

# Nuova Faor SF501 Nitro Motorcycle

IF UNIQUE, ATTENTION-GRABBING VEHICLES get you excited, prepare to be blown away by one of the most unusual RC vehicles on the market: the Nuova Faor (NF) SF501 nitro motorcycle. This 1/5-scale beast boasts a highly functional suspension, .12 nitro power, a true chain drive and a realistic look that's sure to open eyes and drop jaws at local parking lots wherever you take it.



**GAS-BURNIN'  
BIKE**



## TRACK TEST NUOVA FAOR SF501 NITRO MOTORCYCLE

### KIT FEATURES

**CHASSIS.** The Nuova Faor SF501 motorcycle's twin stamped-aluminum plates are connected with large plastic spacers. The bike's basic rigid, light frame structure allows the radio gear and small-block .12 engine to be positioned for ideal balance. A large rectangular balance weight is attached to the lower chassis plate and close to the fuel tank to balance the cycle when it's upright. The cycle's large, metal fuel tank—the heaviest component when it's full—is mounted on the frame's lowest point where it stabilizes the bike when it's running.

**DRIVE TRAIN.** An incredibly realistic chain-and-sprocket drive train propels the bike. The SF501 engine's clutch bell (which houses a 2-shoe clutch with a wraparound spring) is mated with a large, machined-steel spur gear that's attached to a steel shaft with a small sprocket at the other end. The drive chain wraps around this small sprocket and is attached to the cycle's main drive sprocket at the rear wheel. An adjustable chain tensioner is built into the rear swing arm. The front wheel has a single fiber disc brake that's clamped with two metal pads that are actuated by a long control wire.



When it isn't on the track, the SF501 makes a great-looking display model, and the included aluminum stand holds the bike upright.

**SUSPENSION AND STEERING.** Up front, the cycle's scale-looking, dual-fork front suspension has two friction dampers. The front shafts are inserted into the lower tubes and damped by stiff springs at the base of these tubes. Nuova Faor recommends that you pour a few drops of shock oil into the tubes to smooth suspension action, but the front forks are not oil-filled shock absorbers. The bike's one-sided rear, swing-arm suspension pivots on an inner hinge and is damped with one, aluminum-body, coil-over shock absorber. This comes filled with shock fluid of an undisclosed viscosity, and it provides excellent damping. To steer the bike, a simple pushrod system connects the steering-servo horn to the front, pivoting, steering assembly. The box-stock system has a short piece of fuel tubing connected to the steering-servo horn as a damping/servo-saver type assembly, but at the distributor's suggestion, I chose to install NF's optional spring-loaded servo-saver system.

**ENGINE AND ACCESSORIES.** The bike doesn't include an engine, and the field of potential candidates is a little thin because of the precise fit requirements of the bike. Fortunately, NF offers a Novarossi engine made specifically for this motorcycle; it's a .12 pull-start with a slide carb, a threaded short-shaft crankshaft and a side exhaust. It's very powerful and fits the bill perfectly, so that's what I installed. A long, scale-looking aluminum tuned pipe and rubber coupler are included, and so is a metal fuel tank. On the top of the tuned pipe, there's a fitting that pressurizes the tank for consistent fuel delivery. A fitting on the bottom of the pipe has no apparent purpose except perhaps to drain away excess oil and fuel residue; if this is the case, you'd have to attach a length of fuel line to it or oil and exhaust residue will be blown all over the swing arm.

**BODY, WHEELS AND TIRES.** A molded Lexan body and a driver figure complete the scale look. I sent them both off to Bill Zegers of Zegers Graffix for a replica 2003 Suzuki GP team paint job, and the results speak for themselves. The body alone gives the bike a perfect scale appearance, but the two-piece molded driver could have been molded better. I joined the halves with servo tape and attached the driver to the seat; use tape or glue to do this.

To protect the body during a crash, large wire nerf bars are included, but they detract from the bike's scale appearance, so install them only when you plan to run it. Large, 3-spoke aluminum wheels and treaded rubber tires with foam inserts are included.

## BUILDING & SETUP TIPS

The SF501 isn't an easy build for first-timers, as several assembly steps are vaguely described or incomplete. These tips will help guide you in the right direction, and if you already have some building experience, things should go fine.

**STEERING LINKAGE.** The SF501's stock steering linkage has a short piece of fuel tubing to act as a steering "servo-saver." At Internet R/C's suggestion, I replaced this with the optional spring steering support (item no. X80A); it provides more precise, predictable steering.

