

JOHNSON

SEA-HORSE

OUTBOARD MOTORS

HANDY CHART FOR

1930

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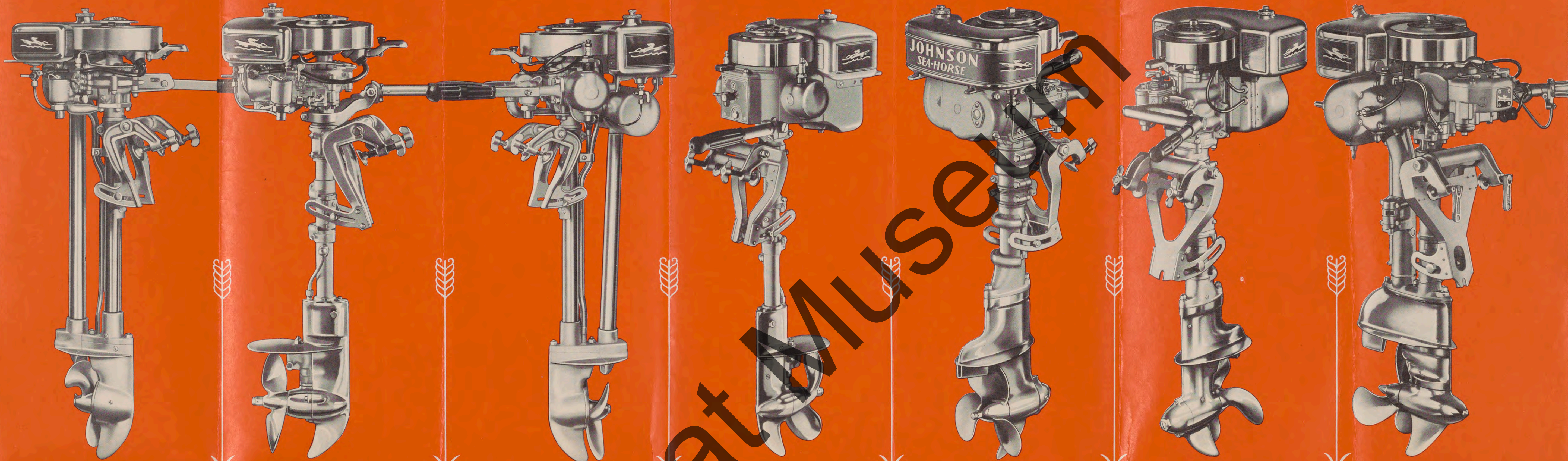


# JOHNSON SEA-HORSE OUTBOARD MOTORS

## STANDARD FEATURES

### ON ALL MODELS

- FULL TILTING propeller, motor automatically tilts over obstructions; tilts for beaching boat or going through shallows.
- STEERING HANDLE tilts. More convenient to stow away or carry; prevents hitting boat seat; has rubber grip.
- GREASE SEAL on propeller shaft. Keeps grease in, keeps water out. Longer gear and bearing life.
- ANTI-CAVITATION PLATE. Cast onto gear case, insures full propeller efficiency.
- HARDENED STEEL GEARS. Made by Johnson from finest alloy steel, heat treated. The best kind of gear for longest life.
- GEAR CASE. Streamlined design for low resistance in water. Cast from corrosion resisting alloys of aluminum.
- FLOAT FEED CARBURETOR. No check valves to wear or clog. Correct measuring of gas to air. Throttle for slow speed control and efficiency.
- LUBRICATION. Oil mixed with gasoline; grease in gear case; nothing else to oil.
- ALL PARTS interchangeable, produced by modern methods with accurate jigs.
- IGNITION is by Johnson built flywheel magneto giving hot spark at slowest starting and running speeds.
- EASY STARTING by cord. Easy pull spins motor several fast turns.
- CRANKSHAFT drop-forged alloy steel, case hardened and precision ground.
- CYLINDER HEADS in all Johnson motors are water cooled.



