

O.S. ENGINE

The First Choice for Quality, Dependability and Performance



BRUSHLESS MOTORS

PREMIUM BRUSHLESS POWER FOR PILOTS!

O.S. brushless motors are the perfect solution for pilots who are eager to go electric, but don't want to leave O.S. performance behind.

Designed by O.S. engineers, they offer the legendary quality and reliability that have made O.S. glow engines famous worldwide for over 75 years. Plus, they also feature a unique centrifugal fan that increases cooling, power and efficiency.

There are brushless equivalents for .10, .15, .25, .30, .40 & .50-size glow engines, to make glow-to-electric conversions and top performance easy to achieve.

Performance features include:

- A thick can designed to resist distortion
- High-quality bearings
- Rigid and secure back plate mount
- Shortened motor length for easy installation in short cowls
- A stainless steel prop shaft
- Back plate mount, prop shaft & adapter, attached leads w/gold-plated male connectors, plus 3 female connectors & shrink-wrap



OMA-3810-1000 (.10 Size)

OSMG9510
Rotor Diameter: 38 mm
Magnet Length: 10 mm
RPM/V: 1000kV
Power: 388W
Load Current (Peak): 30 (60A/5 sec.)
Input: 3S LiPo
Connector size: 3.5 mm
Weight: 3.6 oz (102 g)



OMA-3825-750 (.30 Size)

OSMG9530
Rotor Diameter: 38 mm
Magnet Length: 25 mm
RPM/V: 750kV
Power: 590W
Load Current (Peak): 35-40A (75A/10 sec.)
Input: 4-5S LiPo
Connector size: 3.5 mm
Weight: 6.7 oz (190 g)



OMA-3815-1050 (.15 Size)

OSMG9515
Rotor Diameter: 38 mm
Magnet Length: 15 mm
RPM/V: 1050kV
Power: 333W
Load Current (Peak): 30A (60A/5 sec.)
Input: 3S LiPo
Connector size: 3.5 mm
Weight: 4.6 oz (130 g)



OMA-5020-490 (.45 Size)

OSMG9540
Rotor Diameter: 50 mm
Magnet Length: 20 mm
RPM/V: 490kV
Power: 1110 Watts
Load Current (Peak): 50-60A (90A/10 sec.)
Input: 5-6S LiPo
Connector size: 4.0 mm
Weight: 12.3 oz (350 g)



OMA-3820-1200 (.25 Size)

OSMG9525
Rotor Diameter: 38 mm
Magnet Length: 20 mm
RPM/V: 1200kV
Power: 440W
Load Current (Peak): 30-40A (75A/10 sec.)
Input: 3-4S LiPo
Connector size: 3.5 mm
Weight: 5.5 oz (155 g)



OMA-5025-375 (.50 Size)

OSMG9550
Rotor Diameter: 50 mm
Magnet Length: 25 mm
RPM/V: 375kV
Power: 1550 Watts
Load Current (Peak): 50-60A (90A/10 sec.)
Input: 7-8S LiPo
Connector size: 4.0 mm
Weight: 14.3 g (405 g)

BRUSHLESS ELECTRONIC SPEED CONTROLS

THE PERFECT PERFORMANCE MATCH TO O.S. BRUSHLESS MOTORS!

Features include:

- Latest FETs for cooler running
- Automatic battery cell number recognition
- Safe Start — to prevent accidental motor starts
- Low-voltage cutoff — to prevent control loss and cell damage
- No-signal cutoff — switches off the ESC when signal from the transmitter is not received
- Thermal protection — restricts output when temperatures reach high levels
- Anti-spark function — reduces sparks that can occur when connecting the battery
- OCA-150 is BEC-equipped — OCA-170HV and OCA-1100HV are optically coupled to prevent motor feedback and glitching
- Ultra-high frequency 32kHz switching for smoother, cooler operation
- All feature pretinned motor & battery leads, plus a universal radio connector.



OCA-150 50A 25V Brushless ESC

OSMM0150

Dimensions: 2.0 x 1.0 x 0.4 in (50 x 25 x 10 mm)

Weight: 1.8 oz (52 g)

Functions: Forward/Stop/Brake/Reverse

Load Current (Peak): 50A (60A/5 seconds)

Cell Number: 6-18 NiCd/NiMH; 2-6 LiPo

PWM Frequency: 32kHz

Recommended O.S. Brushless Motors:

OMA3820-1200, OMA3825-750, OMA3815-1000 & OMA3810-1050



OCA-170HV 70A 50V Brushless ESC

OSMM0170

Dimensions: 3.1 x 1.1 x 0.55" (78 x 29 x 14mm)

Weight: 3.1oz (89 g)

Functions: Forward/Stop/Brake/Reverse

Load Current (Peak): 70A (85A/5 seconds)

Cell Number: 14-36 NiCd/NiMH; 4-12 LiPo

PWM Frequency: 32kHz

Recommended O.S. Brushless Motors:

OMA3825-750 & OMA5020-490



OCA-1100HV 100A Brushless ESC

OSMM1100

Dimensions: 2.9 x 2.2 x 1.2 in (73 x 56 x 31 mm)

Weight: 4.4 oz (124 g)

Functions: Forward/Stop/Brake/Reverse

Load Current (Peak): 100A (150A/5 seconds)

Cell Number: 14-36 NiCd/NiMH; 4-12 LiPo

PWM Frequency: 32kHz

Recommended O.S. Brushless Motors:

OMA3825-750 & OMA5025-375

OCP-1 ESC Programmer

The OCP-1 is small enough to fit in a shirt pocket, yet lets you program parameters without a PC and store data for future reference. It's a great option and a quick, easy way to fine-tune performance at the workbench or at the field.

The OCP-1 provides data storage, displays average rpm and programs:

- Battery Type (NiCd, LiPo)
- Voltage Cutoff
- Voltage Cutoff Type (soft/hard)
- Motor Rotation
- Timing Advance
- Acceleration
- Start Power
- Brake Type, On/Off
- Governor Function (for helis)
- Motor Pole Number (2-36)
- Gear Ratio
- Maximum RPM

OSMM0001



HELI ENGINES

GETTING THE MOST OUT OF YOUR HELI MODEL: AN O.S. SPECIALTY.

Heli pilots tend to form a special bond with their machines. O.S. understands that, and that's why every O.S. heli engine undergoes rigorous testing to meet the demands of even the most aggressive flyer.

O.S. Heli Engines feature:

- Durable ringed construction
- Dual ball bearings
- Push-pull throttle arms
- Heat-sink heads and crankcase cooling fins
- Bolt-through pipe mounts
- Lightened pistons and conrods
- Optimized crankshafts to improve balance and reduce vibration
- Glow plug



91HZ-R Speed 3D



91HZ-R Speed 3C



Description	Construction	Practical RPM	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Carb	Stock Number
37SZ-H	Ring	2000-12000	1.4 @ 18000	10.3 / 293	20M	OSMG1945+
55HZ-R DRS	Ring	2000-20000	2.1 @ 17000	15.1 / 429	40L-R	OSMG1957
55HZ Hyper	Ring	2000-20000	2.1 @ 17000	14.4 / 408	40L	OSMG1955
50SX-H Hyper	Ring	2000-20000	1.9 @ 17000	14.3 / 406	60LH	OSMG1951+
70SZ-H	Ring	2000-18000	2.5 @ 16000	19.5 / 554	60K	OSMG1972+
91HZ	Ring	2000-16000	3.4 @ 15000	21.8 / 618	61E	OSMG1974+
91HZ-R Speed 3C	Ring	2000-16500	3.6 @ 15500	21.3 / 603	61G	OSMG1980
91HZ-R Speed 3D	Ring	2000-16500	3.6 @ 15500	21.3 / 603	61G	OSMG1981
91HZ-R Speed 3D w/Pipe	Ring	2000-16500	3.6 @ 15500	29.1 / 826	61G	OSMG1982
91RZ-H	Ring	2000-16000	3.3 @ 15000	21.8 / 618	60-MC	OSMG1978+
105HZ	Ring	2000-16500	3.8 @ 15000	21.0 / 596	61E	OSMG1960+
105HZ DRS	Ring	2000-16500	3.8 @ 15000	21.5 / 608	61G	OSMG1961+

Legend: DH = Die-Cast Head; H/-H = Heli; PS = Pumped; Ring = Ringed Piston; Z = High Performance; DRS = Demand Regulator System; + = Covered by the O.S. 2-Year limited warranty

All (except OSMG1982) require header and muffler or tuned pipe

HELI ENGINES

GETTING THE MOST OUT OF YOUR HELI MODEL: AN O.S. SPECIALTY.

105HZ & 105HZ-R w/DRS

- The displacement of a 1.05 in the mounting space of a .91
- Velocity stacks increase airflow and enhance performance
- An extra feature on the 105HZ-R is the pressurized DRS (Demand Regulator System), which ensures consistent fuel flow regardless of the heli's attitude
- Both engines run just as strong, or stronger, on 15% fuel as .91-sized engines using 30% fuel



105HZ w/DRS



55HZ Hyper & 55HZ-R w/DRS

- 55-size power in the same mounting pattern and silencer size as the 50SX-H
- A dual-needle carb optimizes power and provides precise adjustment at middle and high speeds
- Improved backplate with mount for the Futaba BPS-1 RPM Sensor
- Both crank out 2,000-20,000 rpm



55HZ-R w/DRS

PowerBoost Pipes for 55HZ & 105HZ

- Enjoy peak exhaust efficiency while improving engine power AND reducing noise!



Powerboost Pipe 105 (OSMG2884)



Powerboost Pipe II 55 (OSMG2879)

GASOLINE ENGINES

EASE, ECONOMY AND POWER FOR THE SERIOUS MODELER.

When you've put your best into a scale masterpiece, the only thing that makes sense is to put the best from O.S. under the cowl. Both engines offer dependability and power that comparable engines can't match — and an ignition system you can't beat for fast, easy starts.

That puts them in a class by themselves — and second to none in quality and performance.

Both GT Series Engines include:

- Massive front and rear bearings
- Strong, one-piece crankcases
- Walbro® carburetor
- IG-01 CDI (Capacitive Discharge Ignition)
- CM-6 Spark Plug
- Extra-deep, extra-thin fins on the crankcase and head

Both require:

4-5 cell NiCd/NiMH or 2S LiFe/LiPo, regular unleaded gasoline & 2-cycle engine oil. LiPo requires regulator use.



