Sonny's CarWash

Vacuums

by AUTOVAC

Industrial Vacuum Systems Manual

Index

I. Introduction

Dear Valued Customer,

Congratulations on receiving your new AutoVac Vacuum System. We are happy to provide you with a high quality, hardworking Vacuum System. We know it will provide you years of unsurpassed quality and service.

At Auto Vac, our goal is to provide the most dependable and cost-effective vacuum systems available, as well as excellent service and solutions to our thousands of valued customers worldwide. Our respected reputation is based on a successful twenty plus years of experience as the top quality air systems service provider.

We are committed to improving your company's customer satisfaction, increasing efficiency and profits with the use of AutoVac Vacuum Systems. Thousands of AutoVac professional vacuum systems are increasing production and advancing businesses throughout the world.

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AutoVac Vacuum Systems are the highest quality products available. Each skillfully crafted Auto Vac product is created with your specific air system needs in mind, whether you require high performance car care products, or vacuum systems at the level of commercial or industrial business. Auto Vac is recognized by leading companies worldwide as the source for the most powerful and economical vacuum systems, with our signature Gemini and Liberty systems surpassing the performance of all competition..

Please use this guide as a reference for the use of your new system.
If you have any questions or concerns about your new AutoVac System, please call us at: (888)628-8682 or email us at sales@auto-vac.com. Please have your invoice and serial number available.

Thank you for the opportunity to earn your business.

Sincerely,

AutoVac Industrial Vacuum and Air Systems

For your Reference

Dealer \ Distributor:_____

Model: _____ _____

Invoice #:_____Serial #:_____

Date of Purchase: _____ Date of Installation:_____

Notes:_____

II. Receiving Your Vacuum System

Congratulations! You have purchased the finest vacuum system available.

Receiving the Unit

The unit should be examined thoroughly upon receipt. All packaging material should be removed. Shafts of both unit and drive should turn freely, with no apparent cracks, dents or deformations. Damage to either the unit or its crating should be immediately noted on the freight receipt. Purchaser should file damage claims with the responsible carrier and contact AutoVac immediately. AutoVac will not be responsible for concealed damage

Handling

- The unloading and handling of the equipment is the buyer's responsibility, and should be supervised by experienced personnel.
- Move the unit only by lifting under the steel base.
- DO NOT lift unit by shaft or bearing housings. Be careful to avoid any bending, twisting or distortion of the base frame.

Storage

If the unit will not be placed in operation for an extended period of time (up to 90 days), leave unit on its shipping skids and:

- Place in a clean, dry, protected area, covered to protect it from corrosion.
- Rotate shaft by hand at bi-weekly intervals to prevent bearing "set".

For storage in excess of 90 days, consult Auto Vac for further instructions.

III. Installation

Location

The permanent installation site should be a clean location. Ample space and fresh air ventilation should be provided on all sides to allow lubricating, servicing, and repairing when required. **DO NOT** install the unit in an excessively hot area unless the motor is designed for such service and unit bearings are properly safeguarded. Equipment room temperature should not exceed 110° F.

Caution:
It is normal for this unit to reach operating temperatures of 40 degrees C or 105 degrees F above ambient temperature. Avoid touching the turbine exhaust after it has started operation.

Base

When no special foundation is required, the unit should rest on a solid, level surface, such that the dead weight of the unit can be supported. Shipped skids should be removed and resilient isolator pads (included) inserted under the base. Each Pad must bear its proper share of the load to prevent distortion of the base, potential vibration and subsequent damage.

DO NOT:

- Bolt Base down “Hard”
- Install piping without pipe isolators
- Install excessive weight on machine flanges (filters, silencers, etc.)

Piping and Accessories

Remove shipping tags, flange covers, and connect unit to properly sized and supported piping, using pipe isolators is normally recommended. Be sure no foreign material enters the unit. Install only Auto Vac approved piping and accessories.

Exhaust:
Metal Pipe should be used. Pipe must be sized to match exhaust outlet. Do not plumb exhaust with pipe smaller than the exhaust outlet.

Hook-Up:
Piping from the vacuum producer to the separator is sized at the factory and should be installed based on the current engineered design for the site.

Please refer to your piping kit diagram for more information.

