



OWNER'S MANUAL

DOMINATOR SERIES HIGH & MEDIUM HEAD PUMPS LIQUID ENDS



DOMINATOR HIGH HEAD



DOMINATOR MEDIUM HEAD



DOMINATOR - LIQUID END

IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

- 1. READ AND FOLLOW ALL INSTRUCTIONS.**
- 2. WARNING** - To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- 3. CAUTION** - This pump is for use with permanently installed pools and may also be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so
- that it may be readily disassembled for storage and reassembled to its original integrity and has a maximum dimension of 18 feet (5.49m) and a maximum wall height of 42 inches (1.07m).
- 4. Do not install within an outer enclosure or beneath the skirt of a hot tub or spa unless so marked.**
- 5. SAVE THESE INSTRUCTIONS.**

DOMINATOR PUMP MANUAL

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INSTALLATION & OPERATING INSTRUCTIONS

GENERAL

Your **Dominator** pump has been quality built and engineered to give maximum efficiency under normal water pumping conditions. Consult the manufacturer for any other applications.

INSTALLATION

I. LOCATION OF PUMP

Place pump on a firm level surface. Pump need not be bolted down unless required by local code. Select a location close to the filter allowing for convenience and serviceability.

II. PUMP CONNECTIONS

Suction line from pool (skimmer and main drain) must be connected to inlet at hair and lint trap. It is recommended to have a minimum of 12" of straight pipe before hair and lint trap. Discharge line to pool (return lines) must be connected to outlet at top of pump via filter. If pump is installed below water level of pool, install valves on the inlet and outlet piping to permit removing of equipment without draining the pool.

CAUTION: During the pressure test procedure, this pump is under pressure. DO NOT LOOSEN filter clamp or trap lock ring while pump is running or until all pressure is released. Tighten lock ring securely by hand only. Raise pressure slowly. Do not exceed 35 psi. Extreme care must be taken during pressure test. Failure to follow these instructions explicitly can result in personal injury.

OPERATION

I. PRIMING PUMP

At initial start-up, pump must be primed by filling hair and lint trap with water. To prime pump, remove cover from hair and lint trap; fill pump and suction trap with water. Replace cover (make sure the O-ring is in place) and tighten lock ring. Pump will now prime, with priming time depending upon lift and horizontal distance of suction piping.

II. CLEANING BASKET

It is important to clean the hair and lint basket frequently. A dirty basket will reduce the efficiency of the filter and heater and will put an abnormal stress on the pump motor which could result in costly repair bills.

CAUTION: Do not remove hair and lint strainer lid while pump is running or under pressure! Lid is held in place by a lock ring which can be removed or tightened by hand. Basket must be kept clear of leaves and debris at all times.

III. REMOVING BASKET

1.) Turn off motor. 2.) Remove lock ring by rotating counter clockwise. DO NOT USE TOOLS. 3.) Remove lid. 4.) Remove basket and empty debris. 5.) Replace basket, fill with water, replace lid

and lock ring securely to prevent air from entering and tighten. DO NOT USE TOOLS. 6.) Turn on motor. 7.) Open air-relief valve on top of filter until steady stream of water comes out.

NOTE: If pump is installed below water level of pool, close return and suction lines prior to opening hair and lint pot. Make sure to re-open valves prior to operating.

DO NOT RUN PUMP DRY!

Always maintain proper water level in pool. If water level falls below skimmer intake, pump will suck air. Pump is equipped with a maintenance-free heavy-duty mechanical seal. Damage will occur if pump runs dry, and warranty will be voided.

IV. TO PREVENT FREEZING

Drain liquid from pump through plug at bottom front section of volute. It is recommended to apply a good rust inhibitor into liquid end to prevent corrosion. Be sure motor is kept dry and covered. In mild climate area, when freezing may occur, run pump and filter equipment continuously to prevent freezing.

MOTOR

Your pump is equipped with a permanently lubricated, maintenance-free, heavy-duty industrial quality motor especially designed to withstand the heavy-duty requirements of swimming pool application. Wiring connection must agree with incoming line voltage. Improper wiring can cause serious injuries and damage to the motor, voiding warranty. (For wiring instructions, see diagram on motor rating plate.)

