is light and has amazing feel. Never once was it grabby and fading was nonexistent.

The pairing of Braking rotors, Nissin master cylinders and calipers is solid. Up front a 260mm wave rotor works with the 4-piston caliper to provide exceptional bite without a grabby feel. In the back the 240mm setup modulates nicely as well. Power and feel was consistent all day without fade even on the long technical downhill trails.

While sitting on the bike, the 350 RR is slim and feels short which compounds its extremely nimble nature. A very interesting result considering it weighs in at 240 lbs without fluids. Add 2.1 gallons of fuel and the rest of the fluids and the weight climbs closer to 260 lbs. Even on the tightest slow speed trails the heft is not noticeable thanks to the slim rider cockpit. The only time we felt the weight was when we got stuck and had to lift the bike over obstacles.

For all of the above reasons, the Beta 350 RR is a capable off-road bike, but it is the chassis that puts it over the top and secured its place in my personal motorcycle hall of fame. The 2011 model was a decent handler but the 50mm Marzocchi fork was finicky and the frame had too much flex especially in the whoops. The beefed up frame and 48mm Sachs fork make all the difference in the world as the new components complement each other quite nicely.

Pushing the bike around and rolling at very slow speeds, the handlebars have a heavy feel until you apply a little body English. Once moving the heaviness disappears completely and the 350 RR becomes a razor-sharp trail weapon. The tighter the trail gets the bigger the gap become between the Beta and the other bikes trying to keep up. The front end turns in quickly and is so planted you would swear the front tire is made of Velcro. Standing up on the Beta provides the most control, and it responds favorably to footpeg inputs. You can almost steer this bike with your boots. When the speed picks up the handling is solid and inspires confidence. Once again the front end is so planted that you can stand up in corners that you would normally have to sit down through.

In the rocks the Sachs suspension is supple, plush and soaks up even the most square-edged hits. The fork refuses to deflect off roots and sharp impacts and follows the terrain like it was glued to the dirt. Just as impressive is the Beta's performance in whoops as it tracks straight and true while soaking up the hits. Although we didn't get to test its mettle in the desert, the 350 RR feels like it would be just as impressive there as it is in the woods.



The brakes on the Beta 350 RR are strong and have excellent feel and modulation. Even on long descents fading was not an issue.

At the end of the day we were hesitant to return the 2012 Beta 350 RR. We tried every trick in the book to talk Beta into leaving the red ripper with us for a long-term test but they wouldn't give it up just yet. I guess they didn't think we could handle the truth long term.

The 2012 350 RR retails for \$8899, which is a bit more than the 450cc Japanese off-road motorcycles, but \$100 less than the KTM 350 XC-F. With amazing handling and performance that rivals any mid-sized machine, this Beta should be seriously considered if you're looking for the ultimate trail bike. I was completely blown away by the 350 RR, and you will be as well, if you give it a chance.

Beta 350 RR Technical Specifications



2012 Beta 350 RR

Engine: 4-valve, 4-stroke, liquid cooled Single

Bore/Stroke: 88 x 57.4mm

Displacement: 349cc

Compression Ratio: 12.4:1

Ignition: DC-CDI with variable ignition timing, Kokusan.

Lubrication: Twin oil pumps with cartridge oil filter. Separate oil for engine and clutch .8 liter each

Starting: Electric start with back-up kick starter.

Fueling: Keihin FCR-MX 39mm Carburetor

Clutch: Hydraulic, Wet multi-disc

Transmission: 6-speed

Final Drive: 13/50T, O-ring chain

Chassis: Molybdenum steel with double cradle split above exhaust port.

Wheelbase: 57.8 in.

Seat Height: 36.8 in.

Ground Clearance: 12.6 in.

Footrest Height: 16.2 in.

Dry Weight: 240 lbs. (claimed)

Fuel Capacity: 2.1 gallons

Front Suspension: 48mm Sachs fork, adjustable compression and rebound, 11.4 in. travel

Rear Suspension: Sachs shock w/adjustable rebound and hi/low speed compression, 11.4 in. travel

Front Brake: 260mm floating Braking Wave rotor

Rear Brake: 240mm Braking Wave rotor

Front/Rear Tires: 21/18 in.