

.27 AIRBOAT ENGINE

Important: Please fully read this instruction manual before operating your engine. These instructions have been written so that you may get the greatest satisfaction from the operation of your new engine.

SPECIFICATIONS:

Bore: .716" (18.2mm) Stroke: .653" (16.6mm) Displacement: 4.3cc Weight: 12 oz (339.5g)

ENGINE PARTS:

Power Output: 1.35 hp @ 28,000 RPM Crankshaft Thread Size: 1/4-20 Carburetor Type: Rotary



- 1. Crankshaft
- 2. Carburetor
- 3. Crankcase
- 4. Cooling Head
- 5. High Speed Needle (HSN)

- 6. Low Speed Needle (LSN)
- 7. Idle Stop Screw
- 8. Throttle Arm
- 9. Fuel Inlet Nipple

ITEMS NEEDED TO OPERATE YOUR ENGINE:

- Propeller (9x6)
- Exhaust system (AQUB6432)
- 12V Starter Battery (HCAP0800)
- Starter (HCAP3200)
- Glow Igniter (HCAP2520)
- 10-15% Glow Fuel for Airplanes*

*For best performance, **avoid** using fuel formulated for R/C boat or car use.

WARNING: Use caution when handing your boat with the engine running. The spinning prop can be hard to see and can injure you.

ENGINE BREAK-IN:

Take your time and do not hurry the break-in. If you operate the engine too rich or too lean during the break-in stages you could damage the engine. If you can avoid it, don't allow the engine to run out of fuel during the break-in period.

Factory needle settings: HSN: 2-1/2 turns out LSN: 1 turn out

NOTE: Due to atmosphere changes the factory needle settings could be too rich or too lean. It is important to note that as long as the engine is running rich during break-in, it is safe from any damage. If you live near sea level, you might want to open (turn out, counterclockwise) the HSN 1/2 turn before attempting to operate the engine.

- Run 1: Run the engine full throttle at a rich setting for one tank of fuel. Note the sound of the engine. It should burble with an unsteady sound. After the run allow the engine to cool completely.
- Run 2: Repeat run one.
- Runs 3 6: Start the engine and allow it to warm up. As it's running lean the HSN until you hear the engine jump from a rich 4 cycle sound to a clean 2 cycle sound. Richen the HSN 1/4 turn and run the remaining fuel from the tank.

GET TO KNOW THE SOUNDS AND SIGHTS OF YOUR ENGINE:

 Rich needle setting means less than maximum RPM. The engine will operate with a break in the exhaust note. Also take note that when rich, the engine is going to use more fuel than normal and you are going to end up with a lot of oil and smoke coming out of the exhaust pipe.

Lean needle setting means lots of RPM followed by lean sags in the exhaust note. Fuel consumption will be minimized and you will not see much oil or smoke exit the exhaust pipe. If you suspect your engine is running lean, bring the boat to shore as soon as possible and richen the HSN.

• The perfect needle setting will provide a good RPM and a clean, clear sound. You'll see some light oil and smoke from the exhaust pipe and a tanned, slightly dull but not distorted, glow plug element. TIP: At the risk of a slower operating boat, it is best to error on the rich side of the needle setting.

AFTER RUN MAINTENANCE:

After you are done boating for the day, you are going to want to add some after-run oil to the engine to protect the internal parts. We recommend removing the glow plug, opening the carburetor all the way, and placing 10 to 12 drops of after-run oil down the barrel of the carburetor. Place a rag over the glow plug hole and turn the engine over with the starter. Repeat this step at least one more time to make sure the inside of the engine is fully coated.

REPAIRS AND WARRANTY SERVICE:

SuperTigre warrants its marine glow engines to be free from defects and workmanship for a period or 90 days from the date of purchase. During that time SuperTigre will repair or replace, at our option, any product that does not meet these standards. You will be required to provide proof of purchase date (receipt or invoice).

If, during the 90 day period, your SuperTigre engine shows defects caused by abuse, misuse, or accident, it will be repaired or replaced, at our option, at a service charge not greater than 50% of the current retail list price. Be sure to include your daytime telephone number in case we need to contact you about your repair.

Under no circumstances will the purchaser be entitled to consequential or incidental damages. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. If you attempt to disassemble or repair the unit yourself, it may void the warranty.

For service on your SuperTigre product, either in or out of warranty, send post paid and insured to:

Hobby Services 3002 N. Apollo Dr., Suite 1, Champaign, IL 61822 Phone: 217.398.0007 www.hobbyservices.com

ENGINE Part

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Description

- 1 SUPG1830 **Carburetor Complete**
- 2 SUPG1903 Carburetor Cinch Bolt
- 3 SUPG2055 Backplate
- 4 SUPG2056 **Backplate Screws**
- 5 SUPG2057 **Backplate O-Ring**
- 6 SUPG2450 **Cooling Head**
- 7 SUPG2550 **Connecting Rod**
- 8 SUPG2619 Crankcase
- 9 SUPG3119 Crankshaft
- 10 SUPG3395 Piston and Sleeve Assembly w/Con Rod
- Piston and Sleeve 11 SUPG3396
- 12 SUPG4385 Front Bearing
- 13 SUPG4700 Head Button w/Shims
- 14 SUPG4701 Head Shims
- 15 SUPG4702 Head Bolts
- 16 SUPG5467 **Rear Bearing**
- 17 SUPG6076 Taper Collet
- 18 SUPG6393 Drive Hub
- 19 SUPG6430 Wrist Pin w/Clips



CARBURETOR Part

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Description

- 20 SUPG1900 Carburetor Body with Spray Bar
- 21 SUPG1901 Carburetor Nipple Body
- 22 SUPG1902 Carburetor Barrel
- 23 SUPG1904 Carburetor O-Ring
- 24 SUPG4477 Fuel Inlet with O-Rings
- 25 SUPG4841 **High Speed Needle**
- 26 SUPG4842 Remote Needle Assembly
- 27 SUPG4843 High Speed Needle Socket
- 28 SUPG4844 Remote Needle Bracket
- 29 SUPG4845 **Remote Fuel Nipple**
- 30 SUPG4901 Low Speed Needle
- Throttle Arm 31 SUPG6051
- 32 SUPG6059
- 33 SUPG6075
- Throttle Arm Nut
- **Throttle Stop Screw**

