

# CHAMPION

**MODEL 2K**  
*De Luxe*

**4.2 H.P.**



**CERTIFIED**

**At 4300 R.P.M.**

**OPERATING INSTRUCTIONS**  
**and**  
**REPLACEMENT PARTS**

# CHAMPION

## MODEL 2K

### SPECIFICATIONS

Horsepower—4.2 at 4300 R.P.M.,  
O.B.C. CERTIFIED.

No. Cylinders—1.

Bore and Stroke— $2\frac{1}{16}$ " x  $1\frac{3}{4}$ "

Speed Range (depending upon boats used)—  
Approx. 1 to 10 m.p.h.

Piston Displacement—5.84 cu. in.

Valves—Dual rotary valve, 2 port.

Carburetor—Dual jet concentric type.

Ignition—Bendix Scintilla Magneto

Gear Ratio—14-24.

Propeller—2 blade 8" x  $5\frac{1}{2}$ ".

Cooling System—Centrifugal Pump.

Gas Tank Capacity— 5 qts.

Automatic Co-skipper Steering—Yes.

Controls—Synchronous.

Full Reverse—Yes.

### PLEASE NOTE!

The Champion Motors Company reserves the right to change motor specifications contained herein without notice. Any parts contained in your motor that are different from those listed in this parts book were changed either to improve your Motor or were necessary due to material substitutions.

# CHAMPION OUTBOARD MOTOR

## MODEL 2K

### OPERATING INSTRUCTIONS

1. Open gas tank shut-off. Open gas cap vent screw about three turns.
2. Open high speed adjustment valve  $1\frac{1}{4}$  turns when motor is cold.
3. Set control arm to the START position marked on gas tank.
4. Push down on CHOKE lever and hold down while pulling starter cord.
5. After motor starts, move magneto lever to the right for high speed; close high speed adjustment valve until motor runs smoothly.
6. Should motor slow down after starting, choke quickly once or twice.
7. To stop motor, move magneto lever to the left or STOP position.

### BREAK-IN INSTRUCTIONS

For the first 10 hours of operation the motor should be run not faster than  $\frac{3}{4}$  throttle or at Start position. We recommend the use of 1 pint of S.A.E. 30 non-detergent oil to each gallon of gasoline during the break-in period.

### LUBRICATION INSTRUCTIONS

The most important factor in the operation of any internal combustion engine is proper lubrication. Properly lubricate your motor and you will enjoy many years of highly satisfactory service. Improper lubrication can result in nothing but premature wear and unnecessary expense.

Your new Champion motor is a two cycle engine and lubrication of the piston, cylinder, connecting rod, and crank shaft bearings is supplied by oil mixed with gasoline. The proportions of this mixture are very important. Also, the grades of gasoline and oil are equally important.

Clear gasoline or oil should never be poured into the gas tank. Thorough mixing should be done in a separate clean container.

### LUBRICANT RECOMMENDED

We recommend the use of any high grade S.A.E. 30 non-detergent oil which will mix readily with gasoline. Mix this oil with any regular grade of gasoline, using  $\frac{3}{4}$  pint of oil to one gallon of gasoline for normal operation after break-in period.

### AFTER STARTING MOTOR

Since you have set the main needle valve, you need pay no more attention to it. To regulate your speed, move the magneto lever to the right for increasing speed or to the left for decreasing speed. The magneto lever is synchronized with the carburetor throttle giving the motor single lever control.

## GREASING LOWER UNIT

Outside of lubrication in the form of motor oil in the gasoline, there is one more important lubrication requirement which must be attended to, that is to keep the lower unit gear-housing filled with any high grade outboard gear lubricant. You should inspect the lower unit at least once every month, and more often in the event the motor is in constant use.

To fill the lower unit with grease, remove the aluminum grease plug, Part IJ2, located in the bottom of the lower unit cap, then remove the air vent screw located near the top of the cap. (Part IJ1700). Fill the gear housing with the lubricant to full capacity. Replace grease plug screw and air vent screw.

Outboard gear lubricant is usually supplied in handy tube form which fits the grease opening and allows quick filling with no waste.

For long gear life, be sure to follow the above directions.

## PROPELLER SHEAR PIN

This soft "safety pin" shears off when you strike an obstruction at full speed, thus protecting the gears, shafts, and other mechanism of your motor from damage. When this happens shut your motor off immediately. To replace shear pin, remove the cotter-pin in the propeller nut and remove nut. Slip off the propeller and replace the broken pin with a new one. Make sure to replace nut and cotter pin. The nut should be drawn up until the propeller fits snug against the shear pin.

## SALT WATER INSTRUCTIONS

You will extend the life and performance of your motor when used in salt water by flushing fresh water through the motor after use in salt water. This may be done by running the motor in a barrel of fresh water or by forcing water through the outlet water line with a hose.

## COLD WEATHER MOTOR CARE

To prevent your motor from freezing in cold weather, the following precaution should be observed. When your motor is idle or before storing for the cold weather period, drain it by placing it in an upright position. Remove aluminum grease plug and vent screw in bottom of lower unit gear case and drain any water and old grease that has accumulated, then repack with fresh grease. If motor is to be stored, remove spark plug and pour 2 ounces of oil into the cylinder. Then revolve flywheel a few times to distribute the oil within the motor.

## SERVICE INSTRUCTIONS

### CARBURETOR ADJUSTMENTS:

1. Close idle adjustment screw all the way in until it is snug (do not force needle against seat). Then open idle screw  $\frac{1}{2}$  turn.
2. Close high speed adjustment screw. The knob should register 0. Then open  $1\frac{1}{4}$  turns.
3. Start motor and move stator plate control handle to position marked "Fast" on gas tank.
4. Close the high speed adjustment screw, until the motor begins to slow down from lack of gas. Then open high speed adjustment screw approximately one number on the dial or until motor picks up speed and runs smoothly.
5. Move stator plate control lever to position marked "Slow" on gas tank. The motor should now idle slowly. However, atmospheric changes and fuel mixtures may require opening or closing the idle adjustment screw slightly.

