

PLACE
STAMP
HERE

Mail today to –

Aqua Vac Systems, Inc.
1711 Longwood Road
West Palm Beach, FL 33409
Attn: Warranty Records

Fold, stamp and mail, fax to 561-688-0217 or register on the web at www.aquavacsystems.com

Serial # _____ MakoShark 2
(Stamped on the bottom of the base of the unit)

Registration of Warranty

This registration card must be mailed within 10 days of purchase to secure limited warranty.
FOR USE IN THE U.S.A. ONLY.

Name _____

Address _____

City _____ State _____ Zip _____

Date Purchased _____

How many Aqua Vac units do you have? _____

Is this replacing another pool vacuum? Yes _____ No _____ If yes, what brand? _____

Purchased from _____

City _____ State _____ Zip _____

The size of my pool is _____

Have you seen us on the internet? Yes _____ No _____





Owners Manual



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***The World's Best Pool Cleaners
For More Than 40 Years***



1711 Longwood Road, West Palm Beach, Florida 33409
 USA Toll Free 1-800-327-0141 • (561) 688-0211 • Fax (561) 688-0217
 E Mail: info@aquavacsystems.com
www.aquavacsystems.com



Your MakoShark 2, which has been manufactured, tested and inspected in accordance with carefully specified engineering requirements, is warranted to be free from defects in material and workmanship.

DURATION OF WARRANTY AND TO WHOM EXTENDED (USA only)

One Year ALL GENERAL PARTS

One Year POWER TRAIN WARRANTY
(Motor, Cord and Gear Box).

This unconditional warranty includes both parts and labor for the periods above noted. This warranty is available to such first consumer purchaser and members of his or her immediate family or household for the personal household use of the MakoShark 2 by or on behalf of such first consumer purchaser.

WARRANTY REQUIREMENTS

The MakoShark 2 is required to be used on electric current as indicated on the nameplate. Otherwise, damage, defects, malfunctions, or other failures of the MakoShark 2 arising from use on electric current not as indicated are excepted and excluded from this warranty.

Defects, malfunctions, failure, or damage of the MakoShark 2 caused by improper, unreasonable, or negligent use or abuse while in the possession of the consumer are likewise excluded from this warranty.

Defects, malfunctions, failure, or damage of the MakoShark 2 due to commercial use are excluded from this warranty.

If repair is done on your MakoShark 2 by anyone other than those designated as authorized to perform such work without first having obtained factory instructions, Aqua Vac Systems, Inc., at its sole option, may determine that this warranty will not apply and that reimbursement for such repair will not be made because of the failure to comply with such factory specified instructions.

WARRANTY REPAIR PROCEDURE

To secure repair of the MakoShark 2 or any warranted parts under this warranty, the following procedure should be used. After making prior arrangements with the facility involved, the inoperable MakoShark 2 or warranted parts, together with two extra photocopies

of satisfactory evidence of the purchase date, must be delivered, with shipping and delivery charges prepaid, to the nearest Aqua Vac Systems Factory Authorized Service Center. If you are unable to locate the foregoing, you may call, write, or otherwise communicate with Aqua Vac Systems, Inc., telephone 1-800-327-0141 for the nearest location.

Upon compliance with the above procedure, and if claim is made within one-year from date of purchase, defective warranted parts will be replaced at no charge and the machine sent back to you freight collect.

In following the procedures above set forth, PLEASE MAKE CERTAIN to state the serial number as shown on the base plate of the MakoShark 2.

REPLACEMENT

In the event of a defect, malfunction, or failure of your MakoShark 2, or any warranted part to conform with this warranty, Aqua Vac Systems, Inc. may at its sole option and own expense, replace the MakoShark 2 or any warranted part with another new or factory rebuilt identical or reasonably equivalent unit or part in lieu of repairing the defect.

WARRANTY REGISTRATION CARD FOR YOUR MakoShark 2 AND REQUESTS FOR INFORMATION

Please fill out the warranty registration card accompanying your MakoShark 2, giving complete information as requested on the card and return to the factory.

Any information or questions you may have concerning your MakoShark 2 or this warranty may likewise be secured from the factory.

