

### ONE RACE. ONE TQ. NO MODS.

# Any Questions?

Taking a TQ or title at a major event isn't uncommon. But doing it with a stock-from-the-box engine? That's rare. But that's just what Ron Atomic of Team O.S. did.

He told people that his 12TZ was a missile right out of the box. And he also told them he was going to TQ before the race began. What kind of engine can give a driver that kind of confidence? The O.S. 12TZ.

- Designed for top-level racing and head-to-head competition with premium-priced engines.
- Available in 3-port models for ROAR-legal stock racing and a 5-port powerhouse for 235mm outlaw class!
- Virtually perfect bore-to-stroke "square" creates the broadest possible power band and the ability to harness it for bottom-end torque, topend speed or any combination of the two.
- Factory-milled and flared crankcase, crankshaft and ports smooth the flow of fuel, air and exhaust gasses, reducing power lost to turbulence and boosting performance.

Created specifically for 12TZ engines, these one-piece pipes are all-metal and available for both right- and left-exhaust vehicles.



- "Teardrop" ribs inside the crankcase channel and compress fuel-air flow for added power and better burn.
- CNC-machined A7075 aluminum piston and knife-edge conrod reduce rotational mass, improving efficiency and available power.
- Hefty, 12mm crankshaft is CNC-machined for tighter tolerances and minimum vibration — enlarged transfer port on 5-port 12TZ (OSMG1998) increases fuel-air volume and horsepower!
- Also included: true ABC construction; enlarged rear and rubber-sealed front bearings; oversized, 1.92 in. (49mm) 2-piece turbo head.

www.os-engines.com

For more information on 12TZ engines or the location of the hobby dealer nearest you, please visit www.os-engines.com or call 1-800-682-8948 and mention code number 99Z31.

Displacement: 0.128 cu in (2.1cc) • Bore: 0.543 in (13.8mm)
Stroke: 0.551 in (14mm) • Practical RPM Range: 5,000-40,000
Weight: 7.9 oz (225g) • Include: P6 turbo plug, 5.5mm carb restrictor (T5 also includes 6.5mm restrictor). Require: manifold, tuned pipe, air cleaner

## O.S. Engines

## More great products for racing on the track and pre-race prep in the pits!

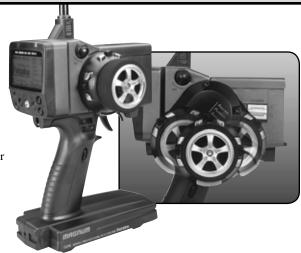
#### Futaba® 3PK Titanium Black 3-Channel FM Computer Radios

It's Futaba's ultimate competition radio equipped with the ultimate racing convenience: a transmitter module that can synthesize any frequency on the band with a turn of a dial. Plus, the 3PK also has the ability to operate in FM, PCM or advanced HRS (High Response Speed) transmission mode, which allows racers to take full advantage of digital servos' performance potential.

Other state-of-the-art features include: "New Driver", "Race-Ready" and "Expert" menus; "Direct Select" shortcuts to six of the most-used functions; digital trims and dials with automatic memory; expandable 10 model memory; an easy-to-read, backlit custom LCD; and the Advanced Positioning Adapter, which allows the wheel to be lowered or rotated for perfect feel in seconds.

Both require receiver and servos. 27 and 75MHz. 1-year warranty.

**FUTJ2900** 3PK Titanium Black Synthesized — Tx only 27MHz. **FUTJ2901** 3PK Titanium Black Synthesized — Tx only 75MHz.



#### **FUTABA® S9451 Digital Servo**

Solid Muscle with a 1-year warranty!

It's a perfect match for the 3PK FM, with a coreless motor and metal gears to give it blinding speed and amazing strength. Its digital design virtually eliminates deadband, so the driver can call up full torque instantly and hold it almost indefinitely. Torque and speed with 4.8V power are 96.6 oz.-in. and 0.13 seconds, but with 6.0V power, values jump to 120 oz.-in. of torque and 0.10 seconds. Weighs just 2 oz. (56g) and measures just 1.6" x 0.8" x 1.5". (41 x 20 x 38mm) Futaba J plug.



FUTM0992

#### Futaba® 3-Channel HRS FM Receiver

Combining the 3PK, digital servos and the HRS (High Response Speed) receiver creates a racing system that responds twice as fast as other radios. Signal clarity and control precision benefit as well, making the HRS receiver a great allaround investment for the serious competitor. 27 and 75MHz. Short crystal required. Weights just 0.6 oz. (17g) and measures 1" x 1.5" x 0.5" (25 x 38 x 13mm)



#### Futaba® FSU-2 Micro Fail Safe Unit

Runaways can be dangerous and costly, unless there's an FSU-2 on-board.

If it detects interference or low voltage, it automatically throttles back to a user-selected setting. One-button programming and a status LED speed and simplify set-up...and installation requires only plugging in and mounting with double-sided tape. Ideal for any car, truck or airplane and compatible both 4 8V and 6 0V receiver packs. Weighs just

Ideal for any car, truck or airplane and compatible with both 4.8V and 6.0V receiver packs. Weighs just 0.18 oz. (5g) and measures just 0.6" x 0.9" x 0.3" in (16 x 22 x 8mm) • Weight: 0.18 oz (5g)

#### of a silicone coupler, these pipes include a metal coupler that seals to the pipe and manifold with

rubber O-rings. That maintains peak exhaust pressure while allowing all three to flex with the bumps and jumps of racing. Springs linking the header and pipe prevent loss without compromising "flex." Available

O.S.® 1-Piece Tuned Pipes

for vehicles with left-hand exhaust (OSMG2985) or right-hand exhaust (OSMG2988).



#### **O.S.® Turbo Plugs**

Performance-matched turbo plugs feature a bottom taper that seats perfectly on 2-piece turbo heads, improving pressure retention and peaking performance. All feature solid platinum-alloy coils that hold heat without idle bars, and reduce the danger of meltdowns and other heat-related failures. Choices range from the cold **P8** and medium-heat **P7** to the hot **P6** and super-hot **P3**.



#### DuraTrax® O'Donnell® 30% Racing Fuel

It's formulated by one of the most famous names in R/C racing — and exclusively endorsed by both Picco Micromotori and Nova Rossi Micromotori.

Maximize the 12TZ with tuned pipes created to make it great! Instead

It's a blend of the highest-quality methanol and nitromethane available, enhanced by a lubrication package created for the high-heat, high-wear world of top-level competition. Quart bottle.



