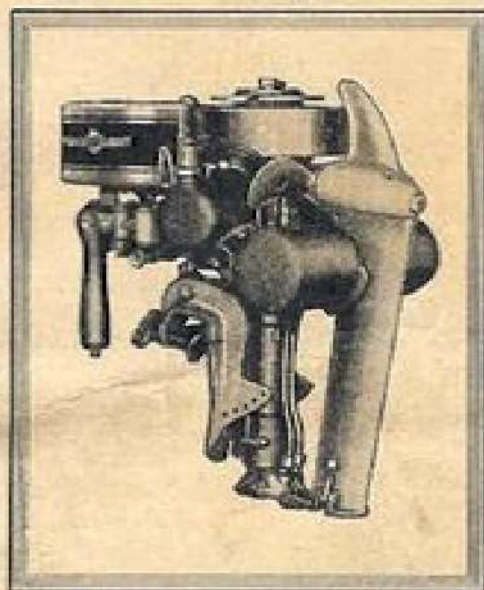


FOLD-LIGHT

SERVICE MANUAL

*Operating
Instructions
and
Care
of
Motor*



*List of
Repair Parts
With
Prices
in
U. S. A.*

April 1, 1930

OUTBOARD MOTORS CORPORATION

Milwaukee, Wis., U. S. A.

Price 50 Cents

Authorized Fold-Light Service Dealers and Distributors

ALABAMA	
*Birmingham.....	Drennan Motor Car Co., Ave. "D" & 20th St.
Birmingham.....	A. L. Hammock, 1921 Ave. "E"
Mobile.....	McGowin Lyons Hdwe. & Supply Co., 125 Northwater St.
Mobile.....	Patterson Hdwe. & Supply Co.
*Montgomery.....	G. W. Barnett Hdwe. Co., 116-118 Commerce St.
Montgomery.....	Alex Chambless, 405 Montgomery St.
ARKANSAS	
Little Rock.....	The Parrier Brokerage Co., 209 Main St.
CALIFORNIA	
Los Angeles.....	E. Aarup, 5110 So. Main St.
*Los Angeles.....	Wm. H. Hoegge Co., Inc., 138
San Francisco.....	J. G. Rapp Corp., 123 Second St. So. Main St.
*Oakland.....	Evinrude Motor Distributors, 119 Broadway.
Oakland.....	P. Rawn, 3260 San Pablo Ave.
*Oakland.....	F. H. Squires, Box 62.
San Diego.....	Clem Store, 2nd & "C" Sta.
*San Francisco.....	Aldo O'Keefe, 7 Front St.
CANADA	
Montreal, Que.....	A. Belevau, 663 St. James St.
Montreal, Que.....	E. Drolet, 137 McGill St.
Montreal.....	F. I. Mitchell.
Winnipeg.....	Kipp-Kelly.
Toronto, Ont.....	Evinrude Motor Co., 64 King St. W.
Toronto, Ont.....	Purser, Bull & Co., Ltd., 504 King St. W.
Toronto, Ont.....	A. R. Williams Machy. Co., 64 Front St. W.
Vancouver, B. C.....	Boeing Aircraft of Canada, Ltd., 1927 Georgia St. W.
Vancouver, B. C.....	Ensign Motor Supply Co., 1800 Georgia St. W.
Vancouver, B. C.....	McQuillan Ltd., 1955 Georgia St. W.
CONNECTICUT	
*Milford.....	C. E. French, 489 E. Broadway.
DISTRICT OF COLUMBIA	
*Washington.....	Stanley Horner, 1015 14th St.
FLORIDA	
*Jacksonville.....	Consolidated Automotive Co., 1131 W. Forsythe St.
Jacksonville.....	Loftin & Taylor, 509 Main St.
Miami.....	Miami Outboard Motor & Boat Co.
Miami.....	Phillips Hdwe. Co., 301 No. Miami Ave.
Pensacola.....	R. L. Shanks Sporting Gds. Store, 401 No. Davis St.
Waldo.....	J. W. Bryant.
West Palm Beach.....	Bill's Tackle Shop, 308 Datura St.
GEORGIA	
Atlanta.....	P. & G. Service Co., Rear 142 Marietta St.
*Augusta.....	Carl Edelblut, 319 Ellis St.
*Macon.....	Southeastern Marine Supply Co., 587 College Ave.
*Savannah.....	Motor Supply Co., 28 Abercorn St.
ILLINOIS	
Antioch.....	E. P. Dressel, Lake Marie.
Chicago.....	Motor Boat & Engine Service
*Chicago.....	Frank-Reach, Inc., 1905 So. Michigan.
Chicago.....	Evinrude Sales & Service, 2620 South Michigan.
*Chicago.....	Inc., Navy Pier.
*Chicago.....	Wilson & Richardson, 29 East Wacker Drive.
Fox Lake.....	T. W. Kannig.
Peoria.....	G. N. Portman Co., 122 No. Adams St.
*Peoria.....	Travis Cadillac Co., 1501 W. Main.
Rockford.....	Fifth Ave. Sport Shop, 1025 5th Ave.
Rockford.....	Pla Mor Sport Shop.
Rock Island.....	Lohse Electric Co., 1064 4th Av.
South Chicago.....	F. E. Ludolph, 9541 So. Commercial Ave.
INDIANA	
Indianapolis.....	The Gun Habich Co., 136 E. Washington St.
Indianapolis.....	Em Roe Sporting Gds. Co., 22 W. Washington St.
*Indianapolis.....	W. J. Holliday Co., 545 McCarty St.
South Bend.....	W. E. Nelson, 127 E. Jefferson Blvd.
Terre Haute.....	Buffalo Tire Sales, 1311 Wabash Ave.
IOWA	
Davenport.....	Davenport Boat & Engine Service, 2025 Lillie Ave.
*Davenport.....	Midwest Timmerman Co.
Des Moines.....	Hopkins McKee Sptg. Gds. Co. 412 7th St.
Des Moines.....	O'Dea Hardware & Paint Co. 6th St.
*Dubuque.....	Midwest Timmerman Co.
Sioux City.....	Hagstrom Sporting Gds. Co., 41 Nebraska St.
Waterloo.....	John C. Jago, 107 Sycamore St.
KENTUCKY	
Louisville.....	Thos. H. Barrett, 112 S. 2nd St.
*Louisville.....	The Sutcliffe Co., 225 S. 4th St.
LOUISIANA	
*New Orleans.....	Alker Donovan Co., 433 Camp St.
New Orleans.....	G. N. Gonzales, 2017 Canal St.
*New Orleans.....	Higgins Industries, 539 Coronadelet St.
Shreveport.....	Thurmond Hdwe. Co., 519 Edwards St.
MARYLAND	
*Baltimore.....	Bacharach-Rasin Co., 14 No. Howard St.
*Baltimore.....	Parks & Hull, Inc., 1031 Cathedral St.
*Baltimore.....	Wm. H. Whiting Co., 428 E. Pratt St.
MASSACHUSETTS	
*Boston.....	W. H. Moreton Corp., 1045 Commonwealth Ave.
*Boston.....	Onthank-Rich Co., 259 Atlantic Ave.
*Boston.....	Wetmore Savage A. E. Co., 585 Commonwealth Ave.
MICHIGAN	
Adrian.....	City Garage, 238 Pearl St.
Alpena.....	Jas. Robarge, 126 So. 2nd Ave.
Bellaire.....	Bailey Bros.
Detroit.....	Andrews Boat Livery, Ft. of Benitau Ave.
Detroit.....	Cumings Bros., 424 W. Elizabeth St.
Detroit.....	Elto Detroit Outboard Sales & Serv. Co., 466 Ashland Ave.
Detroit.....	Evinrude Detroit Motor Co., 6304 E. Jefferson Ave.
Flint.....	Elgin G. Clark, 2325 Forrest Hill.
*Flint.....	Cumings Bros.
Grand Rapids.....	Cumings Bros., 219 Ottawa St.
Grand Rapids.....	Michigan Wheel Co.
Hancock.....	Smith Super Service.
Jackson.....	Upty's Radio & Sptg. Gds. Shop, 116 Michigan Ave. E.
Kalamazoo.....	White Bros., 847 Portage St.
Lansing.....	P. C. Stevens, 323 East Michigan
Port Huron.....	Shepherd Boat & Motor Sales, 407 River St.

*Indicates Distributor.

Authorized Fold-Light Service Dealers and Distributors

Saginaw..... Foess & Obrecht.
*Saginaw..... Morley Bros.
Sault Ste. Marie... Soo Machine & Auto Co.

MINNESOTA

Duluth..... Ross Electric & Outdoor Supply
Co., 23 Lake Ave. No.
Hibbing..... Range Cycle Co., 1701 3rd Ave.
*Minneapolis..... Outboard Motor Distr., 301 N.
Seventh St.
Minneapolis..... Outboard Motor & Cycle Shop,
15 So. 4th St.
Nisswa..... R. L. Parks.
St. Paul..... Park Machine Co., 176 W. 3rd
St.
*St. Paul..... Motor Power Equipmt. Co., Ford
Bridge & River Blvd.
Winona..... Winona Boat Livery, 636 East
Broadway.

MISSISSIPPI

Biloxi..... Kennedy Bros., 508 Hopkins St.
Gulfport..... Connell's Inc.

MISSOURI

Branson..... Higgs & Barnes.
Kansas City..... Covert Boat & Engine Co., 1330
McGee St.
Kansas City..... R. C. Elliot Arms Co., 1416
Grand Ave.
*Kansas City..... Kansas City Boat & Engine Co.,
1330 McGee St.
St. Louis..... Fox Ignition Co., 3925 Wash-
ington St.
*St. Louis..... Milliken - Hemp, Inc., 3982
Washington Blvd.
*St. Louis..... Schneider-Nash Sales Co., Ne-
osho at So. Kings Highway.

NEBRASKA

Lincoln..... Lawler Sporting Gds. Co., 1134
"N" St.
Nebraska City... William Witte Jr., 802 Central
Ave.
*Omaha..... Paxton & Gallagher Co.
Omaha..... Leonard Schulze, 3117 Mormon
St.

NEW HAMPSHIRE

Wolfeboro..... Elbridge Robie.
Wolfeboro..... Onthank-Rich Co.

NEW JERSEY

Atlantic City.... Atlantic Mchy. & Supply Co.,
1922 E. Riverside Drive.
Atlantic City.... Ventnor Boat Works, Ventnor
Heights.

NEW YORK

Buffalo..... H. L. Peters, 332 Pearl St.
Jamestown..... Louis W. Collins, 109 E. 3rd St.
New York..... Olaf Mikkelsen, 115 E. 23rd St.
New York..... Splindorf Electric Co., 225 W.
58th St.
New York..... The E. J. Willis Co., 85 Cham-
bers St.
Rochester..... E. W. Fischer, 191 East Ave.
Syracuse..... The Potter Co., 132 W. Willow
St.
Watertown..... Howard H. Vrooman, 266 State.

NORTH CAROLINA

Wilmington..... Jas. S. King & Son, 103 So. 4th
St.

OHIO

Cincinnati..... Bolles Brendamour Co., 130 E.
6th St.
Cincinnati..... J. C. Fischer, 120 W. 64th St.
Cincinnati..... E. C. Hartlieb & Co., 326 Main
St.
Cleveland..... Lyman Outboard Sales & Ser-
vice, 1535 E. 43rd St.
Cleveland..... H. W. Fegan Co., 1531 W. 25th
St.

Cleveland..... Lyman Outboard Sales & Ser-
vice, 1535 E. 43rd St.
*Columbus..... Columbus Radio Corp., 69 E.
Chestnut St.
Toledo..... R. W. Harrison Boat Works,
3828 Summit St.
Toledo..... Toledo Sales & Engine Co., 14
N. St. Clair.

OKLAHOMA

*Tulsa..... J. W. Mcgee Sporting Gds. Co.,
510 So. Main St.
Tulsa..... A. L. Wait, 512 W. Easton Pl.

PENNSYLVANIA

Conneaut Lake... F. Reimann.
Eric..... Dearbeck & Christensen, West
Public Dock.
Eric..... Le Jeal Automotive Service.
Philadelphia.... Hoffman Cycle Co., 3010 Ken-
sington Ave.
*Pittsburgh..... Dyke Motor Supply, 800 Web-
ster Ave.
Pittsburgh..... R. C. Price, Foot of Federal St.
Scranton..... Harry Layton, 924 No. Irving
Ave.