NOTE: Motor is designed to withstand the effects of normal rain-fall. To increase the life of your motor observe the following:

- 1.) Do not flood motor or submerge in water. To do so voids warranty.
- 2.) Provide ample cross ventilation, minimum of 6" at all points. 3.) Keep motor and surrounding area clean.
- 4.) Avoid sweeping or stirring dust near motor while it is running. 5.) Avoid storing or spilling dry chemicals, powders, etc., near motor.
- 6.) Provide protection against the elements.
- 7.) Locate motor on a slight elevation so water will drain away from motor.
- 8.) Avoid spilling or dripping liquid chemicals on or near motor. 9.) Avoid splashing water or hosing deck near motor. Water damage voids warranty.

For replacements contact your local supplier or authorized serviceman.

WARNING - All electrical wiring of the motor installation must be done by a qualified electrician in accordance with applicable electrical codes. Before working on any motor be certain that the source of electrical power is off at the main junction box.

BONDING WIRE - Upon installation of the pump, the motor must be bonded with a No. 8 AWG (8.4mm²) solid copper conductor per National Electric Code. The connection should be from the accessible wire connector on the motor to all metal parts of the swimming pool, spa, or hot tub structure and to all electrical equipment, metal conduit, and metal piping within 5 feet (1.5m) of the inside walls of a swimming pool, spa or hot tub, when the motor is installed within 5 feet of the inside walls of the swimming pool, spa, or hot tub.

NOTE: For electrical connections, see wiring diagram on motor rating plate.

TROUBLE SHOOTING

If pump loses prime, or if too many bubbles come through return line, check:

- 1.) Hair and lint pot cover is tight and O-ring is in place and free from defects.
- 2.) Valves on suction and return lines are working properly and open.
- 3.) Water level in pool is too low.
- 4.) Filter O-ring or gasket is in place and free from defects. 5.) All fittings and connections are secure and air tight.

Not pumping water, check:

- 1.) Filter pressure gauge reading too high, indicating filter needs cleaning.
- 2.) Clogged plumbing lines.
- 3.) Clogged impeller.
- 4.) Worn or damaged impeller.

Motor does not run, check:

- 1.) Circuit Breakers.
- 2.) Incorrect or loose wire connections

- 3.) Thermal protector in motor tripped. Allow motor to cool, then try to restart.

Motor makes humming noise but won't start, check:

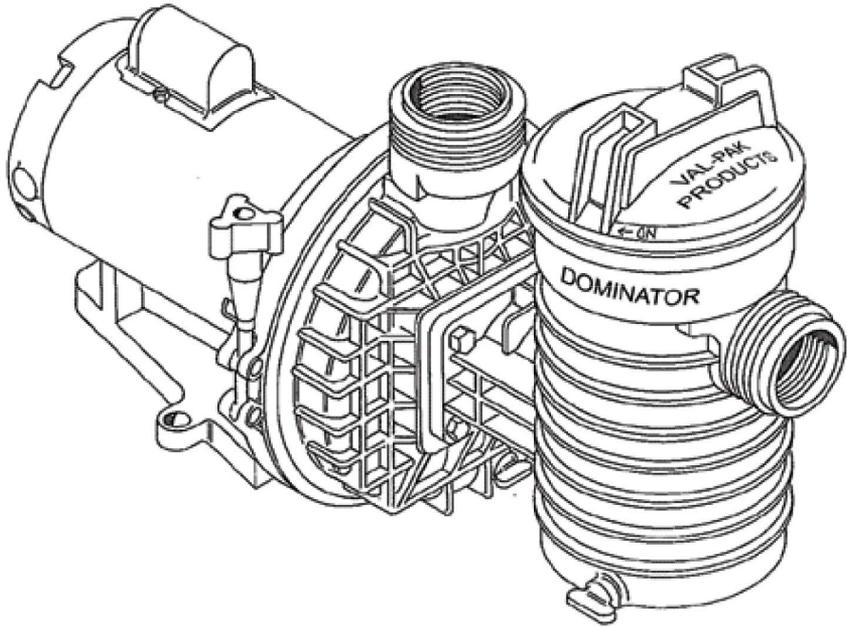
- 1.) Make sure motor shaft turns free.
- 2.) Jammed impeller or an obstruction in (volute) casing. 3.) Low voltage and undersized wire.

