

JET-VAC®

AUTOMATIC POOL CLEANERS

Pressure Side Pool Cleaner



Installation Guide

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Customer Service

If you have questions about ordering Pentair replacement parts, and pool products, please use the following contact information:

Customer Service (8 A.M. to 5 P.M. — Eastern and Pacific Times)

Phone: (800) 831-7133 — (Moorpark, CA – Ext. 6501)

Fax: (800) 284-4151

Technical Support

Sanford, North Carolina (8 A.M. to 5 P.M. — Eastern Time)

Phone: (919) 566-8000

Fax: (919) 566-8920

Moorpark, California (8 A.M. to 5 P.M. — Pacific Time)

Phone: (805) 553-5000 — (Ext. 6312)

Fax: (805) 553-5515

Web site

visit www.pentairpool.com and www.staritepool.com to find information about our products

© 2005 Pentair Water Pool and Spa, Inc. All rights reserved.

This document is subject to change without notice.

1620 Hawkins Ave., Sanford, NC 27330 • (919) 566-8000

10951 West Los Angeles Ave., Moorpark, CA 93021 • (805) 553-5000

Trademarks and Disclaimers. The *Pentair Water Pool and Spa logo* is a trademark of Pentair Water Pool and Spa, Inc. The *Jet-Vac logo* is a registered trademark of Pentair Water Pool and Spa, Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Pentair Water Pool and Spa, Inc. disclaims any proprietary interest in trademarks and trade names other than its own.



TABLE OF CONTENTS

<i>IMPORTANT WARNINGS</i>	<i>4</i>
<i>INTRODUCTION</i>	<i>5</i>
<i>INSTALLATION PROCEDURES</i>	<i>6</i>
<i>FEEDER HOSE ASSEMBLY</i>	<i>7</i>
<i>PRESSURE ADJUSTMENTS</i>	<i>9</i>
<i>ASSEMBLE AND INSTALL JET-VAC HEAD UNIT</i>	<i>9</i>
<i>JET-VAC ADJUSTMENTS FOR VINYL LINER POOLS</i>	<i>10</i>
<i>TROUBLESHOOTING</i>	<i>11</i>
<i>PARTS LIST</i>	<i>12</i>
<i>PARTS DIAGRAM</i>	<i>13</i>

IMPORTANT WARNINGS

1. ALWAYS remove the JET-VAC Automatic Pool Cleaner before anyone enters the swimming pool.
2. ALWAYS have a **licensed electrical contractor** install the wiring for the JET-VAC Booster Pump. It must be wired in accordance with a local and/or regional electrical codes.
3. ALWAYS disconnect the JET-VAC from the wall when back-washing or cleaning the filter system. When you have finished and the pumps are OFF, remove the wall fitting first, then turn ON the filter pump. WAIT ONE MINUTE, then turn ON booster pump to flush out the sweep line. Then turn OFF booster pump AND filter pump. Remove and thoroughly clean filter screen inside wall fitting. Reassemble screen into wall fitting and screw fitting back into wall. Adjust wall fitting so that the connector points up towards the water surface.
4. ALWAYS remove wall fitting and JET-VAC when back-washing filter system. Be certain wall fitting screen is clean before reinstallation.
5. ALWAYS remove JET-VAC and hoses when adding chemicals. Run filter to mix chemicals in water for at least 30 minutes before reinstalling JET-VAC and hoses in water. CHEMICAL ATTACK WILL VOID THE WARRANTY. Never pour concentrated chemicals on or near any part of the JET-VAC or hose assemblies.
6. ALWAYS store all parts of the JET-VAC and hose assemblies away from excessive heat or cold and direct sunlight, when not in use.
7. The JET-VAC is not designed to clean up after new pool construction. Large amounts of grit or sand will damage wheel bearings. Please manually vacuum the pool before installing the JET-VAC.
8. NEVER operate your JET-VAC without a booster pump. Your existing filter system cannot generate adequate pressure.

