

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Dayton® Centrifugal Belt-Drive In-Line Duct Blowers

Description

Dayton centrifugal inline duct blowers feature a unique combination of installation flexibility, rugged construction, ease of service, high efficiency and low sound levels. These compact inline blowers are the ideal selection for indoor clean air applications (including intake, exhaust, return or make-up air systems) where space is a prime consideration. Installation costs are reduced, because the need for costly square-to-round transition are eliminated. The square housing design, compact size and straight through airflow also give the system designer the flexibility to mount the unit in any configuration-horizontal or vertical. Each unit has two removable access panels. Maximum inlet air temperature is 160°F. All blowers are listed for electrical UL/cUL 705.

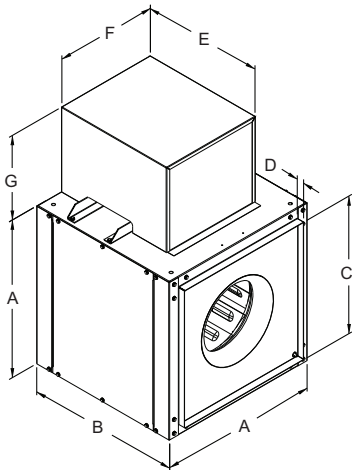


Figure 1 — Dimensions

Dimensions and Specifications (See Figure 1)

Model	Wheel Dia.	Shaft Dia.	A	B	C	D	Motor Cover			Inlet Dia.
							E	F	G	
2RB88, 5TCL3, 5TCL4	11"	3/4"	15"	21"	11 ⁷ / ₈ "	1"	17 ³ / ₈ "	16"	12 ¹ / ₂ "	7 ³ / ₄ "
2RB89	11 ¹ / ₂ "	3/4"	17"	21"	13 ³ / ₈ "	1"	17 ³ / ₈ "	16"	12 ¹ / ₂ "	7 ³ / ₄ "
5TCL5	13 ¹ / ₂ "	3/4"	19"	21"	15 ⁵ / ₈ "	1"	18 ³ / ₅ "	17"	12 ¹ / ₂ "	9"
10C389, 10C390	13 ¹ / ₂ "	3/4"	21"	21"	17 ⁷ / ₈ "	1"	18 ³ / ₅ "	16"	12 ¹ / ₂ "	9 ¹ / ₈ "
5AV78, 10C391	14"	3/4"	23"	22"	19 ⁷ / ₈ "	1"	18 ³ / ₅ "	16"	12 ³ / ₈ "	10 ¹ / ₂ "
5AV79, 10C392	16"	1"	26"	26"	22 ⁷ / ₈ "	1"	21"	17"	13 ³ / ₈ "	11 ⁵ / ₈ "
5AV80, 10C393	18"	1"	28"	28"	23 ³ / ₈ "	1 ¹ / ₂ "	21"	17"	13 ³ / ₈ "	13 ¹ / ₄ "
5AV81	20"	1"	32"	32"	27 ⁷ / ₈ "	1 ¹ / ₂ "	25 ³ / ₅ "	18"	13 ³ / ₄ "	14 ¹ / ₂ "
5AV82, 10C394	24"	1"	39"	34"	34 ⁷ / ₈ "	1 ¹ / ₂ "	25 ³ / ₅ "	18"	13 ³ / ₄ "	17 ¹ / ₂ "
5AV84	30"	1 ¹ / ₄ "	46"	38"	41 ⁷ / ₈ "	1 ¹ / ₂ "	35 ¹ / ₄ "	22"	18"	20 ¹ / ₂ "
5AV85	36"	1 ¹ / ₂ "	52"	42"	47 ⁷ / ₈ "	1 ¹ / ₂ "	35 ¹ / ₄ "	22"	18"	24 ¹ / ₂ "
10C395	42 ¹ / ₂ "	1 ¹ / ₄ "	58"	50"	53 ³ / ₈ "	1 ¹ / ₂ "	35 ¹ / ₄ "	22"	18 ⁷ / ₈ "	30 ² / ₃ "

