

ELECTRIC STARTING OF OUTBOARD MOTORS



Appears for the

First Time in

JOHNSON AQUAFLYERS

two of a group of Johnson Boats powered by

JOHNSON SEA-HORSES

which will introduce the first

OUTBOARD MATCHED UNITS

with revolutionary improvements for 1930 in Motors & Boats



Aquaflyers and Johnson Boats . .

Safe, speedy models of new PRESTITE, or of Water-proof SEALITE construction guaranteed to outlast comparable boats of ordinary construction.

JOHNSON innovations for 1930 pre-empt an entirely new trend in water motoring. They are epoch-making.

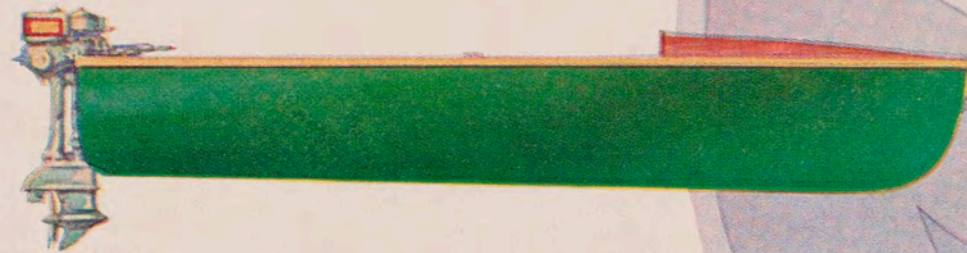
Among them comes the Johnson Aquaflyers—a new type of craft electrically started and lighted.

It is lightweight, spacious, clean, and luxurious, and drives with safety at average motor car speeds. The motor—a Johnson Sea-Horse—is concealed and silenced in a hatch-covered recess in the stern. This leaves the interior clean and as roomy as a 26-ft. inboard runabout. White flannels and summer frocks are never endangered by grease.

This Johnson Outboard Motor Boat will not only outperform inboard motor boats in deep water and rough water, but due to its automatically tilting propeller will also navigate shoals and shallow water inaccessible to them. It can even be beached without skids.

It maneuvers more quickly and certainly in rough water because of the power and instant response of its propeller steering. It is safer in any water because the propeller tilts on striking obstructions that would disable an inboard motor boat propeller.

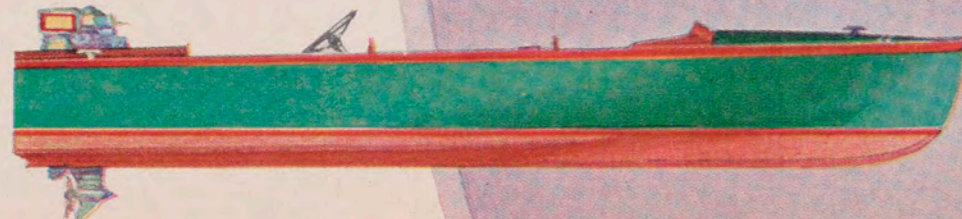
It requires no gasoline pump or gravity feed because of its new Vacturi Carburetor that lifts the fuel by suction alone. This carburetor, found on the latest motor cars, gives more power and uses 20% to 30% less fuel by superior atomization.



14 ft. Utility A, \$165
Sealite construction, cedar deck, only 175 lbs.; round bilge bottom, 52 in. beam, 3 cross seats, ideal for yacht tender, camping, children.



15 ft. Utility B, \$275
Sealite construction, V bottom, 52 in. beam; 3 cross seats with lazybacks; weighs 227 lbs.; true speed up to 22 m.p.h. with Sea-Horse "16."



17 1/2 ft. Service Runabout, \$485
Sealite construction, V bottom, 5 ft. beam; 3 cross seats with lazybacks; weighs 395 lbs.; true speed up to 26 m.p.h. with Sea-Horse "32." Aquaflyer type recess for motor.

Matched to Sea-Horse Motors

Motor car starting ease by ELECTRIC STARTER on two Aquaflyers, and by either the Johnson Release Charger, or Alternate Firing principle.

The Sea-Horse Motor itself is so much lighter than inboard motors, it can easily be removed for service or storage by unscrewing two wing nuts.

Johnson Aquaflyers combine all advantages of an outboard motor boat, including economy, with the speed, luxury, and ease of starting of an automobile.