**BODY ASSEMBLY.** The instruction manuals skip the body- and driver-mounting steps. Trim the motorcycle body so that the spur gear and clutch bell are exposed; if you don't, the gears will grind into the Lexan body so the drive train won't be able to spin smoothly. Also, trim the driver pieces carefully, and test-fit them together before you trim away important pieces. The body doesn't have molded-in trim lines, so you'll have to use your best judgment and remove a little Lexan at a time until the driver fits properly.

**RECEIVER AND RECEIVER BATTERY.** The SF501's instruction manual doesn't tell you how and where to mount these; I mounted the Novak micro receiver on the right rear of the chassis (opposite the exhaust pipe). Secure the receiver battery underneath the chassis with double-sided servo tape and a few pieces of strapping tape or electrical tape.

### you'll need

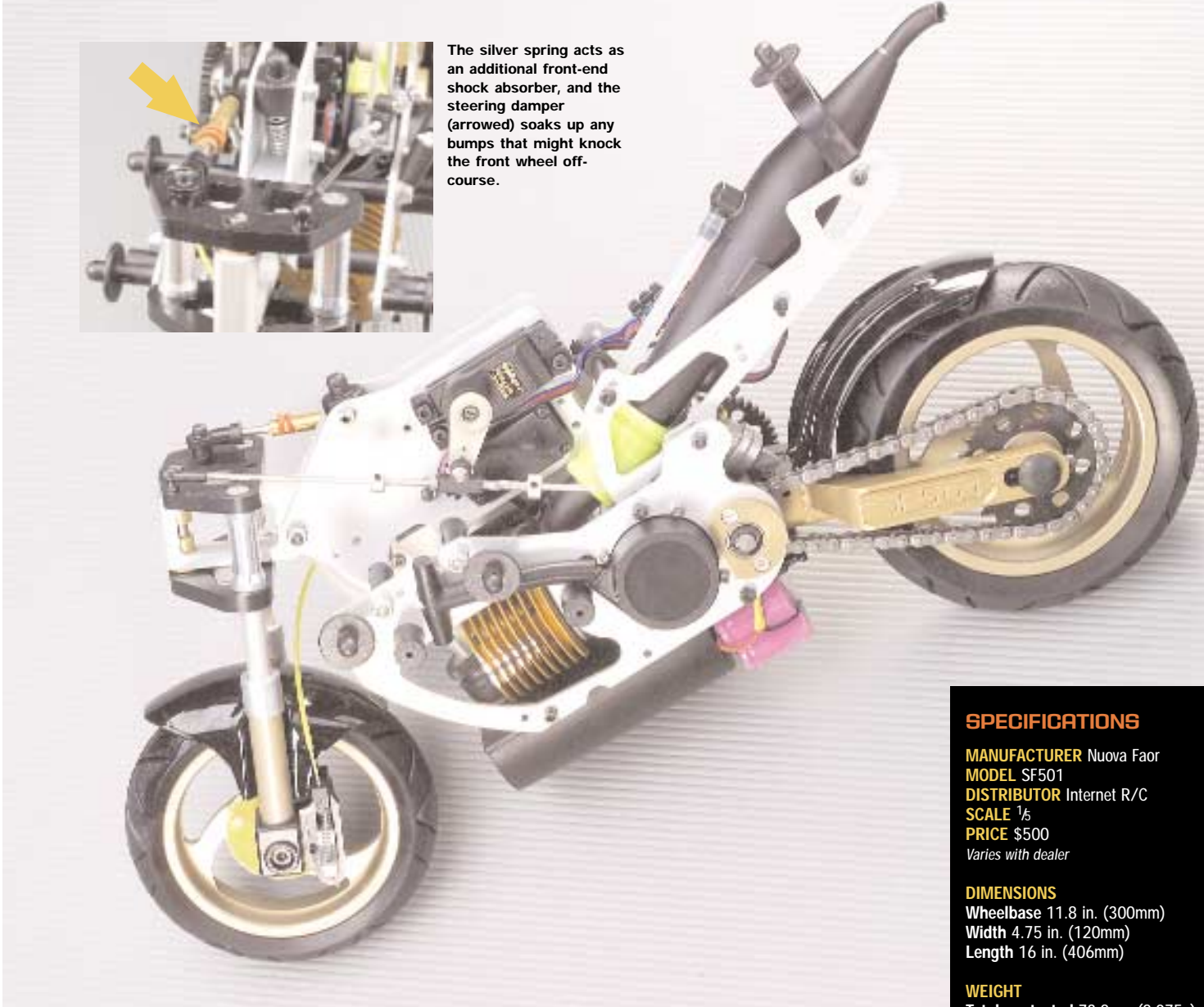
- Transmitter & receiver
- Steering & throttle servos
- Fuel & fuel bottle
- Glow igniter
- Thread-lock compound
- Receiver battery
- Polycarbonate-friendly paint
- CA glue