### **MAGNETO ADJUSTMENTS:**

Ordinarily these magnetos will operate over extremely long periods of time without the need for adjustment or repair. However, if engine operating difficulties are experienced which appear to be caused by the ignition system, the magneto output can be checked to determine whether this unit is functioning properly.

Disengage the high-tension cables from the spark plugs. Hold the cable by its insulation in such a position that the metal terminal is about  $\frac{3}{16}$ -inch from some grounded part of the engine. While holding the wire in this position, spin the engine over at normal cranking speed. If the magneto sparks this gap the trouble is not in the magneto.

Should the magneto fail to spark, inspect the contact breaker. If the contact points are dirty they can be cleaned with a little clear gasoline. Make sure no particles of lint are left between the point surfaces if a brush or cloth is used. If the points are severely burned install a complete new contact breaker assembly. *Disassembly or replacement of individual parts of the breaker is not recommended.*

See that the contacts are properly adjusted. When fully open, there should be eighteen thousandths (.018") of an inch between the point surfaces. This can be checked with a feeler gage. If the contacts do not open the

proper distance, loosen the screws which hold the contact breaker, and shift the assembly slightly so as to obtain the correct clearance of .018" between the point surfaces. If there still is no spark the coil or condenser may be defective. Any service station will correct the situation.

After each 100 hours of operation apply four (4) drops of a good grade S.A.E. No. 60 oil to the cam oiler felt. Blot off any excess oil with a clean cloth.

### **SPARK PLUG ADJUSTMENTS:**

The spark plug should be kept clean and the point gap set at .030 inch. If the points are too badly corroded or burned away from long use, the plug should be replaced.

### **CARBURETOR DRAIN**

There is a carburetor drain screw at bottom of control panel for the purpose of draining any water or dirt which may have accumulated in the carburetor bowl.

If gas does not flow freely, check gas tank screen.

### **EMERGENCY STARTING**

If Pull-O-Matic Starter fails to operate, remove the starter housing, by removing the three screws that hold housing to gas tank. This will give access to the emergency starter plate.

### **OUTSIDE REPAIR CHARGES**

You have received with this motor a warranty covering workmanship and materials. We will not be responsible for work performed and time spent by other than the manufacturer of Champion Motors, unless such repairs are first authorized by us in writing.

