

INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS

MODEL VGBA 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:

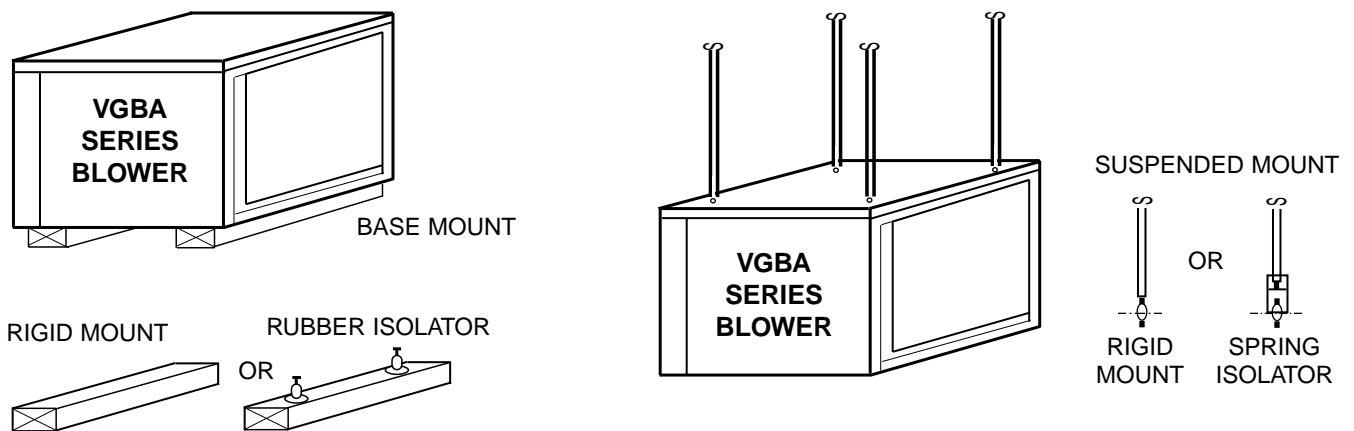
Model VDBA series blowers are suitable for both suspension or base mounting.

SUSPENSION MOUNTING:

Drill 4 — 7/8" diameter holes through the top using the inside top "hat section" channel as a guide. Extend 1/2" diameter threaded mounting rod through the cabinet and the bottom channel and secure to both top and bottom. Ensure unit is level.

BASE MOUNTING:

For base mounting, secure the unit through 4 — 7/8" holes located in the "hat section" channel in the bottom of the unit. Ensure unit is level.



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:

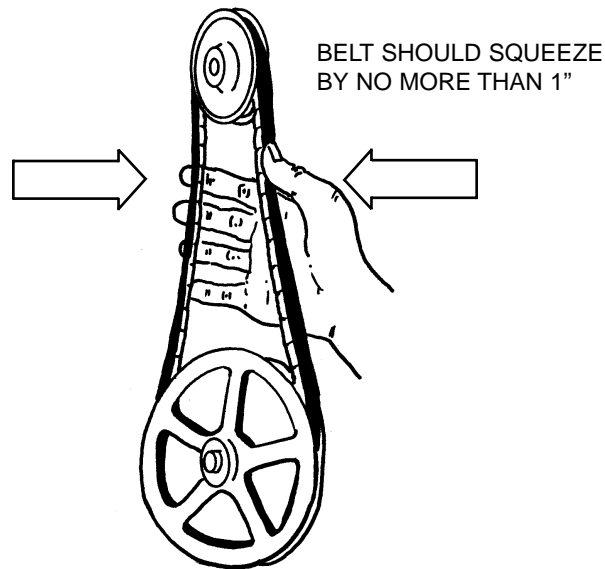
1. Excessive belt tension is the number 1 cause of blower bearing failure.
2. Proper belt tension and pulley alignment are essential for trouble free operation.
3. A simple "Rule of Thumb" for checking belt tension is illustrated on page 2.

(Continued on next page)

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.
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:

Insert bearings with sealed in lubricant are used on all 9200 series models up to 15. No further lubrication is required. Models 18 and 20 use cast iron, pillow block, sealed type bearings. Re-lubrication is unnecessary under mot operating conditions. If lubrication is required lubricant should be compatible to Esso Beacon #325.


