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HUSQVARNA TE310
vs. KTM 350 EXC-F



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CW COMPARISON

BETA 350 RS HUSQVARNA TE310 KTM 350 EXC-F

Rocking the middle ground

BY BLAKE CONNER

HOW MANY TIMES IN MOTORCYCLING HISTORY has a new “inbetweener” class popped up seemingly out of nowhere, promising riders that the middle of the road is the fastest route to success? Right now, such a trend is in full effect with street-legal, four-stroke enduros. These are the new middleweights, a small collection of enduro bikes that split the difference between two of off-roading’s most popular classes. They’re lighter than the 450s and 500s and more powerful than the 250s, a compromise intended to offer riders the best of both worlds.



With stricter emissions regulations a reality worldwide, the days of slapping a set lights, signals and mirrors on an off-road-specific machine and going dual-sporting are just about over. But machines like the Beta, Husqvarna and KTM deliver the best of both worlds: on-road legality in all 50 states and awesome off-road performance.



Husqvarna was there first with its TE310 in 2009, followed by KTM's 350 EXC-F and Beta's 350 RS, both new for 2012. All three are street-legal in all 50 states, yet they give up virtually nothing to their purebred off-road racer cousins.

"This is *the* new enduro class," said Off-Road Editor Ryan Dudek. "If there is a replacement for 250cc two-stroke enduros, this is it. They are fast enough for anything off-road and light enough

to not wear you out."

We interpreted their existence as an invitation: It sounded like a party we couldn't miss. So we gathered up the trio and RSVP'ed ourselves to the Arizona desert near Wickenburg for multiple days of dodging cholla cactus, tiptoeing along single-track and crawling through rock-infested washes.

Each manufacturer approached this new class in its own way, but all three

bikes offer varying degrees of what we are looking for: precise handling, hard-core enduro performance and the ability to hit the pavement to connect trails when necessary.

BETA 350 RS

Although Beta is far from a household name—even amongst enduro rid-

ers—*Cycle World* has had plenty of experience with the brand, and we've been impressed. The Italian company used to buy previous-generation KTM four-stroke crate motors and stuff them into chassis of its own design, but the Florence-based firm now builds its own proprietary engines.

The RS's liquid-cooled, counterbalanced, 349cc unit has four titanium valves and double overhead cams. Of

the three motorcycles in this test, it is the only one that is not fuel-injected, instead using a 39mm Keihin FCR carburetor. A chrome-moly steel double-cradle frame, 45mm Marzocchi upside-down fork and Sachs shock (both fully adjustable), and Nissin brakes at both ends are chassis highlights.

For trail riders who are unlikely to race and primarily ride for fun, the Beta 350 RS is a good choice. It's the heavi-

Beta 350 RS	
Price.....	\$9299
Dry weight.....	265 lb.
Fuel capacity.....	2.1 gal.
Seat height.....	36.7 in.
Footpeg height.....	16.0 in.
Ground clearance.....	11.5 in.
Wheelbase.....	59.2 in.

est of the trio (265 pounds without fuel), so it's instantly penalized. "The Beta's weight affects multiple performance areas," said Dudek. "It makes the suspension feel too soft, the brakes less effective and the engine less lively."

But that doesn't make it a poor choice; it just means the Beta is the least likely to serve multiple roles as a trail-bike and sometimes racer, at least without a few modifications.

▲ Ups

- ▲ Most stylish of the trio
- ▲ High-quality components
- ▲ Built-in grab handles a nice touch

▼ Downs

- ▼ Too-short fuel range
- ▼ Hard and narrow seat
- ▼ Notchy shift action

tipover, but never to the point of being a problem; it was just an annoyance.

As for the engine's performance, it felt very different than what we experienced with the KTM and Husky. "The motor is easy to use," said Dudek. "It will chug over just about anything, giving the rider confidence to tackle nasty hillelimbs or rocky washes." It doesn't have the bottom-end snap of the TE and can't match the EXC up top, but it's definitely no dog. Other than the engine's reluctance to restart when hot, the carburetion was very good with crisp fueling under load.

One of our biggest complaints concerned the notchy action of the six-speed transmission. Not only were shifts a high-effort affair compared to the other two bikes, but neutral sometimes was very difficult to find when stopped.