Optional Accessories

General or UL 705	
Description	Model No.
NEMA 1 Dis. Switch:	
	1H400 (2 pole, 115/230V, 2 HP max)
	1H401 (3 pole, 230V, 7 ¹ / ₂ HP max)
	1H401 (3 pole, 460V, 10 HP max)



Dayton Electric Mfg. Co. certifies that the blowers shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

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Dayton® Centrifugal Belt-Drive In-Line Duct Blowers

Performance

Model	Wheel Dia.	Blower RPM	HP	Max BHP	Sones @											
					.250" SP @ 5 Ft.	CFM Air Delivery @ Static Pressure Shown										
					.125"	.250"	.500"	.750"	1.00"	1.25"	1.50"	1.75"	2.00"	2.50"		
5TCL3	11"	1969	1/4	0.26	19	404	383	331	272	211	141	—	—	—	—	
		2174	1/3	0.35	21	451	432	387	335	283	225	161	—	—	—	—
		2480	1/2	0.52	25	520	502	466	424	378	332	285	229	174	—	—
2RB88	11	1833	1/4	0.26	16.9	720	687	613	524	424	—	—	—	—	—	
		2018	1/3	0.35	19.5	799	769	704	630	545	452	269	—	—	—	—
		2310	1/2	0.52	23	924	897	842	784	716	643	563	445	—	—	—
		2645	3/4	0.79	28	1065	1041	995	945	894	835	773	705	—	—	—
5TCL4	11	1692	1/4	0.26	15.8	964	913	796	651	433	—	—	—	—	—	
		1868	1/3	0.35	17.3	1074	1029	927	809	660	—	—	—	—	—	—
		2131	1/2	0.52	21	1236	1199	1114	1021	913	784	632	—	—	—	—
		2450	3/4	0.79	25	1432	1399	1329	1253	1170	1077	980	849	716	—	—
		2693	1	1.05	28	1580	1550	1489	1421	1349	1272	1188	1099	989	899	717
2RB89	11½	1609	1/4	0.26	15.0	1265	1207	1088	917	—	—	—	—	—	—	
		1772	1/3	0.35	16.4	1405	1352	1247	1110	939	—	—	—	—	—	—
		2029	1/2	0.52	19.6	1623	1577	1484	1396	1262	1119	—	—	—	—	—
		2323	3/4	0.79	23	1871	1830	1749	1668	1591	1472	1358	1197	—	—	—
5TCL5	13½	1366	1/4	0.26	11	1470	1391	1225	1018	—	—	—	—	—	—	
		1508	1/3	0.35	12.5	1639	1567	1421	1256	1032	—	—	—	—	—	—
		1721	1/2	0.52	15.7	1889	1827	1700	1567	1418	1235	—	—	—	—	—
		1979	3/4	0.79	19.1	2189	2135	2026	1915	1798	1670	1527	1321	—	—	—
		2174	1	1.05	23	2415	2366	2267	2166	2065	1956	1839	1715	1557	—	—
		2488	1½	1.57	30	2777	2734	2648	2561	2473	2384	2291	2196	2089	1848	—
10C389	13½	1292	1/4	0.26	11.8	1650	1562	1326	955	—	—	—	—	—	—	
		1427	1/3	0.35	13.6	1842	1758	1573	1306	—	—	—	—	—	—	—
		1627	1/2	0.52	15.8	2121	2045	1903	1708	1461	1087	—	—	—	—	—
		1872	3/4	0.79	20	2456	2398	2274	2138	1960	1753	1480	—	—	—	—
		2057	1	1.05	23	2708	2661	2543	2432	2294	2125	1935	1698	1364	—	—
5AV78	14	2351	1½	1.57	30	3106	3069	2965	2871	2771	2653	2507	2351	2108	1720	
		800	1/4	0.11	6.7	1362	1185	—	—	—	—	—	—	—	—	—
		1076	1/4	0.26	10.7	1927	1810	1538	—	—	—	—	—	—	—	—
		1185	1/3	0.35	11.9	2142	2039	1807	1463	—	—	—	—	—	—	—
		1356	1/2	0.52	13.9	2476	2392	2197	1979	1636	—	—	—	—	—	—
		1553	3/4	0.79	16.0	2858	2787	2626	2449	2253	1964	1447	—	—	—	—
		1709	1	1.05	18.0	3159	3094	2953	2798	2635	2451	2177	1752	—	—	—
		1956	1½	1.57	23	3633	3576	3461	3330	3193	3050	2894	2705	2457	—	—
5AV79	16	2153	2	2.10	30	4009	3958	3856	3741	3622	3494	3365	3225	3078	2627	
		873	1/4	0.26	8.6	2373	2209	1759	—	—	—	—	—	—	—	—
		962	1/3	0.35	9.6	2643	2504	2150	—	—	—	—	—	—	—	—
		1101	1/2	0.52	12.1	3061	2944	2665	2301	—	—	—	—	—	—	—
		1261	3/4	0.78	15.1	3538	3436	3212	2946	2611	2071	—	—	—	—	—
		1387	1	1.05	17.5	3911	3818	3628	3402	3146	2815	2311	—	—	—	—
		1588	1½	1.56	22	4503	4422	4259	4079	3880	3656	3389	3055	2566	—	—
		1748	2	2.08	27	4973	4899	4751	4603	4425	4240	4037	3802	3528	—	—