INTRODUCTION

JV105

Congratulations on purchasing the JET-VAC automatic pool cleaner. The JET-VAC is the easiest to install, most energy efficient automatic pool cleaner on the market.

The JET-VAC has a patented, built-in backup system that will move the unit out of corners and away from other obstacles that tend to trap other pool cleaners. The unit moves forward for approximately three minutes, then backs up and turns for approximately one and one-half minutes, all the while vacuuming and sweeping your pool in a random pattern. It is designed with fewer moving parts to give you years of dependable, economical service. The JET-VAC is built with pride from the best materials obtainable by skilled craftsmen, state-of-the-art machinery and is backed by a one year limited warranty that guards against defects in parts and workmanship.

Like any other mechanical device, the JET-VAC should be routinely maintained. We recommend that you have your JET-VAC checked periodically by your local JET-VAC dealer.

For best results, your JET-VAC should be installed by a professional, but can be installed by the consumer with some plumbing experience.

Thank you for choosing JET-VAC. You have made a wise choice!



INSTALLATION PROCEDURES

BEFORE YOU START, PLEASE READ THIS ENTIRE DOCUMENT for important guidelines to assure proper installation and care of your JET-VAC. JET-VAC pressure test sticks are available from the factory or your JET-VAC Dealer.

The **JET-VAC** comes packaged in two separate boxes. One box contains the head and hose assembly, and the other contains the booster pump. The **JET-VAC** needs a 3/4 h.p. booster pump to operate correctly. You may already have a booster pump at your equipment pad. If so, proceed to the next section after the Booster Pump Installation.

The **JET-VAC** is designed to clean swimming pools that have been pre-plumbed with a dedicated line (pipe) that runs from its own booster pump to the wall of the pool. At that point, most pools have 1-1/2" female threads. If the pool has 3/4" female threads, it will require the LW11A3 wall fitting, or the 3/4" MPT x 1-1/2" FPT Reducer Bushing.

QUICK DISCONNECTS:

Quick Disconnects are used at all important hose junctions. They are easily snapped on and off by pulling back on the ring and twisting on or off. Give a tug at the connection to make sure it is snug.

MENDER NUTS:

These plastic nuts provide a gripping hold over hose ends that have been pushed down over various fittings and connections. With the hose pushed tight over the end of the fitting or connection, grasp the hose in one hand and slide the mender nut toward the hose, twisting until firmly in place over the hose end.

PRESSURE TEST STICK - USE JET-VAC TEST STICK ONLY

In order to assure correct operation, it is necessary to adjust the water pressure after cutting the feed hose to fit your pool size. To accomplish this, you will need a 0-60 p.s.i. pressure gauge with a 1/4" M.P.T. connector, a JET-VAC Pressure Test Stick, part No. JV-P8.

BOOSTER PUMP INSTALLATION:

Installation of the booster pump requires both electrical and plumbing. The electrical connections should be completed by a licensed electrician in accordance with applicable electric codes. Remember: the booster pump is not self-priming and must be installed PAST the filter pump and PRECEDING any chlorinating device (if applicable). Booster Pump details are packaged in Booster Pump Box. Please note: a booster pump is required for the JET-VAC to work. If you do not have an existing booster pump, you should have purchased a JET-VAC unit complete with pump. If you do not have a booster pump, please contact your dealer immediately or call Customer Care at 1-800-831-7133.

WALL FITTING INSTALLATION:

The wall fitting is the outlet for the water supply from the booster pump to the pool.

1. Flush the system by first turning ON filter pump (for at least 30 seconds) and then turn ON booster pump, until stream of water appears clear.
2. Turn OFF both pumps and clock.

3. Check the filter screen inside the wall fitting to make sure it is free of debris. (It is important to check and thoroughly clean the wall fitting filter screen periodically.)
4. Remove the wall adaptor from the wall fitting and screw adaptor by hand into the dedicated line. Turn until tight.
5. Take the wall fitting and twist lock the wall fitting into the wall adapter 1/4" turn; to a snug fit. Once the wall adapter is secure you can now twist lock and unlock to remove wall fitting with ease from the wall adapter. See Figure 1.