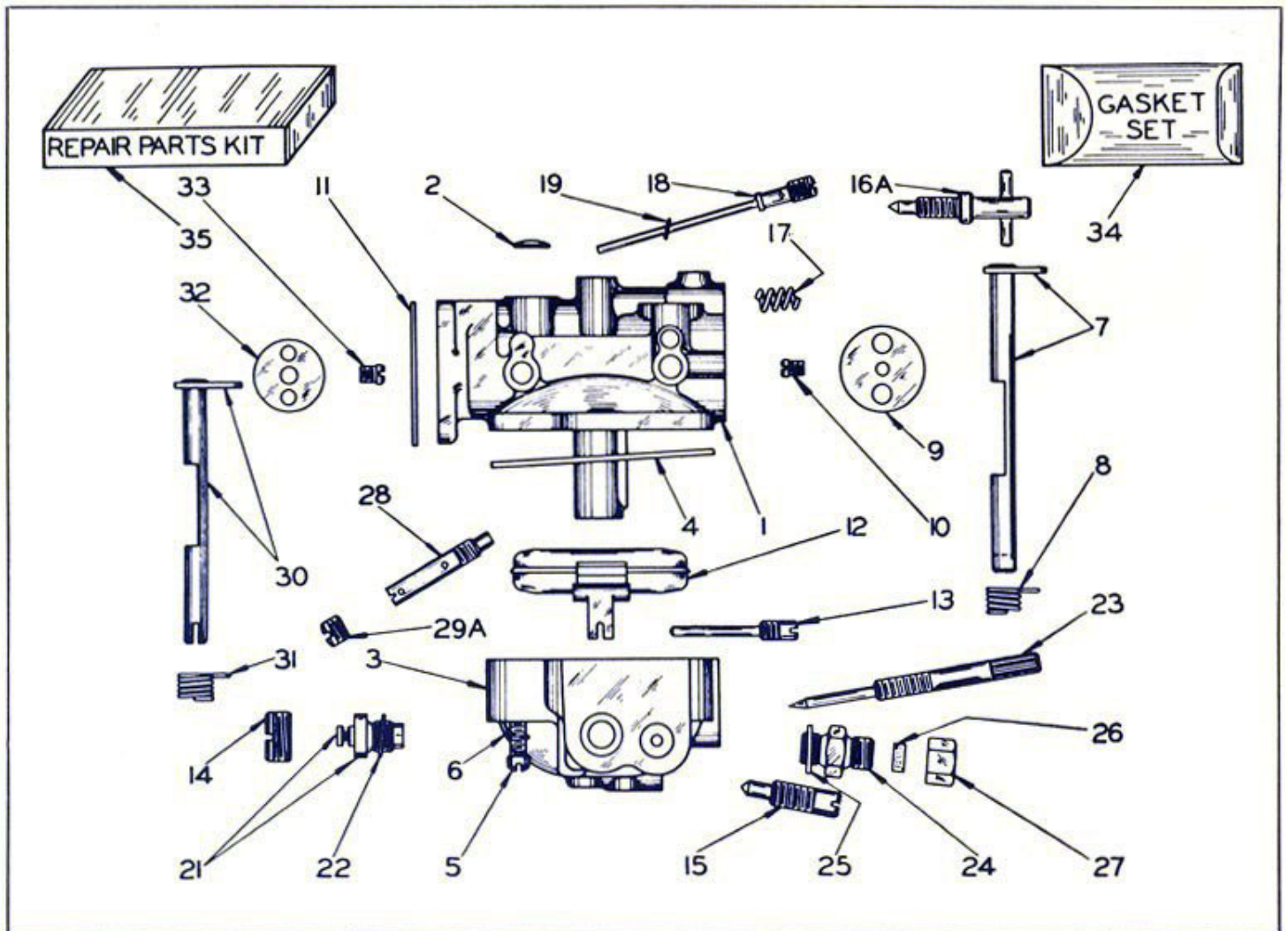
## **WARNING!**

**Never raise lower unit above level of power head without first allowing water to drain from under-water exhaust housing.**

***Always store motor in an upright position.***

**Do not use so-called outboard motor gasoline or stove gas. Best results are obtained with regular gasoline.**

# CARBURETOR MODEL ME-1B — STANDARD ON MODEL 2K

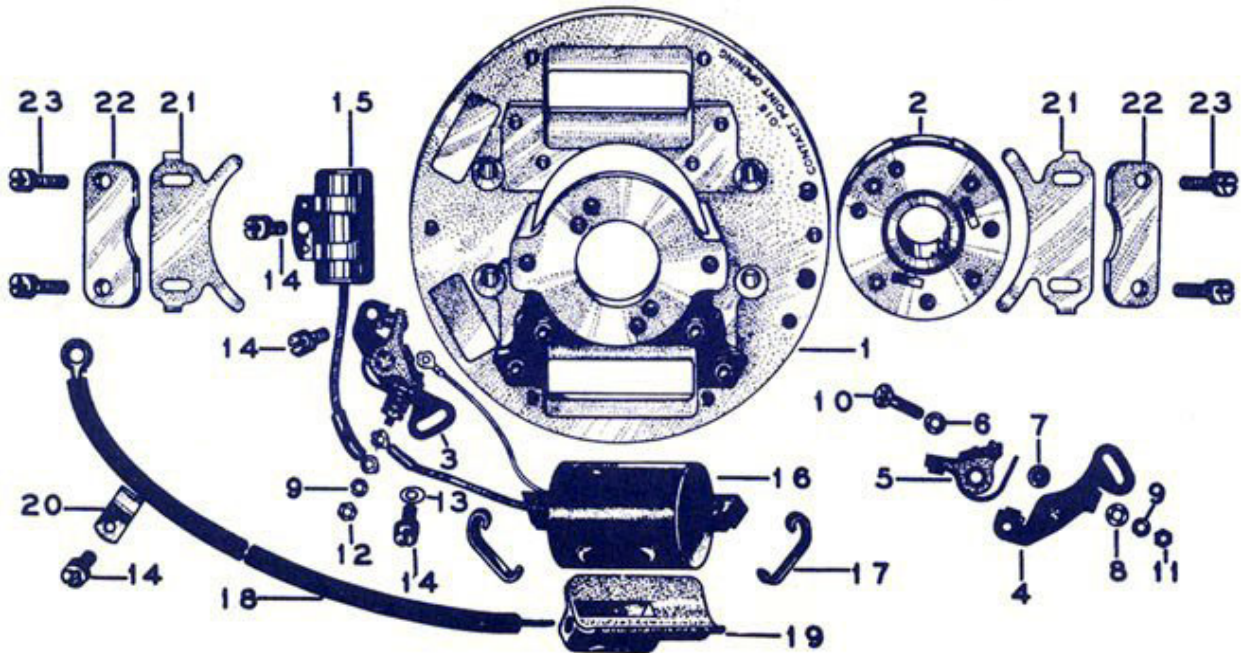


Ref. No.	Part No.	No. Req.	Description
1	08368	1	Body, Upper Half
2	*02531	1	Body Channel Welch Plug
3	07953	1	Fuel Bowl
4	07951	1	Body Gasket
5	06062	4	Body Retaining Screw
6	0992	4	Body Retaining Screw Lockwasher
7	07946	1	Choke Shaft and Lever
8	*07910	1	Choke Return Spring
9	05088	1	Choke Shutter
10	05430	1	Choke Shutter Screw
11	05591	1	Flange Gasket
12	07804	1	Float
13	*07901	1	Float Lever Pinion Screw
14	07896	1	Fuel Bowl Plug Screw (Large)
15	*07952	1	Fuel Bowl Drain Valve
16A	*08379	1	Idle Adjustment Screw
17	*05725	1	Idle Adjustment Screw Spring
18	*07938	1	Idle Tube

