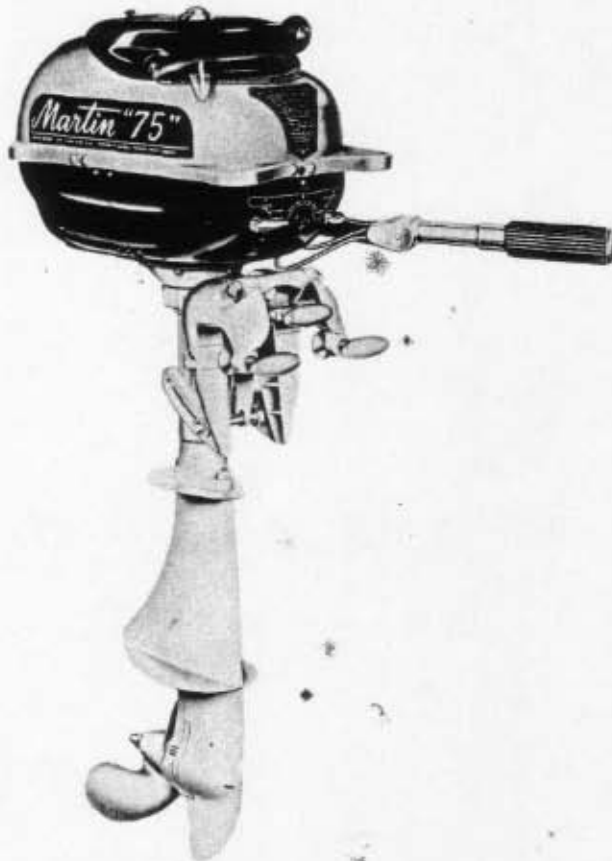


MARTIN "75"

SYNCRO-TWIST CONTROL



SPECIFICATIONS . . .

Power Head	- - - - -	Alternate Firing
Bore and Stroke	- - - - -	2 x 1¾
No. of Cylinders	- - - - -	2
Certified Brake H. P. at 4300 R.P.M.	- - - - -	7½
Piston Displacement	- - - - -	11 Cubic Inches
Propeller Diameter Pitch	- - - - -	8 x 8¼
Fuel Tank Capacity	- - - - -	1 Gallon
Starter	- - - - -	Depend-A-Pull
Ignition	- - - High Tension, Positive Action Magneto	
Carburetor	- - - Full Range, Dual Adjustment	
		Concentric Bowl Type
Gear Ratio	- - - - -	13-19
Type of Exhaust	- - - - -	Pre-Cooled Underwater
Cooling System	- - - - -	Positive Displacement
		Rotor Type Water Pump
Steering	- - - - -	Full 360° Pivot
Stern Height	- - - - -	15"
Weight	- - - - -	44 lbs.
Full Reverse	- - - - -	Yes

In view of the fact that much of the service repair on the MARTIN "75" is similar to that of the MARTIN "60", the following will cover service instructions on those new assemblies which were incorporated into this motor. All other service information on the engine can be found in Section 7.

I

CARBURETOR (CARTER NO. N-753S)

Dimension: Flange size: $\frac{1}{2}$ inch S.A.E. Main venturi, size 23/32 inch.

Float Level: Distance from top to float (at free end) opposite needle seat to lower edge of float chamber cover when needle is seated to be $\frac{1}{8}$ inch plus or minus $\frac{1}{64}$ inch.

Vents: Inside—none. Outside—No. 50 (.070") drill.

Gasoline Intake: Square vertical needle, seat size No. 38 (.1015") drill.

Low Speed Jet Tube: Jet size No. 75 (.021") drill. Auxiliary Jet—None.

Idle Port: Slot type, length .107 inch. Idle port opening—Bottom of port to be .060"-.064" below lower edge of valve. 3—.104" diameter holes in throttle valve. Idle adjustment screw seat, size No. 44 (.086") drill.

Set Idle Adjustment Screw: 1 to 2 turns open. For richer mixture turn screw in.

Main Nozzle: Accelerating jets 4—No. 62 (.038") drill in side of nozzle, (in nozzle well). Nozzle passage: (nozzle well to air horn) restriction size No. 35 (.110") drill.

High Speed Adjusting Needles: Seat (in base of nozzle) size: .076" diameter. Setting, see adjustments.

Choke: Manual—butterfly type, with poppet valve.

HIGH SPEED ADJUSTMENT SCREW SETTING APPROX. $\frac{1}{2}$ to 1- $\frac{1}{2}$ TURNS OPEN

TO DISASSEMBLE:

1. Remove carburetor from engine.
2. Remove adjustable main metering screw and needle assembly, gasket and bowl.
3. Remove float pin, float, needle and needle seat. Check float for dents, leaks, and wear on float lip or in float pin holes.
4. Remove bowl ring gasket.
5. Remove low speed jet.
6. Remove idle adjustment screw and spring.
7. Remove nozzle.

8. Remove throttle valve screws, valve, and shaft and lever assembly.
9. Do not remove choke valve and shaft unless replacement of these parts is necessary. A spring loaded ball retains choke in wide open position. Be sure to use a new ball and spring when replacing choke shaft and lever assembly. CAUTION: Hold a screw driver handle or a small piece of wood over threaded hole in air horn (side opposite choke lever) to prevent the ball from flying out when shaft is removed.
10. Clean all parts in clean gasoline or solvent, making sure all carbon accumulation is removed from bore, especially where throttle valve seats in casting. Blow out all passages with compressed air. Replace all worn and damaged parts. Always use new gaskets.

TO ASSEMBLE:

11. Install throttle shaft and valve. Valve must be installed with trademark "c" on side toward idle port when viewing from flange side. Always use new screws. With valve screws loose and throttle lever set screw backed out, seat valve by tapping lightly with a small screw driver. Hold in place while tightening screws.

NOTE: Throttle valve return spring opens throttle.

12. Install nozzle, making sure it seats in casting.
13. Install needle seat, needle, float and float pin.
14. Set float level. With carburetor casting inverted, and free weight of float on seated needle, there should be $\frac{1}{8}$ " (plus or minus $\frac{1}{64}$ ") clearance (use gauge T109-36) between machined surface of casting and free end of float (side opposite needle seat). Adjust by bending lip of float with small screw driver.
15. Install bowl ring gasket, bowl, adjustable main metering screw and needle assembly. Before installing adjustable main metering screw and needle assembly, back out adjusting screw needle, until tip of needle is flush with end of thread, then tighten securely after making certain bowl is centered in gasket. Turn adjusting screw needle in, until it seats, then back out $\frac{3}{4}$ turn. Make sure packing nut is tight.
16. Install low speed jet.
17. Then install idle adjusting screw. Turn inward until screw seats, then back out $1\frac{1}{4}$ turns.

II.

MARTIN SYNCRO TWIST CONTROL

TO DISASSEMBLE:

A. Remove starter cover assembly, gas tank, front and rear shrouds.

B. Loosen screw (20) holding clamp and cable to left hand bracket (18) on left side of powerhead.

C. Loosen two screws holding quadrant assembly (23) to stator plate so that cables may be removed.

NOTE: It is not necessary to remove quadrant completely.

D. Loosen top nut (26) and remove cable from right hand bracket (25).

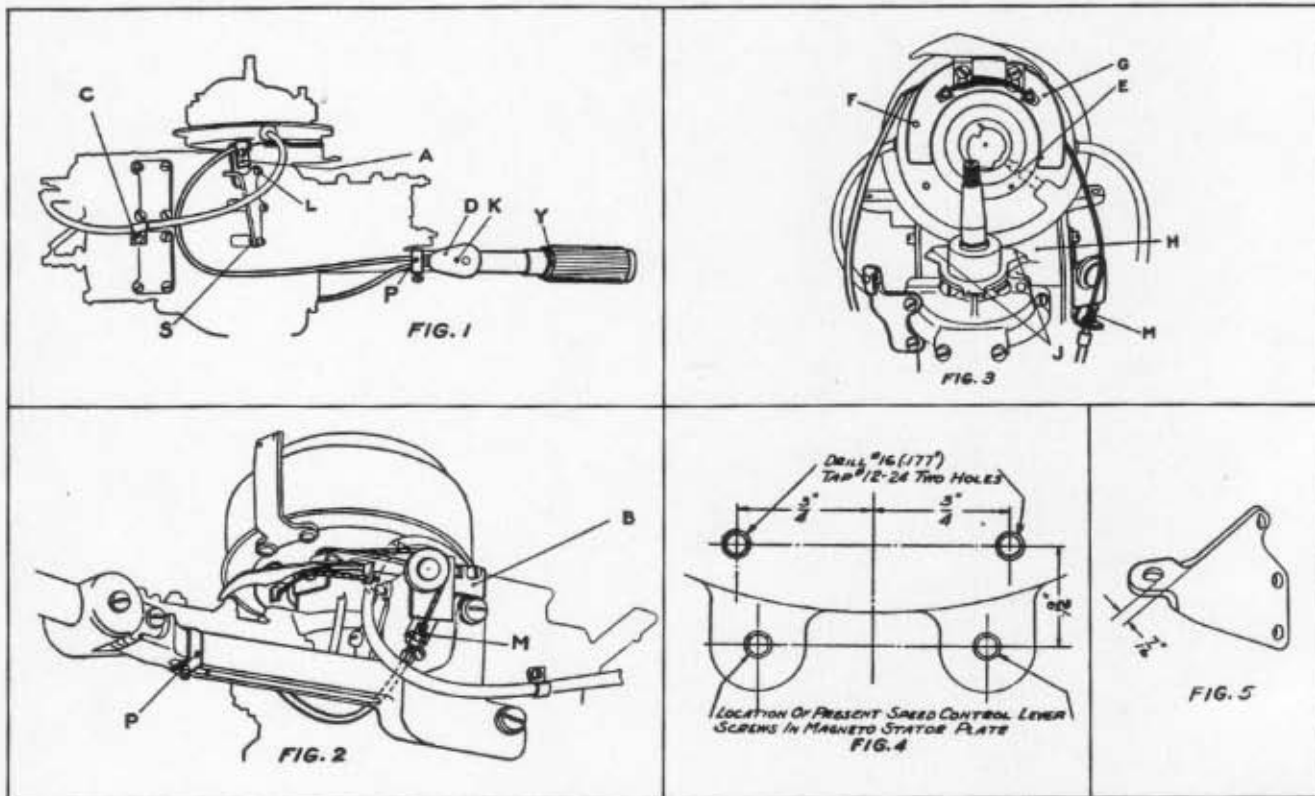
E. Remove screw (21) from cable support (22) and remove cable support.

F. Remove pivot bolt (11). Complete assembly may now be removed.

TO REASSEMBLE:

1. **Warning:** Do not remove screw "K" on control until installation is complete. Removing this screw can lead to a damaged cable and voiding the warranty on the cable.
2. To install the TYCO throttle control, it is necessary to remove the shrouds, gas tank and stator plate according to the instructions in the MARTIN OUTBOARD MANUAL.
3. Install left bracket "A" in position shown in Fig. 1. When bracket "A" is used with the heavy type gas tank bracket illustrated in Fig. 5, the bracket "A" is installed between the motor casting and the gas tank bracket. The spacer "S" is then used on the bottom screw as illustrated in Fig. 1. It is necessary to offset the heavy type gas tank bracket so that the dimension from the face of the gas tank bracket to the front edge of the gas tank mounting hole is 7/16" as illustrated in Fig. 5. When bracket "A" is used with motors having the light weight 2 hole gas tank bracket, the bracket "A" is mounted in front of the gas tank bracket using the two upper screws. Spacer "S" is used in position "L" when light weight gas tank bracket is used.