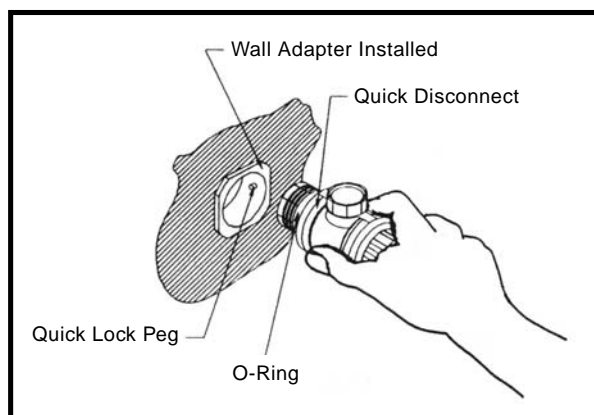
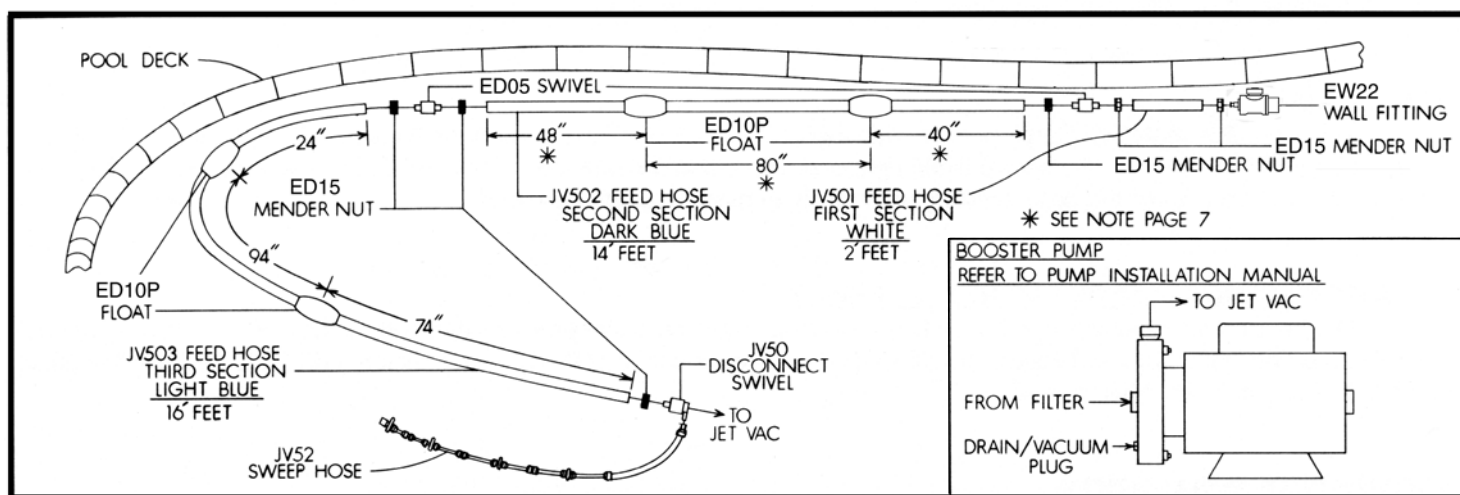


Figure 1.

FEEDER HOSE ASSEMBLY:

NOTES: Feeder hoses come assembled and must always be in the following order:
First section is white hose with quick disconnect which connects to wall fitting.
Second section is dark blue hose which connects to white swivel connection.
Third section is light blue hose with whip hose attached and connects to cleaner.



IMPORTANT!

The JET-VAC feed lines are formulated with a special material for maximum performance. These feed lines cannot be kinked at any time, either during operation or when being removed from the pool. Kinking feed lines will result in bursting and will not be covered.