Performance certified is for installation type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type B: Free inlet hemispherical fan sone levels.

Models 2RB88, 2RB89, 5AV78 thru 5AV82, 5AV84, 5AV85, 5TCL3 thru 5TCL5, 10C389 thru 10C394

Performance (Continued)

Model	Wheel Dia.	Blower RPM	HP	Max BHP	Sones @										
					.250" SP @ 5 Ft.	CFM	Air Delivery @ Static Pressure Shown								
					.125"	.250"	.500"	.750"	1.00"	1.25"	1.50"	1.75"	2.00"	2.50"	
5AV80	18"	791	1/3	0.35	10.9	3051	2845	2217	—	—	—	—	—	—	—
		905	1/2	0.52	12.1	3546	3366	2928	2175	—	—	—	—	—	—
		1037	3/4	0.79	14.2	4109	3955	3616	3179	2432	—	—	—	—	—
		1141	1	1.04	16.1	4549	4412	4127	3760	3290	2523	—	—	—	—
		1306	1½	1.57	19.5	5242	5128	4878	4610	4281	3884	3332	—	—	—
		1437	2	2.09	22	5790	5686	5463	5236	4964	4662	4298	3814	3106	—
		1645	3	3.13	28	6656	6566	6377	6179	5981	5744	5485	5216	4866	3898
5AV81	20	660	1/3	0.34	11.2	3315	3018	2042	—	—	—	—	—	—	—
		756	1/2	0.52	12.0	3867	3624	3036	—	—	—	—	—	—	—
		865	3/4	0.79	13.7	4484	4285	3812	3239	—	—	—	—	—	—
		952	1	1.04	15.5	4972	4796	4391	3916	3203	—	—	—	—	—
		1090	1½	1.57	18.9	5741	5587	5253	4874	4452	3878	—	—	—	—
		1200	2	2.09	22	6350	6210	5920	5597	5233	4836	4316	—	—	—
		1373	3	3.12	27	7303	7181	6936	6665	6383	6063	5738	5363	4839	—
5AV82	24	569	1/2	0.51	11.8	5269	4833	3685	—	—	—	—	—	—	—
		651	3/4	0.78	13.9	6132	5768	6946	—	—	—	—	—	—	—
		717	1	1.04	15.9	6816	6498	5782	4884	—	—	—	—	—	—
		826	1½	1.59	19.5	7935	7680	7086	6425	5604	—	—	—	—	—
		903	2	2.09	22	8720	8488	7960	7384	6756	589	—	—	—	—
		1034	3	3.14	27	10,048	9845	9409	8936	8421	7881	7219	6268	—	—
		1225	5	5.20	40	11,973	11,802	11,460	11,070	10,671	10,245	9804	9345	8797	7124
5AV84	30	449	3/4	0.78	11.6	7693	7033	4827	—	—	—	—	—	—	—
		494	1	1.04	13.8	8598	7982	6450	—	—	—	—	—	—	—
		566	1½	1.57	16.6	10,022	9469	8363	6662	—	—	—	—	—	—
		623	2	2.09	19.0	11,129	10,636	9676	8418	—	—	—	—	—	—
		713	3	3.13	23	12,862	12,446	11,588	10,703	9547	7803	—	—	—	—
		845	5	5.23	27	15,380	15,041	14,307	13,604	12,860	11,957	10,839	9309	—	—
		967	7½	7.85	33	17,693	17,396	16,776	16,124	15,526	14,888	14,171	13,273	12,242	—
5AV85	36	376	1	1.04	12.5	10,039	9008	—	—	—	—	—	—	—	—
		431	1½	1.55	14.7	11,720	10,872	8980	—	—	—	—	—	—	—
		474	2	2.09	16.6	13,018	12,323	10,736	8489	—	—	—	—	—	—
		543	3	3.12	19.6	15,081	14,544	13,112	11,627	9553	—	—	—	—	—
		643	5	5.19	27	18,041	17,587	16,511	15,327	14,081	12,560	—	—	—	—
		737	7½	7.84	31	20,802	20,407	19,615	18,505	17,515	16,475	15,153	13,704	—	—
		811	10	10.45	34	22,967	22,607	21,888	21,011	19,986	19,146	18,195	16,996	15,786	—
10C395	42½	445	3	3.13	20	17,704	17,704	15,188	12,941	—	—	—	—	—	—
		527	5	5.19	25	21,202	21,202	19,183	17,697	15,790	13,043	—	—	—	—
		604	7½	7.84	31	24,459	24,459	22,762	21,502	20,206	18,533	—	—	—	—
		665	10	10.45	38	27,027	27,027	25,524	24,424	23,246	22,054	16,581	18,772	16,320	—