4. Install right hand bracket "B" but do not tighten screws fully.
5. Install TYCO control handle in place of original one as shown at "D". Screw and lock washer are furnished. Install cable guide "P" and pass control cables through guide.
6. Unscrew stator plate screw "E" and lift stator plate free of shaft. If dowel pins in stator plate at "F" extend beyond the surface of the stator plate, drive the dowel pins in with a hammer or grind off.
7. Screw quadrant "G" to stator plate below throttle cam, using the original screws and spacers. Put stator plate back into place to see if quadrant clears motor at "J" and "H" when stator is rotated. If necessary, file high parts on motor casting at "H" and remove any burrs on points of bearing surface at "J".
8. Slip right hand bracket into the right hand bracket "B" and see that there is a nut on the adjusting screw "M" before placing in the bracket. Put other jam nut onto the adjusting screw but do not tighten.
9. Remove stator plate again, loosen quadrant and insert cable as shown in Fig. 3. The upper (or the longer cable) leading from the TYCO control runs to the left hand bracket "A" and the lower cable runs to the right hand bracket "B".
10. Clinch cables into place on quadrant lug. Lugs should be pinched only enough to keep cable from falling out. Tighten quadrant and put stator back on motor.
11. Clamp left hand cable into place at "A". Adjust bracket for height so that the cable passes between the quadrant and the stator plate. Tighten screws. Adjust bracket "B" for height and tighten screws. Adjust cable tension with adjusting screw "M" and lock into position. NOTE: If cable is adjusted too tight, a gritty action will result, and if cable is too loose, the cable may jump the pulley.
12. Remove locking screw "K" and test for freedom of movement and make final adjustments. Only enough compression is required on screw "E" to keep stator from coming out.
13. Handle drag of friction can be adjusted by screw on collar "Y".



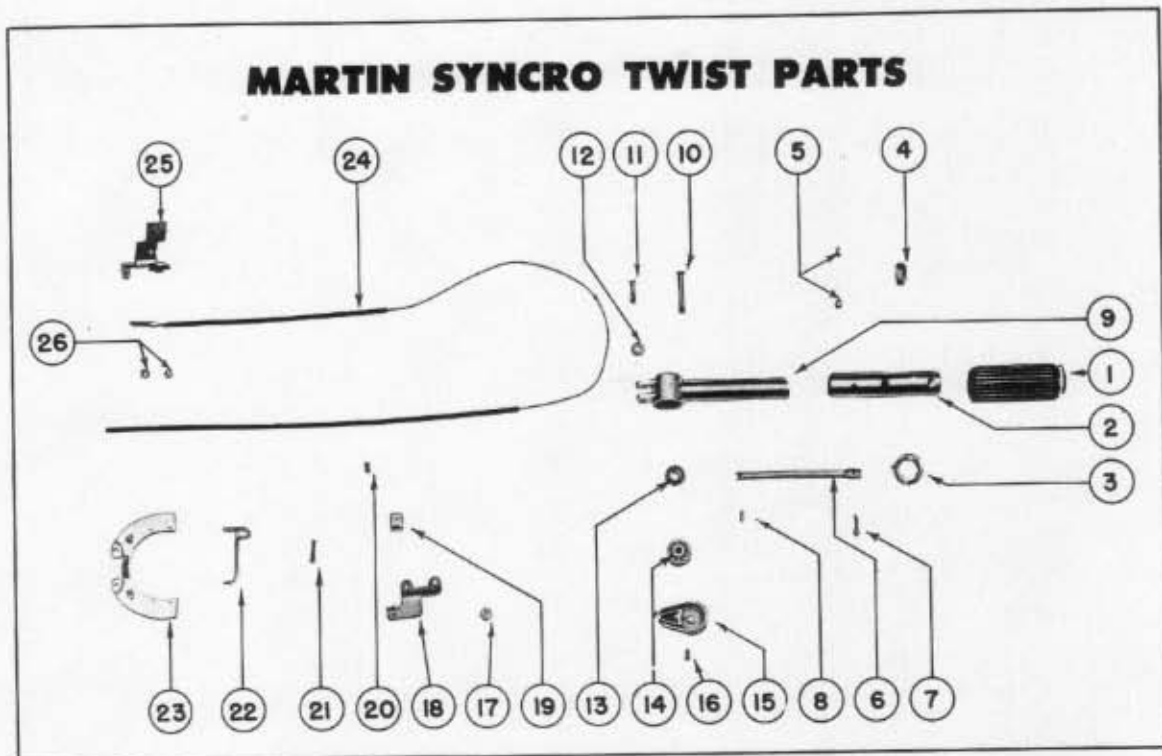
TO DISASSEMBLE TWIST GRIP:

- A. Remove thru bolt (10) and separate cable assembly from handle.
- B. Loosen set screw on collar (3) and slide forward.
- C. Remove two friction shoes (5) from rotatable tube (2).
- D. Slide rubber grip assembly (1) off rotatable tube (2).
- E. Remove cotter pin (7) located inside of rotatable tube (2). Tube may now be removed.
- G. Shaft (6) and gear (13) may now be removed.
- H. To remove cable from housing slide cable

covering ahead to that gear (14) and cable assembly (24) may be lifted from cable housing. Twist grip now completely disassembled.

TO REASSEMBLE:

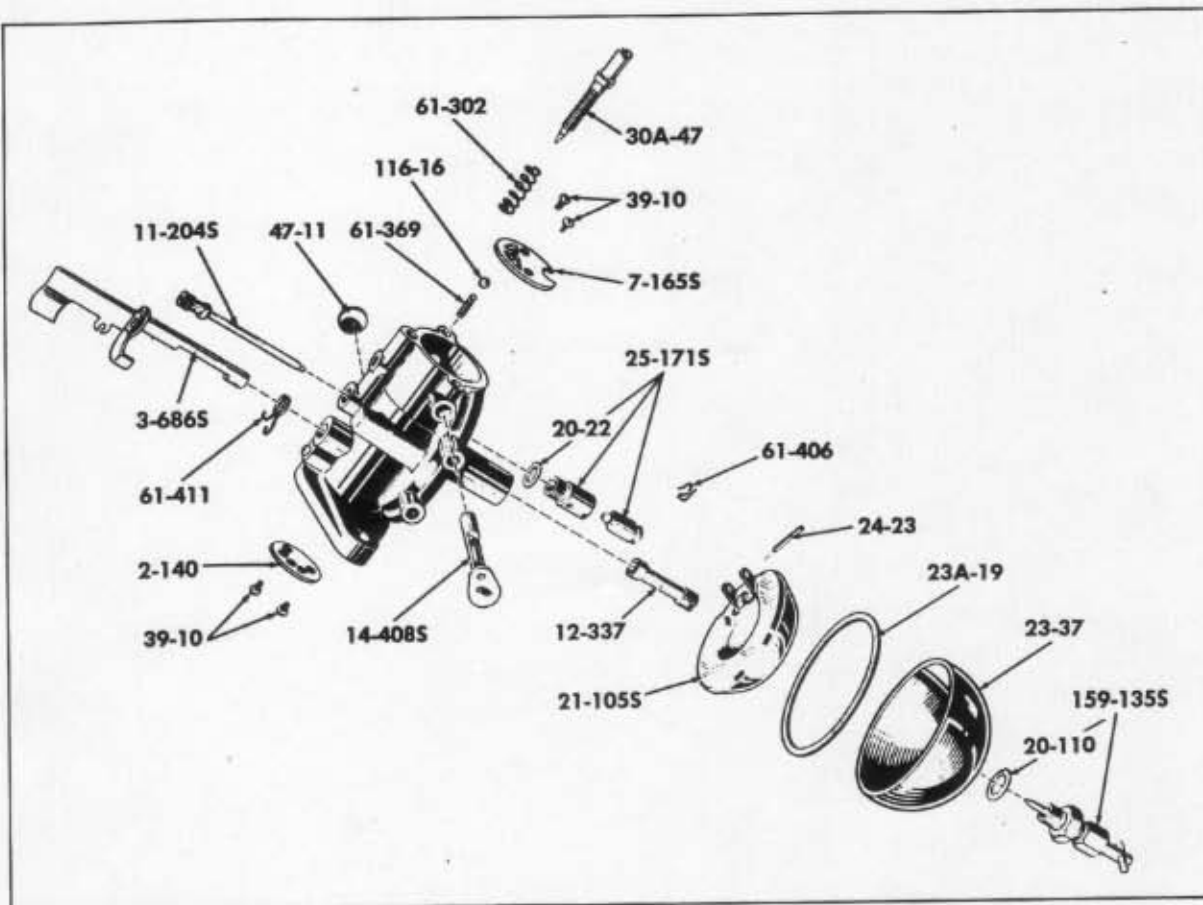
- Reverse above procedure.
- CAUTION: When reassembling cable in housing use a standard 6/32 x 1/2 screw in cable housing. Tighten screw before replacing gear and cable. With gear teeth facing up set ball of cable in recess of housing in such a position that the natural tendency of the short cable is to wind in a counter-clockwise direction. Refer to **warning** note in reassembly procedure.



MARTIN SYNCRO TWIST PARTS LIST

Ref. No.	Part No.	Quantity	Part Name
1	SA-51-1	1	Rubber Grip Assembly
2	O-1	1	Rotatable Tube
3	O-20	1	Collar (With 8/32" x 1/8" Set Screw)
4	O-7	1	Driving Lug
5	O-22	2	Friction Shoe
6	O-6	1	Drive Shaft
7	O-28	1	Cotter Pin 1/8" x 1/2"
8	O-23	1	Pin
9	SSA-3	1	Gear Housing Sub-Assembly
10	O-10	1	Bolt
11	O-18	1	Pivot Bolt
12	O-27	1	Lock Washer 1/4"
13	O-5	1	Gear
14	O-4	1	Gear and Drum
15	O-9	1	Gear Housing Cap
16	O-30	1	Locking Screw
17	O-8M	1	Spacer
18	O-4M	1	L. H. Bracket
19	O-13	1	Cable Clamp
20	O-25	1	8/32" x 3/8" Mach. Screw
21	O-24	1	8/32" x 7/8" R. H. Mach. Screw
22	O-9M	1	Cable Support
23	SA-4	1	Quadrant Assembly
24	SA-2	1	Cable Assembly
25	SA-1	1	R. H. Bracket
26	O-26	2	Lock Nuts 1/4-28 x 1/8"

Martin "75" CARBURETOR



Part No.	Part Name
2-140	Throttle valve
3-686S	Throttle shaft and lever assembly
7-165S	Choke valve assembly
11-204S	Low speed jet assembly
12-358	Nozzle
14-408S	Choke lever and shaft assembly
20-22	*Needle seat gasket
20-110	Bowl nut gasket
21-105S	Float and lever assembly
23-37	Bowl
23A-19	Bowl ring gasket
24-23	Float lever pin
25-171S	Needle and seat assembly
30A-47	Idle adjustment screw
39-10	Valve attaching screw (4)
47-11	Welsh plug
61-302	Idle adjustment screw spring
61-369	Choke shaft spring
61-411	Throttle valve return spring
116-16	Choke shaft ball (2)
159-135S	Adjustable main metering screw assembly

(*) Gasket so marked must be soaked in 90 proof denatured alcohol for 15 minutes, installed on part and let dry before using.

NOTE: Small figures in parentheses indicate the number of pieces used in one carburetor. Where no figure is shown, only one is used.

TO: All Distributors & Direct Dealers
DATE: March 1, 1951

WICO MAGNETO SPECIFICATION FW-2141

The following is a breakdown of the individual parts making up the magneto used on the MARTIN "75" Synchro-Twist motor. The breakdown of parts as shown on Page 25 of the "75" owner's manual is partially incorrect. Retain this sheet for future reference and order parts necessary accordingly.

Part No.	Part Name
2965	Fixed contact clamp screw washer
2972	Shaft key
3081	Cam spring washer
5431	Condenser clamp screw
5431	Fixed contact clamp screw
5431	Condenser connection screw
5446	Cam wiper felt
X5463	Condenser group
5486	Lead wire bushing
5536	Primary lead wire clip screw
X5816	Friction shoe group
5925	Lead wire marker
7018	Breaker cam
7041	Breaker slide
X7046	Breaker contact set
7323	Rotor label
X7381	Lead wire group, 17"
X7500	Coil group
7537	Core screw
Y7559	Rotor
X7562	Stator plate unit (Includes stator plate, core group, coils, lead wires, condensers, and breaker mechanism)

H. Dickerson
Service Manager



We, your dealer and the manufacturers, wish to thank you for selecting a MARTIN Motor for your outboarding pleasure.