IV. Pre-Start Up

Motor

Motor name plate must coincide with voltage, hertz, and phase available at the installation site. Connect motor leads in accordance with wiring diagram shown on motor nameplate. Wiring must be connected in accordance to all local codes by a licensed electrician. Motor must be protected by a *Magnetic Starter* or *VFD* and *Electrical Disconnect*

Bearings

Bearings are pre-packed with grease at the factory and should not be re-greased before starting the unit. When performing bearing maintenance use only Shell Gadus S2 V220 2 or Mobil Ronex MP grease for the **Turbine**. For the **Electric motor** bearings use only Mobil Polyrex EM.

CAUTION: Do not over grease!
Excessive grease creates bearing seal failure which may result in bearing damage! Always follow proper greasing procedure. See OPERATION, MAINTENANCE AND TROUBLE SHOOTING.

Alignment

Proper alignment of driver and driven unit at operating conditions is the single most important factor in providing long trouble-free operation. All units are shipped from our factory properly aligned. Maximum alignment tolerance is + or – .004

4 Bearing Direct Drive

1. All units must be realigned prior to startup.

2. Alignment must be checked with the unit at operating temperature. *Ambient* (room) temperature alignment does not allow for the unit's thermal growth, and neglect of this will result in misalignment, excessive vibration, and shortened bearing life. (NOTE: lack of vibration at startup does not necessarily indicate perfect alignment.)

3. When both the driver and driven member are rotating together and connected through a common coupling, the unit will rotate freely without excessive vibration. A common axis of rotation requires that there be no parallel or angular misalignment between the two shafts.

4. Base and Foundation must be level and smooth. Vibration pads should be used. Do not bolt down hard.

5. Piping must be isolated using flexible sleeves or expansion joints

6. Pay particular care to outlet driven machines with horizontal discharge heads as thermal expansion can be multi-directional

Note: Lack of vibration at start-up does not necessarily indicate perfect alignment.

Centrifugal rotating equipment must have time to stabilize. It may take up to 1 hour for the machine to reach operating temperature. During this time it is not unusual to experience higher than normal vibration levels while the machine is settling in and stabilizing. Therefore, it may be necessary to disable vibration sensors during this period to avoid premature shutdown.

Alignment Methods

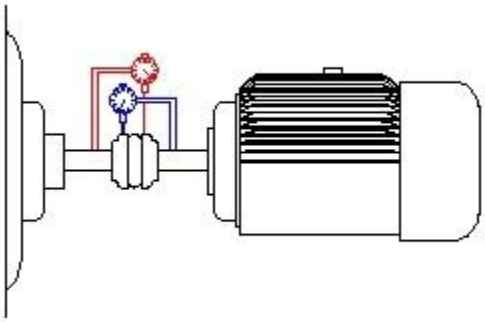
Alignment can be achieved using several methods. Laser alignment is the most accurate and quickest method of shaft alignment. Factory technicians are specifically trained to provide laser alignment services. Consult factory for more details.

Tools Needed for Alignment

1. Calipers
2. 2. Dial Indicator
3. 6” Level
4. Straight Edge

Dial Indicator Method

1. Clamp dial indicator to driving halr
2. Locate indicator probs on driving half
3. Rotate shaft simultaneously and take readings at 90 degree revolutions
4. Mis-alignment of coupling is ½ of total run-out
5. Locate indicator probs at an extreme point on coupling face.
6. Rotate shafts simultaneously and take reedings at 180 degree revolutions



Caliper Method

1. Make sure motor couling flange and cube flange are level. If motor must be raised use shim stock.
2. Check both sides with calipers to make sure distance is equal @ 12-3-6-9 O'Clock
3. Tighten down motor

Straight Edge Method

1. Place a straight edge across the O.D.
2. Rotate shafts simultaneously and measure at 90 degree revolutions with feeler gauge
3. Mis-alignment of coupling is equal to feeler gauge reading
4. Use gauge to check the mis-alignment at 180 degree revolutions

