

DSQ-B SERIES - BELT DRIVE INLINE BLOWERS

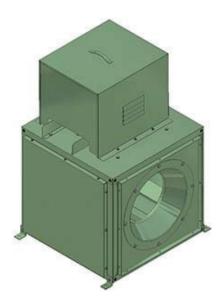
OPERATION INSTRUCTIONS AND PARTS MANUAL

MODELS: DSQ-B-10, DSQ-B-12, DSQ-B-13, DSQ-B-15, DSQB-16, DSQ-B-18, DSQ-B-20, DSQ-B-22, DSQ-B-24 AND DSQ-B-27

General Safety

Rotating parts, (pulleys, shafts and belts) on fans should not be exposed. Where these components are not protected by ductwork, cabinets or covers, appropriate guards should be employed to restrict exposure to rotating parts. Access doors should not be opened with the fan operating to avoid foreign objects being drawn into the system. On initial start-up a careful inspection should be carried out to ensure no foreign material is present which could become airborne in the system.

Read installation and operation instructions carefully before attempting to install, operate or service Delhi DSQ-B Series Blowers. Failure to comply with instructions could result in personal injury and/or property damage. Retain instructions for future reference.



Model	Max. H.P.	Shaft Dia.	Unit Weight
DSQ-B-10	1	3/4"	62
DSQ-B-12	1-1/2	3/4"	73
DSQ-B-13	1-1/2	3/4"	85
DSQ-B-15	2	3/4"	95
DSQ-B-16	3	3/4"	123
DSQ-B-18	3	1"	140
DSQ-B-20	3	1"	165
DSQ-B-22	5	1"	211
DSQ-B-24	7-1/2	1-3/16"	241
DSQ-B-27	7-1/2	1-3/16"	280

General

Inspect unit for damage, report any shipping damage to carrier. Check all fasteners, re-tighten as required. Rotate the blower wheel by hand to ensure free rotation. If rubbing occurs, loosen the inlet venturi bolts, re-position the venturi to establish clearance, re-tighten bolts.

Installation (Fig. 1)

The 4 angle brackets provided allow for base or suspension mounting

Suspension Mounting

For suspension mounting, move the 4 angle iron mounting brackets to the four upper corners (front and rear or both sides) using the hardware provided, secure the unit to 4 customer provided suspension rods.

Base Mounting

For base mounting, 4 angle iron mounting brackets are supplied in the 4 lower corners (front and rear or both sides) secure these to the customer supplied base.

Vibration Isolation (not included).

Recommended (spring or rubber) for both suspension or base mount.



Suspension Mount
Install 4 supplied angle iron mounting brackets on upper cabinet front & rear or sides (illustrated)

Customer supplied suspension rods (4)

Base Mount
4 angle iron mounting brackets are supplied on the cabinet bottom front & rear (illustrated),

Motor, Pulleys & Belts

- Select the appropriate drive set (motor, pulleys, and belts) from the drive table (page 3) or Delhi's 'Delair' blower selection program to obtain the blower RPM that will deliver the design performance (CFM & SP).
- 2. Remove the access panel from the drive compartment to expose the blower shaft. Mount the blower pulley on the shaft end and tighten the setscrew securely.
- 3. Remove the motor compartment cover to expose the motor mounting platform. Secure the motor to the platform, mount the adjustable motor pulley to the shaft end, align with the blower pulley using a straight edge (see Fig. 2) and tighten the setscrew to secure the pulley to the motor shaft.
- 4. Install the belt(s) and raise the end of the pivoting motor platform to tension the belt and secure the platform in place with the positioning screws located on both sides of the platform.

DO NOT OVER TENSION

Belt Tension & Alignment - Fig. 2

Warning

EXCESSIVE BELT TENSION IS THE MOST FREQUENT CAUSE OF BEARING WEAR AND RESULTING NOISE PROPER BELT TENSION IS CRITICAL FOR QUIET EFFICIENT OPERATION

Ideal belt tension is the lowest value under which belt slip will not occur at peak load conditions

Correct Wrong Wrong

Belt Alignment

Electrical

Warning: Ensure power supply is disconnected & locked out prior to making electrical connections.