So that you may completely enjoy the outstanding performance and many exclusive features built into your new MARTIN, this manual has been prepared which we know you will find interesting as well as helpful. To get the most out of your MARTIN, read it carefully and save for future reference.

Martin Motors

Eau Claire, Wisconsin



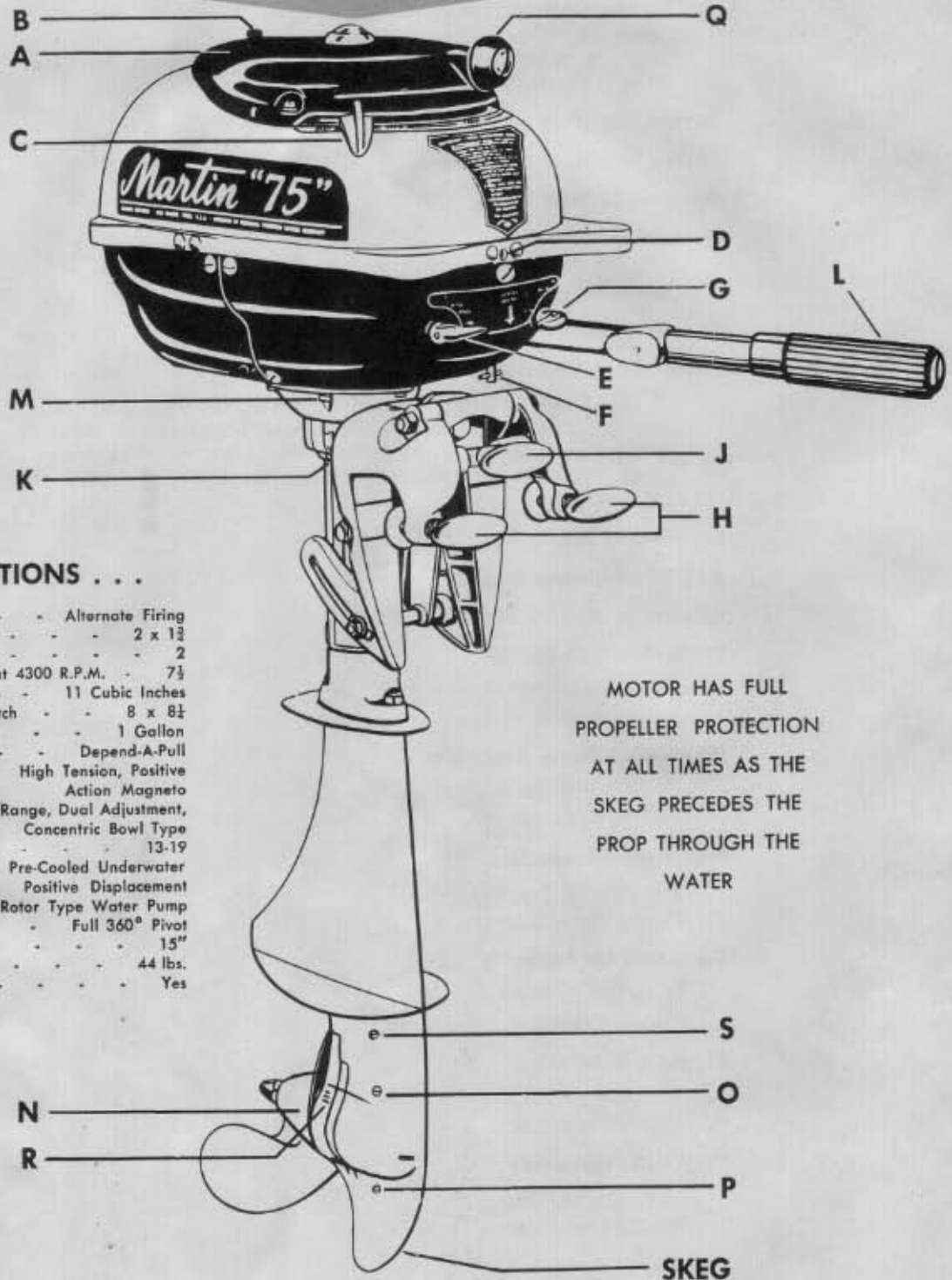
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Martin "75"

SYNCHRO-TWIST

THE MARTIN "75" SYNCHRO-TWIST MODEL FEATURES CONTROL OF SPEED AND STEERING IN ONE UNIT AND CAN BE REVERSED WITHOUT SHIFTING BY TURNING THE MOTOR IN ITS FULL 360° SWIVEL.



SPECIFICATIONS . . .

Power Head	- - -	Alternate Firing
Bore and Stroke	- - -	2 x 1 1/2
No. of Cylinders	- - -	2
Certified Brake H. P. at 4300 R.P.M.	- - -	7 1/2
Piston Displacement	- - -	11 Cubic Inches
Propeller Diameter Pitch	- - -	8 x 8 1/2
Fuel Tank Capacity	- - -	1 Gallon
Starter	- - -	Depend-A-Pull
Ignition	- - -	High Tension, Positive Action Magneto
Carburetor	- Full Range, Dual Adjustment, Concentric Bowl Type	
Gear Ratio	- - -	13-19
Type of Exhaust	- - -	Pre-Cooled Underwater
Cooling System	- - -	Positive Displacement Rotor Type Water Pump
Steering	- - -	Full 360° Pivot
Stern Height	- - -	15"
Weight	- - -	44 lbs.
Full Reverse	- - -	Yes

MOTOR HAS FULL PROPELLER PROTECTION AT ALL TIMES AS THE SKEG PRECEDES THE PROP THROUGH THE WATER

Martin "75" SYNCRO-TWIST OPERATING PARTS

READ CAREFULLY TO BECOME ACQUAINTED WITH YOUR MOTOR

- A** THE MARTIN FILLER CAP which carries two concealed spare shear pins.
- B** AIR VENT, built into filler cap. Keep this turned off when motor is tilted or removed from boat, otherwise fuel will spill. Always open before starting motor, because fuel will not flow when it is closed.
- C** INDICATOR LEVER. This is a combined control and indicator which moves when the Syncro-Twist grip is turned and shows when motor is set for "stop" — "slow" — "start" or "fast" operation.
- D** IDLE ADJUSTMENT SCREW is a carburetor air control for slow speed. For approximate adjustment turn clockwise till lightly seated then turn counter clockwise $\frac{1}{2}$ turn. Adjust only at slow speed.
- E** KNOB "A" is a starting control. It chokes the carburetor to start a cold motor. Choking a warm motor is not necessary. Leave knob "A" at run position.
- F** "T" HANDLE SCREW — adjusts the ratio of fuel and air entering your motor during intermediate and high speed running. This is rarely used and only then when you fail to get smooth high speed running. Approximate setting is $\frac{3}{4}$ turn counter clockwise off seat. Adjust only at high speed.
- G** KNOB "C" is the fuel valve which when fully opened permits fuel to pass from the tank to the carburetor. Fully open this valve before starting your motor. To insure against fuel leakage, it is advisable to shut off this valve and run engine until carburetor is dry, before removing motor from boat.
- H** STERN CLAMP HANDLES are the two outside handles used to tighten the clamps to the boat's stern. Turn only by hand as tightly as possible. Never use a wrench for this purpose.
- J** STERN ADJUSTMENT located between the stern clamp handles is used to adjust vertical position of the motor. By turning this handle you can obtain the correct angle, which is vertical. You may adjust before starting or while under way. If under way, reduce motor speed to lessen the effort of turning the handle.
- K** SWIVEL LOCK. To turn your motor to any desired horizontal angle, follow this sequence of operation: Stop motor, turn both air vent B and fuel valve G to "off" position. This avoids spilling fuel. Facing motor turn steering handle to your left approximately 80°. Tilt motor forward until propeller is out of water. This exposes the swivel lock located on the left side. Lift this swivel lock and turn the entire motor crosswise. This will enable you to change a shear pin or remove weeds from the blade or around the water intake slots R. Periodically check for weeds.

While fishing, you may choose to leave the motor in a crosswise position. If so, tilt the motor slightly backward until it reaches a resting place on the base of the steering handle.

To return your motor to run position, press down on the steering handle. This elevates the unit to its

swivel position. Turn the motor so the propeller is directly behind the boat. Release the swivel lock and make sure lock has engaged before lowering the propeller into the water.

- L** SYNCRO-TWIST control and steering handle. Turning the handle grip clockwise increases motor speed — counter clockwise reduces speed or stops motor. Indicator lever "C" moves when Syncro-Twist grip is turned. **Never use handle to carry motor.**
- M** STEERING STABILIZER holds your motor in any selected steering position as well as stabilizing and dampening motor vibration. Built into your motor, its only parts visible are four (4) adjusting screws which control the tension on the stabilizer. If more or less tension is desired, turn each screw equally to assure an even setting. To increase tension, turn screws right. To decrease tension, turn screws left. A quarter turn at a time of each screw should be made, until desired results are obtained.

- N** RESILIENT PROPELLER CLUTCH (Located inside the propeller hub) drives the propeller and is a device designed to eliminate damage to the propeller and shear pin should the propeller strike any solid object.

To install propeller place it including the clutch, on the shaft, making certain it is properly engaged with the shear pin. Then screw the propeller nut on the shaft as tightly as possible, using only your fingers. Next, using your wrench, tighten the nut approximately another $\frac{3}{4}$ turn and until the cotter pin holes in the shaft and nut match. Insert cotter pin, and the motor is ready to run. Slippage of propeller will indicate necessity of further tightening nut.

SHEAR PIN is a brass pin serving as an additional safety measure between the propeller and gears in the lower unit. To replace, remove the propeller and clutch, insert new pin in the hole in the propeller shaft and reassemble as described above.

- O** GREASE VENT for hand tube lubricating.
- P** GREASE INLET for lower gear housing.
- Q** DEPEND-A-PULL STARTER KNOB — Pulling this operates the built-in starter.
- R** WATER INTAKE SLOTS.
- S** GREASE VENT for high pressure factory lubricating.

Instructions: To lubricate using grease tube—remove screws at P and O, insert nozzle of tube in P and squeeze tube until grease appears at O. Replace screws.

To lubricate using pressure grease gun, remove screws P and S. Insert pressure gun nozzle in P and force feed lubricant until it appears at S. This lubricates lower drive shaft bearing and is **primarily for factory use. Be sure to replace all screws** after lubricating. Check grease level every 10 normal running hours, or oftener.

Martin Warranty

The MARTIN MOTOR Division of National Pressure Cooker Company warrants all MARTIN outboard motors to be free from defects in material or workmanship under normal use and service. All obligation under this warranty is limited to replace or repair any part or parts thereof which shall within three months (90 days) after delivery to the original purchaser for use be returned to place of purchase with transportation charges prepaid and shall upon examination prove to be defective. This warranty is in lieu of all other warranties expressed or implied or of any other liability or obligation on our part. This warranty shall not apply: (1) to any motor which has been subjected to any misuse, negligence, or accident, or work done in any other way than by a duly authorized MARTIN dealer or agent; (2) to any motor that has been used for racing or on a light-weight boat so that the motor RPM exceeds 4500; (3) to any motor upon which parts not made, sold by, or having the written approval of the MARTIN MOTORS Division have been installed.

Martin Motors reserves the right to change construction, specifications, prices and terms without notice and without obligation as to motors already shipped, or to be shipped.

MARTIN MOTORS

DIVISION OF NATIONAL PRESSURE COOKER COMPANY
EAU CLAIRE, WISCONSIN, U. S. A.

