

INSTALLATION BULLETIN



ETL LISTED
MOTOR OPERATED
AIR COMPRESSORS
VACUUM PUMPS AND
PAINTING EQUIPMENT
ETL TESTING LABORATORIES INC.
CORTLAND, NEW YORK 13045

R0892068520

Installation, Care and Operation of REMA AIR VACUUMS

INDEX

- Par. 1. Vacuum Header - pipe sizes
- Par. 2. Exhaust Line
- Par. 3. Direction of rotation and speed
- Par. 4. Draining
- Par. 5. Tank erection - rubber sleeves
- Par. 6. Motor Instructions - Overload caution
- Par. 7. Lubrication
- Par. 8. Before starting
- Par. 9. Lack of suction
- Par. 10. Specification chart
- Par. 11. Suggested installation layouts

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 Norwalk, Conn.

REMA DRI-VAC CORPORATION • Norwalk, Conn.

1. 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 RPO-5	: 3 inch
Model RP-2	: 2 inch	Model RPO-8	: 3 inch
Model RP-3	: 2 inch	Model RPD-12	: 3 inch
Model RP-5	: 2 1/2 inch	Model RPD-16	: 3 inch
Model RP-8	: 3 inch	Model RPD-40	: 4 inch
Model RP-16	: 3 inch	Model RPD-50	: 4 inch
Model RP-20	: 3 inch		
Model RP-25	: 3 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, Fig. V, 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, instead of a 90 degree elbow, try to use two 45 degree fittings or a long elbow. This procedure will reduce your vacuum losses to a minimum.

2. EXHAUST LINE

Must be 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. Escaping vapor from the exhaust line is a natural condition and is contingent on the weather.

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.

3. DIRECTION OF ROTATION AND SPEED

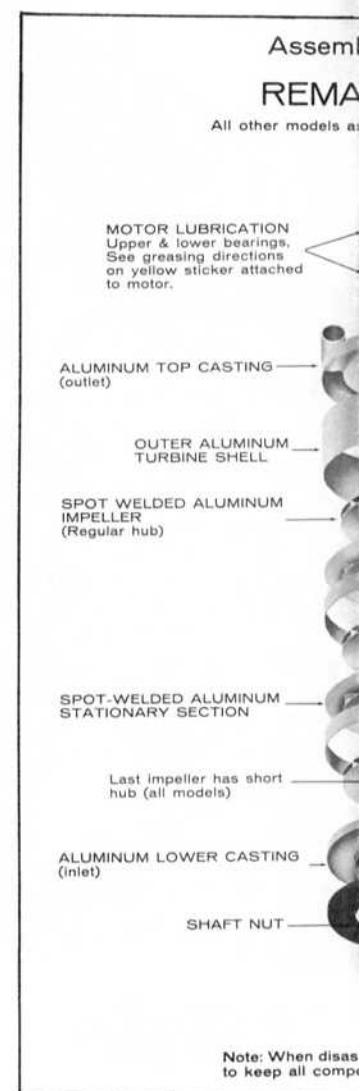
Important! - An arrow on the motor housing indicates correct direction of rotation which is COUNTER-CLOCKWISE when looking down on the motor from the top. When a machine runs backwards, suction is reduced by as much as 50%. Note: escaping steam between motor and turbine is an indication that the motor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

4. 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.

5. TANK ERECTION - RUBBER SLEEVES

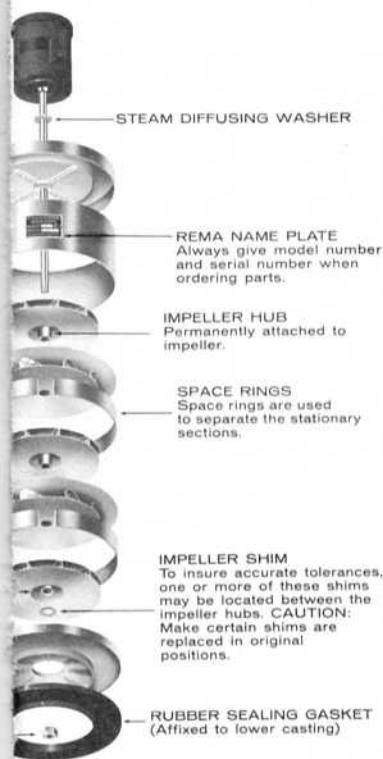
Locate tank in a clean, cool, dry, place. The three rubber mounts must rest freely and evenly on the floor, otherwise a vibration will result. Two rubber sleeves are provided to connect intake and exhaust lines. Note. The vacuum head (turbine) may be placed on the condensate tank in the position best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



