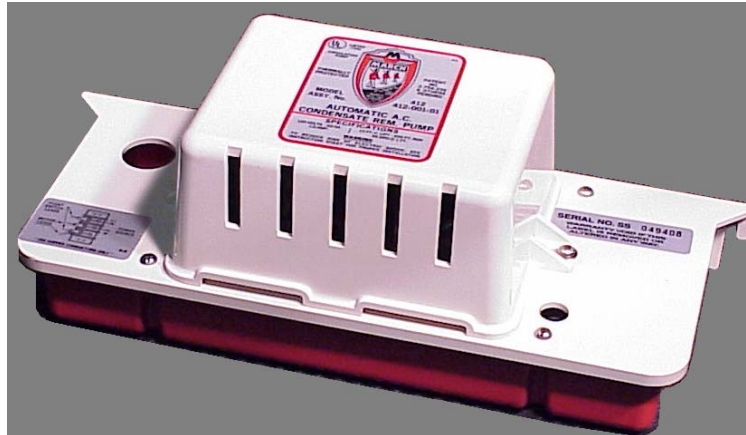




MARCH PUMPS

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INSTRUCTIONS & REPAIR PARTS FOR MODEL 412 CONDENSATE DISPOSAL PUMP



LOCATION. Model 412 pump is designed to mount BELOW the evaporator pan. It is preferable to mount pump as close to drop pan as possible to minimize actual lift and to clear components usually found on floor of most A.C. units. Pump is designed to mount on side of A.C. unit or on wall near unit by using the two ears on each end of the plastic mounting plate.

PIPING. The Condensate Pump inlet is a 1" diameter hole in the mounting plate. Attach a 1" O.D. rubber or plastic tube to the evaporator drip pan drain connection, and lead it down into the pump inlet hole. Make sure the drain line is not kinked or collapsed due to sharp bends.

The Outlet fitting is a 90° tube fitting to which the 1/4" I.D. plastic tubing is attached. It is important to go straight up from the pump to your highest vertical point and then run the horizontal line to the drain. All horizontal lines should be slanted slightly downwards toward the drain or disposal area in order to prevent line drain-back into the pump after it goes off. See Figure 1. If impractical to slant the horizontal run, make an inverted "U" trap directly over the pump at the highest point to prevent back-syphoning. See Figure 2. Slight amount of drain-back from the vertical column is not generally enough with 1/4" I.D. tubing to short cycle the pump. Total maximum lift is 13 feet.

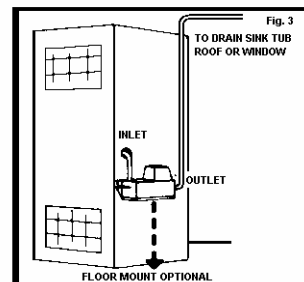
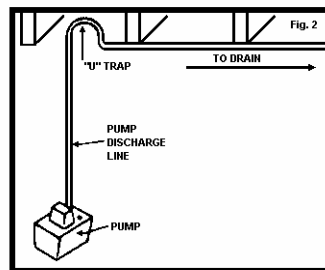
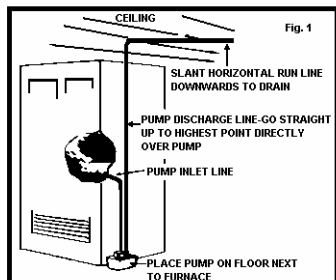
ELECTRICAL AND OPERATION. Remove the 2 machine screws holding down the White Top Cover and lift the cover off. The Model 412 pump is equipped with a BX BRACKET and a 3 station Terminal Board.

The complete wiring diagram is attached to the mounting plate. Attach rigid or flexible conduit to the BX Bracket and wire the 115 Volt A.C. for pump operation.

The Motor is available in 230 volt, 60 Cycle, 1 Phase. All motors are equipped with an automatic reset type thermal protector and the combination is U.L. Listed.