**SEA-HORSE MODEL 100** • Fundamentally the same powerhead that won world acclaim in Johnson's famous "Light Single," now improved for extreme low speed operation and more power at high speed. The lightest Johnson motor ever built. Real float-feed carburetor with throttle control, patented oiling system, light aluminum piston, bronze connecting rod, counter-balanced crankshaft, grease seal, ample grease capacity, hardened alloy-steel gears, pressure-vacuum cooling that circulates water at any speed motor will operate, directional propeller steering, underwater exhaust—and other features. A real Sea-Horse at a lower price.

**SEA-HORSE MODEL J-80** • The Little Aristocrat—the De Luxe Single—the motor that "has everything," including streamlined lower unit, shake-proof steering handle, propeller shaft seal, stainless steel propeller shaft, carburetor silencer, patented co-pilot, propeller protection clutch, positive pump cooling, instant pivot reverse, new manifold and carburetor for extreme slow speed (for trolling), more power at higher speeds, quiet, double expansion muffler, counter-balanced crankshaft, patented special oiling system, stainless steel propeller shaft, and many other "plus" features. Rugged, dependable, easy to handle.

**SEA-HORSE MODEL 200** • Johnson's famous Light Twin with fundamentally the same power head that has created a world-wide reputation for stamina, dependability and long life during the past 15 years. With such features as underwater exhaust combined with pressure-expansion muffler, streamlined gear case, pressure-vacuum cooling, grease seal, directional propeller steering, full capacity gasoline tank, float-feed carburetor with throttle control, protective steering rail, hardened alloy-steel gears, slow speed operation (for trolling), long life proven by the years, dependable, and the price is lower than on any Johnson twin ever built.

**SEA-HORSE AERO-BUILT MODEL 300** • Entirely different, light in weight, balanced appearance as well as balanced construction. Has aluminum cylinders with ni-resist iron sleeves, full range, double jet carburetor, synchro-control, shake-proof steering handle, patented co-pilot, full pivot steering and instant reverse, water jacketed muffler, positive plunger pump, propeller protection clutch, grease seal, streamlined gear case of corrosion resisting alloy, new reverse flux magneto Johnson built, finger tip control panel, water-cooled cylinder heads, integral rotary valve intake—any many other De Luxe features.

**SEA-HORSE MODEL A-80** • Now—a practical protective spark plug enclosure, with plugs accessible. A double-jet full range carburetor. Increased power, new coincidental exhaust cutout, synchro-control, underwater exhaust, instant pivot reverse, rotary valve, vacuum-pressure cooling, propeller protection clutch, stainless steel propeller shaft with grease seal, full size gasoline tank and patented co-pilot. . . . And remember, for sheer smoothness, nothing surpasses the silken flow of power of this Alternate Firing twin, with its two impulses per revolution instead of only one—originated—and perfected by Johnson.

**SEA-HORSE MODEL K-80** • A large edition of the Model A-80, with the same quality features, the same Alternate Firing smoothness and the same new developments including the new spark plug enclosure with instantly accessible plugs. This model provides the extra power necessary for flashy performance on bigger hulls. Controls perfectly at low speeds. Note that these are the only outboard motors in the world that give you Underwater Exhaust with Instant Reverse and Full Pivot Steering—a deluxe combination, typical of the extreme refinement of Johnson's Alternate Firing motors. Yet both are moderately priced.

**SEA-HORSE MODEL P-80** • Super power for thrilling speeds, heavy loads. A new 30 cubic inch opposed twin built for punishment. New double jet carburetor with automatic full range. New integral rotary valve "on the top side" for more power, greater efficiency, better distribution. New stainless steel propeller shaft. Release charger for easy starting, pressure-vacuum cooling, underwater exhaust, propeller shaft grease seal, automatic circulating oiling system, automatic exhaust relief, roller bearing connecting rods, twist grip control—a complete and brilliant power plant for larger boats, heavy-duty service.