Before connecting the motor to the electrical supply, check the electrical characteristics and wiring instructions as indicated on the motor nameplate or inside the conduit box cover to ensure proper voltage and phase. Complete electrical connections as indicated.

Warning: A ground wire must be connected from the motor housing to a suitable electrical ground.

Operation

- 1. Complete the electrical connections, energize the unit momentarily and ensure proper wheel rotation.
- Apply full power.
- 3. With all ducts attached, the access doors in place and the air system in full operation, measure the motor current and ensure that it is less than the rated full load motor amperage as indicated on the motor nameplate.

DS	DSQ-B DRIVES	RIVES	DSC	DSQ-B-10	DE	DSQ-B-12	DS(DSQ-B-13	DS(DSQ-B-15	٥	DSQ-B-16		DSQ-B-18	18	DSQ-B-20	.20	DSQ-B-22	-22	DS(DSQ-B-24		DS	DSQ-B-27	
	Мах. НР	ЧЬ		1		1-1/2	1	1-1/2		2		3		3		3		2		7	7-1/2		7	7-1/2	
Based	on 1725	Based on 1725 RPM Motor											MOTC	MOTOR FRAME											
Motor		RPM		56/143T		56/143T	_	56/143T		56/143T	*	56/143T	182T 5	56/143T 1	182T 5	56/143T	182T 5	. 1641/95	182T 56	56/143T	182T	213T 5	56/143T	182T	213T
Pulley			48	/145T	48	/145T	- 48	/145T	48	/145T	48	/145T	/184T	/145T //	/184T	_	/184T	.	/184T /	/145T /	/184T /	/215T	/145T /	/184T /	/215T
1VL34	AL104 AL94				' '				- 4L58							4L67 4L66		4L75 4L74							
3/4 HP		421-643		ı	'	'	•	,	4L57			ı		4L61		4L65		4L73							
MAX.	AL74	483-738		,	' ;	1	41.52	1	4L55		4L55			4L59		4L63		4L71							
	AL64 Al 51	567-865	- 41 41	- 41 42	4147		41.48		4153		4L53	, ,		4L58		4L61									
	AK41	886-1352	4640	4L40	4144) ++	41.47		4L50	- 4L50	4L50	- 4L51		,		5 '									
	AK30	1171-1787	4L38	4L39	4L42	2 4L43		4L46	'	'	<u>'</u>			ı											
1VL34	_			-	'	'	-						-			-		-		-			4L86		
	BK100H		1		'	1	'	•	4L59		'	ı	1		ı	4L67	,	4L75		4L80	,	ı	4L84		ı
	BK90H	410-625	•	,	•	•	, ;		4L57		, !	,		4L61		4L65		4L73		4L79					
	BK80H BK70H	468-715			- 41 48	٠ ،	4152		4L55		4L55 4L54			4L60		4L63		4 70							
	BK60H		- 4L42	- 4L43	4L46	0 (0	4L49		4L52		4L54			4L36 B55		B58		, t							
	BK50H		4L40	4L41	4L44	- 1	4L47	,	4L50		4L50	,		B53	,	B56	,	,		,		•		,	,
	BK40H	1024-1563	4L39	4L40	4L43	- 2	4L46	•	4L49		-	,	1	B52		B55		-		1	-	-	-	-	
1VL44	AL104 Al 94	483-656	-		' '				- 41 60							- 41 68		- 41 76							
3/4 HP		621-843	' '	' '	' '	' '	4L55		4L58					4L62		4L66		2 '							
MAX.		712-967	'	,	4L50	- C	4L53	1	4L56		4L56	ı		4L61		4L64	•	1		,		•		,	
	AL64	836-1134	4L44	4L45	4L48	- 8	4L51		4L54		4L55	1		4L59			•		•	,	•				
	AL51	1010-1371		4144	4L47				4L53	4L53	ı	4F24								1					
	AK41	1305-1772		4L42	4L45		4L48	4L49			1	,					,		,			,			
;	AK30	_	4L40	4 L 40	'	4L44																			
1VL44	BK110H BK100H	483-656 537-728			' '	' '			- 4L60							- 4L68		- B74		B80 B80			887 B84		
	ВК90Н		•	,	•	'	4L55	,	4L58	,		,		4L63		4L66		B73		B78			B82		
	BK80H	986-069	4L47	4L47	4L51		4L53		4L56		4L57	1		4L61	,	4164	,	B71		B76		,	B80	,	,
	BK 70H	805-1093 966-1311	4L45 4I 43	4L46 4l 44	4L49 4L47	- I	4L52 4L50		4L55 4L53		4L55	- B52		B58 B56		B61 B59		B69 B68							
	BK50H	•		4L42	4L45		4L48	B48	'	B51	,	B51	,	B54	,					,			1	,	
	BK40H			4L41	'	4L45	•	B46		B49	•	B50		•	,		,							,	,
1VP44	BK100H BK90H	569-752			' '																			B85	
	BK80H		•	ı	'	'	•	,				,		•		,		-			B78			B82	
	BK70H	~	•	,	•	'	'	,		,	,	,	,	,		,		,	B71		B76		,	B80	
	ВК60Н		•		'	•	'	•	,		'	,	•	,	,		B61		B70		B75	•	ı		
	BK50H		•		•	•	•	•			,		,	-	B56		,		,			,	,		
	BK40H	_	1	1	'	'	'	•	'	'	1	,	B52	1			'		1			1			
1VP71	BK80H	1306-1553		4L51	'	1	•					1				,									
	BK60H			4L48	' '	- B50	' '	- B53																	
	BK50H		,	B45	'	B49	'		,		,	,	,	,	,	,	,	,	,	,		•	,	,	,
	1	, ,	•	B44	'	'	'		-		•		'		-				-						
2VP62		983-1183	'		'	•	•		,						,							. 0		,	B87
1000	ZB/4	1142-1375	- 6	1142-1375	N	- D maximii	٠ <u>٤</u>	-						-		-	-			-	-	P82	-		