Standoffs



GT-33 Pitts Muffler

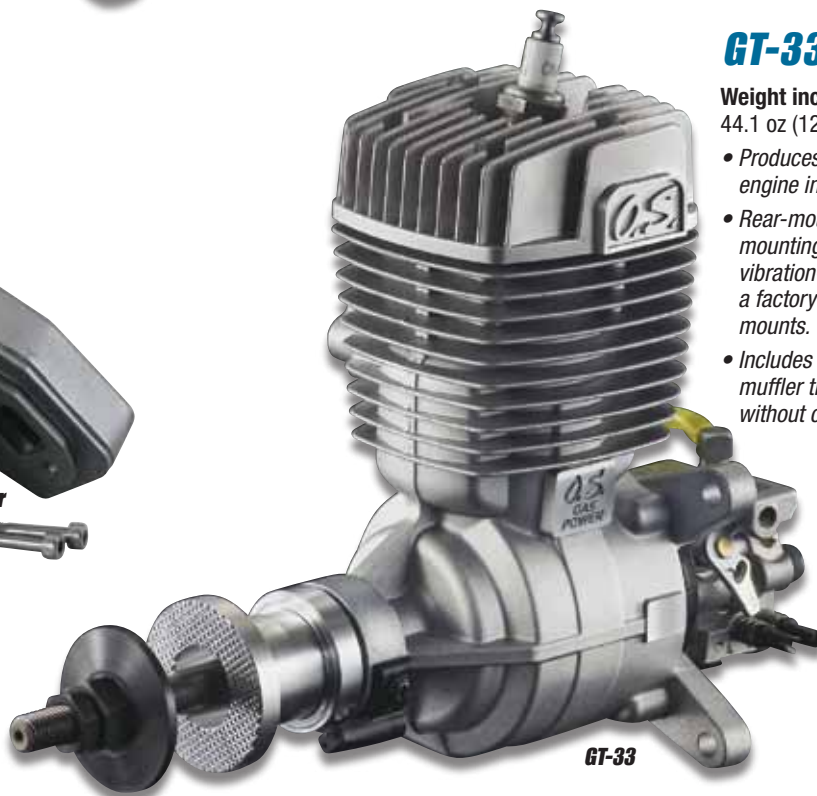


GT-55

GT-55

Weight including ignition:
60.7 oz (1720 g)

- Delivers 20-30% more power and performance!
- Front-mounted carb maximizes cooling and performance and simplifies throttle and choke linkages.
- Requires shorter standoffs which reduces vibration and results in a stronger and more rigid mount.
- Features a front-induction, rotary-valve crankshaft.
- Thin, high-performance piston ring and high-strength aluminum alloy piston reduce break-in time and ensure high compression from the very first run.



GT-33

GT-33

Weight including muffler and ignition:
44.1 oz (1249 g)

- Produces 10% more power than any engine in its class.
- Rear-mounted carb simplifies mounting and installation. Includes vibration-reducing backplate and a factory-installed choke linkage mounts.
- Includes a compact, Pitts-style E-5030 muffler that reduces exhaust noise without compromising performance.

Stock Number	Part Number	Description
OSMG8955	74003510	Standoffs 1/4" (4) GT-33/-55
OSMG8956	74003520	Standoffs 1/2" (4) GT-33/-55
OSMG8957	74003530	Standoffs 3/4" (4) GT-33/-55
OSMG8958	74003540	Standoffs 1" (4) GT-33/-55
OSMG8959	74003550	Standoffs 1-1/4" (4) GT-33/-55
OSMG8960	74003560	Standoffs 1-1/2" (4) GT-33/-55
OSMG8961	74003570	Standoffs 1-3/4" (4) GT-33/-55
OSMG8962	74003580	Standoffs 2" (4) GT-33/-55
OSMG6795	74003000	GT-55 Pitts Muffler
OSMG6801	28325000	GT-33 Pitts Muffler

Description	Practical RPM	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Muffler	Carb	Break-in Prop	Stock Number
GT-33	1800-8000	3.9 @ 9000	34.7 / 984	E-5030	Walbro®	18x8	OSMG1533+
GT-55	1500-8000	5.45 @ 7000	55.3 / 1580	—	WLA-2	22x8	OSMG1555+

Legend: + = Covered by O.S. 2-year limited warranty

2-STROKE AIRPLANE ENGINES

INCREDIBLE POWER FOR EVERY PLANE!

At O.S., our goal has always been to provide power for every plane *and* an engine for every kind of modeler. LA and LA-S series engines for sport and control-line pilots who value ease and affordability. AX and FX series engines for the modeler who wants extra power and performance for sport and contest use. Ducted fan engines for the jet set. And one-of-a-kind specialty engines for one-of-a-kind needs.

For the best in displacement, dependability and selection, look to O.S.



46AXII



95AX

Description	Construction	Practical RPM	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Muffler	Carb	Break-in Prop	Stock Number
25AX	ABL	2500-17000	0.79 @ 16000	9.7 / 275	E-4010A	21K	9 x 6	OSMG0527+
35AX	ABL	2500-17000	1.3 @ 16000	9.2 / 280	E-3080	21K	10x6	OSMG0545+
46AX	ABL	2000-17000	1.7 @ 16000	13.2 / 375	E-3070	40G	10x6	OSMG0547+
46AXII	ABL	2000-17000	1.7 @ 16000	13.3 / 378	E-3071	40K	10x6	OSMG0548+
55AX	ABL	2000-17000	1.7 @ 16000	15.3 / 404	E-3070	40J	12x8	OSMG0556+
65AX	ABL	2000-16000	2.0 @ 16000	17.5 / 497	E-3071	61D	12x6	OSMG0558
75AX	ABL	2000-16000	2.4 @ 15000	20.4 / 578	E-4040	61A	13x8	OSMG0575+
95AX	ABL	2000-16000	2.9 @ 15000	20.0 / 567	E-4040	61C	14x8	OSMG0580+
120AX w/Muffler	ABL	1800-9500	3.1 @ 9000	29.0 / 823	E-5020	70D	15x10	OSMG0650+
120AX	ABL	1800-9500	3.1 @ 9000	22.8 / 647	—	70D	15x10	OSMG0651+
25FX	ABL	2500-19000	0.84 @ 18000	8.7 / 248	892	20D	9x6	OSMG0525+
160FX w/Muffler	Ring	1800-10000	3.7 @ 9000	43.6 / 1235	E-5010	60F	17x10	OSMG0660+
160FX	Ring	1800-10000	3.7 @ 9000	32.6 / 925	—	60F	17x10	OSMG0661+
10LA	ABN	2500-18000	0.27 @ 17000	3.9 / 112	871	10H	7x4	OSMG0011+
15LA	ABN	2500-18000	0.41 @ 17000	4.9 / 138	871	10G	8x4	OSMG0016+
25LA	ABN	2000-16000	0.6 @ 15000	6.9 / 197	E-3020	20H	9x5	OSMG0026+
46LA	ABN	2000-16000	1.2 @ 15000	9.6 / 272	E-3030	40D	11x6	OSMG0047+
65LA	ABN	2000-16000	1.7 @ 16000	18.9 / 535	E-4010	60J	12x6	OSMG0066+
25LA-S	ABN	2000-16000	0.6@16000	6.5 / 186	E-2030	venturi	9x6	OSMG1426+
46LA-S	ABN	2000-16000	1.2 @ 15000	9.3 / 264	E-3030	venturi	11x6	OSMG1447+
BGX-1 3500	Ring	1500-10000	4.1 @ 10000	47.3 / 1340	E-5010	8AA-RN	18x8	OSMG0352+
15CV-A	ABN	2500-19000	0.5 @ 18000	6.0 / 170	871	10K	7x5-6	OSMG0715+
140RX-P	Ring	1800-10000	3.5 @ 9000	29.3 / 830	—	70A	16x14	OSMG0678+
46VX-DF RE	ABC	2500-28000	2.5 @ 23000	16.6 / 470	—	40A	—	OSMG1847
91VR-DF	ABN	2500-25000	4.8 @ 22000	23.5 / 662	—	9B	—	OSMG1891
49-PI .30 Wankel Rotary	—	2500-18000	1.1 @ 17000	14.9 / 421	RE-2010	21G	10x5	OSMG1401+



Most AX and FX Series airplane engines — and all VG series car engines — include ABL (Advanced Bimetallic Liner) technology — an O.S. innovation that minimizes wear and extends engine life.



49-PI .30 Wankel Rotary

Legend: ABC = Aluminum, Brass and Chrome; ABL = Advanced Bimetallic Liner; ABN = Aluminum, Brass and Nickel; DF = Ducted Fan; -P = Pump; RE = Rear Exhaust; Ring = Ringed Piston; + = Covered by O.S. 2-year limited warranty

Note: O.S. does not offer a 2-year limited warranty on ducted fan engines due to their high-speed performance characteristics.

4-STROKE ENGINES

V SERIES: "GOLDEN AGE" LOOKS. SUPERIOR PERFORMANCE.

With an O.S. 4-stroke, performance isn't just something you see; it's a sound you *hear*. It's deeper, richer and more realistic, created by engines engineered for perfection. Each engine is produced by today's most advanced CNC machinery, to today's most demanding tolerances and with over 70 years of engineering innovations. It's an invitation to swing larger, more aggressive props and to climb harder, longer and stronger than you ever have before. Add in the best 4-stroke fuel economy in the industry, and O.S. 4-strokes stack up as the perfect choice for sport power and scale masterpieces.

O.S. single-cylinder 4-strokes feature:

- Rugged, ringed piston construction
- Corrosion-resistant plating on the piston, camshaft and crankshaft
- Stainless steel camshaft bearings
- Dual bearing-supported camshafts and crankshafts
- Camshaft with helical gears
- Die-cast header(s)
- Muffler
- Prop locknut
- 2-year limited warranty
- F glow plug and Woodruff key

All engines include the O.S. F glow plug — the world's best for 4-strokes!

V Series 4-strokes look like classics from aviation's "Golden Age," but it's their performance that exceeds all expectations. Jet Stream mufflers deliver the deep, rich sound preferred by scale pilots. Mounting is easy – the FS62-V has the same bolt pattern as the FS-52 and FS56-a, while the FS95-V fits in the same space as the FS-91SII, 61FX, 65LA, 75AX, 95AX and FS110-a. And since they're from O.S., you can expect reliable, consistent operation in any flight condition.

Both feature:

- High-combustion efficiency and effective cooling, for consistent operation
- Authentic radial engine details, like angled valve layouts and individual valve covers
- Jet Stream muffler delivers scale-like, low-amplitude sound
- Reversible, centerline-mounted carbs maximize installation options and simplify adjustment
- Machined aluminum pushrod guides



Description	Construction	Practical RPM	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Muffler	Carb	Stock Number
FS62-V	Ring	2400 – 11000	1.1 @ 11000	15.6 / 442	F-4050	61T	OSMG0898+
FS95-V	Ring	2100 – 11000	1.7 @ 11000	20.9 / 592	F-5050	60PS	OSMG0900+

Legend: FS = Four-Stroke; Ring = Ringed Piston; (P) = Pumped; + = Covered by O.S. 2-Year Limited Warranty

4-STROKE ENGINES

FS-A SERIES: MORE POWER IN THE SAME SPACE.