## MECHANICAL SPECIFICATIONS

	SEA-HORSE 100	SEA-HORSE J-80	SEA-HORSE 200	SEA-HORSE 300	SEA-HORSE A-80	SEA-HORSE K-80	SEA-HORSE P-80
<b>MODELS</b>	Model 100: for square stern boats. Model 100-L: 5' longer drive-shaft.	Model J-80: for square stern boats. Model JL-80: 5' longer drive-shaft.	Model 200: for square stern boats. Model 200-L: 5' longer drive-shaft.	Model 300: for use on square stern boats. Model 300-L: 5' longer drive-shaft.	Model A-80: for square stern boats. Model AL-80: 5' longer drive-shaft.	Model K-80: Standard. Model KL-80: 6' longer drive-shaft.	Model P-80: Standard. Model PL-80: 6' longer drive-shaft.
<b>N. O. A. CERTIFIED BRAKE H. P.</b>	1.7 N.O.A. Certified Brake Horse Power at 3300 R.P.M.	1.7 N.O.A. Certified Brake Horse Power at 3300 R.P.M.	3.3 N.O.A. Certified Brake Horse Power at 3000 R.P.M.	3.7 N.O.A. Certified Brake Horse Power at 4000 R.P.M.	4.5 N.O.A. Certified Brake Horse Power at 4000 R.P.M.	9.3 N.O.A. Certified Brake Horse Power at 4000 R.P.M.	22 N.O.A. Certified Brake Horse Power at 4000 R.P.M.
<b>BORE, STROKE, DISPLACEMENT</b>	Bore, 2"; Stroke, 1½". Piston displacement, 4.71 cubic inches.	Bore, 2"; Stroke, 1½". Piston displacement, 4.71 cubic inches.	Bore, 2"; Stroke, 1½". Piston displacement, 9.4 cubic inches.	Bore, 1¾"; Stroke, 1¾". Piston displacement, 7.59 cubic inches.	Bore, 1¾"; Stroke, 1¾". Piston displacement, 8.28 cubic inches.	Bore, 2¾"; Stroke, 1-31/32". Piston displacement, 29.92 cubic inches.	Bore, 2¾"; Stroke, 1-31/32". Piston displacement, 29.92 cubic inches.
<b>DIMENSIONS</b>	Model 100: Length, 35½"; Width, 10"; Stern height, 15". Model 100-L: Length, 40¾"; Width, 10"; Stern height, 20".	Model J-80: Length, 35½"; Width, 10"; Stern height, 15". Model JL-80: Length, 40¾"; Width, 10"; Stern height, 20".	Model 200: Length, 36½"; Width, 12¾"; Stern height, 15". Model 200-L: Length, 41¾"; Width, 12¾"; Stern height, 20".	Model 300: Length, 36½"; Width, 10¾"; Stern height, 15". Model 300-L: Length, 41¾"; Width, 10¾"; Stern height, 20".	Model A-80: Length, 39-1/16"; Width, 12"; Stern height, 14". Model AL-80: Length, 44-1/16"; Width, 12"; Stern height, 19".	Model K-80: Length, 42¾"; Width, 14½"; Stern height, 15¾". Model KL-80: Length, 48¾"; Width, 14½"; Stern height, 21¾".	Model P-80: Length, 45-3/16"; Width, 17¾"; Stern height, 16½". Model PL-80: Length, 51-3/16"; Width, 17¾"; Stern height, 22½".
<b>WEIGHT</b>	Standard Model 100, 24¾ pounds. Model 100-L, 25 pounds.	Standard Model J-80, 28½ pounds. Model JL-80, 29½ pounds.	Standard Model 200, 38¾ pounds. Model 200-L, 39 pounds.	Standard Model 300, 36¾ pounds. Model 300-L, 37 pounds.	Standard Model A-80, 48 pounds. Model AL-80, 49½ pounds.	Standard Model K-80, 64 pounds. Model KL-80, 65½ pounds.	Standard Model P-80, 109 pounds. Model PL-80, 112 pounds.
