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2007

PERFECTED  
FOUR-STROKE

SAITO ENGINES  
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POWER PERFECTED

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THE CATALOG

2007



**SAITO**

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**SAITO**™

[Four-Stroke Power Perfected]



**SAITO**

# Unchallenged Reliability

When you decide to invest in a 4-stroke engine, you want it to last. Saito™ engines have proven reliability. In fact, Saitos are the only 4-stroke engines backed by a full 3-year warranty on every engine in the line.

Of course veteran Saito owners, many of whom have had their engines in use for a decade or more, consider their engines "just about broken-in" by the third year. A stretch of the truth, of course (Saito engines are easily broken-in after about an hour of easy running), but this shows the kind of "relationship" many modelers have with their trusty Saitos.

## Why they run longer

The Saito difference starts with the cylinder and head. Whereas all other manufacturers join the cylinder head to the head with long bolts (because it's easier to produce this way), Saito does it the right way...the way expensive racing engines are done. In one piece.

Unlike a two-piece system, a unitized cylinder and head simply can't leak. It can't distort when assembled or from operation. It simply has to run better.

The one-piece head system also offers some advantages that aren't so easy to see but are equally important. For example, thermal transfer. Because the head is integrated, it transfers heat more easily and evenly. Saitos cool better too. They can run as much as 200 degrees cooler than the competition which helps increase engine longevity.

Another key feature of Saito technology is a true-chrome ABC/AAC cylinder lining. Whereas most competitors have switched to a less costly nickel plating system, Saito keeps on lining them with genuine chrome, a metal which has been long proven to provide a superior plating protection for either a brass or aluminum cylinder. When used in conjunction with a ringed piston, as all Saitos have, the result is a quality liner that's nearly impossible to wear out with conventional use.



R E L I A B I L I T Y

Hear the sweet sound of Saito at [www.saitoengines.com](http://www.saitoengines.com)

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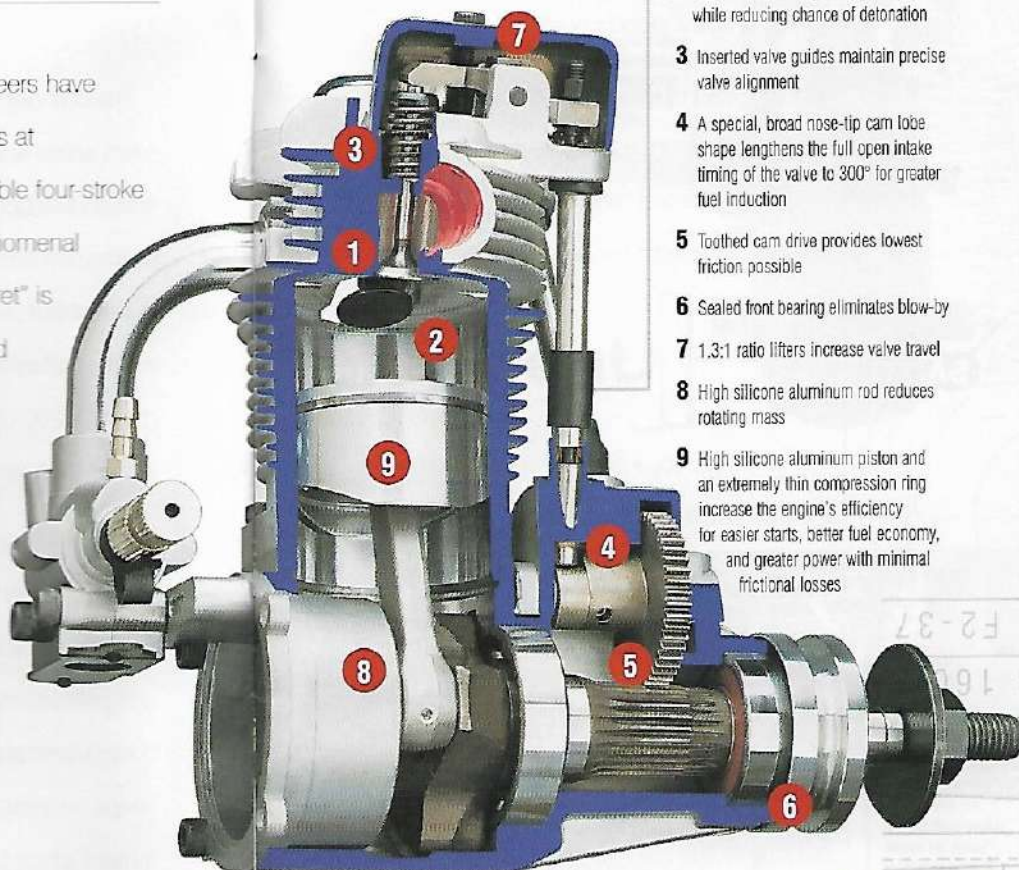
While teaching 40 people to fly, RC instructor Marc Self flew his Saito .50 powered trainer at half throttle for hundreds of hours, while going through just 25 gallons of fuel. The engine is still running strong!



It takes a close look to understand what makes a Saito engine so unique. Yes, the head is one piece. But the cylinders are actually cast around the brass or aluminum sleeve. The result? A leak-proof, unitized construction with superb coefficient of expansion and unmatched heat transfer capability for better cooling. Plus, because the sleeve is true hard-chrome-plated, it will almost never wear out.

Saito™ engineers have long been masters at creating dependable four-stroke engines with phenomenal

power-to-weight ratios. The "secret" is Saito's single-piece cylinder head design that allows significantly greater displacement for a given case size. Sure, it costs more to make engines this way, but the superb power production and lower weight this process yields makes for a one-of-a-kind flying experience that's worth it. Just ask any Saito owner.