O.S. engineers designed FS-a engines to work performance magic. They put bigger displacements on Surpass-size footprints, to offer added power with no-mod installation ease. The FS81-a features the same mounting bolt pattern as the FS-70SII, but gives you 20% more power to work with. And with a FS110-a in the nose, spectacular 3D performance is a reality. But they also transformed vented engine oil into lubrication for moving parts, eliminating crankcase vents, oily cowls and clean-up work at the same time. And by extending venturi length, they not only reduced blowback, but improved fuel/air mixing and economy. For engines that offer more power and more besides, get an O.S. FS-a.

All feature:

- Precision-machined, bar stock piston, crankshaft, camshaft, conrod and rocker arms
- Durable, heat-treated parts
- Stronger wrist pin, conrod and valve assembly designs to minimize wear and extend life
- Factory-set valves and idle for shorter setup and break-in
- Reversible carb and narrower camshaft for installation ease
- Compact mufflers can be moved in or out and rotated 360°, for more in-cowl options with fewer mods
- Tighter tolerances and ratchet springs help hold settings longer
- O-ring seals on carbs eliminate fuel/air leaks



FS56-a



FS110-a (P)

Description	Construction	Practical RPM	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Muffler	Carb	Stock Number
FS56-a	Ring	2400-13000	1.0 @ 10000	14.8 / 419	F-4040	40NA	OSMG0956+
FS72-a	Ring	2400-12500	1.2 @ 11000	16.8 / 476	F-5030	61N	OSMG0877+
FS81-a	Ring	2200-12000	1.3 @ 11000	19.6 / 556	F-5030	60-RA	OSMG0981+
FS81-a (P)	Ring	2200-10000	1.3 @ 10000	20.1 / 570	F-5030	61R	OSMG0982+
FS110-a	Ring	2000-11000	1.8 @ 10000	21.2 / 600	F-5040	60Y	OSMG0990+
FS110-a (P)	Ring	2000-11000	1.8 @ 10000	21.5 / 610	F-5040	61P	OSMG0991+
FS155-a (P)	Ring	2000-10000	2.6 @ 10000	28.4 / 805	F-6020	70R	OSMG0998+

Legend: FS = Four-Stroke; Ring = Ringed Piston; (P) = Pumped; + = Covered by O.S. 2-Year Limited Warranty

4-STROKE ENGINES

MULTI-CYLINDER 4-STROKES: PERFORMANCE PLUS.

In scale, appearance is nearly as important as performance, and O.S. multi-cylinder 4-strokes offer the best of both. Choices range from the FT-300 flat twin up to the inline IL-300 and magnificent 7-cylinder Sirius radial. But while their designs and displacements differ, all O.S. multi-cylinders offer modelers unparalleled power for flight and unrivaled authenticity in appearance.

All O.S. Multi-Cylinder Engines feature:

- Overhead pushrod valves
- Gear-driven camshaft
- Accessory package with:
 - Remote starting cables
 - Mount and hardware
 - Choke valve extension rod
 - Valve gauge/tool set



FT-300 (Pegasus)

SURPASS™ SERIES: POWERFUL INNOVATIONS IN FLIGHT.

With the Surpass Series, the name says it all. The goal is to perform better and last longer than the one before — a goal every Surpass engine has achieved since the first Surpass Series engine was introduced in 1976. For the power you need and the rich scale sound you want, turn to the Surpass Series.



FS-40



FR7-420 Sirius

Description	Construction	Practical RPM	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Muffler	Carb	Stock Number
FS-30S	Ring	2500 – 13000	0.5 @ 10000	9.8 / 279	F-2010	20N	OSMG0830+
FS-40S	Ring	2200 – 12000	0.65 @ 12000	12.5 / 355	FS-40S	FS-40S	OSMG0845+
FS-120S-E	Ring	2000 – 11000	1.9 @ 11000	30.5 / 864	F-5020	FS-120	OSMG0930+
FS-120 III-P	Ring	2000 – 12000	2.1 @ 12000	28.8 / 815	F-5020	70N	OSMG0935+
FS-200S-P	Ring	1800 – 10000	3.0 @ 9000	30.9 / 876	F-6010	80R	OSMG0979+
FS-200S	Ring	1800 – 10000	2.9 @ 9000	30.1 / 853	F-6010	80N	OSMG0980+
FT-160	Ring	2000 – 10000	—	36.8 / 1100	—	120/160	OSMG1160+
FT-300	Ring	1800 – 9000	—	64.5 / 1828	—	240/300	OSMG1250+
FR7-420 Sirius	Ring	1500 – 7000	—	111.7 / 3167	—	80T	OSMG1307+
FF-320	Ring	1800 – 8500	—	77.2 / 2190	—	FF-240	OSMG1320+
IL-300 Inline	Ring	1800 – 8000	—	82.9 / 2350	—	80P	OSMG1330+

Legend: FS = 4-stroke; -P = Pumped; Ring = Ringed Piston; + Covered by the O.S. 2-year limited warranty.

MARINE ENGINES

THE POWER TO TAKE TITLES!

You can win a race with almost any engine. But to win race after race, season after season, you need more than speed and power — you need the consistently superior performance built into every O.S. Marine engine. Designed for dependability, they're engineered to last longer and provide higher performance than any other marine on the water. For the best engine in the long run, look to O.S. Marine engines.



21XZ-M

21XZ-M Inboard

- The marine version of the championship-winning 21XZ for on-road!
- Crankshaft is tungsten-balanced for better low- and mid-range torque and silicone-filled for smoother air flow and air/fuel mixing.
- Big-bore 21D carb handles high-nitro fuels with ease.
- Lightened, balanced piston and strengthened conrod reduce weight and wear.
- Includes: flywheel collet, head gasket, glow plug and dust caps



18CVR-MX

18CVR-MX

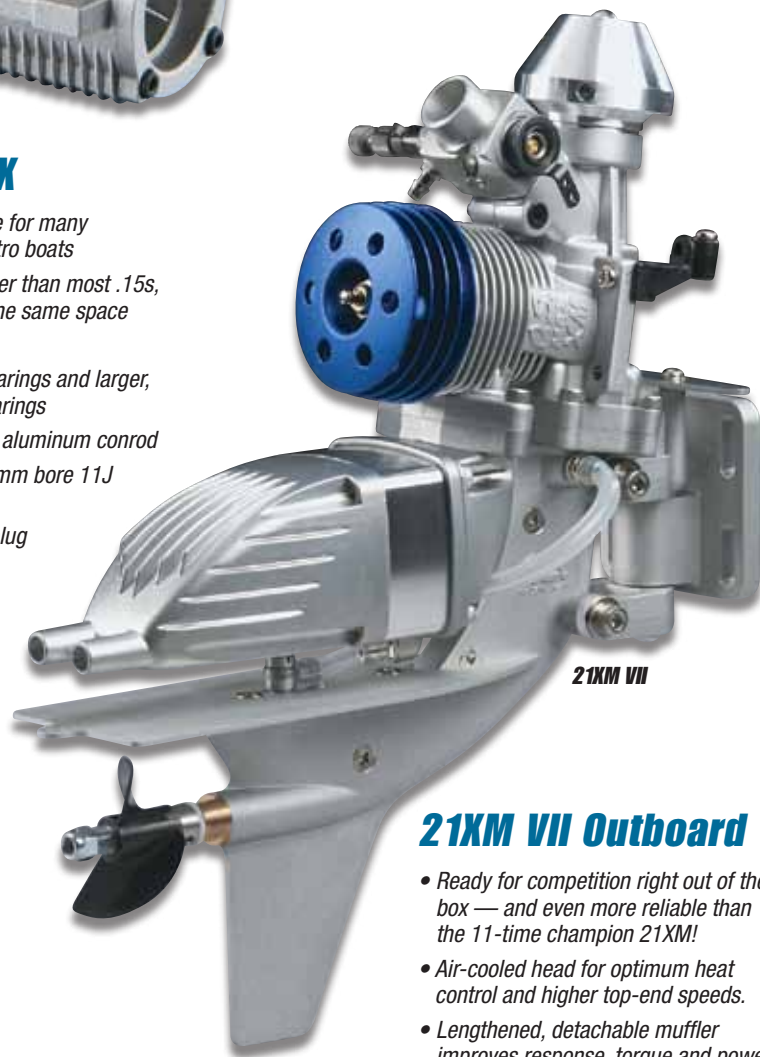
- A great upgrade for many ready-to-run nitro boats
- 11% more power than most .15s, yet mounts in the same space
- 3-port liner
- Sealed front bearings and larger, thicker rear bearings
- Double-bushed aluminum conrod
- Adjustable 6.5 mm bore 11J rotary carb
- Includes glow plug

46VX-M

- A long-time favorite for scale and sport
- One-piece crankcase
- Rear rotor intake
- Requires glow plug, flywheel and joint.



46VX-M



21XM VII

21XM VII Outboard

- Ready for competition right out of the box — and even more reliable than the 11-time champion 21XM!
- Air-cooled head for optimum heat control and higher top-end speeds.
- Lengthened, detachable muffler improves response, torque and power better than a tuned pipe.
- Pressurized lubrication system for the bearings and flex shaft drive.
- Integral mount with independent prop height and angle adjustments.
- Includes: mount, outdrive, muffler, starter cone, steering bracket, throttle link assembly, glow plug and 42 x 1.2 carbon prop.

Description	Construction	Practical RPM	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Carb	Stock Number
18CVR-MX	ABC	3000 – 32000	1.4 @ 28000	8.2/233	11J	OSMG1611+
21XZ-M	ABC	4000 – 45000	2.7 @ 33000	10.9/308	21D	OSMG1621
46VX-M	ABC	2500 – 28000	2.5 @ 23000	15.7/445	40A	OSMG1647
21XM VII	ABN	3000 – 25000	1.3 @ 25000	24.1/682	20J	OSMG1720

Legend: ABC = Aluminum, Brass & Chrome; ABN = Aluminum, Brass & Nickel; FE = Front Exhaust; M = Marine; R = Racing Engine; RE = Rear Exhaust; SE = Side Exhaust; X = Recoil Started; + = Covered by the O.S. 2-year limited warranty.

All engines except the 21XM VII require mount, header and muffler or tuned pipe.

SPEED TUNED ENGINES

FACTORY-ENHANCED FOR PERFORMANCE SO ADVANCED, IT'S ALMOST UNFAIR.