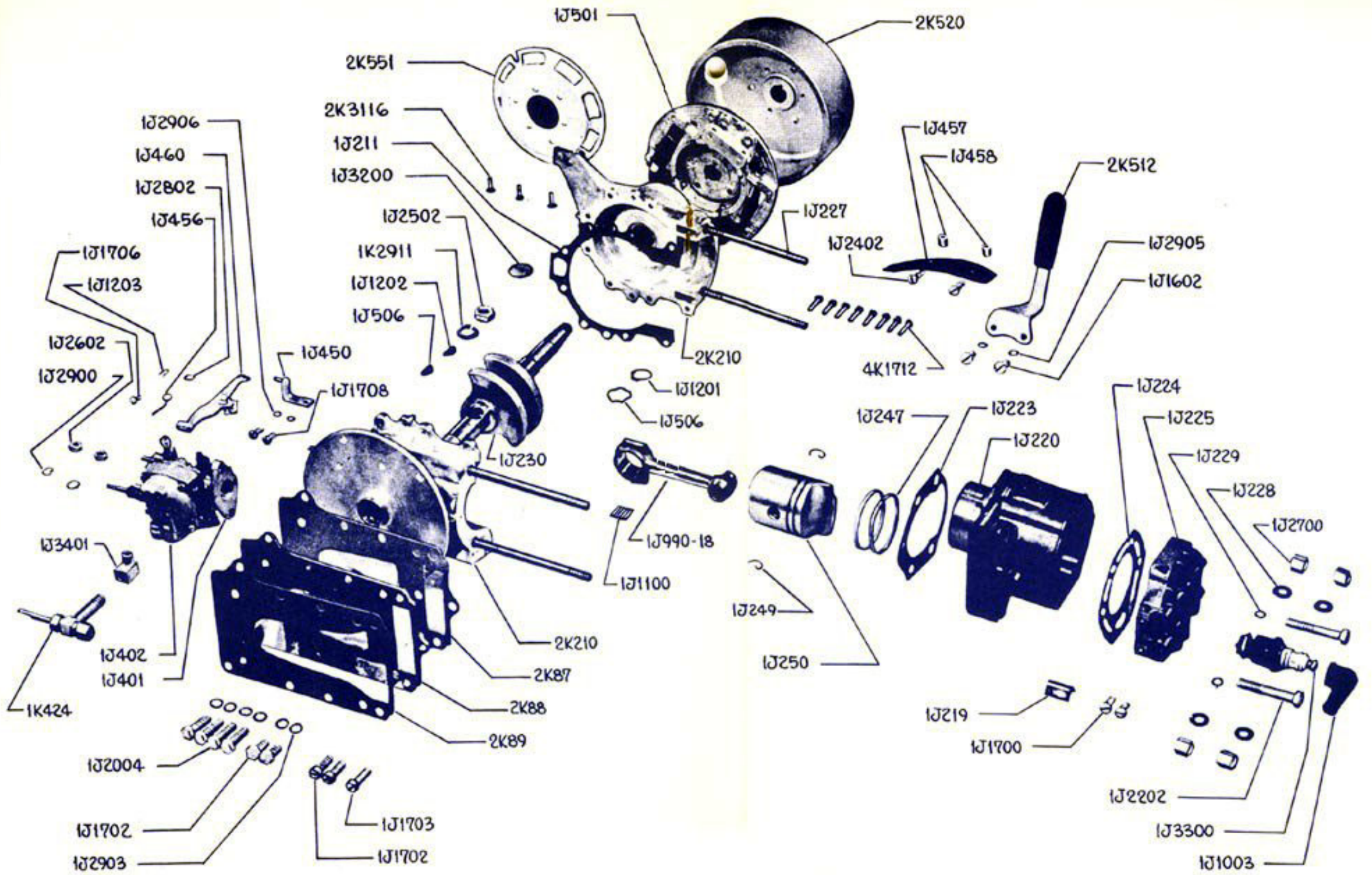
Ref. No.	Part No.	No. Req.	Description
19	07900	1	Idle Tube Gasket
21	*07895	1	Inlet Needle, Seat and Gasket
22	02510	1	Inlet Seat Gasket
23	*08156	1	Main Adjustment Screw
24	0702	1	Main Adjustment Screw Gland
25	0676	1	Main Adjustment Screw Gland Gasket
26	0705	1	Main Adjustment Screw Packing
27	0703	1	Main Adjustment Screw Packing Nut
28	*07922	1	Main Nozzle
29A	02395	1	Main Nozzle Channel Plug Screw
30	07943	1	Throttle Shaft and Lever
31	*07944	1	Throttle Return Spring
32	08364	1	Throttle Shutter
33	*05430	1	Throttle Shutter Screw
34	*08415		Gasket and Packing Set
35	08416		Repair Parts Kit
	1J-402		Carburetor
	08150		Main Adjustment Screw Assembly