HERE IS JET-VAC'S SIMPLE, TIME SAVING AND INNOVATIVE APPROACH TO QUICK AND EASY INSTALLATION!

1. Turn off booster pump, filter pump and time clocks.
2. Attach the wall fitting to the pool wall.
3. Attach the "Sweep Hose" end of the feed hose to the wall fitting. (Hereafter, *attached refers to attached to the wall fitting*). See **Photo #1**.
4. With a loose grasp on the feed hose, walk around the circumference of the pool to find the point that is furthest from the wall fitting and remove slack from the hose, *but do not stretch the hose*. See **Photo #2**.
5. While maintaining a grasp on the attached hose, use a sharp knife to cut the dark blue hose (marked with a bright-colored label reading "cut this section only") at the point where the end of the hose would touch the edge of the pool. See **Photo #3**. Take both hose sections and go to the wall fitting.
- *Note:** After you cut the dark blue hose to size, evenly space the two ED10P floats moving them so they divide the remaining section into three equal parts.
6. Secure with your foot or knee the dark blue attached hose. Remove the dark blue piece of hose from the white section at the mender nut and discard the severed piece of dark blue hose.
7. At the mender nut, attach the removed white hose to the severed end of the attached dark blue hose. See **Photo #4**.
8. Reverse hose ends (disconnect the sweep hose end of the hose from the wall fitting and reconnect the other white hose end to the wall fitting).



Photo #1



Photo #2



Photo #3



Photo #4

PRESSURE TEST STICK - USE JET-VAC TEST STICK ONLY

To assure optimum performance of the JET-VAC, the water pressure must be adjusted after the feed hose assembly is cut to fit your individual pool size. Too little pressure will cause sluggish performance and too much pressure will damage the JET-VAC or burst the feed hose, jeopardizing the warranty. Excess pressure can also cause the JET-VAC to "fly" off the bottom of the pool surface.

1. FIRST, turn OFF booster pump, filter pump and clock.
2. Screw pressure gauge into threaded fitting in pressure test stick (JV-P8). Snap pressure test stick onto Quick Disconnect Swivel at the end of the feed line where the whip hose is attached.
3. Hold the ends of the whip hose and pressure stick under the water and turn ON filter pump.

NOTE: If you do not have someone to assist you, secure the pressure test stick and whip hose with a tool box or similar heavy object. After turning ON the pumps, grasp the test stick and whip hose firmly before removing the heavy object used to secure them. Hold the ends of the whip hose and test stick under the water.

4. *While holding the ends of the whip hose and pressure stick under the water*, open pressure relief valve until the pressure gauge reads 25 to 28 PSI. Do not adjust the pressure with the water stream from the Pressure Stick or the Sweep Hose shooting into the air. This will cause a false reading. Use a JET-VAC Pressure Stick *only*!
5. Turn OFF booster pump AND filter pump.
6. Disconnect pressure test stick from feed line.



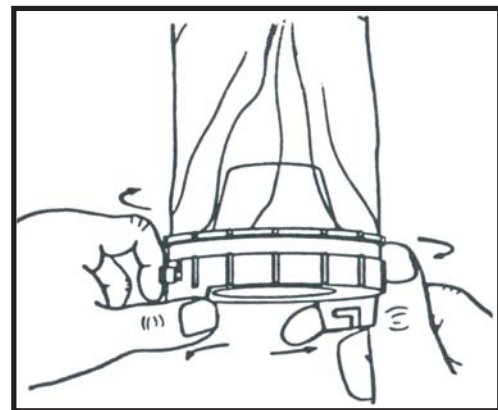
Photo #5

ASSEMBLE AND INSTALL JET-VAC HEAD UNIT:

1. Attach funnel adapter to JET-VAC head.
2. Attach bag to funnel adapter.
3. Attach connector at whip-end of feed hose to JET-VAC housing.
4. Place the assembled unit with hoses in the water.
5. Turn ON filter pump for at least 30 seconds to purge the air from the unit.
6. Turn ON booster pump and clock.
7. THE JET-VAC IS INSTALLED AND CLEANING THE POOL!!!