Speed Tuned engines are secret weapons for racing success! A special DLC (Diamond-Like Coating) on the crankshaft reduces friction and wear. The crankshaft is tungsten-weighted to improve balance at high rpms. And all Speed Tuned engines boast at least one carb restrictor for track-tuning finesse. All you have to do is bolt one in, and get ready to win!

12XZ Speed Spec II

Designed for excellent mileage and improved bottom-end speeds

- Holes machined into the aluminum outer head reduce weight and aid in cooling



12XZ Speed



21XZ-R Speed

21XZ-R Speed On-Road & 21XZ-B Speed

The power you need to dominate 1/8 scale competition

- 21XZ-R Speed On-Road's redesigned crankcase produces smoother transitions and higher speeds
- A precisely balanced conrod reduces vibration and wear
- 21M slide-valve carb features 4 adjustable control settings for improved torque and fuel economy
- 21XZ-B Speed boasts improved fuel economy, plus a longer stroke for superior torque
- Race-proven 3-port sleeve with special inner head
- 21J2(B) carb comes with 3 sizes of restrictors for fine-tuning control

19XZ-B Speed

10% more run time than .21s, for fewer pit stops

- Lighter and leaner, delivering competitive power while cutting fuel consumption by 8%
- Low CG design for added stability
- Ceramic bearings reduce rolling resistance throughout
- 21J2 carb provides fine control for throttling down for cornering and nailing hole shots



19XZ-B Speed



21XZ-B Speed

Description	Construction	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Weight (oz/g)	Carb	Stock Number
12XZ Speed	ABC	5000-44000	1.7 @ 35000	7.8 / 220	12F(B)	OSMG1991
19XZ-B Speed	ABC	4000-40000	2.4 @ 34000	12.1 / 343	21J2	OSMG2035
21XZ-R Speed	ABC	4000-45000	2.7 @ 33000	11.9 / 338	21M	OSMG2041
21XZ-B Speed	ABC	4000-40000	2.6 @ 34000	12.5 / 355	21J2(B)	OSMG2051

Legend: ABC = Aluminum, Brass and Chrome; R = Race; + = Covered by the O.S. 2-Year limited warranty

CAR & BUGGY ENGINES

COMPETE WITH THE BEST

Competitors come and go — but champions keep on winning. For rock-solid dependability and title-taking performance, there's only one choice for the long run: O.S.

12XZ

- Crankshaft features a counter-balancing shape and a more efficient intake port
- Improved liner ports and inner head max out low- to mid-speed torque



12XZ

15CV-X Natural

- Heat sink head is lightweight for maximum airflow and shorter for better clearance
- Front crankcase and rear cover are webbed and reinforced to minimize distortion
- Type 10E carb has adjustable idle and low-end, an angled high-speed needle that's adjustable, and a rubber boot to seal off air leaks

Description	Construction	Practical RPM	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Carb	Stock Number
12XZ	ABC	5000-40000	1.6 @ 34000	8.3 / 236	21F	OSMG1993
15CV-X Natural	ABL	3000-30000	0.67 @ 29000	9.3 / 264	10E	OSMG2033+
21TM Revo®	ABC	3000-35000	1.8 @ 29000	8.6 / 243	11K-R	OSMG2082+
21TM T-Maxx®	ABC	3000-35000	1.8 @ 29000	8.6 / 243	11K	OSMG2083+
21VG (P)	ABL	3000-36000	2.0 @ 30000	12.2 / 347	21F	OSMG2057+
21VG (P) ES	ABL	3000-36000	2.0 @ 30000	15.3 / 433	21F	OSMG2071+
21XZ-B	ABC	4000-40000	2.5 @ 33000	12.5 / 362	21J2	OSMG2050
21XZ-R VII	ABC	4000-45000	2.7 @ 33000	12.1 / 343	21M	OSMG2042
25XZ (P)	ABC	4000-39000	3.1 @ 33000	13.1 / 370	21JN	OSMG2080
28XZ (P)	ABC	4000-38000	3.3 @ 32000	13.2 / 375	21J	OSMG2074+
30VG (P)	ABL	4000-36000	3.0 @ 28000	12.7 / 360	21E	OSMG2076+
30VG (P) ES	ABL	3000-36000	3.0 @ 28000	15.4 / 436	21E	OSMG2078+

Legend: ABC = Aluminum, Brass and Chrome; ABL = Advanced Bi-metallic Liner; ES = Electric Start; X = Recoil Start; R = Race; (P) = SG Crank; + = Covered by the O.S. 2-Year limited warranty

25XZ(P)

- More muscle than a .21 — better fuel economy than a .28
- A lower center of gravity aids in handling
- 21JN carb offers 4 settings
- Premium power that's ROAR-legal



25XZ(P)

30VG(P)

- Retrofits easily into .21, .25 and .28 spaces with no modifications
- Features virtually perfect bore-to-stroke balance with a rear exhaust configuration
- 3-port ABL™ cylinder liner for better compression and longer life
- SG (pilot) crankshaft with rubber-sealed front bearing and oversized rear bearing



30VG(P)

CAR, TRUCK & BUGGY ENGINES

STAY A LAP AHEAD OF THE COMPETITION.

Nothing beats the durability and power of O.S. Engines. Each engine endures *two years* of rigorous testing and fine-tuning before it's considered chassis-ready. All are built to last and packed with power, and there are lots of options available: side or rear exhaust, pull or electric starting, slide valve or rotary carbs...the list goes on and on. With over 70 years of engine expertise, it's no surprise that O.S. remains a lap ahead of the competition.

Engines feature:

- Lightweight aluminum piston
- Oversized, machined aluminum heat sink head
- Rubber-sealed front and enlarged rear bearings
- Turbo engines include turbo glow plug
- All others include standard glow plug



18TZ Turbo

- The first small-block to break the 2 hp barrier!

18TZ-TX



18CV-RX

- Dual-needle carbs feature "Outlaw" 6.5 mm bore

18CV-RX

12TG Ver. II (P)

- ROAR-legal rear exhaust power for 1/10 scale
- Two-piece head



CARB KEY

Description	Model
Rotary, Single-Needle	11J
Rotary, Dual-Needle	11L
Slide Valve, Dual-Needle	10C, 11G, 12D, 21F
Slide Valve, Dual-Needle	11G, 12F (B)
Slide Valve, Triple-Needle	11K

Description	Construction	Practical RPM	Output (hp @ rpm)	Weight w/o Muffler (oz/g)	Carb	Stock Number
12TG Ver.II (P)	ABL	5000-30000	0.7 @ 28000	8.0 / 227	12FB	OSMG1988+
18CV-RX	ABC	3000-32000	1.4 @ 28000	10.4 / 296	11G	OSMG2102+
18CV-RX	ABC	3000-32000	1.4 @ 28000	10.4 / 296	11J	OSMG2104+
18CV-RX (S)	ABC	3000-32000	1.4 @ 28000	10.4 / 296	11J	OSMG2105+
18TZ (P)	ABC	3000-34000	1.8 @ 29000	8.0 / 226	11K	OSMG2110
18TZ-TX	ABC	3000-34000	1.8 @ 29000	9.3 / 264	11L	OSMG2113

Legend: ABC = Aluminum, Brass and Chrome; ABL = Advanced Bi-Metallic Liner; (P) = SG Crank; R = Race; (S) = Short Shaft; T = Turbo Head; X/-X = Recoil Start; + = Covered by the O.S. 2-year limited warranty.

GLOW PLUGS

TOUGH ENOUGH TO TAKE THE HEAT.™



Getting the best engine performance means choosing the right glow plug, which depends on a number of different factors — the engine type, air-fuel mix, nitro percentage, and even air temperature.

What's more, the right glow plug will change as conditions change. Keeping a range of glow plugs on hand will help you fine-tune glow heat and enjoy maximum performance under all conditions.

Generally, hot plugs provide better idle and acceleration than cold plugs. Cold plugs will produce more power but may idle more roughly and be harder to tune.

#6	Hot	(OSMG2690)	A long-lasting plug for most .10-.60 2-strokes (Formerly A3)
P-3	Ultra Hot	(OSMG2699)	For 21VZ-B V-Spec and most .18-.28 off-road racing Turbo head engines
P-4	Super Hot	(OSMG2697)	For 21VZ-B V-Spec and most .18-.28 off-road racing Turbo head engines
P-5	Very Hot	(OSMG2711)	For 21VZ-B V-Spec and most .18-.28 off-road racing Turbo head engines, especially when the temperature is high or for leaner needle settings and high-nitro/high-rpm running
LC3	Hot	(OSMG2700)	Long reach, for 1/10 scale off-road engines such as O.S. 21TMs and Traxxas® TRX® 2.5 & 3.3 engines
#7	Medium Hot	(OSMG2713)	For 2-stroke airplane, helicopter and car (except Turbo head) engines. Offers stable idling, broad peak needle settings and punchy throttle response
RP6	Medium	(OSMG2703)	For most .12-.21 on-road racing Turbo head engines
LC4	Medium	(OSMG2708)	Long reach, for 1/10 scale off-road engines such as O.S. 21TMs and the Traxxas TRX 2.5 & 3.3 engines
#8	Medium	(OSMG2691)	A favorite for most 2-stroke engines
RP7	Cold	(OSMG2704)	For most .12-.21 on-road racing Turbo head engines
RP8	Cold	(OSMG2715)	Outlast the hottest heats with Turbo head engines
#10	Cold	(OSMG2693)	Ideal for aircraft engines .60-size and up (Formerly A5)
R5	Cold	(OSMG2694)	For leaner needle settings and high-nitro/high-rpm scale racing
F	4-Stroke	(OSMG2692)	Long reach and long life

AIR HOT

MEDIUM

COLD

No.6

Hot
A3



No.7

Medium Hot



No.8

Medium



No.10

Cold
(Formerly A5)



