EVINRUDE

MODELS
15014-15015

FASTWIN 15

AQUASONIC

OWNER'S MANUAL

Twenty Cents a Copy

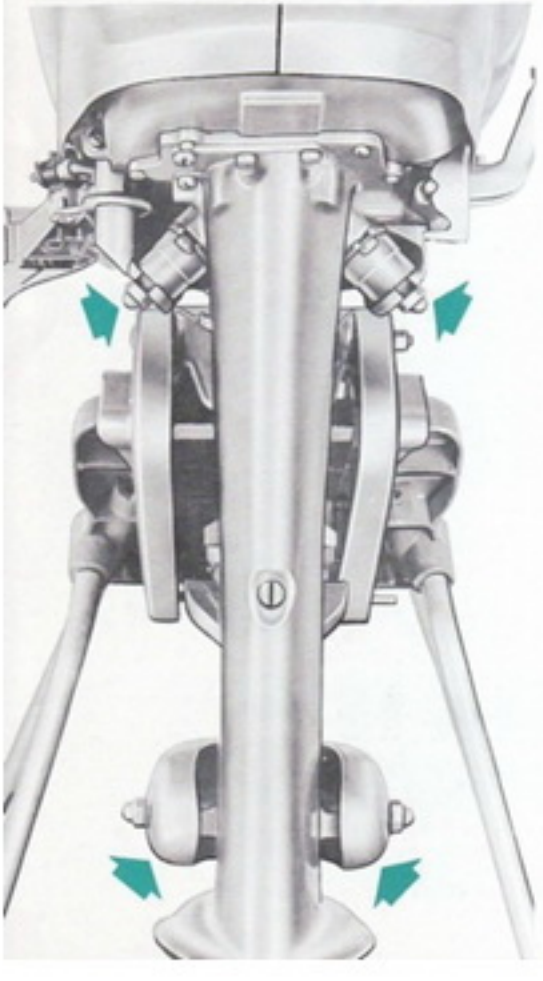
EVINRUDE

Whispering Power

DESIGN FEATURES FOR YOUR PLEASURE and COMFORT

For many years marine research engineers have set as their goal outboard motors that are quiet, smooth, easy to operate, dependable and a pleasure to own. Your new Fastwin exemplifies the degree of quiet, smooth operation that Evinrude engineering skill has developed.

A few of the important features built into your Aquasonic Fastwin (Aquasonic is the name given to the latest Evinrude models incorporating the principles of extremely quiet operation) are illustrated and described on these pages.



SHOCK ABSORBER MOTOR MOUNTS

For the first time in the marine field, Evinrude utilizes a new principle of engine mounting similar to that used in the aircraft industry to pillow vibration. The principle makes it possible to "float" the entire powerhead of the motor, thus isolating engine vibration from the hull. The technique is based on the strategic use of resilient mountings for the powerhead and lower unit. The mountings absorb torsional and thrust vibrations at their source and prevent engine vibration from being transmitted to the boat, which would produce noise by acting as a sounding board.

Smoothness never before found in a motor of this size is the pleasant result. You will thrill to the instant power at your command, the slow trolling ability and the ease with which the motor answers your every wish. The view shown is taken from the rear of the motor showing the upper and lower Aquasonic mountings. These are the key to the new era of vibration free motor operation produced by Evinrude for your enjoyment.

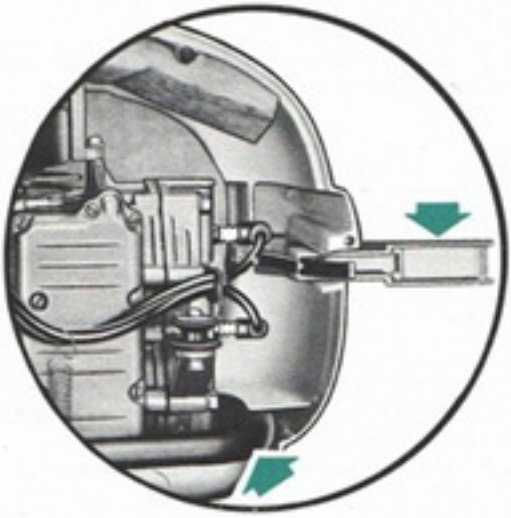
PERFECTED UNDERWATER EXHAUST

Engineering research has perfected a new underwater exhaust system which eliminates back pressure from the exhaust, thereby improving the idling qualities. Exhaust noise is muffled much in the same manner as in the automobile muffler, then buried in the water.

OWNER'S MANUAL

TWIN TURBO AIR SILENCER

Air that is breathed into the carburetor is sound filtered. Noise normally resulting from rushing air entering the motor is dampened and reduced to a new degree of quietness. All present day Evinrudes are equipped with these silencers to continue the trend toward quiet, smooth operating outboards.



NEW BOTTOM MOTOR COVER

The Auto lift hood on the Fastwin opens without the use of tools. Fore and aft finger tip operated fasteners on the hoods free the port hood to be raised, exposing the entire port side of the motor for checking or routine servicing.

New bottom motor covers now become a worthy addition to the power plant enclosure. Motor noise that formerly found its way through the bottom of the motor hoods, to resound throughout the boat, is controlled and retained within the hoods. Rubber moldings seal tightly around the lower edge of the auto lift hoods and the bottom motor covers, minimizing motor noise and producing a water sealed motor enclosure. This is another contributing factor to Whispering Power.

FOREWORD

As you read through your owner's manual you will find pictures and interesting descriptive information on the function of many new developments which are a part of your new Fastwin.

Helpful hints on how to care for and protect the motor are explained. Recommendations are offered to prolong the life and satisfactory service the motor was designed to give you. Evinrude Motors extend thanks and welcome to you for selecting an Evinrude as your boating pal. Best wishes for years of the very best in boating fun.

(See page 25 for complete Index)

KEEP YOUR MOTOR SHIPSHAPE

Your motor will give you better performance and more pleasure if you keep it shipshape all the time. The instructions on these pages and the following ones are provided to help you prolong the life of your motor and get the maximum performance we have built into it.

AUTO-LIFT HOOD

For access to the power head, just unsnap the clasps at front and rear of the hood, and swing up the port hood on its hinge. (See figure 11.) When it is necessary to completely remove the hood, remove choke knob and take out two screws in the starboard side of the hood; then lift off the complete hood.

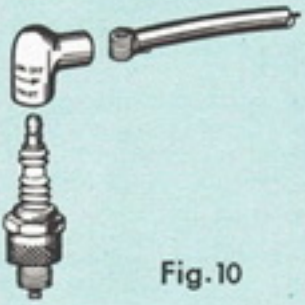


Fig. 10

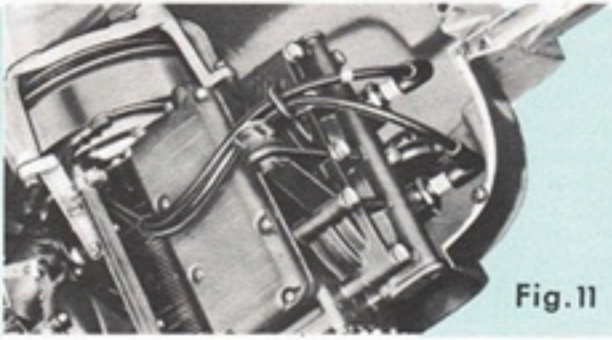


Fig. 11

SPARK PLUG

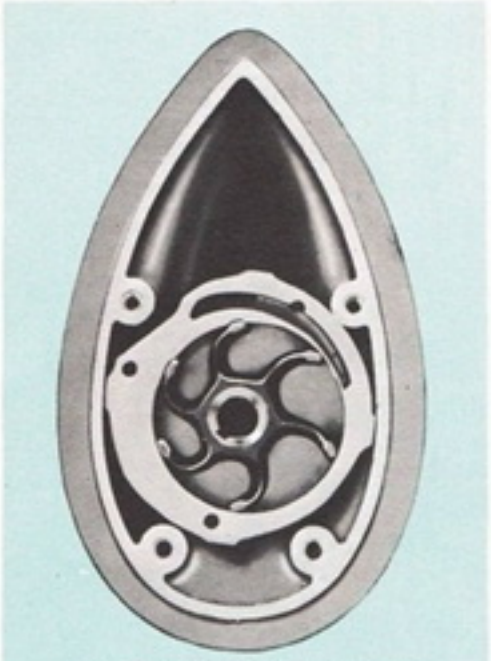
Champion J-6J or Auto Lite A3X are the proper spark plugs to be used. They are carefully adjusted to .030 inch gap at factory, but after continued use it may be necessary to reset them. A gage for this is provided in tool kit. Use end marked "Spark Plug."

When placing spark plugs into cylinders, be sure gaskets are intact, and tighten plugs securely.

Magneto high tension wires are equipped with special rubber hoods, (figure 10) that fit tightly over spark plugs and prevent plugs from shorting due to moisture. When attaching wire to spark plug, press hood down securely and give hood a half turn to the right.

CARBURETOR ADJUSTING KNOB FRICTION

Should adjusting knobs become too loose and not retain proper setting they can be tightened to the desired friction by drawing up on the packing nut. After considerable use, it may be desirable to add new packing in the nut.