Performance certified is for installation type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type B: Free inlet hemispherical fan sone levels.

ENGLISH



Dayton® Centrifugal Belt-Drive In-Line Duct Blowers

High Pressure Performance

Model	Wheel Dia.	Blower RPM	HP	Max BHP	Sones @										
					.500" SP @ 5 Ft.	CFM Air Delivery @ Static Pressure Shown									
					.500"	.625"	.750"	1.00"	1.25"	1.50"	1.75"	2.00"	2.50"	2.75"	
10C390	13½"	1525	1/4	0.26	11.5	1019	953	889	680	—	—	—	—	—	—
		1677	1/3	0.35	12.5	1163	1112	1051	934	706	—	—	—	—	—
		1917	1/2	0.52	14.5	1381	1340	1295	1193	1092	926	684	—	—	—
		2202	3/4	0.79	19.1	1628	1595	1563	1484	1397	1306	1214	1048	—	—
		2423	1	1.05	23	1816	1786	1757	1693	1622	1542	1458	1379	1098	920
		2781	1½	1.57	28	2117	2091	2065	2014	1960	1898	1836	1762	1620	1459
10C391	14	1318	1/4	0.26	11.2	1252	1155	1039	—	—	—	—	—	—	
		1455	1/3	0.35	13.4	1452	1373	1284	1062	—	—	—	—	—	
		1660	1/2	0.52	16.4	1737	1671	1601	1449	1256	—	—	—	—	
		1908	3/4	0.79	19.7	2060	2011	1958	1836	1706	1553	1370	—	—	
		2098	1	1.05	24	2301	2259	2213	2111	2001	1882	1744	1585	—	
		2399	1½	1.57	30	2676	2639	2603	2525	2437	2339	2244	2134	1885	1732
		2643	2	2.10	33	2976	2943	2910	2843	2771	2691	2601	2515	2322	2210
10C392	16	1012	1/4	0.26	7.4	1563	1377	1117	—	—	—	—	—	—	
		1117	1/3	0.35	8.6	1847	1706	1537	—	—	—	—	—	—	
		1275	1/2	0.52	10.8	2232	2133	2015	1724	1295	—	—	—	—	
		1465	3/4	0.79	14.2	2671	2588	2504	2307	2059	1734	—	—	—	
		1611	1	1.05	17.9	2991	2925	2849	2694	2503	2275	2002	1630	—	
		1843	1½	1.57	25	3490	3435	3379	3250	3117	2956	2776	2573	2018	
		2029	2	2.10	28	3886	3835	3784	3680	3560	3439	3295	3141	2770	2552
		2319	3	3.13	36	4495	4451	4407	4318	4229	4125	4019	3913	3655	3506
10C393	18	921	1/3	0.35	9.8	2067	1877	1630	—	—	—	—	—	—	
		1051	1/2	0.52	11.6	2527	2390	2236	1799	—	—	—	—	—	
		1208	3/4	0.79	14.1	3040	2938	2822	2559	2205	—	—	—	—	
		1328	1	1.05	16.2	3416	3327	3234	3018	2765	2438	—	—	—	
		1519	1½	1.57	20	3994	3924	3848	3685	3499	3296	3045	2744	—	
		1673	2	2.10	25	4452	4390	4326	4187	4034	3866	3682	3468	2919	2025
		1911	3	3.13	33	5149	5096	5044	4931	4810	4685	4538	4388	4050	3848
10C394	24	822	1	1.05	15.5	4659	4419	4167	3516	—	—	—	—	—	
		940	1½	1.57	18.1	5559	5371	5167	4730	4173	—	—	—	—	
		1035	2	2.10	20	6266	6095	5924	5550	5146	4632	3791	—	—	
		1182	3	3.13	25	7329	7189	7039	6740	6411	6065	5705	5198	—	