- 1 Oversized intake/exhaust valves improve flow scavenging
- 2 "Hemi" head design boosts output while reducing chance of detonation
- 3 Inserted valve guides maintain precise valve alignment
- 4 A special, broad nose-tip cam lobe shape lengthens the full open intake timing of the valve to 300° for greater fuel induction
- 5 Toothed cam drive provides lowest friction possible
- 6 Sealed front bearing eliminates blow-by
- 7 1.3:1 ratio lifters increase valve travel
- 8 High silicone aluminum rod reduces rotating mass
- 9 High silicone aluminum piston and an extremely thin compression ring increase the engine's efficiency for easier starts, better fuel economy, and greater power with minimal frictional losses

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## Outstanding Power-to-Weight

Saito maximizes power in every way possible, while keeping in mind the overall philosophy of simplicity, ease of handling and reliability. All features help maximize output, while minimizing complexity.



All Saito crankshafts are machined from a chrome-molybdenum forging, hardened and finish-ground on all bearing surfaces, including the crankpin. The counterbalance, which provides smooth running by offsetting the weight of the rod, wrist pin, and most of the piston, is formed during forging.



Saito's large valves and rough-surfaced semi-spherical hemi-head increase combustion efficiency for more power.



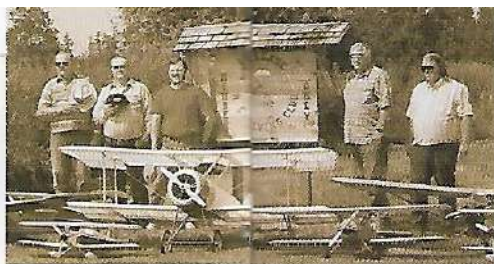
1.3:1 ratio cams give big valves big travel—so pistons are relieved to provide adequate clearance.

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Shown are just five of the Renegade R/C Club's 30-plus members — every member owns at least 2 Saitos! Fred Anderson (second from right) reports many of his Saitos have 80 gallons of fuel through them, and they're still going strong.



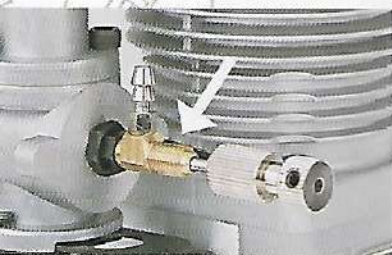
The moment you fire up your new Saito™, you'll know why you made a good choice.

First, instead of the usual "whine" you're used to hearing from a 2-stroke, your ears will be greeted to a pleasant "phutta-phutta" sound. It sounds more realistic because it is more realistic.

**SAITO**

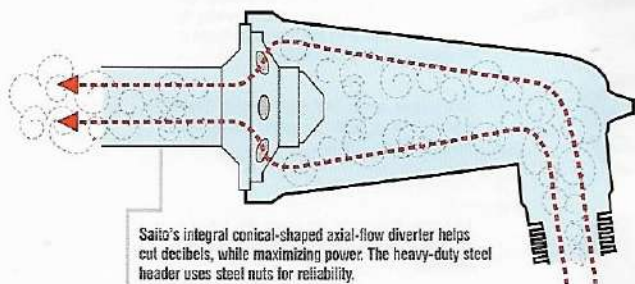
## Unequalled Enjoyment

After break-in, you'll discover why Saitos have earned a reputation as the "Friendly 4-Stroke."



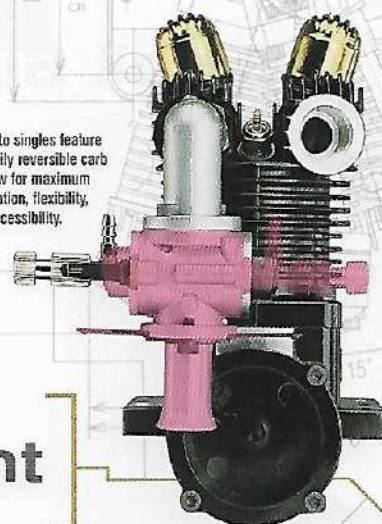
O-ring seals located inside the needle housing contribute to precise fuel metering.

Thanks to an unpinned cast-iron ring, with its extremely low gap and micro tolerances achieved through computer-operated production equipment, your Saito will have high compression for easy starting. You'll find the high-speed needle valve to be precise, repeatable, yet with a broad range, thanks in part to a special O-ring seal in the needle housing.



Saito's integral conical-shaped axial-flow diverter helps cut decibels, while maximizing power. The heavy-duty steel header uses steel nuts for reliability.

All Saito singles feature an easily reversible carb to allow for maximum installation, flexibility, and accessibility.



About the only thing missing in a Saito is a lot of vibration. Mounted securely, your Saito will offer extremely low levels of vibration due to mass reduction of the piston, rod, and wrist pin. Add to that an oversized counterbalanced crankshaft, and you have a 4-stroke that purrs instead of pounds.

The only question left is which Saito's right for your model? Will it be an all-silver FA model, or one of the flashy GKs? As you'll see on the next few pages, there's a broad range of Saitos to choose from. This is 4-stroke power perfected. This is Saito.

Saito goes to great lengths to make sure props stay secure. Crankshafts use a long tapered steel collet which fits into the machined propdriver. For additional security, a tapered split prop nut recesses into a thick prop washer — helpful with the high-power pulses of the big engines.