Motor overheating and cycling on and off, check:

- 1.) Incorrect or loose wire connections.
- 2.) Low voltage supply (frequently caused by undersized wire). 3.) Make sure the motor gets a fresh air supply and the vents are kept unclogged.

Noises, check:

- 1.) Plumbing vibration.
- 2.) Impeller turns freely and is properly adjusted.
- 3.) Motor bearings.
- 4.) For cavitation, due to obstruction in or undersized suction line.

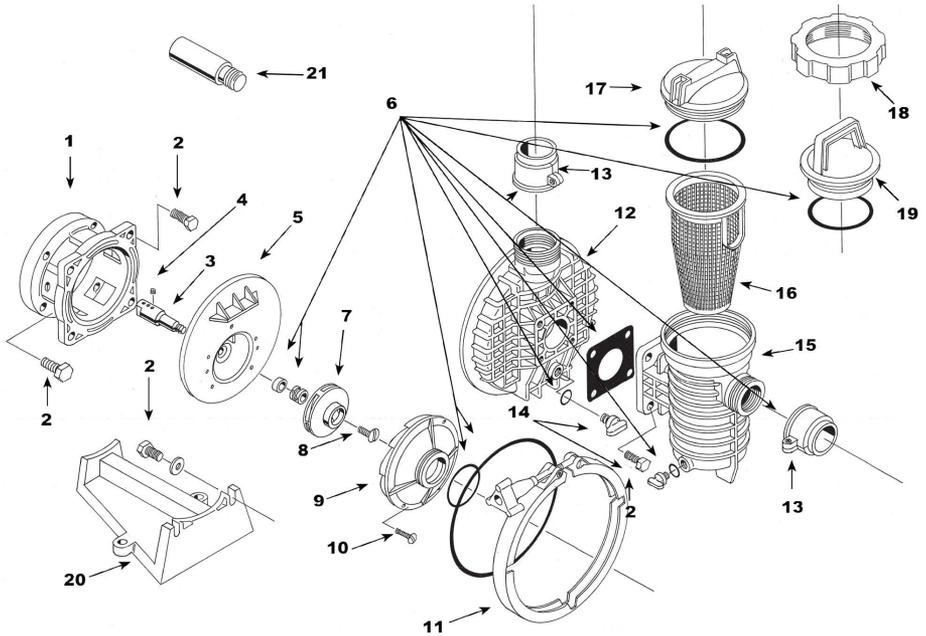


Val-Pak Part No.	Description	List Price
159050H-1	1/2 HP High Head 115/230 1PH Pump	
159050M-1	1/2 HP Medium Head 115/230 1PH Pump	
159070H-1	3/4 HP High Head 115/230 1PH Pump	
159070M-1	3/4 HP Medium Head 115/230 1PH Pump	
159100H-1	1 HP High Head 115/230 1PH Pump	
159100M-1	1 HP Medium Head 115/230 1PH Pump	
159150H-1	1½ HP High Head 115/230 1PH Pump	
159150M-1	1½ HP Medium Head 115/230 1PH Pump	
159200H-1	2 HP High Head 115/230 1PH Pump	
159200M-1	2 HP Medium Head 115/230 1PH Pump	

LIQUID END ONLY

Val-Pak Part No.	Description	List Price
159050H	1/2 HP High Head 2" Suction	
159050M	1/2 HP Medium 2" Suction	
159070H	3/4 HP High Head 2" Suction	
159070M	3/4 HP Medium 2" Suction	
159100H	1 HP High Head 2" Suction	
159100M	1 HP Medium 2" Suction	
159150H	1½ HP High Head 2" Suction	
159150M	1½ HP Medium 2" Suction	
159200H	2 HP High Head 2" Suction	
159200M	2 HP Medium 2" Suction	