Note: 4L Belts, AL and AK pulleys are rated to 3/4 HP maximum.

Maintenance

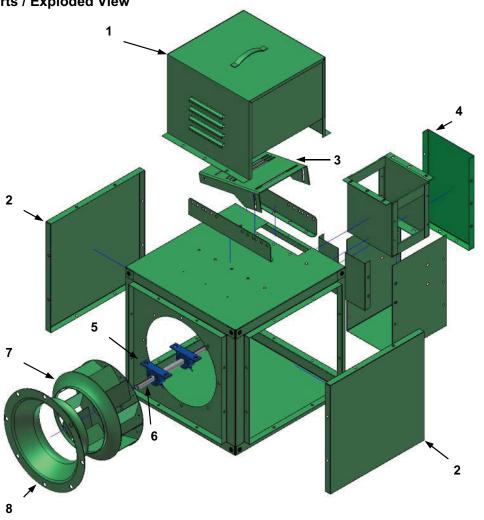
Ensure power supply is disconnected & locked out prior to performing maintenance.

- 1. Inspect and tighten all bearing and wheel set screws after the first 50 to 100 hours of operation and periodically thereafter.
- 2. Follow motor manufacturer's instructions for motor lubrication. Remove any excess lubrication.
- 3. Drives: A Check belt tension and alignment, replace cracked or worn belts. If it is necessary to replace one belt on a multiple belt drive, replace all the belts with a matched set.
 - B Under normal conditions, no re-lubrication is the rule. The bearing lubricant cavity is 1/3-1/2 filled as shipped from the factory. Never lubricate new bearings.
- 4. Clean the blower wheel periodically. Material build up on the blades can cause wheel imbalance which may result in wheel or bearing failure.

DSQ-B Series Replacement Parts / Exploded View

Parts List

- 1 Motor Cover
- 2 Side Access Panel
- 3 Motor Mounting Platform
- 4 Drive Compartment Access Cover
- 5 Bearings
- 6 Shaft
- 7 Wheel
- 8 Inlet Venturi



Warrantv

Delhi Industries Inc, Air Moving Products are guaranteed for a period of one year against manufacturing defects in material and workmanship when operating under normal conditions. Liability is limited to the replacement of defective parts. Labour and transportation costs are not included.

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