<b>POWER HEAD</b>	Valveless, three port type.	Valveless, 3 port type.	Valveless, three port type.	Rotary valve, 2 port, with cylinders offset.	Rotary valve, 2 port type. Perfected Alternate firing.	Rotary valve, 2 port type. Perfected Alternate firing.	Rotary valve, 2 port, with cylinders offset.
<b>CYLINDERS</b>	Single cylinder, cast of nickel-iron with integral head.	Single cylinder, cast of nickel-iron with integral head.	Twin cylinders, cast of nickel-iron with integral head.	Twin, cast of aluminum alloy integral head, ni-resist iron sleeves.	Twin, cast in block of nickel-iron arranged for alternate firing.	Twin, cast in block of nickel-iron arranged for alternate firing.	Twin, cast of nickel-iron, with detachable aluminum heads.
<b>PISTONS</b>	"LO-EX" Aluminum—3 rings.	"LO-EX" Alloy Lynite—3 rings.	Cast iron—3 rings.	"LO-EX" Alloy Lynite—2 rings.	"LO-EX" Alloy Lynite—3 rings.	"LO-EX" Alloy Lynite—3 rings.	"LO-EX" Alloy Lynite—2 rings.
<b>CONNECTING RODS</b>	High-grade bronze, straight.	High-grade bronze, straight.	High-grade bronze, offset.	High-grade bronze, offset.	High-grade hard bronze, straight.	High-grade hard bronze, straight.	Steel; no offset, with roller bearings at crankpin end.
<b>BEARINGS</b>	Hard bronze, reamed, hand-fitted. Low friction.	Hard bronze, reamed, hand-fitted. Low friction.	Hard bronze, reamed, hand-fitted. Low friction.	Hard bronze, reamed, hand-fitted. Low friction.	Hard bronze, reamed, hand-fitted. Low friction.	Hard bronze, reamed, hand-fitted. Low friction.	Journals, hard bronze, reamed, hand-fitted. Rollers in connecting rods.
<b>CARBURETOR</b>	Float-feed, one lever control. Accessible screen and settling basin. Silenced intake.	Float-feed, one lever control. Accessible screen and settling basin. Silenced intake.	Float feed, one lever control. Accessible screen and settling basin. Silenced intake.	Float-feed, full range control, low and high speed adjustment.	Float-feed, full range control. Low and High speed adjustment.	Float-feed, full range control. Low and High speed adjustment.	Float-feed, full range control. Low and High speed adjustment.
<b>GAS TANK CAPACITY</b>	¾ pints.	4 pints.	7 pints.	6.5 pints.	7 pints.	13 pints.	2½ gallons.
<b>IGNITION</b>	High-tension flywheel magneto. Water-proof.	High-tension flywheel magneto. Water-proof.	High-tension flywheel magneto. Water-proof.	High-tension flywheel reverse flux magneto. Water-proof.	High-tension flywheel magneto. Water-proof.	High-tension flywheel magneto. Water-proof.	High-tension flywheel magneto. Water-proof.
<b>TYPE OF EXHAUST</b>	Under-water exhaust.	Muffler type, silences without undue back pressure. Double chamber.	Under-water, combined with expansion chamber.	Muffler type. Silences without undue back pressure. Double Chamber.	Water jacketed expansion chamber with Underwater Exhaust.	Water jacketed expansion chamber with Underwater Exhaust.	Water jacketed expansion chamber with Underwater Exhaust.
