

INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS

MODEL VDBA SERIES BLOWER

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CAUTION!

**DO NOT INSTALL, USE OR OPERATE THIS EQUIPMENT UNTIL THIS MANUAL HAD BEEN READ AND UNDERSTOOD.
READ AND SAVE THESE SHEETS FOR FUTURE USE.**

RECEIVING INSPECTION:

Check for damage or missing parts immediately upon receipt. Ensure that wheel rotates freely. ***REPORT ANY DAMAGE PROMPTLY TO CARRIER.***

INSTALLATION:

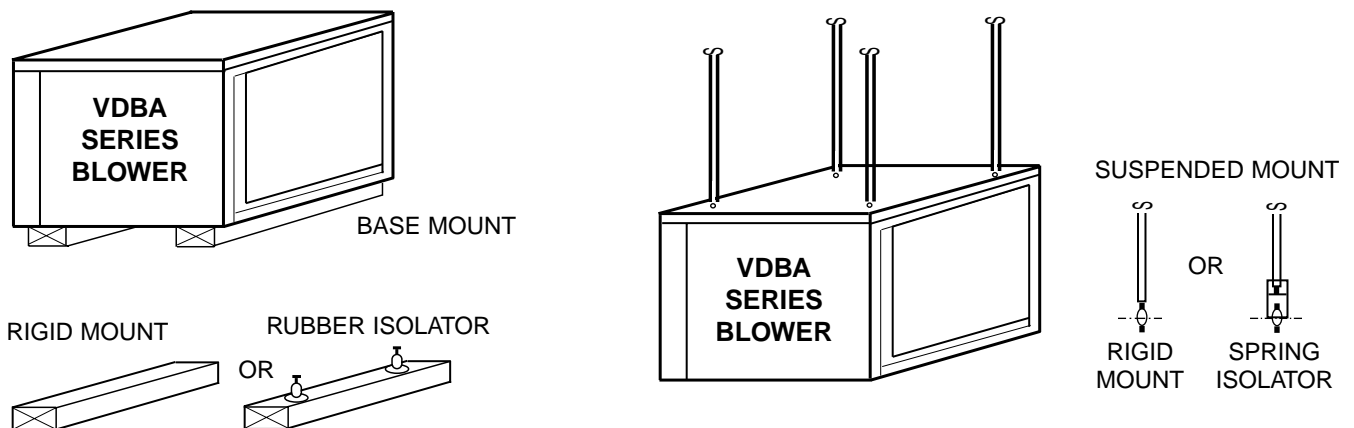
Model VDBA series blowers are suitable for both suspension or base mounting.

SUSPENSION MOUNTING:

Suspend the unit using 4 — 1/2" diameter threaded rods through 4 — 9/16" clearance holes located in the top of the unit. Ensure the unit is level.

BASE MOUNTING:

For base mounting, secure the unit through the bottom 4 — 9/16" holes to a solid base.



Flexible inlet and outlet collars are recommended to minimize vibration transmission.

MOTOR AND V-BELT DRIVES:

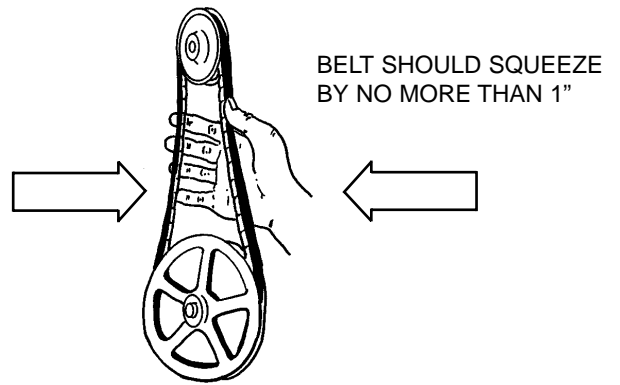
Mount motor with hardware provided and install pulleys and belt(s) with proper tension. Follow illustrated recommendations on belt installation on page 2.

BELT TENSION AND PULLEY ALIGNMENT:

1. Excessive belt tension is the number 1 cause of blower bearing failure.
2. Proper belt tension and pulley alignment are essential for trouble free operation.
3. A simple "Rule of Thumb" for checking belt tension is illustrated on page 2.
4. When belt is grasped as shown on page 2, a total deflection of approximately 1" should be easily attained.
5. Insufficient deflection indicates that the belt is too tight, resulting in noise from excessive vibration, premature bearing failure, and short belt life. Tight belts may overload a motor that would otherwise be adequate.
6. Excessive deflection is a indication that the belt is not tight enough. If not corrected, slippage could cause loss of blower speed and belt failure through wear.

