

Yokomo Drift FC3S

Driving Impressions and Hop-Ups

By RYAN SCOTT

Photos By RYAN SCOTT

LAST MONTH WE LEFT YOU HANGING, the car was built and ready to go but made you wait to see how it drives. Of course that's the real point, to enjoy your work by burning off some tires and pissing off the neighbors. Well, since last month I succeeded in both of those endeavors. And I'm happy to say that 1:10 scale drifting is loads of fun.

From where we left last month, the first thing to do was install the running gear. Yokomo supplied one of their new entry level ESC's (Electronic Speed Control), the SCX 6712. It's a nice small design that fits well in the Drift tub chassis, and handles hot modified motors up to 12 turn. Another necessary piece is a motor, to start with I used a Yokomo Drift Spec 21 turn motor. It's not made for top speed, you don't need it to drift, but instead gives you excellent runtime and plenty of torque to keep the car in a perpetual slide. For a receiver I used a Hitec FM that I had already. My radio is an Airtronics MX-3, and servo is a Futaba S-148 to round out the electronics.

Box Stock Driving Impressions:

The final pieces are a freshly charged battery pack and a nice open stretch of asphalt. With the kit two-ring drift tires installed I was off. My first impression was these tires get absolutely no traction, I was sliding all over



21 Turn Drift Spec Motor

could drive the car in a big sweeping drift and even managed a few picture perfect transition drifts. Then I started to notice that traction was slowly increasing as the plastic drift rings wore down a bit exposing some of the rubber. Once that happened, it really got fun. I could get enough traction to control the car direction and speed.