SOUTH CAROLINA

Charleston..... J. J. W. Leiden Co., 156 E. Bay
St.

TENNESSEE

Memphis..... Ambrose Sporting Goods Co.,
132 So. Main St.
*Memphis..... Ensley Co. Inc., 71 Union Ave.
*Memphis..... Outboard Sales Co., 141 No.
Main St.

TEXAS

*Dallas..... Huey & Phelp Hdwr. Co.
Galveston..... S. A. Maverick, Jr., 2009 Ave-
nue C.
Houston..... Houston Sporting Goods Co.,
1005 Main St.
*Houston..... Peden Co.
*Houston..... Texas Sporting Goods Co., 1010
Fannin St.
Marshall..... C. A. Pressler, 1510 W. Rusk St.
San Antonio.... Barbera Sporting Goods Co.,
103 W. Houston St.

VIRGINIA

Norfolk..... Gas Engine & Boat Corp., First
St. near Front.
*Norfolk..... Nye the "Engine Man", 126
Boush St.

WASHINGTON

*Seattle..... Canning & McClure, 94 Colum-
bia St.
*Seattle..... S. V. B. Miller, 63 Columbia St.
*Seattle..... Sunde & d'Evera, Coleman Dock.
Tacoma..... Avery Richardson, 929 Com-
merce St.

WISCONSIN

*Green Bay..... Morley Murphy Co.
Green Bay..... X. Parmentier & Sons, 102
Douman St.
Hayward..... Don Harper.
La Crosse..... Isle La Plume Boat Works.
Lac du Flambeau H. W. Parker.
Madison..... W. P. Bernard, 624 E. Gorham
St.
Madison..... Tracy Boat Co.
*Milwaukee..... Ruggles Motor Service, 386 Ken-
ilworth Pl.
Milwaukee..... Tessner Outboard Motor Sales,
222 6th St.
*Oshkosh..... Midwest Outboard Sales Inc.,
15 Main St.
Racine..... R. B. Gilmore, 3205 Osborne
Blvd.
Racine..... Kamm's Tire Service, 518 Col-
lege Ave.
Stevens Point... Art Miller, Jr.

* indicates Distributor.

Foreword

"There's a right way and a wrong way to do everything." This applies to the care and maintenance of Outboard Motors Corporation Motors as it does to every other piece of machinery.

Although Outboard Motors Corporation Motors are simple to understand, easy to operate, and built to give first-class service—every Fold-Light user should read these instructions before any attempt is made to attach and operate the Fold-Light.

This booklet tells the right way to get satisfactory service from your motor. Handle it in accordance with these instructions and it will return big dividends on your investment, in wholesome pleasure and health building recreation.

Give your Fold-Light the same consideration that you'd give a watch, and you'll find that it's really built, "TO LAST A DECADE."

Important

Everyone should read pages 1 to 16 carefully before attempting to operate the Fold-Light. The remaining instructions are for later reference and may be read at leisure.

The first thing to do when the box containing the motor has been opened is to look for the motor Warranty Card in the kit containing the tools. **MAKE OUR WARRANTY ON YOUR MOTOR EFFECTIVE NOW** by filling out the Registration Card and mailing it immediately. **BE SURE TO FILL IN THE MOTOR NUMBER.**

Why the Registration Card?

1. It helps to locate stolen motors.
2. It assists the customer to get quick repair and part service.
3. It binds the Outboard Motors Corporation to make good their warranty.
4. It enables the Outboard Motors Corporation to keep in touch with Fold-Light owners.

BE SURE TO FILL IN THE MOTOR NUMBER ON THE REGISTRATION CARD AND MAIL AT ONCE.

Unpacking

The motor is shipped completely assembled—ready to use when attached to a boat. After removing the cover of the box, loosen thumb screws and remove bracket board or brace to which motor is clamped. Remove corrugated pads from side of cylinder and the motor can then be lifted out of the box. If motor comes packed in Metal Carrying Case, which is sold as an accessory, it is not necessary to remove packing as motor can be lifted out after opening case.

Attaching the Motor to Boat

Hang the motor over the stern of the boat, exactly in the center, but before clamping it into position, see that the propeller is submerged while the boat is floating without load. If the propeller is not fully submerged the stern must be cut down until the propeller is submerged with the boat floating empty (see page 6). Tighten the thumbscrews (Diagram, page 7) with the fingers. Use no tools for this purpose. Finger pressure is sufficient.

Lubricating Instructions—Caution

Lubrication is the most important factor in the operation of internal combustion engines—correct lubrication insures long life and satisfactory performance, whereas incorrect lubrication invariably results in premature wear and unnecessary expense.

The Fold-Light motor is a two cycle motor and the lubrication of the cylinders, pistons, crankshaft and connecting rod bearings is supplied by mixing the lubricating oil with the gasoline. **NEVER POUR CLEAR GASOLINE INTO THE TANK.**

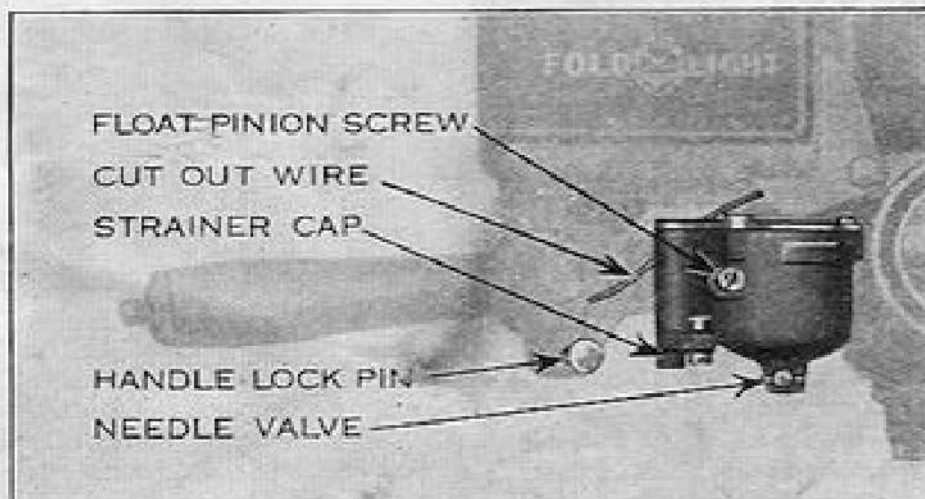
LUBRICANT RECOMMENDED. Be very careful in the selection of your oil. We recommend the use of Gargoyle Mobiloil "A" or high grade oil of similar body and character.

1. For the first ten hours mix 1 pint of Gargoyle Mobiloil "A" or any other high grade oil of similar body and quality in a clean, separate can with each gallon of gasoline.
2. Mix oil and gasoline thoroughly before pouring into tank.
3. After ten hours of operation, the oil can be reduced to $\frac{3}{4}$ pint to the gallon of gasoline.
4. We guarantee no satisfaction whatever unless our instructions are strictly adhered to.

In foreign countries consult Fold-Light Agents for correct mixtures. The Imperial gallon is one-fifth greater than a United States gallon.

To Start Motor

1. Open gasoline cock under tank by turning handle down.
2. Open vent screw on filler cap on top of tank to the **LEFT** until wide open.
3. Close needle valve on carburetor, then **OPEN** $\frac{3}{4}$ to $1\frac{1}{2}$ turns.
4. Set carburetor control lever (below tank) at "**CHOKE**" position.
5. Set spark control lever at "**START**"—(see top of tank).
6. Coil starting rope clockwise and pull quickly.
7. When motor starts, move carburetor control lever at once toward "**FAST**" position. Move spark control lever toward "**FAST**" position. Close needle valve slowly until motor runs smoothly. Obtain desired speed by moving the carburetor control lever and the spark control lever between the "**FAST**" and "**SLOW**" POSITIONS.



8. To **STOP**, push button at end of steering handle.

Needle Valve Adjustment

The normal adjustment of the needle valve as set at the factory is about $\frac{3}{4}$ turn open. If the motor does not seem to be operating at full speed, turn the needle valve slowly to the right or left until the motor operates most efficiently. Once the needle valve is adjusted it should require no further attention.

Additional Instructions for Fold-Light

Your Fold-Light was designed as a motor to fulfill the need for a lightweight motor of extremely compact size. The folding feature found on this motor was designed by Outboard Motors Corporation's engineers and represents an entirely new departure in the building of outboard motors. Fold-Light is provided for easy carrying with a strong hinging device which permits the lower housing to fold back against the upper housing. Loosening of two nuts permits the lower housing to be swung into position; tightening the nuts locks the motor to absolute rigidity. The two sections of the drive shaft, slotted for folding, are automatically coupled when the housing is locked. The steering handle conveniently folds for carrying.

UNFOLDING MOTOR: The motor, when packed for shipment, is placed in the shipping box in folded position, with the lower housing folded under the flywheel, held in place by the retaining spring. The first step in the preparation of the motor for running, after its removal from the shipping case, is to unfold the motor. The two ends of the drive shaft, at the point where the motor folds, have been slotted. In order to mesh properly, it may be necessary to move the propeller half a turn or so in either direction. Do not try to mesh the shaft ends together by forcing. A slight turn of the propeller or flywheel will quickly engage the shafts.

Next place the retaining bolts which are attached to the lower housing, through the notches provided for them in the upper housing, tightening the nuts securely. Bring the steering handle up to a horizontal position, locking it by pushing and turning the small lock button which is found on the steering handle.

FOLDING MOTOR: For folding the motor, merely reverse the process. Loosen the retaining bolts, slip retaining bolts out of the slot, fold the lower housing up under the flywheel, engaging the protecting skag in the retaining spring. Drop the steering handle down against the motor by disengaging small lock button. The motor is now ready for easy carrying.

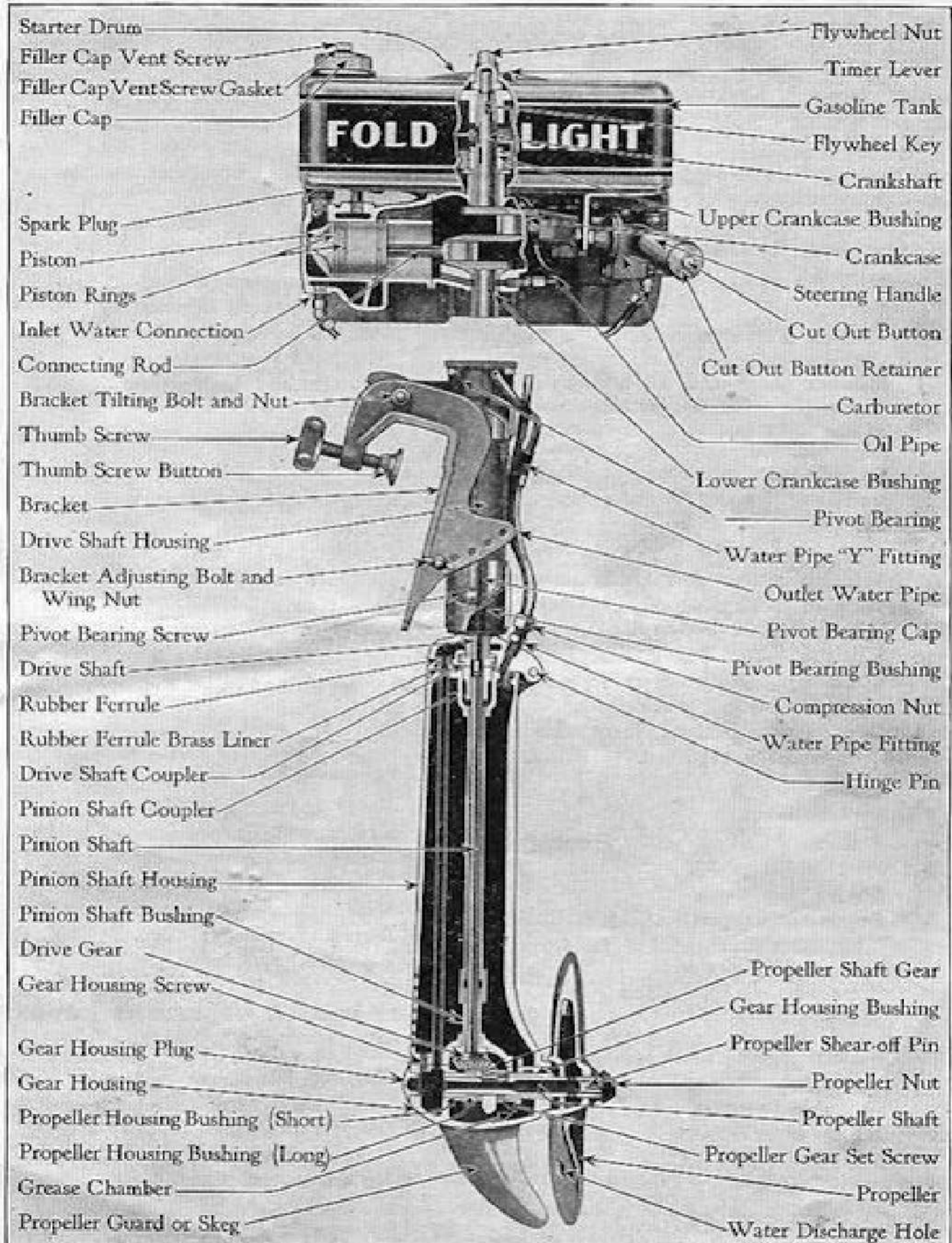
COOLING OF MOTOR: It is necessary that water circulates properly at all times. If cylinder ends appear to be overheated, look for obstruction at the water intake due to weeds or other foreign matter in the water. The motor is self-draining. However, a few seconds must be allowed for complete draining of the motor, therefore, care should be exercised during cold weather to make sure that all water has drained from the cylinders before the motor is tilted up. Water remaining in the cylinder jackets will freeze and crack the cylinders, unless this precaution is taken.