IMPELLER AT LOW SPEED

Fig.12

COOLING SYSTEM

Water for cooling purposes is provided by the "CENTRI-MATIC" rubber impeller centrifugal pump. It functions as a positive, full displacement pump assuring adequate water supply at the lowest motor speed (figure 12). At the higher speeds it becomes a centrifugal pump as the increased water pressure bends back the impeller blades, decreasing the impeller diameter, thereby eliminating wear and conserving power (figure 13). The water inlet (figure 14) is a slot located below the exhaust outlet directly behind propeller; constantly swirling slipstream makes the inlet virtually clog-proof. If, while operating motor at full speed, it should show signs of slowing down, immediately check water discharge at water outlet (figure 14) located at rear of the motor directly below cylinder. In case no water is being discharged, immediately shut off the motor and check water inlet slot (figure 14) for obstruction. If no obstruction is found, it may be necessary to have the pump impeller checked.

SALT WATER

Evinrude motors are built for use in either fresh or salt water. With your new Evinrude the bothersome chore of flushing internally after operation in salt water is a thing of the past.

Testing and research has been conducted by Evinrude engineers over a period of years both with and without internal flushing in salt water areas all over the country.

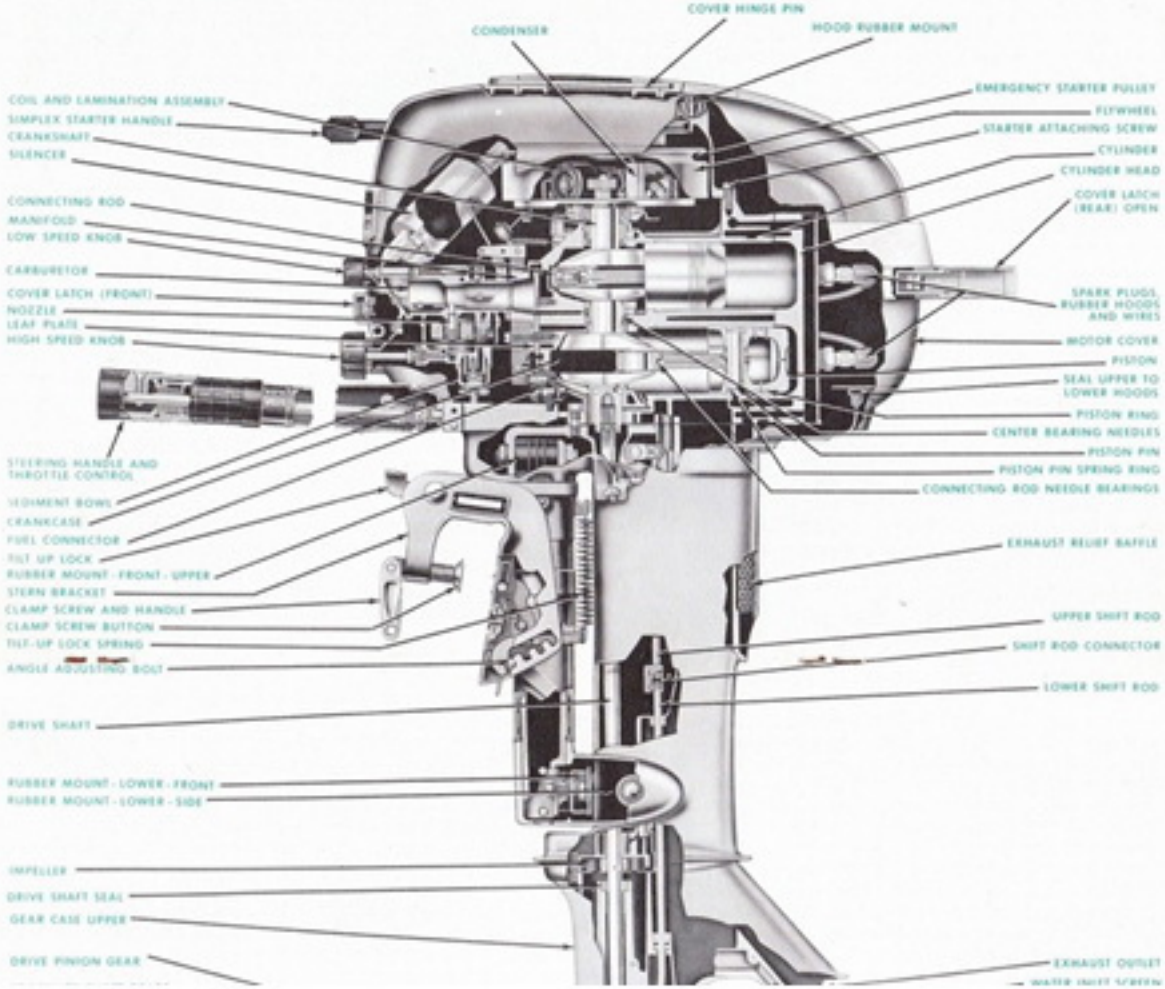
As a result of these tests, it has been clearly established that all Evinrude motors now effectively resist salt water corrosion and deposit, whether or not they are flushed with fresh water after use, as has been recommended in the past. This advancement in outboard motor design will be good news to the many owners in salt water areas, relieving them from the time, effort and anxiety formerly experienced.

If you wish to keep your Evinrude motor attractive in appearance, it is still advisable to wash the motor externally to remove salt deposits from the motor covers and lower unit. A simple fresh water spray over all exposed external areas and a good wipe-down with an oily rag will maintain the luster of the finish and keep the motor looking good.

Fig.13

IMPELLER AT HIGH SPEED

CUTAWAY VIEW OF EVINRUDE FASTWIN



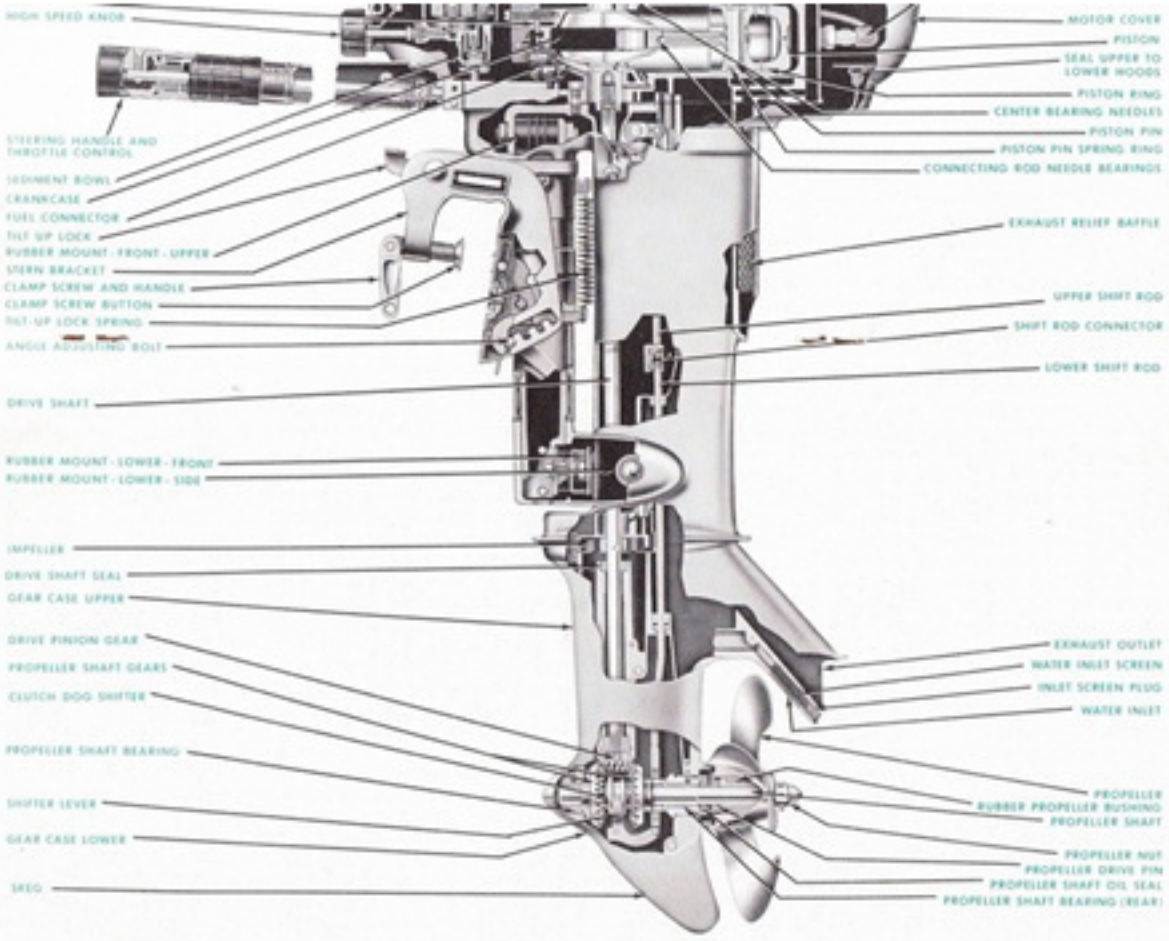


Fig. 14

WHEN WRITING FOR INSTRUCTIONS ON MOTOR REFER TO ABOVE ILLUSTRATION FOR NAMES OF PARTS. STARBOARD (RIGHT) AND PORT (LEFT) ARE DESIGNATED WHILE FACING BOW (FRONT).