PLEASE COMPLY WITH THIS REQUEST

Each motor has a metal serial number plate. You will find a warranty registration card packed with the motor, bearing the same number as your

motor. This should be properly filled out and mailed to us within 10 days; otherwise your motor will not be registered under our warranty.

Important . . . READ CAREFULLY

MARTIN SERVICE POLICY FOR CUSTOMERS

The Manufacturers have exercised every reasonable precaution to make sure that the finest available material and workmanship have gone into the production of MARTIN Motors. Your dealer is obligated by the Manufacturers to com-

pletely inspect and check your motor before delivery to you. It is therefore urged that you insist your motor be completely serviced and its operation explained to you before it is put in use.

WARRANTY PERIOD ON PARTS AND LABOR

During the first ninety (90) days after you purchase your motor, there will be no charge AT THE PLACE OF PURCHASE OF THE MOTOR for MARTIN parts required solely because of defective material or workmanship and no charge for labor

necessary to install these parts. This applies to all original parts of the motor. When labor and parts are required through accident, abuse or negligence, the parts and labor will be charged for at standard prices.

TRANSIENT SERVICE OR CHANGE OF RESIDENCE DURING WARRANTY PERIOD

During the warranty period should an owner be traveling or become permanently located in some territory other than that of the dealer from whom the motor was purchased, and should it become necessary to have adjustments made that involve labor only, the MARTIN motor owner is expected to pay for such labor at the standard prices.

The MARTIN owner will in all cases be expected to furnish proof that his motor is within the warranty period (bill of sale or dated warranty card are acceptable proof).

Where parts are required due to defective material or workmanship, during the warranty period, such parts will be furnished no charge by any MARTIN dealer in accordance with the owner's service policy.

Should a MARTIN owner want an inspection or adjustment of his motor before the ninety day period has expired, and this is made by a MARTIN dealer other than the dealer from whom he purchased his motor, the owner will be expected to pay the regular established price for this service.

This service would be performed at no charge by the dealer from whom the motor was purchased.

Always take your motor to an authorized MARTIN dealer.

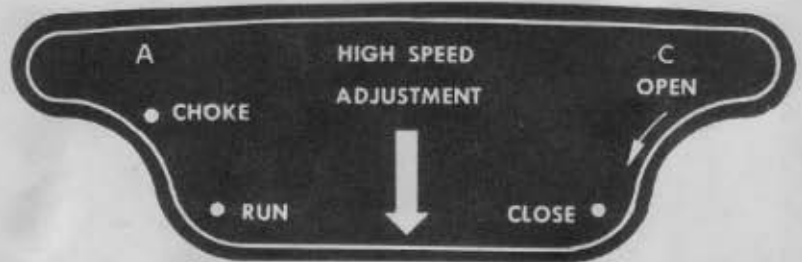
BREAKING IN YOUR *Martin* "75"

CAREFULLY READ INSTRUCTIONS APPEARING ON THE DECALS LOCATED ON THE FUEL TANK, AND AROUND THE CONTROL KNOBS.

IMPORTANT—READ INSTRUCTION BOOK

1. Mix thoroughly $\frac{1}{4}$ pt. oil comparable to Texaco Outboard (SAE 40) to each gallon of regular gas.
2. Open filler cover air vent.
3. Place speed control lever on "Start."
4. Turn knob "C" full open.
5. Turn knob "A" to "choke."
6. Pull starter sharply, after starting turn "A" to "run" position.
7. "T" handle screw under front shroud is high speed adjustment.
8. Choke warm motor if necessary.
9. See instruction book for idle adjustment and gear lubrication.

IDLE ADJUSTMENT
LEAN RICH



For long, trouble-free operation, it is recommended that during the time needed to consume the first 5 gallons of fuel, $\frac{3}{4}$ pint of oil per gallon of gas be used, with throttle at not over $\frac{2}{3}$ full speed. Normal operation after break-in requires $\frac{3}{4}$ pint of oil per gallon, unless motor is to be used for continuous trolling. In this case it is permissible to reduce oil content to $\frac{1}{2}$ pint per gallon if spark plugs tend to foul.

DO'S and DON'TS

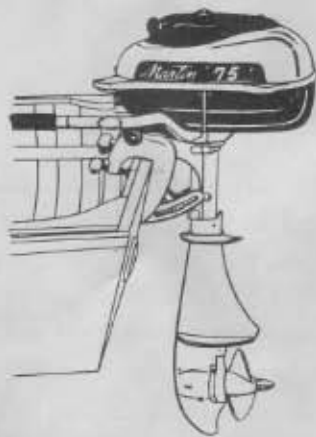
- 1 Use a Safety Cable to attach motor to boat. Fasten to motor support tube housing and thence to boat.
- 2 Periodically check clamp screws while under way, making sure motor is secure on transom.
- 3 Cover motor if left out.
- 4 Mix your fuel outside and away from smokers or fire.
- 5 Keep new spare spark plug in your tackle box.

- 1 Don't pull the starter cord abusively. It's bad for you and your motor. Don't let starter cord snap back — it may possibly injure cord or starter cover.
- 2 Don't raise the propeller end of your motor higher than the powerhead. Water may run into the powerhead and cause expensive rusting.
- 3 Don't run motor for more than 15 minutes in a barrel or small amount of non-circulating water as water heats up and motor won't cool properly.
- 4 Don't mix fuel in motor tank. Use separate fuel can.
- 5 Don't use old fuel mixtures that may have become gummy.
- 6 Don't tilt motor by steering handle.

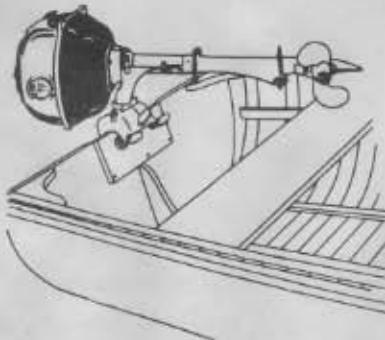
GENERAL INSTRUCTIONS

ATTACHING MOTOR TO BOAT

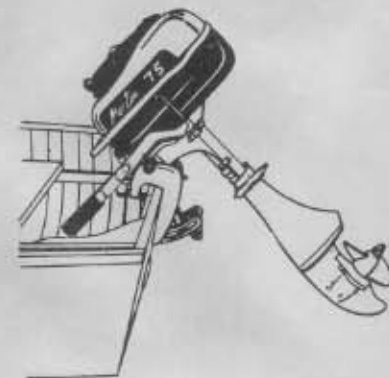
Be sure that motor is centered or slightly to port (left) side before fastening the stern clamp handles. Make vertical corrections by operating stern adjustment handle.



MOTOR PROPERLY ATTACHED TO BOAT



MOTOR IN SWIVEL POSITION



MOTOR TILTED FOR DOCKING

BEFORE STARTING MOTOR

FOLLOW THESE INSTRUCTIONS TO PREPARE THE CORRECT FUEL MIXTURE

MODEL "75"—Use Texaco Outboard motor oil or equal. Mix in a separate container in the following quantity:

Mix $\frac{3}{4}$ pint Texaco Outboard Oil (SAE No. 40) or its equivalent with one gallon of regular gasoline for break-in and all normal usage.

For very slow operation such as continuous trolling it is permissible to reduce the oil mixture to $\frac{1}{2}$ pint. This is not recommended unless spark plug fouling necessitates.

This mixture should be strained through fine mesh wire or chamois-mesh wire preferred. **DO NOT FILL TANK WHILE ENGINE IS RUNNING.**

The fuel tank has a capacity of $6\frac{1}{2}$ pints and allows approximately $1\frac{1}{2}$ hours full throttle running time. Inspect lower gear housing at least every ten (10) hours of operation and when necessary refill with outboard gear lubricant.

Be sure air vent is "open" and fuel is turned "on" before attempting to start motor.

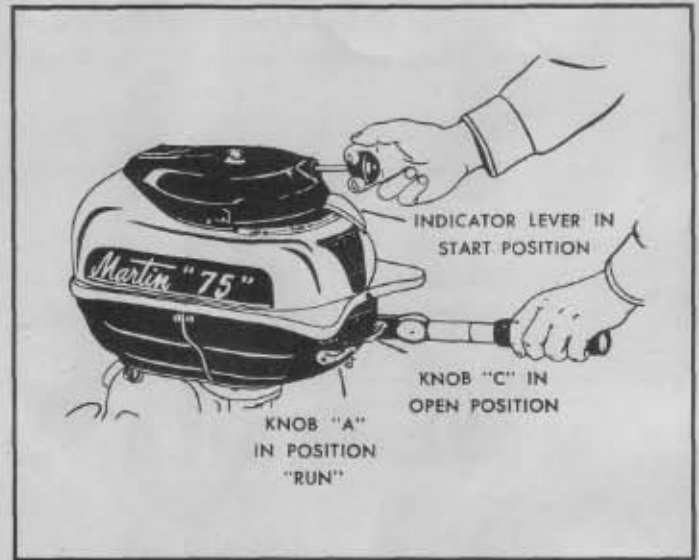
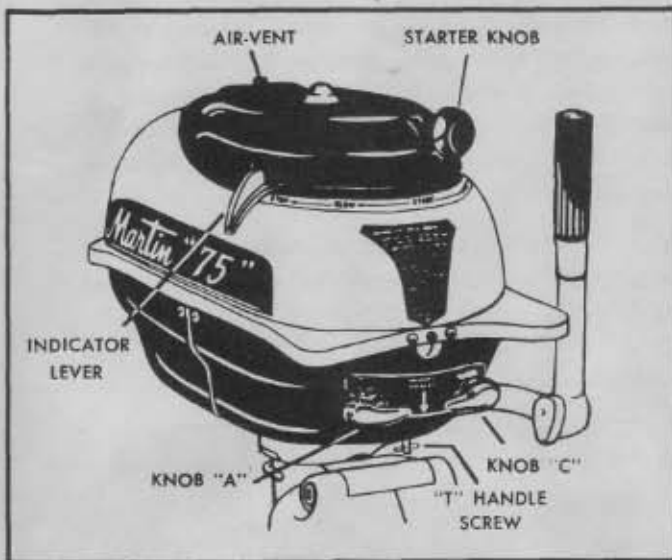
CAUTION—Do not use pliers or wrench on air vent screw.

Do not use a detergent (auto-crankcase) oil or leaded gasoline, as it tends to foul plugs.

Failure to comply with the above recommendations may result in serious damage to your motor.

Spark Plug Gap .030—Magneto Breaker Point Gap .020

TO START MOTOR



1. Open gasoline shut-off valve Knob C. To open turn counter-clockwise approximately 1 turn.
2. Be sure air vent is open. Turn counter-clockwise approximately one turn to open.
3. Move indicator lever to "start", by turning Syncro-Twist grip.
4. Turn Knob A to choke position.
5. Now only a short, sharp pull of the starter knob is necessary to start motor. When motor has run a few moments, turn Knob A to "run" position.
6. If motor falters, return Knob A to "choke" position momentarily then return to "run." Repeat if necessary until motor "warms up."
7. "T" Handle Screw is a high speed correction adjustment, factory set, and will rarely need changing. Should this be necessary, the motor must be running at high speed. If the adjustment is set too rich, the motor will vibrate and run unevenly, commonly known as four-

cycling. If set too lean, the engine will starve and tend to backfire and stop.

To correct this, slowly turn screw B towards lean, until motor starts to falter, then slowly turn towards rich until motor runs fast and even.

As previously stated, this adjustment should rarely be changed and when required should be a very slight correction.

8. CAUTION: Do not run new motor beyond $\frac{1}{2}$ maximum speed while consuming the first five (5) gallons of fuel, except for possible short times necessary to adjust high speed. (See 7 above). Do not run motor out of water as this causes excessive wear on pump rotor, and possible serious damage to the motor.

The motor speed may be gradually increased after the break-in period, however, it is still a new engine and a careful break-in period will result in extended, trouble-free motor life.

IMPORTANT— Two (2) shear pins are supplied with your motor and are clipped under the tank filler cap. Always keep these clips filled.