FUEL MIXTURE: Before the fuel mixture is placed in the tank, it should be thoroughly mixed in a separate container, according to the proportion stated elsewhere in the instruction. (See page 5).

TYPES OF BOATS: There are many different types of hulls, demanding various sized motors. One would not expect to haul ten-ton loads with a lightweight Ford Delivery Truck, neither is your Fold-Light suitable for the heaviest type boats. Fold-Light is primarily adapted for the lighter types of hulls: rowboats, tenders, dinghies, round and vee bottom boats, and square stern canoes. If it is desired to operate the motor on a pointed stern canoe, a special bracket may be obtained for this purpose.

NOTE: The distance from the arch of the stern brackets to the center of the propeller is $20\frac{1}{2}$ ". Fold-Light should, therefore, not be used on a boat with a stern higher than $15\frac{1}{2}$ ". A 15" stern is preferred. If the stern on your boat is higher than this dimension, it should be notched by cutting down the transom. The width of the notch need only be sufficient to accommodate the bracket which is $5\frac{1}{4}$ " wide.

View Showing Inside Construction of Fold-Light



When writing for instructions on Fold-Light refer to above illustration for names of parts. Order parts from list, pages 18 to 27.

Trouble Chart

The following chart aims to provide an outlet for the systematic tracing down of trouble with the least amount of effort. Finding the cause of trouble usually suggests the remedy.

Proceed as follows: Identify the probable cause of trouble in the left hand column, and then trace it through as indicated within the brackets. The causes of troubles are listed, insofar as it is possible, in the order of probable frequency.

Motor won't start—

Gasoline trouble

- Tank empty.
- Shut-off Valve closed.
- Carburetor flooded, if motor is warm.
- Mixture too thin, if engine is cold.
- Too much oil mixed with gasoline.
- Water in carburetor, tank or strainer.
- Pipe clogged.
- Spray nozzle in carburetor clogged.
- Vent in filler cap closed.

No spark

- Wire to contact screw disconnected.
- Wire to spark plug disconnected.
- Water, oil, or carbon on contact points.
- Contact points do not come together when fly-wheel is revolved.
- Contact points do not separate when fly-wheel is revolved.

Spark plug faulty

- Foul with carbon, oil or moisture.
- Porcelain cracked.
- Center pole loose.
- Points not properly adjusted—should be apart thickness of gauge supplied with motor.

Poor compression

- Piston rings carbonized and stuck in groove.
- Cylinder scored.
- No oil in cylinder.

Motor misses—

Wiring defective

- Broken or loose wiring.
- Defective insulation.
- Wires short circuited with moisture, oil or foreign material.

Magneto

- Contact points corroded.
- Contact points improperly spaced, should be apart thickness of gauge supplied with motor.
- Defective coil or armature.
- Weak Magneto.
- Foreign matter or oil on contact points.

Carburetor

- Foreign matter in spray nozzle or needle valve hole.
- Supply impeded.
- Water in carburetor.

Motor overheats—

- Lack of oil or water.

Motor knocks—

- Spark too far advanced.
- Carbon in cylinders (caused by too much oil or gasoline).
- Motor too hot, causing pre-ignition.
- Bearings loose or worn.
- Piston or cylinder worn.
- Fly-wheel nut loose.

Motor is stiff or cranks hard—

- Rust in cylinder.
- Bearings out of line.
- Crank shaft bent.
- Coupler broken.
- Gear shaft bent.
- No oil on bearings.

Water stops circulating—

- Obstruction in water intake.
- Leak at water pipe connections.
- Broken water pipe.

Motor loses power—

Improper mixture
Too rich (will slow down and knock).
Too thin (will knock).
Lack of compression
Lack of oil.
Scored cylinder.
Worn rings.

Motor runs but propeller does not revolve—

Propeller pin sheared off.
Plain gear key sheared off.

Motor vibrates—

No spark in one cylinder.
Loose Pivot bearing.
Bent propeller wheel.
Motor loose on boat.
Too lean a mixture of gas.

Motor runs but boat makes little or no progress—

Propeller blades bent.
Rope or other obstruction dragging in water.
Weeds on propeller.

Troubles — Diagnosis of Symptoms

When any gasoline engine goes "dead" the trouble is usually due to exhaustion of fuel, or to ignition difficulties. One who has had experience with automobiles, or other types of gasoline engines, soon learns where to look when troubles develop.

This booklet, however, is intended to be a guide and help to the beginner—the person to whom the operation and functioning of a Fold-Light is a complete mystery.

The beginner, however, will soon learn that Fold-Light is a very simple piece of machinery, and that there is really nothing about it that the average school boy is not capable of learning very quickly.

As stated above, gasoline and ignition troubles are by far the most prevalent ailments among all types of gasoline engines. Therefore, if your Fold-Light does not behave properly, it is wise to look for the most common form of trouble before attempting to dismantle the engine—don't try to find something when you don't really know what you're looking for.

If your motor has fuel properly mixed and carefully strained, but refuses to start, or behaves badly, consult the trouble chart. If you have no idea what the trouble may be, start making a systematic check through the list of symptoms described. If you do this, the chances are ninety-nine out of a hundred that you'll quickly locate your trouble and be able to remedy it. Don't get excited, don't lose your temper, and don't swear. The last three named actions never got one single, little wooly explosion out of a cantankerous gasoline engine. They won't make your Fold-Light drive your boat.

JUST ONE MORE "DON'T." If you have trouble with your motor and can't remedy it yourself—go to your Fold-Light Dealer, rather than be hoodwinked into paying self-styled "experts" exorbitant prices for time and repairs. If a dealer cannot be reached easily, write to our Service Department, and they will advise you what to do with your motor. **DO NOT SHIP YOUR MOTOR OR PARTS TO US WITHOUT OUR INSTRUCTIONS TO DO SO, AS WE WILL ACCEPT NO GOODS WITHOUT HAVING FIRST GIVEN OUR WRITTEN AUTHORIZATION FOR THEIR RETURN.**

Aside from supplying the motor with the correct proportions and proper grade of lubricating oil mixed with the gasoline, your Fold-Light requires very little additional attention. What little it does require, however, is highly important.

Fill the gear housing with a good grade of Outboard Motor Gear Grease **AT LEAST ONCE EACH MONTH**, or, if the motor is being used constantly, fill the housing every week.

To fill the gear housing with grease, remove the screw plug.

Then with a grease gun, or other means, pack the gear housing through the opening. Put the screw plug back, and be sure it's in tight.

To make greasing of the gear mechanism as easy as possible, we furnish a three-fillings capacity grease gun with a threaded nozzle to fit the grease plug opening. See accessory catalog.

Outboard Motors Corporation gear grease is the best lubricant for the gear housing of your motor. It insures long life to these vital parts. Supplied in five-pound pails.

Salt Water Instructions

THE FOLD-LIGHT IS BUILT FOR USE IN EITHER FRESH OR SALT WATER. Yet science has NOT succeeded in developing any metal which is totally impervious to the corrosive action of salt water. The materials from which your motor is built, are as nearly "salt water proof" as anybody knows how to make them. This material has been used in our outboard motors for a period of years and has given satisfactory service when used in salt water. Nevertheless, a few instructions, easily carried out, will extend the life and satisfactory performance of your motor when it is used in salt water.

If you've been out in salt water all day, it isn't much trouble to flush your motor off with fresh water when you come ashore. Having done that, set the propeller and housing in a bucket or barrel of fresh water, and rotate the flywheel until the salt water is rinsed out of the pump mechanism, pipes, and cylinder jackets. Follow these simple instruction, and salt water won't hurt your FOLD-LIGHT a bit.

Adjustment of Spark Plug Points

The spark plugs of every Fold-Light motor are carefully adjusted before the motors leave the factory. The adjustment, however, sometimes gets changed from corrosion resulting from continued use, or accidentally when the plugs are removed for any purpose. The correct adjustment of spark plug points is 1/64 of an inch apart. The finger on the contact wrench shows the correct width.

Motors that have been Submerged, and How to Get at the Magneto

With the automatic tilt-up of the Fold-Light, it is very easy to pull the stern of your boat up on the shore for attaching or removing the motor. Do this and you avoid all possibility of dropping your motor overboard. Some users, however, prefer to install their motors with their boats floating, or sometimes circumstances in open waters make this necessary. Accidents may happen to the most careful person, and it is by no means impossible to drop an outboard motor overboard. Careful yachtsmen, and others who find it necessary to handle their motors in boats in the open water, safeguard themselves against such mishaps by tying a length of rope to their motors and tying the other end to the boat. A motor so secured cannot be lost.

A motor that has been submerged is temporarily out of commission. Such a motor must, of course, be dried out thoroughly, before it can be restored to service. The motor is best dried out by removing all fuel, and subjecting it to any form of slow dry warmth. The magneto, however, may require special attention.

If no spark is noticeable at the plugs—proceed as follows: Hold the flywheel rigid and unscrew the flywheel nut, which should automatically release the flywheel, as the starter plate acts as a wheel puller. If the flywheel does not release easily, a sharp rap on the flywheel nut, while the flywheel and crankshaft are lifted and held in this position, will force the crankshaft down and loosen the flywheel. When the flywheel comes off, use care not to lose the keys by which the flywheel is held in engagement with the shaft. After putting the flywheel on again, draw up the nut that holds it as tight as possible. Use a hammer on the wrench to insure good tightening.

Remove and dry the bakelite high tension plate. Then, if the spark is not satisfactory, remove the flywheel again, as above instructed, and expose entire armature to heat for drying. After all moisture has evaporated give the armature two or three coats of good varnish. Be careful not to get varnish on the contact points. Should these instructions fail to remedy the trouble, send the magneto to the factory, or to the nearest Fold-Light Service Station.

Re-magnetizing the Magneto

After a magneto has been in use for a number of years, there is a possibility of the magnets losing their magnetic force. Re-magnetizing can be done at a nominal charge at the factory. Magnetos have been known to retain their magnetic force over a period as long as ten years. Therefore, a magneto should not be considered as having lost its "pep" until such diagnosis has been made by an Authorized Fold-Light representative.

Propeller Shear-off Pin

The propeller shear-off pin prevents damage to the motor if you strike a submerged rock, or other obstruction in the water. This is a soft "safety" pin which passes through the propeller shaft. If you strike a solid obstruction while running at full speed, the shear-off pin shears off—disengaging the propeller from the driving mechanism, thus saving the gears, shafting, and other mechanism from being damaged.