CLEANING THE BAG:

Remove the entire bag assembly (including funnel adapter) from the JET-VAC by twisting counterclockwise to release the snap-lock. To remove bag with locking ring from funnel adapter, position fingers as shown by putting thumb on one tab and finger on the other tab. Push in opposite directions to unlock (see drawing at right). Empty debris from bag and rinse clean with cold water. Next, hold the funnel adapter upside down and gently tap against a solid surface to dislodge the flexible funnel adapter gasket. Rinse any debris from both sides of the gasket and the funnel adapter. Press the gasket back into the funnel adapter, and lock ring and bag assembly in place with the same technique used to remove the locking ring. Lock the funnel adapter onto the JET-VAC, and it's ready to resume cleaning.



To Remove Bag with Locking Ring from Funnel Adapter
Position fingers as shown by putting thumb on one tab and finger on the other tab. Push in opposite directions to snap off.

VINYL LINER POOLS - ADJUSTMENTS

Some vinyl pools have a steep incline from the deep end to the shallow end, some simple adjustments to the JET-VAC will help it climb up into the shallow end of the pool.

1. Remove the transparent nose wheel (part # JV13) by removing the Phillips screw and the plastic hub that the screw goes through. Turn the nose wheel upside down, with the flange end of the hub up, reinstall the screw into the hub and screw securely. Check that it spins freely and does not fall off.
2. Remove the Phillips screw and nut that holds the stainless steel wheel (part # JV15) in place and reinstall in the lower mounting position.
3. Loosen, but do not remove, the Phillips screw that attaches the roller arm (part # JV12) to the JET-VAC body. Place the JET-VAC on a flat surface and adjust the roller arm angle so that the bottom of the stainless steel wheel (JV15) is 1/2" from the flat surface and tighten the Phillips screw securely.
4. Test the JET-VAC in the pool to verify adjustments.

***Note:** In some cases it may be necessary to increase pressure to 27-29 PSI for added thrust.

TROUBLESHOOTING

Cleaner floats above pool floor?

- a. Check for excess water pressure and adjust to 25-28 PSI.
- b. Stainless steel nose may need adjustment to 1/2" off the floor.

Cleaner isn't moving?

- a. Be sure filter system and booster pump are on and working properly.
- b. Check and clean wall fitting filter screen.
- c. Check for damaged and/or leaking feed hose(s) and replace as necessary.
- d. Grit may accumulate in the wheel bearings. Use a strong stream of water to spray the wheel bearings while forcefully rotating the wheels back and forth in both directions until they spin freely.

Cleaner moving very slowly?

- a. Check and clean filters.
- b. Check and clean wall fitting filter screen.
- c. Grit may accumulate in the wheel bearings. Use a strong stream of water to spray the wheel bearings while forcefully rotating the wheels back and forth in both directions until they spin freely.
- d. Check hoses for leaks and replace worn parts as necessary.
- e. Check condition of tires and replace worn parts as necessary. Tires have a notch as a wear indicator. Replace tires when notch is gone.

Cleaner falling over or lying on its side?

- a. This usually indicates the bag needs to be emptied.

Cleaner doesn't pick up sand or silt?

- a. Use the Sand & Silt fine mesh bag (JV32).

Hose tangles?

- a. Feed hose may be too long. Review FEEDER HOSE ASSEMBLY on [Page 7](#) to verify that the instructions were carefully followed.
- b. Check hose swivels to make sure they turn freely, and replace any that will not.

Cleaner stays in deep end or does not climb?

- a. Lower stainless steel wheel from current setting down one notch (use Phillips screwdriver).
- b. Set unit on deck. Stainless steel wheel should be 1/2 inch from deck.
- c. Place Jet-Vac into pool.

Your problem or question isn't mentioned here?