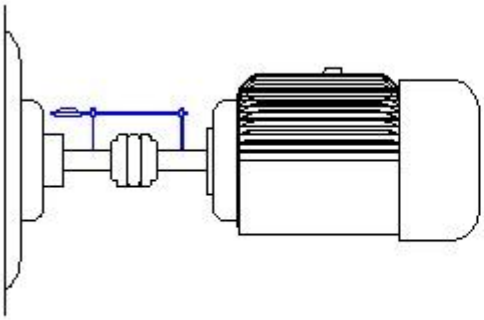


Figure X

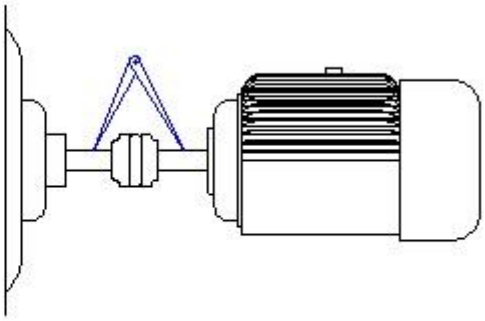
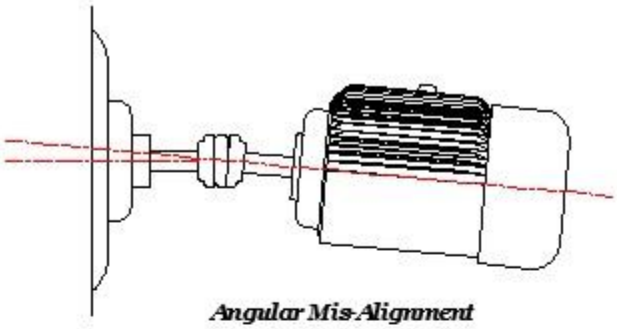
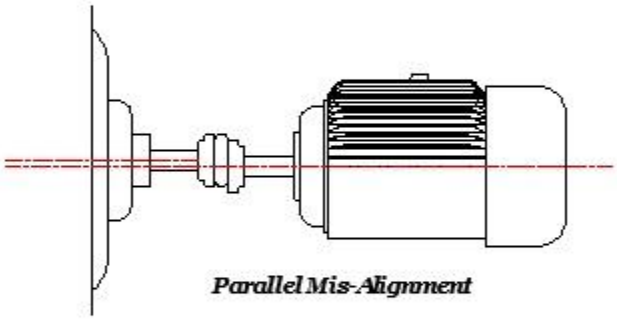


Figure X

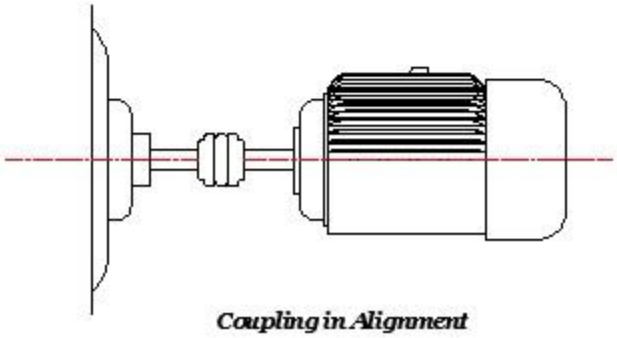
Mis-Alignment



Angular Mis-Alignment



Parallel Mis-Alignment



Coupling in Alignment

V. Startup

Review Installation

After carefully observing all points under “Installation”- *page 4,* rotate the shaft by hand. Rotation should be free and without noise.

Exhauster Inlet and Outlet

If installation permits, close both the inlet and outlet of the unit to relieve the load during startup. If this is not possible, close either the inlet or outlet. NEVER start the unit with both the inlet and outlet open.

Check Rotation

Switch on the unit motor momentarily to check for correct rotation. Rotation of the unit should be as indicated by an arrow on the outlet head. If rotation is wrong, correct as necessary. (See Trouble shooting section.)

Load Conditions

Auto Vac centrifugal-type units should not normally be operated with both the inlet and outlet connections wide open. This condition allows maximum volume flow through the unit and, in some cases, will seriously overload the motor. In a centrifugal type unit, the minimum load on the motor exists when either the inlet or the outlet of the unit is completely closed. Readings should not exceed the full load rating of the motor as stamped on the motor nameplate. Under full load conditions, the unit should rotate at the full load speed indicated on the motor nameplate.

Check Points

Check for excessive vibration (more than 1.25 mils) surging and any unusual noise. If any problem is noticed – SWITCH OFF disconnect immediately to lock out the electrical supply. Check carefully for the cause of trouble, and correct as necessary.

Once the unit is put into operation, during the first eight hours of running, it should be periodically observed and checked for excessive air discharge and bearing temperatures, vibrations and noise. At this time, checks should be made of motor input current and bearing temperatures to insure they do not exceed the manufacturer’s recommendation.

VI. Operation and Maintenance

System maintenance and operational service items are outlined to be accomplished as follows:

Daily Maintenance

Auto Vac vacuum producer shall be inspected for signs of excessive amounts of dirt, water or debris, in, on, or around machine. If this condition exists, corrective action should be taken.