When this happens, the fact is evidenced by the motor continuing to run without the propeller rotating. Naturally the boat does not move. In such an emergency, stop the motor immediately, remove the propeller nut and slip off the wheel, and the repair is quickly made by inserting another shear-off pin. If you have no spare shear-off pin, use a piece of wire, or a nail temporarily.

Safeguard Your Motor Against Theft

Any piece of personal property that can be moved, or carried away, and which has a resale value, is the logical prey of thieves. This applies to your Fold-Light just as it does to a portable typewriter, or an automobile. Keep your motor under lock and key, as you would any other piece of valuable property when not in use. Do not tempt thieves by leaving your motor unguarded in places where a wandering freebooter may run off with it. For further protection fill out the application blank packed in the tool kit covering insurance on your motor at a very small charge. Further particulars will be furnished on request by the National Outboard Association, 333 N. Michigan Ave., Chicago, Ill.

Avoid All Hazards

In the realm of land motoring and motor boating, millions of gallons of gasoline are being handled every day. Yet the number of accidents resulting from gasoline are negligibly few. The fire hazard around motor boats is no greater than with automobiles.

Provident motorists, however, carry a small fire extinguisher in their automobiles. Careful motor boat men do the same in their boats.

Storing the Motor Away

If you are not going to use your Fold-Light for a time, don't store it away in a cellar or other place where it will be exposed to dampness and dust. No sportsman would do such a thing with his guns or fishing rods, and there is no reason why your Fold-Light should not receive the same care that would be accorded to other personal property of lesser values. Dampness and dust may injure the magneto of your motor, cause deterioration of the enamel, and do other damage almost beyond repair.

When storing your motor away **PUT IT IN A DRY PLACE**. If it has been used in salt water, clean it thoroughly with fresh water, and let it dry before putting it away. Drain the water out of the pipes and cylinder jackets as instructed under "CARE OF THE MOTOR IN COLD WEATHER." It is also a wise precaution to remove the spark plugs, put a couple of teaspoons of pure lubricating oil into the cylinders, and then revolve the flywheel several times to spread the oil over the cylinder walls before putting the spark plugs back. Pack the gear housing with grease. Wipe the entire motor over with a cloth saturated with oil. An exterior film of oil won't hurt any piece of machinery, but dampness and rust **WILL**. When these instructions have been carried out, wrap the motor in a piece of canvas, an old blanket, or in a piece of heavy paper, if you have no case, and store it in a dry place.

INSTRUCTIONS AND LIST OF PARTS FOR FOLD-LIGHT

If these simple instructions are carried out, storing will not injure your motor in the least. Further, it will be ready to run, and to render faithful service when you are ready to use it again.

IF YOUR MOTOR IS IN NEED OF ANY REPAIRS—Take advantage of the "dull season" in our repair department. Send it in to the factory, or service station, during the fall or winter months when the mechanics can give it the utmost care and attention without "rushing" the job. If you do this, you'll be ready to "shove off" when the fish begin to bite, or on the very first boating day of the season.

Warranty

WE WARRANT each new Fold-Light Motor to be free from defects in material and workmanship under normal use and service, our obligation under this warranty being limited to making good at the Outboard Motors Corporation factory any part or parts thereof which shall, within three months after delivery of such motor to the original purchaser, be returned to us with transportation charges prepaid, and which our examination shall disclose to our satisfaction to have been thus defective; this warranty being expressly in lieu of all other warranties and representations expressed or implied and of all other liabilities in connection with the sale or use of any Fold-Light Motor.

Outboard Motors Corporation Service Policy

In accordance with the OUTBOARD MOTORS CORPORATION Warranty, parts will be repaired or replaced under the following conditions:

1. That permission has been expressly granted by manufacturer for return of parts.
2. That return shipment is made prepaid and tagged with OUTBOARD MOTORS CORPORATION "Returned Material Identification Tag" properly filled out.
3. That manufacturer's examination discloses actual defect.
4. That customer has paid or will pay transportation charges, on replacement or repaired parts.

Final decision as to defect rests solely with the OUTBOARD MOTORS CORPORATION at Milwaukee, Wisconsin, and no repairs or replacement agreement other than the above will be recognized.

Repair Service

Fold-Light dealers usually carry a complete stock of spare parts. If you need parts, or repair service, consult your dealer. If the name and address of the nearest dealer is not known, write us.

Repair Hints on Fold-Light Motor Proper

The flywheel can be removed by proceeding as follows:

Hold the flywheel rigid and unscrew the flywheel nut, which should automatically release the flywheel, as the starter plate acts as a wheel puller. If the flywheel does not release easily, a sharp rap on the flywheel nut, while the flywheel and crankshaft are lifted and held in this position, will force the crankshaft down and loosen the flywheel.

Be sure that shaft is raised before hitting nut, to avoid bending crankshaft. Remove armature by loosening the armature base pressure spring screws and taking out the pressure springs. After these have been removed the armature can be taken off. Keep armature inside flywheel, or place pieces of steel across pole pieces when magneto is removed for any length of time.

Next remove mufflers, loosen gas line, take off gas tank, inlet water connections, and remove the four screws holding the motor to drive housing. The motor can now be lifted off the drive housing.

Take out spark plugs and remove the carburetor.

INSTRUCTIONS AND LIST OF PARTS FOR FOLD-LIGHT

1. Remove cylinders and inspect cylinder walls—if scored it is best to replace them with new ones, also remove carbon from head of cylinders and exhaust ports.
2. Take out crankcase screws, also flywheel key and remove upper crank case half.
3. Clamp crank shaft in vise, using lead or fiber jaws and remove pistons by taking out spring rings in end of piston pin hole.
4. Try piston pins in connecting rods and if very loose in rods or loose enough to turn in piston, new ones should be installed.
5. Remove piston rings with care, and scrape out carbon in groove—if rings look badly worn, weak or loose, replace with new rings as they are the pep of the motor.
6. When fitting new rings be sure all carbon is removed from ring grooves. When rings are in piston they should be perfectly free.

Remove and look over the connecting rods and, if worn too thin, or burnt too badly, replace with new ones; otherwise, file caps until holes are a little smaller than shaft. Inspect shaft, look over part where connecting rods ride. If scratched, polish with fine emery cloth. Assemble rods on shaft and tighten. Give it a couple of turns to bring out high spots. These can be taken down with a bearing scraper. This gives a good bearing, and is the best for the inexperienced repair man to use.

When finished, rods should not stick on any point when turned. Try crank case bearings and shaft for play. Do not allow too much play, or the crank case compression will be poor. If new bearings are needed, it is best to use a straightening bar to line them up.

This can be done by assembling upper and lower crank case halves, then insert straightening bar in one bearing and run it up lightly to the edge of the other. If bearing is not in line it will be noticed that the bar is off center, leaving bar in case, hit bar down on wooden block having crank case in such position so as to bend bearing straight, do likewise on opposite side. After bar enters both bearings a finer job can be had by pressing down on bar and case and running bar in and out of opposite bearing and feeling edges, pounding bar on block wherever it strikes heavy. When bar strikes four sides evenly then bearing is lined up—do likewise on the bearing.

If no straightening bar is to be had, assemble crank shaft in case minus connecting rods, then by pounding the ends of shaft on a wooden block a lineup can be had—be careful not to pound too hard so as to bend shaft.

Assembling and Timing Motor

1. Assemble connecting rods on crank shaft, being sure that upper connecting rod is on right hand side and lower connecting rod is on left hand side. Put wire through holes in connecting rod screws in such a way that wire will keep screws tight.
2. Place lower crank case in a vise.
3. Making sure that key way in crank shaft is facing you, arrange connecting rods so they will be in the extreme outward position.
4. Leaving rods and shaft in this position, place shaft in lower bearing (with key way up) put on upper half of crank case and tighten screws evenly.
5. Looking at the piston it will be noticed that the top is slanted on one side, turn piston so slanted side will come on bottom and assemble on rod, put in piston pin and spring rings.
6. Put gaskets on cylinders, shellac one side and grease other. Turn piston rings so both openings are opposite of each other.
7. Oil all parts well and slide on cylinder, if new rods have been used or rods refitted, connecting rods will have to be lined up. To do this keep piston at about a half stroke, then by pressing down on cylinder and keeping lower edge against crank case, look at opening on top between cylinder and crank case, now push cylinder upward and look at opening on bottom. When these two openings are alike the rod should be lined up (if not alike, bend rods until so). When motor is lined up properly, shaft should still drop on four points.

Repairing Gear Housing

Remove the four screws holding gear housing to housing. Take off propeller nut and cotter pin, also remove shear-off pin. Pin can be driven out with a small punch or nail. After washing out grease, replace worn parts. The meshing of the gears can now be easily inspected and if gears are not worn too much, perhaps all they need is a little adjusting.

To do this, push bushing in gear housing at propeller end, either inward or outward, depending upon the meshing of the gears, whether meshed too tight or too loose. (Inward for loose gears, outward for tight gears.)

Advice to Beginners*

Government Regulation as to Rule of the Road and the Equipment to be Carried on Motor Craft. By Capt. E. Armitage McCann

If one goes for a bath at Coney Island and holds onto the ropes, it is not necessary to know much about swimming, but it is rather a tame performance. The same applies to cruising, if one is just going to dodge about a few miles from the landing stage it is not needful to know a great deal of navigation, but even for that it is wise to know the rule of the road, so as to avoid dangers and possible heavy fines and damages.

According to law a motor boat, being propelled by machinery, comes under the same rules as the largest ship, and under certain conditions would have the right of way of the Leviathan. However, the small boat is generally expected to keep out of the way.

Every yachtsman, of course, knows that Port is his left side and Starboard his right. That the helm is a real, not imaginary tiller, which is put the opposite way to which it wants to go, so that when you port your helm, the tiller would go to port, but the vessel's head to starboard.

On yachts and motor boats, however, our steering apparatus is so designed that we disregard this porting and starboarding of the helm. We turn the wheel to port and the boat's head to port and vice-versa. To save any confusion, only the direction in which the boat's head is to go will be used here, but it is necessary to understand the terms as they are used in official rules and the like.

*Reprinted from Motor Boat.

Numbering and Recording

Every motor boat over 16 feet in length measured from end to end over the deck, shall be numbered. The numbers on application of owner shall be awarded by the Collector of Customs of the District in which the boat is operated.

Rules of the Road

When meeting another vessel head-on or nearly head-on, each shall alter its course to starboard so as to pass on the port side of the other (keep to the right) and each shall give one short blast on the whistle.

If well over to starboard, keep straight on and give one toot on the whistle. If over to port, keep on and give two toots on the whistle. The other fellow should do the same, but some men persist in coming over to starboard when there is really no need for it; if he does you will also have to steer to starboard and give one blast. It is very bad to have another boat hit you on the starboard side, as you are almost sure to be found in the wrong and lose your case should a lawsuit follow.

When two boats are crossing, that is not nearly end on, nor overtaking, but approaching obliquely so as to involve risk of collision, the one that has the other on her own port side shall keep her course and speed and the one which has the other on her starboard side shall get out of the way, as best she can, but, if possible, not by crossing ahead. The "giving-way" vessel shall give one short whistle if she is altering to starboard, or two if to port, which the "holding-on" boat will answer, but not alter her course.

Any boat overtaking another shall keep out of the way. Overtaking is coming up from a direction more than two points (22 degrees) abaft the beam of the overtaking boat.

INSTRUCTIONS AND LIST OF PARTS FOR FOLD-LIGHT

If for any valid reason you cannot comply with the rules or do not understand those given by the other boat, give the danger signal, which is a number of short blasts, not less than four (don't overdo it) and stop or reverse if necessary.

Three short blasts mean "my engines are going full speed astern."

Motor boats must keep clear of sailing craft and row boats.

Keep on the starboard side of the fairway or mid-channel when possible.

Break any of these rules, if absolutely necessary in order to avert immediate danger, but be quite sure it is immediate, as for instance when you are supposed to hold your course and speed, but from fog or other cause you find the other boat, which should give way, is so close that there is no room for her to get out of your way. Then you must act according to your judgment, but be sure to give the whistle signal.