No dealer, distributor, or other similar person has any authority to make any warranties or representations concerning Aqua Vac Systems, Inc.'s products or to extend this warranty beyond the express items contained herein. Accordingly, Aqua Vac Systems, Inc. assumes no responsibility for any such warranties or representations beyond the express items contained in this unconditional warranty. This unconditional warranty is valid and enforceable only in the United States of America on MakoShark 2's owned and normally operated in the United States of America. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



SAFETY PRECAUTIONS

The MakoShark 2 automatic swimming pool vacuum cleaner has been manufactured to the standards of CSA (Canadian Standards Association) and ETL (Edison Testing Laboratories) with the highest degree of care and concern for safety. We suggest the following safety precautions become part of your pool safety regulations:

1. ALWAYS PUT THE MACHINE INTO THE WATER BEFORE CONNECTING IT TO THE ELECTRICAL OUTLET.
2. IT IS IMPORTANT FOR SWIMMERS' SAFETY TO REMOVE THE UNIT IMMEDIATELY FOLLOWING USE. THIS CAN ALSO IMPROVE THE OPERATING LIFE OF YOUR MAKOSHARK 2.
3. BE CERTAIN THE MACHINE IS ONLY PLUGGED INTO A GROUNDED ELECTRICAL OUTLET EQUIPPED WITH AN APPROVED GROUND FAULT CIRCUIT INTERRUPTER (GFCI).
4. DO NOT HANDLE MACHINE WHILE IT IS PLUGGED INTO THE ELECTRICAL OUTLET.
5. DO NOT USE AN EXTENSION CORD. THIS COULD CREATE A SAFETY HAZARD AND/OR DAMAGE YOUR UNIT.
- 6. ALWAYS STAY OUT OF THE POOL WHILE CLEANER IS IN OPERATION.**
7. NEVER ALLOW PLUG TO ENTER THE POOL.
8. DO NOT OPERATE THE MACHINE OUT OF WATER. THIS WILL DAMAGE THE MOTOR SEAL AND VOID THE WARRANTY.
9. DO NOT DRAG THE MACHINE OUT OF THE POOL AGAINST THE SIDE WALL. THIS COULD DAMAGE UNIT AND/OR YOUR POOL WALL.
10. SOME POOLS HAVE A CORNER OR A CORNER STEP CONFIGURATION THAT MAY CAUSE THE UNIT TO "HANG-UP;" THEREFORE, DO NOT LEAVE THE UNIT COMPLETELY UNATTENDED FOR MORE THAN 1/2 HOUR. OCCASIONAL OBSERVATION AND ATTENDANCE CAN ALSO REDUCE ANY TENDENCY FOR THE CORD TO TWIST.

While the MakoShark 2 has been made to operate as safely as possible, we suggest you exercise reasonable care in the handling of the vacuum and inspect the electrical cord frequently for damage or wear, as with any other electrical appliance. After use, remove the unit and rinse with fresh water and remove any twists that may be present in the cord.

GENERAL INFORMATION

You have purchased the finest piece of equipment in the pool cleaner industry. If you treat it as such, your MakoShark 2 automatic swimming pool vacuum cleaner will give you long, satisfactory service. We suggest the unit be stored in the original shipping container for safe-keeping during the off-season.

ADJUSTMENT

There is one adjustment that **may be** necessary for use in some pools. Please take the few minutes necessary to make it.

The height of the sensor bar #1710 (Page 10, Key 37) is preset at the factory for average pools. It may be necessary to readjust the height of the sensor bar for the machine to operate satisfactorily in your pool.

In "Free Form" or "Bowl Shaped" pools, the sensor bar may have to be raised to a higher setting allowing the machine to climb out of the deep end and clean up the radius or slope as far as possible without the machine turning over.

10, Key 37) is made by loosening adjusting arm nut #1722 (Page 10, Key 30) located just ahead of the intake. Make adjustments in 1/4" increments. The nut is shaped as a thumb screw for your convenience.

With the machine sitting on a level surface, loosen adjusting arm nut, and move sensor bar to desired position. Make certain the sensor bar is parallel to the level surface and retighten the adjusting arm nut one-half to three-quarter turn past the hand tight. Do not overtighten.