(Continued on next page)

7. A belt should be just tight enough to avoid slippage.
8. Align pulleys with a straight edge to conserve belt life and eliminate unnecessary noise.
9. Check tension before start-up, after every pulley adjustment and regularly thereafter.



SET SCREWS:

Ensure all set screws on both pulleys and blower wheel are tight.

ELECTRICAL:

Connect motor in accordance with applicable codes. Provide properly sized motor overload protection to protect motor against electrical faults and system changes. Confirm proper motor rotation on start-up.

MAINTENANCE:

Inspect periodically for mounting rigidity. Verify belt for wear and tension and adjust as required. Inspect wheel for any dust accumulation and clean as needed. **Caution** — Do not dislodge balancing clips. Check set screw for tightness.

LUBRICATION:

Ball bearings with sealed in lubricant is used on all models. No additional lubrication is required.

Model VDBA Series Blower Belt Length Selection Table

Blower	Model	3-1/4" Dia. Zinc Die Cast Blower Pulley — Dia. & RPM Range						Blade Length	Based On Motor Frame
		5" 824-1125 RPM	6" 680-929 RPM	7" 580-792 RPM	8" 505-690 RPM	9" 447-611 RPM	10" 401-548 RPM		
	07	4L33	4L34*	4L36*	4L38*	4L40*	---	---	48 Frame
	09	4L36	4L38	4L40*	4L42	4L44	4L45	---	
	10	4L38	4L40	4L41	4L43*	4L45	4L47	---	
	12	4L42	4L43	4L45	4L47	4L48*	4L50	4L54	
	15	---	---	---	---	4L54	4.55**	4L59	56 Frame

* Standard Drive with 3-1/4" x 1/2" v. s. Motor Pulley ** Standard Drive with 3-1/4" x 5.8" v. s. Motor Pulley

Motor Pulley Cast Iron	Blower Pulley Cast Iron	RPM Range	Blower Model					Belt Length Based On Motor Frame	
			07	09	10	12	15		
#8325 O.D. 3.25"	HB77T	756-568	Note: Blower Pulley Model Number Specifies O.D. Eg. HB47T = 4.7" O.D.	---	---	---	---	B49	143 & 145T Frame
	HB87T	667-500		---	---	---	---	B51	
	HB97T	596-447		---	---	---	---	B52	
	HB107T	538-404		---	---	---	---	B54	
	HB117T	491-368		---	---	---	---	B56	
	HB127T	452-339		---	---	---	---	B58	
	HB137T	418-314		---	---	---	---	---	
	HB187T	304-228		---	---	---	---	---	
#IVL44 O.D. 4.15"	HB47T	1630-1232	B32	B36	B38	B42	---	Models 07 - 12 48 Frame (Add 1" For 56 Frame) Model 15 143, 145T Frame	
	HB57T	1329-1005	B34	B38	B40	B43	---		
	HB67T	1121-848	B36	B39	B41	B45	---		
	HB77T	969-733	B37	B41	B43	B47	B51		
	HB87T	854-645	B39	B43	B45	B48	B42		
	HB97T	763-577	B41	B45	B47	B50	B54		
	HB101T	690-521	B43	B45	B49	B51	B56		
	HB117T	629-476	B45	B48	B50	B54	B58		
	HB127T	678-437	B47	B50	B52	B56	B60		
	HB187T	390-295	---	B56	B58	B61	---		
#8400 O.D. 4.15"	HB77T	1253-1017	---	---	---	---	B52	182, 184T Frame (Deduct 2" For 56, 143, 145T)	
	HB87T	1104-896	---	---	---	---	B54		
	HB97T	1005-815	---	---	---	---	B56		
	HB107T	907-750	---	---	---	---	B58		
	HB117T	828-686	---	---	---	---	B59		
	HB127T	756-618	---	---	---	---	B61		
	HB137T	697-575	---	---	---	---	B63		
	HB157T	616-509	---	---	---	---	B56		
	HB187T	522-435	---	---	---	---	---		

FOR FRACTIONAL HP APPLICATIONS "4L" BELTS MAY BE SUBSTITUTED BY ADDING 2" TO THE SPECIFIED "B" BELT. EG. 850 BELT = 4L52.