On coming out of your berth, give a long blast on the whistle, if there is any chance of other vessels being close and give the same signal on approaching a bend if you cannot see around it.

When approaching another boat, watch how she bears from you and if the bearing draws ahead, she will pass ahead, and vice-versa, but if it remains the same there will be a collision unless one of you alters your course or speed.

Fog Signals

In fog, mist, falling snow or heavy rainstorms, whether by day or by night, sound signals shall be given as follows:

When under way, that is, not at anchor or tied to a dock, you must sound at intervals of not more than one minute on the whistle or fog-horn, one prolonged blast (two to five seconds).

If towing, you must and if being towed you may give one long blast followed by two short blasts. Be careful to try to pass astern of a vessel giving this signal, or you may foul the tow, or the rope.

When at anchor you must ring the bell rapidly for about five seconds every minute.

Do not give the steering signals unless you can see the other vessel, even if she is close-to. Use the fog signals only, until you see her, or pass.

Unnecessary sounding of the whistle is prohibited.

These rules apply to all the inland waters of the United States and to the high seas, except that there, you do not have to reply to a steering signal unless you are also altering your course.

As Soon as You Get Under Way

Having started the motor, your boat is under way, and holding it upon its course becomes a pleasure. After you have set the needle valve, it is not necessary to pay any more attention to this part. The speed is regulated by moving the spark control lever and the carburetor control lever between the fast and slow positions. **JUST ONE PRECAUTION.** As soon as you get under way, take a look at your motor to be sure that water is circulating through the cooling system. When the water fails to circulate, ninety-nine times out of a hundred the trouble may be traced to weeds, mud, or other foreign substances having clogged the water intake in gear housing. If the intake is unobstructed and the water still refuses to circulate, consult the more detailed instructions, page 5.

CONTINUED RUNNING OF YOUR FOLD-LIGHT WITHOUT WATER CIRCULATING THROUGH THE COOLING SYSTEM WILL CAUSE SERIOUS DAMAGE—JUST AS AN AUTOMOBILE WOULD BE DAMAGED BY RUNNING IT WITH AN EMPTY RADIATOR. SCORED CYLINDERS AND REPAIR BILLS ARE THE PENALTY OF SUCH CARELESSNESS.

What to Take With You

When you go for a spin in your Fold-Light, take an extra supply of fuel along. The motor tank contains enough for about two hours operation with the motor running at full speed. But it is advisable to carry an extra supply of gasoline, properly mixed with lubricating oil, and avoid the risk of running out of fuel unexpectedly. Don't forget to take your life jacket.

INSTRUCTIONS AND LIST OF PARTS FOR FOLD-LIGHT

Take your oars along, too. Fold-Lights are built to eliminate oar drudgery, and the chances are you'll not need them. On the other hand, no mechanical device has yet been made so perfect that it cannot fail. Even a \$5,000 automobile has to be towed in occasionally.

There is **NO NECESSITY WHATSOEVER** for carrying a lot of spare parts. Outboard Motors Corporation motors have made long cruises—cruises of 1,000 miles or more without any repairs being necessary. It is impossible to carry enough spare parts to rebuild a motor, and besides, there's no need for it, except under very unusual circumstances. The tools that come with the motor and a length of hay wire, and an extra starter rope, possibly a couple of extra shear-off pins and a spark plug will cover all the requirements of ninety-nine per cent of Fold-Light users.

Care of Motor in Cold Weather

If you are using your motor, or storing it away, when the temperature is down to the freezing point, or freezing weather may be expected, it is important that precautions against a frozen Fold-Light be taken. Your Fold-Light will freeze in cold weather just as the radiator of an automobile will, if not given proper attention. A frozen motor usually means cracked pipes and water jackets.

There is not the slightest danger of your motor freezing while in actual use. The warmth generated by the combustion of the explosive gases prevents that danger. But, when your Fold-Light is idle, or before storing it away in cold weather, drain the motor while in its upright position. This lets the water run out of the cylinder jackets and pipes, leaving nothing to freeze and burst the mechanism.

All Fold-Lights Increase in Speed after Use

On your first few trips with a brand new Fold-Light, **DON'T BE DISCOURAGED BECAUSE** some fellow with an old Fold-Light runs away from your new model. All Fold-Lights gain speed and increase in power and flexibility after they are "broken in." After 50 hours they develop full power and speed.



Canvas Carrying Case

This canvas motor carrying case is designed with self-adjusting straps to distribute weight, making for easy carrying. Made of olive drab duck, pre-shrunk and waterproof; provided with a staunch but light wood bottom. May be conveniently carried on running board of automobile, for which attachment fittings are furnished at a small additional charge. Parcel post weight, 8 pounds.



Fold-Light Trunk

Especially designed for Fold-Light and occupies but very little more space than motor alone. Fabricated of light, durable metal which is reinforced to withstand hard handling. Motor rests firmly against felt pads. Cover held securely with two strong, quick-operating clamps and also fitted with lock. Trunk carries from a comfortable handle, solidly riveted to top.

GUARANTEE

Be sure that you get genuine FOLD-LIGHT parts, as the OUTBOARD MOTORS CORPORATION guarantee does not hold good when articles are used that have been manufactured by others than the OUTBOARD MOTORS CORPORATION.

FOLD-LIGHT PARTS CATALOG

The prices in this catalog take effect April 1st, 1930, and are subject to change without notice.

HOW TO ORDER

These instructions are given to enable you to order parts properly, and if carefully followed, all possibility for errors will be eliminated.

1. When ordering be sure to state:

- A. Give number, horsepower, year and model of motor for which parts are desired. (If the number of the motor for which parts are

required has been removed, state the horsepower and the year of purchase from factory).

- B. Give part number of article wanted (not photo number).

- C. Give description of part—(as listed in catalog).

2. Follow style shown below when ordering.

SAMPLE ORDER.

KINDLY USE THIS ORDER BLANK

OUTBOARD MOTORS CORPORATION
MILWAUKEE, WISCONSIN

Charge to _____ Your Name _____ Date _____ 19____

Address _____

City _____ State _____

Ship to _____ When ship _____ { Rush
At once
Date

Via _____ Parcel Post _____ (Check or insert date)

WRITE PLAINLY THE ITEMS YOUR SHIPMENT IS TO CONSIST OF:

Quantity	For Model	Part No.	Name and Description	Price	Total
2	Motor	100106	Piston Rings		
1	Number	190093	Spark Plug		

Write the order plainly on repair part order blank.

When possible save time by ordering parts through established Fold-Light Dealers, Service Stations, or distributing branches.

The code words can be used to advantage when ordering by telegram but they should not be used when ordering by letter, or by telephone.

Terms: Cash With Order C.O.D.

In ordering parts, to avoid C. O. D. shipments and extra charges, all orders should be accompanied by cash. Save time and money by remitting sufficient cash to cover cost of parts and TRANSPORTATION CHARGES. Stamps are accepted in payment of all orders not over \$1.00. The right to hold all orders unaccompanied by cash is reserved by the Outboard Motors Corporation.

A minimum charge of \$0.50 net will be made on all orders amounting to less than this amount. We reserve the right to furnish additional parts to make up the difference.

OUTBOARD MOTORS CORPORATION

MILWAUKEE, WISCONSIN, U. S. A.

Cable Address "Outboard"

Codes ABC—5th Edition—5th improved—6th Edition—Bentley's

Do Not
Order by
Photo
No.

In
Ordering
Use This
Number

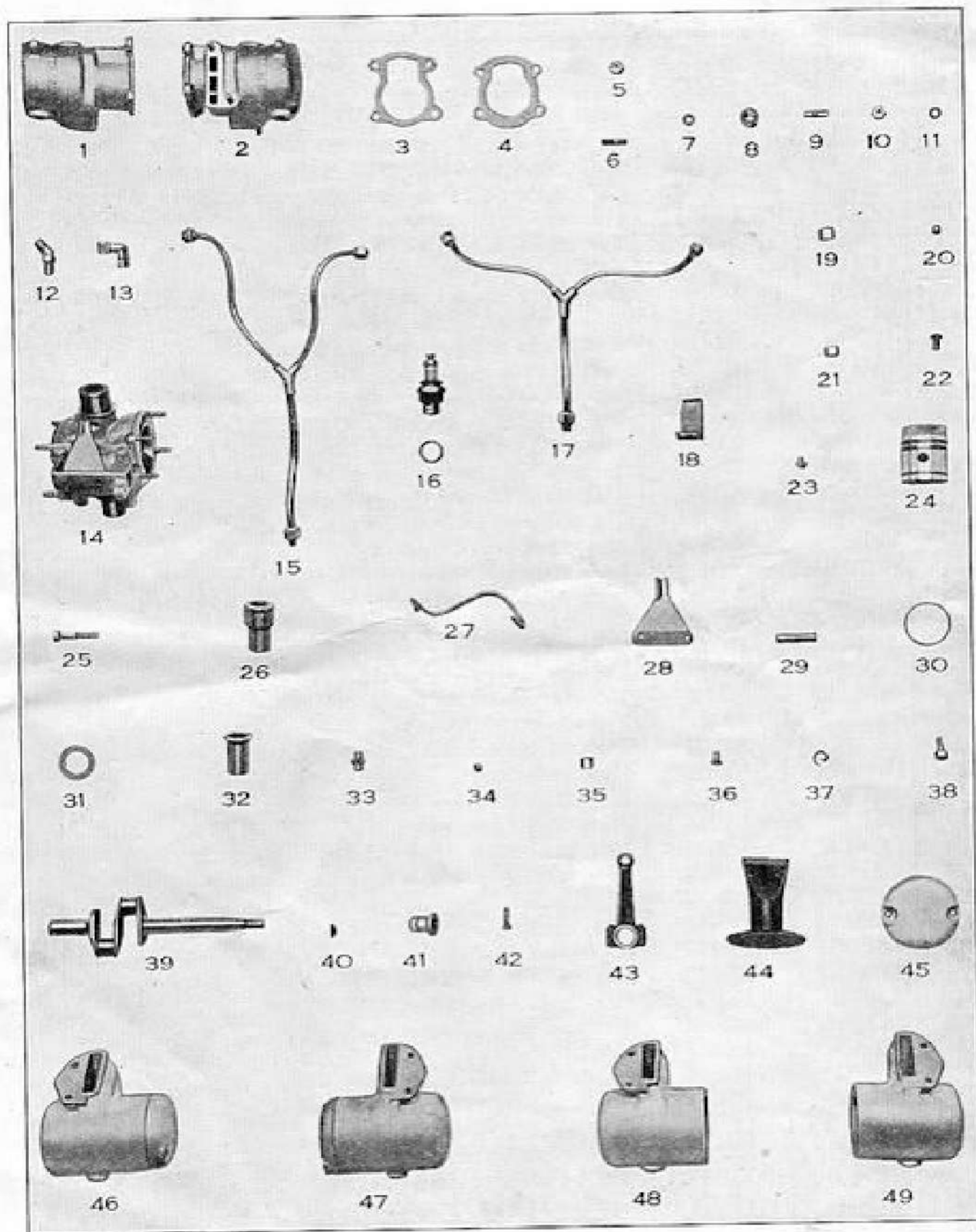
Fold-Light Parts Catalog

A minimum charge
of 50c will be made on
all orders amounting
to less than that
amount.