Filter and Primary Separators

Auto Vac Filter and Primary Separators should be inspected daily. Emptying of dirt container should be done according to use. Filter bags should be inspected daily and replaced according to use. Lip seal gaskets should be inspected daily.

To maximize efficiency and filter life, filters bags should be shaken every time the unit is shut down. In addition, depending on the type and volume of dust loading, filter bags should be changed periodically and at least once per year. Some filter bags may be washed. Consult factory for more information.

Bag Maintenance

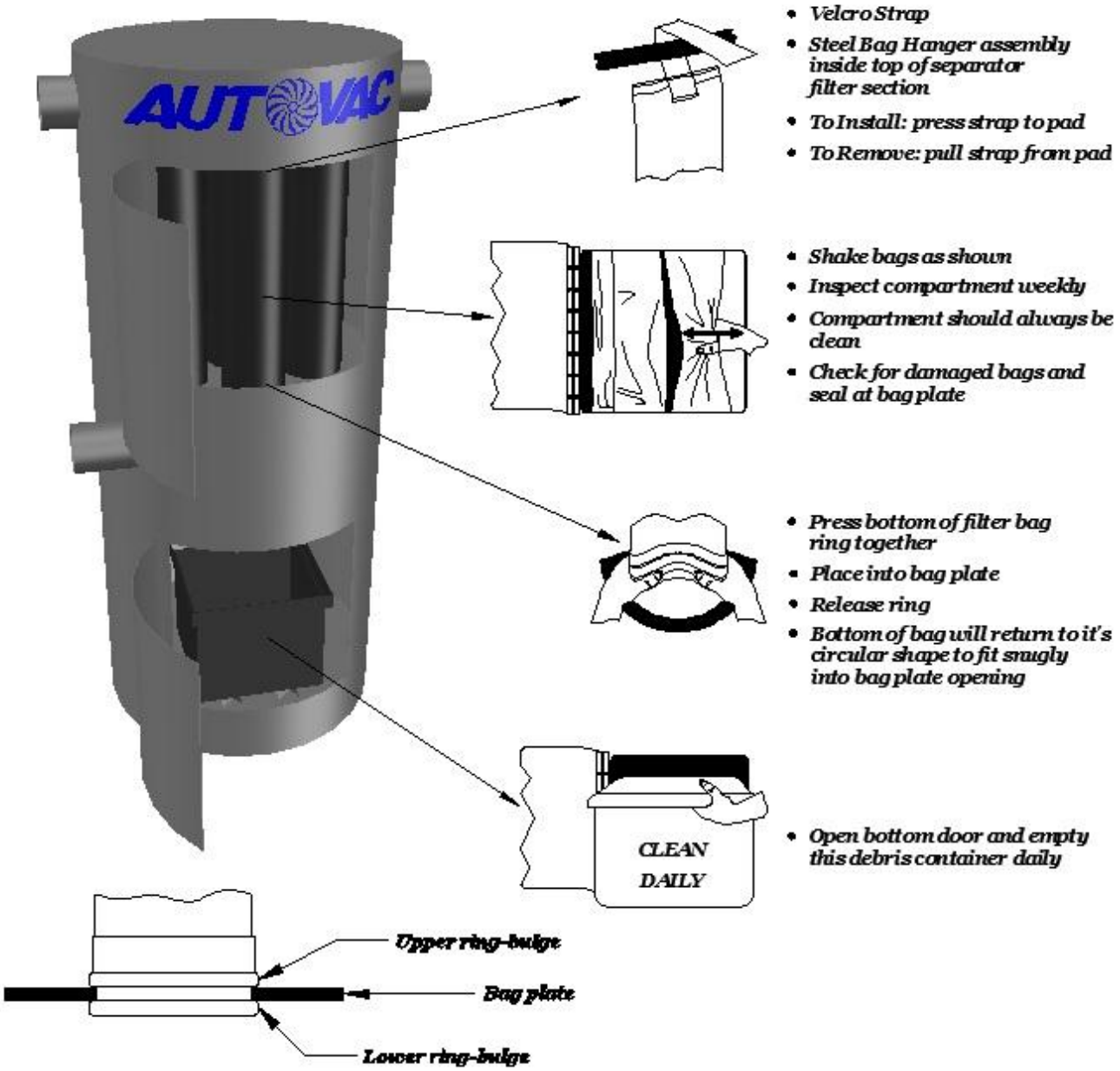
Manual: For separators with manual shaker or no shaker use shaker while machine is turned off. Do not attempt to shake bags while unit is turned on.