REMEMBER—To turn Knob "A" to "Run" position after motor starts. Occasionally check against weeds collecting around water pump inlet ports.

IMPORTANT!

When tilting motor, be sure all water is drained from lower unit so as to avoid getting moisture in power head. Always lay motor down in car or on dock so that propeller is lower than the power head.

GENERAL REMINDERS AND AIDS

The operation and servicing of outboards has been greatly simplified through better design and years of manufacturing experience. Actually there is nothing complicated about servicing motors IF YOU KNOW WHAT TO LOOK FOR.

If your outboard won't start, the first thing to check is your fuel supply. Be sure your fuel shut-off valve is "open".

In all 2-cycle engines in which oil is mixed with the gasoline, spark plug fouling is rather prevalent. Therefore, if motor misses or does not start, the probability

is that one or both spark plugs are fouled. Spark plugs can be removed by first removing rear shroud. If spark plugs are dirty, they can be cleaned in emergencies with a pocket knife, being especially careful to remove any carbon between the points. Also be careful to avoid changing the gap setting which is .030. Probably 90% of all ignition failures can be traced to spark plug difficulties.

In order to review all of the possibilities which might cause difficulties in motor operation, we have prepared the following chart:

MOTOR FAILS TO START OR MISSES

FUEL

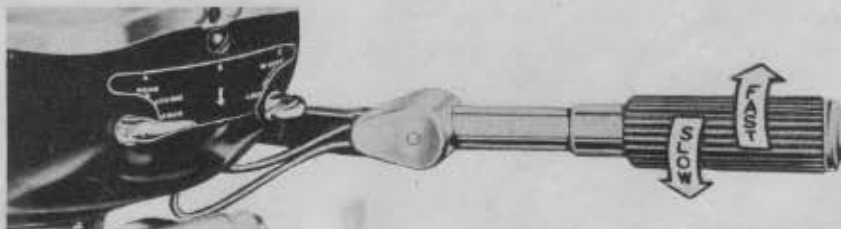
- No fuel in tank.
- Fuel valve closed.
- Fuel line clogged.
- Carburetor dirty.
- Tank filter screen dirty.
- Water in fuel.
- Too much oil in fuel.
- Motor not choked.

IGNITION

- Loose, broken or disconnected spark plug wire.
- Poor insulation on wires.
- Cracked porcelain on spark plugs.
- Short circuit due to moisture or oil.
- Spark plugs dirty or center pole loose.
- Spark plug gaps not set at .030.
- Magneto breaker points not set at .020 or are corroded.
- Magneto breaker points fail to open or close when flywheel revolves.
- Magneto coils or condensers weak.

THE *Martin* "75" SYNCRO-TWIST CONTROL

ITS OPERATION AND FUNCTION



Your MARTIN "75" has the exclusive Syncro-Twist Control which provides steering plus carburetor and spark control in one, compact, neatly engineered unit.

This ingenious device consists of a sturdy twist grip, attached to the steering bracket which grip when turned clockwise increases the motor's speed and turned counter clockwise, reduces speed.

Now, with your new MARTIN "75" Syncro-

Twist, you can go "full tilt" up to that sand bar, weed bed or dock and with a twist of the wrist, turn the grip and slow down to that famous MARTIN troll, or stop.

There's no awkward turning your body around or clumsy arm crossing to change or reduce speeds. **ALWAYS**, while operating your "75" Syncro-Twist, **YOU'RE FACING FORWARD** with complete, fool-proof motor control at your very finger tips.

GENERAL REMINDERS AND AIDS

IF YOUR MOTOR WON'T OPERATE PROPERLY — CHECK THE FOLLOWING:

MOTOR KNOCKS

Flywheel nut loose.
Worn piston, cylinder or bearings, or loose rods.
Overheated motor.

MOTOR STIFF

Rust in cylinders.
Crank shaft bent.
Propeller shaft bent.
No lubricant in lower unit gear housing.
Too little oil in fuel, resulting in damaged bearings.
Propeller fouled by fish-line around hub.
Overheated motor.

BOAT MAKES POOR PROGRESS IN WATER

Wrong type of boat.
Propeller blades bent.
Rope or anchor dragging.
Fouled propeller or weeds on lower unit.

POOR COMPRESSION

Piston rings fouled and stuck in ring grooves of piston.
Scored cylinder.
Gaskets blown out or leaking.

MOTOR LOSES POWER OR SLOWS DOWN

Carburetor set too rich. (slows down)
Carburetor set too lean. (backfires and slows down)
Lack of oil in fuel causes engine to overheat and slow down.
Too much oil at slow speeds causes rough uneven firing.
Clogged fuel line, carburetor or filter.
Scored cylinder, worn rings, poor compression.

MOTOR VIBRATES

Poor ignition.
Stern bracket clamp screws loose.
Bent or fouled propeller.
Steering stabilizer adjustment screws too loose.
Bent propeller or shaft.

MOTOR POWERHEAD OVERHEATED

Water inlet ports at pump clogged.
Water inlet tube broken or loose at ends.
Water pump clogged or worn.
Water inlet port not deep enough in water.
Use of wrong propeller permitting engine to run too fast.
Lack of proper oil-gas fuel mixture.

COLD WEATHER CARE OF MOTOR

While running, your motor cannot freeze, but when idle during freezing weather, it should be drained by raising propeller and gear housing out of water and

placing control knob on "slow" and rotating engine by pulling starter cord several times. DO NOT RAISE PROPELLER END OF MOTOR ABOVE THE POWERHEAD.

ACCESSORIES TO HAVE ABOARD WHEN ON THE WATER

- 1 A reliable approved fire extinguisher, securely fastened and easily accessible.
- 2 A reliable safety fuel container with flexible spout, filled with ready-mixed fuel.
- 3 A pair of oars or paddle.
- 4 Suitable life belts or safety cushions for all on board.
- 5 Tools consisting of a screw driver, pliers and wrench. These should be kept in a water-proof kit or in your tackle box.
- 6 If you are going to be on the water after dark, it is always wise to carry some kind of an electric torch or lantern.
- 7 An extra length of starter pull cord.
- 8 Extra spark plugs.

SUBMERGED MOTOR

The manufacturers recommend that should your motor be submerged and recovered that it be taken immediately to your nearest dealer. Under no condition attempt to start your motor if it has been under water as this will damage the magneto and possibly other parts.

If you cannot get your motor to a dealer within five hours after recovering it, remove the starter cover and rear and front shrouds. 1. Remove the flywheel and the stator plate, remove carburetor and manifold along with intake valves and springs. 2. Remove spark plugs. Drain all water out of powerhead through spark plug holes and valve openings. With the valves removed and the spark plugs removed, pour a quantity of oil, about $\frac{1}{2}$ cup, in each valve compartment, rotating the motor while doing so. This is to insure lubrication to all of the anti-

friction bearings within the powerhead. 3. Wash all these parts in gasoline and allow to dry in warm, NOT HOT, place. 4. Drain tank and fuel lines, then flush with fresh gasoline.

When magneto is dry, reassemble on motor and check spark by holding end of ignition cable near cylinder head while spinning flywheel. Test each cable repeatedly, grounding other cable to some part of motor. A blue-white spark indicates magneto is operating correctly.

Should all attempts fail to start your motor, see your dealer or send motor in to the factory.

Normal moisture such as might be encountered during rain storms or spray will not affect the operation of MARTIN MOTORS as each unit is well protected by spray shields, shrouds and spark plug guards.

SALT WATER INSTRUCTIONS

Your Martin Outboard can be operated in either salt or fresh water. Although the metals used in its construction are of the best materials available, they are not totally impervious to the corrosive action of salt water, unless proper precaution is taken.

To extend motor life and protect its parts after use in salt water, proceed as follows:

1. Place motor in tank or barrel full of fresh water, being sure lower the unit is submerged, and flush-run for ten or

fifteen minutes. Do not race motor. Sluice down the outside of the motor with fresh water.

2. Remove from tank and refill gear housing with lubricant. This is important as a small amount of salt water in the gear housing will tend to corrode internal gears and working parts.

NOTE: MARTIN dealers have available a flushing attachment which can be applied to your motor requiring only the use of an ordinary garden hose.

STORAGE OF MOTOR WHEN NOT IN USE

It is suggested by the manufacturers that you make arrangements with your dealer to take advantage of the "Winter Storage Plan" which includes storing, cleaning and adjusting your motor for the following season. This can be done for a nominal charge. Should the dealer at this time find it necessary to replace any parts, an estimate will be given you before any work is done.

If you don't use this service, dry out your motor thoroughly (See "Care in Cold Weather Instructions" and if used in salt water, also see "Salt Water Instructions.") Remove spark plugs and pour two table spoons of lubricating oil in each cylinder, then revolve the flywheel to evenly spread this lubricant over

the pistons and cylinder walls. Replace the plugs. Fill gear housing with lubricant. Now wipe the entire motor with an oily rag being sure to cover all joints and crevices. Cover your entire motor with a tarpaulin, heavy canvas, or heavy paper, in order to keep out any dust and dirt. It is advisable to keep your shipping container for this home storage purpose. **EMPTY ALL FUEL FROM TANK**, so as to avoid any fire hazard and because oil in fuel may settle and cause fuel line stoppage.

Remember to store in a warm dry place to avoid possibility of any remaining pockets of water freezing. When storing motor, keep it in upright position.

Martin "75"

The Foregoing . . .

has been both general and specific. We have conveyed to you such information as will enable you to thoroughly understand all operations of your motor and have explained the necessary procedure for its proper care and maintenance.

Without being too technical, we have explained your Martin Motor, detailing the outstanding and exclusive features, while advising you how to get the best out of this superb piece of marine equipment.

We have built an outboard motor for you which has been performance tested and will last many years. This is our responsibility and we have done so conscientiously.

We know you will want to take full advantage of the exceptional features incorporated in your Martin Motor and for this reason will take upon yourself the responsibility of caring for your motor as we have outlined in this manual.

It's wise to remember: **It is not the use of a good thing that harms it. It is the ABUSE of it that should be avoided.**

That your hours of "Martin" motoring be many and enjoyable, is our sincere wish!