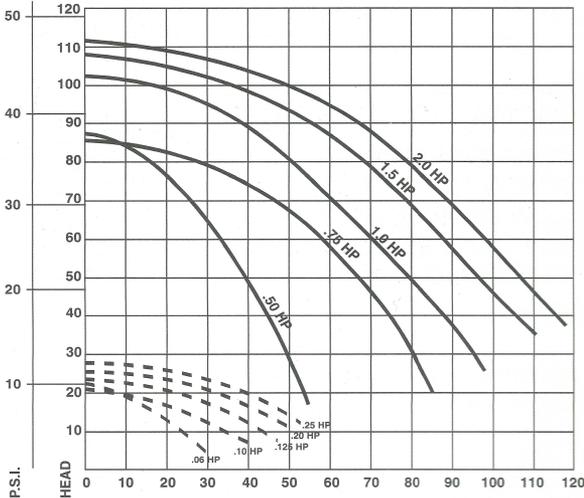
DOMINATOR EXPLODED VIEW



Key No.	Description	Val-Pak Part No.	List Price	Key No.	Description	Val-Pak Part No.	List Price
1	Bracket	V40-902		8	High Head Impeller Lock Screw (10/bag)	V40-428	
2	Bolt Kit	V40-908		9	Med. Head Diffuser	V40-410	
3	Pump Shaft	V40-116-1		9	High Head Diffuser	V40-415	
4	Set Screws 1/4"-20 X 5/16" (100/bag)	V40-401		10	Med. Head Diffuser Screw (25/bag)	V40-425	
5	Seal Plate	V40-901		10	High Head Diffuser Screw (25/bag)	V40-426	
6	Seal Parts Kit - Medium Head*	V40-908		11	Volute Clamp W/Knob	V40-906	
6	Seal Parts Kit - High Head*	V40-908-1		12	Volute Casing	V40-900	
	*Pump Seal Prior to 1995	V40-300		13	Compression Fitting 2"	V40-432	
7	3/4 HP Med. Head IMP	V40-411		14	1/4" Drain Plug W/O-ring (10/bag)	V40-907	
7	1 HP Med. Head IMP	V40-412		15	Trap	V40-903	
7	1 - 1/2 HP Med. Head IMP	V40-413		16	Pump Basket (12/box)	V40-409	
7	2 HP Med. Head IMP	V40-414		17	Pump Lid N/S 2010 to Present	V26-361	
7	3/4 HP High Head IMP	V40-416		18	Lock Ring Prior to 2009	V40-905	
7	1 HP High Head IMP	V40-417		19	Pump Lid Prior to 2009	V40-430	
7	1 - 1/2 HP High Head IMP	V40-418		20	Base	V40-904	
7	2 HP High Head IMP	V40-419		21	Extension Shaft, Shorty	V40-910	
8	Med. Head Impeller Lock Screw (10/bag)	V40-427					

DOMINATOR PUMP CURVES

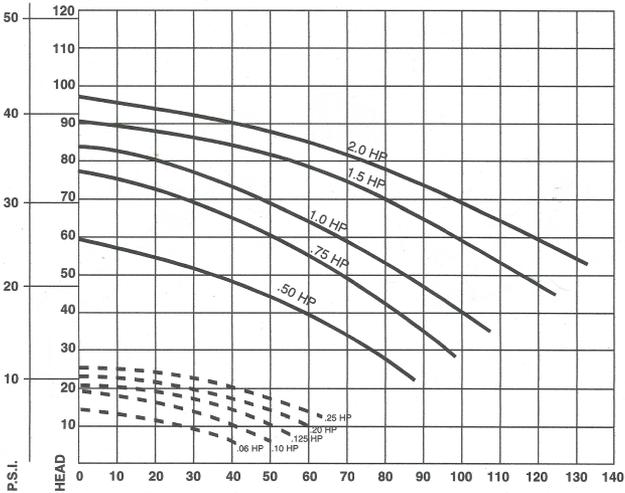
HIGH HEAD



CAPACITY IN GALLONS PER MINUTE

SOLID curve based on 3450 RPM
DASHED curve based on 1725 RPM
50 cycle units available

MEDIUM HEAD



CAPACITY IN GALLONS PER MINUTE

SOLID curve based on 3450 RPM
DASHED curve based on 1725 RPM
50 cycle units available

DOMINATOR ASSEMBLY INSTRUCTIONS (Mounting Liquid End to Motor)

To facilitate the assembly of the pump and make your installation easier, please read and follow these instructions:

1.) Remove the liquid end and motor from their shipping cartons and check for any possible freight damage.

2.) Set the motor base in place aligning the two slots with the bottom mounting holes in the motor bracket. Secure to the motor bracket and seal plate using the 3/8-16 bolts that are supplied with the liquid end.