Reverse Air: A bag cleaning option which employs the use of an electronically operated valve to stop vacuum during the vacuum producers operation. This effect causes the bags to momentarily go limp. When the valve closes, vacuum is restored causing all of the bags to fill with air and “snap”, shedding the surface of excess cake. No operator involvement is required.

Pulse Jet: The most effective method of bag maintenance. Pulse Jet Cleaning uses a timer and compressed air in combination to blow excess cake away from the bags during operation. A sophisticated electric circuit cycles the cleaning of each bag assuring maximum filter performance. Cycle times and sequences can be controlled by the operator. See separate manual on Pulse Jet operation for information on bag / cartridge maintenance and replacement.

Removal and Replacement: Filter bags should be replaced at the first sign of damage or when repeated shaking does not improve vacuum efficiency. In no instance should bags be allowed to be used past 12 months of continuous use.

Bags that become blinded reduce airflow and could potentially harm the vacuum producer due to restricted airflow and will result in overheating.



CAUTION:
Vacuum cleaning or material handling systems should never be used to pick up water or liquids of any kind without the use of an AV liquid or primary separator manufactured of the proper material and sized for the application.

Equipment Maintenance

Bearings (located on turbine and motor)

Bearings should be greased according to use – Approximately once every 3-4 months for turbine bearings, and once every 6 months for electric motors (Note that some electric motors are greased for life and others will have greaseable bearings – see motor manufacture or nameplate for further details.)

There are two turbine bearings with grease fittings – one bearing on the inlet side (front) and one bearing on the outlet side (rear) of the turbine shaft. Electric motors with greaseable bearings will also have the fittings on each end of the motor.

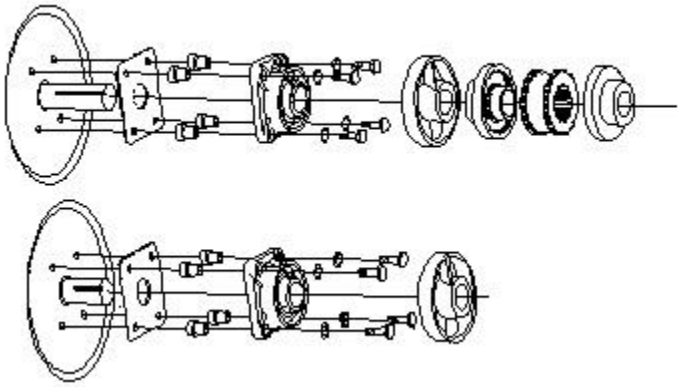
Bearings may be greased with a standard manual level pump action grease gun. **Do NOT over-grease or use incorrectly spec'd grease.**

Turbine bearings: Use only Shell Gadus S2 V220 2 or Mobil Ronex MP grease. Grease application shall not exceed **THREE** pumps per bearing.
Electric motor bearings: Where greaseable, use only Mobil Polyrex EM.
See chart below for grease application amounts:

AutoVac vacuum producers are generally maintenance-free provided that the separators and filters are maintained and cleaned regularly.

High equipment room temperatures will require more frequent attention to bearings. **PLEASE CONSULT FACTORY FOR MORE INFORMATION.**

Bearing Parts Breakdown



Bearing Replacement (4 Bearing Outboard)

Tools Needed:

1. Ratchet and Socket
2. Allen wrench set
3. Bearing puller
4. Rubber Hammer
5. File and Emery cloth
6. Channel Lock Pliers

ITEM NO.	QTY. REQ'D.	DESCRIPTION
1	1	TURBINE SHAFT
2	2	SEAL PLATE
3	8	SPACER
4	4	SET SCREW
5	2	FLANGE BEARING
6	8	LOCK WASHER
7	8	BOLT, HEX HEAD
8	1	INLET FAN L.H./R.H.
9	2	SET SCREW
10	1	COUPLING FAN
11	1	COUPLLING SLEEVE
12	1	COUPLING
13	2	SET SCREW

Bearing Replacement Continued

Follow these steps below:

1. Remove coupling guard and unbolt motor
2. Loosen set screws at 0 degrees and 90 degrees on coupling hubs. (motor shaft and turbine shaft)
3. Side coupling flange apart to remove flex sleeve. (move motor back if needed)
4. Carefully measure and record the distance between the bearing colar and the end of the turbine shaft.
5. Remove set screws on the bearing collar. If collar does not turn on shaft freely then use channel lock pliers to turn collar back and forth on the bearing shaft until it turns freely. It is important that the collar moves freely.
6. Polish turbine shaft in front of bearing collar to insure there are no burs on the turbine shaft.
7. Slide bearing off shaft
8. Clean the shims, seal plate and mounting surface. Replace rusted or damaged shims.
9. Slide new bearing on to the turbine shaft and position over mounting holes. Align and bolt the bearing to the aluminum casting. When shimmed correctly the distance between the bearing collar and the end of the turbine shaft should match the distance recorded in step #4. The set screws should line up into the pre-drilled holes on the turbine shaft
10. After tightening of the set screws rotate the turbine shaft by hand and listen for interference. If rubbing sound is heard re-adjust shaft position on collar until noise is eliminated
11. Replace coupling flange and sleeve. Re-align motor. Tighten all bolts and set screws. Reinstall coupling guard.

VII. Trouble Shooting

Obstacle	Probable Cause	Correction
Vibration or noise	1) Improper coupling alignment 2) Foundation not flat 3) Defective or worn ball bearing	1&2) Follow base installation procedures. 3) Worn or defective – replace
Bearings Noisy or Excessive grease dripping	1) High equipment room temperature 2) Over-greasing	Should be replaced with a new bearing promptly to avoid further damage to the unit.
Surge – a breathing or pulsating discharge noise	1) Vacuum producer operating under light or no load may cause surge	Increasing the volume flow sufficiently should eliminate surge.
Low Pressure	1) Wrong rotation. Incorrect rotation will drastically reduce performance 2) Line leakage in pipe connection sleeves, valves, fittings, etc. 3) Dirty filter will restrict the volume flow through the system 4) Blocked or broken line(s)	1) Rotation can be corrected by a licensed electrician by reversing the wiring to the proper direction as indicated by rotation arrows on unit. 2) Make certain that no leaks exist in the system. 3) Check all separator filters, screens, etc. Clean or replace. 4) Inspect vacuum lines for broken lines. Check shut-off valves in the system to ensure they are in the open position.
Hot Motor	1) Overload caused by excessive volume flow through the unit. Inlet in wide-open condition. 2) Wrong electrical hook-up. Motor name plate must coincide with voltage, hertz, and phase available at the installation site.	1) Unit should not be operated with inlet wide open. Seal or connect to system. 2) Check wiring to be sure motor leads are connected in accordance with wiring diagram shown on motor. Be sure amperage does not exceed the nameplate guidelines.

VIII. Terms and Conditions / Warranty

PRICES: All prices quoted include cash discount and are exclusive of taxes and freight charges unless otherwise noted. Purchasers shall furnish to Auto Vac an appropriate Tax-Exemption certificate, if applicable. Prices are subject to change without notice.

TERMS OF PAYMENT: All goods are payable 50% deposit with order and 50% final payment (see Terms of Final Payment below) 1 week before ship date noted on invoice. If Invoice is noted Pre-Paid then 100% of Invoice is due. Finance charges of 2.08% per month (not to exceed maximum allowed by law) shall be applied on balances over 15 days past due and then monthly thereafter. Handling charges will be assessed for returned checks or credit cards. In the event of Purchaser's default on payment for products purchased hereunder, Purchaser shall be responsible for all reasonable costs, expenses and legal/collection incurred by Auto Vac in collection of any sums owed by Purchaser. Such reasonable costs and expenses of Auto Vac shall include, but are not limited to, reasonable attorney's fees, plus any other costs of such action. Auto Vac shall not be obligated to make any further deliveries to Purchaser.

TERMS OF FINAL PAYMENT: Upon equipment being produced according to the endorsed terms, final 50% payment is due one week before acknowledged shipment date (assuming equipment has not been paid in full). If final payment is not received within (5) business days of notification, equipment will be made available for resale to the public and the open order will then be placed back into production (6 week build time). Once produced for a second time, final payment must be received within (5) business days of notification. If final payment is not made at this time, the open order will be quoted based on current pricing and is subject to price increases. At this time, a credit will placed for the amount of the initial deposit made until a time that payment is made in full to complete said order; Auto Vac does not issue refunds on deposited monies. Order will then be placed into production (6 week build time) and notification will once again be made that equipment is ready for shipment.