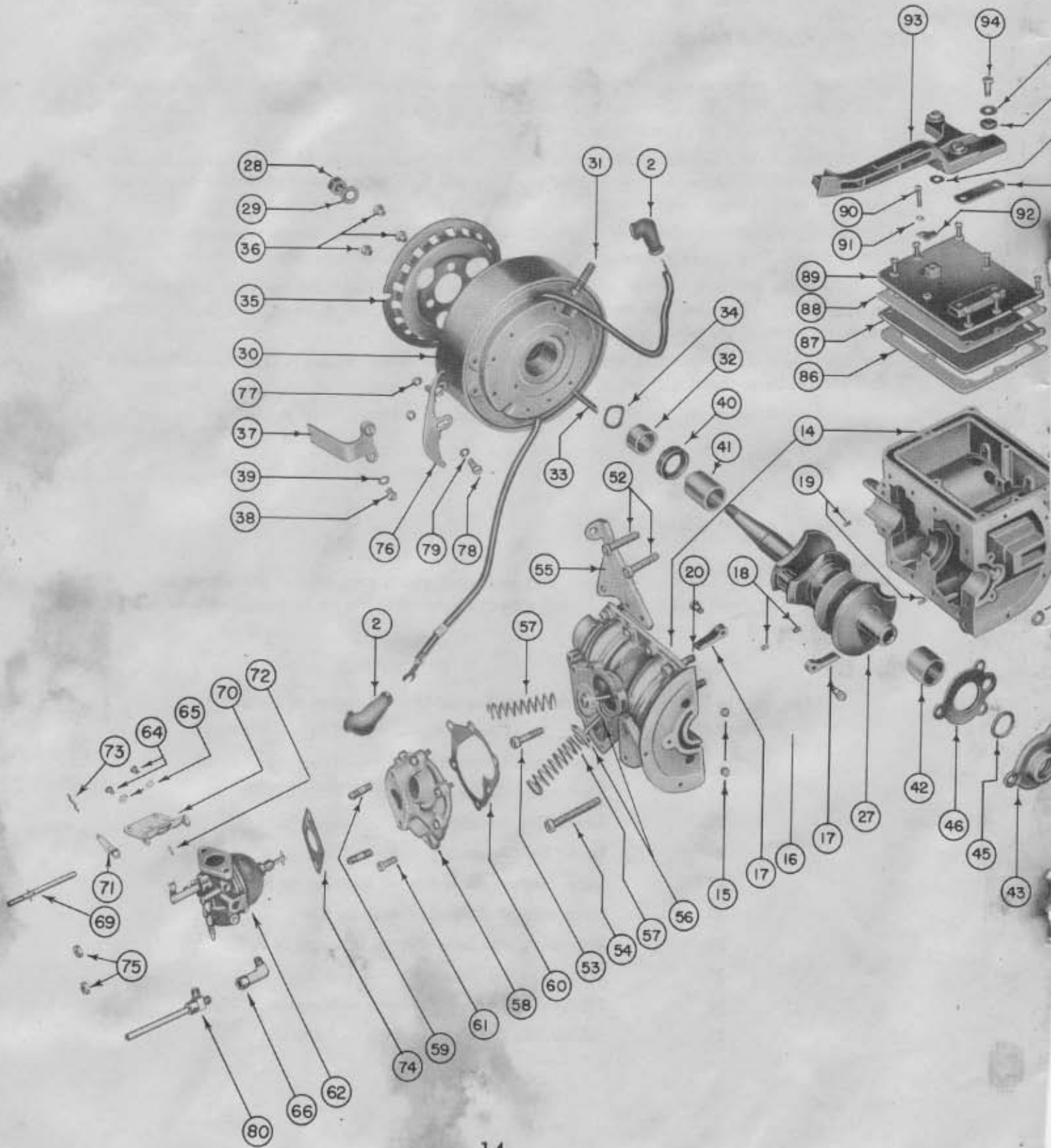
The Following . . .

In this section of the manual you will find exploded views and Master Parts List for your Martin "75" Syncro-Twist Control Motor. **Always take your motor to an authorized Martin dealer for service and check-up.**

PAGE	DESCRIPTION
14-15	Power Head Assembly — Diagram of Parts
16-17	Power Head Assembly — Parts List
18	Starter and Cover Assembly — Diagram of Parts
19	Starter and Cover Assembly — Parts List
20	Lower Unit Assembly — Diagram of Parts
21	Lower Unit Assembly — Parts List
22	Stern Bracket Assembly — Diagram of Parts
23	Stern Bracket Assembly — Parts List
24	Wico Magneto Assembly — Diagram of Parts
25	Wico Magneto Assembly — Parts List
26	Tillotson or Carter Carburetor — Diagram of Parts
27	Tillotson or Carter Carburetor — Parts List

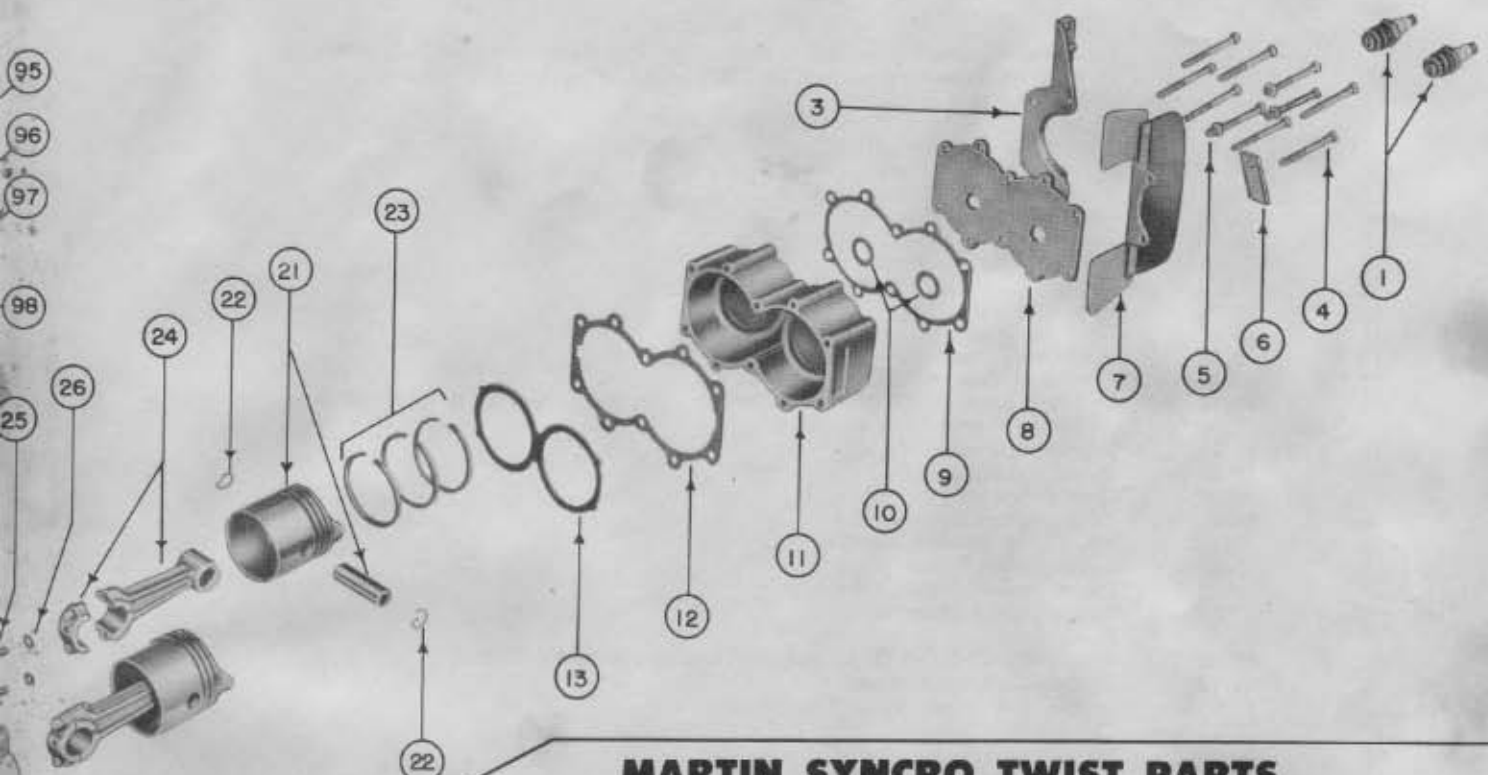
Martin "75"

POWER HEAD ASSEMBLY

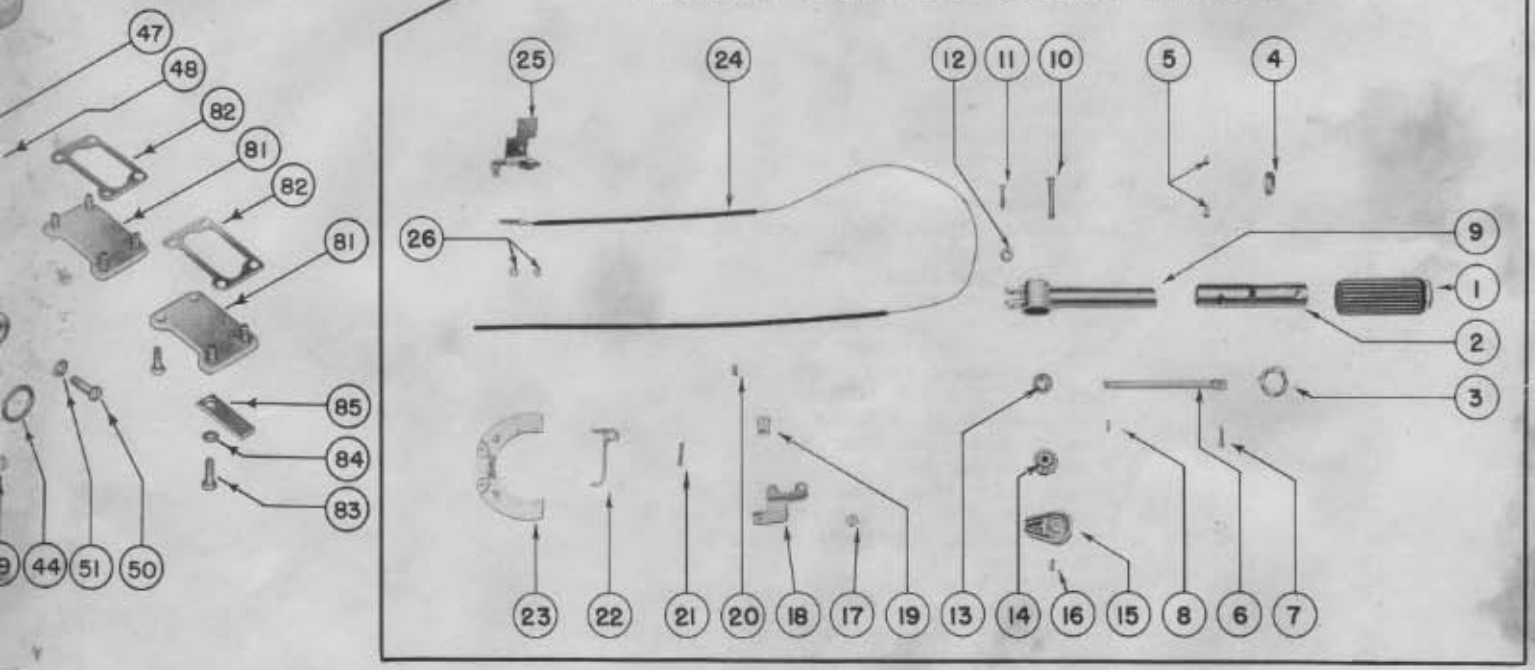


Martin "75"

POWER HEAD ASSEMBLY



MARTIN SYNCRO TWIST PARTS



Martin "75"

POWER HEAD ASSEMBLY

Ref. No.	Part No.	Description
	25618	Powerhead Assembly Complete, Includes all Parts Listed to and Including Item 92
	25620	Powerhead Assembly—Same as 25618 less Carburetor and Magneto
1	100-S-1	Spark Plug and Washer
2	25605	Short Angle Rubber Nipple, for Spark Plug
3	25180	Tank Mounting Bracket (Rear)
4	2-S-12	Screw—Cylinder Head
5	35-S-17	Washer—Cylinder Head Screw
6	15152	Clip—Magneto Wire
7	25219	Spray Shield Assembly
8	25031	Cover—Cylinder Head
9	25095	Gasket—Cylinder Head Cover
10	25191	Gasket—Spark Plug
11	25040	Cylinder Head
12	25189	Gasket—Cylinder Head Water
13	25187	Gasket—Cylinder Head Compression
14	25114	Cylinder Block and Crankcase Assembly, Includes Item 14 to and Including Item 20 and Items 41 and 42
15	50-S-2	Expansion Plug
16	25640	Pin—Cam Follower
17	25641	Cam Follower
18	9-S-6	Screw—Cam Follower Pin
19	25154	Pin—Main Bearing Locating
20	15226	Taper Dowel Screw
21	25292	Piston and Wristpin Assembly
22	25064	Lock Spring—Wristpin
23	25223	Piston Ring
24	25354	Connecting Rod and Cap Assembly, Includes Items 24, 25 and 26 Inclusive
25	25344	Screw—Connecting Rod
26	37-S-3	Lockwasher—Connecting Rod Screw
27	25353	Crankshaft
28	20-S-1	Nut—Magneto
29	36-S-1	Lockwasher—Magneto Nut
30	25294	Magneto, Includes Items 30 to 34 Inclusive
31	15139	Friction Shoe—Magneto
32	15140	Cam—Magneto
33	25402	Key—Magneto
34	25315	Cam Spring Washer
35	25113	Starter Ratchet Ring
36	8-S-6	Screw—Starter Ratchet Ring
37	25205	Speed Control Lever
38	2-S-10	Screw—Speed Control Lever
39	36-S-4	Lockwasher—Speed Control Lever Screw
40	25266	Oil Seal—Crankshaft (Upper)
41	25185	Bearing—Upper Main
42	25182	Bearing—Lower Main
	25139	Seal Assembly—Lower Main Bearing, Includes Item 43 to 45 Inclusive
43	25422	Seal—Lower Main Bearing
44	25423	"O" Ring—Lower Main Bearing Seal
45	5036	Oil Seal—Crankshaft (Lower)
46	25293	Gasket—Lower Main Bearing Seal
47	41-S-1	Washer—Water Seal Retaining
48	25297	Washer—Water Tube Seal
49	3-S-4	Screw—Lower Main Bearing Seal (Oval Head)
50	2-S-31	Screw—Lower Main Bearing Seal (Fillister Head)
51	36-S-10	Lockwasher—For Seal Retaining Screw 2-S-31
52	2-S-8	Screw—Block to Case
53	2-S-1	Screw—Block to Case
54	2-S-2	Screw—Block to Case
55	25672	Tank Mounting Bracket--25778—Intake side (Not Shown)
56	25755	Valve and "O" Ring Assembly
57	25166	Valve Spring
58	25403	Intake Manifold Assembly Includes Item 59
59	25197	Stud—Carburetor
60	25198	Gasket—Intake Manifold
61	2-S-4	Screw—Intake Manifold
	25742	Carburetor, Linkage and Choke Control Assembly
62	25698	Carburetor Assembly

} See Magneto Chart

Always order by part number and name, giving serial number of your motor.