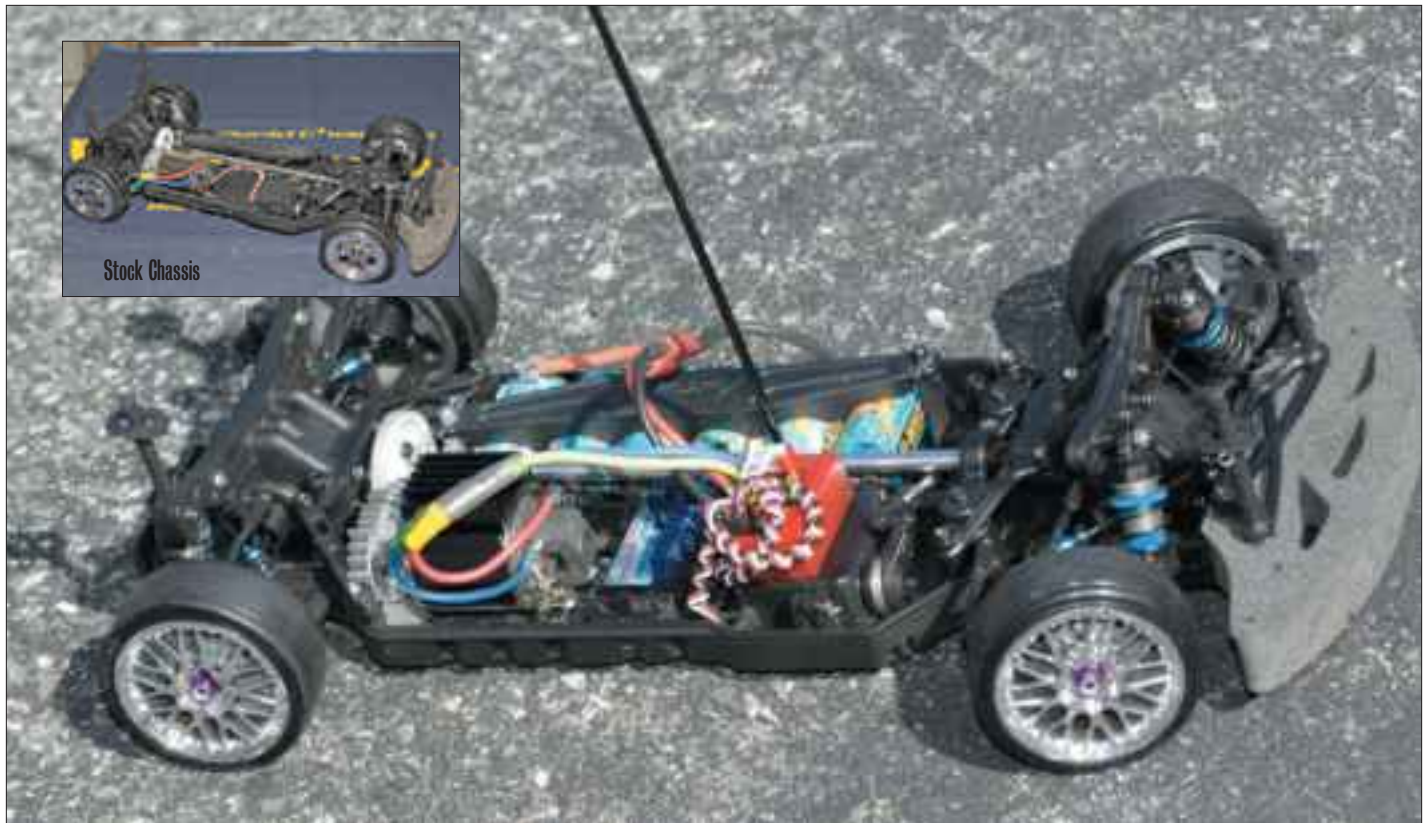
Yokomo SCX 6712 ESC

the place, and it took a few seconds of full throttle just to get any speed built up. Still after a few minutes of mad wheel-spin, I was starting to get the hang of it. With gentle throttle and steering inputs, I

Photos: Ryan Scott



Yokomo Apexi Imamura Replica



Completed Chassis with Hop-Ups Installed

I ran a few battery packs through the car, and by about the third pack it was really coming together. The tires were warmed up and had just the right feel, enough traction to get moving and change direction but still slippery enough to drift at will. Since all my experience with on-road cars has been with grip tires, this was quite different and I was skeptical at first. But after trying the whole thing for myself, I decided any rc'er should definitely have a drift car in his or her arsenal. It really is a lot of fun.

But How Does it Handle?

So it drifts well, but how does the Yokomo handle with grip tires installed? Again I was skeptical. The stock shocks just didn't provide much damping power. I had a feeling they wouldn't be able to cope with the extra g-forces and high speed of sticky tires.

To perform the test, you'll need a set of hub adaptors. The stock brake rotor/hub combo doesn't have enough of a lip to mount a set of grip tires correctly. But don't worry, hub adaptors are cheap and pretty much universal. I used a set that I had on my Tamiya TA-03 and they fit perfectly. For tires I mounted up a set of HPI rubber on Yokomo dish rims.

Again with a fresh charge on my battery pack it was off to the testing ground – aka the cul-de-sac. My skepticism proved well founded, the car grounded out badly under any heaving turns. But even with the relatively mild 21 turn motor, it was quite fast in a straight line and had fantastic acceleration. I could see the car has potential, just needs a few tweaks to give a perfect combo of drift and grip.

The first thing I wanted to try was adding oil to the stock plastic shocks. Butch at Yokomo had told me that they were originally designed to be oil filled, so I wanted to try it out. I filled them with Associated 35wt silicone oil, bled out the air, and refitted them to the car. They now had more damping force, but seemed inconsistent from corner to corner. It was probably

due to my not so perfect job of filling the oil, but it seemed some shocks were more firm than others.

And back on the proving grounds the car responded with better handling, and less prominent grounding of the chassis on the pavement. But it did still bottom out, which isn't good, so the next answer was a set of hop-up aluminum body shocks.

Installing the Hop-Ups:

One of the things that really draws you into rc stuff is the endless array of hop-up options available. You can take a relatively pedestrian looking chassis and pimp it out with graphite, titanium, and anodized aluminum parts to fit your taste. As you have the budget for parts, you can add bling by upgrading things, or add performance to your ride with race oriented pieces.

The hop-ups we'll be doing are more race oriented, designed to make the car handle, accelerate, and brake better than stock. Specifically we'll



Stage 1 Upgrades, ignore the ridiculous MSRP, Yokomo says street price is much lower.



Stage 2 Upgrades

be installing a set of blue aluminum threaded shocks, sway-bar set, front one-way differential, front universals, ball bearings on the axles and steering, and titanium screws throughout.

Yokomo sells these hop-ups either individually or in stages for Drift Kit owners. They represent the Stage 1 and Stage 2 upgrade kits. Since the stock shocks are lacking, I installed the Stage 1 pieces first. The primary component of this is the aluminum shocks. These are really something any gear-head can even enjoy. They have a threaded body and upper shock perch, just like a set of coil-overs, allowing you to change pre-load on the springs by moving the

upper perch. They're oil filled, and the anodized blue pieces really add to the look as well. Also in Stage 1 are bearings for the axles, steering, and diffs.

After a quick test of the car after Stage 1, I decided this is a must upgrade for any Drift Kit owner. The shocks don't make the car any less easy to drift,

and change the handling immensely for the better with grip tires installed. In addition, the bearings make everything much smoother, especially in the steering, and bearings won't wear quickly like the stock bushings will. Stage 1 fittingly enough should be your first upgrade.

Stage 2 upgrades are not nearly as 'necessary' for everyday usage, but are important if you plan on racing your car at all. Consisting of the front one-way differential, sway bar set, and universals for the rear Stage 2 makes the car even more potent.