DELIVERY: Shipment of all products shall be FOB Auto Vac / El Cajon California. In the event of carrier's damage, loss, or mis-delivery of product, it shall be the responsibility of the Purchaser to deal with the carrier. In the absence of specific shipping instructions, Auto Vac will select the method and carrier it deems best with the responsibility of dealing with the carrier to the Purchaser. Delivery schedules are approximate only. Auto Vac will make every reasonable effort to deliver on time; however, Auto Vac shall not be liable for late or lost shipments.

TITLE: Title and risk of loss or damage to product shall pass to Purchaser upon delivery to carrier or Purchaser or Purchaser's Agent at FOB point. The above notwithstanding, Purchaser agrees that Auto Vac shall retain a purchase money security interest in all products sold to Purchaser, and to
all products now or hereafter acquired by Purchaser ("the collateral") and to any proceeds from the disposition of said products until the purchase price and other charges due to Auto Vac have been paid in full. Upon any default by Purchaser hereunder, Auto Vac shall have all rights and remedies of a secured party under the
Uniform Commercial Code, which rights shall be cumulative.

PURCHASE ORDERS: Auto Vac will acknowledge the receipt of an order in writing if the request is included in the Purchase Order at the time the order was placed. Prices quoted are applicable only to those quantities shown. Order for other than quoted quantities "or conditions of purchase" may be subject to price changes and should be confirmed with Auto Vac prior to placing an order. Quotes are valid for 15 days.

CHANGES AND CANCELLATIONS: Orders accepted by Auto Vac are not subject to change or cancellation by Purchaser except with Auto Vac's written consent and upon payment of an appropriate charge to cover the cost or loss incurred by Auto Vac which, unless otherwise agreed in writing, shall be no less that twenty-five percent (25%) of the price of the goods subject to change or cancellation.

LIMITATION OF LIABILITY: In no event shall Auto Vac be liable for any loss of use, revenue or anticipatory profit, or for any direct, indirect or consequential damage arising out of, or connected with, the sale, use or operation of goods sold.

RETURN OF ITEMS: In order to return an item, Purchaser must provide: 1) Auto Vac's invoice number and date, 2) Product model, serial number, and motor nomenclature number – any product returned to Auto Vac must be complete and in original condition (including all original documentation, manuals, parts, packaging, etc.). Purchaser must obtain a Return Authorization number from Auto Vac prior to return. Item(s) are to be shipped PREPAID by Purchaser, Item(s) marked "collect" will not be accepted.

CREDITS/EXCHANGES: Credits will be issued after receipt and approval of the item(s). Refunds will not be given. Request for credit must be received within 2 business days after receipt (verified by a bill of lading) of item(s), and delivered back to Auto Vac freight prepaid within 30 days. Credits will be issued 90 days after receipt and approval of the returned item(s).

WARRANTY PERIOD: When purchased from Auto Vac, new systems are warranted free from defect in material and workmanship for two years from the Auto Vac invoice date. All new parts bought separately carry the manufacturer's standard warranty. Self Serve Vacuum Motors do not apply.

LIMITED WARRANTY: This limited warranty is extended only to customers (herein called Purchasers), who purchase products from Auto Vac, subject to the following conditions. Should product prove defective by reason of improper workmanship or material under normal use and service conditions within two years on new systems, parts and labor from the date of original purchase by Purchaser, Auto Vac will repair or, at its option, replace, the product. All New motors carry an 18-month no fault warranty. Self Serve Vacuum Motors, bearings and consumable products do not apply.

MANUFACTURER'S WARRANTY: This warranty does not cover damage to any component caused by power surge or power spike due to improperly connected equipment, or Purchaser's misuse of equipment. If a component fails during the warranty period and the component is no longer available from Auto Vac, Purchaser has the option to upgrade and pay the cost difference between the failed component and the upgraded component. All items not manufactured by Auto Vac are subject to the original manufacturer warranty unless expressly stated and noted by Auto Vac. Self Serve Vacuum Motors, bearings and consumable products do not apply.

SERVICE: Service for associated Auto Vac warranty items will be performed in Auto Vac's factory. It is Purchaser's sole responsibility to return the serviceable item freight prepaid to Auto Vac's factory. The limited warranty does not apply if: (a) the product is damaged by accident, improper installation, misuse, lightning, fire, water, electrical surges or other acts of nature; (b) the product is altered or repaired by anyone other than Auto Vac's authorized warranty station, or (c) the serial number is removed or tampered with. This warranty does not cover broken or marred cabinets, cases or covers. Should product prove defective in workmanship or material, the Purchaser's sole remedy shall be such repair or replacement as provided above. Under no circumstances shall Auto Vac be liable for any loss or damage, direct, consequential, or accidental, arising from the use or inability to use this product. Auto Vac makes no warranty other than the one set forth herein. Such warranty is in lieu of all other warranties, express or implied, including but not limited to any expressed or implied warranty of merchantability or fitness for a particular purpose and such constitutes the only warranty made with respect to the goods. Acceptance of this product constitutes acceptance of the stated policy terms and conditions.