SURFACE HOT

COLD

P3

Turbo



P4

Turbo



P5



LC3

T-Maxx®/Revo®



LC4

T-Maxx/Revo



RP6

Turbo



RP7

Turbo



R5



RP8



Especially designed for 4-stroke engines



Type F

OFF ROAD

ON ROAD

AIRCRAFT ENGINE ACCESSORIES

Mufflers

Stock Number	Part Number	Description
OSMG2814	21225000	871 10-15FP/LA
OSMG2825	22628000	892 25SF/FX 32F
OSMG2835	25425000	873 40-46SF/FX
OSMG2838	26028000	E-4010 60FP 61FX
OSMG2840	29525000	E4020 91FX
OSMG2842	27426000	E-4050 In Cowl 65AX
OSMG2844	27425000	E-4040 75AX
OSMG2845	29122500	E-5020 120AX
OSMG2846	29325000	E-5010 BGX-1 3500
OSMG2851	45225000	FS-40S
OSMG2859	45525030	F-5020 FS-120
OSMG2861	45525001	FS-120S w/Header
OSMG2869	22325020	E-2030 20-25FP
OSMG2870	23875010	E-2050-2 21XM
OSMG2871	23875000	E-2050 21XM
OSMG2872	44225000	F-3020 FS-52S w/Header
OSMG2873	23325020	E-3030 35-40FP
OSMG2874	45925010	F-4020 70/91SII w/Header
OSMG2876	29025000	855 91/108FSR
OSMG2942	44525000	F-6010 FS-200S w/Header
OSMG2950	44625000	F-4040 FS56-a w/Header
OSMG2951	44425000	F-4030 FL-70 w/Header
OSMG2955	23325030	E-3030S
OSMG2959	26028010	E-4010S 61FX 65LA
OSMG6771	44525100	F-6010 FS-200S
OSMG6773	43025100	F-2010 FS-30S
OSMG6774	45225010	FS-40S
OSMG6775	43025000	F-2010 FS-30S w/Header
OSMG6777	23125000	E-3080 35AX
OSMG6778	44825000	F-5030 FS81-a w/Header
OSMG6779	24625200	E-3070 46-55AX
OSMG6780	40925000	F-5050 FS95-V
OSMG6781	45525011	Muffler FS-120S
OSMG6782	44625100	F-4040 FS56-a
OSMG6784	45925100	F-4020 FS-70-91II
OSMG6785	44425100	F-4030 FL-70
OSMG6786	26028050	E-4010A 65AX
OSMG6787	44225100	F-3020 FS-52
OSMG6790	44825100	F-5030 FS72/81-a
OSMG6791	44925000	F-5040 FS110-a w/Header
OSMG6792	44925100	F-5040 FS110-a
OSMG6793	42525000	F-6020 FS155-a w/Header
OSMG6794	42525100	F-6020 FS155-a
OSMG6796	40625000	F-4050 FS-62V w/Header
OSMG6797	40625100	E-4050 FS-62V
OSMG6799	40925100	F-5050 FS-95V
OSMG6803	24625210	E-3071 w/Header 46AXII



OSMG2835

Tuned Pipes

Stock Number	Part Number	Description
OSMG2945	72104300	T-6010 Tuned Silencer 140RX

Headers

Stock Number	Part Number	Description
OSMG2710	72101230	Header Pipe 61-91FX
OSMG2712	29026119	Header Pipe 90-108F
OSMG2718	45926000	Header Pipe FS-91
OSMG2721	45526110	Header Pipe FS-120
OSMG2723	72101260	Header Pipe 46VX-M
OSMG2727	72102100	Header Pipe 140RX RX-FI
OSMG5700	72102200	Header Pipe BGX-1 3500
OSMG6798	40626000	Header Pipe Assy F-5040

Muffler Extensions

Stock Number	Part Number	Description
OSMG2558	29026140	855
OSMG2573	41651300	Rotary 49PI
OSMG2576	22625103	762, 892, E-3080
OSMG2578	25425600	873, E-3010, 3020, 3070
OSMG2582	26625340	E-4010, 4020, 4040, 4050
OSMG2584	21125108	761, 871
OSMG2586	26625500	E-4010, 4020, 4040, 4050 Long
OSMG2612	22325100	842, E-2030
OSMG2616	23325100	762S, 843, E-3030
OSMG6788	29122600	E-5020



OSMG2616

60°, 80° & 90° Muffler Adapters

Stock Number	Part Number	Description
OSMG2562	72109710	90° Header In-Cowl Inverted FS110-a
OSMG2563	72109700	60° Header In-Cowl Side FS110-a
OSMG2564	72109660	60° Header In-Cowl Side FS56-a
OSMG2565	72109670	80° Header In-Cowl Inverted FS56-a
OSMG2567	72109680	60° Header In-Cowl Side FS72-a
OSMG2568	72109690	80° Header In-Cowl Inverted FS72-a
OSMG2569	72109750	60° Header In-Cowl Side FS-200S
OSMG2570	72109760	80° Header In-Cowl Inverted FS-200S
OSMG2571	72109720	60° Header In-Cowl Side FS155-a
OSMG2572	72109730	80° Header In-Cowl Inverted FS155-a
OSMG2588	22625508	90° Adapter 762, 892, E-3030
OSMG2590	25425500	90° Adapter 873, E-3010
OSMG2596	21125502	90° Adapter 761, 871
OSMG2598	26625410	90° Adapter 744B, E-4010
OSMG6789	29122700	90° Adapter 120AX



OSMG2571



OSMG2590

Exhaust Systems

Stock Number	Part Number	Description
OSMG2726	47069010	Exhaust Ring In FR5
OSMG5695	46569000	Collector Exhaust IL-300
OSMG5697	47169000	Collector Ring FR7

AIRCRAFT ENGINE ACCESSORIES

Flex Pipes

Stock Number	Part Number	Description
OSMG2672	72108110	FS-70-91 FL-70, FS72/81-a 240 mm
OSMG2674	72108300	FS-40-56 120 mm
OSMG2675	72108310	FS-40-56 240 mm
OSMG2678	72108510	FS-120SIII, FS155-a 120 mm
OSMG2679	72108520	FS-120SIII, 155FS-a 240 mm
OSMG2680	72108000	FR5-300 120 mm
OSMG2682	72108201	FS-120S 120 mm
OSMG2683	72108211	FS-120S 240 mm
OSMG2684	72108100	FS-70-91 FL-70, FS72/81-a 120 mm
OSMG2685	72108200	FT-300 120 mm
OSMG2686	72108210	FT-300 240 mm
OSMG2687	72108120	FS-70-91 FL-70, FS72/81-a 170 mm
OSMG2689	72108130	FS-70-91 FL-70, FS72/81-a 330 mm



Lock Nuts

Stock Number	Part Number	Description
OSMG2914	45910300	FS-70-91, FS-120S, FS-200S FS-95V, FS81/110/155-a 5/16-5mm
OSMG2915	45810300	FS-52S, FL-70, FS56/72a 1/4-5mm
OSMG2934	46210100	FT/FR5 3/8-24
OSMG6684	45910200	FS-70SII, 91SII, 120S, 200S, 75AX, 120AX, FS81-a 5/16-4mm
OSMG6687	45910100	FS-91 5/16-24
OSMG6690	46110200	BGX-1 3500, 160FX, 108FSR 3/8-5mm
OSMG6691	28310000	GT33
OSMG6693	45810200	FS-52S, FL-70, FS56-a 1/4 4mm
OSMG6686	29310110	3/8 5mm
OSMG6688	29610100	160FX
OSMG6689	29310100	BGX-1 3500
OSMG7922	45810100	FS 40-48S
OSMG7924	46410100	FF-240/320
OSMG7928	45510100	FS-90, 120

Radial Engine Mounts

Stock Number	Part Number	Description
OSMG2750	71908410	25-35AX, 25FX, 32SX
OSMG2751	71920000	160FX/FI
OSMG2753	71909410	10LA, 15CV-A
OSMG2754	71909310	15LA
OSMG2757	71910100	IL-300
OSMG2763	71901200	FS110-a
OSMG2765	71904200	FS-120SIII, FS-120AX, FS155-a, FS-200S
OSMG2769	71905030	FS81-a
OSMG2772	71906000	FS-40S
OSMG2774	71913100	40-46FX, 46AX, 50SX, 55AX
OSMG2776	71907000	108FSR
OSMG2780	71905200	65LA, 61-91FX, 65-95AX
OSMG2784	71908100	25LA
OSMG2790	71908300	FS-30S
OSMG2800	71906200	40-46LA
OSMG2804	71900000	FT-120/160
OSMG2805	71905010	FL-70, FS-70, FS72-a
OSMG2808	71911000	FT-240/300
OSMG2809	71912100	Sirius 7 FR7
OSMG2810	71912110	Sirius 7 Motor Mount Standoff
OSMG2811	71913000	FS-52S, FS56-a
OSMG6760	41633000	49PI Wankel



Spinner Nuts

Stock Number	Part Number	Description
OSMG2916	20824005	10FP, 10-15LA 5mm
OSMG2924	23024008	25LA, 25FX, 25-35AX 1/4-28
OSMG2925	23034009	25-50, 46-55AX 1/4-28 (L)
OSMG2932	45924000	60FP, 65AX, 65LA, 61-91FX 5/16-24



AIRCRAFT ENGINE ACCESSORIES

Carburetors & Accessories

Description	Part Number	Stock Number
10G 15LA	21783000	OSMG2419
10H 10LA	21081000	OSMG2445
10K 15CV-A	21581000	OSMG2442
20C 32SX-H/HX	23481000	OSMG2459
20D 25FX	22681030	OSMG2412
20F 32SX	24382000	OSMG2462
20H 25LA	22581000	OSMG2464
20M 37SZ-H	23483000	OSMG2461
20N FS-30S	43081000	OSMG2467
21G 49-PI-2	41618030	OSMG2435
21K 35AX	23181000	OSMG2460
21L 25AX	22582000	OSMG2428
40A 46VX-M/DF	25581000	OSMG2545
40B 40-46FX 50SX	25681010	OSMG2452
40D 40/46LA	24081000	OSMG2421
40G 46AX	24681000	OSMG2454
40J 55AX	25781000	OSMG2518
40L 55HZ	25881000	OSMG2438
40LR 55HZ-R	25881010	OSMG2437
40N FS-52S	44281000	OSMG2492
40NA FS56-a	44681000	OSMG2485
60C 61FX	27783000	OSMG2539
60F 91/160FX	29581000	OSMG2509
60J 65LA	26581000	OSMG2534
60K	27081000	OSMG2406
60K 70SZ-H	27981010	OSMG2514
60LH 55SX-H Hyper	29083020	OSMG2469
60M-C 91SZ/RZ-H	29183000	OSMG2516
60M-P 91SZH-PS	29183010	OSMG2517
60N FS-91SIP	45983000	OSMG2533
60P FS-91SII	45984000	OSMG2432
60PS FS-95V	40981000	OSMG2532