		1399	5	5.19	33	8827	8732	8635	8382	8130	7873	7589	7301	6687	6244
		1610	7½	7.84	43	10,266	10,183	10,100	9932	9712	9492	9273	9047	8554	8296

Performance certified is for installation type B: Free inlet, Ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type B: Free inlet hemispherical fan sone levels.

Unpacking

1. Inspect for any damage that may have occurred during transit.
2. Shipping damage claim must be filed with carrier.
3. Check all bolts, screws, set-screws, etc. for looseness that may have occurred during transit. Retighten as required.

Rotate wheel by hand to be sure it turns freely.

General Safety Information

⚠ DANGER Do not depend on any switch as the sole means of disconnecting power when installing or servicing the blower. Always disconnect, lock and tag power source before installing or servicing. Failure to disconnect power source can

result in fire, shock or serious injury. Motor will restart without warning after thermal protector trips. Do not touch operating motor, it may be hot enough to cause injury.

⚠ DANGER Do not place any body parts or objects in blower, motor openings or drives while motor is connected to power source.

Models 2RB88, 2RB89, 5AV78 thru 5AV82, 5AV84, 5AV85, 5TCL3 thru 5TCL5, 10C389 thru 10C394

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General Safety Information (Continued)

⚠ WARNING *Do not use this equipment in explosive atmospheres!*

1. Read and follow all instructions and cautionary markings. Make sure electrical power source conforms to requirements of equipment and local codes.
2. Blowers should be assembled, installed and serviced by a qualified technician. Have all electrical work performed by a qualified electrician.
3. Follow all local electrical and safety codes in the United States and Canada, as well as the National Electrical Code (NEC), the Occupational Safety and Health Act (OSHA), and the National Fire Protection Association (NFPA) Bulletin 96 in the United States. Ground motor in accordance with NEC Article 250 (grounding). Follow the Canadian Electric Code (CEC) in Canada.

⚠ CAUTION *To reduce the risk of injury to persons, observe the following:*

OSHA requires OSHA complying guards when blower is installed within 2.1 meters (7 feet) of floor or working level.