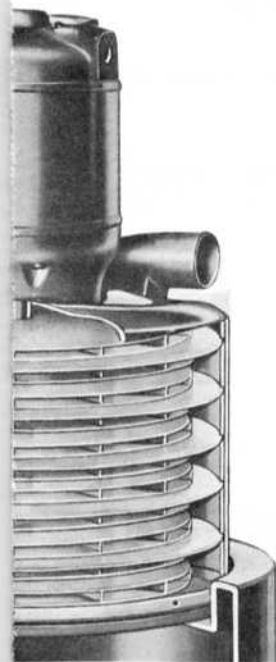
Assembly Diagram

"Dri-Vac"

Assembled in similar manner



When assembling turbine, be certain components are in proper sequence.



6. 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 inlet opening. **MOTOR HEAT:** Excessive motor temperature is caused by improper wiring and by overloading. Follow wiring guide on motor nameplate when connecting the motor. Keep dust and lint out of 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.

7. LUBRICATION

Grease motor bearings, top and bottom, once every 6-8 months. Use high temperature grease, i. e. **REMA SPECIAL LUBRICANT.** A tube of this grease is enclosed with your Rema Vacuum. Remove grease plugs leading to the bearings and screw the tube into the greaseway. Squeeze a small amount of grease into the raceway and replace the plug. **NEVER USE A PRESSURE GUN!** Additional tubes of grease may be ordered from your distributor.

CAUTION: Too much grease will create excessive friction, cause undue heat, and will eventually destroy the bearing. Consult the motor instructions which come with each unit for further information.

8. BEFORE STARTING

Check the following:

1. Voltage, phase and cycles on the motor 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.

9. LACK OF SUCTION

1. Check direction of shaft rotation with arrow on motor housing. Direction should be **COUNTER-CLOCKWISE** looking down on the motor.
2. Make sure that 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 air valves. See that air valves open properly and that foot treadle is not out of adjustment.
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 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.

Model No.	No. of presses served	Motor H.P.	Inlet		Outlet		Overall			Ship Wgt.
			Size	Height	Height	Size	H't.	L'th.	Depth	
RP-1	1	1/2	2"	10 3/4"	22 3/8"	2"	31"		15"	95 lbs.
RP-2	2	3/4	2"	10 3/4"	24 3/4"	2"	33"		15"	105 lbs.
RP-3	3	3/4	2"	16"	34 1/4"	2"	43"		15"	115 lbs.
RP-5	5	1	2 1/2"	16 1/2"	38 1/2"	2"	48"		19"	185 lbs.
RP-8	8	1 1/2	3"	19"	42 1/4"	2"	52"		19"	200 lbs.
RP-16	12-16	2	3"	19"	42 3/4"	2 1/2"	53 1/2"		24"	258 lbs.
RP-20	16-20	3	3"	19"	44 3/4"	2 1/2"	55 1/2"		24"	265 lbs.
RP-25	25	5	3"	21"	49"	2 1/2"	59 1/2"	26"		290 lbs.
RPO-5	5	1	3"	17"	19 7/8"	2"	35"	44"	19"	215 lbs.
RPO-8	8	1 1/2	3"	17"	19 7/8"	2"	35"	44"	19"	225 lbs.
RPD-12	12	2	3"	19"	42"	2"	52"	36"	19"	365 lbs.
RPD-16	16	3	3"	19"	42"	2"	52"	36"	19"	375 lbs.
RPD-40	30-40	6	4"	15 3/4"	42"	2 1/2"	56"	44"	24"	520 lbs.
RPD-50	40-50	10	4"	15 3/4"	42"	2 1/2"	56"	44"	24"	580 lbs.
*RPE-3	2-3	3/4	2 1/2"	14 1/2"	32"	2 1/2"	40"		19"	165 lbs.
*RPE-5	3-5	1	3"	16"	40 3/4"	2 1/2"	48 1/2"		19"	200 lbs.
*RPE-8	5-8	1 1/2	3"	19"	44 3/4"	2 1/2"	53 1/2"		19"	213 lbs.
*RPE-12	8-12	2	3"	19"	42 3/4"	2 1/2"	53 1/2"		24"	258 lbs.
*RPE-16	12-16	3	3"	19"	44 3/4"	2 1/2"	55 1/2"		24"	265 lbs.

* E Model for use w/50 cycle only.

All models available in single or three phase current except Model RP-1 (available in single phase only).

11. SUGGESTED INSTALLATION LAYOUTS