Martin "75"

POWER HEAD ASSEMBLY

Ref. No.	Part No.	Description
64	2-S-39	Screw Choke Bracket
65	36-S-2	Lock Washer—Choke Bracket
66	25743	Elbow Fitting
	25745	Choke Control Assembly
69	25747	Choke Stem and Pin Assembly
70	25746	Bracket—Choke Control
71	25453	Arm—Choke Control
72	65-S-7	Pin
73	25454	Link—Choke Control
74	25852	Orifice Plate—Carburetor
75	22-S-3	Nut—Carburetor
76	25797	Cam—Carburetor Control
77	25298	Spacer—Carburetor Control Cam
78	2-S-19	Screw—Cam Locating
79	36-S-4	Lockwasher—Cam Locating Screw
80	25744	Shut Off Cock
81	25076	Cover—Intake Port
82	25065	Gasket—Intake Port Cover
83	2-S-4	Screw—Intake Port Cover
84	36-S-5	Lockwasher—Intake Port Cover Screw
85	15152	Clip—Magneto Wire
86	25200	Gasket—Exhaust Port Cover Plate
87	25049	Plate—Exhaust Port Cover
88	25047	Gasket—Exhaust Port Cover
89	25048	Cover—Exhaust Port
90	2-S-11	Screw—Exhaust Port Cover
91	36-S-5	Lockwasher—Exhaust Port Cover Screw
92	15152	Clip—Magneto Wire
93	25613	Bracket—Steering Handle
94	25225	Bolt—Handle Bracket
95	35-S-25	Washer—Handle Bracket Bolt
96	25226	Grommet—Handle Bracket
97	25228	Washer—Handle Bracket
98	25227	Pressure Pad—Handle Bracket

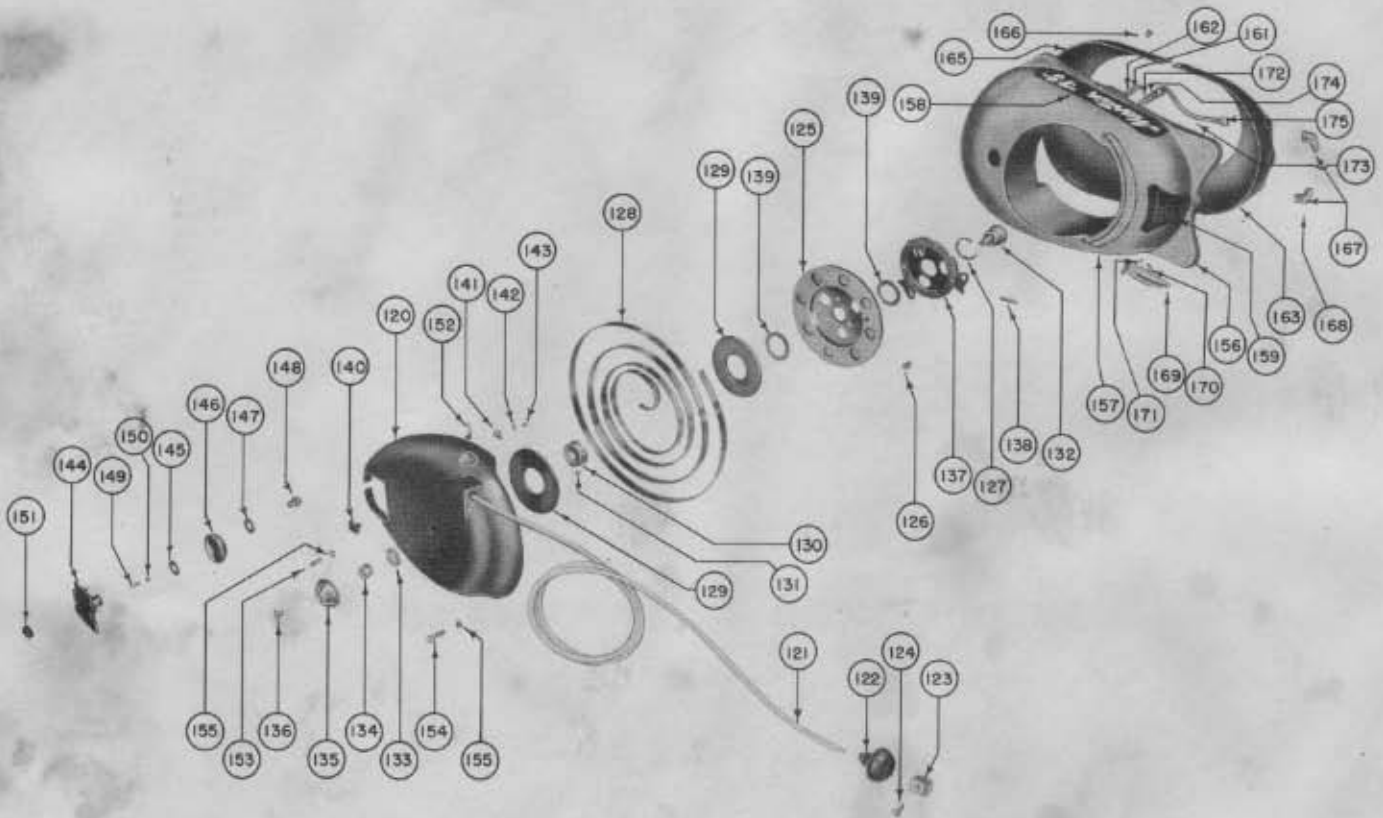
MARTIN SYNCRO TWIST PARTS LIST

Ref. No.	Part No.	Quantity	Part Name
1	SA-51-1	1	Rubber Grip Assembly
2	O-1	1	Rotatable Tube
3	O-20	1	Collar (With 8/32" x 1/8" Set Screw)
4	O-7	1	Driving Lug
5	O-22	2	Friction Shoe
6	O-6	1	Drive Shaft
7	O-28	1	Cotter Pin 1/8" x 1/2"
8	O-23	1	Pin
9	SSA-3	1	Gear Housing Sub-Assembly
10	O-10	1	Bolt
11	O-18	1	Pivot Bolt
12	O-27	1	Lock Washer 1/4"
13	O-5	1	Gear
14	O-4	1	Gear and Drum
15	O-9	1	Gear Housing Cap
16	O-30	1	Locking Screw
17	O-8M	1	Spacer
18	O-4M	1	L. H. Bracket
19	O-13	1	Cable Clamp
20	O-25	1	8/32" x 3/8" Mach. Screw
21	O-24	1	8/32" x 3/8" R. H. Mach. Screw
22	O-9M	1	Cable Support
23	SA-4	1	Quadrant Assembly
24	SA-2	1	Cable Assembly
25	SA-1	1	R. H. Bracket
26	O-26	2	Lock Nuts 1/4-28 x 1/8"

Always order by part number and name, giving serial number of your motor.

Martin "75"

STARTER AND COVER ASSEMBLY



Martin "75"