<b>COOLING SYSTEM</b>	Pressure—vacuum.	Water-cooled with positive acting plunger pump.	Pressure—vacuum.	Water-cooled with positive acting plunger pump.	Pressure-vacuum.	Pressure-vacuum.	Pressure-vacuum.
<b>TYPE OF PROPELLER</b>	Woolless, two blade, 7¾" diameter, 4½" pitch. Grease seal on propeller shaft.	Woolless, two-blade, 8" diameter, 6¼" pitch. Grease seal on propeller shaft.	Woolless, three blade, 7¾" diameter, 5½" pitch. Grease seal on propeller shaft.	Woolless, two-blade, 8" diameter, 6¼" pitch. Grease seal on propeller shaft.	3 blade—9½" diameter, 6" Pitch. Grease seal on propeller shaft.	3 blade—9½" diameter, 6" Pitch. Grease seal on propeller shaft.	Three blade, 12" diameter, of different pitches to suit boats of different speeds. Grease seal on propeller shaft.
<b>GEAR RATIO</b>	13 to 19, motor to propeller.	14 to 25, motor to propeller.	13 to 19, motor to propeller.	14 to 25, motor to propeller.	14 to 24, motor to propeller.	12 to 21, motor to propeller.	14 to 24, motor to propeller.
<b>QUICK MOTOR TAKEDOWN</b>	By removing 4 screws under crank-case.	By removing 4 screws at a point under the crank-case.	By removing 4 screws under crank-case.	By removing 4 screws at a point under the crank-case.	By removing six screws under crank-case.	By removing six screws under crank-case.	By removing four nuts under crank-case and three nuts from muffler.
<b>PROP. PROTECTION CLUTCH</b>	No.	Yes.	No.	Yes.	Yes.	Yes.	No.
<b>STEERING AND REVERSE</b>	Pivot.	Full pivot and instant reverse. Shake-proof steering handle.	Pivot.	Full pivot and instant reverse. Shake-proof steering handle.	Full Pivot and Instant Reverse. Rubber mounted steering handle.	Full Pivot and Instant Reverse. Rubber mounted steering handle.	Pivot.
<b>PATENTED CO-PILOT</b>	No.	Yes.	No.	Yes.	Yes.	Yes.	No. Wheel steering usual.
<b>STARTING</b>	Rope Starting.	Rope Starting.	Rope Starting.	Rope Starting.	Rope Starting.	Rope Starting.	Rope Starting.
<b>THROTTLE CONTROL</b>	On carburetor.	On carburetor.	On carburetor.	Synchro-control of throttle and spark.	Synchro-control of Throttle, Spark and Exhaust Cutout.	Synchro-control of Throttle, Spark and Exhaust Cutout.	Steering Handle.
<b>RELEASE CHARGER</b>	No.	No.	No.	No.	No—Alternate firing.	Yes.	Yes.
<b>BOAT SUITABLE</b>	Any canoe, ordinary rowboats and dinghies.	Any canoe, ordinary rowboats and dinghies.	Any canoe, ordinary rowboats and dinghies.	Any canoe, ordinary rowboats and dinghies.	Large canoes and all kinds of rowboats, family boats and dinghies.	Large rowboats of all models and light weight boats that plane.	Large heavy rowboats. Fast runabouts and cruisers and as auxiliary power.