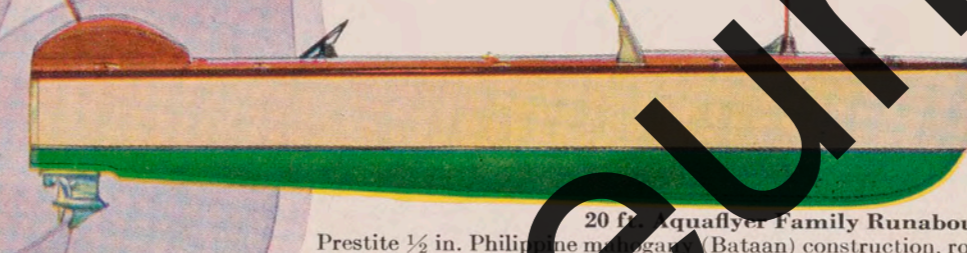
All controls, including the electric starter and speed control, and automobile steering wheel, are operated from the driving seat, as convenient and comfortable as your motor car.

These outboard motor boats will populate the waters as no other craft before them. A woman or child can start and drive them as easily as a man.

SEALITE and PRESTITE Construction New to Boat Building

Seamless, waterproof Sealite requires no care, no caulking, and never leaks. But half the weight of ordinary construction in service, it is faster with the same power, more portable, and yet 35% greater in tensile strength as certified by Prof. W. M. Sawdon of Cornell University after comparative tests.

Prestite represents an amazing advance over all wood seam construction, being water-tight and remaining so without caulking.



20 ft. Aquaflyer Family Runabout
Prestite 1/2 in. Philippine mahogany (Bataan) construction, round bilge bottom, bent ribs; 63 in. beam, 33 in. depth, weighs 455 lbs.; 2 upholstered cross seats; spacious floor for chairs; up to 22 m.p.h. with Sea-Horse "32," complete with motor, \$1065.

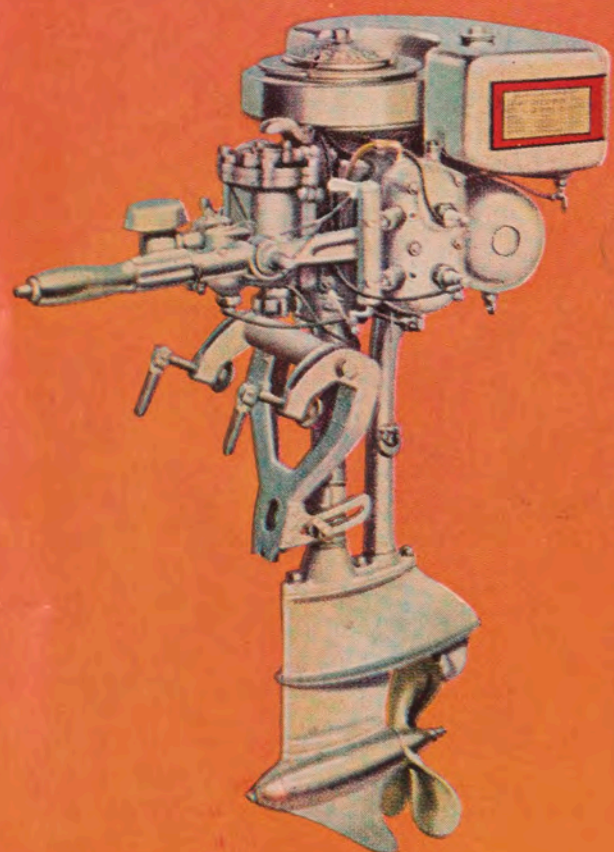


17 1/2 ft. Aquaflyer, De Luxe Runabout
Sealite construction, V bottom, 5 ft. beam; double cockpit arrangement, with two upholstered cross seats; with lazybacks; weighs 450 lbs.; true speed up to 19 m.p.h. with Sea-Horse "16," complete with motor, \$925—up to 25 m.p.h. with Sea-Horse "32," complete with motor, \$995.



15 ft. Knockabout, \$135
Strong, lightweight, 1/2 in. cedar planking, hollow and round construction; strong, bent white oak ribs sheer to sheer, round bilge bottom, 4 1/2 ft. beam.