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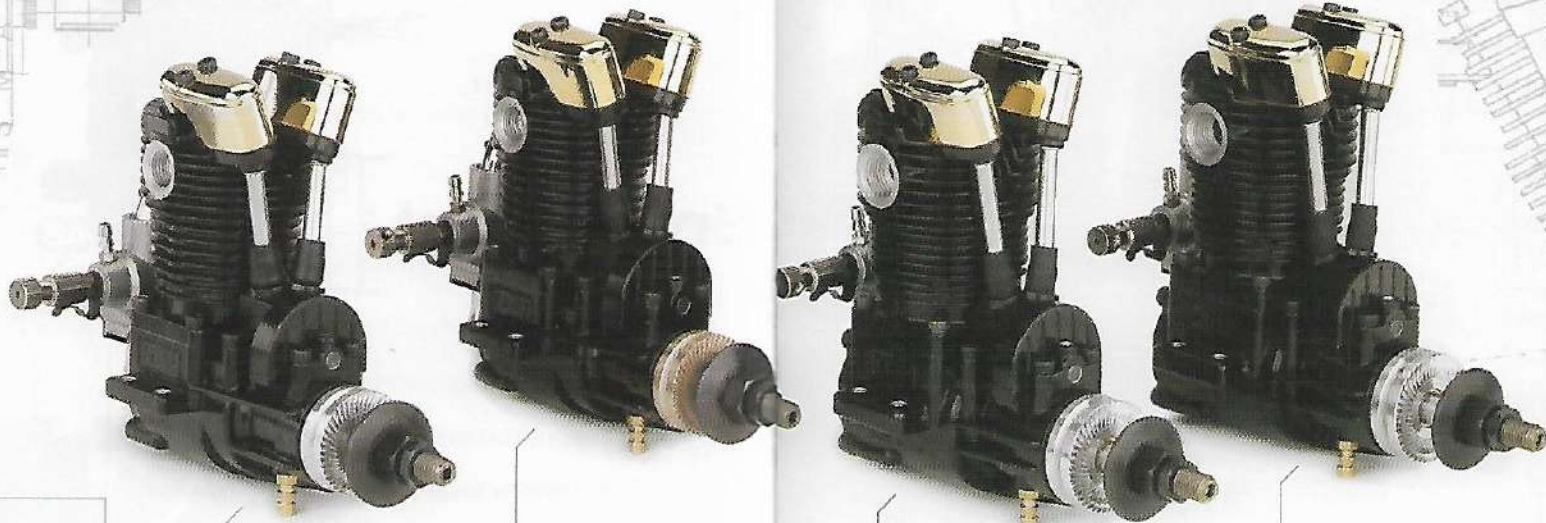


# Small Singles

**SAITO**



Hangar 9's ShowTime 50 is capable of aggressive verticals with the FA-82.



## FA-56/56GK

Displacement: .56 cu in
Weight: 15.5 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 11x8-12x7

The .56 is a real powerhouse for an engine that weighs a little over 12 ounces. In fact, there isn't another 4-stroke in its class that can beat its power-to-weight ratio. With the .56, you'll have enough thrust to power sport 40 planes to excess or fly even big 6'-span planes, like the Goldberg Protege.

## FA-62a/62aGK

Displacement: .62 cu in
Weight: 14.7 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 11x7-13x7

Packing .62 cubic inches of power into a .50-size case, the FA-62 has what it takes to turn your 40-size sport plane into a real head-turner. With an APC 13 x 6 prop, it's capable of an astonishing 9900 rpm, which is more than enough power to fly airplanes like the Hangar 9 Pulse XT or Ultra Stick 40-size ARFs.

## FA-72/72GK

Displacement: .72 cu in
Weight: 16 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 12x8-14x8

Its ultra-compact crankcase design allows this .72 to fit in the same engine mount as a .56. The added cubic inches let its prop turn an APC 13x8 at about 9600 or a 14x8 at 8400. That's enough horsepower to make 60-size planes, like the 7-1/2 pound Hangar 9 Super Stick, go straight vertical and then some.

## FA-82a/82aGK

Displacement: .82 cu in
Weight: 16 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 13x8-15x8

Those looking for unlimited performance for a 40 to 60-size airplane have a lot to look forward to with the FA-82a. It shares the same weight and dimensions of many of its .70-size competitors, but boasts big engine performance like max rpm in the 12,000 range and the ability to swing a 15x6 prop. That's more than enough power to give any .60 Stick or 3-D machine out-of-sight vertical performance.



All small singles come complete with a muffler and are also available in silver versions.

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**SAITO** Four-Stroke Power Perfected





Joe Grable's fantastic Coast Guard C-130 puts four Saito 91s to good use to haul this 139"-span, 43-pound plane into the Florida skies. Joe uses APC 14 x 6 props for flying to maximize thrust and keep speed down.

**SAITO**

## Medium Singles



All medium singles come complete with a muffler and are also available in a silver versions.



### FA-91S/91SGK

Displacement:	.91 cu in
Weight:	19.6 oz w/o muffler
Cylinder/Head:	One-Piece AAC
Piston:	Ringed
Prop Range:	12x8-15x6

Putting out 1.7 horsepower, the FA-91S will turn a Zinger 14x6 at over 9100 rpm, providing over 10 pounds of static thrust—all from an engine that weighs 19.6 ounces.

Modelers like Joe Grable choose Saito 91's not only for their power, but for their reliability and easy handling. Joe's C-130 uses four 91s (all inverted), and he's had great success with all of them.

The FA-100 gives Hangar 9's FontanaX 100 spine-tingling vertical performance.

### FA-100/100GK

Displacement:	1.00 cu in
Weight:	19.5 oz w/o muffler
Cylinder/Head:	One-Piece AAC
Piston:	Ringed
Prop Range:	13x9-14x10

Not only does the FA-100 swing a 14 x 8 APC prop 300 to 400 more rpm than an O.S. .91, but it shares the exact same mounting dimensions and weighs 2 ounces less. That's right—2 ounces less. No other 4-stroke offers this kind of power-to-weight ratio for .60-to-.90-size airplanes.