Description	Part Number	Stock Number
60R FS-70SII	44082000	OSMG2513
60RA FS81-a	44881000	OSMG3750
60U FS-70U	44481000	OSMG2527
60W FL-70	44781000	OSMG2529
60Y FS110-a	44981000	OSMG2523
61A 75AX	27482010	OSMG2424
61B-PII 91HZ PSII	29085030	OSMG2503
61C 95 AX	29087000	OSMG2505
61D 65AX	26981000	OSMG2531
61E 91HZ (new)	29088010	OSMG2521
61ER 91HZ-R	29088000	OSMG2520
61G 91HZ-R Speed	29088040	OSMG2494
61N FS72-a	44381000	OSMG2524
61P FS110-a-P	44982000	OSMG2511
61T FS-62V	40681000	OSMG2530
70A 140RX	29481000	OSMG2547
70D 120AX	29182000	OSMG2549
70N FS-120SIII	45582000	OSMG2537
70R FS155-a-P	42581000	OSMG2542
80N FS-200S	44581000	OSMG3669
80P IL-300	46581000	OSMG3661
80R FS-200S-P	44582000	OSMG2525
80T Sirius FR7	47181000	OSMG2439
8AA-RN BGX-1 3500	29383010	OSMG2431
9B 61-91VR	29381010	OSMG2443
FS-120SE	45581000	OSMG2508
FS-40S	45281020	OSMG2490
FT-160/FF-320	46481000	OSMG2538
FT-300	46281000	OSMG2540
WLA-2 GT55	29781000	OSMG2550
WT1024 GT33	28381000	WT1024 GT33



Remote Needle Assemblies

Stock Number	Part Number	Description
OSMG7258	28282000	9B Carb
OSMG8336	23882900	20G Carb



Fuel Accessories

Stock Number	Part Number	Description
OSMG5870	71531000	Bubbleless clunk
OSMG5871	72403051	Super Can Filter SM
OSMG5872	72403050	Super Can Filter LRG



In-flight Control Needles

Stock Number	Part Number	Description
OSMG6462	71705000	40E 60B/G/K/KC/LH/M/MC/MP

4-Stroke Valve Adjustment Kit

Stock Number	Part Number	Description
OSMG6334	72200060	4-Stroke Valve Adjustment Kit



TOOLS



Speed Plug Wrench

Stock Number	Part Number	Description
OSMR2977	71520100	Speed Plug Wrench



Speed Clutch Wrench

Stock Number	Part Number	Description
OSMR4000	71415300	Speed Clutch Wrench



10-Piece Speed Tool Set

Stock Number	Part Number	Description
OSMR3000	71410000	10-PC Speed Tool set
OSMR3005	71410150	Speed Hex Driver 1.5 mm
OSMR3006	71410200	Speed Hex Driver 2.0 mm
OSMR3007	71410250	Speed Hex Driver 2.5 mm
OSMR3008	71410300	Speed Hex Driver 3.0 mm
OSMR3015	71411200	Speed Hex Ball Driver 2.0 mm
OSMR3016	71411250	Speed Hex Ball Driver 2.5 mm
OSMR3025	71412300	Speed Flat Screwdriver 3.0 mm
OSMR3035	71413550	Speed Nut Driver 5.5 mm
OSMR3036	71413600	Speed Nut Driver 6.0 mm
OSMR3037	71413700	Speed Nut Driver 7.0 mm

Speed Flywheel Key

Stock Number	Part Number	Description
OSMR4001	71415200	Speed Flywheel Key



Speed Flywheel Puller

Stock Number	Part Number	Description
OSMR4002	71415100	Speed Flywheel Puller



Crankshaft Clamps

Made from engineering plastic, these simple tools won't damage your engine, but will simplify and speed maintenance work. Inserting clamp locks crankshaft in place for easy installation/removal of a flywheel, cooling fan or pilot shaft.



Stock Number	Part Number	Description
OSMR1001	71530100	Crankshaft Clamp 10-12
OSMR1002	71530200	Crankshaft Clamp 15-21
OSMR1003	71530300	Crankshaft Clamp 32-61
OSMR1004	71530400	Crankshaft Clamp 32-46
OSMR1005	71530500	Crankshaft Clamp 70 SZ, 91SX
OSMR1006	71530510	Crankshaft Clamp 91SZ-H

Long Plug Wrench

Stock Number	Part Number	Description
OSMR2976	71521000	Long Plug Wrench



Replacement Tips:

Stock Number	Part Number	Description
OSMR5005	71414015	Hex Replacement Tip 1.5 mm
OSMR5006	71414020	Hex Replacement Tip 2.0 mm
OSMR5007	71414025	Hex Replacement Tip 2.5 mm
OSMR5008	71414030	Hex Replacement Tip 3.0 mm
OSMR5015	71414120	Ball Replacement Tip 2.0 mm
OSMR5016	71414125	Ball Replacement Tip 2.5 mm
OSMR5025	71414130	Screwdriver Replacement Tip 3.0 mm
OSMR5035	71414355	Nut Driver Replacement Tip 5.5 mm
OSMR5036	71414365	Nut Driver Replacement Tip 6.0 mm
OSMR5037	71414370	Nut Driver Replacement Tip 7.0 mm

SURFACE ACCESSORIES

1/8 Scale Headers & Pipes

Compatible Engines	Part Description	Part Number	Stock Number
19XZ-B Speed, 21VZ-B/XZ-B 21/30VG & 25/28XZ	M2000 Header	72106430	OSMG2701
	T-2060 WN Tuned Pipe*	72106090	OSMG2940
	M2000SC Header	72106440	OSMG2702
	T-2060SC WN Tuned Pipe	72106130	OSMG2939
	M200SC + T-2060SC WN Set	72106135	OSMG2938
	T-2090SC Tuned Pipe	72106190	OSMG2954
	M200SC + T-2090SC Set	72106192	OSMG2953
	M2002SC Header	72106480	OSMG2717
	T-2060SC Tuned Pipe	72106130	OSMG2939
	T-2090SC Tuned Pipe	72106190	OSMG2954

Compatible Engines	Part Description	Part Number	Stock Number
21XZ-R, & 21VG	T-2080 Header Set	72106860	OSMG2994
	T-2080 WN Tuned Pipe^	72106810	OSMG2991
	M2001 + T-2080 WN Set^	72106800	OSMG2990
	M2001SC Header	72106870	OSMG2716
	T-2080SC WN Tuned Pipe	72106851	OSMG2984
	M2001SC + T-2080SC WN Set	72106850	OSMG2983
21/30VG (For HPI Savage)	T-2070 Tuned Pipe*	72106120	OSMG2843

Legend: WN = Welded Nipple; SC = Spring Connected.

Use M2000 Series headers for high speeds.

Use M2002 Series headers for low-to-mid-range speeds.

*Requires 21 Exhaust Coupler (72106300, OSMG8876). Available separately.

^ Includes aluminum ring to join pipe and header.

Recommendations:

For huge tracks, long straights and big jumps, use the M2000SC header with a T-2060SC pipe

For smaller technical tracks, use a T-2090SC pipe with either the M2000SC or M20002SC header.



OSMG2701
M2000
(72106430)



OSMG2702
M2000SC
(72106440)



OSMG2717
M2002SC
(72106480)



OSMG2938
T-2060SC WN Set
(72106135)



OSMG2939
T-2060SC WN
(72106130)



OSMG2940
T-2060 WN
(72106090)



OSMG2953
T-2090SC
(72106192)



OSMG2954
T-2090SC
(72106190)

1/10 Scale Headers & Pipes

Compatible Engines	Part Description	Part Number	Stock Number
12/15CV (For KYO FW-05 or inline mounted engines with right-hand exhaust.)	90° Header	72103110	OSMG2720
	T-1040 R52 Tuned Pipe*	72103056	OSMG2972
12TG/TZ/XZ (For KYO V-OneR, Mugen MTX-4 or belt-driven chassis)	M1004 Header	72107460	OSMG3000
	T-1060 L52 Tuned Pipe	72107410	OSMG2997
	M1004 + L52 T-1060^	72107400	OSMG2996
	M1001 Header	72106420	OSMG2617
	T-1040 L52 Tuned Pipe*	72103051	OSMG2970
	M1001SC Header	72106400	OSMG2608
	T-1050SC L52 Tuned Pipe	72106600	OSMG2981
M1001SC + T-1050SC L52 Set	72106700	OSMG2987	

Compatible Engines	Part Description	Part Number	Stock Number
KYO V-OneSIII (For chassis designs with belt drive, engine side mount)	M1003 Header	72106450	OSMG2605
	T-1040 L52 Tuned Pipe*	72103051	OSMG2970
	M1003 SC Header	72106460	OSMG2606
	T-1050SC L52 Tuned Pipe	72106600	OSMG2981
KYO FW-05, TAM TG10MKII (For chassis with shaft drive, engine mount inline)	M1010 Header	72103180	OSMG2639
	T-1040 R52 Tuned Pipe*	72103056	OSMG2972
	M1011SC Header	72106410	OSMG2609
	T-1040SC R52 Tuned Pipe	72106320	OSMG2982
	M1011SC + T-1040SC R52 Set	72106510	OSMG2988

Legend: WN = Welded Nipple; SC = Spring Connected.

*Requires 15 Exhaust Coupler (72103310, OSMG8875). Available separately.

^ Includes aluminum ring to join pipe and header.

SURFACE ACCESSORIES

Tuned Pipes & Headers

Description	Part Number	Stock Number
OSMG2952	72103010	T-1010 Tuned Pipe
OSMG2957	72106030	T-2030 Tuned Pipe
OSMG2615	72103800	21TM Header
OSMG2619	72103710	Revo 18TM Header
OSMG2627	72103510	21RG-BX+ Header
OSMG2632	72103160	V-1-R Header
OSMG2707	72101270	21RZ Header
OSMG2728	72103120	TGX CV+ Header
OSMG2731	44126010	26 S-C/CX Header Set

Air Filters & Elements

Description	Part Number	Stock Number
OSMG2360	72413000	203 Assembly
OSMG2380	72411000	201 Assembly
OSMG2381	72403300	103 Assembly
OSMG2383	72403200	102 Assembly
OSMG2384	72412000	202 Assembly
OSMG2385	72403120	101/102 Elements (6)
OSMG2386	72403110	101 Body
OSMG2387	72403210	101 Cleaner Body
OSMG2389	72412200	102 Cleaner Body
OSMG2390	72403212	102S Cleaner Body
OSMG2391	72403310	103 Cleaner Body
OSMG2392	72403202	102S Assembly
OSMG2393	72413200	203 Elements (4)
OSMG3022	72411020	201 Elements (2)
OSMG3023	72403420	104 Elements LD (3)
OSMG3032	72403320	103 Elements (4)

Exhaust Seals

Description	Part Number	Stock Number
OSMG5673	22826140	O-Ring RZ/RG (2)
OSMG8869	21826100	O-Ring 15RX (3)
OSMG8871	21427200	O-Ring (2)

Dust Cap Sets

Description	Part Number	Stock Number
OSMG5644	22884250	RZ-V/P (S/M & L)
OSMG5874	73300305	4mm (5)
OSMG5877	73300712	7 mm T-1010/-1020 (3)
OSMG5878	73300812	8 mm T-1030 (3)
OSMG5880	73301012	10 mm #10A & #10E (3)
OSMG5882	73301212	12 mm #10D (3)
OSMG5886	73301612	16 mm (3)
OSMG5888	73301812	18mm (3)