It may be necessary to reset the sensor bar several times to find the best position for operation in your pool.

OPERATING INSTRUCTIONS

1. Lower the unit into the shallow end of pool (do not drop or throw). Plug cord into a GROUNDED OUTLET. Observe machine as it travels over bottom of pool.
2. Select nearest grounded outlet supply of correct 110/115/220/240 voltage.

CAUTION: Avoid overloaded circuits as low or high voltage can damage your motor. A connected ground is most important.

3. Allow machine to travel around the pool until it is clean. Average 16' x 32' pool will require one hour or less. If the pool has a heavy accumulation of debris, it may be necessary to clean the filter several times during the vacuuming period.

4. Upon completion of vacuuming the pool, allow the unit to travel to the shallow end of the pool. Before it reaches the pool wall, disconnect the cord from the outlet, raise the unit by the

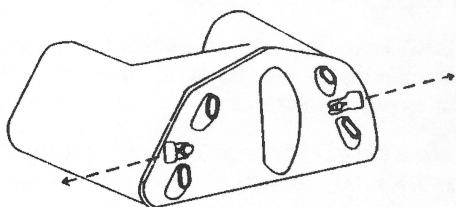
OPERATING INSTRUCTIONS Cont'd.

cord, then remove the unit from the water by use of the handle. Allow excess water from the filter to drain into the pool with the MakoShark 2 resting on the edge or coping. Do not leave the machine in the water after disconnecting.

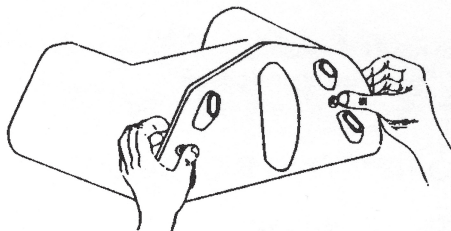
5. When opening the filter for cleaning, move the machine away from the pool edge so that when filter casing is opened the vacuumed debris will not spill in the pool.

6. Cleaning the filter after each use is the most important part of maintaining your MakoShark 2. Clean filters will allow the machine to function most efficiently.

7. Remove the filter by first removing the two push clips as shown below.



Following the removal of the push clips, gently grasp the rear filter plate with the thumbs pressed firmly against the tie rod ends and remove rear plate.



8. Wash the cartridges with a water hose, using a pressure nozzle. Wash outside—then back wash from the inside.

9. Use the MakoShark 2 on a regular basis to keep your pool clean.

MOTOR INFORMATION

The Motor in your MakoShark 2 has automatic overload protection. The overload switch will protect the motor against burning out when an obstruction stops the machine. When an obstruction stops the machine, **UNPLUG THE CORD FROM THE OUTLET** and remove the unit from the pool. Turn the machine over and with the aid of a long screw driver or needle-nose pliers, rotate the impeller and dislodge any foreign object. All large objects should be removed from the pool before the MakoShark 2 is put into operation.

TROUBLE SHOOTING

Machine hangs up or hesitates on pool drain:

- Order accessory P/N 1730 (raised drain intake assy.) from Service Center or Factory

Machine fails to come out of deep end:

- Raise sensor bar to allow machine to climb up incline.

Machine turns away from curved wall too soon:

- Raise sensor bar to allow machine to clean higher on curved portion, but still turn away before tipping over.

Machine tips over before tripping or sensing wall:

- Lower sensor bar until it trips. However, a slight adjustment might have to be made by clipping one or two coils off the spring #2207L (Page 10, Key 34) that is located directly behind sensor bar slide #1707 (Page 10, Key 33). This will allow optional weights to overcome the lesser spring tension and operate reversing mechanism.