### FA-125a/125aGK

Displacement:	1.25 cu in
Weight:	21.9 oz w/o muffler
Cylinder/Head:	One-Piece ACC
Piston:	Ringed
Prop Range:	15x7-17x6

Less weight, more thrust—that's what you get with the FA-125. That's because it weighs in at fully 10 ounces lighter than its predecessor, the venerable FA-120, yet it provides the same power and torque. This is a great way to give an Ultra Stick Lite or any 120-size iMAC plane even more vertical performance.



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# Big Singles

**SAITO**



This big Fiesler Storch employs a Saito for excellent STOL (short takeoff or landing) that simulates prototypical performance, plus that sound only a 4-stroke can produce.

## FA-220a/220aGK

Displacement:	2.20 cu in
Weight:	38.83 oz w/o muffler
Cylinder/Head:	One-Piece AAC
Piston:	Ringed
Prop Range:	17x12-20x8

Using the same one-piece, hemispherical head design that gives all Saitos their legendary power-to-weight ratios, the new FA-220 packs a full two cubic inches of combustion into a case barely bigger than that of most 1.80s. No other single cylinder 4-stroke engine comes close to giving you this much displacement with so little weight. Able to turn an 20 x 6 prop at 3,600 rpm, it is perfect for most any 25% IMAC plane or giant-scale Cub.

## FA-180/180GK

Displacement:	1.80 cu in
Weight:	31 oz w/o muffler
Cylinder/Head:	One-Piece AAC
Piston:	Ringed
Prop Range:	15x8-18x6

Weighing just an ounce more than the 1.50, the 1.80 has enough power to turn a 16x8 a full 500 rpm faster. The crankpin, rod, piston and crankshaft have all been beefed up. The muffler also has been modified to compensate for the greater flow of gas through its chamber.

For modelers looking for added horsepower for more aggressive verticals, higher speed, or better authority in torque rolls, this can handle it.

## FA-150/150GK

Displacement:	1.50 cu in
Weight:	30 oz w/o muffler
Cylinder/Head:	One-Piece AAC
Piston:	Ringed
Prop Range:	16x8-18x6

Weighing just 2 ounces more than the 1.20, the 1.50 provides about 10% more power—enough power to spin an APC 16 x 8 at 8900 rpm—which can be boosted to 9200-9300 with 30% helicopter fuel.

The 1.50 has satisfied thousands of modelers nationwide in sport and aerobatic planes like the Hangar 9 Miss America P-51. Of course, its high torque output makes it a favorite when the goal is to swing large propellers at reduced rpm for scale subjects like Cubs and PT-19s.

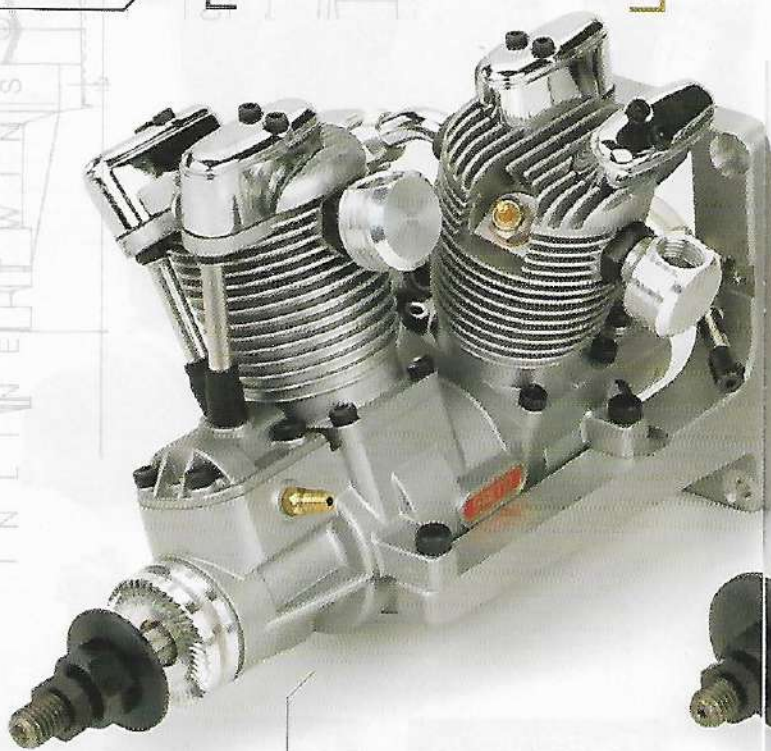
All big singles come complete with a muffler and are also available in silver versions.

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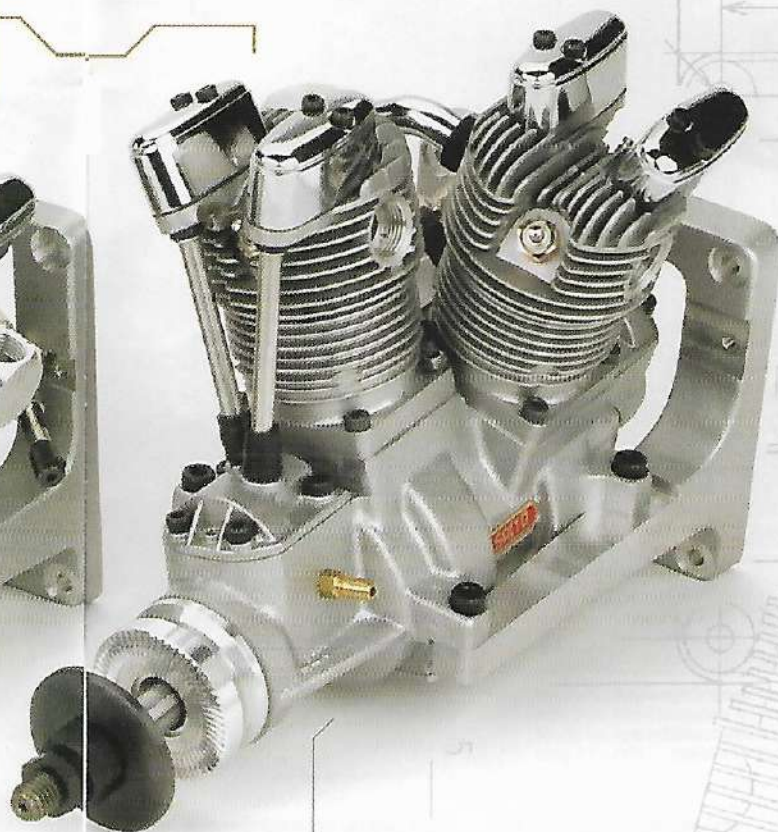