Marine Accessories

Description	Part Number	Stock Number
OSMG2344	71802100	#2J Flywheel
OSMG2637	71801040	#1D Flywheel
OSMG2643	71802030	#2E Flywheel 21EX-M
OSMG2645	71801050	#1E Flywheel 18CV-RM/RM-X
OSMG2646	71804020	#4C Flywheel 46VX-M
OSMG2647	71802200	#2K Flywheel 21VZ-M
OSMG2723	72101260	Exhaust Header 180° 46VX-M
OSMG2944	22442009	Joint Assembly 20FP-M/21RX-M
OSMG2968	27126400	Exhaust Adapter — Cool 61-77VR
OSMG6626	21342000	Joint Ball 4mm 21 Marine

Carb Restrictors

Description	Part Number	Stock Number
OSMG2471	71533000	8.0 mm (Red) — 21VZ Series
OSMG2472	71533010	9.0 mm (Blue) — 21 VZ Series
OSMG2476	71533055	5.5 mm (Black) — 11H/11HB
OSMG2477	71533065	6.5 mm (Grey) — 11H/11HB
OSMG2478	71533155	5.5 mm (Red)
OSMG2482	71533270	7.0 mm (Red) — 21H
OSMG2483	71533280	8.0 mm (Red) — 21H
OSMG2484	71533290	9.0 mm (Red) — 21H
OSMG2486	71533260	6.0 mm (Red) — 21JS
OSMG2487	71533265	6.5 mm (Red) — 21JS
OSMG2489	71533255	5.5 mm (Red) — 12XZ
OSMG2491	771533385	8.5 mm (Purple)
OSMG2498	71533272	7.0 mm (Yellow)

Car Carbs

Description	Part Number	Stock Number
11L 18TZ-TX	21884110	OSMG2408
11H 12TZ(P)-T3	21538000	OSMG2473
11H(B) 12TZ(P)-T5	21538010	OSMG2474
11K 18TZ/21TM	21982000	OSMG3665
12D 12TG-P/PX	21418000	OSMG2480
12E 12TG/TG-X	21428000	OSMG2481
12F 12XZ	21683000	OSMG2427
20J 21XM/21RG-M	25382000	OSMG2466
21D 21VZ-M	23882000	OSMG2479
21E 30VG (new)	23981000	OSMG2493
21F 21VG-P/PX	23618030	OSMG2414
21J 28XZ	22848010	OSMG2457
21J2 21XZ-B	22481000	OSMG2495
21J2(B) Speed	22481002	OSMG2496
21J2B 19XZ-B Speed	22481007	OSMG2497
21JN 25XZ	22848030	OSMG2409
21JS 21	22481002	OSMG2444
21JS 21VZB/28ZX	23818070	OSMG2448
21M 21XZ-R	22082000	OSMG2410
21M 21XZ-R VII	22082010	OSMG2500
21M(B) 21XZ-R Speed	22082020	OSMG2499

Springs

Description	Part Number	Stock Number
OSMG2633	72106172	Header Pipe
OSMG2961	72106042	Joint T-2040
OSMG2965	72106142	Header Pipe 21VZ-R

Flywheel Sets

Description	Part Number	Stock Number
OSMG2648	71812000	Hyper Flywheel Mugen
OSMG2649	71813000	Hyper Flywheel Kyosho

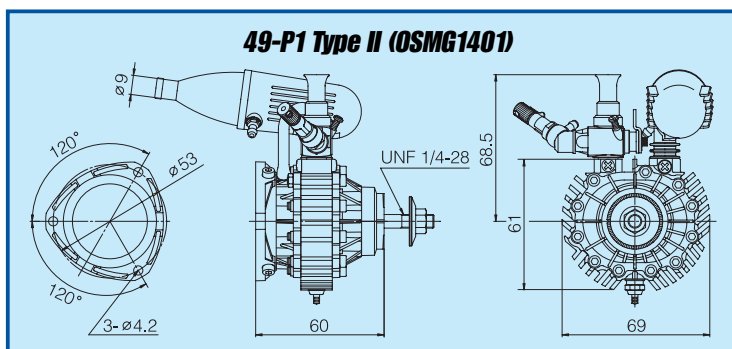
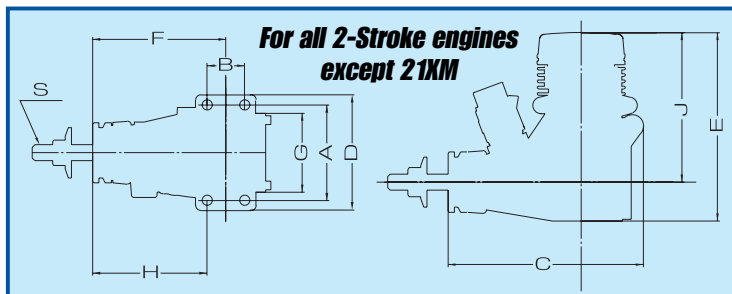
Ceramic Bearings

Description	Part Number	Stock Number
OSMG3081	23730050	Rear Crankshaft Bearing .21
OSMG3082	21931100	Rear Crankshaft Bearing .12

DIMENSIONS

Airplane Engines: 2-Stroke, Single-Cylinder

Description	A	B	C	D	E	F	G	H	J	S	Page #
10LA	31.4	11	61.5	38.6	55.8	38.7	23	33.2	42.8	M5	7
15CV-A	31.4	11	65.5	39	62.5	41	25	35.5	49	M5	7
15LA	33	14.4	63.7	40	61	39.5	24.8	30.8	48.5	M5	7
25AX	38	15	75.5	45	75.1	53	30.6	45.5	59.2	1/4-28	7
25FX	38	15	77.8	46	75.5	53	30	45.5	60	1/4-28	7
25LA	36	14	72.8	44	74.5	46.5	29	39	60	1/4-28	7
35AX	38	15	75.5	45	77.4	53	30.6	45.5	61.5	1/4-28	7
46AXII	44	17.5	85.2	51	85.2	60.4	35	51.65	67.4	1/4-28	7
46LA	40.5	17.5	81.5	48	85	51.2	32	42.5	69	1/4-28	7
55AX	44	17.5	85.3	51	90.5	60.4	36	52	72	1/4-28	7
65AX	52	25	93.3	60	99.5	66.6	40	54.1	78.5	5/16-24	7
65LA	52	25	99.8	62	107	61.2	42	48.7	85.4	5/16-24	7
75AX	52	25	94.5	61	103.4	66.6	42.6	54.1	81.4	5/16-24	7
95AX	52	25	94.5	61	103.4	66.6	42.6	54.1	81.3	5/16-24	7
120AX	58	25	100.2	67	109.1	70	46.5	57.5	85.5	5/16-24	7
140RX-P	58	25	117.2	70	118	78	48.4	65	94	5/16-24	7
160FX	64	30	115.5	74	123.2	80	51.5	65	96.7	3/8-24	7
BGX-1	74	32	129.5	85	142.5	99	60.5	83	111	3/8-24	7
25LA-S	36	14	72.8	44	74.5	46.5	29	39	60	1/4-28	7
46LA-S	40.5	17.5	81.5	48	85	51.2	32	42.5	69	1/4-28	7
46VX-DF RE	45	21	115.5	53	90.5	55.6	37	45.1	72.3	1/4-28	7
91VR-DF	52	25	133.5	61	109.5	66	43.5	53.5	87.5	5/16-24	7
49-PI .30 Wankel	See 3-view										7

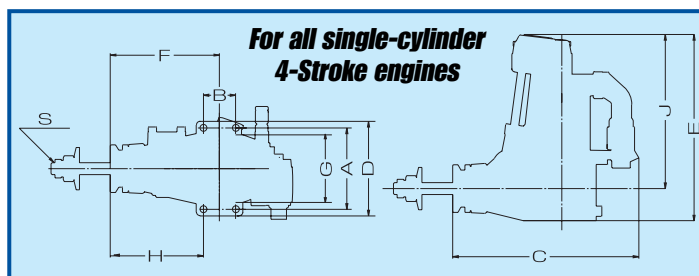


Helicopter Engines

Description	A	B	C	D	E	F	G	H	J	S	Page #
37SZ-H	38	15	75	45	76.5	53	30.6	45.5	61	1/4-28	4&5
50SX-H Hyper	44	17.5	85.8	52	92.5	61	36	52.3	74	1/4-28	4&5
55HZ-R DRS	44	17.5	76.6	52	90.9	51.6	36	42.85	72.6	1/4-28	4&5
55HZ Hyper	44	17.5	76.6	52	90.9	51.6	36	42.85	72.6	1/4-28	4&5
70SZ-H	52	25	82.3	61	99	55.3	42.6	42.8	77.5	5/16-24	4&5
91HZ	52	25	92.5	61	102.7	56.4	43	42.9	81.2	5/16-24	4&5
91HZ-R Speed 3C/3D	52	25	98	66.1	102.7	55.4	43	42.9	79	5/16-24	4&5
91RZ-H	52	25	83.5	61	109	56.4	43	43.9	7.4	5/16-24	4&5
105HZ	52	25	85.5	51	100.7	55.4	43	42.9	79.2	5/16-24	4&5

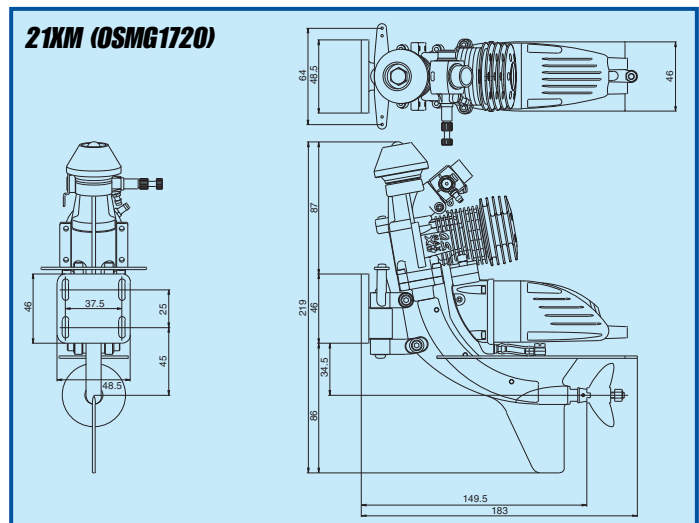
Airplane Engines: 4-Stroke, Single-Cylinder

