## INSTALLATION BULLETIN



**ETL LISTED** 

MOTOR OPERATED AIR COMPRESSORS VACUUM PUMPS PAINTING EQUIPMENT

TESTING LABORATORIES INC CORTLAND, NEW YORK 13045

R0892068520

#### Installation, Care and Operation of REMA AIR VACUUMS

#### Rema "Dri-Vac" Warranty

Rema "Dri-Vac" air vacuum systems are guaranteed for a period of one (1) year from date of original purchase. The Rema Corporation will replace free of charge any part thereof which proves to be defective in material or workmanship within one (1) year from date of original purchase. This warranty does not apply to damage resulting from accident, alteration, misuse, or abuse.

Any defect in said vacuum system should be brought to the attention of the Rema distributor from whom it was purchased, who will be authorized to arrange for repairs or replacement within the terms of this warranty. If this procedure is impracticable, contact REMA CORPORATION direct.

Rema Corporation will not assume any expense or liability for repairs made outside our factory unless authorization has been made for such repairs by the REMA CORPORATION. For minor motor repairs and checkup, ONLY THE AUTHORIZED MOTOR SERVICE BRANCH of the motor manufacturer should be used.

Any correspondence with the factory concerning your Rema "Dri-Vac" should mention the model number and the serial number of the unit. This information is stamped on the nameplate which is attached on the side of the vacuum housing.

### REMA DRI-VAC CORPORATION



#### Vacuum Header - Pipe Sizes

The vacuum header from the condenser tank to pressing machines should be the same size as the inlet connection on the side of the tank. The following chart shows the correct header sizes for each model:

Model RP-1	:	2 inch	Model RP-20		3 inch
Model RP-2	:	2 inch	Model RP-25	:	3 inch
Model RP-3	:	2 inch	Model RPO-5	:	3 inch
Model RP-4	:	2 1/2 inch	Model RPO-8		3 inch
Model RP-5	:	2 1/2 inch	Model RPD-12		3 inch
Model RP-8	:	3 inch	Model RPD-16	:	3 inch
Model RP-12	:	3 inch	Model RPD-40	:	4 inch
Model RP-16	:	3 inch	Model RPD-50		4 inch

The vacuum header should be pitched toward the tank 1" for every 10' of header length. Branch pipe connections from the vacuum header to the air valves on the pressing machines should be no less than 2" in size. SEE FIG. IV FOR CORRECT INSTALLATION. For best results, connect branch to header with a "Y" fitting. See illustration, on back page. Be sure there are no water pockets (low spots) in the vacuum header or branches. When Rema vacuums are located on the same floor as the presses, and the vacuum header is lower than tank inlet, install a drain cock at the point where the piping rises. Drain daily. Whenever it is necessary to make sharp turns in the vacuum line, try to use two 45 degree fittings or a long elbow instead of a 90 degree elbow. This procedure will keep your vacuum losses to a minimum.

#### **Exhaust Line**

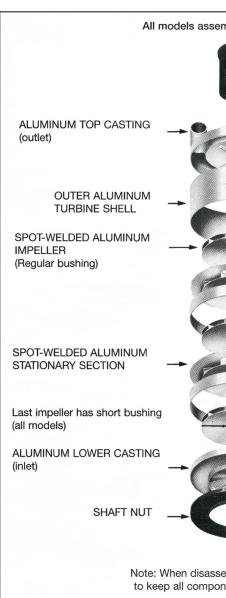
Must be the same size or larger than machine outlet. Avoid sharp turns and water pockets in the exhaust line. When water pockets are unavoidable, a drain cock must be installed. For best operating conditions, the exhaust line should be kept as short as possible and should be piped to the outside atmosphere. When severe restriction makes it impracticable to run the exhaust line outside the building, we recommend piping the line into a small barrel or other suitable receptacle, preferably located in the cellar directly under the presses. Note: If a severe rise in the exhaust line is unavoidable, use 3" or 4" pipe for the entire length to lessen restriction. Install a petcock at the low point of rise to permit condensate to drain from the lines.

#### **Direction of Rotation and Speed**

Important! An arrow on the motor housing indicates correct direction of rotation, which is COUNTER-CLOCKWISE when looking down on the motor from the top. When a machine runs backwards, suction is reduced by as much as 50%. Note, escaping steam between motor and turbine is indication that the motor is turning backwards or that there is restriction in the exhaust lines. By changing the electrical wiring connections according to the motor instructions, the direction of rotation can be reversed. Full load is 3450 RPM.

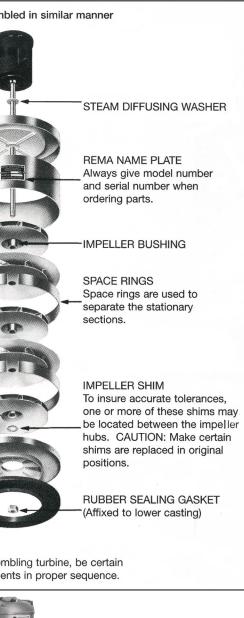
#### **Draining**

A 1/2 inch opening is provided in the condenser tank for draining. Use a faucet or if conditions warrant, use a check valve, which will drain the tank automatically when vacuum is off. Drain: Waste water must be disposed of per all local and state regulations. Condenser tank should be drained at least once daily and cleaned of sediment about once a year.