(\* ) Indicates Contents of Designated Repair Parts Kit

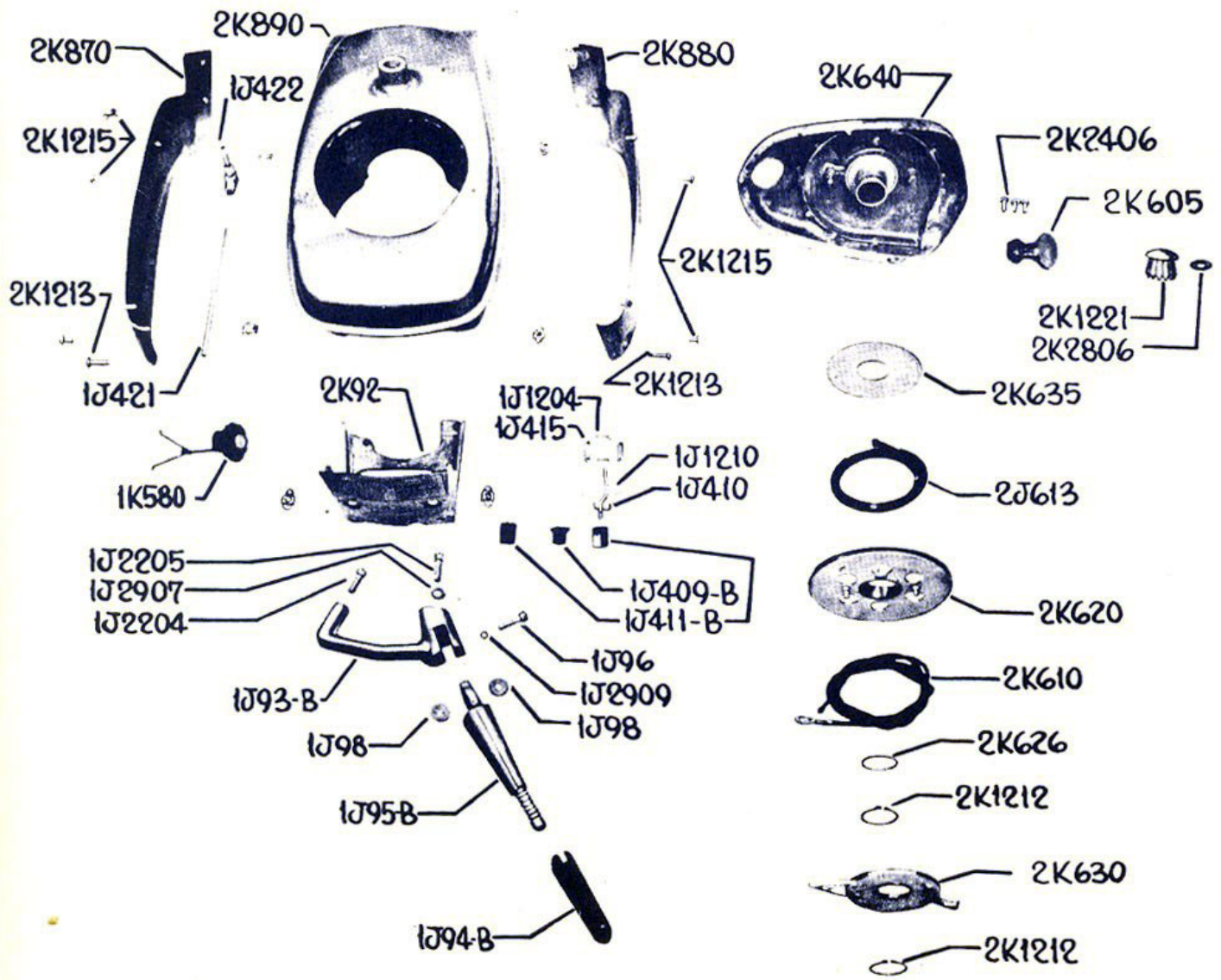
# K1-203 MAGNETO SPECIFICATION NO. 10-55270