Machine turns in circles and twists cord:

- Sensor bar too high, hitting hood.
- Thread on reversing arm #1703 (Page 10, Key 50) is worn or stripped, not allowing reversing mechanism to disengage.
- Sensor bar cable screws are loose.
- Drive wheel broken.
- Drive belt broken.
- Because of various pool designs, especially those with a gradual slope up the sides, the unit has a tendency to attempt to make the climb. To prevent the machine from turning over, a sensor bar weight is attached to both sides. These optional weights are automatically activated when the machine has reached a maximum point of ascension, reversing the unit—causing it to reverse or turn. Remember the basic rule:
- Sensor Bar must always be level to avoid cord twisting!
- Is the unit being run in the pool for too great a length of time? One hour in operation in a 16' x 32' pool should be sufficient with not more than a few twists in the cord set, which should be straightened out after each vacuuming.

Machine does not pick up:

- Filter may be clogged and does not permit the flow of water through the filter cartridge.
- Large object lodged in the intake or in the impeller housing. See motor information, page 5.

Machine does not move:

- Not connected to live outlet.
- Object lodged in impeller.

TROUBLE SHOOTING cont'd.

- A short in the motor; check the ground fault interrupter.
- Unit runs for short distance but stops. Check for overloaded circuit or possible faulty motor. (Do Not Use Extension Cords.)
- Motor runs but unit becomes motionless (gear box worm is worn or the drive pin is sheared).

Machine tips over backwards before sensing wall:

- Filter overloaded with sand.
- Improper sensor bar adjustment (too high).
- One or two coils should be removed from sensor bar spring to allow optional weights to operate reversing mechanism.
- Cord too short for pool length.

**FOR MAXIMUM PERFORMANCE, PLEASE REMEMBER TO
KEEP SENSOR BAR LEVEL AT ALL TIMES**

NOTES

PREVENTATIVE MAINTENANCE

In order to maximize efficiency and receive long term service of your unit, we suggest the following:

- Thoroughly rinse entire unit after use.
- Clean filters thoroughly after each use—a clogged filter can decrease efficiency dramatically.
- Remove any twists in the cord after each use. Twisting should be minimal if the unit is functioning properly. Stretching cord in sunlight is helpful.
- Avoid allowing the unit to “cool down” in the water.
- Inspect belts and filter frequently. Replace when necessary.
- Always keep your Sensor Bar level (a non-level Sensor Bar can cause the cord to twist).

Protect Your Investment!

Following these quick and easy steps will extend the life and efficiency of your MakoShark 2. If you have any questions, contact your local Service Center or call us at 1-800-327-0141, Monday - Friday, 8:30 a.m. - 5:30 p.m. EST.

PARTS ORDERING INSTRUCTIONS

Should you desire to order repair parts, follow this simple procedure:

1. Determine each of the parts you will need and identify them by part number. Use this book as a guide, be sure to note that in some cases, due to continual product improvement, parts may vary depending on the year of manufacture.
2. Contact your local Factory Authorized Service Center with the list of parts you will need. Be sure to advise the Service Center of the MakoShark 2 serial number and the date of purchase. If you need the location of your nearest Service Center, please call Aqua Vac Systems, 1-800-327-0141 or 561-688-0211.
3. All parts under unconditional warranty are confined to the specific limitations as stated.

SPECIFICATIONS

MOTOR:

Type	Submersible
Gallons Circulated	40 GPM/2400 GPH
Voltage	110/115 Volts 220/240 Volts (Export Only)
Frequency	60 Cycle-50 Cycle
Speed	1725/1425 RPM
Bearing	Ball Bearing
Housing	Aluminum Anodized
Motor Seals	Double Lip Wave
Overload Protection	Thermal Overload
Electrical Cord	#16 Wire Encased in Flotation Jacket; 55' & 75' in length

DRIVE:

Reduction	80:1
Reduction Unit	Worm Gear-Bronze Gear
Reduction Gear Lubrication	Permanent
Reduction Unit Housing	20% Glass Filled Resin
Rear Wheel Drive	Planetary Gear System
Front Wheel Drive	Continuous Belt

FILTER:

Type	Self Contained and Attached to Cleaner
Filter Media	Corrugated Resin Impregnated Element
Porosity	50 Microns
Filter Area	20 Square Feet
Housing	Molded Plastic

CASTINGS:

All castings are corrosion resistant Aluminum Alloy.

SHAFT and AXLE:

All parts such as axle, shafts, pins, fasteners, rods, etc., are corrosion resistant.