Pioneers in Air \





#### Tank Assembly - Rubber Sleeves

Locate tank in a clean, cool dry, place. the three rubber mounts rest freely and evenly on the floor, otherwise a vibration will result. Two rubber sleeves are provided to connect intake and exhaust lines. Note. The vacuum head (turbine) may be placed on the condensate tank in the position best suited for the most direct exhaust to the outside.

#### **Motor Instructions - Overload Caution - Motor Heat**

Instructions for electrical connections, care and operation of the motor are attached to the motor. READ THEM CAREFULLY. Keep instructions handy for future reference. MOTORS SHOULD BE CONNECTED BY AN EXPERIENCED ELECTRICIAN. An approved starting switch with heater protection MUST be used. Do not operate the vacuum unit before piping connections have been completed. It is characteristic of the exhauster (turbine) to be under heaviest load when inlet and outlet are wide open. This is likely to overload and burn out the motor. However, if it is necessary to test the machine, close off the inlet by means of a cover or board placed over the inlet opening. MOTOR HEAT: Excessive motor temperature is caused by improper wiring and overloading. Follow wiring guide on motor nameplate when connecting the motor. keep dust and lint out of the motor - clean frequently. NOTE: When changing motor for voltage in single phase motors, BE SURE TO CHECK ROTATION after making the change.

NOTE: Single phase motors have thermal protection - either manual or automatic reset as indicated.

GROUND INSTRUCTIONS: This product should be connected to a grounded, metallic, permanent wiring system or an equipment grounding terminal.

#### **Before Starting**

Check the following:

- 1. Voltage, phase and cycle on the motors nameplate coincide with available electric current. If in doubt, consult your lighting company.
- 2. Motor rotation is in direction of arrow which must be COUNTER- CLOCKWISE looking down on the motor.
- 3. Inlet or outlet is closed or connected to a closed piping system.

#### **Lack of Suction**

- Check direction of shaft rotation with arrow on motor housing. Direction should be COUNTER-CLOCKWISE looking down on the motor.
- 2. Make sure the condenser drain and riser check valves are closed.
- 3. Check pipe lines and other connections for leaks.
- 4. Examine pipe lines for water traps or pockets.
- 5. Check rubber sleeves. Steam devulcanizes the rubber after several years and permits sleeve on tank inlet to collapse.
- 6. Check that air valves open properly.
- 7. Examine padding to see if the pores are closed or if the padding is plugging holes in the pressing buck. Replace padding if necessary.
- 8. Check the piping for stoppage caused by an accumulation of lint, especially at elbows.
- 9. If water accumulates on head casting under motor, check direction of motor rotation; check for possible restrictions in the outlet or exhaust line.

/acu<u>ums since 1947</u>



# **Specification Chart**

Model No. of		Motor	Inlet		Outlet		Overall		**Packaged	
No. Presses served	H.P.	Size	Height	Size	Height	H't.	L'th.	Diam.	Weight	
RP-1	1	1/2	2"	10 ¾	2"	22 2/3"	31"		15"	90lbs
RP-2	1-2	3/4	2"	10 ¾	2"	24 ¾"	33"		15"	96lbs
RP-3	2	3/4	2"	16"	2"	34 ¼"	43"		15"	105lbs
RP-4	3	3/4	2 ½"	16"	2"	29 ¼"	37"		19"	130lbs
RP-5	3-4	1	2 ½"	16 ½"	2"	38 ½"	48"		19"	155lbs
RP-8	5	1 ½	3"	19"	2"	42 ¼"	52"		19"	165lbs
RP-12	8	3	3"	19"	2 ½"	42 ¾"	53 ½"		24"	240lbs
RP-16	10	3	3"	19"	2 ½"	42 ¾"	53 ½"		24"	245lbs
RP-20	12	3	3"	19"	2 ½"	44 ¾"	55 ½"		24"	260lbs
RP-25	15	5	3"	21"	2 ½"	49"	59 ½"		24"	275lbs
RPO-5	3-4	1	3"	17"	2"	19 7/8"	35"	44"	19"	185lbs
RPO-8	5	1 ½	3"	17"	2"	19 7/8"	35"	44"	19"	185lbs
RPD-40	20	6	4"	15 ¾"	3"	42"	56"	44"	24"	510lbs
RPD-50	25	6	4"	15 ¾"	3"	42"	56"	44"	24"	530lbs
*RPE-2	1	3/4	2"	16"	2	33 ¼"	43"		15"	105lbs
*RPE-3	2	3/4	2 ½"	14 ½"	2 ½"	32"	56"		19"	145lbs
*RPE-5	3-4	1	3"	16"	2 ½"	40 ¾"	48 ½"		19"	160lbs
*RPE-8	4-6	1 ½	3"	19"	2 ½"	44 ¾"	53 ½"		19"	170lbs
*RPE-12	8	3	3"	19"	2 ½"	42 ¾"	53 ½"		24"	240lbs
*RPE-16	10	3	3"	19"	2 ½"	44 ¾"	53 ½"		24"	245lbs
*RPE-20	14	5	3"	21"	2 ½"	49"	55 ½"		24"	275lbs
*RPDE-30	20	6	4"	15 ¾	3"	42"	56"	44"	24"	510lbs
*RPDE-40	25	10	4"	15 ¾"	3"	42"	56"	44"	24"	530lbs

<sup>\*50</sup>Hz \*\* Packaged Weight does not include skid/pallet weight







Over Head