UL/cUL Standards require OSHA complying guards when blower is installed within 2.5 meters (8 feet) of floor or working level.

4. Do not kink power cable or allow it to come in contact with sharp objects, oil, grease, hot surfaces or chemicals. Replace damaged cords immediately.
5. Make certain that the power source conforms to the requirements for the equipment.

6. Never open access door to a duct with the blower running.
7. Motor must be securely and adequately grounded. Accomplish this by wiring with a grounded, metal-clad race way system by using a separate ground wire connected to the bare metal of the motor frame, or other suitable means.

Installation

⚠ WARNING *Installation, troubleshooting and parts replacement is to be performed only by a qualified personnel.*

1. Test the wheel movement before installing the unit. Wheel should rotate freely in a clockwise rotation when looking into the inlet side of the unit.
2. Move the blower to the desired location and determine position of access panels and motor.

IMPORTANT: The venturi end is the inlet side of the unit. Position the unit to the desired airflow direction.

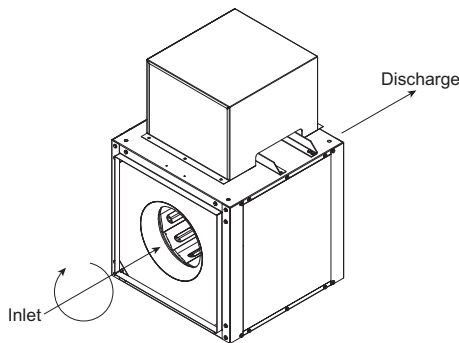


Figure 2 — Discharge

IMPORTANT: The inlet and outlet duct length should be approximately 2½ wheel diameters long before and after the blower to achieve cataloged performance.

3. After placing unit properly, connect it to the duct work. Duct on inlet and discharge should be the same height and width as inside dimensions of the square housing frame.
4. Use appropriate size fasteners to secure and tighten.

MOTOR AND PULLEY MOUNTING

NOTE: For UL/cUL listed units, the motor used with this blower must be designated as such by Dayton®.

1. Secure motor to plate using hardware provided. Holes will align when the motor frame (shaft end) is flush with the edge of the motor plate.

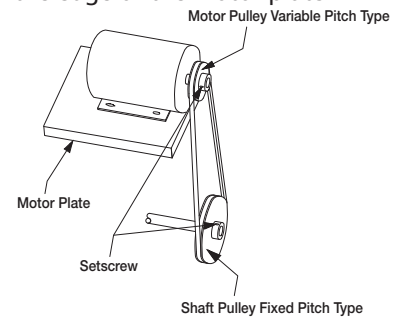


Figure 3 — Drive Package Diagram

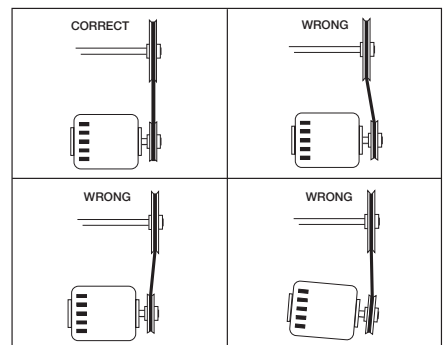


Figure 4 — Pulley Alignment

2. Mount pulleys on shafts securing to shaft with set screw. Check pulleys for proper alignment. Misaligned pulleys lead to excessive belt wear, vibration, noise and blower loss.

Dayton® Centrifugal Belt-Drive In-Line Duct Blowers

Installation (Continued)

3. Install the belt and adjust the tension to allow for 1/64" of deflection per inch of span when moderate thumb pressure is applied to the belt. Too much tension will cause excess bearing wear and noise. Too little tension will cause slippage at startup and uneven wear.

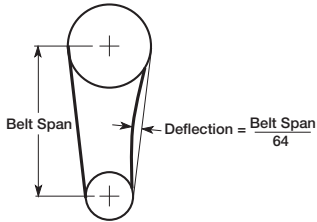


Figure 5 — Belt Tension

4. Adjust RPM to desired level using a variable pitch pulley. After adjustment, motor amperage should be checked to avoid overloading of the motor.