Model VGBA 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"	6"	7"	8"	9"	10"	12"	
		824-1125 RPM	680-929 RPM	580-792 RPM	505-690 RPM	447-611 RPM	401-548 RPM	533-455 RPM	
	09	4L36	4L38	4L40*	4L42	4L44	4L45	---	48 Frame
	10	4L38	4L40	4L41	4L43*	4L45	4L47	---	

* 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	
			09	10	12	15	18		20
#8325 O.D. 3.25"	HB77T	756-568	Blower Pulley Model Number Specifies O.D. Eg. HB47T = 4.7" O.D.		B50	B55	B63	B68	Models 09 & 10 48 Frame (Add 1" For 56 Frame) Balance 143, 145T
	HB87T	677-500		B52	B57	B65	B70		
	HB97T	596-447		B54	B59	B67	B72		
	HB107T	538-404		B55	B51	B68	B74		
	HB117T	491-368		B57	B62	B70	B75		
	HB127T	452-339		B59	B64	B72	B77		
	HB137T	418-314		B51	B55	B74	B79		
	HB157T	364-273		---	B70	B77	B62		
HB187T	304-228	---	---	B83	B62	B88			
#IVL44 O.D. 4.15"	HB47T	1630-1232	B36	B38	---	---	---	143 & 145T Frame	
	HB57T	1329-1005	B38	B40	---	---	---		
	HB67T	1121-848	B39	B41	---	---	---		
	HB77T	969-733	B41	B43	B50	B53	B65		---
	HB87T	854-645	B43	B45	B51	B55	B67		B72
	HB97T	763-577	B45	B47	B53	B56	B68		B74
	HB107T	629-476	B48	B50	B56	B60	B72		B77
	HB117T	578-437	B48	B50	B56	B60	B72		B77
	HB127T	578-437	B50	B52	B58	B61	B73		B78
	HB137T	535-404	B52	B54	B60	B63	B75		B80
	HB157T	466-352	B56	B58	---	B67	B79		B84
	HB187T	390-295	B63	B64	---	---	---		---
#8400 O.D. 4.15"	HB77T	1253-1017	---	---	B52	B56	B67	---	182 & 184T Frame (Deduct 2" For 56, 143 * 145T)
	HB87T	1104-896	---	---	B53	B57	B69	B74	
	HB97T	1005-815	---	---	B55	B58	B70	B76	
	HB107T	907-750	---	---					
	HB117T	828-686	---	---	B57	B60	B72	B77	
	HB127T	756-618	---	---	B58	B52	B75	B80	
	HB137T	697-575	---	---	B62	B63	B77	B82	
	HB157T	616-509	---	---	---	B69	B81	B86	
HB187T	522-435	---	---	---	---	B86	B91		
#8550 O.D. 5.35"	HB87T	1104-896	---	---	B65	B58	B71	---	182 & 184T Frame (Deduct 2" For 56, 143 & 145T)
	HB97T	1005-815	---	---	B57	B60	B72	---	
	HB107T	907-750	---	---	B58	B62	B74	B79	
	HB117T	828-685	---	---	B60	B63	B75	B80	
	HB127T	756-618	---	---	B62	B65	B77	B82	
	HB137T	697-575	---	---	B54	B67	B79	B84	
	HB157T	616-509	---	---	---	B70	B72	B87	
	HB187T	522-435	---	---	---	---	B88	B92	
#D8600 O.D. 6"	Double Groove		Note: Double Groove Pulley Model Number For O.D. Dimension Eg. 11.0x2B=11.35 O.D.						213, 215T Frame
	11.0x2B	939-780		---	---	(2) B78	(2) B83		
	12.4x2B	839-700		---	---	(2) B80	(2) B85		
	13.6x2B	759-631		---	---	(2) B82	(2) B87		
	15.4x2B	682-574		---	---	(2) B85	(2) B90		
	18.4x2B	569-486		---	---	(2) B91	(2) B95		
20.0x2B	516-429	---	---	---	---				
2LVP38B60A O.D. 6.5"	11.0x2B	924-764	---	---	---	---	(2) BX85	254T Frame BX Belts Are Not Available From Carnes	
	12.4x2B	817-678	---	---	---	---	---		
	13.6x2B	745-618	---	---	---	---	(2) BX90		
	15.4Xxb	657-545	---	---	---	---	(2) BX93		
	18.4x2B	551-456	---	---	---	---	(2) BX97		
	20.0x2b	507-419	---	---	---	---	(2) BX100		

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

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