**SAITO**

## Inline Twins



Now you can enjoy the one-of-a-kind 4 stroke sound and silky smooth throttle response of a Saito twin in a package that fits neatly in the slender cowl of a P-51 or PT-19. It's all made possible with Saito's unique offset inline design that's just a couple of inches wider than a comparably powered single, yet still provides ample cooling for both cylinders.



### FA-100Ti

Displacement:	1.00 cu in
Weight:	39.8 oz w/o muffler
Cylinder/Head:	One-Piece AAC
Piston:	Ringed
Prop Range:	14x6-15x6

Half the size of the FA-200Ti, the FA-100Ti is great for 60-size warbirds such as Hangar 9's P-51 ARF.

### FA-200Ti

Displacement:	2.00 cu in
Weight:	51.5 oz w/o muffler
Cylinder/Head:	One-Piece AAC
Piston:	Ringed
Prop Range:	16x8-18x10

If you're of a mind to make your next model a quarter-scale warbird with a narrow cowl, the Saito FA-200Ti is an easy fit for ARFs like Hangar 9's 1.50-size P-51.

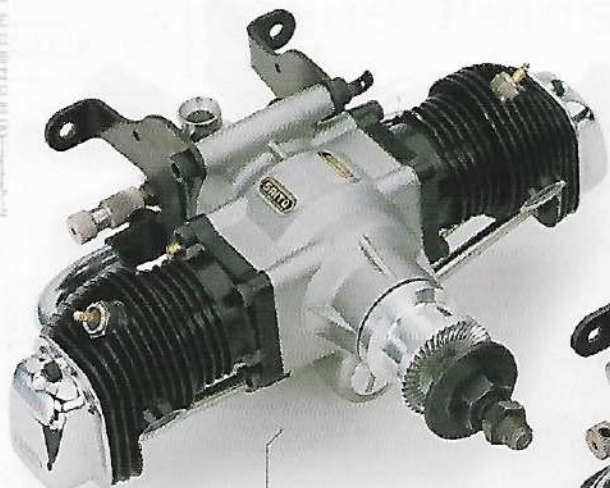
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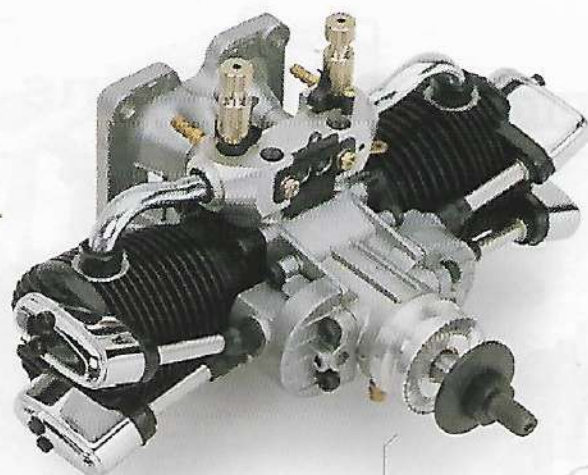
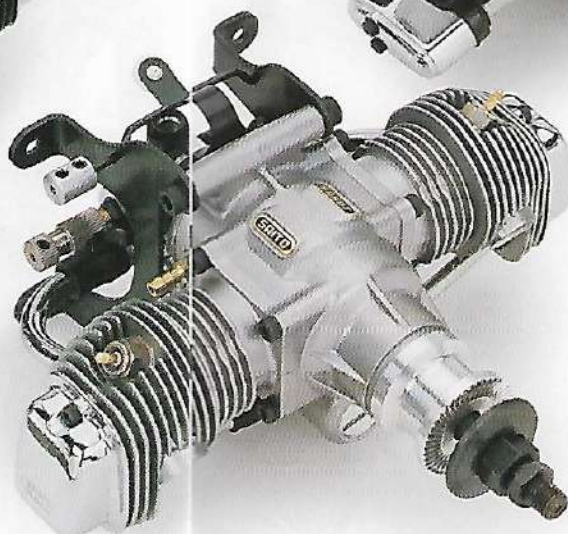


SAITO

## Small Twins



The 60T pulls Dr. Tennyson's humongous Avro and it does in a very scale-like manner! Lightweight construction pays off in this spectacular project.



With the additional weight and drag of the floats, this Hangar 9 Cub benefits from the additional cubes of the 90TS.

## FA-90TS

Displacement: .90 cu in

Weight: 27.2 oz w/o muffler

Cylinder/Head: One-Piece AAC

Piston: Ringed

Prop Range: 13x8-14x6

Mount-interchangeable with its smaller cousin the 60T, the 90TS is a bored and stroked version of the 60T to provide a 50% increase in cubes and a substantial boost in output. Like the 60T, the 90TS has a low profile which makes it easy to keep this engine cowed in a scale-like manner.

It will swing a 14x6 APC at a little less than 9000 rpm. And when you hear the wonderful phutta-phutta-phutta of this engine idling away at 1800 rpm, you'll know you made a great choice.