CHECK CHART

Fuel and ignition cause most operating difficulties in gasoline engines. If your motor does not behave properly, check first to be sure you are using the correct gasoline-oil mixture, and are following operating instructions accurately. If your motor has fuel properly mixed and carefully strained, but refuses to start, or behaves badly, consult the Check Chart. This chart will provide an outline for systematically tracing difficulty with the least amount of effort. Once you have found the difficulty, the remedy is usually self-evident.

MOTOR WILL NOT START

FUEL DIFFICULTIES

Fuel tank empty.
Water in carburetor, tank, strainer or sediment bowl.
Carburetor nozzle or passages clogged.
Strainer screens at carburetor or in gas tank clogged.
Improper gasoline and oil mixture.
Air leak in hose or tank cap.
Fuel line hose fitting not fully snapped onto motor fitting.

NO SPARK TO PLUG

Spark plug lead disconnected or grounded.
Breaker points not set at .020 inch gap.
Breaker points corroded or wet.
Loose or broken wire in magneto.
Broken cam.
Flywheel key sheared.

SPARK PLUG FAULTY

Fouled plug.
Porcelain cracked.
Center electrode (pole) loose.
Points not set at .030 inch gap.
Plug shorted internally.

POOR COMPRESSION

Cylinder gasket blown.
Piston rings stuck in grooves.
Cylinder walls scored.
No crankcase compression due to leaking gasket, stuck or broken leaf valves.

MOTOR KNOCKS

Flywheel nut loose.
Excessive carbon in cylinder.
Motor overheated and pre-igniting.
Incorrect spark plug pre-igniting.
Loose or worn bearings.
Badly worn cylinder, piston and pin.
Water pump worn. Insufficient cooling.

MOTOR IS STIFF AND CRANKS HARD

Fuel or water in cylinder; rust in cylinder.
Crankshaft or drive shaft bent.
No lubricant in gear case.
Drive pinion or propeller gear broken.
Foreign matter caught in propeller.

WATER STOPS CIRCULATING

Clogged water pump inlet. Worn or damaged water pump.
Broken or clogged water tube.
Gear housing not deep enough in water.
Leaks at water system.

MOTOR WILL NOT IDLE

Low speed needle on carburetor not adjusted properly.
Improper gasoline and oil mixture.
Throttle stuck open.
Dirty or defective spark plug.
Clogged carburetor.
Improperly set breaker points.
Poor compression.
Cylinder head gasket bad, water getting into cylinder.

MOTOR VIBRATES

No spark in one cylinder.
Loose pivot bearing.
Bent propeller.
Motor loose on boat.
Too lean or rich a mixture.
Foreign matter on propeller.

MOTOR RUNS AT EXCESSIVE SPEED

Foreign matter on propeller or gear case.

MOTOR RUNS BUT BOAT MAKES LITTLE OR NO PROGRESS

Propeller blades bent or foreign matter on propeller.
Rope or other obstruction dragging.
Sheared propeller drive pin.

MOTOR MISSES

WIRING

Loose or broken ignition wire.
Broken or oil-soaked insulation on wire.

MAGNETO

Weak or broken breaker point spring.
Corroded or dirty breaker points.
Breaker points not set at .020 inch.
Weak coil, condenser or magnet.
Broken cam.

CARBURETOR

Nozzle or feed hole dirty. Fuel line clogged.
Water or foreign matter in strainers.
Carburetor passages clogged.

MOTOR LOSES POWER

Fuel mixture too rich - motor slows down and four cycles (fires every other stroke).
Fuel mixture too lean - motor knocks.
Poor compression.
Water not circulating.
Cylinder head gasket blown.
One H.T. wire dropped off plug.

IGNITION DIFFICULTIES AND HOW TO LOCATE THEM

In locating ignition difficulty, the first and most common cause may be spark plugs. Remove plugs, and examine them carefully. Should the points and inner porcelain appear wet from either oil or water, plug is definitely fouled. Also check plugs for dirt across points, incorrect gap and for cracked porcelain.

If no faulty spark plugs are found, proceed to check strength of spark from magneto. Leaving plugs out of cylinder, remove rubber spark plug hoods and ground one high tension wire on motor, then, holding the other one 1/4 inch away, pull on starter handle. A good spark should jump this gap.

Repeat this procedure on the other wire, and if there is any evidence of spark failure, it will then be necessary to check magneto. See your local Evinrude dealer.

The magneto, composed of the improved "Alnico" steel, will retain its magnetic charge practically indefinitely. Therefore the magneto should not be considered to have lost its "pep" until such diagnosis has been made by a competent authority.

HOW TO ADJUST FASTWIN .....
MAGNETO BREAKER POINTS

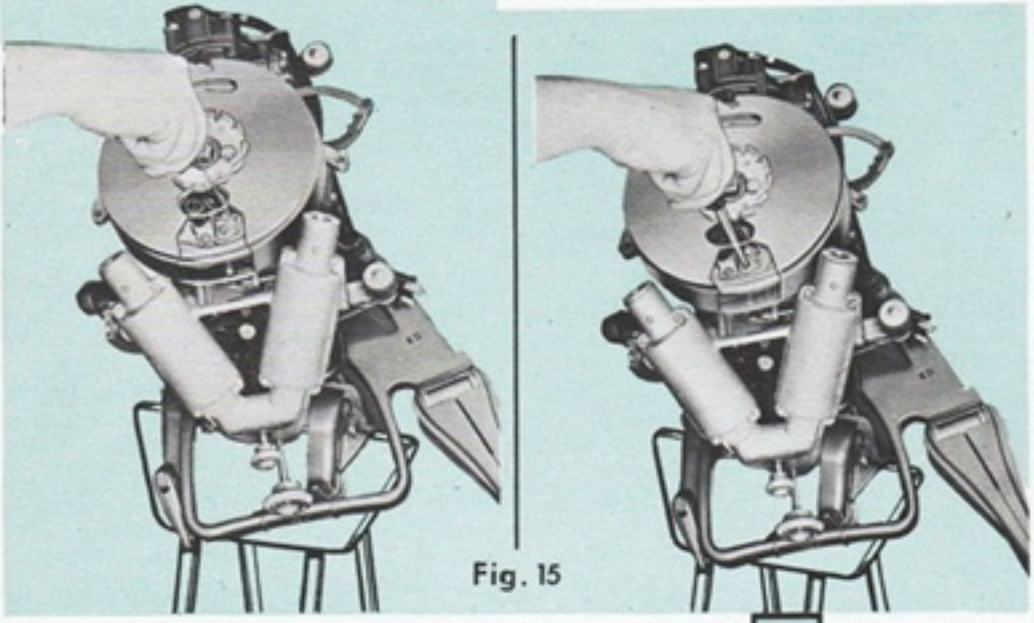


Fig. 15

SYNCHRONIZED SPEED CONTROL

Synchronized speed control consists of a cam plate (figure 16) fastened beneath the magneto base which travels with any movement of the speed control handle.

This plate contacts a cam follower lever (figure 17) on carburetor which is connected directly to the throttle valve on the carburetor. Moving the speed control handle to FAST advances the spark and opens the throttle valve; to SLOW retards the spark and closes the throttle valve to any desired idling speed or STOP.

After extensive service, the breaker points may become dirty or out of adjustment. To check, it is not necessary to remove flywheel, as there is a hole in flywheel for this purpose (figure 15).

After removing starter, turn flywheel until one of the breakers lines up with hole, and then insert gage furnished with motor. Use end marked "Breaker." Points should check .020". If necessary to readjust, insert screw driver through hole and loosen breaker point lock screw (round head screw closest to crankshaft figure 16). Now with screw driver, turn breaker point adjusting screw (outer slotted screw)

1 CONDENSER SCREW
2 CONDENSER
3 COIL MOUNTING AND GROUND SCREWS
4 UPPER CYLINDER COIL
5 THROTTLE CONTROL CAM
6 ARMATURE BASE
7 BREAKER POINT CAM
8 COIL MOUNTING SCREWS
9 BREAKER ARM
10 LOWER CYLINDER BREAKER POINTS
11 POINT ADJUSTING SCREW
12 CONDENSER SCREW
13 CONDENSER
14 SHIFTER LOCK STOP

clockwise to open points, counterclockwise to close points. After proper adjustment has been made, lock breaker by tightening breaker point lock screw. Recheck points for correct gap.

Turn flywheel 1/2 turn and check the other set of points.

If, after considerable service, points need filing or replacing, or if it is necessary to check magneto base, flywheel will have to be removed. We recommend that you have your Evinrude dealer perform this service.