Photo No.	Code Word	Part No.	NAME OF PART	Price Each
POWER HEAD				
1	OABCB	190192	Cylinder and stud assembly L. H.	10.00
2	OABBA	190191	Cylinder and stud assembly R. H.	10.00
3	OABED	170066	Cylinder gasket L. H.	.05
4	OABDC	170065	Cylinder gasket R. H.	.05
5	OABGF	130201	Cylinder stud nut	.05
6	OABFE	130238	Cylinder stud	.15
7	OABHG	120054	Cylinder stud nut lockwasher	.05
8	OABIH	130269	Inlet water plug	.35
8	OABJH	130269	Outlet water plug	.35
9	OABML	130238	Muffler stud	.15
9	OABMLJ	130238	Carburetor stud	.15
10	OABNM	130201	Muffler stud nut	.05
10	OABNM	130201	Carburetor stud nut	.05
11	OABON	120054	Muffler stud nut lockwasher	.05
11	OABON	120054	Carburetor stud nut lockwasher	.05
12	OABSR	100195	Water inlet fitting 45°	.25
13	OABTS	100269	Water outlet fitting 90°	.50
14	OABAZ	190197	Crank case assembly	12.50
15	OABUT	190332	Inlet water pipe assembly	1.55
16	OABKJ	190093	Spark plug with gasket	.75
*	OABLK	170181	Spark plug hood	.35
17	OABVU	190333	Outlet water pipe assembly	1.75
18	OACKL	120114	Gear housing catch spring	.15
19	OABWV	130476	Compression nut $\frac{3}{16}$ "	.10
20	OABYX	130475	Compression sleeve $\frac{3}{16}$ "	.05
21	OABXW	130693	Compression nut $\frac{1}{4}$ "	.10
22	OABZY	130694	Compression sleeve $\frac{1}{4}$ "	.10
23	OACLM	130255	Gear housing catch spring screw	.05
24	OACMN	190510	Piston and rings	5.00
25	OACCD	130254	Crank case screws	.10
26	OACAB	100315	Crankshaft bushing upper	.75
27	OACEF	130276	Oil pipe	.35
28	OACIJ	120232	Ratchet spring	.25
29	OACOP	130220	Piston pin	.45
30	OACNO	100106	Piston ring	.40
31	OACDE	120106	Armature washer	.05
32	OACBC	100316	Crankshaft bushing lower	.50
33	OACFG	130308	Oil pipe fitting	.15
34	OACHI	130494	Compression sleeve $\frac{3}{16}$ "	.05
35	OACGH	130492	Compression nut $\frac{3}{16}$ "	.05
36	OACJK	160048	Ratchet spring rivet	.05
37	OACPQ	120110	Piston pin spring ring	.05
38	OACCB	130628	Muffler casting cap screw	.20
39	OACST	160045	Crankshaft—For motors 1620001 to 1620499	10.50
*	OACTU	160079	Crankshaft—For motors 1620500 and up	9.50
40	OACUV	120187	Crankshaft key	.05
41	OACVW	130221	Flywheel nut	.50
42	OACRS	130203	Connecting rod screw	.20
43	OACQR	190511	Connecting rod assembly	3.00
44	OACOC	190408	Muffler baffle	1.25
45	OACBA	100213	Muffler casting cap	.80
46	OACYZ	100133	Muffler casting R. H.	1.75
47	OACZA	100134	Muffler casting L. H.	1.75
48	OACWX	190377	Muffler assembly R. H.	4.50
49	OACXY	190378	Muffler assembly L. H.	4.50

ORDER FROM YOUR DEALER
ORDER BY PARTS NAME

ORDER BY PART NUMBER
ORDER GIVING MOTOR NUMBER



SAVE TIME AND MONEY

Include with Remittance sufficient funds to cover Transportation Charges
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Do Not
Order by
Photo
No.

In
Ordering
Use This
Number

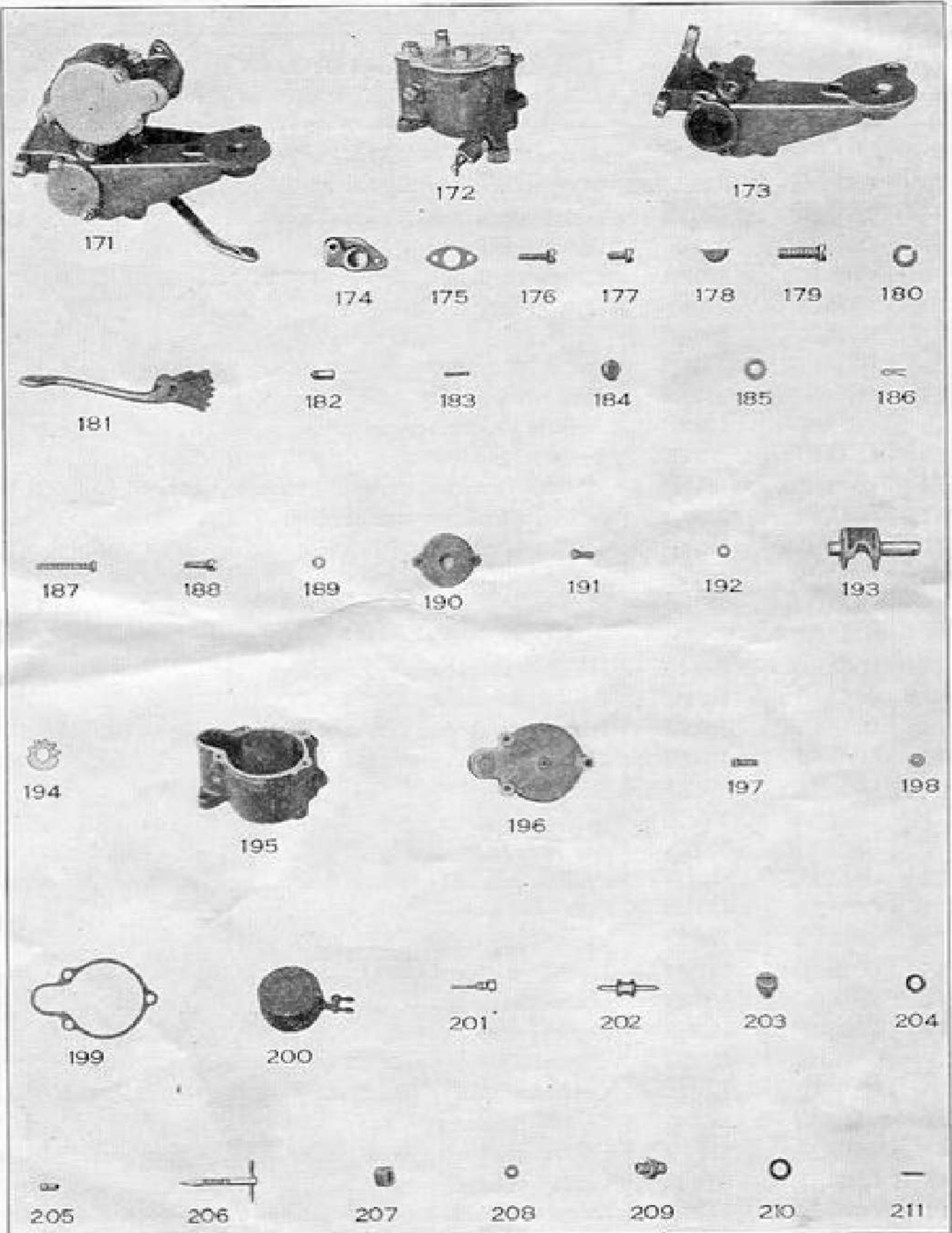
Fold-Light Parts Catalog

A minimum charge
of 50c will be made on
all orders amounting
to less than that
amount.

Photo No.	Code Word	Part No.	NAME OF PART	Price Each
CARBURETOR				
171	OCDAB	190246	Carburetor assembly complete	10.00
172	OCEBC	190516	Carburetor only (Less steering handle bracket)	5.00
173	OCFCD	190514	Steering handle bracket and fulcrum	2.50
174	OCOPU	160050	Carburetor strainer cap .....	.40
175	OCPQV	170072	Carburetor strainer cap gasket .....	.05
176	OCQRW	130266	Carburetor strainer cap screw long .....	.05
177	OCRSX	130265	Carburetor strainer cap screw short .....	.05
178	OCSTY	120118	Carburetor strainer screen .....	.10
179	OCTUZ	130153	Carburetor screw .....	.10
180	OCUVA	120054	Carburetor screw lockwasher .....	.05
181	OCGDE	190515	Throttle lever assembly	2.00
182	OCHEF	130594	Throttle lever friction pin .....	.15
183	OCIFG	170186	Throttle lever friction pin spring .....	.10
184	OCJGH	170185	Throttle lever shaft friction spring .....	.15
185	OCKHI	120338	Throttle lever shaft washer .....	.05
186	OCLIJ	120337	Throttle lever shaft cotter pin .....	.05
187	OCMIK	130591	Carburetor body screw 1 1/4" long .....	.10
188	OCNKL	130585	Carburetor body screw 1/2" long .....	.10
189	OCOLM	120122	Carburetor body screw lockwasher .....	.05
190	OCPMN	100322	Throttle valve cover .....	.25
191	OCQNO	130590	Throttle valve cover screw .....	.05
192	OCOLM	120122	Throttle valve cover screw lockwasher .....	.05
193	OCROP	100320	Throttle valve	2.00
194	OCSPQ	100321	Throttle valve pinion .....	.50
195	OCTQR	100319	Carburetor body	4.00
196	OCURS	100323	Float bowl cover .....	.45
197	OCNKL	130585	Float bowl cover screw .....	.10
198	OCOLM	120122	Float bowl cover screw lockwasher .....	.05
199	OCVST	170184	Float bowl cover gasket .....	.15
200	OCWTU	190513	Float	1.50
201	OCXUV	130588	Float lever pinion screw .....	.25
202	OCYVW	190517	Inlet valve	1.50
203	OCZWX	130593	Float bowl inspection screw .....	.25
204	OCFGL	120339	Float bowl inspection screw gasket .....	.10
205	OCGHM	130595	Nozzle .....	.50
206	OCHIN	190518	Needle valve .....	.80
*	OCIJO	130592	Channel plug .....	.10
207	OCJKP	130587	Needle valve packing nut .....	.15
208	OCKLQ	170183	Needle valve packing .....	.10
209	OCLMR	130586	Stuffing box gland .....	.50
210	OCMNS	170182	Stuffing box gland gasket .....	.05
211	OCNOT	130584	Throttle valve pinion pin .....	.05

ORDER FROM YOUR DEALER
ORDER BY PARTS NAME

ORDER BY PART NUMBER
ORDER GIVING MOTOR NUMBER



SAVE TIME AND MONEY

Include with Remittance sufficient funds to cover Transportation Charges
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Do Not
Order by
Photo
No.

In
Ordering
Use This
Number

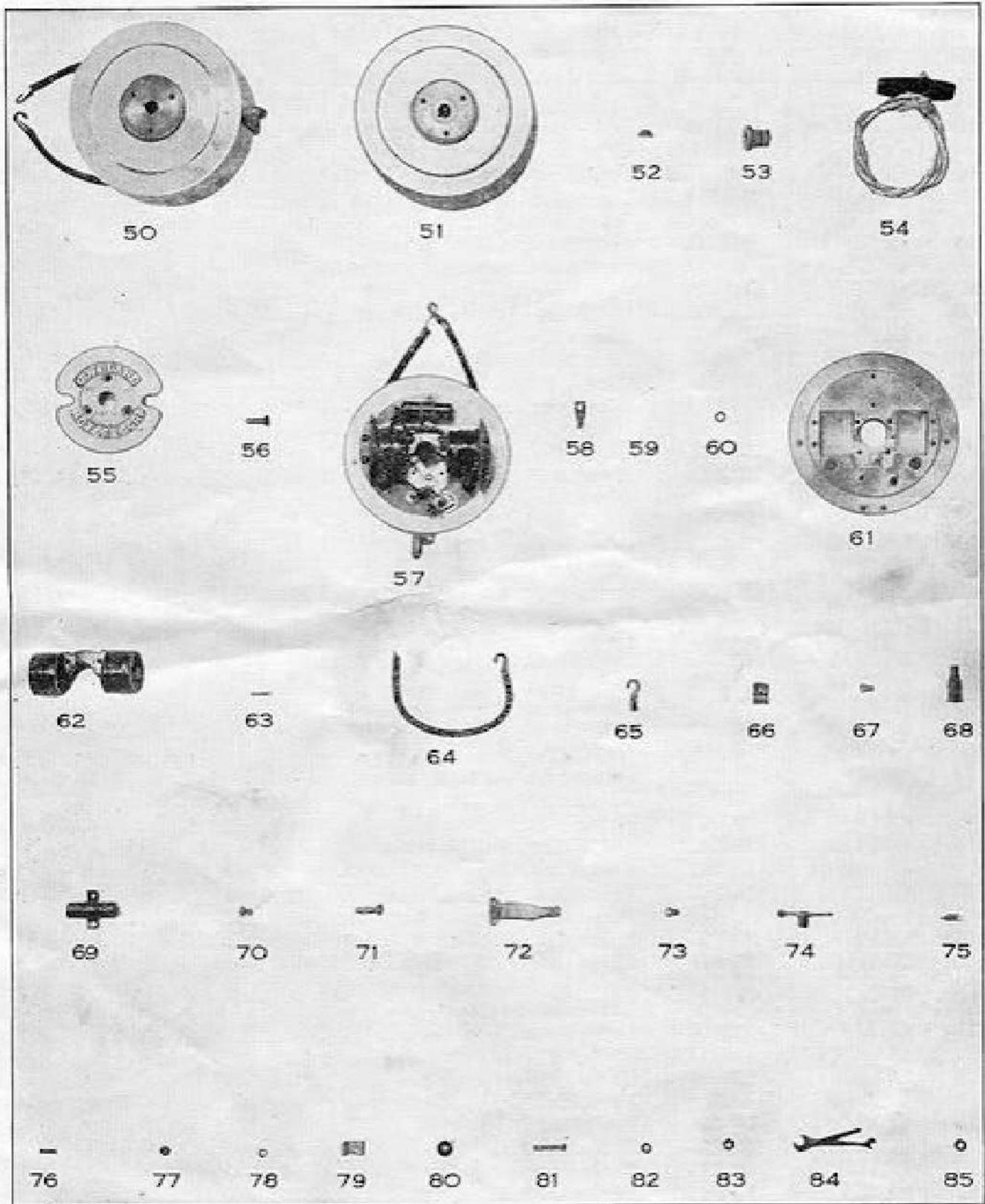
Fold-Light Parts Catalog

A minimum charge
of 50c will be made on
all orders amounting
to less than that
amount.