ELECTRICAL CONNECTION

NOTE: Refer to motor nameplate for wiring procedures. Refer to switch manufacturer for installation and wiring procedures.

1. Motor and blower must be securely grounded (bare metal) to a suitable electric ground, such as a grounded water pipe or ground wire system.

NOTE: Refer to Figure 6 for connection wiring diagram.

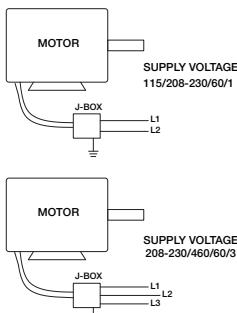


Figure 6 —
Typical Wiring
Diagram

Operation

1. Before starting up or operating your new Dayton® blower, check all fasteners for tightness. In particular, check set screws in wheel hub (and sheaves, if applicable). While in the OFF position, or before connecting the blower to power, turn the blower wheel by hand to be sure it is not striking the orifice or any obstacle.
2. Start the blower up and shut it off immediately to check rotation of the wheel with directional arrow in the motor compartment. Blower wheel should rotate **clockwise** when looking into the inlet side of the unit.
3. When the blower is started, observe the operation and check for any unusual noises.
4. With the system in full operation and all duct work attached, measure current (amps) input to the motor and compare with the nameplate rating (full-load amps) to determine if the motor is operating under safe load conditions.

IMPORTANT: Adjust (tighten) belt tension after the first 48 hours of operation.

Maintenance

▲ WARNING *Disconnect and lockout power source before servicing.*

▲ WARNING *Uneven cleaning of the wheel will produce an out of balance condition that will cause vibration in the blower.*

1. Keep inlets and approaches to blower clean and free from obstruction.
2. Depending on the usage a regularly scheduled inspection for cleaning the blower wheel, housing and

surrounding areas should be established.

3. Check belts periodically for wear and tightness.
 - a. When replacing belts, use the same type as supplied with the unit.
 - b. Matched belts should always be used on units with multi-grooved pulleys.
 - c. For belt replacement, loosen the tension device far enough to allow removal of the belt by hand.

▲ WARNING *Do not force belts on or off. This may cause cords to break, leading to premature belt failure.*

3. Periodically check bearing lubrication.
 - a. All bearings are factory lubricated and require no further lubrication under normal use (between -20°F and 180°F in a relatively clean environment).
 - b. Units installed in hot, humid or dirty locations should be equipped with special bearings. These bearings will require frequent lubrication. A high grade lithium base grease is recommended.

▲ WARNING *Do not overpack or contaminate.*

- c. Grease fittings should be wiped clean. Manually rotate blower while lubricating bearings.

▲ CAUTION *Extreme care should be used around moving parts.*

- d. Grease should be pumped in very slowly until a slight bead forms around the seal.
4. Generally clean and lubricate (where applicable) motor.

Models 2RB88, 2RB89, 5AV78 thru 5AV82, 5AV84, 5AV85, 5TCL3 thru 5TCL5, 10C389 thru 10C394

Maintenance (Continued)

⚠ WARNING *The unit should be made non-functional when cleaning and/or maintaining.*

a. Cleaning should be limited to exterior surfaces only.

b. Removing dust buildup on motor cover ensures proper motor cooling.