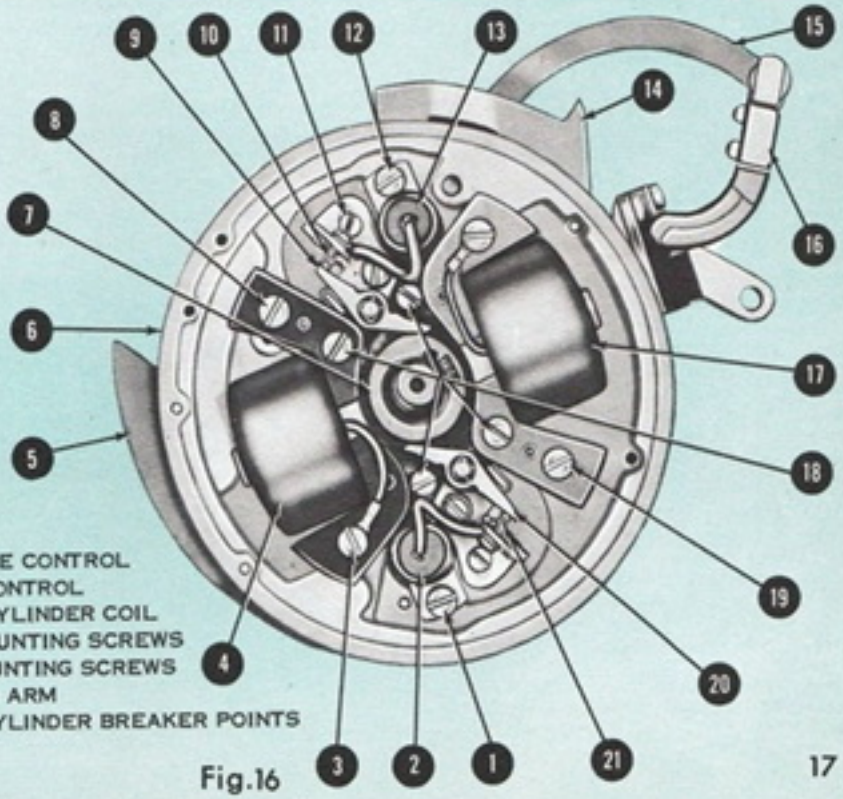
The starboard breaker points fire the lower cylinder through the rear coil, and the port breaker points fire the upper cylinder through front coil (figure 16).

SPEED CONTROL FRICTION

The steering handle throttle control friction is governed by a friction block in the end of the steering handle. When installing a remote control, it is necessary to remove this friction block. This is covered by the instructions accompanying the remote control.

If no remote control is used and you wish less friction to operate the throttle or speed control, you can remove the friction block as follows: (See figure 14.)

Remove steering handle grip screw, slide grip off handle, strike open end of grip on a flat wood surface. Friction block and spring will drop out. Replace spring and steering handle grip without the friction block. Insert screw and tighten.



15 THROTTLE CONTROL
16 LEVER CONTROL
17 LOWER CYLINDER COIL
18 BASE MOUNTING SCREWS
19 COIL MOUNTING SCREWS
20 BREAKER ARM
21 UPPER CYLINDER BREAKER POINTS

Fig.16

CARBURETOR

The float-feed Venturi type carburetor has dual jets with low and high speed adjustments. An acousti-tuned silencer (figure 20) mutes the intake noise and protects against back-fire.

Motor speed is controlled by a butterfly-type valve in the single barrel. This valve is operated by a cam on the magneto plate and cam follower lever. A semi-automatic choke also controls the valve when the choke knob is pulled out.

A single jet supplies fuel at high speed. The amount of fuel supplied is controlled by the high speed needle in the bottom of the carburetor.

Two low speed jets in the ceiling of the throat of the carburetor supply fuel when the throttle valve is closed. The correct mixture for these jets is controlled by the low speed needle in the top of the carburetor.

The butterfly type choke valve for cold starting is located just ahead of the Venturi and is controlled by the choke knob.

All fuel entering the carburetor is strained through the sediment-bowl type filter at the bottom of the carburetor.

Leaf valves mounted between the carburetor and crankcase control flow of fuel-air mixture into the crankcase. When the mixture is compressed in the crankcase for delivery to the cylinder, the leaf valves close to entrap the mixture. When the piston is compressing the mixture in the cylinder for firing, the leaf valves open to allow the fuel-air mixture for the next charge to enter the crankcase.

The leaf valves consist of two phosphor bronze leaves and two leaf spring stops mounted on the leaf plate.

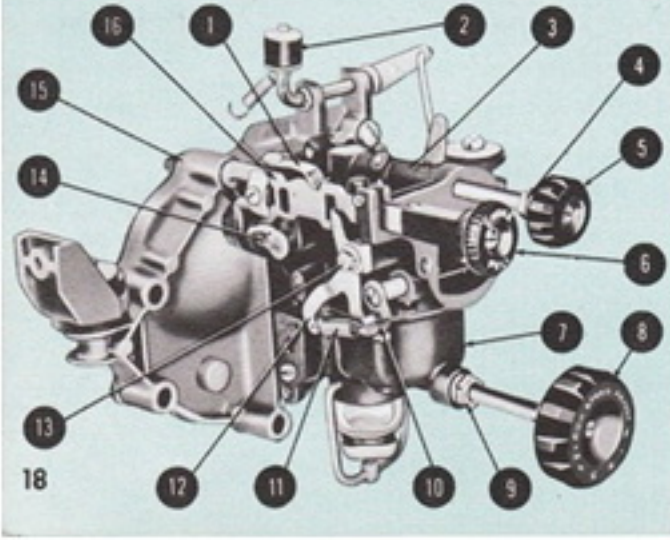


Fig. 17

1 CHOKE CONTROL ROD SPRING
2 CAM FOLLOWER
3 CARBURETOR BODY
4 PACKING NUT
5 LOW SPEED KNOB
6 CHOKE KNOB
7 FLOAT CHAMBER
8 HIGH SPEED KNOB
9 PACKING NUT
10 CHOKE LEVER
11 CHOKE RETURN SPRING
12 BELL CRANK
13 CHOKE SHAFT
14 CARBURETOR STUD NUT

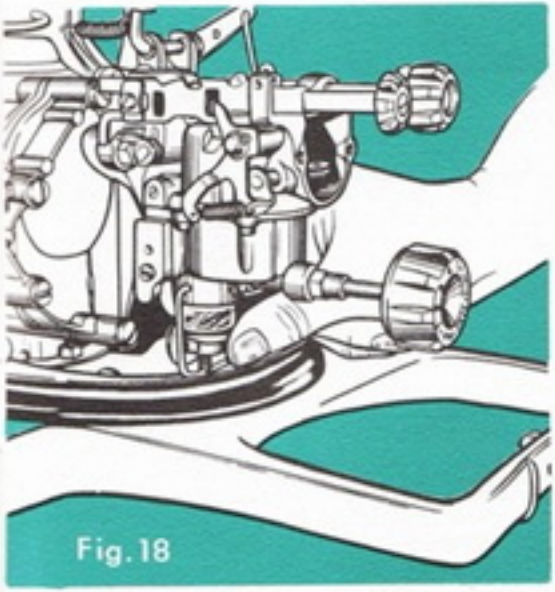


Fig. 18

IMPORTANT — KEEP CARBURETOR CLEAN

No matter what precautions are used in straining fuel, there is always a chance of dirt, sediment, or water accumulating in tank, fuel line and carburetor. It is therefore advisable to clean the carburetor sediment bowl at regular intervals.

Disconnect the fuel and air lines from the motor. Loosen the thumbscrew at the bottom of the sediment bowl and remove the bowl. Clean the bowl thoroughly and replace it.

SUBMERGED MOTORS

In the event a motor is submerged, proceed as follows before attempting to start the motor.

1. Clean the carburetor sediment bowl.
2. Remove both spark plugs.
3. With the motor lying on the rear side (spark plug holes down) pull the starter rope 8 or 10 times. This will drain out most of the water from the powerhead.
4. Remove the air silencer to expose the carburetor throat and pour a teacup of motor fuel into the carburetor. Pull the starter cord 8 or 10 times to flush the fuel through the motor. Repeat this operation until 1 quart of fuel has been flushed through the motor.
5. Replace the air silencer and spark plugs and attempt to start the motor in the normal manner.

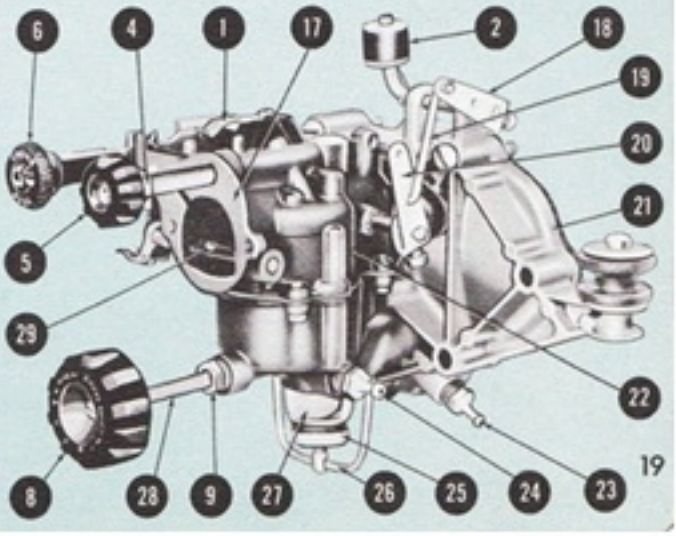
If you are not successful in starting the motor, take it to your Authorized Evinrude Dealer and he will either start the motor or dismantle it before damage occurs from rust. Do not delay getting the motor to your dealer if you are unable to start it. Rusting takes place quickly.

IMPORTANT

A motor retrieved from salt water should be either started or disassembled within 3 to 5 hours. Otherwise major repair will be necessary.