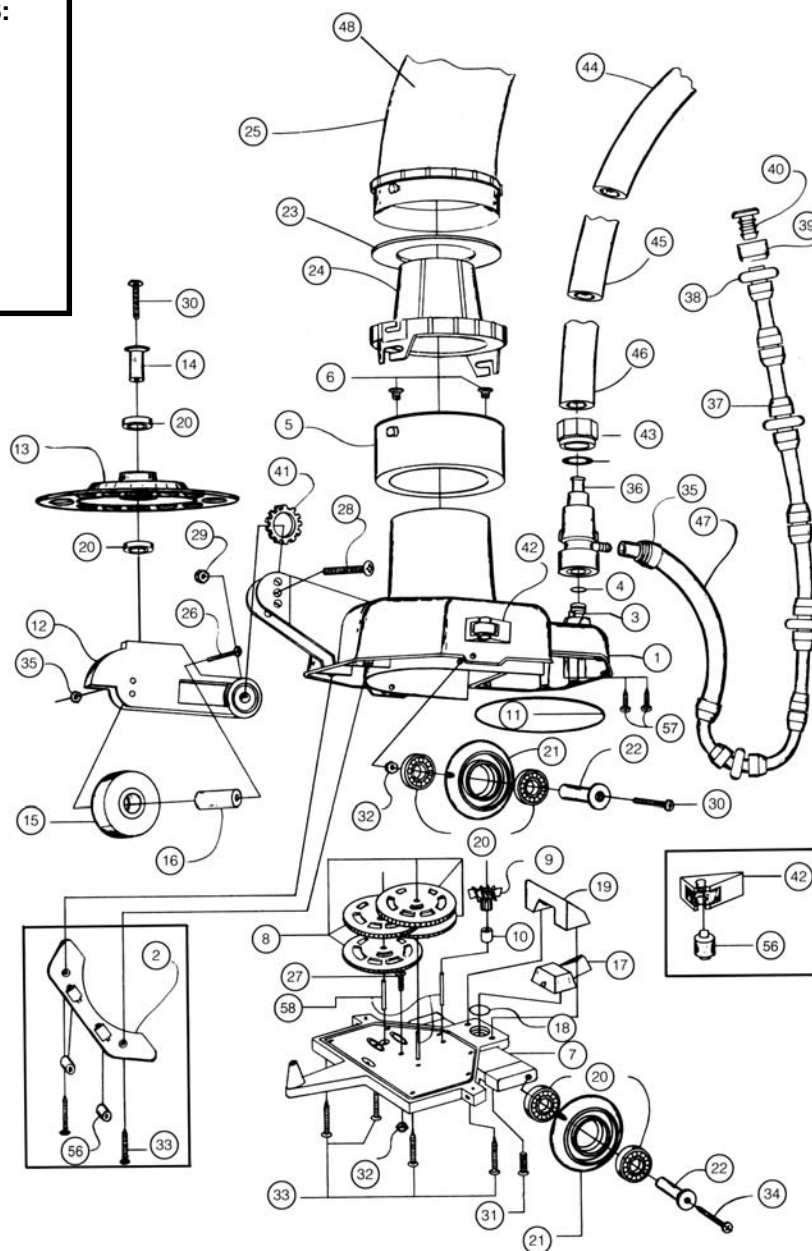
- a. See your local pool dealer, or
- b. Contact Pentair Water Pool and Spa, Inc., weekdays at 1-800-831-7133.