Photo No.	Code Word	Part No.	NAME OF PART	Price Each
MAGNETO				
50	OMABA	190395	Magneto complete without starter.....	37.50
51	OMACB	190406	Magneto flywheel.....	17.50
52	OMADC	120187	Flywheel key.....	.05
53	OMAED	130221	Flywheel nut.....	.50
54	OMAFE	190256	Starter ope.....	.25
55	OMAGF	100094	Starter plate.....	1.25
56	OMAHG	130354	Starter plate screw.....	.05
57	OMAIH	190396	Armature base complete.....	20.00
58	OMAJI	120108	Armature base pressure spring.....	.05
59	OMAKJ	130258	Armature base pressure spring screw.....	.05
60	OMALK	120122	Armature base pressure spring screw lockwasher.....	.05
61	OMAML	190392	Armature base and stud assembly.....	3.50
62	OMANM	190189	Coil complete.....	7.00
63	OMAON	130259	Coil assembly screw.....	.05
64	OMAPO	190190	High tension cable complete.....	.50
65	OMAQP	120051	High tension cable terminal.....	.10
66	OMARQ	120001	High tension cable clamp.....	.05
67	OMASR	130147	High tension cable clamp screw.....	.05
68	OMATS	190469	High tension socket with safety gap.....	.25
69	OMAUT	170067	Condenser.....	.75
70	OMAVU	130150	Condenser bolt and nut.....	.05
71	OMAWV	130426	Armature head screw.....	.05
72	OMAXW	100263	Armature handle.....	.75
73	OMAYX	130147	Armature handle screw.....	.05
74	OMAZY	190000	Timer finger assembly.....	.65
75	OMAYZ	170033	Timer finger spring.....	.05
76	OMBAB	130144	Contact point and screw.....	.35
77	OMBBC	185144	Contact screw nut.....	.05
78	OMBCD	120052	Contact screw lockwasher.....	.05
79	OMBDE	120184	Contact screw plate.....	.25
80	OMBEF	170132	Contact insulating washer.....	.05
81	OMBFG	130448	Contact plate screw.....	.05
82	OMBGH	120193	Contact plate screw brass washer.....	.05
83	OMBHI	130450	Contact plate screw nut.....	.05
84	OMBIJ	190151	Magneto wrench.....	.15
85	OMBJK	170133	Contact plate screw fibre washer.....	.05

ORDER FROM YOUR DEALER
ORDER BY PARTS NAME

ORDER BY PART NUMBER
ORDER GIVING MOTOR NUMBER



SAVE TIME AND MONEY

Include with Remittance sufficient funds to cover Transportation Charges
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Do Not
Order by
Photo
No.

In
Ordering
Use This
Number

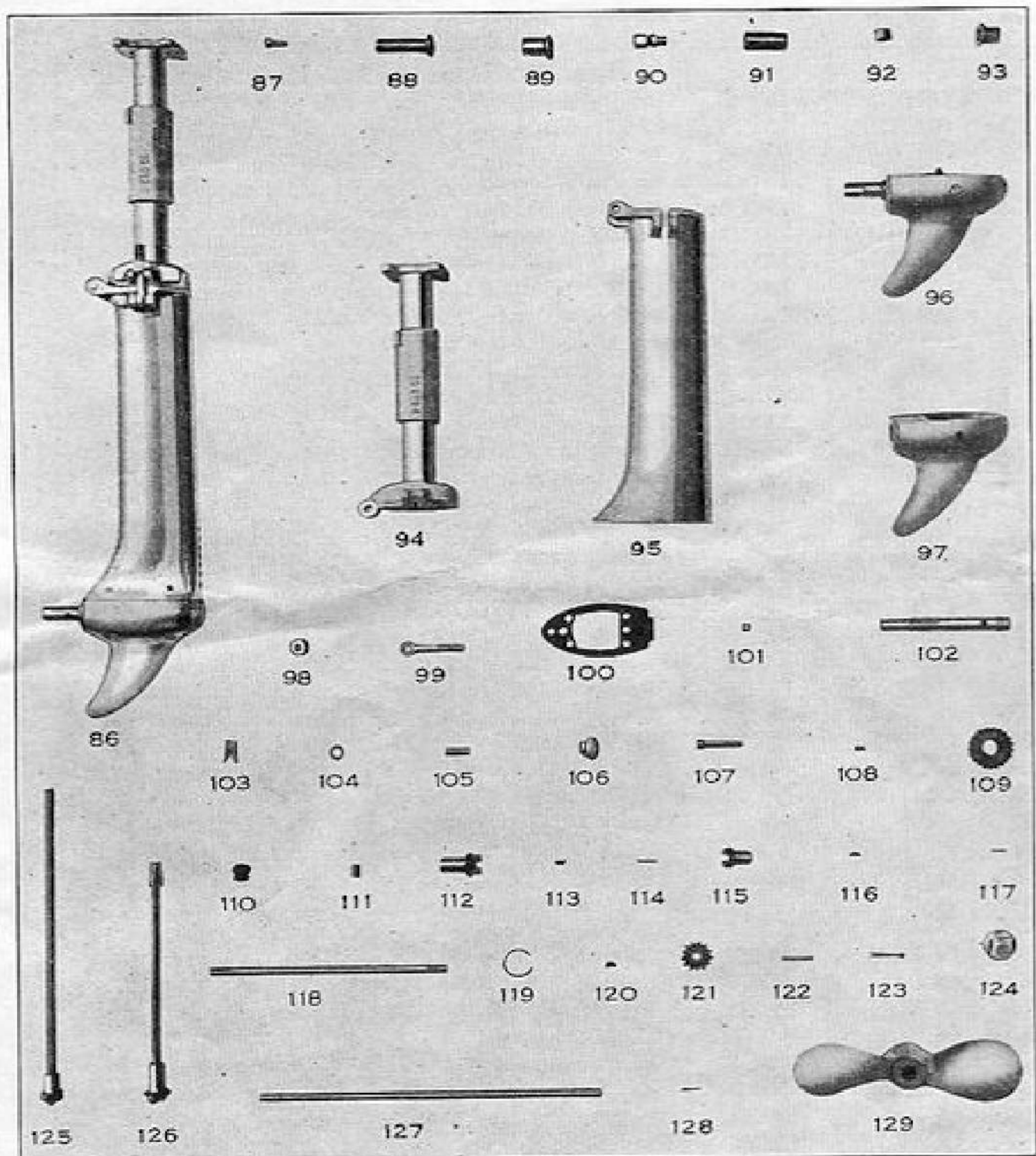
Fold-Light Parts Catalog

A minimum charge
of 50c will be made on
all orders amounting
to less than that
amount.

Photo No.	Code Word	Part No.	NAME OF PART	Price Each
LOWER UNIT				
86	OLBAC	190243	Lower unit assembly complete with pivot bearing.....	42.50
87	OLMLN	130395	Drive shaft housing screw.....	.10
88	OLKLM	100317	Pinion shaft bushing.....	1.25
89	OLKJL	100318	Drive shaft housing bushing.....	.50
90	OLHGI	130344	Water pipe fittings.....	.35
91	OLFDH	100312	Gear housing bushing propeller end.....	.50
92	OLHFJ	100313	Gear housing bushing front short.....	.25
93	OLGEI	100314	Gear housing bushing front long.....	.50
94	OLCBD	190253	Drive shaft housing & bushing assembly.....	9.00
95	OLECG	190505	Pinion shaft housing & bushing assembly.....	13.50
96	OLUSW	190506	Gear housing assembly complete.....	13.50
97	OLTRV	190507	Gear housing & bushing assembly.....	7.50
*	OLVTX	130631	Hinge pin.....	.20
*	OLWUY	130642	Hinge pin nut.....	.10
*	OLXVA	130265	Hinge pin washer.....	.05
98	OLFEG	130055	Hinge lock bolt nut.....	.25
99	OLDCE	130062	Hinge lock bolt.....	.40
100	OLLJN	170064	Gear housing gasket.....	.05
101	OLJHL	130275	Grease plug.....	.10
102	OLMKO	130231	Propeller shaft.....	2.75
103	OLSRT	120117	Drive shaft key for motors 1620001 to 1620499.....	.20
104	OLGFH	120124	Hinge lock bolt washer.....	.05
105	OLEDF	130242	Hinge lock bolt pin.....	.10
106	OLIGK	130582	Gear housing plug.....	.40
107	OLKIM	130253	Gear housing screw.....	.20
108	OLOMQ	130233	Propeller shaft gear set screw.....	.10
109	OLNLP	190242	Propeller shaft gear & key assembly.....	3.75
110	OLIHJ	170060	Rubber ferrule.....	.05
111	OLJIK	130232	Rubber ferrule brass liner.....	.10
112	OLPOQ	130248	Drive shaft coupler.....	1.25
113	OLQPR	120128	Drive shaft coupler key.....	.05
114	OLRQS	130267	Drive shaft coupler pin.....	.05
115	OLXWY	130247	Pinion shaft coupler.....	1.00
116	OLYXZ	130267	Pinion shaft coupler pin.....	.05
117	OLZYA	120128	Pinion shaft coupler key.....	.05
118	OLONP	130263	Drive shaft only for motors 1620001 to 1620499.....	1.35
118	OLWUY	130607	Drive shaft only for motors 1620500 & up.....	1.25
119	OLUTV	120119	Drive shaft locking spring ring.....	.05
120	OLDBF	120128	Drive gear key.....	.05
121	OLAZB	130250	Drive gear.....	2.25
122	OLQOS	130217	Propeller shear pin.....	.05
123	OLSQU	120099	Propeller nut cotter pin.....	.05
124	OLRPT	130228	Propeller nut.....	.75
125	OLVUW	190251	Pinion shaft assembly.....	3.50
126	OLNMO	190250	Drive shaft assembly for motors 1620001 to 1620499.....	3.00
126	OLVTX	190533	Drive shaft assembly for motors 1620500 & up.....	3.00
127	OLWVX	130264	Pinion shaft only.....	2.00
128	OLTSU	130270	Drive shaft key pin for motors 1620001 to 1620499.....	.05
129	OLPNR	100105	Propeller.....	3.50

ORDER FROM YOUR DEALER
ORDER BY PARTS NAME

ORDER BY PART NUMBER
ORDER GIVING MOTOR NUMBER



SAVE TIME AND MONEY

Include with Remittance sufficient funds to cover Transportation Charges
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Do Not
Order by
Photo
No.