### factory options

- Titanium muffler—item no. X226
- 3-point clutch—X215
- Metal front disc brake in with metal and Ferodo brake pads—X115/X114
- Steering support with springs for steering rod—X80A
- Motorcycle carrying case—X106

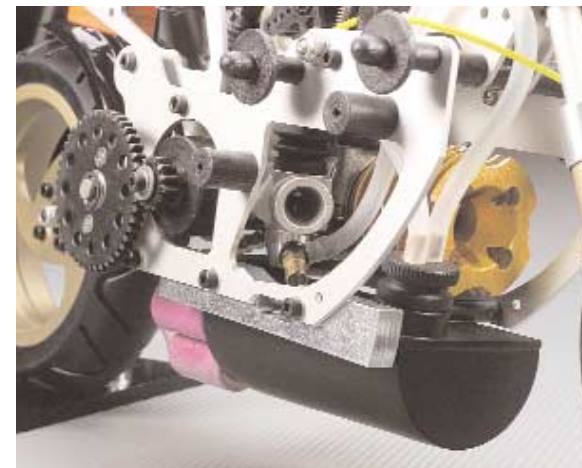


The silver spring acts as an additional front-end shock absorber, and the steering damper (arrowed) soaks up any bumps that might knock the front wheel off-course.



Below: the clutch bell sticks out on the right side of the frame and is mated with the machined-steel spur gear. When the motorcycle is running, the heavy, metal fuel tank and a weight on the frame's lowest point enhance stability.

Right: the realistic-looking rear end features an authentic metal chain and a one-sided swing arm where the rear sprocket is mounted. The screw that's indicated by an arrow is used to adjust chain tension.



## SPECIFICATIONS

**MANUFACTURER** Nuova Faor  
**MODEL** SF501  
**DISTRIBUTOR** Internet R/C  
**SCALE** 1/5  
**PRICE** \$500  
*Varies with dealer*

**DIMENSIONS**  
**Wheelbase** 11.8 in. (300mm)  
**Width** 4.75 in. (120mm)  
**Length** 16 in. (406mm)

**WEIGHT**  
**Total, as tested** 73.2 oz. (2,075g)

**CHASSIS**  
**Type** Twin-plate box frame  
**Material** Stamped aluminum

**DRIVE TRAIN**  
**Type** Chain drive  
**Primary** Clutch bell/spur  
**Bearing type** Metal-shielded ball bearings

**SUSPENSION**  
**Type (F/R)** Inverted fork/one-sided swing-arm  
**Damping (F/R)** Friction/coil-over, aluminum oil-filled

**WHEELS**  
**Type** 4-spoke anodized-aluminum

**TIRES**  
**Type** Treaded rubber

**ENGINE AND ACCESSORIES**  
**Engine (not included)** Nuova Faor/Novarossi CX12 w/pull-start  
**Carb** Twin-needle slide  
**Exhaust** Aluminum tuned pipe  
**Fuel capacity** 80cc

## Bike-handling basics

Driving an RC motorcycle is not the same as driving an RC car. With a car, you turn the transmitter wheel to the left to turn the front wheels to the left. With the bike, the opposite is true: its front wheel turns in the opposite direction to the radio input. Just flip the servo-reversing switch so that when you turn the steering wheel on the transmitter to the left, the Cycle also goes left even though the wheel will be physically turning to the right.

Turn the transmitter wheel until the bike leans and turns at the desired rate; then return the wheel to the neutral position and it will continue to turn. Applying throttle or brake alters its turning radius. If you squeeze the trigger for more throttle, the bike will stand up and go straight; conversely, applying brake tightens the radius. If you don't alter the throttle settings at all, you'll have to turn the transmitter wheel in the opposite direction to get the bike to come out of a turn.



## PERFORMANCE

After scoping out an empty, freshly paved mall parking lot, I set up my gear and fired up the engine. It's best to break the engine in and get its needle settings dialed in to allow it to idle well before you install the body; if you don't, you'll constantly have to remove and reinstall the body to get to the pull-start mechanism. Luckily, the .12 easily holds an excellent idle when given a decent tuning.