JET-VAC PARTS LIST

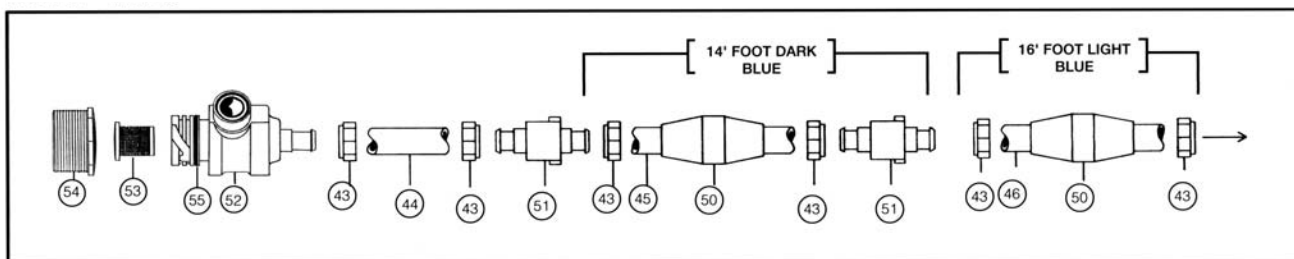
NO.	PART#	DESCRIPTION	QTY.
1	JV2C	Venturi Shell (Blue)	1
1	JV2CBK	Venturi Shell (Black)	Opt.
2	JV2B	Deflector Assembly	1
3	JV3	Connector	1
4	EFO7	O-Ring for JV3	1
5	JV4	Shell Float	1
6	JV4B	Adjustment Bushing for Shell Float Cover	2
7	JV5	Gear Plate	1
7	JV5C	Gear Plate with Gears	1
8	JV7	Gear	4
9	JV8	Propeller	1
10	JV9	Spacer for Propeller	1
11	JV11	O-Ring for JV2	1
12	JV12	Roller Arm	1
13	JV13	Nose Wheel	1
14	JV14	Nose Wheel Hub	1
15	JV15	Stainless. Steel Wheel	1
16	JV16	Hub for Stainless. Steel Wheel	1
17	JV17	Pusher Jet Nozzle	1
18	E18	O-Ring for Pusher Jet	1
19	JV19	Pusher Jet Nozzle Holder	1
20	LG35B	Bearing	10
21	JV21	Tire	4
22	JV22	Hub for Tire	4
23	JV29	Funnel Adapter Gasket	1
24	JV30	Funnel Adapter	1
25	JV32	Fine Silt Bag with Locking Ring	1
26	JV39	Screw for Stainless Steel Wheel	1
27	JV40	Screw for Gear Plate Center	1
28	JV41	Screw for Roller Arm	1
29	EU78	Nut for Roller Arm	1
30	JV43	Screw for Front Tire Hub & Nose Wheel Hub	3
31	JV44	Screw for Pusher Jet Holder	2
32	JV45	Nut for JV43 and JV40	4
33	JV46	Screw for JV5C and JV2B	9
34	JV48	Screw for Back Tires	1
35	JV49	Hose Mender for Sweep Hose	1
36	JV50	Quick Disconnect Swivel	2
37	JV53	Hose Sleeve	1
38	JV54	Roller Ring	1
39	JV55	Hose Jet Collar	1
40	JV56	Hose Jet	14
41	JV61	Lock Washer for Roller Arm	2
42	JV62	Side Wheel Assembly	1
43	ED15	Hose Mender - Plastic	1
44	JV501	2" Feed Hose - First Section - White	4
45	JV502	14" Feed Hose - Second Section - Dark Blue (Hard)	1
46	JV503	16" Feed Hose - Third Section - Light Blue (Soft)	2
47	JV52	Sweep Hose - Complete	2
48	JV31	Coarse Mesh Leaf Bag w/Locking Ring	2
50	ED10P	Feed Hose Float	2
51	ED05	Swivel	6
52	EW22	Wall Fitting - Complete	1
53	E24	Screen For Wall Fitting	1
54	E23	Quick Disconnect Adapter	1
55	E21	O-Ring For Wall Fitting	*
56	JV64	Sidewheels	2
57	LG10	Screws for JV3	Opt.
58	JV6	Shaft	Opt.

**JV504C
INCLUDES THE
FOLLOWING PARTS:**

- 1 - JV501
- 1 - JV502
- 1 - JV503
- 1 - JV50
- 4 - ED10P
- 6 - ED15
- 2 - ED05



HOSE KIT - # JV209



SAVE THESE INSTRUCTIONS.



NOTES

This page is intentionally blank.