In
Ordering
Use This
Number

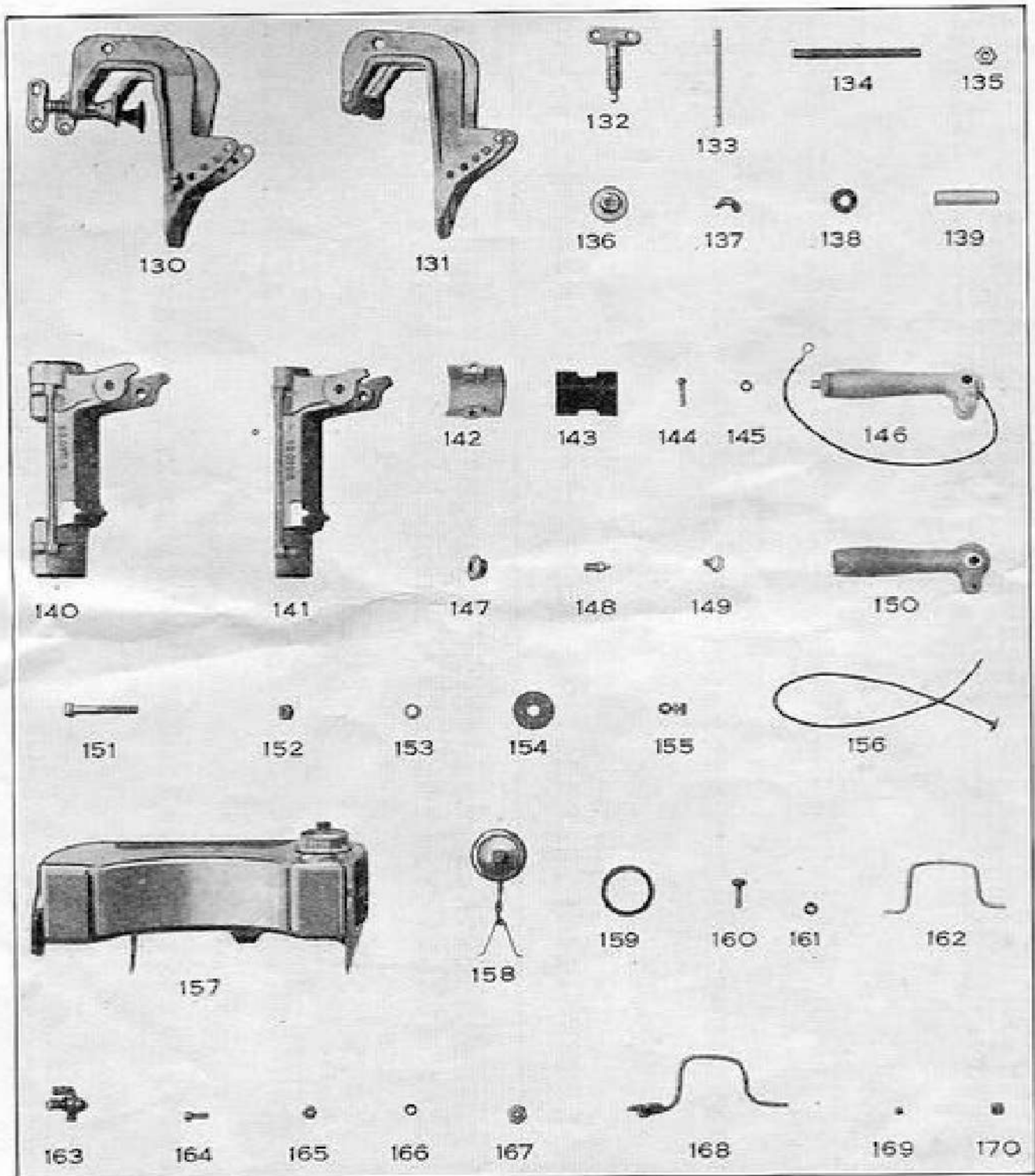
Fold-Light Parts Catalog

A minimum charge
of 50c will be made on
all orders amounting
to less than that
amount.

Photo No.	Code Word	Part No.	NAME OF PART	Price Each
BRACKET AND STEERING HANDLE				
130	ORDBA	190249	Bracket assembly.....	8.50
131	ORDCB	100109	Bracket only.....	6.25
132	ORDDC	160041	Thumb screw.....	.50
133	ORDFE	130067	Bracket adjusting bolt.....	.15
134	ORDHG	130236	Bracket tilting bolt.....	.45
135	ORDIH	130243	Bracket tilting bolt nut.....	.10
136	ORDED	160051	Thumb screw button.....	.25
137	ORDGF	160009	Bracket adjusting bolt wing nut.....	.05
138	ORDJI	170061	Bracket tilting bolt friction washer.....	.05
139	ORDKJ	130277	Bracket tilting bolt spacer.....	.20
140	ORDLK	190508	Pivot bearing assembly.....	8.50
141	ORDNM	100125	Pivot bearing.....	3.00
142	ORDML	100126	Pivot bearing cap.....	.45
143	ORDQP	190244	Pivot bearing bushing assembly.....	1.50
144	ORDON	130353	Pivot bearing screw.....	.05
145	ORDPO	120054	Pivot bearing screw lockwasher.....	.05
146	ORDRQ	190247	Steering handle assembly.....	2.75
147	ORDUT	130260	Steering handle cut out button retainer.....	.25
148	ORDTS	130235	Steering handle cut out button.....	.20
149	ORDVU	170062	Steering handle cut out button spring.....	.05
150	ORDSR	190648	Steering handle & lock pin assembly.....	2.50
151	ORDVX	130268	Steering handle bracket bolt.....	.50
152	ORDZY	130262	Steering handle bracket bolt nut.....	.15
153	ORDAZ	120121	Steering handle bracket bolt washer.....	.05
154	ORDBA	120086	Steering handle socket washer.....	.05
155	ORDXW	120191	Cut out button wire terminal.....	.05
156	ORDWV	190501	Cut out button wire assembly.....	.25
GAS TANK				
157	OGEB A	190254	Gas tank assembly.....	9.50
158	OGECB	190257	Gas tank filler cap assembly.....	.85
159	OGEFE	170068	Gas tank filler cap gasket.....	.05
160	OGEDC	130583	Gas tank filler cap vent screw.....	.20
161	OG EED	170070	Gas tank filler cap vent screw gasket.....	.05
162	OG EON	130304	Gas pipe only.....	.30
163	OGEGF	190360	Gas tank shut off cock.....	.60
164	OG EHG	130153	Gas tank cap screw.....	.10
165	OG EIH	130490	Gas tank cap screw nut.....	.05
166	OG EJI	120054	Gas tank cap screw nut lockwasher.....	.05
167	OG EKJ	130262	Gas tank to handle bracket nut.....	.15
168	OG ELK	190193	Gas pipe assembly with strainer cover.....	.75
169	OG ENM	130494	Compression sleeve 3/8".....	.05
170	OG EML	130492	Compression nut 3/8".....	.05

ORDER FROM YOUR DEALER
ORDER BY PARTS NAME

ORDER BY PART NUMBER
ORDER GIVING MOTOR NUMBER



SAVE TIME AND MONEY

Include with Remittance sufficient funds to cover Transportation Charges
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CROSS INDEX

Part No.	Photo No.	Page No.	Price	Part No.	Photo No.	Page No.	Price
100094	55	22	1.25	130228	124	24	.75
100105	129	24	3.50	130231	102	24	2.75
100106	30	18	.40	130232	111	24	.10
100109	131	26	6.25	130233	108	24	.10
100125	141	26	3.00	130235	148	26	.20
100126	142	26	.45	130236	134	26	.45
100133	46	18	1.75	130238	6	18	.15
100134	47	18	1.75	130242	105	24	.10
100195	12	18	.25	130243	135	26	.10
100213	45	18	.80	130247	115	24	1.00
100263	72	22	.75	130248	112	24	1.25
100269	13	18	.50	130250	121	24	2.25
100312	91	24	.50	130253	107	24	.20
100313	92	24	.25	130254	25	18	.10
100314	93	24	.50	130255	23	18	.05
100315	26	18	.75	130258	59	22	.05
100316	32	18	.50	130259	63	22	.05
100317	88	24	1.25	130260	147	26	.25
100318	89	24	.50	130262	152	26	.15
100319	195	20	4.00	130263	118	24	1.35
100320	193	20	2.00	130264	127	24	2.00
100321	194	20	.50	130265	177	20	.05
100322	190	20	.25	130266	176	20	.05
100323	196	20	.45	130267	114	24	.05
120001	66	22	.05	130268	151	26	.50
120051	65	22	.10	130269	8	18	.35
120052	78	22	.05	130270	128	24	.05
120054	7	18	.05	130275	101	24	.10
120086	154	26	.05	130276	27	18	.35
120099	123	24	.05	130277	139	26	.20
120106	31	18	.05	130304	162	26	.30
120108	58	22	.05	130308	33	18	.15
120110	37	18	.05	130344	90	24	.35
120114	18	18	.15	130353	144	26	.05
120117	103	24	.20	130354	56	22	.05
120118	178	20	.10	130395	87	22	.10
120119	119	24	.05	130426	71	22	.05
120121	153	26	.05	130448	81	22	.05
120122	189	20	.05	130450	83	22	.05
120124	104	24	.05	130475	20	18	.05
120128	113	24	.05	130476	19	18	.10
120184	79	22	.25	130490	165	26	.05
120187	40	18	.05	130492	35	18	.05
120191	155	26	.05	130494	34	18	.05
120193	82	22	.05	130582	106	24	.40
120232	28	18	.25	130583	160	26	.20
120265	*	24	.05	130584	211	20	.05
120337	186	20	.05	130585	188	20	.10
120338	185	20	.05	130586	209	20	.50
120339	204	20	.10	130587	207	20	.15
130055	98	24	.25	130588	201	20	.25
130062	99	24	.40	130590	191	20	.05
130067	133	26	.15	130591	187	20	.10
130144	76	22	.35	130592	*	20	.10
130147	67	22	.05	130593	203	20	.25
130150	70	22	.05	130594	182	20	.15
130153	179	20	.10	130595	205	20	.50
130201	5	18	.05	130607	118	24	1.25
130203	42	18	.20	130628	38	18	.20
130217	122	24	.05	130631	*	24	.20
130220	29	18	.45	130642	*	24	.10
130221	41	18	.50	130693	21	18	.10
				130694	22	18	.10

CROSS INDEX

Part No.	Photo No.	Page No.	Price	Part No.	Photo No.	Page No.	Price
160009	137	26	.05	190243	86	24	42.50
160041	132	26	.50	190244	143	26	1.50
160045	39	18	10.50	190246	171	20	10.00
160048	36	18	.05	190247	146	26	2.75
160050	174	20	.40	190249	130	26	8.50
160051	136	26	.25	190250	126	24	3.00
160079	"	18	9.50	190251	125	24	3.50
170033	75	22	.05	190253	94	24	9.00
170060	110	24	.05	190254	157	26	9.50
170061	138	26	.05	190256	54	22	.25
170062	149	26	.05	190257	158	26	.85
170064	100	24	.05	190332	15	18	1.55
170065	4	18	.05	190333	17	18	1.75
170066	3	18	.05	190360	163	26	.60
170067	69	22	.75	190377	48	18	4.50
170068	159	26	.05	190378	49	18	4.50
170070	161	26	.05	190392	61	22	3.50
170072	175	20	.05	190395	50	22	37.50
170132	80	22	.05	190396	57	22	20.00
170133	85	22	.05	190406	51	22	17.50
170181	"	18	.35	190408	44	18	1.25
170182	210	20	.05	190469	68	22	.25
170183	208	20	.10	190501	156	26	.25
170184	199	20	.15	190505	95	24	13.50
170185	184	20	.15	190506	96	24	13.50
170186	183	20	.10	190507	97	24	7.50
185144	77	22	.05	190508	140	26	8.50
190000	74	22	.65	190510	24	18	5.00
190093	16	18	.75	190511	43	18	3.00
190151	84	22	.15	190513	200	20	1.50
190189	62	22	7.00	190514	173	20	2.50
190190	64	22	.50	190515	181	20	2.00
190191	2	18	10.00	190516	172	20	5.00
190192	1	18	10.00	190517	202	20	1.50
190193	168	26	.75	190518	206	20	.80
190197	14	18	12.50	190533	126	24	3.00
190242	109	24	3.75	190648	150	26	2.50

Harriet M. Smith
Pa.