Fig. 19

15 CARBURETOR MANIFOLD
16 CHOKE ROD
17 AIR HORN
18 FOLLOWER SHAFT ARM
19 THROTTLE LINK
20 THROTTLE SHAFT ARM
21 CARBURETOR MANIFOLD
22 CARBURETOR BODY
23 AIRLINE CONNECTOR
24 FUEL LINE CONNECTOR
25 THUMB SCREW
26 SEDIMENT BOWL YOKE
27 SEDIMENT BOWL
28 HIGH SPEED NEEDLE
29 CHOKE SHUTTER



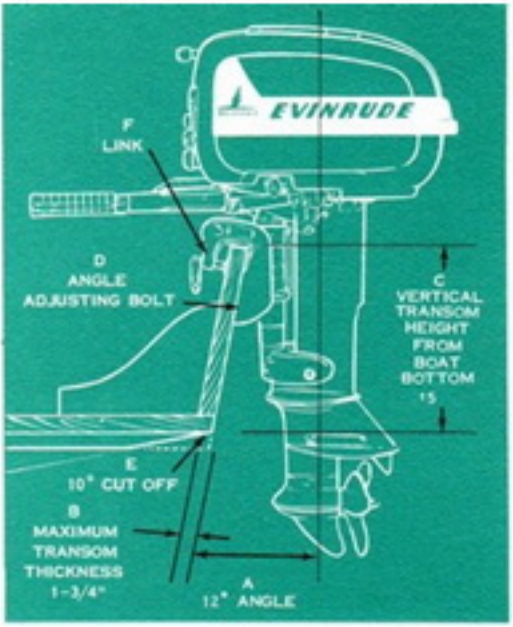


Fig. 1

ATTACHING MOTOR TO BOAT

Evinrude motors are designed for transoms that conform to SAE boat standards. In figure 1, A denotes pitch or angle; B maximum transom thickness; C vertical transom height, not including keel.

A transom over 15 inches high may cause propeller slippage (cavitation). However, if boat has an extremely high transom and it is not desirable to cut

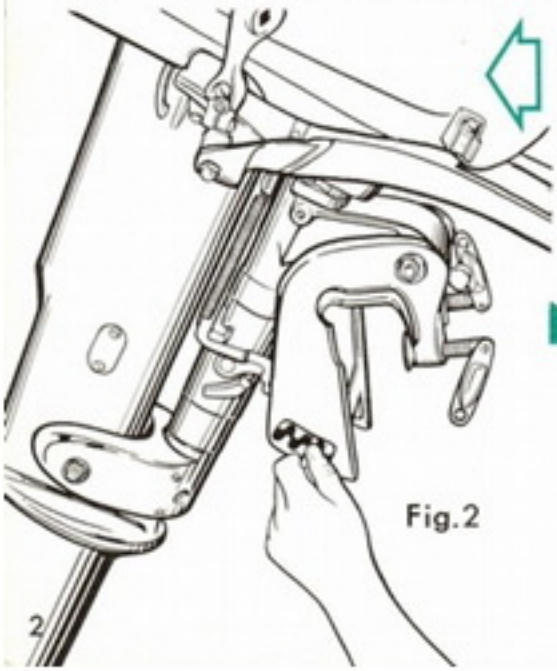


Fig. 2

HOW TO PREPARE

it to 15 inches, a Fastwin with 5-inch-longer shaft is available at moderate extra cost.

Best performance and speed are obtained when the boat keel is cut off as shown at E in figure 1. This will not affect operation of the boat, but will prevent formation of spray and provide free running performance.

With boat afloat, place motor on transom, preferably in center, and SECURELY TIGHTEN CLAMP SCREWS BY HAND. USE NO TOOLS FOR THIS PURPOSE.

CAUTION

It is good insurance to tie motor to boat with a stout rope so that if motor becomes loose accidentally, it cannot drop overboard. Fasten the rope to link F in stern bracket. (Figure 1.) Holes are provided in thumb screw handles for locking with a padlock.

ANGLE ADJUSTMENT

For best performance an outboard motor should be operated in a vertical position. Adjusting the angle of motor to boat transom is provided by an angle adjustment lever (figure 2).

To adjust the angle, tilt motor slightly, then lift up on the lever and move it ahead or back in the slots in the stern bracket. On some boats it may be necessary to correct angle adjustment to maintain motor in a vertical position when changing load from one to more passengers. Always try to arrange load so boat runs on an even keel.

INCORRECT

PROPELLER TILTED AWAY FROM STERN CAUSES BOAT TO "SQUAT"

POWER HEAD

An important feature of the Fastwin power head is the auto-lift hood which gives instant accessibility to the port side of the motor for inspection or routine servicing.

To open the hood, snap open the two clasps, fore and aft; then lift up the hood. It will stay in position.

When closing the hood, be sure the starter handle is correctly positioned in the groove so the hood will close properly.

The power head is fully enclosed, adding to the quiet operation of this motor.

The Fastwin power head utilizes hot-head type cylinders with detachable cylinder heads. The cylinder heads normally become quite hot even when the cooling system is operating properly.

It is recommended that the owner does not attempt to disassemble the power head at any time. Your Evinrude dealer has the special tools and knowledge required for overhauling these motors. Consult him when you have a service problem on the power head.

For motor specifications see page 24.

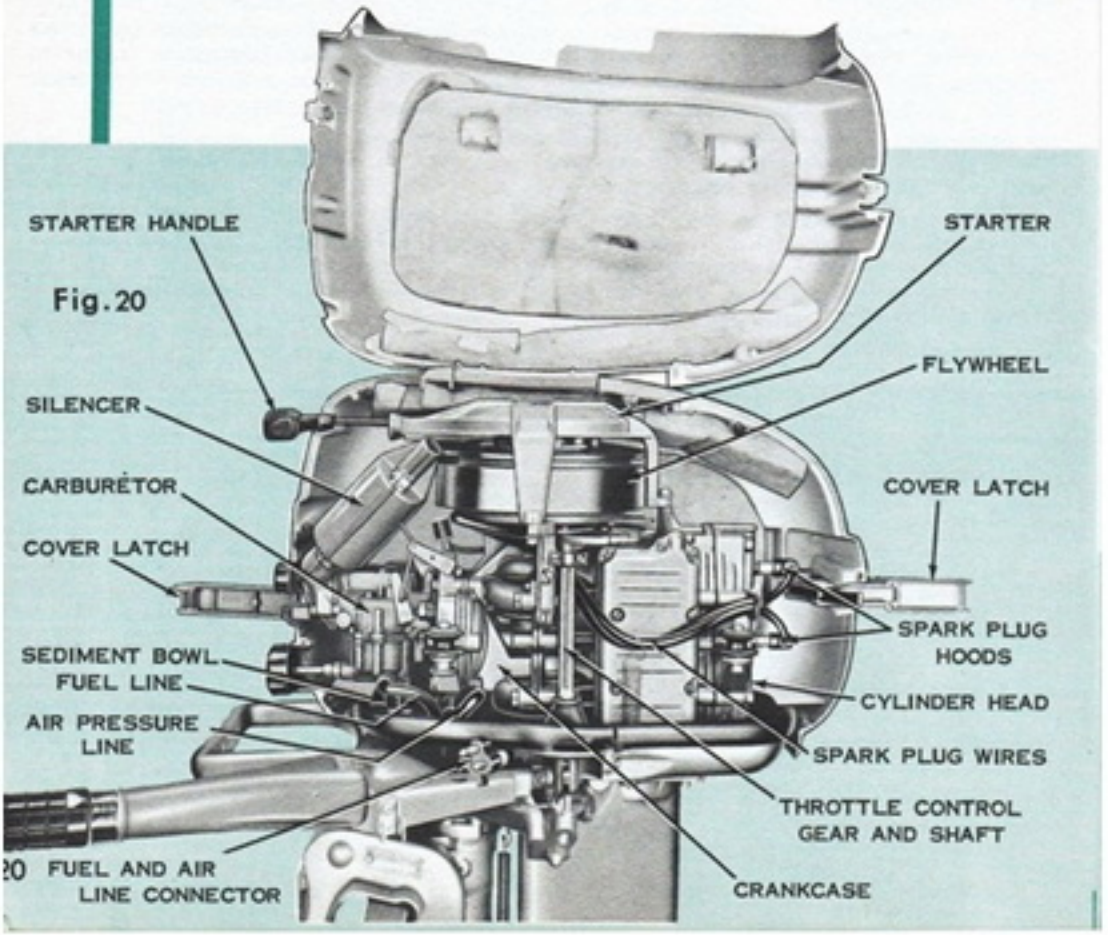


Fig. 20

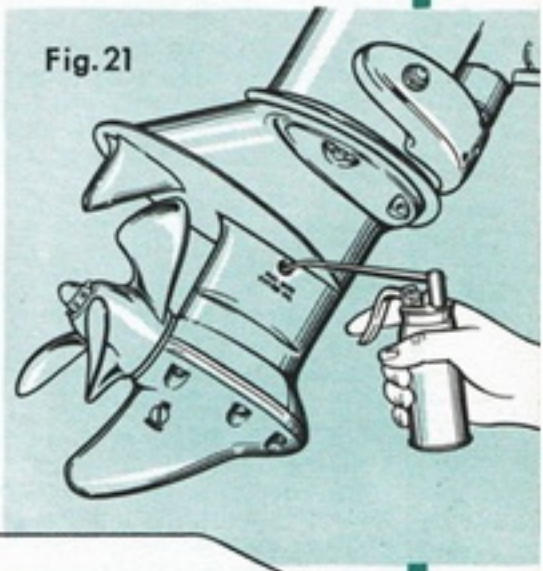
GEAR LUBRICATION

Check your gear case for oil after first five hours of operation to be sure it is filled. Then check periodically at least every 50 hours. Drain and refill at the end of the season.