We had pros and cons about the Beta's chassis, too. The suspension is well suited to rocky technical terrain tackled at slower speeds. "It's more trail-oriented than the others," said Dudek. "It's what you want to be on when goofing around on a relaxing, Sunday afternoon ride." But pick up the pace and the too-supple

Despite different approaches to the same end game, all three of these hardcore dual-sport enduros impressed us with their competence on a wide variety of terrain, most of it bordered by cactus, cactus and more cactus...

suspension easily bottoms on g-outs, jump landings and in the whoops.

Overall handling, however, is actually quite good considering the bike's weight. The steering is quick, but once the RS settles into a corner, its weight becomes noticeable. When threading your way through saguaro cactus and tree-lined tight trails, the Beta doesn't react as quickly as we would like, forcing a slower pace.

As a dual-sport, the 350 RS is quite good: There is plenty of gearing to allow riding at highway speeds when needed, and the RS comes with a pair of folding mirrors, which means you don't have to remove them before hitting gnarly terrain. What isn't so great is the fuel mileage: On several occasions, the Beta had to be switched to Reserve after only 40 miles.

Husqvarna TE310

Unlike the other two bikes, the Husky is a bored and stroked version of its 250cc sibling, not a purpose-built middle-weight. It also is the only bike of the trio without a counterbalancer. Displacing 303cc, the dobe Single has four titanium valves laid out in a radial arrangement. Intake is via an EFI system with a 45mm Mikuni throttle body. The chassis is a chrome-moly steel frame with a 48mm inverted Kayaba fork and a fully adjustable shock of the same make. Brembo calipers and Braking discs are fitted front and rear.

All it takes is one push of the starter button to put a smile on almost any enduro rider's face. The TE fires to life on the first try 99 percent of the time; hot, cold, after a tipover, it doesn't matter. This becomes very important when you are paddling up a loose, rocky hillclimb with poor footing and keep killing the engine. Trust us on this one.

Despite its significant displacement deficit, the Husky easily has the snappiest power delivery. It feels very responsive down low in the rev range but falls flat on its face when you try to wind it out. "It feels more like a 250 than a 350 and nothing close to a 450," said Dudek. "The motor has to be revved and shifted more to keep it in the sweet spot, too."

Considering that narrow powerband, the gearing—which borders on ridicu-



Husqvarna TE310

Price.....	\$8199
Dry weight.....	259 lb.
Fuel capacity.....	2.2 gal.
Seat height.....	37.2 in.
Footpeg height.....	16.0 in.
Ground clearance.....	11.2 in.
Wheelbase.....	58.4 in.

lously short and tightly spaced—makes a bit more sense. But unless the terrain is ultra-tight, the low gearing really takes some getting used to. We often were riding in third or fourth on the TE where the KTM would be in first or second. Thankfully, the Husky's six-speed transmission is slick-shifting; otherwise, the excessive gearchanging would get old in a hurry. For most riding conditions, taller final gearing would help dramatically.

As with its engine, there's a little 250 hidden inside the TE's chassis, and it provides agile handling when it comes out to play. That's the point of this bike, really: agility. The combination of a short wheelbase and quick steering allows the Husky to be very maneuverable in tight confines; it also makes the bike feel lighter than its 259-lb. dry weight would suggest. Despite that quickness, the 310 was stable when tapped out—although its gearing-limited top speed is much lower than that of the other two bikes.

A nice surprise was the performance of the TE's Kayaba suspension. Valving and spring rates for our group of riders, who ranged from 165 to 180 lb., was quite good. Big jumps and harsh landings would use up the available travel, but there was plenty of it. Small-bump

compliance wasn't perfect, but a bit more fiddling with the rebound clickers would probably have helped matters considerably. Overall, we ranked the TE's suspension second to the KTM's.

Given that the Husky has the smallest engine here, we had few gripes with the bike except for the aforementioned gearing. It can make dual-sporting on the TE310 difficult because the engine has to scream beyond 10,000 rpm to achieve 65 mph. That tends to limit the bike's versatility to riding in urban settings and on secondary roads.



KTM 350 EXC-F

After KTM proved to the world that its 350cc four-stroke motocross bikes could be competitive against 450s, it was only a matter of time before the Austrian company introduced an EXC version. That time is now, and the bike is the 350 EXC-F. It's powered by a counter-balanced, 350cc twin-cam engine that breathes through four titanium valves and is fed by a Keihin fuel-injection system. The EXC-F rides on a chrome-moly

steel frame suspended by a 48mm inverted fork and a fully adjustable PDS shock, both from WP. Brakes are by Brembo.