FLOATING ELECTRICAL CONDUCTOR:

Standard lengths are 55' and 75'.

DIMENSIONS:

Height	161/2" (41.9 cm)
Width	16" (40.6 cm)
Length	18" (45.7 cm)

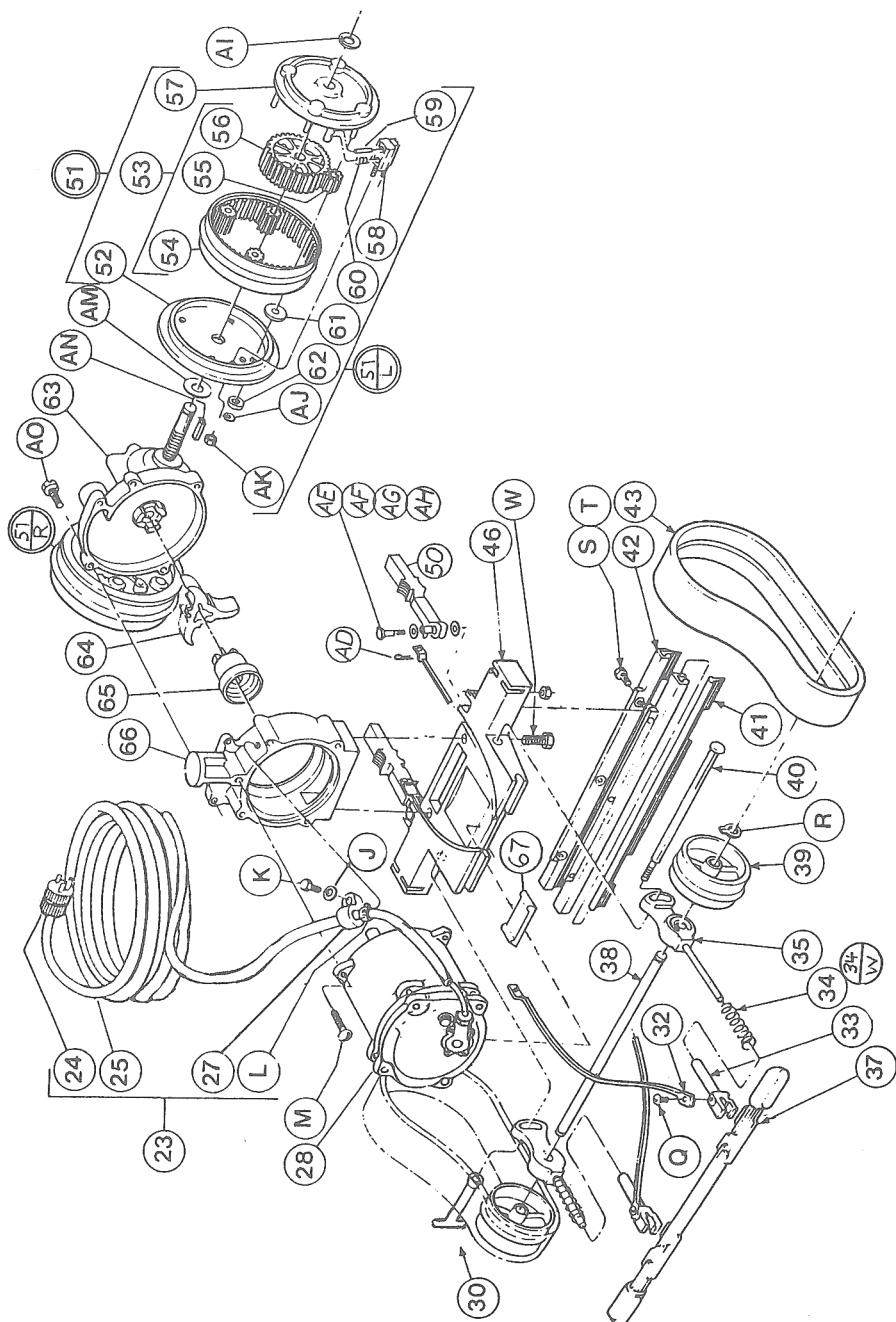
WEIGHT:

Net Weight of MakoShark 2 with 60' Cord	34 lbs. (17.2 kg)
Gross Shipping Weight	38 lbs. (19.5 kg)
Net Weight of MakoShark 2 with 80' Cord	36 lbs. (19.5 kg)
Gross Shipping Weight	40 lbs. (21.7 kg)

SHIPPING CARTONS:

Cleaner	191/2" x 171/2" x 16" (49.5 cm x 44.5 cm x 40.6 cm)
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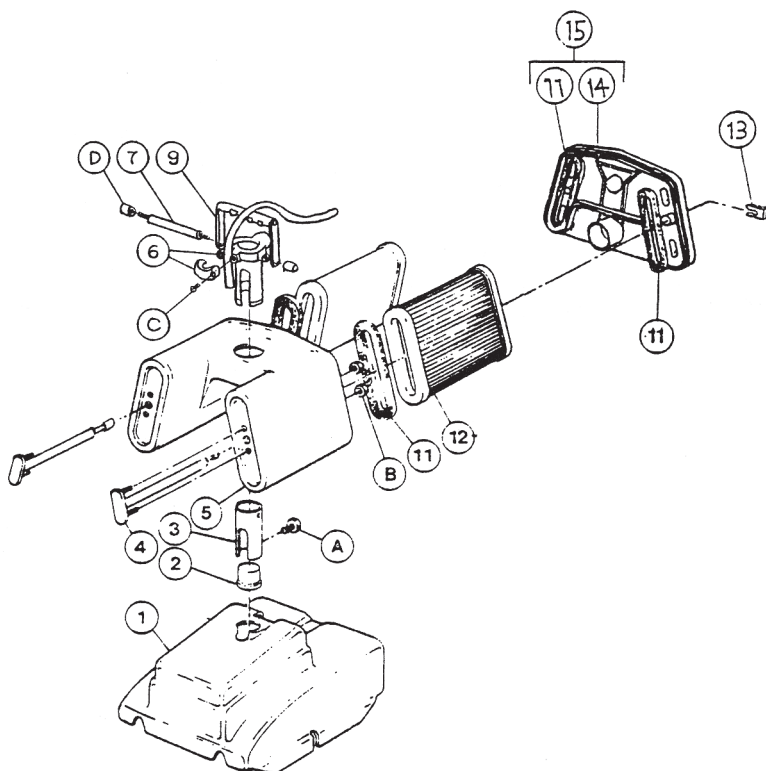
1993 TO PRESENT



KEY	PART NO.	PART DESCRIPTION	REQ	L/H	R/H
23	505	Q CORD ASSEMBLY 55' NS/PI	1		
24	508	Q CORD ASSEMBLY 75' NS/PI	1		
25	5919	PLUG - ELECTRICAL	1		
27	417A	CORD - (REFERENCE ONLY)	1		
J	2220B	CLAMP - MOTOR (FOAM CORD)	1		
K	2121B	WASHER FLAT 1/4" SS	1		
L	3	BOLT HEX HD 1/4-20 X 3/4" SS	1		
28	4000-88	SAFETY CLAMP	1		
M	2102B	MOTOR - 110V/60HZ P.I.N.S.	1		
30	1722	SCREW RD HD 10-32 X 1 1/4" SS	3		
32	1701	NUT - ADJUSTING ARM	1		
Q	1715	CABLE	2	1	1
33	1707	SCREW RD HD 10-32 X 1/2" SS	2	1	1
34	2207L	SLIDE - SENSOR BAR	2	1	1
34W	1206	SPRING - SENSOR BAR SLIDE SS (W/O WT)	2	1	1
35	1705	SPRING - SENSOR BAR SLIDE SS (IF WEIGHT IS PRESENT)	2	1	1
37	1710	ARM - ADJUSTING	2	1	1
38	1721	BAR - SENSOR	1		
39	1702	AXLE - FRONT	1		
R	1702A	WHEEL - FRONT	2	1	1
40	1723	RING SNAP 3/8" SS	2	1	1
41	1711	BOLT - ADJUSTING ARM SS	1		
42	1712	BLADE - INTAKE	2		
S	1713	HOLDER - INTAKE BLADE	2		
T	420A	(ALL QUEENS POST 1978)	6		
		BOLT HEX HD 8-32 X 1/2" SS	6		
		NUT HEX 8-32 SS	6		