Remove plug on starboard side marked "FILL WITH HYPOID OIL" (figure 21). Also, remove drain plug, marked "OIL DRAIN", on same side (figure 21) and with motor in a vertical position, permit housing to drain. Replace drain plug, then fill gear housing through the lubrication plug hole using a pump-type oil can. We recommend Mobilube GX90 or any other good grade of SAE 90 automotive (hypoid) gear lubricant. If hypoid lubricant is not available, in emergency use Mobiloil Outboard or other SAE 30 engine oil until recommended lubricant can be obtained.

DO NOT USE GREASE.

Fig. 21



RUNNING MOTOR IN TEST TANK

When running this motor in a test tank, be sure to remove the upper bypass cover on the pump housing. This is the small metal strip on the lower port side of the upper pump housing. This allows the motor to take in sufficient water to cool properly.

Write Us

Whenever you are in need of information see your dealer or write us immediately for service on your motor. Our Service Department is always ready to cheerfully and promptly answer your letter, and to make helpful suggestions.

When writing, be sure to give Motor Model, Name and Serial Number.

EQUIPMENT REQUIRED ON FEDERAL WATERS

No all-embracing definition of what constitutes Federal waters can be given. However, in general it may be said that craft operating on navigable waters in or opening into the Great Lakes, an ocean or gulf, and all navigable waters tributary to such waters upstream to the first lockless dam, are under Federal supervision and should carry the proper government equipment.

1. A bright white light aft to show all around the horizon. Visible at least 2 miles.*

2. Combination light in the fore part of boat showing green to starboard and red to port, from right ahead to two points abaft the beam on their respective sides. Visible at least 1 mile.*

3. A whistle or other sound-producing mechanical appliance capable of producing a blast of 2 seconds or more in duration. (On boats 16 feet or more in length.

4. A life preserver or ring buoy (or approved cushion) for every person on board.

5. An approved fire extinguisher. Open construction motor boats under 26 feet in length propelled by outboard motors and not carrying passengers for hire are not required to carry fire extinguishers. Cabin or enclosed type boats require extinguishers regardless of length.

6. Persons who operate any motor boat in a reckless or negligent manner so as to endanger life, limb or property of any person shall be termed guilty of a misdemeanor and, on conviction, shall be punished by a fine not to exceed $2,000 or by imprisonment for a term not exceeding one year or by both such fine and imprisonment.

BOAT NUMBERS REQUIRED BY THE UNITED STATES COAST GUARD

We quote from the Department Regulations:

1. Application for numbers will be made by the owner or master to the collector of customs of the district in which the owner resides. The owner will then receive full instructions as to the number awarded, how it is to be placed on the vessel etc.

2. The following undocumented vessels are required to be numbered.
   a. All boats equipped with permanently fixed engines.
   b. All boats over 16 feet in length equipped with detachable engines.
   c. All boats not more than 16 feet in length equipped with detachable engines as the ordinary means of propulsion.

3. The following undocumented vessels are not required to be numbered:
   a. All boats not exceeding 16 feet in length equipped with detachable engines and falling within the following classes:
      (1) Rowboats and canoes designed and intended for the use of oars or paddles as the ordinary means of propulsion.
      (2) Sailboats.
      (3) Boats designed and used solely for the purpose of racing or operation incident to racing.

*FROM SUNSET TO SUNRISE

RULES OF THE ROAD FOR OUTBOARD OWNERS

1. Boats under sail always have the right of way.

2. Motor boats must keep clear of sailing craft and row boats at all times.

3. Always keep on the right side of the channel or fairway when possible.

4. Any boat overtaking another boat must keep out of the way.

5. When meeting another boat head on or nearly so, each boat shall alter its course to right so as to pass on the left side of the other and each boat should give one short blast of the whistle. In other words, always keep to the right.

6. If a boat is well over to the right in passing, it should keep straight on and give one toot to the whistle. If you are well over to the left, keep straight on and give two toots to the whistle. The other boat should do the same.

7. When two boats are crossing and approaching obliquely, the one that has the other on her own left side should keep her course and speed, and the one which has the other on her right side should get out of the way as best she can, but, if possible, not by crossing ahead. "The giving away vessel" should give one short toot if she is altering her course to right or two short toots if to left, which the boat that is holding her course should answer.

8. If for any valid reason you cannot comply with the rules or do not understand signals being given by another boat, give the danger signal, which is a number of short blasts, not less than four, and stop if necessary.

9. Never sound a whistle while underway unless necessary.

QUIET OPERATION

A noisy motor is unwelcome in the boating scene, and gives the sport of boating a black eye.

That is one big reason why Evinrude Motors has spent, and is continuing to spend, thousands of dollars annually to make Evinrude motors run more quietly.

We count on all Evinrude owners to cooperate with all their fellow boatmen and with us by:

Operating their motors as silently as possible at all times.
Refusing to tamper with or removing all or any part of exhaust and silencing mechanisms.
Promptly repairing silencing mechanisms if these become faulty.

Evinrude dealers recognize the desirability of having all outboards operate quietly, and will gladly cooperate with you in reaching this worthy objective.

Your courtesy in conserving the quiet of the great outdoors will be gratefully recognized by all your boating and shoreside neighbors. We also will sincerely appreciate your cooperation.

† PREPARED BY OUTBOARD BOATING CLUB OF AMERICA.

REPAIR SERVICE

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.

YOUR EVINRUDE MOTOR FOR USE

LUBRICATION AND FUEL INSTRUCTIONS

Correct lubrication is the most important factor for long life and satisfactory performance of your outboard motor. The lubrication of pistons, cylinder, crankshaft and connecting rod bearings is solely supplied by oil which is mixed with the gasoline. Cruis-a-Day tank capacity is about six gallons, sufficient to readily accommodate five gallons of gasoline plus the necessary oil.

TYPE OF GASOLINE: Use a good grade of regular gasoline such as used in automobiles. High octane or highly leaded fuel gives no advantage.

LUBRICANT: We recommend Mobiloil Outboard or another outboard oil, or a regular SAE 30 grade automotive engine oil. Avoid use of low price third grade (ML) oils.

QUANTITY OF OIL REQUIRED: Mix one quart of Mobiloil Outboard to each full tank of regular gasoline. If smaller quantity of gasoline is being added, for ease of measurement mix one-half pint of Mobiloil Outboard per gallon of gasoline.

MIXING PROCEDURE: Pour into Cruis-a-Day tank approximately one half the amount of gasoline to be mixed, and add all the required oil (see "Quantity of Oil Required".) Shake or stir until thoroughly mixed; add balance of gasoline and shake tank to insure mixing.

STRAIN ALL FUEL: Due to condensation, from changes in temperature, water is often present in gasoline when you get it from the vendors or in your own fuel container. All fuel should be poured through a fine mesh strainer, because the presence of water in fuel is frequently a cause of hard starting. This will eliminate the water and also the dirt which might otherwise clog fuel passages. USE METAL CONTAINERS ONLY.

ALWAYS USE FRESH GASOLINE AND OIL MIXTURE. For lower unit and gear case lubrication, see page 21.

..... *Strain all fuel* .....

CORRECT

PROPELLER LINE-OF-DRIVE PARALLEL TO BOAT TRAVEL GIVES MAXIMUM PERFORMANCE.

INCORRECT

PROPELLER TILTED TOWARDS STERN CAUSES BOAT TO "PLOW"

OPERATING INSTRUCTIONS

NEW MOTOR

Read "Lubrication and Fuel Instructions" (see page 3) carefully before attempting to operate this motor. Do not operate a new motor at continuous full power until after at least one hour of operation. During this hour, short periods of full power may be used. No extra lubricating oil is required.

COLD MOTOR

1. Connect fuel line (1) from Cruis-a-Day tank to motor.

2. Press down on pump button (2) on fuel tank 3 to 5 times. Pressure required to press down button increases as fuel line and carburetor fill up. This is your signal to stop as too much pressure may flood carburetor. As pressure in Cruis-a-Day tank is automatically maintained by operation of the motor and held in tank even after motor has stopped, it may not be necessary to use pump again until refilling tank, or unless carburetor has been run dry.

3. Pull out choke knob (3), located on starboard side of control panel, all the way.

4. Turn high speed knob (4) to No. 3 position. To start motor in temperature below 40° F, turn high speed knob 1/4 turn to the "LEFT" (counterclockwise).

5. Place throttle control (5) on steering handle at START position.

6. Place gear shift lever (6) at NEUTRAL or center position. Always start motor in NEUTRAL.

7. Set tilt-up lock (13) in upper position (long slot).

8. Pull starter handle (7) slowly until starter engages, then pull forcibly.

Do not pull cord out more than 30 inches. Repeat until motor starts. Allow starter cord to rewind before you release handle. Premature release of handle may injure starter or cord.

9. After motor starts, push in choke knob (3). The motor may be idled in NEUTRAL or shifted to FORWARD or REVERSE as desired by moving the gear shift lever (6).