5. Clean wheel occasionally to remove oil and dust buildup, this will ensure smooth and safe operation.

6. All fasteners should be checked for tightness each time maintenance checks are performed prior to restarting unit.

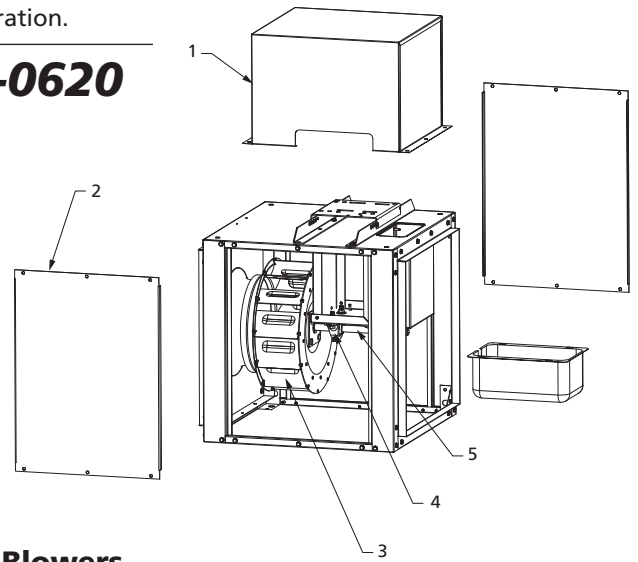
For Repair Parts, call 1-800-323-0620

24 hours a day – 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part description and number as shown in parts list

Figure 7 — Repair Parts Illustration for Centrifugal Belt-Drive In-Line Blowers



Repair Parts List for Centrifugal Belt-Drive In-Line Blowers

Reference Number	Description	Part Number For Models:								Qty.
		2RB88	2RB89	5AV78	5AV79	5AV80	5AV81	5AV82	5AV84	
1	Motor Cover	50B909	6380129	6380129	6380130	6380130	6380131	6380131	6380128	1
2	Access Panel	50B908	50B905	6380123	6380122	6380127	6380126	6380121	6380124	1
3	Wheel	50B910	50B912	6380136	6380135	6380133	6380134	6380132	6380137	1
4	Bearings	53J920	53J920	53J915	50Z248	50Z248	50Z248	50Z248	53J917	2
5	Shaft	50B907	6380117	6380117	6380116	6380116	6380118	6380115	6380119	1

Reference Number	Description	Part Number For Models:								Qty.
		5AV85	5TCL3	5TCL4	5TCL5	10C389	10C390	10C391	10C392	
1	Motor Cover	6380128	50B909	50B909	6380129	6380129	6380129	6380129	6380129	1
2	Access Panel	6380125	53J944	53J944	53J942	52R996	52R996	53J941	53J490	1
3	Wheel	6380138	50B910	50B912	53J952	52T001	52T002	52T003	52T004	1
4	Bearings	53J916	53J920	53J920	53J920	53J915	53J915	53J915	50Z248	2
5	Shaft	6380120	50B907	6380117	53J924	53J924	53J924	6380117	6380116	1

Reference Number	Description	Part Number For Models:			Qty.
		10C393	10C394	10C395	
1	Motor Cover	6380130	6380131	52R995	1
2	Access Panel	52R997	52R998	52R999	1
3	Wheel	52T005	52T006	52T007	1
4	Bearings	50Z248	50Z248	53J916	2
5	Shaft	6380116	6380115	52T008	1

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Dayton® Centrifugal Belt-Drive In-Line Duct Blowers

Trouble Shooting Chart

Symptom	Possible Cause(s)	Corrective Action
Reduced Airflow	1. System resistance too high	1. Check system: Proper operation of backdraft or control dampers, obstruction in duct work, etc.
	2. Unit running backwards	2. Correct, rotation should be clockwise and correspond to the rotation decal on the unit
	3. Excessive dirt buildup on wheel	3. Clean wheel
	4. Improper wheel alignment	4. Center wheel on inlet
Excessive Noise or Vibration	1. Bad bearings	1. Replace
	2. Belts too tight/loose	2. Refer to Figure 6, adjust tension
	3. Wheel improperly aligned and rubbing	3. Center wheel on inlet
	4. Loose drive on motor pulleys	4. Align and tighten
	5. Foreign objects in wheel or housing	5. Remove, check for damage or unbalance
	6. Unbalance of wheel caused by excessive dirt and grease buildup	6. Clean wheel, remove buildup

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Manufactured for Dayton Electric Mfg. Co., 5959 W. Howard St., Niles, Illinois 60714-4014 U.S.A.

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Niles, Illinois 60714 U.S.A.

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