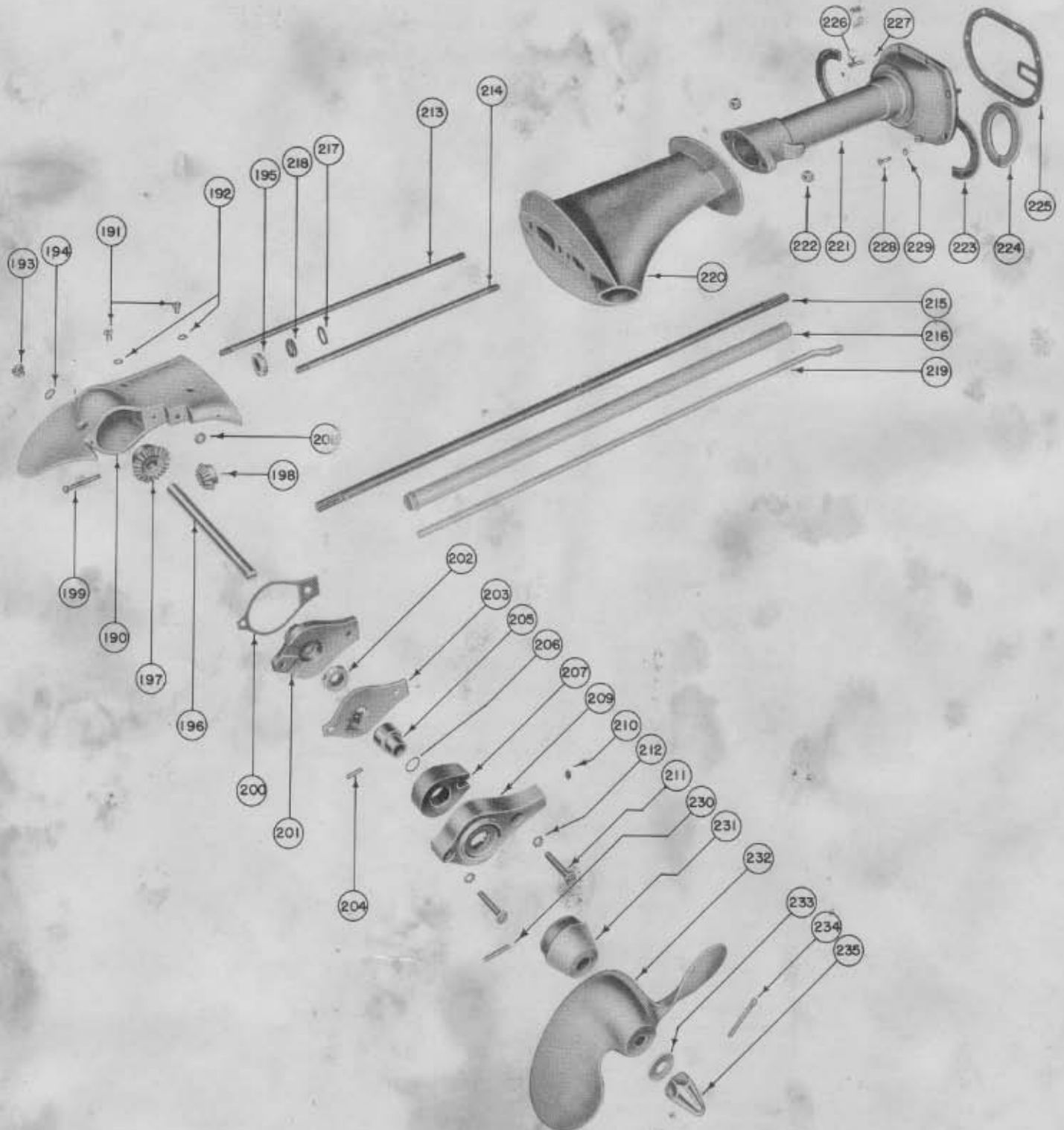
STARTER AND COVER ASSEMBLY

Ref. No.	Part No.	Description
	25619	Starter and Cover Assembly—Complete (black) Includes Items 120 to and Including Item 152
120	25650	Starter Housing (black)
121	25251	Starter Cord and Handle Assembly Includes Items 122 to and Including Item 124
122	25125	Starter Handle
123	25206	Starter Handle Plug Assembly Includes Item 124
124	4-S-2	Screw—Starter Handle Plug (Oval Head)
125	25127	Starter Pulley Assembly
126	72-S-1	Rivet—Starter Cord Retaining
127	25107	Spring—Starter Friction
128	25103	Rewind Spring
129	25338	Washer—Rewind Spring
130	25109	Anchor—Rewind Spring
131	8-S-5	Screw—Rewind Spring Anchor
132	25096	Starter Pivot Bolt
133	25269	Washer—Starter Pivot Bolt
134	24-S-1	Nut—Pivot Bolt
135	25173	Cover—Pivot Bolt
136	4-S-5	Screw—Pivot Bolt Cover
137	25121	Pawl Retainer Assembly
138	25244	Starter Bias Spring
139	25273	Spring Washer
140	25652	Filler Cap Latch (black)
141	25609	Tension Spring—Filler Cap Latch
142	35-S-4	Washer—Filler Cap Latch
143	17-S-1	Screw—Filler Cap Latch
	25604	Filler Cap Assembly—Complete (black) Includes Items 144 to and Including Item 151
144	25624	Filler Cap (black)
145	35-S-14	Spacer—Tank Seal
146	25188	Tank Seal
147	35-S-6	Washer—Tank Seal
148	25209	Bushing—Air Vent
149	90-S-4	Spring—Vent Seal
150	80-S-1	Ball—Vent Seal
151	25449	Pad—Air Vent Screw
152	25271	Retainer—Filler Cap
153	2-S-4	Screw—Starter Mounting (short)
154	2-S-6	Screw—Starter Mounting (long)
155	36-S-5	Lockwasher—Starter Mounting Screw
156	25794	Gas Tank and Decal Assembly Includes Item 157 to and Including Item 160
157	25255	Decal—Speed Control
158	25796	Decal—Side MARTIN "60"
159	25749	Decal—Operating Instructions
160	25799	Decal—Rear (Not Shown)
161	2-S-15	Screw—Tank Mounting
162	36-S-3	Lockwasher—Tank Mounting Screw
163	25750	Shroud Assembly (front) Includes Item 164
164	15212	Decal—Carburetor Control (Not Shown)
165	25616	Shroud—Rear
166	25218	Screw—Shroud Mounting
167	25487	Carburetor Control Knob, Includes Item 168
168	25359	Set Screw Control Knob
169	25611	Knob—Speed Control
170	8-S-3	Screw—Speed Control Knob
171	38-S-1	Lockwasher—Speed Control Knob
172	25254	Gas Line Fitting
173	25752	Gas Line Assembly, Includes Items 174 and 175
174	25340	Compression Sleeve
175	25339	Compression Nut

Always order by part number and name, giving serial number of your motor.

Martin "75"

LOWER UNIT ASSEMBLY



Martin "75"

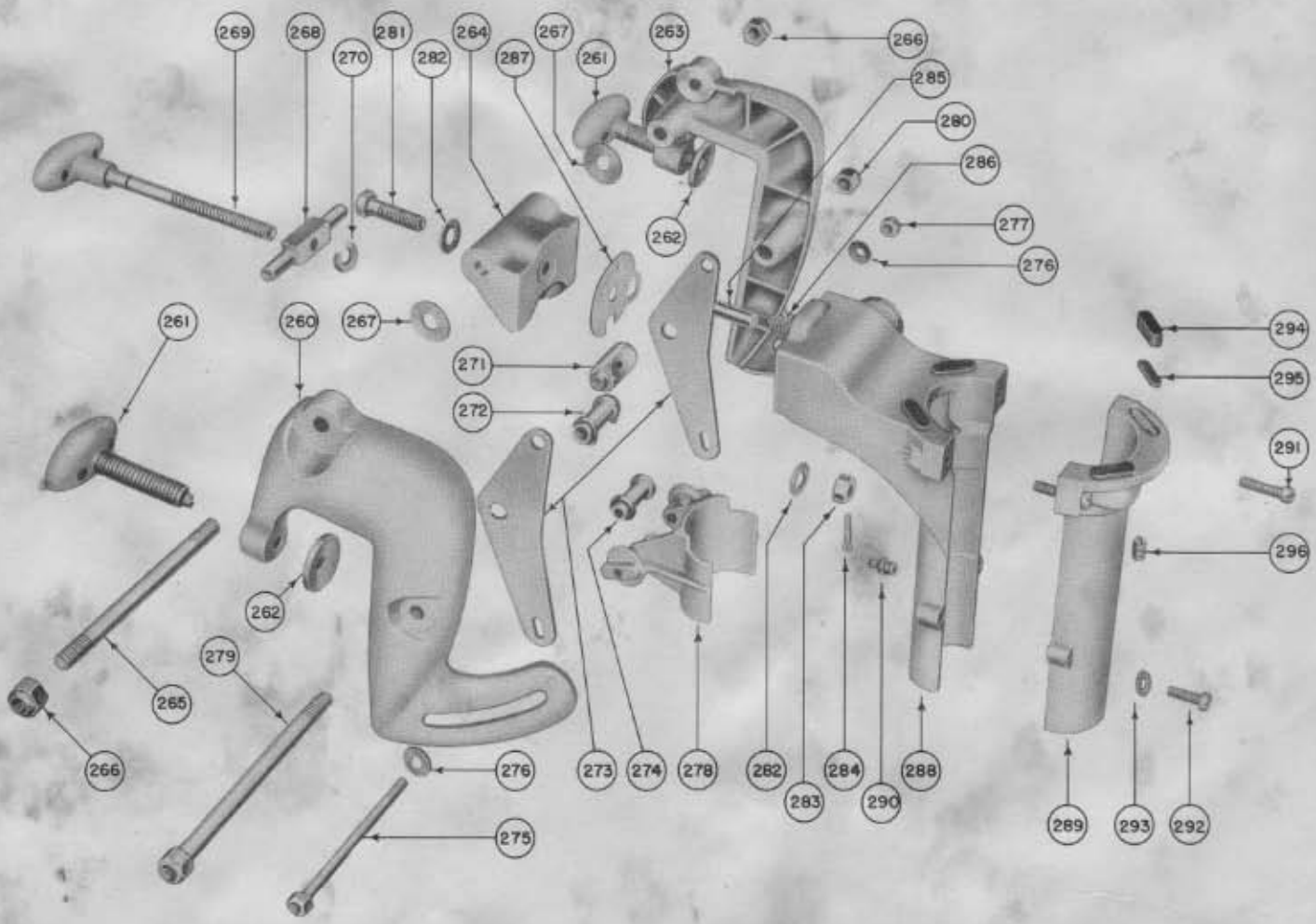
LOWER UNIT ASSEMBLY

Ref. No.	Part No.	Description
	25518	Lower Unit Assembly Includes Item 190 to and Including Item 222
	25415	Gear Case Assembly Includes Item 190 to and Including Item 212
190	25416	Gear Case Housing Includes Items 191 to and Including Item 195
191	25245	Grease Plug
192	25288	Gasket—Grease Plug
193	25378	Grease—Plug
194	25379	Gasket—Grease Plug
195	40-S-6	Grease Seal for Drive Shaft
	25765	Propeller Shaft and Gear Assembly Includes Items 196, 197 and 199
196	25010	Propeller Shaft
	25418	Gear Set Includes Item 197 to and Including Item 199
197	25159	Gear
198	25760	Pinion
199	70-S-3	Rivet—Gear and Shaft
200	25087	Gasket—Bearing Housing
201	25419	Propeller Shaft Bearing Housing Assembly, Includes Item 202
202	40-S-7	Grease Seal for Propeller Shaft
203	25005	Pump Plate
204	25084	Pin Pump Eccentric
205	25012	Pump Eccentric
206	25090	Snap Ring—Pump Eccentric
207	25089	Pump Rotor
208	25093	Water Pump Seal
209	25155	Water Pump Housing Includes Item 210
210	50-S-1	Expansion Plug
211	4-S-1	Pump Housing Screw
212	38-S-3	Lockwasher—Pump Housing Screw
213	25018	Stud—Lower Unit—Front
214	25017	Stud—Lower Unit—Rear
215	25290	Driveshaft
216	25428	Tube—Driveshaft Seal
217	25423	O—Ring—Lower Main Bearing Seal
218	25429	Spacer—Driveshaft Seal
219	25296	Water Tube
220	25004	Intermediate Housing
221	25020	Motor Support Tube Assembly
222	28-S-3	Nut—Lower Unit Stud
223	25150	Stabilizer Friction Ring
224	25243	Stabilizer Friction Washer
225	25074	Gasket—Motor Support Tube Assembly
226	2-S-11	Screw—Motor Support Tube Assembly (Fillister Head)
227	36-S-5	Lockwasher (Flat)
228	8-S-3	Screw—Motor Support Tube Assembly (Flat Head)
229	38-S-2	Lockwasher (Cone)
230	25156	Shear Pin
231	25157	Friction Clutch
232	25614	Propeller
233	35-S-3	Washer—Propeller Shaft
234	60-S-1	Cotter Pin
235	25700	Nut—Propeller

Always order by part number and name, giving serial number of your motor.

Martin "75"

STERN BRACKET ASSEMBLY



Martin "75"

STERN BRACKET ASSEMBLY

Ref. No.	Part No.	Description
	25413	Stern Bracket Assembly Includes Items 260 to and Including Item 293
	25146	Stern Bracket Clamping Assembly (right) Included Items 260, 261 and 262
260	25053	Stern Bracket (right)
261	25145	Clamp Screw and Handle Assembly
262	25061	Pressure Pad
	25147	Stern Bracket Clamping Assembly (left) Includes Items 261, 262 and 263
263	25052	Stern Bracket (left)
264	25036	Swivel Bracket
265	25070	Tilting Stud
266	23-S-1	Nut
267	25286	Friction Washer
268	25141	Pin—Stern Adjusting Anchor
269	25140	Stern Adjusting Screw and Handle Assembly
270	25033	Key—Reverse Check
271	25023	Clevis Pin
272	25142	Spacer—Tilting Lever
273	25032	Tilt Adjusting Lever
274	25045	Spacer—Thrust Socket
275	25334	Stud—Thrust Socket
276	35-S-24	Washer—Thrust Socket Stud
277	23-S-2	Nut—Thrust Socket Stud
278	25029	Thrust Socket
279	25333	Stud—Tilt Adjusting Lever
280	23-S-1	Nut—Tilt Adjusting Lever Stud
281	25617	Swivel Retaining Screw
282	35-S-16	Washer—Swivel Bracket
283	21-S-2	Nut—Swivel Bracket
284	60-S-2	Cotter Pin—Swivel Bracket
285	25281	Swivel Locking Pin Assembly
286	90-S-3	Spring—Swivel Lock
287	25027	Swivel Bearing
288	25682	Motor Support Tube Casing Assembly Included Item 289
290	25337	Grease Fitting
291	2-S-7	Screw, Motor Support Tube Casing (Upper)
292	2-S-8	Screw—Motor Support Tube Casing (Lower)
293	39-S-2	Lockwasher—Motor Support Tube Casing Screw
294	25220	Stabilizer Compression Block (Rubber)
295	25221	Stabilizer Compression Plate (Steel)
296	13-S-1	Screw—Stabilizer Adjusting

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Martin "75"

MAGNETO