"The KTM is the best example of why these bikes are so awesome," said Dudek. "They have a license plate and turnsignals, but you don't realize that when you're standing up and looking over the front fender. If you lined up for an enduro or even a grand prix, you wouldn't know the EXC isn't a race bike."

In street-legal enduro form, the engine is everything we want it to be. It doesn't quite have the snap of the Husky, but its

Enduro Tool Kit 101

Don't let a tipover or minor crash strand you in the middle of nowhere. By packing a few key tools in a fanny pack or backpack, experienced riders are usually back on the trail in no time. Here are our top-10 must-haves.

1 Spare tube (21 inch): If you only carry one, make it a front because it will work in both tires.

2 Tire irons (at least two, three are better): Good levers (like Motion Pro's) make short work of tough sidewalls.

3 Compact bicycle hand pump/or CO₂: A manual pump will always pump, but if space is tight, CO₂ is more compact.

4 Valve-stem remover: Speeds up the tire-changing process if the tube isn't totally flat.

5 J-B Weld: Punch a hole in an engine case and this epoxy can save your day.

6 Tools (specific to your bike): Figure out what size wrenches you need to remove wheels, adjust chain, bars, brakes, levers, bodywork, etc...

7 Safety wire and/or zip-ties: You would be shocked by the things that can be fixed with these items.

8 Duct tape: Peel a couple of feet off the roll and fold it into a nice compact, flat square.

9 Spare nuts and bolts: A few common nuts and bolts can be used for a variety of repairs.

10 Spare clutch and brake levers: Carry one of each. They are easy to break and suck to ride without.



KTM 350 EXC-F

Price.....	\$9699
Dry weight.....	251 lb.
Fuel capacity.....	2.2 gal.
Seat height.....	37.6 in.
Footpeg height.....	16.5 in.
Ground clearance.....	12.9 in.
Wheelbase.....	58.1 in.

▲ Ups

- ▲ Ultra refined
- ▲ Ready to race or ride out of the box
- ▲ Best engine for all conditions

▼ Downs

- ▼ Reluctant starting after tipovers
- ▼ Stalls too frequently when hot
- ▼ Price hurts our wallets

broad spread of power and killer top-end blow the other two bikes into the weeds. The power builds smoothly and cleanly without a big hit anywhere, remaining linear all the way. Even with its fairly tall gearing, the KTM easily chugged up everything we threw at it; and when the desert opened up, the EXC took no prisoners, leaving the other two bikes sucking its dust.

As good as the fuel-injection system behaves while riding, we were completely frustrated on multiple occasions by the engine's reluctance to restart when hot

after a stall or a tipover. The good news is that we never had to resort to the kickstarter; every time, the magic button eventually did its job.

Aside from the injection anomaly, every aspect of the EXC feels thoroughly refined and well executed, including the chassis; it takes little time on the bike to appreciate the quality of its WP suspension. "It feels soft enough to keep you comfortable on slow-paced trail rides or multi-day dual-sport tours," said Dudek, "but crank up the speed and it will tackle race whoops and even large jumps. Not bad for a motorcycle that can be used as a streetbike."

Not only is the KTM the lightest of the trio at 251 lb. (without fuel), but it's the most stable when skimming across whoops or bouncing off of baby-head rocks while trying to avoid becoming a cholla pincushion. When the trail tightens and quick maneuvering is necessary, the KTM's lightness pays bigger dividends than the Husky's quick-steering chassis.

Unlike the other two middleweights that have narrow, focused strengths, the 350 EXC-F does it all. Open-desert stability combined with technical-trail agility is rarely found on one machine, but the KTM pulls it off with little compromise. Commuting on the 350 isn't out of the

question, either; in this company, it's by far the best dual-sport.

That, in fact, is an area in which KTM has focused more intently than ever before. The rear fender, license-plate bracket and turnsignals all were redesigned for 2012, and they proved more durable than those on our previous KTM testbikes. There's also a new mirror that provides good visibility when you need it and is easily removable when you don't.

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In a category that requires compromise, these three bikes really don't have to make that many concessions to be good all-around dual-sport/enduro machines. They are tolerable on-road and excellent off of it. All three also prove that the middle-weight formula works, offering a good balance of power, handling and weight.

Of course, some do it better than others. And if there is one company that is completely in tune with the needs of off-road and dual-sport riders, it's KTM. Which is why, amongst this trio, the 350 EXC-F does everything far better than the others. It's a truly bad-ass off-road bike that makes you wonder why anyone would buy an enduro without a license plate and miss out on so much of the fun. ☐