JOHNSON BOATS



1930 Sea-Horse Motors

SEA-HORSE "32"

World's fastest outboard motor, holding the official American record at 49.34 m.p.h. Four cylinders with Release Charger, Water-cooled Underwater Exhaust, Rotary Valve, Pressure-vacuum Cooling System and Detachable Aluminum Cylinder Heads, make the Sea-Horse "32" unquestionably monarch of all outboard motors.

JOHNSON now revolutionizes the performance of twin-cylinder motors by introducing the first successful alternate-firing design in Sea-Horses "4" and "12." Two impulses per revolution, instead of one, as heretofore, produce a smoothness of power flow and minimum vibration unequalled by any other two-cylinder motor. With four spark plugs as usual to one pull of the starting rope, starting is as sure and certain as in automobiles.

Johnson's exclusive Release Charger brings equal ease and certainty of starting to other Sea-Horses.

The Underwater Exhaust, which deposits fumes below water and muffles the motor to a quiet hum, is perfected in Sea-Horses by being Water-cooled, and equipped with completely Automatic Back-pressure Release.

Sea-Horse "32" \$125.00 — Sea-Horse "3" \$150.00 — Sea-Horse "4" \$160.00
Sea-Horse "10" \$185.00

JOHNSON

Again Set New Standards

The fastest time ever made by any outboard motor—49.34 m.p.h.—was made with a Sea-Horse "32." The official American record for Class B is also held by Johnson with a Sea-Horse "16" at 43.97 m.p.h. In all, twenty-six out of forty official records are held by Johnson Sea-Horses—two-thirds of the total!

Among this line of champions there is a motor for every need, including the world's most portable motor, the Sea-Horse "Single," weighing only 27 pounds.

All dealers carry first aid parts. Stations for complete service in all sections of the country. Prices f.o.b. factory.

Write for Color-Illustrated Boat and Motor Catalog

JOHNSON MOTOR COMPANY

On Pershing Rd. WAUKEGAN, ILL.
In Canada: Canadian Johnson Motor Co., Ltd., Peterboro, Ontario
Distributors for British Columbia: Hoffer's, Ltd., Vancouver, B. C.

Sea-Horse "12" \$195.00 — Sea-Horse "16" \$250.00 — Sea-Horse "24" \$285.00
Sea-Horse "32" \$325.00

SEA-HORSES

SEA-HORSE "4"

One of the two new-type alternate-firing twin-cylinder motors. The "4" sets a new standard of luxuriously smooth power flow for small and medium boats for fishing, hunting, and general utility. Has Pressure-vacuum Cooling System, Water-cooled Underwater Exhaust, Rotary Valve and Full Pivot Steering.



These 7 Great Johnson Features

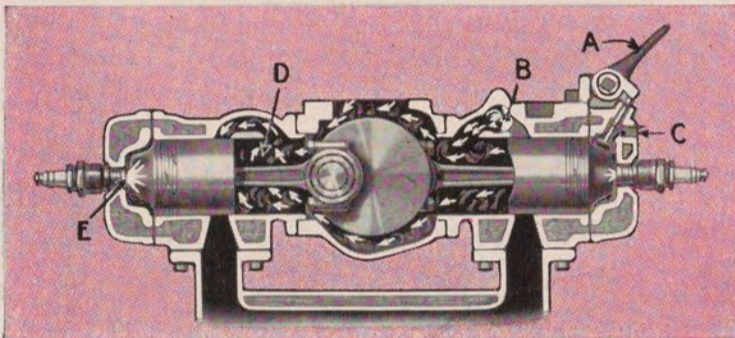
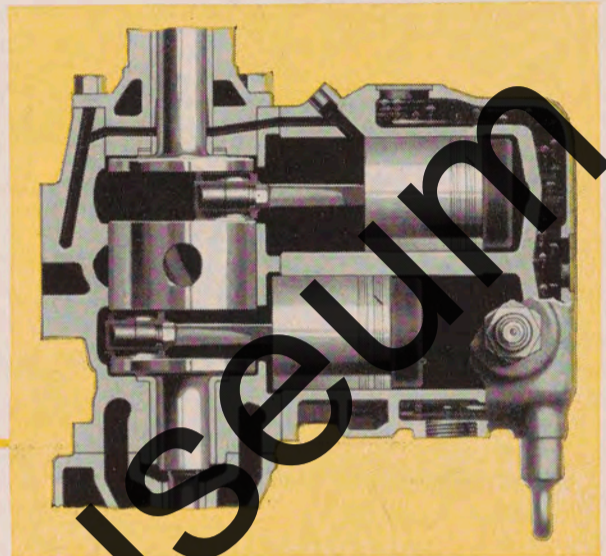
no other outboard motors enjoy

1 Alternate Firing— Farthest Advance in Smooth Performance

are produced per revolution instead of one as heretofore. This change simply revolutionizes the performance of twin-cylinder outboards. The improvement is as noticeable as the difference between an eight cylinder automobile and a four.