Description	A	B	C	D	E	F	G	H	J	S	Page #
FS-30S	36	14	82	44	86.5	48.5	29	40	70	1/4-28	10
FS-40S	42	17.5	92.5	49	98	57	32.5	48.1	80.5	1/4-28	10
FS56-a	44	17.5	102.3	51	101.7	59	34	49.3	84	1/4-28	9
FS-62-V	44	17.5	102.8	51	105.1	60	34.1	51.3	87.5	1/4-28	8
FS72-a	45	20	103.6	54	108	59.5	36	49.5	90	1/4-28	9
FS81-a (P)	50	21	112	57	117.5	66	40	55.5	97	5/16-24	9
FS-95-V	52	25	115.7	61	119	66.5	42.6	54	97.5	5/16-24	8
FS110-a	52	25	114.5	61	125.4	66.5	42.6	54	103.8	5/16-24	9
FS110-a (P)	52	25	120.2	61	125.6	66.5	42.6	54	104	5/16-24	9
FS-120S-E	58	25	134	67	138.5	77	47	64.5	115	5/16-24	10
FS-120S III-P	58	25	134.5	67	139.5	77	47	64.5	116	5/16-24	10
FS155-a (P)	58	25	127.6	67	138.6	77	47	64.5	114	5/16-24	9
FS-200S-P	58	25	142	67	145	77	48	64.5	119	5/16-24	10
FS-200S	58	25	136	67	145	77	48	64.5	119	5/16-24	10



Marine Engines: 2-Stroke

Description	A	B	C	D	E	F	G	H	J	S	Page #
18CVR-MX	31.4	11		39	63.3		25		50.5	M5	11
21XZ-M	37	21	65.6	45	81.75	44	31.6	33.5	66.15	1/4-28	11
46VX-M	45	21		53	87		37		68	1/4-28	11
21XM VII	see 3-view										



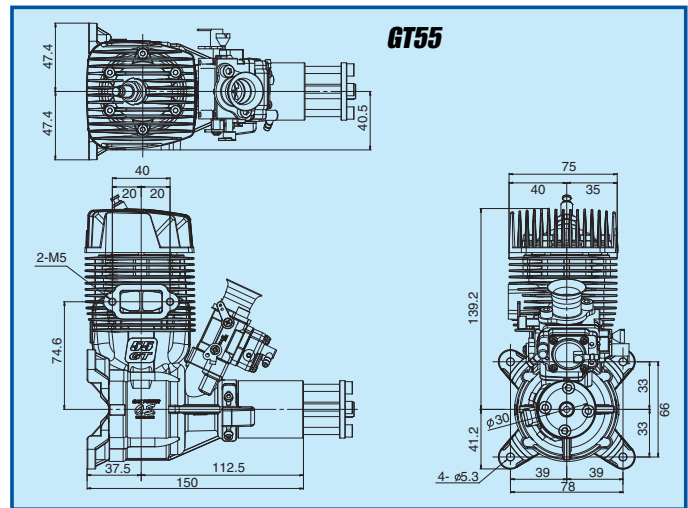
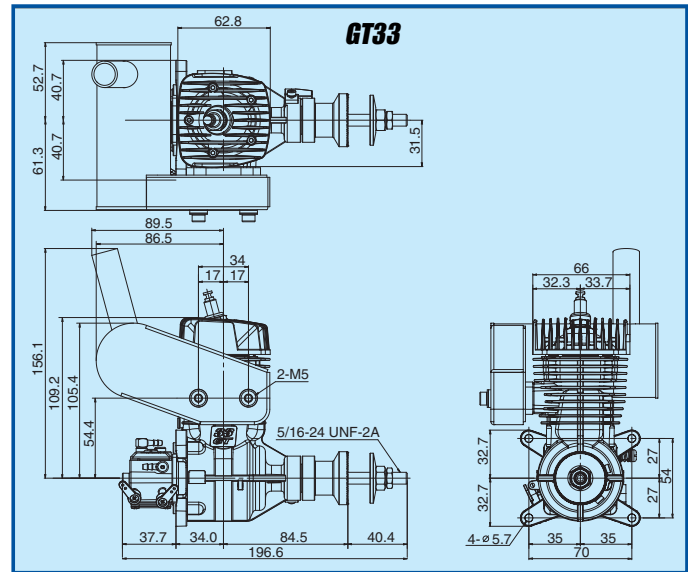
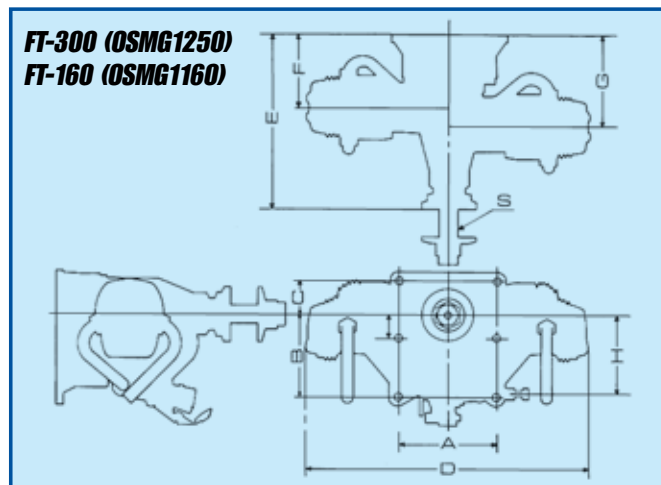
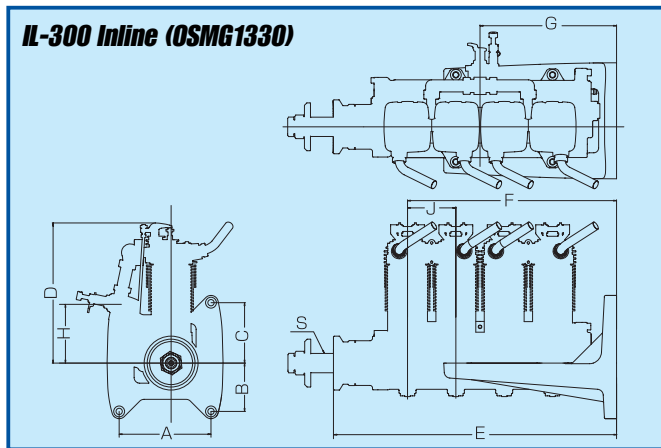
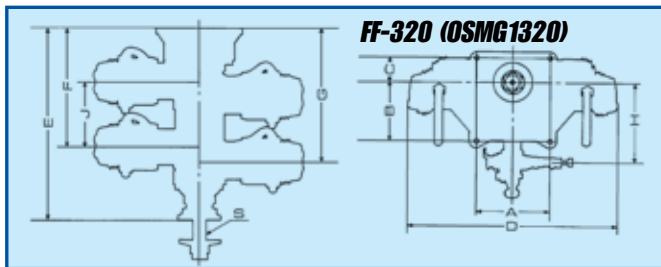
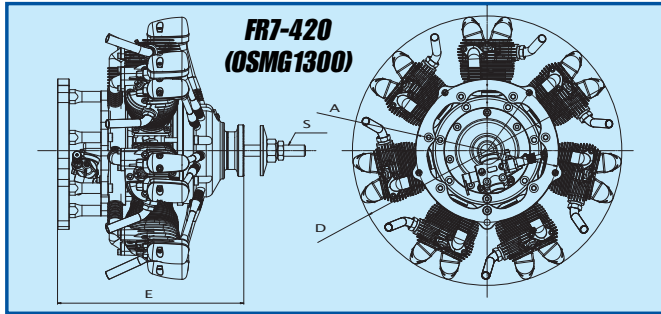
DIMENSIONS

Airplane Engines: 4-Stroke, Multi-Cylinder

Description	A	B	C	D	E	F	G	H	J	S	Page #
FT-160	68	56.5	23.5	196	120	50.5	63.5	54	—	5/16-	10
FT-300	90	55	35	240	148	62	80	56	10	3/8-24	10
IL-300 Inline	76	40	50	116	234.3	173	113	48.6	40	3/8-24	10
FF-320	68	56.5	23.5	196	181.5	112.5	125.5	76	62	5/16-	10
FR7-420 Sirius	122	—	—	230	158.5	—	—	—	—	3/8-24	10

Airplane Engines: Gasoline

Description	A	B	C	D	E	F	G	H	J	S	Page #
GT33/GT55	see 3-view										6



Car & Truck Engines

Description	A	B	C	D	E	F	G	H	J	S	Page #
12TG Veril (P)	31.4	11	52.4	39	86.8	34.9	25.4	29.4	73.3	1/4-28	14
12XZ	31.4	11	52.4	39	90.1	34.9	25.4	29.4	76.6	1/4-28	13
15CV-X Natural	31.4	11	74.8	39	87.2	41	—	35.5	74.5	M5	13
18CV-RX(S)	31.4	11	74.8	39	93.7	41	—	35.5	80.9	M5	14
18TZ (P)	31.4	11	52.4	39	92	34.9	25.4	29.4	79.5	1/4-28	14
18TZ-TX	31.4	11	80	39	92	40.9	25.4	35.4	79.5	M5	14
21TM Revo®/T-Maxx®	31.4	11	53.6	39	101.3	41	25	35.5	85.3	M7x1	13
21VG(P)/21VG(P) ES	37	21	65.6/79.6	45	102.7	44	30.8/--	33.5	87.4	1/4-28	13
21XZ-B	37	21	65.6	45	101.9	44	31.6	33.5	86.3	1/4-28	13
21XZ-R VII	37	21	65.6	45	102.3	44	31.6	33.5	86.7	1/4-28	13
25XZ (P)	37	21	65.6	45	109.2	44	31.6	33.5	93.6	1/4-28	13
28XZ (P)	37	21	65.6	45	111.9	44	31.6	33.5	95.9	1/4-28	13
30VG(P)/30VG(P) ES	37	21	65.6/79.6	45	113	44	30.8/--	33.5	99.7	1/4-28	13
12XZ Speed	31.4	11	52.4	39	84.1	34.9	25.4	29.4	70.6	1/4-28	12
19XZ-B Speed	37	21	65.6	45	101.9	44	31.6	33.5	86.2	1/4-28	12
21XZ-B Speed	37	21	65.6	45	101.9	44	31.6	33.5	86.3	1/4-28	12
21XZ-R Speed	37	21	65.6	45	94.4	44	31.6	33.5	78.8	1/4-28	12

T-SHIRTS

Black, 100% cotton T-shirt is pre-shrunk for a lasting fit, and features a blue O.S. "flame" logo on the left shoulder and back. Grey T-shirt features large O.S. Speed Racing logos front and back in red, black and white. 90% cotton/10% polyester blend.

OSMZ7000	Black Racing T-Shirt (L)
OSMZ7001	Black Racing T-Shirt (XL)
OSMZ7002	Black Racing T-Shirt (XXL)
OSMZ7003	Grey O.S. Speed T-Shirt (XL)
OSMZ7004	Grey O.S. Speed T-Shirt (L)



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