3.) Place the liquid end and motor on a flat working surface to assist in the assembly of the complete unit.

4.) If a "C" face motor is used, discard the shaft key. The key will not be required.

NOTE: If a square flange threaded shaft motor is used, the pump bracket and the brass extension shaft supplied with your liquid end will not be used. Remove and set aside.

5.) To facilitate and assure that the liquid end and motor are properly assembled, it is recommended that the trap and casing, as a unit, be removed by unscrewing and removing clamp band. For Square Flange assembly, proceed to step #7.

6.) "C" FACE MOTOR ASSEMBLY:

Place the motor on the pump base and insert the motor shaft into the brass extension shaft making sure the motor shaft keyway is in alignment with the set screws in the brass extension shaft.

Important: Before installing the brass extension shaft to the motor, remove all the setscrews and apply a small amount of thread locking compound (supplied) along each screw's thread. Reinstall the setscrews.

a. Place the pump bracket up against the motor, aligning the holes in the bracket with the threaded holes in the motor. Install the four 3/8-16 hex head bolts, but do not tighten at this time.

b. Secure the brass extension shaft to the motor shaft by pushing the impeller towards the motor as far as it will go, using the opening in the diffuser. Make sure the shaft extension does not move forward while set screws are being tightened.

c. Make sure the round head screw in the impeller is secure. If tightening is required, hold the flat areas on the brass extension shaft with a suitable tool, and tighten the screw by turning counter-clockwise.

d. Now, tighten the four hex head bolts that secure the pump bracket to the motor. Also make sure that the four bolts securing the bracket and motor base to the seal plate are tight.

Proceed to step #8.

7.) SQUARE FLANGE MOTOR ASSEMBLY:

Remove the diffuser and impeller. NOTE: The floating brass wear ring around the impeller hub. Place the motor on the pump base, inserting the motor shaft through the seal plate. Secure motor to seal plate using four 3/8-16 bolts.

NOTE: Use the two longer bolts for securing of the motor base.

a. Making sure the mechanical seal is properly in place, screw the impeller securely to the motor shaft. Se cure the round head slotted screw by tightening counter-clockwise.

Proceed to step #8.

8.) Make sure the floating brass wear ring is placed back in position around the impeller hub.

9.) Place the diffuser back into position over the impeller and secure to the seal plate with the three #8-32 screws.

10.) **Important:** Before replacing the casing and trap, reach in with a couple of fingers and rotate the impeller, making sure it is clear and turning freely.

11.) Place the casing and trap in position, making sure the discharge port connection is in a straight vertical position. Set the clamp band in place and tighten.

12.) The pump is now ready to be installed.

Replacement parts for Dominator liquid end are the same as Dominator Medium Head pump replacement parts except where noted. Please refer to Dominator Medium Head replacement parts page.

DOMINATOR SERIES PUMPS LIMITED WARRANTY

VAL-PAK PRODUCTS, INC.

WARRANTS TO:

the original retail purchaser only, that the products they manufacture are free from defects in material and/or workmanship for a period of one years (pump seals warranty for 30 days) from date of purchase. If within the first year, any such products shall prove defective, it shall be repaired or replaced at **Val-Pak's** option as follows:

The original retail purchaser shall first contact the installing dealer, as soon as possible after discovery of the defect, but in no event later that the expiration date of this warranty. Or upon notification,

VAL-PAK PRODUCTS

20731 CENTRE POINTE PKWY
SANTA CLARITA, CA 91350

will advise the consumer of the address to which the defective item may be shipped, together with the model number, serial number and date of purchase of item claimed to be defective. The consumer must pay for all shipping charges.

EXCLUSIONS

1. This warranty shall not apply to any failures resulting from negligence, abuse, misuse, misapplication, improper installation, alteration or modification, chemical corrosion, or improper maintenance.
2. Any items manufactured by other companies and used by **Val-Pak Products** in its products may carry warranties by the original manufacturers.
3. **Val-Pak** is not liable for incidental or consequential damages, loss of time, inconvenience, incidental expenses, labor or material charges in connection with removal or replacement of the equipment.

Val-Pak is not responsible for any implied warranties or representations by others, and the foregoing warranty is exclusive and in lieu of all warranties provided herein.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



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