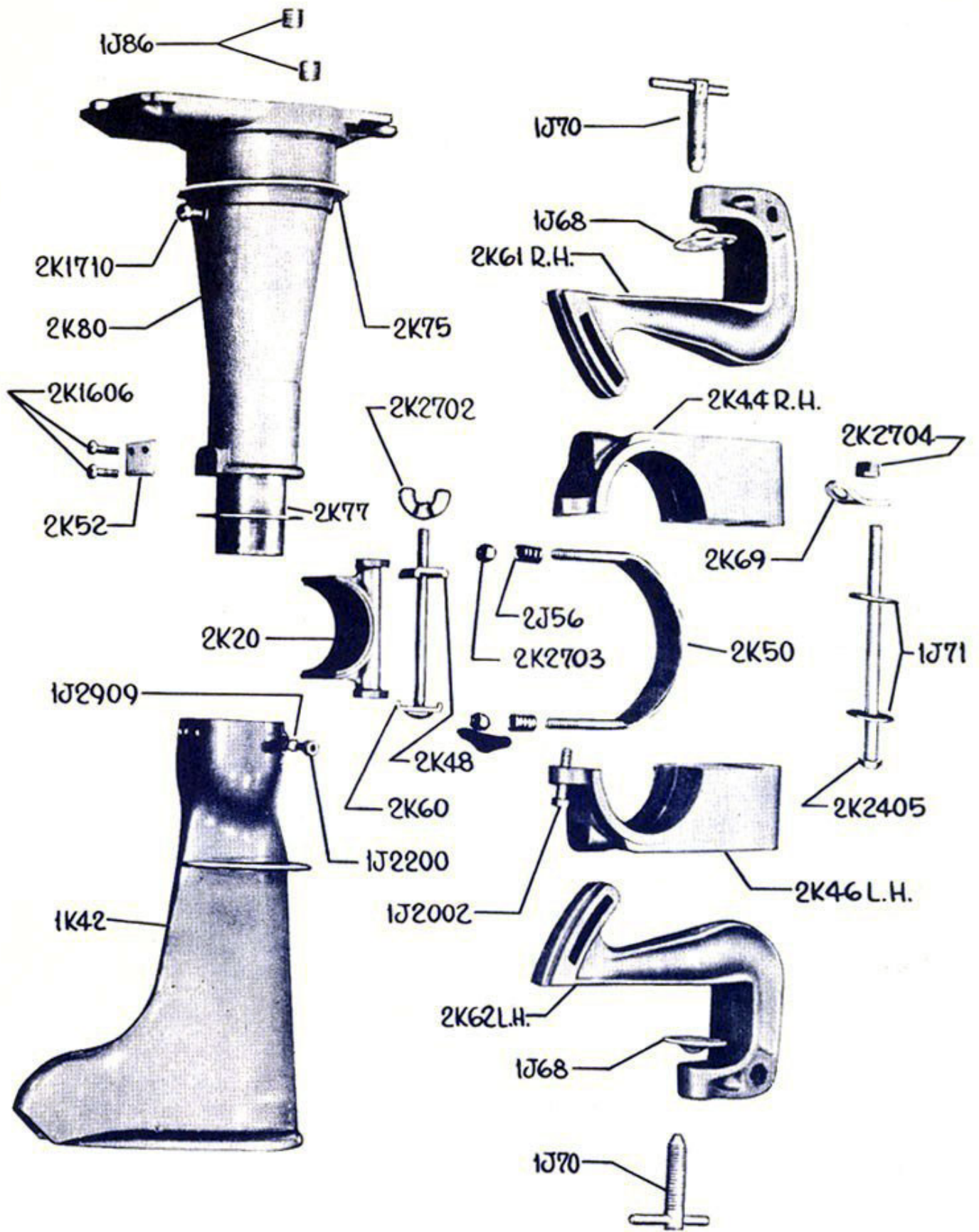


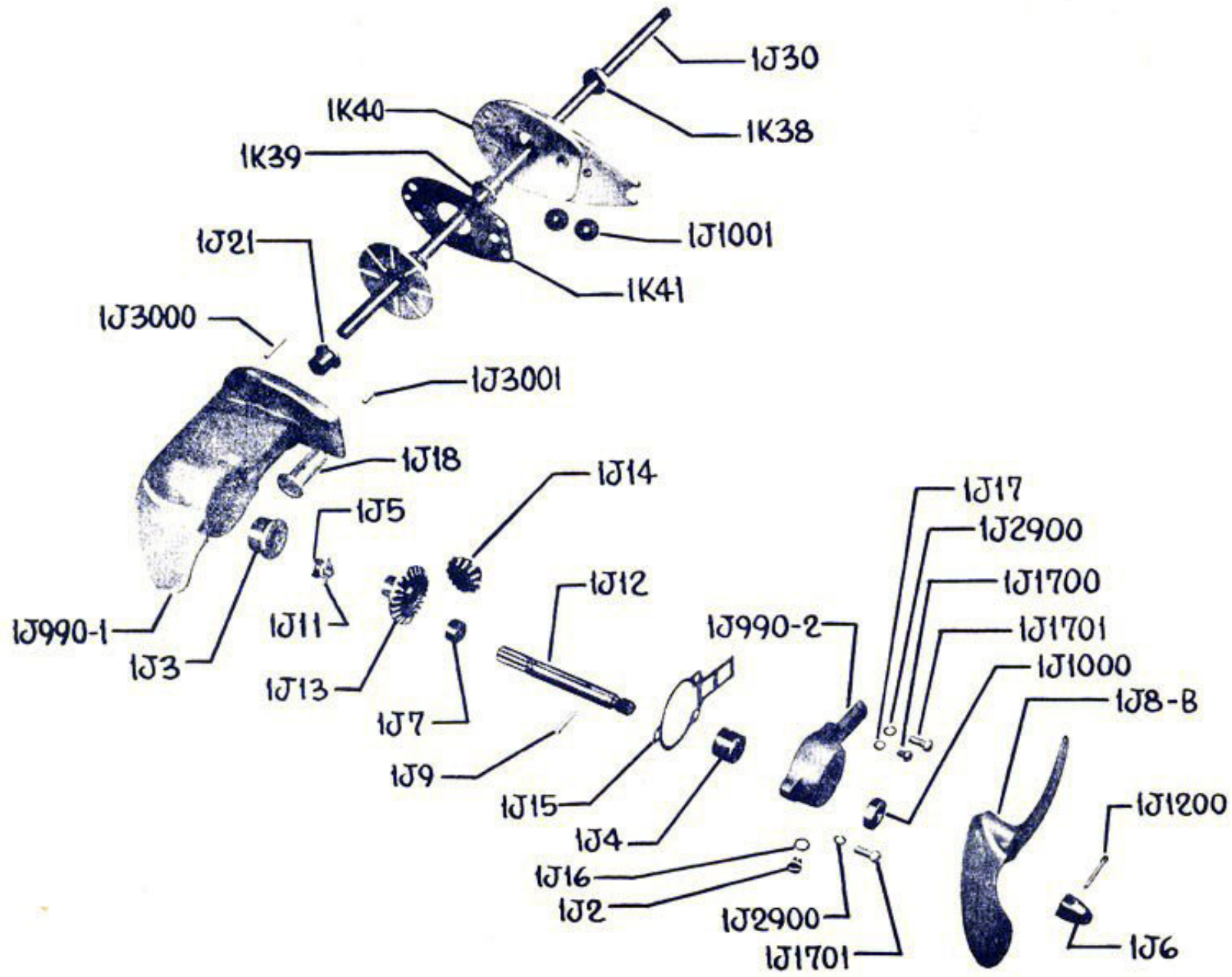
Ref. No.	Part No.	No. Req.	Description	Ref. No.	Part No.	No. Req.	Description
1	10-53177	1	Flange - Mounting	12	10-38682	1	Nut (Primary Connector to Contact Assembly)
2	10-38334	1	Magnet - Rotating	13	10-14268	1	Washer - Plain (Contact Assembly Screw, Adjustable End)
3	10-54940	1	Contact Assembly - Breaker	14	10-51662	5	Screw and Lock Washer (2, Contact Assembly) (2, H. T. Lead Clamp) (1, Condenser)
4	10-54933	1	Support Assembly - Breaker Contact	15	10-58224Y	1	Condenser
5	10-54938	1	Lever Asm.-Breaker Contact	16	10-38222Y	1	Coil
6	10-52384	1	Washer - Plain (Breaker Assembly Screw)	17	10-37804	2	Clamp - Coil Core
7	10-52382	1	Bushing - Insulating (Breaker Assembly Screw)	18	10-38944	1	Lead - H. T.
8	10-52383	1	Washer - Insulating (Breaker Asm. Screw)	19	10-37806	1	Insulator - H. T. Connection
9	2-220	2	Washer - Lock (1, Breaker Asm. Scr.) (1, Primary Conn. to Breaker Asm. Nut)	20	10-37807	2	Clamp - H. T. Lead
10	10-56155	1	Screw (Breaker Asm.)	21	10-37879	2	Spring - Flange Tension
11	10-56156	1	Nut (Breaker Asm. Scr.)	22	10-37878	2	Plate - Flange Tension Spring
				23	10-51667 1J-501	4	Screw and Lock Washer Magneto