## FA-60T

Displacement: .60 cu in

Weight: 26 oz w/o muffler

Cylinder/Head: One-Piece ABC

Piston: Ringed

Prop Range: 10x6-11x6

A perfect power plant for 80-inch Goldberg, Sig, or Hangar 9 Cubs, the 60T will fly these models realistically while offering a sound that's impossible for a single to match. Of course, as Dr. Tennyson's Avro shown on this page will attest, the engine has enough power even for larger planes of appropriate style.

The 60T will idle reliably below 2000 rpm and swing a Zinger 13x5 around 8000 rpm with the sweetest sound you've ever heard.

## FA-100T

Displacement: 1.00 cu in

Weight: 29 oz w/o muffler

Cylinder/Head: One-Piece ABC

Piston: Ringed

Prop Range: 12x8-14x6

The 100T is more powerful, yet a gem to handle. Here's what Frank Tiano had to say...

"My 7 1/4-pound Stick went almost vertical until it was nearly out of sight! That's with an APC 14x6 turning at exactly 9,900 rpm. In all attitudes, the 100 performed flawlessly, never offering even a hiccup. We also tested larger props and found the 14x7, 15x6, and 16x6 all work very well.

This may be the nicest all-around small engine I've had the pleasure to handle in several years. Saito has a real winner here."

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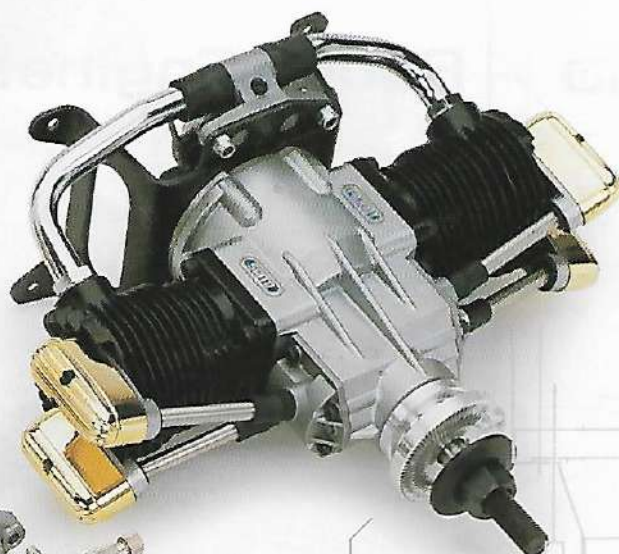
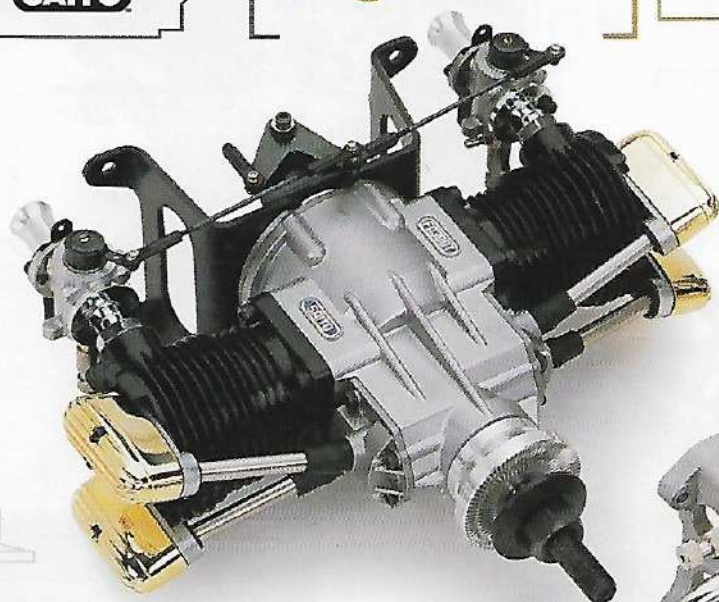
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# Big Twins



Chuck Smith's 15-pound, Saito 300-equipped S&S Special boasts unlimited vertical — for spectacular upline snaps, torque rolls, and tumbles. The engine weighs only 4 pounds, sounds wonderful, and out-powers most any 3.2 gas engine you'd choose.

## FA-300T-TDP

Displacement: 3.00 cu in
Weight: 63.5 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 18x10–20x10

With twin carbs, dual plugs, and a fuel pump system, the TDP version offers slightly increased power with assured fuel flow delivery due to the diaphragm pump system.

## FA-182TD

Displacement: 1.82 cu in
Weight: 44 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 14x10–18x6

The single-throw crank 182TD puts out 2.8 horsepower and yet has enough torque to swing props up to 18 inches in diameter.

Twin carbs allow for precise metering of fuel to each cylinder which are equipped with dual plugs for redundant glow ignition.

Clarence Lee of RCM found the 182's overall handling was excellent with no particular problems. With the 15-inch and 16-inch prop sizes, the engine would hold a steady, reliable idle speed of 2,000 rpm with almost instant acceleration. With the heavier 18-inch props, we had it ticking over at 1,500 rpm without battery heat and 1,200 with.

## FA-300TL

Displacement: 3.00 cu in
Weight: 61 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 20x8–20x10

This huge twin swings an 18x10 over 8,000 rpm. Or for even greater thrust, a 20x10 at over 7,000 rpm.

Thanks to the engine's low profile, scale cowls remain clear of any non-scale protrusions. The single carb version offers operational simplicity. Big models, like Midwest's Extra 300, Frankel's T-34, Yellow's Zero, or even Sig's 1/3 scale Spacewalker, all benefit from the performance, reliability, and smoothness of this power plant that's in a class of its own.



Bobby Posten's Cessna 150 Aerobat does everything the full-scale plane does with the help of its Saito 300TL. Easy starting, unmatched sound.