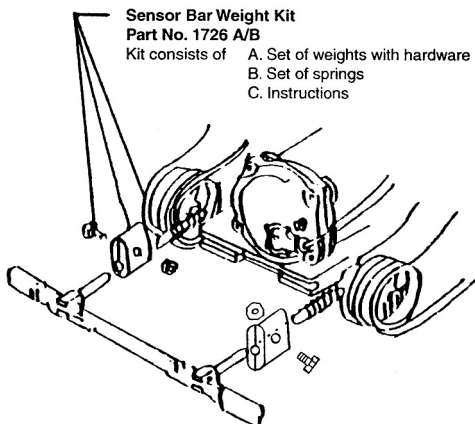
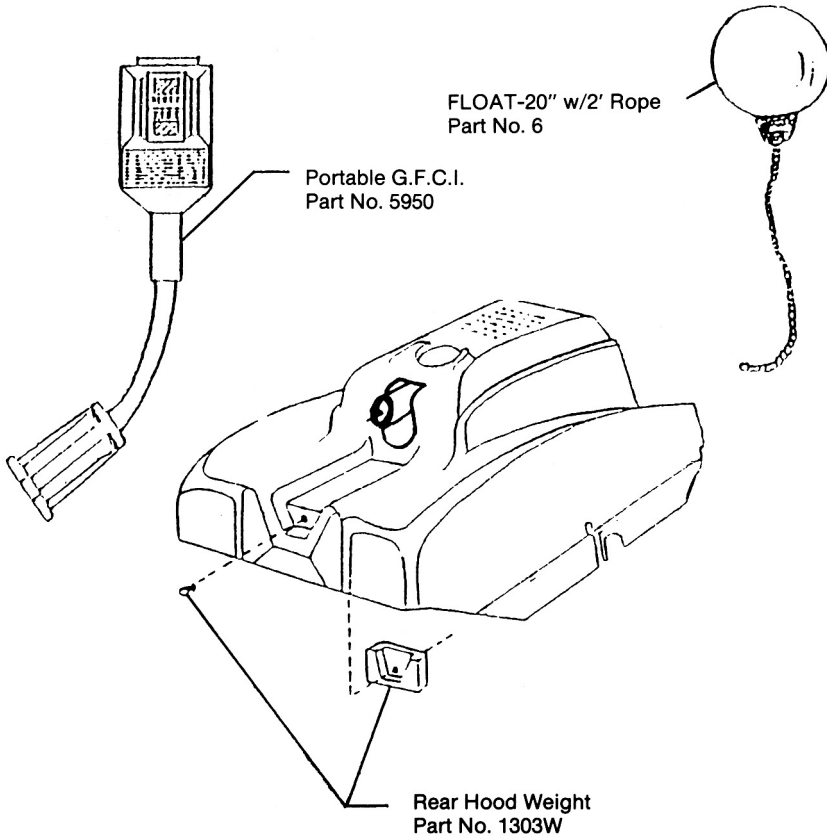
KEY	PART NO.	PART DESCRIPTION	REQ	L/H	R/H
43	1307V	DRIVE BELT - SHORT	2	1	1
W	1720	BOLT HEX HD 5/16-18 X 1" SS	2	1	1
46	1700-89	BASE - PLATE N/S	1		
50	1703	ARM - REVERSING L & R	2	1	1
AD	1703D	HAIR PIN COTTER 1/16 X 1/2" SS	2	1	1
AE	1714C	BOLT HEX HD 10-32 X 1 1/2" SS	2	1	1
AF	2204C	WASHER FLAT #10 SS	4	2	2
AG	1714A	SLEEVE - GUIDE PIN SS	2	1	1
AH	1610B	NUT LOCK HEX 10-32 SS	2	1	1
51L	1600L	WHEEL - DRIVE ASSEMBLY LEFT	1	1	
51R	1600R	WHEEL - DRIVE ASSEMBLY RIGHT	1	1	
52	1600A	PLATE - SIDE WHEEL	2	1	1
53	1602	GEAR - PLANETARY ASSEMBLY	2	1	1
54	1602B	GEAR - RING (REF ONLY)	2	1	1
55	1603	GEAR - PLANETARY (REF ONLY)	8	4	4
56	1604	GEAR - SUN (REF ONLY)	2	1	1
57	1601	PLATE - WHEEL OUTSIDE	2	1	1
AI	1814D	RING SNAP 1/2"	2	1	1
58	1606	LOCK - WHEEL DRIVE W/ STUD	2	1	1
59	1607A	PISTON - WHEEL LOCK SS	4	2	2
60	1607	SPRING - WHEEL LOCK SS	4	2	2
61	1605	WASHER - WHEEL PLASTIC	8	4	4
62	1114A	BUTTON - WHEEL	8	4	4
AJ	1608	CLIP "E" 1/4" SS	8	4	4
AK	1606A	NUT LOCK HEX 10-24 SS LOW PROFILE	2	1	1
AM	1814C	WASHER FLAT 7/16" SS	2	1	1
AN	1113	KEY 1/8" SS - DRIVE WHEEL	2	1	1
63	1800F	GEAR BOX ASSEMBLY - FLEX	1		
AO	1808	BOLT HEX HD 1/4-20 X 1 1/4" SS	5		
64	1104A	IMPELLER - 3 BLADE	1		
65	1102A	COLLAR - IMPELLER FLEX DRIVE	1		
66	4148P-82	HOUSING - PUMP PLASTIC	1		
67	4209	PAD - MOTOR RUBBER NS	1		