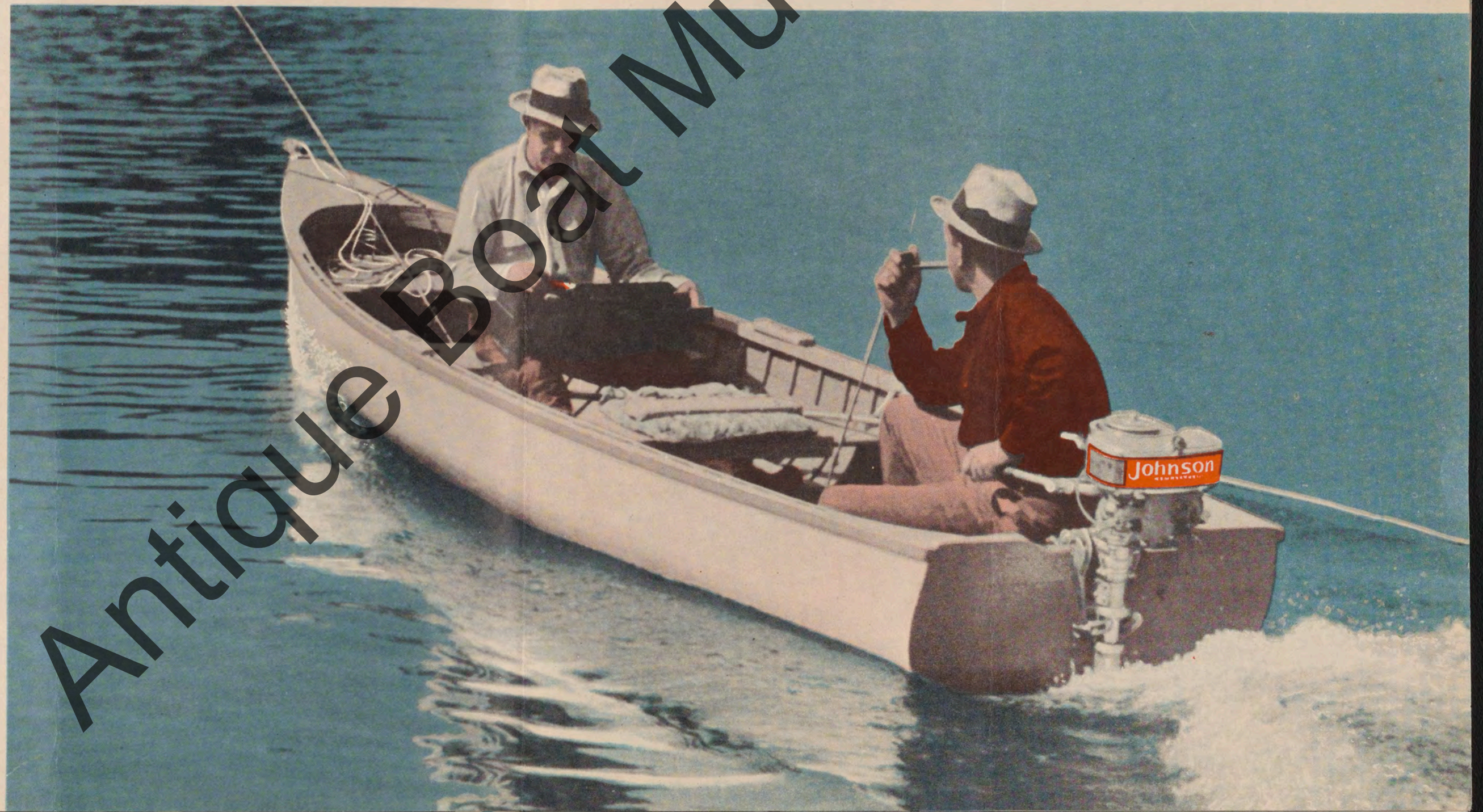
# DEPENDABILITY

THROUGH THICK AND THIN, YOU CAN COUNT ON A JOHNSON SEA-HORSE

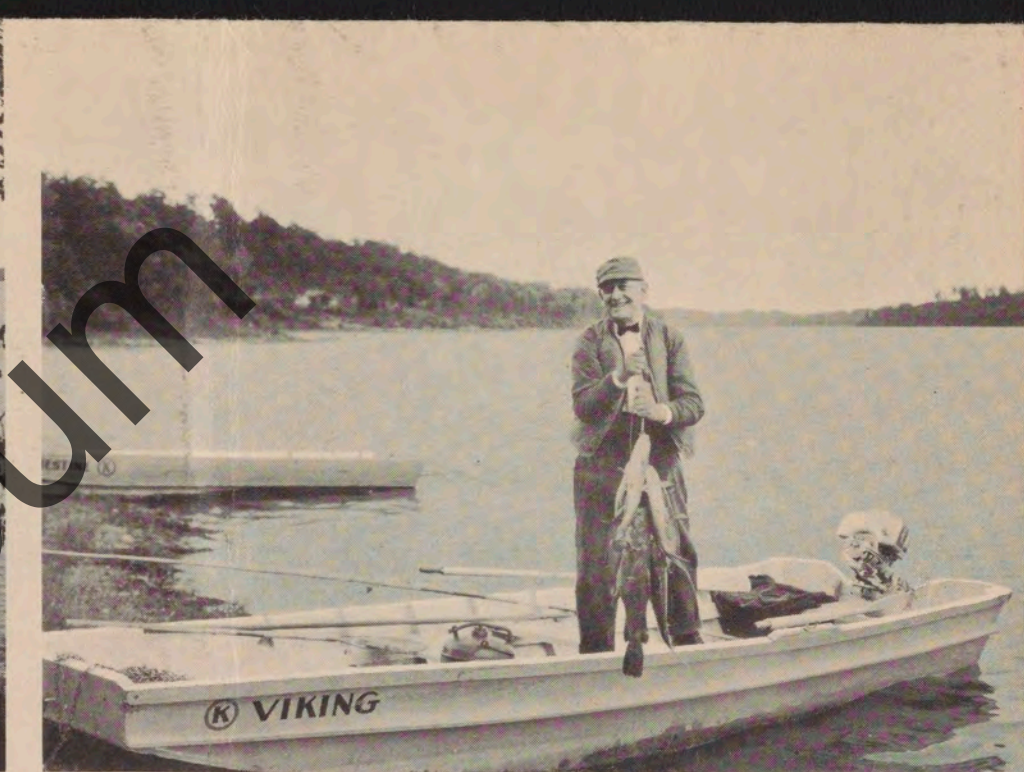
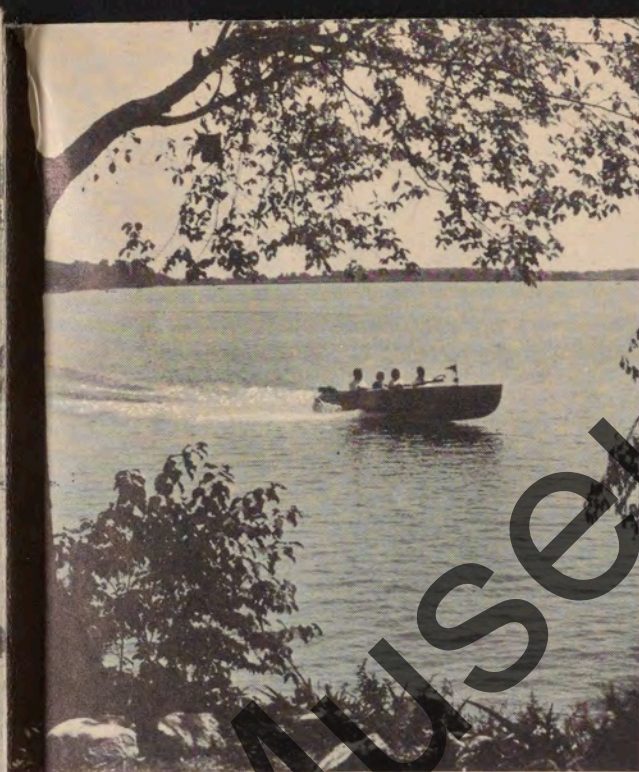
● Johnson Sea-Horses have been world-famous for fifteen years for one outstanding and remarkable characteristic. You can **DEPEND** on them.

They start when **YOU** want to go . . . they run as long as it is **YOUR** desire . . . they "stay put" for those years and years of service which give **YOU** such complete satisfaction. Just as they have performed in tight places for such world-famous men as Admiral Byrd, Capt. Bob Bartlett, Col. Lindbergh, Wiley Post, Father Hubbard and others.

Dependability in a Johnson is not happenstance. It has been *built-in* right from the beginning. It has been achieved by minute attention to detail in design, in construction, in selection and testing of materials. But more than that, it is the result of a continued, steadfast, iron-clad policy . . . that Johnson Sea-Horses *must* be superior outboard motors.



Antique Boat Museum



Antique Boat Museum

The Antique Boat Museum  
750 Mary Street  
Clayton, NY 13624

## WHEN YOU BUY AN OUTBOARD MOTOR

Be sure to consult a dependable motor dealer. Johnson dealers are carefully selected merchants who know motors and boat requirements. They are interested in helping you choose the motor which will best fit *your needs*. Beyond that, Johnson dealers are interested *after* the sale. When you need advice or assistance, call on them—and when, after years of service you need new parts, count on Johnson Service.

There are 33 District Service Stations in the United States with complete stocks of parts. In addition, hundreds of dealers carry stocks. At the factory is a huge reserve supply from which you or any dealer or Service Station may draw on a moment's notice. *No service organization in the industry carries a more complete stock of parts—to serve you . . . quickly.*

Get a good motor in the first place. But, whatever you get, *be sure* that it is backed by service equal to Johnson's.



JOHNSON MOTOR COMPANY, *Waukegan, Illinois*

*Canadian Johnson Motor Company, Peterboro, Ontario, Canada*