## BE SURE TO GIVE SERIAL NUMBER OF MOTOR WHEN ORDERING PARTS

Part No.	Description	No. Req'd
1J2	Grease Plug	1
1J3	Front Propeller Shaft Bearing	1
1J4	Rear Propeller Shaft Bearing	1
1J5	Gear Lock Screw	1
1J6	Propeller Nut	1
1J7	Propeller Shaft Thrust Collar	1
1J8-B	Propeller	1
1J9	Shear Pin	1
1J11	Gear Lock Screw Washer	1
1J12	Propeller Shaft	1
1J13	Drive Gear	1
1J14	Pinion Gear	1
1J15	Lower Unit Cap Gasket	1
1J16	Grease Plug Gasket	1
1J17	Vent Screw Gasket	1
1J18	Pinion Gear Bearing	1
2K20	Thrust Socket	1
1J21	Driveshaft Center Bearing	1
1J30	Driveshaft Assembly	1
1K38	Pump Housing Seal	1
1K39	Pump Housing Bearing	1
1K40	Pump Housing Assembly	1
1K41	Pump Seal Plate	1
1K42	Driveshaft Housing	1
2K44	Tilting Bracket R. H.	1
2K46	Tilting Bracket L. H.	1
2K48	Thrust Socket Clamp Pad	2
2K50	Co-Pilot Clamp	1
2K52	Reverse Lock Catch	1
2J56	Co-Pilot Spring	2
2K60	Thrust Socket Bolt	1
2K61	Boat Bracket R. H.	1
2K62	Boat Bracket L. H.	1
1J68	Boat Bracket Clamp Screw Pad	2
2K69	Safety Catch	1
1J70	Boat Bracket Clamp Screw	2
1J71	Tilting Bracket Friction Washer	2
2K75	Pivot Base Washer	1
2K77	Pivot Base Tube	1
2K80	Pivot Base	1
2K84	Intake Water Line	1
2K85	Discharge Water Line	1
1J86	Water Line Fitting	2
2K87	Top Motor Base Gasket	1
2K88	Motor Base Spacer	1

Part No.	Description	No. Req'd
2K89	Bottom Motor Base Gasket	1
2K92	Control Panel	1
1J93-B	Carrying Handle	1
1J94-B	Steering Handle Grip	1
1J95-B	Steering Handle	1
1J96	Steering Handle Bolt	1
1J98	Steering Handle Friction Washer	2
1J208	Carburetor Stud	2
2K210	Crankcase	1
1J211	Crankcase Gasket	1
1J219	Water Passage Baffle	1
1J220	Cylinder Block	1
1J223	Cylinder Base Gasket	1
1J224	Cylinder Head Gasket	1
1J225	Cylinder Head	1
1J227	Cylinder Head Stud	4
1J228	Cylinder Head Stud Washer	4
1J229	Cylinder Head Support Screw Washer	2
1J230	Crankshaft	1
1J243	Connecting Rod Cap Screw	2
1J247	Piston Ring	2
1J248	Wrist Pin	1
1J249	Wrist Pin Lock	2
1J250	Piston and Wrist Pin	1
1J401	Carburetor Gasket	1
1J402	Carburetor	1
1J409-B	High Speed Adjustment Knob	1
1J410	Choke Lever	1
1J411-B	Choke and Shut-off Knob	2
1J415	Choke Lever Link	2
1J421	Gas Line	1
1J422	Gas Line Elbow and Screen	1
1K424	Gas Line Shut-off Valve	1
1J450	Synchronous Control Bracket	1
1J456	Synchronous Control Adjustment Lever	1
1J457	Synchronous Control Cam	1
1J458	Synchronous Control Cam Spacer	2
1J460	Synchronous Control Arm	1
1J501	Magneto	1
1J505	Magneto Key	1
1J506	Magneto Washer	1
2K512	Stator Plate Control	1

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Part No.	Description	No. Req'd
2K520	Flywheel Assembly	1
2K551	Starter Plate	1
1K580	Gas Cap Assembly	1
2K605	Ready Pull Handle	1
2K610	Starter Cable	1
2K611	Starter Spring Anchor Screw	1
2J613	Starter Recoil Spring	1
2K620	Starter Spool	1
2K626	Spring Washer	1
2K630	Starter Ratchet Assembly	1
2K635	Starter Spring Cover	1
2K640	Starter Housing	1
2K870	Left Shroud	1
2K880	Right Shroud	1
2K890	Gas Tank	1
4K901	"Champion" Decalcomania	2
1K911	Blue Ribbon Decalcomania	1
1J1000	Propeller Shaft Grease Seal	1
1J1001	Water Line Grommet	2
1J1003	Spark Plug Nipple	1
1J1100	Connecting Rod Needle Bearing	32
1J1200	Propeller Nut Cotter Pin	3
1J1201	Magneto Rotor Retaining Ring	1
1J1202	Flywheel Key	1
1J1203	Synchronous Control Arm Spring Cotter	1
1J1204	Choke Lever Cotter Pin	2
1J1210	Choke Lever Hinge Pin Clip	2
2K1212	Starter Spool Lock Ring	2
2K1213	Shroud Stud Long	2
2K1215	Shroud Stud Short	6
2K1216	Shroud Stud Cross Pin	8
2K1221	Starter Handle Plug	1
1J1602	Stator Plate Control Screw	2
2K1606	Reverse Lock Catch Screw	2
1J1700	Lower Unit Vent Screw	1
	Cylinder Head Seal Screw	2
1J1701	Lower Unit Cap Screw	4
1J1702	Upper Lower Unit Screw	4
	Pivot Base Screw (Short)	2
1J1703	Pivot Base Screw (Long)	1