GENERAL: These terms and conditions shall constitute the final, complete and exclusive agreement of the parties with respect to all sales by Auto Vac to Purchaser and supersedes all prior offers, negotiations, understanding and agreements. Unless Purchaser and Auto Vac have executed a master contract which specifically supersedes and replaces the terms and conditions herein, it is expressly agreed that no prior or contemporaneous agreement or understanding, whether written, or oral, shall contradict, modify, supplement or explain the terms and conditions contained herein.

IV. Warranty Registration Information & Acknowledgement

Please fill out the forms on the next few pages and send them to Auto Vac as soon as possible to register your new vacuum system. If you should have any questions, please call us at (888)628-8682.

It is important that all categories in these forms are initialed and understood by the end user. Failure to submit this sheet to Auto Vac will void the factory Warranty.

End User Initials	Auto-Vac Rep Initials	
☐	☐	I have received a copy of the Auto Vac Installation and Maintenance Manual.
☐	☐	I have read and I understand the contents of the Auto Vac Installation and Maintenance Manual.
☐	☐	I understand the factory warranty depends on adhering to Following the steps in the Auto Vac Installation and Maintenance Manual

End Users Signature

_____

Signature Date

_____

Printed Name Company Name

Auto Vac Representative Signature

_____

Signature Date

_____

Printed Name Company Name

Please make copies of these forms for your convenience*

IX. Acknowledgement and Warranty Registration Card Walk-through Sheet

Please initial your review of each section in this Auto Vac Instruction and Maintenance Manual.

End User	Auto-Vac Rep		
☐	☐	I.	Introduction
☐	☐	II.	Receiving Your Vacuum System/Inspection
☐	☐	III.	Installation
☐	☐	IV.	Pre-Startup
☐	☐	V.	Startup
☐	☐	VI.	Operation and Maintenance
☐	☐	VII.	Troubleshooting
☐	☐	VIII.	Terms and Conditions
☐	☐	IX.	Warranty Card

Notes:

Please make copies of these forms for your convenience

Model

Turbine's Serial #

Separator Serial #

VFD Model #

VFD Serial #

Date of Purchase

Installation Date

Contact Person

Company Name

Address

City

State

Zip

Phone Number

Email address

Congratulations on receiving your new Auto Vac vacuum system. We are happy to provide you with a high quality, hardworking Vacuum System. We know it will provide you years of unsurpassed quality and service. Please take the time to register your product.

Once all forms are completed, please fax all forms to (619) 258-9805 or email to sales@auto-vac.com.

Have any questions? Give us a call toll-free: (888)628-8682

Remember to check us out on the web!

www.autovacinc.com

Maintenance Schedule

***Never** perform maintenance procedures while vacuum is running*
***Always shut off** safety switch/disconnect to turbine motor*

Filter Separator and Primary Separator *(primary optional)*

(Primary Separator optional))

Inspect and shake filter bags ***daily*** ❖ Empty dirt container(s) ***daily***

AutoVac recommends cleaning & washing filter bags every 500 hours of use

Please log your filter cleaning intervals to assure top performance

Date	Technician	Date	Technician	Date	Technician
_____	_____	_____	_____	_____	_____
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Maintenance Schedule

Never perform maintenance procedures while vacuum is running
Always shut off safety switch/disconnect to turbine motor

Primary Separator - *(not on all systems)*

Empty dirt from container ***daily*** ❖ Clean out residue and debris from top area of primary separator monthly

Date	Technician	Date	Technician	Date	Technician

Maintenance Schedule

***Never** perform maintenance procedures while vacuum is running*
***Always shut off** safety switch/disconnect to turbine motor*

Turbines

Inspect couplings monthly for excessive wear
Bearings need to be greased every 6 months with a manual level pump action grease gun
Prime grease gun then add 2 to 3 pumps of grease to each bearing. Do ***not exceed*** 3 pumps per bearing
Please log your lubrication intervals to assure top performance and proper maintenance

Date	Technician	Date	Technician	Date	Technician