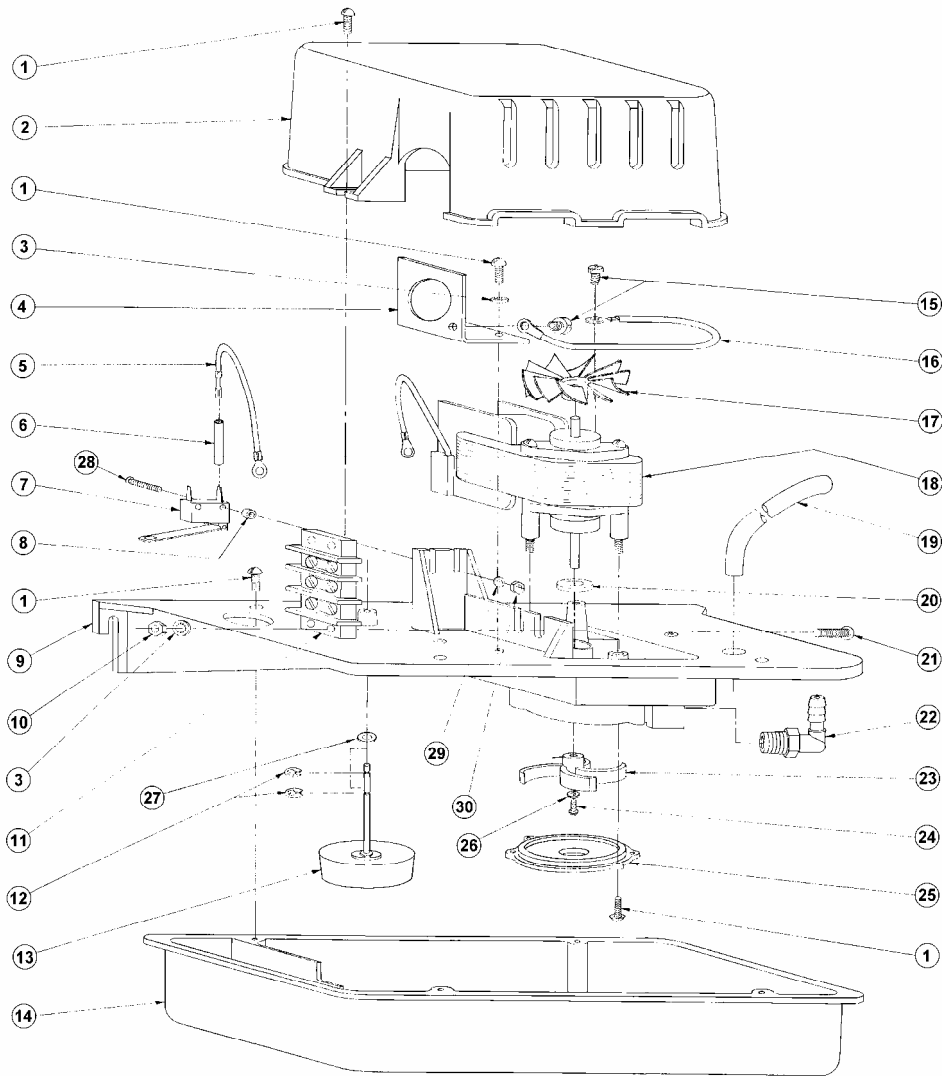
WARNING. Reduced risk of electric shock during operation of this pump requires the provision of acceptable grounding. If the means of connection to the supply-connection box is other than grounded metal conduit, ground the pump back to the service by connecting a copper conductor, at least the size of the circuit conductors supplying the pump, to the grounding screw provided within the wiring compartment.

SERVICING AND MAINTENANCE. Remove the 4 screws in the corners of the pump reservoir and lower the reservoir from the mounting plate. Clean out all dirt accumulation on the parts. Check the float rod to be sure it is working freely. Examine the discharge fitting and tubing for any dirt accumulation. Place the reservoir back in place and screw down the 4 corner screws. Run the unit thru one cycle by pouring water into the reservoir. Always replace the white top cover if removed.



MODEL 412 RATINGS AND SPECIFICATIONS

MOTOR SPECS.					GALLONS PER HR.			MAX. HEAD IN FT.	MAX. P.S.I.	OUTLET PORT	PACKED WEIGHT
VOLTS	AMPS	WATTS	H.P.	R.P.M.	1 FT.	6 FT.	12 FT.				
115	.9	48	1/75	3300	65	38	6	13	5.65	1/4 F.P.T.	5 lbs.



MODEL 412 PARTS LIST

ITEM	DESCRIPTION	QTY.	PART NO.	ITEM	DESCRIPTION	QTY.	PART NO.
1	#8-32 x 3/8 LG. RD. HD. SCR. ST. SS.	12	0135-0040-1000	16	GROUND WIRE & TERMS ASSEM.	1	0412-0014-0100
2	MOTOR COVER	1	0412-0005-1000	17	C.C.W. FAN BLADE	1	0809-0066-1000
3	#8 INT. TOOTH LOCK WASHER	4	0620-0010-1000	18	MOTOR W/LEADS-115V	1	0412-0026-1000
4	BX BRACKET	1	0412-0010-1000	19	1/4 I.D. TUBING X 20 FT. LONG	1	0410-0024-1000
5	CONNECTING WIRE & TERMS ASSEM.	2	0618-0049-0200	20	WASHER -BUNA "N" RUBBER	1	0412-0011-1000
6	HEAT SHRINKABLE SLEEVE TUBING	2	0618-0059-0000	21	#8-32 X 11/16 LG. RD. HD. SCR. SS.	2	0618-0101-1000
7	SWITCH W/SCREWS, NUTS & WASHERS	1	0618-0043-1100	22	90° ELBOW	1	0618-0033-1000
8	SWITCH SPACER	2	0618-0053-1000	23	IMPELLER	1	0412-0028-1000
9	PUMP MOUNTING PLATE	1	0412-0002-1000	24	#4-40 X 5/16 LG. RD. HD. SCR.	1	0410-0033-1000
10	#8-32 NUT	2	0410-0039-1000	25	PUMP CAVITY COVER	1	0412-0003-1000
11	3 TERMINAL STRIP	1	0618-0074-1000	26	#4 INT. TOOTH LOCK WASHER	1	0410-0034-1000
12	"TRUARC" E-RING	2	0410-0007-1000	27	PIVOT WASHER	1	0410-0009-1000
13	FLOAT ASSEMBLY	1	0412-0009-0100	28	#2-56 X 5/8 LG. RD. HD. SCR.	2	0618-0086-1000
14	PUMP RESERVOIR	1	0412-0001-1000	29	#2 INT. TOOTH LOCK WASHER	2	0618-0055-1000
15	#8 X 1/4 LG. SLOTTED PAN HD. TAP SCR.	1	0412-0015-1000	30	#2-56 NUT	2	0618-0054-1000

Contact factory for other materials and/or parts not listed.

LIMITED WARRANTY

March pumps are guaranteed only against defects in workmanship or materials for a period of one year from date of manufacture pumping water. On all other solutions, contact the factory for application assistance. March Pump Application Worksheet 750-130-10 is available for additional warranty information.



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