IMPORTANT

Throttle control (5) must always be placed at START or slower position before gear shift lever can be moved to FORWARD, NEUTRAL or REVERSE. Do not force lever.

10. With gear shift in FORWARD only, turn throttle control towards FAST and slowly turn high speed knob (4) either way until motor runs smoothly.

11. After motor has warmed up, turn throttle control towards SLOW and turn low speed knob (8) slowly either way until motor runs smoothly.

12. To control speed, turn throttle control (5) to FAST to increase speed and

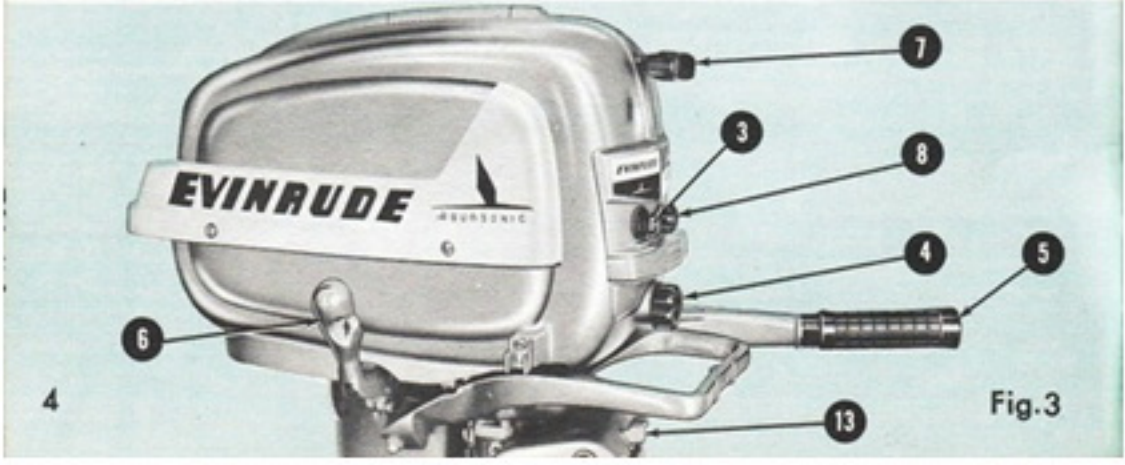


Fig.3

Fig.4

to SLOW to decrease speed.

13. To STOP motor, turn throttle control to STOP position.

ALWAYS START MOTOR IN NEUTRAL

TILT-UP LOCK

The manually operated tilt-up lock (13) has two positions; upper position (long slot) to be used whenever the motor is running, and lower position (short slot) for tilting the motor for beaching, etc.

When in the upper position, the lock will hold the motor in a semi-locked vertical position. This lock is sufficient to retain a vertical position of the motor while you are pulling on the starter rope. In reverse, this lock will overcome the reverse thrust of the propeller and hold the motor in a vertical position. In forward, the lock is set to release upon contact with underwater objects, allowing motor to tilt up, minimizing the possibility of damage to underwater parts. As soon as the lower unit has passed over the obstruction, the motor will return to a vertical position and lock automatically.

When in the lower position, the motor is released from the lock and can be tilted as desired.

IMPORTANT

Always place lock in upper position before starting motor and keep it there at all times when motor is running.

WARM MOTOR

When starting motor immediately after previous running, it is not necessary in most cases to use the choke. If however, the motor fails to start on the third attempt, the choke should be pulled out the full travel. After motor starts, push choke knob in.

FLOODING

Flooding can be created by over-choking or cranking a warm or hot motor which may cause too much fuel to be drawn into crankcase and cylinder.

To correct, note the approximate setting of the high speed knob (4) then close high speed knob and pull starter handle until motor starts, allowing motor to run until it stops. Now reset high speed knob back to its original setting and follow instructions relative to starting warm motor.

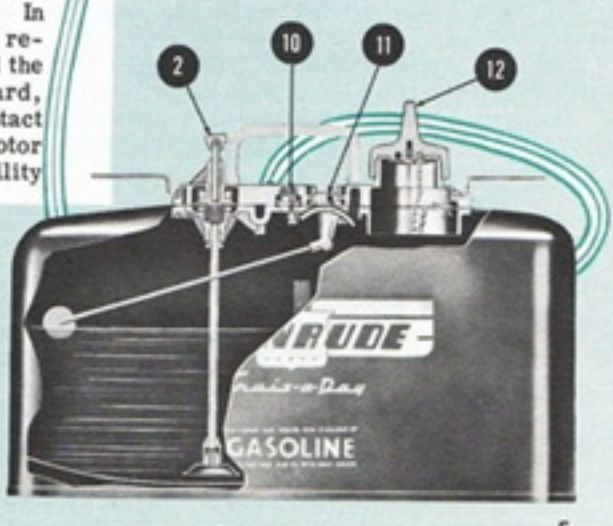


Fig.5

1 FUEL AIR LINES
2 FUEL PUMP BUTTON
3 CHOKE KNOB
4 HIGH SPEED KNOB
5 THROTTLE CONTROL
6 GEAR SHIFT LEVER
7 STARTER HANDLE
8 LOW SPEED KNOB
9 FRONT HOOD CLASP
10 PRESSURE RELIEF VALVE
11 FUEL GAGE
12 FILLER CAP
13 TILT-UP LOCK

HOW TO GET THE MOST OUT

Many important features have been built into your Evinrude to give you maximum satisfaction with its use. These pages show you how to get the most out of these features.

PROPER CARBURETOR ADJUSTMENTS

If either the high or low speed adjusting knob should come loose on the needle, remove the knob screw and knob. Turn the needle into closed position; then turn it back (counterclockwise) 3/4 turn. Place knob on the needle with number 3 at the pointer on the clasp, and tighten knob screw securely.

TILTING OF MOTOR

The tilting feature is designed to permit self tilting when striking any submerged object while running in forward position. Care, however, should be taken in obstructed waters, not to operate motor at too high a speed. This tilting feature is also useful in boat launching, beaching or rowing in shallow waters.

To tilt the motor, place the tilt-up lock in the lower position (short slot), grasp the rear handle and pull the motor toward you. Never try to tilt the motor by bearing down on steering handle.

TILTING FRICTION

Proper tilting friction is set at factory, but through continued use, friction may have to be increased occasionally so motor will retain a tilted position. To increase friction, first tilt the motor as far as it will go. Then tighten the friction nut on the starboard side of the stern bracket, using a wrench.

PROPELLER WARNING

This motor is equipped with a rubber cushioned propeller of the diameter and pitch best suited for average boats. If any other type is used, excessive wear in the reverse mechanism may occur.

A considerable underwater shock may shear the propeller pin. If this occurs, remove the propeller nut, propeller, and replace the pin. Be sure to replace the cotter pin in the propeller nut after reinstallation of the propeller.

SERVICE POLICY

In accordance with our 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 manufacturer's examination discloses actual defect.

OF YOUR EVINRUDE.....

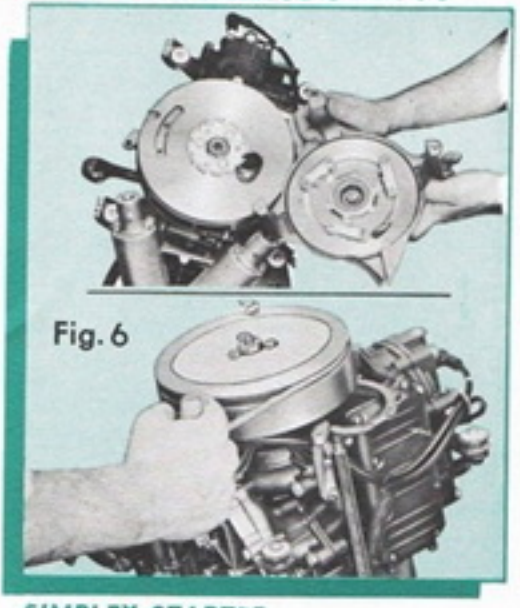


Fig. 6

SIMPLEX STARTER . . . EMERGENCY STARTING

The starter is built to give the best possible service. However, if starter fails, motor can still be started. Open hood (page 10) and remove two screws from starboard side; then lift off complete hood. Next remove four screws holding Simplex starter to brackets (figure 6). Wrap a length of 1/4 inch cord with a knot tied on one end and placed into notched pulley atop flywheel (figure 6) clockwise, and start motor in usual manner.

CAUTION

It is advisable to remove starter ratchet from atop flywheel as a safety measure.

If starter is damaged, send it to your dealer for repairs while motor continues in use.

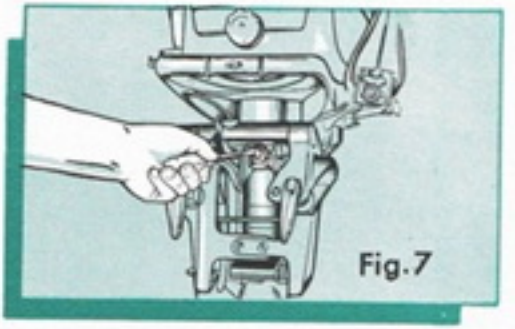


Fig. 7

CO-PILOT STEERING ADJUSTMENT

The co-pilot is your relief steersman. It provides a cushioned, yielding grip, holding motor in selected position whenever you let go of steering handle for short intervals.