Part No.	Description	No. Req'd
1J1706	Synchronous Control Swivel Screw	1
1J1708	Synchronous Control Bracket Screw	2
2K1710	Pivot Base Lock Screw	1
4K1712	Crankcase Screw	8
1J2002	Tilting Bracket Clamp Screw	1
1J2003	Pivot Base & Control Panel Bolt	2
1J2004	Gas Tank Screw	4
	Motor Base Screw	6
1J2005	Motor Base Spacer Screw	1
	Control Panel Screw	1
1J2200	Driveshaft Housing Clamp Screw	1
1J2202	Cylinder Head Support Screw	2
1J2204	Carrying Handle Screw (small)	1
1J2205	Carrying Handle Screw (large)	1
1J2402	Synchronous Control Cam Screw	2
2K2405	Tilting Bracket Friction Bolt	1
2K2406	Starter Housing Screw	3
2K2408	Control Panel Anchor Screw	2
1J2502	Flywheel Nut	1
1J2601	Pivot Base and Control Panel Nut	2
1J2602	Carburetor Nut	2
1J2700	Cylinder Head Nut	4
2K2702	Thrust Socket Bolt Nut	1
2K2703	Co-Pilot Tension Adjustment Nut	2
2K2704	Tilting Bracket Bolt Nut	1
1J2800	Synchronous Control Arm Washer	1
	Gas Cap Washer	1
1J2802	Synchronous Control Swivel Washer	1
4K2804	Control Panel Washer	1
2K2806	Starter Handle Washer	1
1J2900	Upper Lower Unit Cap Screw LW	4
	Motor Base Spacer Screw LW	1
	Pivot Base Screw Lock Washer	3
	Carburetor Lock Washer	2

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Part No.	Description	No. Req'd
1J2900	Tilting Bracket Clamp Screw LW.....	1
	Control Panel Screw LW.....	1
	Carrying Handle Screw LW... 1	
	Gas Tank Screw Lock Washer. 4	
1J2903	Pivot Base and Control Panel Bolt Lock Washer.....	2
	Motor Base Screw L W.....	6
1J2905	Stator Plate Control Screw LW	2
1J2906	Synchronous Control Bracket Screw LW.....	2
1J2907	Carrying Handle Screw LW... 1	
1J2909	Steering Handle Bolt LW..... 1	
	Driveshaft Housing Clamp Screw LW.....	1
	Lower Unit Cap Screw LW ... 4	
1K2911	Flywheel Nut Lock Washer.... 1	
1J3000	Lower Unit Dowel Pin (long) .. 1	
1J3001	Lower Unit Dowel Pin (short).. 2	
1J3002	Crankcase Dowel.....	2
2K3116	Starter Plate Rivet.....	3
1J3200	Crankcase Expansion Plug.... 1	
1J3300	Spark Plug (Champion No. 7).. 1	
1J3401	Carburetor Inlet Elbow..... 1	

### ASSEMBLIES

1J990-1-B	Lower Unit Body Sub-Assembly 1 (Includes 1J1-B, 1J3, 1J18, 1J21, 1J3000, 1J3001)	
1J990-2-B	Lower Unit Cap Sub-Assembly 1 (Includes 1J2, 1J4, 1J15, 1J16, 1J17, 1J19-B, 1J1000, 1J1700)	
1J990-3	Propeller Shaft Assembly..... 1 (Includes 1J5, 1J7, 1J11, 1J12, 1J13)	
1J990-6-B	Lower Unit Assembly..... 1 (Includes 1J990-1-B, 1J990-2-B, 1J990-3, 1J14, 1J30, 1K40, 1K41, 1J4701, 1J2900)	

Part No.	Description	No. Req'd
2K990-11	Pivot Base Assembly..... 1 (Includes 2K80, 2K84, 2K85, 1J86)	
2K990-14	Control Panel Sub-Assembly . 1 (Includes 2K92, 1J93-B, 1J2204, 1J2205, 1J2900, 1J2907)	
2K990-15	Control Panel Assembly..... 1 (Includes 2K990-14, 1J94-B, 1J95-B, 1J96, 1J410, 1J415, 1J1204, 1J1210, 1J2909)	
2K990-16	Crankcase Assembly..... 1 (Includes 1J208, 2K210, 1J211, 1J227, 4K1712, 1J3002, 1J3200)	
1J990-18	Connecting Rod Assembly.... 1 (Includes 1J240, 1J1100)	
1J990-19	Piston Assembly..... 1 (Includes 1J247, 1J249, 1J250)	
1J990-23	Carburetor Assembly..... 1 (Includes 1J402, 1K424, 1J450, 1J456, 1J460, 1J1708, 1J2906, 1J3401)	
2K990-24	Magneto Assembly..... 1 (Includes 1J457, 1J458, 1J501, 2K512, 2K520, 1J1602, 1J2402, 1J2905)	
2K990-26	Gas Tank Assembly..... 1 (Includes 1J422, 1K580, 2K890, 4K901, 1K911)	
2K990-28	Complete Set of Gaskets..... 1 (Includes 1J15, 1J16, 1J17, 2K87, 2K89, 1J211, 1J223, 1J224, 1J401, 1J579, 1J1000)	
2K990-31	Starter Housing Assembly.... 1	
2K990-32-B	Ready Pull Handle Assembly (Includes 2K605, 2K1221, 2K2806)	