Hear the sweet sound of Saito at [www.saitoengines.com](http://www.saitoengines.com)

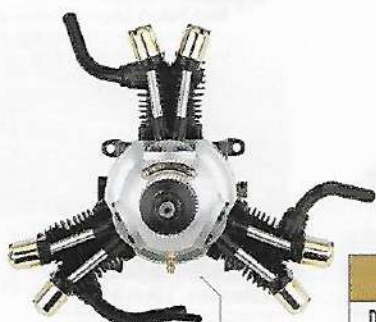
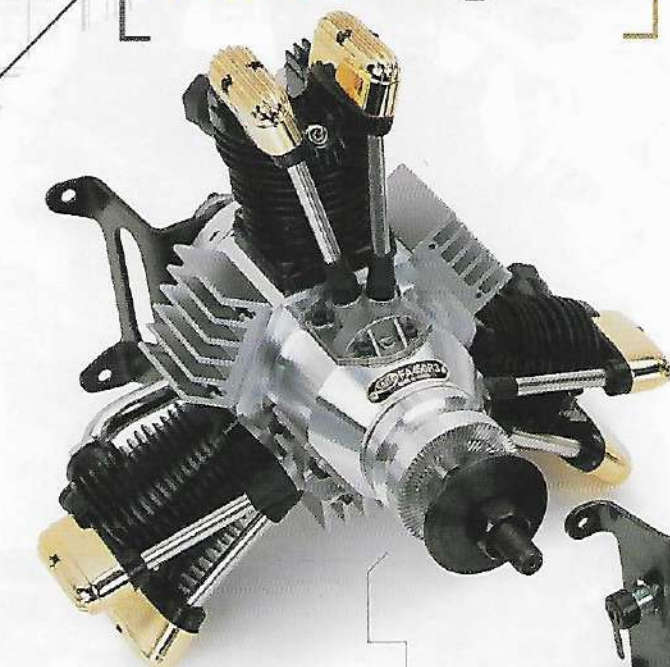
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# Radial Engines



Corvin Miller's fantastic F4U-1G Corsair puts the R450 to good use. It's said that he has so much power, he cruises at about 1/3 throttle. Of course, the radial is totally enclosed inside this legendary Zivoli design. (Photo by Cal Art Johnson)

## FA-90R3D

Displacement: .90 cu in
Weight: 29.98 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 13x6-14x6

While the FA-90R3D is the smallest of Saito's radials, it shares the same design of its larger Saito siblings. It's also a breeze to start and with an APC 13 x 8 prop turns an impressive 8,500 rpm. If you're seeking maximum realism for a .60-size radial warbird, this is your engine.

## FA-450R3D

Displacement: 4.25 cu in
Weight: 99 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 21x10-24x10

Mount the 4 1/2-cubic inch R450R-3D radial in your Helicat, Sukhoi, Texan, or GeeBee and get ready for some spirited flight, because this brute'll swing a 22x12, or 22x10 prop at 7,000 or 7,800 respectively.

Of course, what guys like most about the R450 is that it produces all that horsepower so smoothly—extending the life of your airframe, servos, and radio indefinitely.

## FA-170R3D

Displacement: 1.70 cu in
Weight: 46 oz w/o muffler
Cylinder/Head: One-Piece AAC
Piston: Ringed
Prop Range: 14x8-16x8

This smooth-as-silk triple is perfect for round-cowled aircraft that would ordinarily use a 1.20 to 1.50 4-stroke.

With a sound all its own, the FA-170R3D spins an APC 16 x 8 at 8400 on 15% fuel. And handling couldn't be sweeter—starts are nearly instantaneous—and with a single carb, this triple is easy to adjust for optimal settings.

## FA-325R5-D

Displacement: 3.25 cu in
Weight: 84 oz w/o muffler
Cylinder/Head: One-Piece ABC
Piston: Ringed
Prop Range: 20x8-20x10

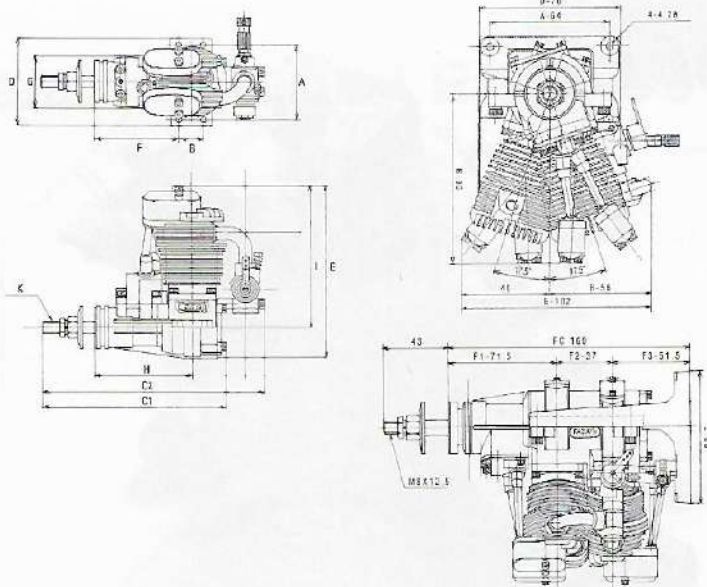
In a league of its own, the radial 325 represents the pinnacle of Saito's engineering. Perfect for big models like Balsa USA's Sopwith Pup, Proctor's Nieuport 28, or Byron's Wildcat or Staggerwing, your model's realism will be unmatched with the addition of this technical masterpiece.



Imagination pays off! Rod Gier added a cowl and an R450 to this Giant Telemaster to create a versatile airshow machine that's a real attention-getter!