Proper adjustment is made at factory. Should co-pilot steering become too loose, adjustment can be made by tightening screw located on front of pivot bearing (figure 7).

TO AVOID FUEL LEAKAGE WHEN CARRYING OR HANDLING MOTOR

Toward the end of run, just before stopping motor, disconnect fuel and air line, and then permit motor to run for a minute or two until it stops. This will drain the carburetor and the motor can then be carried or transported without leakage.

REMOVING MOTOR FROM BOAT

While lifting motor off boat, hold in an upright position until all water has drained from lower unit, to prevent water from entering into cylinders and crankcase through exhaust ports.

3. That customer has paid or will pay transportation charges on replacement or repaired parts.

4. WE WILL NOT BE RESPONSIBLE FOR TIME SPENT AND WORK PERFORMED BY OTHERS THAN THE FACTORY, UNLESS SUCH REPAIRS ARE FIRST AUTHORIZED BY US IN WRITING.

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

CARE OF YOUR EVINRUDE . . . .

Give your new Evinrude the same care you would a new automobile, gun, or fishing tackle, and it will always be a source of satisfaction to you. Care in handling it will prevent unsightly scratching and nicking the finish. Follow these instructions for keeping your motor neat and clean; it will always be ready for fast starting efficient operation.

GREASING

There are two Zerk type grease fittings which should be greased occasionally. One is located on the end of the gear shift lever shaft (starboard side) and the other is located on the starboard side of the swivel bracket. A good grade of waterproof grease such as Mobiloil Outboard Grease is recommended for these fittings.

CARE OF MOTOR IN COLD WEATHER

Your motor 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 running. But, when your motor is idle, or before storing it in cold weather, drain the motor by setting it in an upright position and revolving flywheel. This lets the water out of the cylinder jackets and pipes, preventing costly freezing and bursting of parts.

Drain and refill the gear housing with the correct lubricant. (See page 21.)

EQUIPMENT NECESSARY WHEN OUTBOARDING

Although the following equipment may not always be needed, it is advisable to have it aboard when motoring.

Funnel with strainer — Extra spark plug
Tools — Starting cord (see page 7)
Rope to tie motor to boat

Oars and any equipment required by law when outboarding in Federal waters. (See page 22.)

The Cruis-a-Day tank fuel capacity is about 6 gallons and should run the motor from 2-3/4 to 3-1/4 hours depending upon type of boat and boat load.

SPURIOUS PARTS

Be sure that you get genuine parts. Your dealer can be relied upon to furnish nothing else. There are, however, spurious parts for outboard motors, just as there are for all makes of automobiles, and nearly everything else mechanical. THE USE OF PARTS OTHER THAN THOSE MANUFACTURED BY US VOIDS OUR WARRANTY.

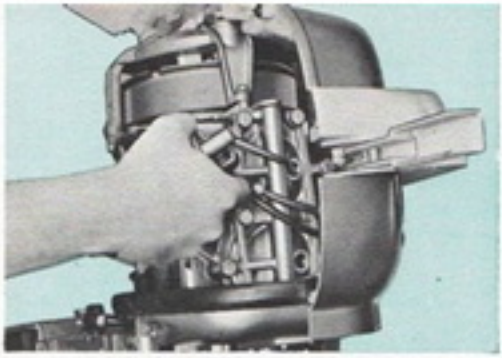


Fig. 8

STORING YOUR MOTOR

When storing your motor, PUT IT IN A DRY PLACE. Drain the water out of the pipes and cylinder jackets as instructed under "CARE OF MOTOR IN COLD WEATHER." (See page 8.) Drain all fuel from the carburetor. It is also a wise precaution to remove the spark plugs, put a couple of teaspoonfuls of pure lubricating oil into the cylinders (figure 8), and then revolve the flywheel several times to spread the oil over the cylinder walls before putting the spark plugs back.

A preferred method for protecting internal parts, if you have a test tank available or a place to run motor preparatory to storage, is as follows:

Remove small polished button from front of air silencer. Partially fill a pump type oil can with Mobiloil Sova-Kote 503. Run the motor at high speed and pump 4 or 5 squirts of the oil directly into front opening of carburetor. Then stop motor immediately. The internal motor parts are now fully rust-protected.

CAUTION

Do not attempt to run the motor out of water to rust-proof it.

Drain and refill gear case with proper lubricant. (See page 21.) Wipe the entire motor with a cloth saturated with oil (figure 9). An exterior film of oil will not hurt the motor but dampness and rust will. Wrap motor in a piece of canvas, an old blanket, or in heavy paper, and store in dry place.

If you wish help in winterizing your motor, see your Evinrude dealer.

WHEN READY TO USE IT AGAIN

If your motor has been idle for some time, or has been stored without following the "Storing Your Motor" instructions, it is always a good plan to first clean it up thoroughly. Then remove the spark plugs and squirt a little pure lubricating oil into cylinders through spark plug holes (figure 8). This done, pull motor over several times with starter handle to spread the oil around the cylinder walls. Then thoroughly clean and re-gap spark plugs, checking them for cracks, burnt points etc. and insert into cylinders. (Do not attempt to clean plugs if they are badly carboned. Replace them).

Clean carburetor sediment bowl.

Strain all fuel: use only metal containers. Fill the tank. Connect fuel and air lines to motor. Pump up pressure in tank and see that the fuel is flowing to the carburetor.

Tighten up all screws and nuts. If, in going over the motor, you find any parts damaged, replace them at once.

Put the motor on the boat and start it. Carefully adjust the carburetor. See that cooling water is flowing.

After long, continuous, hard service, a very complete overhauling may be advisable. This should be done by an expert.

If you desire, return the motor to our distributor or dealer, and you will get a workmanlike job at a fair charge.

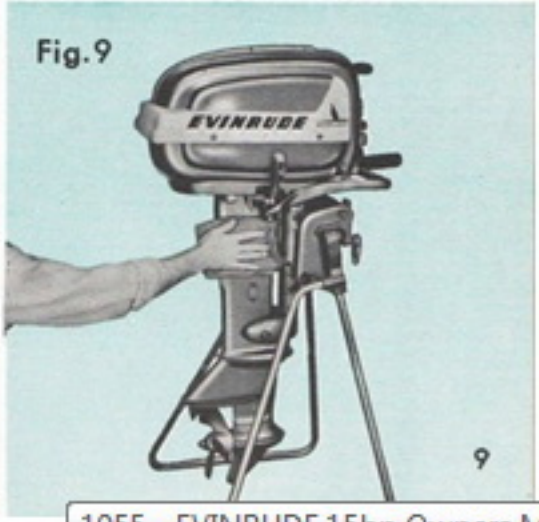


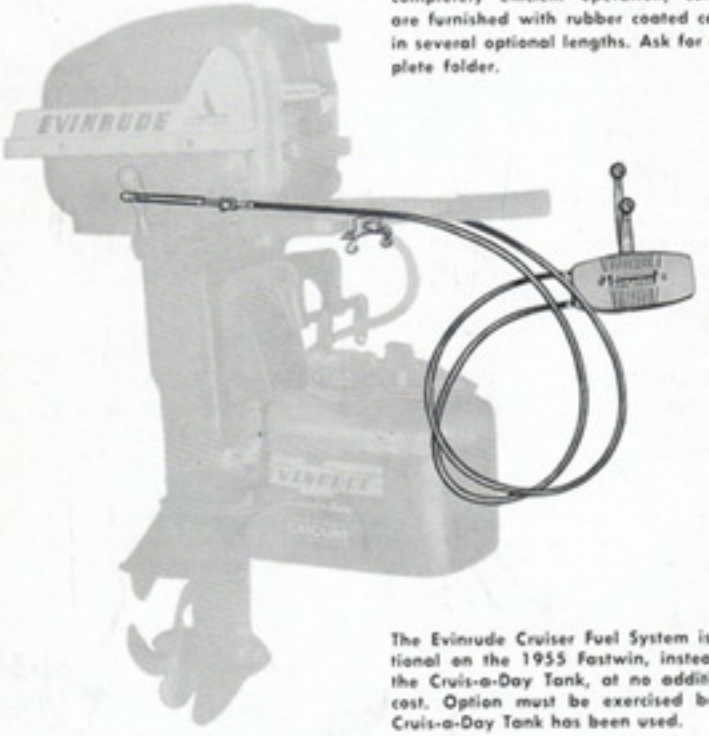
Fig. 9

EVINRUDE

Simplex

REMOTE CONTROL

Evinrude's Fastwin is engineered for remote controls (without affecting stern-of-the-boat operation).
Mechanism is smooth, positive, precise, corrosion proof . . . there is no lag. Control panels on either side of boat. Gearshift and throttle connectors attach quickly to built-in fitting. Steering cable clip on steering arm attaches instantly by spring-loaded lock pin. To assure completely efficient operation, controls are furnished with rubber coated cables in several optional lengths. Ask for complete folder.



The Evinrude Cruiser Fuel System is optional on the 1955 Fastwin, instead of the Cruis-a-Day Tank, at no additional cost. Option must be exercised before Cruis-a-Day Tank has been used.

EVINRUDE MOTORS

Milwaukee 16, Wisconsin

In Canada: Evinrude Motors, Peterborough

FORM NO. 2304-16M-7-54 LITHO IN U.S.A. PART NO. 203630