The install of the parts was fairly straightforward even though instructions were in Japanese. One bit of guidance lost in translation was that you must cut about 3-4 mm off the ends of each ball cup for the sway bar end links. If you don't, they'll be too long and bump against the upper turn-buckle links. I figured this out after assembling them all wrong of course. Otherwise, it was easy enough. Installing the front one-way required removing the front gearbox, but once out it drops right in. A one-way is aptly named because it only spins one way, allowing the front tires to get power under acceleration, but roll freely under braking. This means the car will have rear brakes only, which for a rc is plenty because electric motors provide quite a bit of braking force.

I was worried that these upgrades might make the car a



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Front Universals and Associated Black Grease

bit harder to drift, but that proved not to be the case. In fact I found myself pulling off my best drifting sessions with these upgrades, especially after the one-way. The universals seemed to make the drivetrain noticeably smoother. But the sway bars, well I don't think they do much of anything except look cool. This is probably due to the bars being too thin, and Yokomo makes

thicker bars. I'll probably try combinations of different bar thicknesses later. And speaking of that, I plan on trying different spring rates on the aluminum shocks later too. You see how many tuning options are becoming possible?

In addition to making for better drifts, the Stage 2 upgrades also made

quite an improvement in the handling of the car with grip tires installed. The car now turns better and is more predictable under braking. These upgrades seem to work perfectly with those from Stage 1 to produce a very nice handling car. I would be totally comfortable racing it in exactly this state of tune.



Yokomo 19 Turn Motor

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Front One-Way

Other Goodies Tested:

Since this is a Drift car first of all, I wanted to test the Yokomo one-ring drift tires, known as the Zero-One R. Not wanting to risk scratching my pretty Gram Light 57 Pro replica rims,

Yokomo sent me a second set of tires with the Zero-One's mounted. After some testing I found that the single ring tires handle very similar to the two ring ones, just with even less traction. Still they are very easy to get the hang of with a few minutes behind the wheel. If I were to make a recommendation, I'd say have a set of the single ring tires for warm weather drifting, and the two ring ones for cold weather.

The big addition was the Apexi Imamura Drift FD3S replica body shell. Yokomo is really onto something by creating exact scale replicas of D1GP cars, this being one example. Just a word of caution though before buying one – the decals are NOT easy to install, they are very detailed and must form to many curves of the body. My best advice is to be patient above all, don't try to finish your car in an hour because you'll just make a mess of

it. When applying the large decals, cut the backing off in addition to the decal itself. That way you can test fit it, and then only peel back one corner to apply, peeling the rest off as you go. Another trick is to lightly mist the decal area with a water and soap mixture, or with Windex. This will allow you to slide the decal around a bit before working out the bubbles.

Another thing Yokomo sent me to try were their #1 and #2 Philips screwdrivers. You may think big deal, but these screwdrivers turned out to be money. Last month I complained about how hard it was to find a screwdriver that fit the kit screws perfectly,



resulting in a few stripped screws. These screwdrivers fix that problem, and for around \$3-\$4 each street price, they're a must purchase in addition to your Drift kit. Trust me.

Another addictive aspect to electric rc cars is how easy it is to swap in a new motor and make the car faster. The 21 turn Drift Spec motor was set aside for a test of the Yokomo 19 turn motor, and wow! The car probably picked up another 5-10 mph of top speed and had tons more acceleration with grip tires mounted. With drift tires it just meant even more wheel spin and is probably overkill, but the hotter motor made grip driving loads more fun.



Yokomo Screwdrivers



Next Month:

I hope you're still reading, because there's more to come. I'll be building one of Yokomo's CGM kits and comparing it to the Drift kit. The CGM comes stock with many of the hop-ups installed here, and has chassis and suspension components made of a graphite material as opposed to the Drift kits molded plastic. This should make the car handle better, but we'll see how it drifts. I'll also be throwing into the mix a Yokomo SSG (Silver Surface Graphite) kit. This is constructed with a silvery finish double deck graphite plate chassis. Both the CGM and SSG are targeted towards racers, and assuming they're driftable, might just be the ticket for someone looking for a double duty drift/race chassis.

And since we'll be covering race topics, I'll show you some neat electric stuff like a motor dyno for your electric motors, and how to properly charge and discharge very expensive battery packs for maximum power and longevity. I'll also install and report on some race worth electronics.

While rc cars may not hold the same place in your heart as the RX in the garage, they can be lots of fun. And lets face it, as much as our rotaries



break, it's good to have something you can wrench on during the downtime. And now that Yokomo has released these sweet FC and FD bodies, it just gives you another reason to have one. **RX**

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