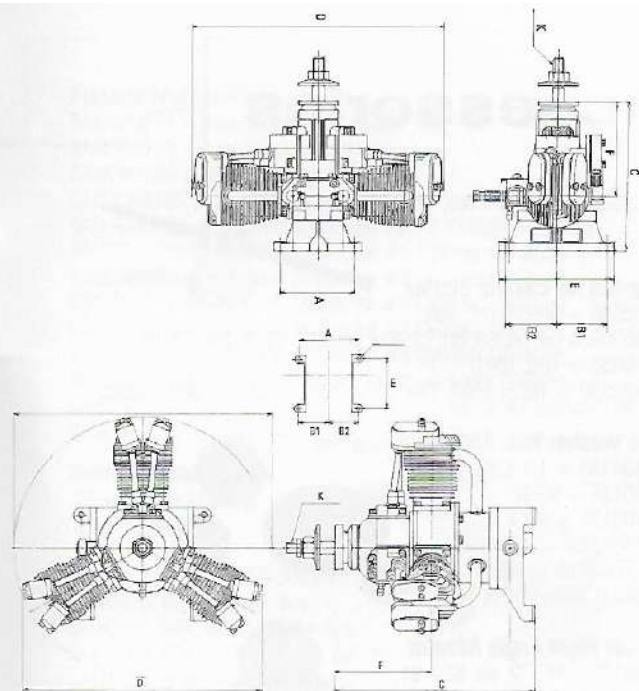
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## Specifications

	Disp (cc)	Bore (mm)	Stroke (mm)	Weight (g)	K (ISO)	Cylinder	HP
FA-56/FA-56GK	9.2	24.8	19.0	410	7x1mm	— AAC	0.90
FA-62/FA-62GK	10.2	26.2	19.0	420	7x1mm	— AAC	0.95
FA-72/FA-72GK	11.8	27.0	20.6	470	7x1mm	— AAC	1.2
FA-82/FA-82GK	13.8	29.0	20.4	462	7x1mm	— AAC	1.5
FA-91S/FA-91SGK	15.0	28.2	24.0	520	7x1mm	— AAC	1.6
FA-100/FA-100GK	17.1	29.0	26.0	550	8x1.25mm	— AAC	1.8
FA-125/FA-125GK	20.5	31.7	26.0	620	8x1.25mm	— AAC	2.2
FA-150/FA-150GK	25.0	34.0	27.6	850	8x1.25mm	— AAC	2.5
FA-180/FA-180GK	29.1	36.0	28.6	880	8x1.25mm	— AAC	2.8
FA-220/FA-220GK	36.3	38.0	32	1100	8x1.25mm	— AAC	3.5
FA-60T	10.0	20.0	16.0	750	7x1mm	5cc(x2) ABC	0.9
FA-90TS	15.0	22.4	19.0	723	7x1mm	7.5cc(x2) AAC	1.0
FA-100T	16.4	23.4	19.0	820	7x1mm	8.2cc(x2) ABC	1.6
FA-100Ti	18.0	24.8	18.6	1,100	8x1.25mm	9cc(x2) AAC	1.5
FA-182TD	29.98	28.2	24.0	1,364	8x1.25mm	14.9(x2) AAC	2.5
FA-200Ti	33.0	28.2	26.2	1,460	8x1.25mm	16.5(x2) AAC	3.0
FA-300TL	50.0	34.0	28.0	1,750	10x1.25mm	25cc(x2) AAC	4.7
FA-300TTDP	50.0	34.0	28.0	1,800	10x1.25mm	25cc(x2) AAC	4.8
FA-90R3	15.1	20.0	16.0	850	7x1mm	5cc(x3) AAC	0.75
FA-170R3	27.85	24.8	19.2	1,345	8x1.25mm	19.2(x3) AAC	2.0
FA-325R5D	53.0	24.8	22.0	2,400	8x1.25mm	10.6cc(x5) ABC	3.8
FA-450R3D	75.18	34.0	27.6	2,900	10x1.25mm	25cc(x3) AAC	5.5



## Outside Dimensions (mm)

Items	A	B	B1	B2	C	C1	C2	D	E	F	G	H	I
FA-56/FA-56GK	46	15	—	—	—	80	104	54	104	52	32	59	87
FA-62/FA-62GK	46	15	—	—	—	80	104	54	104	59	32	52	87
FA-72/FA-72GK	46	15	—	—	—	85	104	54	111	53	35	60	93
FA-82/FA-82GK	46	15	—	—	—	85	104	56	111	53	35	60	93
FA-91S/FA-91SGK	50	21	—	—	—	93	116	60	117	55	40	66	97
FA-100/FA-100GK	52	25	—	—	—	95	115	60	128	57	43	69	106
FA-125/FA-125GK	52	25	—	—	—	96	119	60	127	58	43	70	105
FA-150/FA-150GK	59	24	—	—	—	111	138	69	134	70	45	82	112
FA-180/FA-180GK	59	24	—	—	—	111	138	69	135	70	45	82	113
FA-220/FA-220GK	64	30	—	—	—	116	149	75	156	70	53	85	130
FA-60T	61	—	10	43	125	—	—	160	64	50	—	—	—
FA-90TS	61	—	10	42	121	—	—	170	75	62	—	—	—
FA-100T	50	—	35	35	100	—	—	169	80	63	—	—	—
FA-100Ti	64	56	27	53	152	—	—	58	93	61	—	—	—
FA-182TD	70	—	35	35	133	—	—	196	79	73.5	—	—	—
FA-200Ti	73	—	30	45	160	—	—	86	88	71.5	—	—	—
FA-300TL	112	—	30	49	175	—	—	233	92	83	—	—	—
FA-300TTDP	112	—	30	49	175	—	—	233	102	83	—	—	—
FA-90R3	64	—	20	38	129	—	—	168	67	60	—	—	—
FA-170R3	94	—	25	49.5	155	—	—	198	74.5	75.5	—	—	—
FA-325R5D	100	—	30	49	170	—	—	225	92	75	—	—	—
FA-450R3D	110	—	30	49	200	—	—	235	100	100	—	—	—