Acceleration is astounding, and with 1hp on tap, it's almost possible to pull wheelies when traction is ideal and the engine has been tuned for maximum performance. Braking is another issue, especially if you haven't set up the brake system properly; if you don't have a delicate brake-trigger finger, you'll find it difficult to bring the bike to a safe stop. If you lock up the front wheel, you'll instantly skid and be wrecked, but with practice, coming to a controlled, gradual stop is easy.

The bike runs best when it's allowed to make gradual sweeping turns and direction changes; if you alter course abruptly, you risk toppling it and losing control. Luckily, the wire nerf bars protect its sides. Don't expect to weave through tight spots until you have had plenty of wheel time with it, and even then, you'll find it difficult to pull off a sharp leaning turn without scraping its sides. Learning to drive it presents a challenge that's similar to learning to ride a full-size bike. After feeling awkward for a few tanks of fuel, you'll get a feel for how it handles, and from then on, driving it will come naturally.

It's easy to forget that you're driving an RC motorcycle as you lean into corners and blast out of them. The bike's motions mimic those of a full-size bike in every way, with the possible exception of its speed-to-size ratio: I estimate its top speed to be 45mph—like 225mph on a full-size bike. Oh; and get ready to make plenty of new friends because a large, nitro-powered RC motorcycle draws more attention than any 4-wheeler ever could.

## THE VERDICT

The Nuova Faor nitro motorcycle presents several assembly and driving challenges, but given some attention to detail, it will reward its owners by being a unique, scale-looking RC vehicle that delivers speed and fun in large doses. I'm especially fond of its incredible acceleration and how it looks when it scoots through a parking-lot course. It's unlike any RC vehicle I've driven in my 16 years of RC. It isn't cheap, and its assembly is challenging, but the Nuova Faor Nitro Motorcycle delivers a true-to-scale appearance and a high-speed performance that will make any experienced RC guy overlook such minor details and enjoy it for exactly what it is: a fast, fun departure from the every day 4-wheel RC car.



## LIKES

- > True-to-scale appearance.
- > One of the most unusual RC vehicles on the market.
- > Astounding acceleration and top speed.

## DISLIKES

- > Time-consuming assembly following two manuals.
- > Minor parts fit and quality problems.
- > Molded-Lexan rider figure isn't realistic.

## TEST GEAR



**Futaba 3PDF transmitter**  
The 3PDF's glitch-resistant FM signal is perfect for nitro-powered vehicles, and its digital trims make dialing in your settings a snap.

Other items used to complete the SF501:

**Novak XXL receiver**

**Novarossi/Nuova Faor CX12 pull-start engine**

**Airtronics 94102 standard servos**

**O'Donnell 20%-nitro fuel**

## SOURCES

AIRTRONICS (714) 978-1895; airtronics.net.

DURATRAX/O'DONNELL distributed by Great Planes Model Distributors (217) 398-6300; (800) 682-8948; duratrax.com.

FUTABA distributed exclusively by Great Planes Model Distributors Co. (217) 398-6300; (800) 682-8948; futaba-rc.com. NOVAK ELECTRONICS INC. (949) 833-8873; teamnovak.com.

NOVAROSSİ distributed exclusively by Trinity Products Inc. (732) 635 1600; teamtrinity.com.

NUOVA FAOR distributed by Internet R/C (602) 347-1600; internet-rc.com.

ZEGERS R/C GRAFFIXX (561) 988-5411.

## RATING THE NUOVA FAOR SF501 NITRO MOTORCYCLE

	POOR	FAIR	GOOD	VERY GOOD	EXCELLENT
<b>INSTRUCTIONS</b>	CAD drawings are a plus, but several steps aren't clearly described.				
<b>PARTS FIT &amp; FINISH</b>	The machined and stamped parts are well finished, but the Lexan body and driver figure could have been molded better.				
<b>CORNERING ABILITY</b>	The SF501 corners very well for a motorcycle, and on smooth surfaces, it's easy to balance.				
<b>ACCELERATION</b>	The bike's lightness with the Novarossi/NF .12 engine equals rocket-like acceleration.				
<b>DURABILITY</b>	With the included nerf wings installed, the bike takes plenty of abuse and stays in one piece.				
<b>ESTIMATED TOP SPEED</b>	<b>45MPH*</b>				
<b>BEST BUYER</b>	Experienced builders who love scale looks and high performance.				

\* Top speed varies with equipment used.