HOOD & FILTER ASSEMBLY 1993 TO PRESENT



KEY	PART NO.	PART DESCRIPTION	REQ	L/H	R/H
1	1303	HOOD	1		
2	7802B	HAT - RISER	1		
3	7802	ADAPTER - HANDLE RISER	1		
A	2302A	BOLT HEX HD 1/4-20 X 5/8" SS	1		
4	7815	TIE ROD - NEW STYLE	2	1	1
B	1610A	HEX NUT 10-32 SS	4	2	2
5	7801	BODY - FILTER ASSEMBLY	1		
6	7825	RING - ADAPTER W/ CLAMP	1		
C	7804A	SCREW PAN HD 8-32 X 1" SS	2	1	1
7	7806	PIN - HANDLE	1		
D	1610B-82	NUT - SLOTTED SS	2	1	1
9	7805	HANDLE	1		
11	7813	GASKET FOAM 1/4" OVAL	4	2	2
12	7807	FILTER - CARTRIDGE	2	1	1
13	7803	TIE ROD PUSH CLIP	2	1	1
14	REF. ONLY	PLATE - FILTER BACK (MUST BUY #7810-93)	1		
15	7810-93	COVER - FILTER ASSEMBLY	1		

ACCESSORIES



Part #99385 Caddy Cart
Available as option





For small and large commercial pools

The KingShark® is designed for commercial pools up to 30x60 and cleans entire pool in less than 3 hours! Community centers, motels and small commercial pools of all varieties agree there's no faster, easier or more economical way to clean their pools!

The KingShark 2® is the leading commercial pool cleaner worldwide. The KingShark 2® has a powerful motor and 40 square feet of filtration. The unit independently cleans an olympic size pool in under 5 hours while circulating 4,200 GPH.

The KingShark 2® Plus is a luxury cleaner, equipped with a standard cord swivel and remote control as well as a caddy cart. No wonder the KingShark 2 Plus® was chosen for the Los Angeles, Seoul, Barcelona, Atlanta and Sydney Olympics!

Aqua Vac® Cleaners are built in the USA to be the best in the world. Call today for a dealer in your area.

***The most powerful,
efficient and versatile vacuum
pool cleaner you can buy.***

1711 Longwood Road, West Palm Beach, Florida 33409

USA Toll Free 1-800-327-0141

(561) 688-0211 • Fax (561) 688-0217

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www.aquavacsystems.com