Smoothness of power flow is increased 100% and vibration is cut to almost nothing. In trolling for fish or approaching piers or landing places, these motors throttle down to a noiseless, steady crawl unbroken by any noticeable pulsations even on the steering handle. Alternate firing produces twice the number of sparks to one pull of the starting rope and hence starting is the easiest ever known and rivalled only by the Release Charger in other Sea-Horses.

For the first time in history, twin-cylinder outboard motors are made successfully in which the cylinders fire alternately, instead of simultaneously. In Sea-Horses "4" and "12" two impulses



2 Ease and Certainty of Automobile Starting

Positive starting is achieved in Sea-Horses "4," "24," "16," "10" and "3" with the Release Charger. This releases compression from one cylinder, cutting in half the effort required to turn the motor.

The other cylinder is supercharged with the "gas" ordinarily delivered to both. At the same time spark intensity in this cylinder is increased. The doubled charge and enormous spark start the motor easily.

3 Automatic Back-pressure Relief

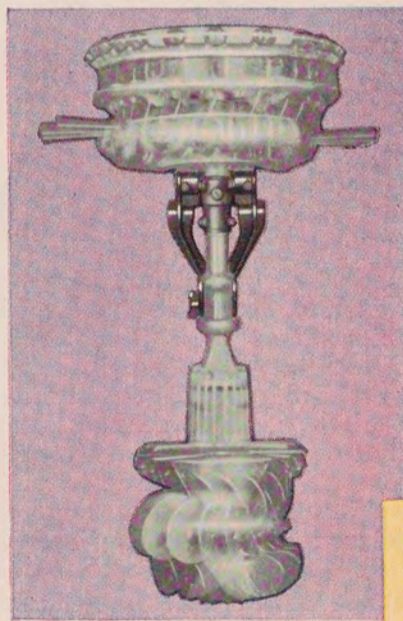
In Sea-Horses "4," "12," "16," "24" and "32" a valve on the side of the drive-shaft casing, which closes at high speeds and opens at low speeds, permits free exhaust of gases above the water line when starting and running slowly.



4 Full Pivot Steering Backs Boat Without Stopping Motor

Johnson provides in Full Pivot Steering the only system in the world which allows complete maneuverability. Full Pivot Steering means that you can turn the motor completely around. It steers or starts in any and every direction. It reverses instantly and thus backs the boat without stopping the motor. You can get away from a crowded pier with ease, or

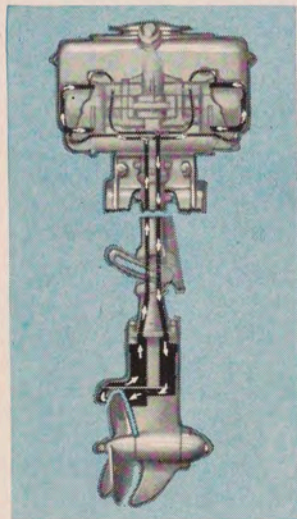
worm in and out of tight places at will. You can swing the boat on its centre and turn it in its own length. This complete maneuverability of the boat provides an equaled factor of safety in avoiding obstacles and other craft. Full Pivot Steering is available in Sea-Horses "Single," "3," "4," and "12."



5 Patented Pressure- Vacuum Cooling System

No Pump! No Moving Parts! Positive Action!

Pressure created by the propeller forces the water through the system. Suction of the propeller draws the water out of the system. In all motors except the "Single."



6 The Only Water- cooled Underwater Exhaust

Only Johnson Motors have an underwater exhaust with water-cooling system. This protects driver's hands and aids in cooling the gasses. The motor is muffled to a quiet hum. Available in Sea-Horses "4," "12," "16," "24" and "32."

7 Rotary Valve Insures Full and Even Charges At All Speeds

In Sea-Horses "32," "24," "16," "12," and "4" the rotary valve revolves in perfect unison with the crankshaft. Full, complete, and perfectly even charges are assured, even at high engine speeds.

