Dayton®

Centrifugal Belt-Drive In-Line Duct Blowers

Models 2RB88A, 2RB89A, 5AV78A thru 5AV82A, 5AV84, 5AV85, 5TCL3A thru 5TCL5A, 10C389A thru 10C394A, 10C395

465931

Dayton®

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.

PLEASE REFER TO BACK COVER FOR INFORMATION REGARDING DAYTON'S WARRANTY AND OTHER IMPORTANT INFORMATION.

Model #: _____

Serial #: _____

Purch. Date: _____

Form 5S6964 / Printed in U.S.A.
5S6964 Version 2 06/2018

BEFORE YOU BEGIN

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

Electrical Requirements:

- The motor amperage and voltage ratings must be checked for compatibility to supply voltage prior to final electrical connection. Wiring must conform to local and national codes.

Tools Needed:

- Sockets/Wrenches
- Screwdrivers
- Tachometer
- Hex Keys (to make adjustments to pulleys, if required)

Optional Accessories:

- NEMA 1 Disconnect Switch (1H400, 1H401)

UNPACKING

Contents:

- Dayton® Centrifugal Belt-Drive In-Line Duct Blower (1)
- Operating Instructions and Parts Manual (1)

Inspect:

- After unpacking unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing, or damaged parts. Shipping damage claim must be filed with carrier.
- 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.

- **See General Safety Instructions on page 2, and Cautions and Warnings as shown.**

Dayton®

GENERAL SAFETY INSTRUCTIONS

These compact in-line fans are the ideal solution for indoor clean air applications including intake, exhaust, return or make-up air systems where space is a prime consideration. The square housing design, compact size and straight-thru airflow also gives the system designer the flexibility to mount in-line fans in any consideration - horizontal, vertical or any angle.

⚠ 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.***

⚠ 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.

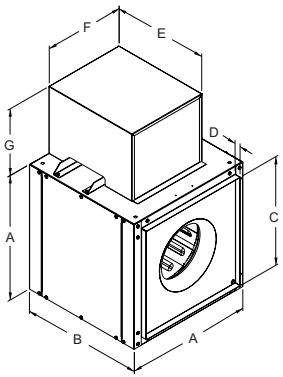
⚠ CAUTION ***To reduce the risk of injury to persons, observe the following: OSHA requires OSHA complying guards when blower is installed within 2.1 meters (7 feet) of floor or working level.***

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.

SPECIFICATIONS

Max. Inlet Temp.	160ºF
Mounting Location	Inline
Housing Material	Galvanized Steel
Wheel Type	Aluminum, Backward Inclined Centrifugal
Agency Compliance	UL/cUL 705, AMCA Sound and Air



c UL us LISTED
E53236

Figure 1

Dimensions (inches)

	2RB88A, 5TCL3A, 5TCL4A	2RB89A	5TCL5A	10C389A, 10C390A	5AV78A, 10C391A	5AV79A, 10C392A
A	17-1/8	17-1/8	19-1/8	21-1/8	23-1/8	26-1/8
B	21	21	21	21	22	26
C	11-7/8	13-7/8	15-7/8	17-7/8	19-7/8	22-7/8
D	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
E	17-3/4	17-3/4	20	20	20	20
F	13	13	17	17	17	17
G	13-1/4	13-1/4	13-1/4	13-1/4	13-1/4	13-1/4
Wheel Dia.	11	11-1/2	13-1/2	13-1/2	14	16
Shaft Dia.	3/4	3/4	3/4	3/4	3/4	1
Inlet Dia.	7-3/4	7-3/4	9	9-1/8	10-1/2	11-5/8

	5AV80A, 10C393A	5AV81A	5AV82A, 10C394A	5AV84	5AV85	10C395
A	27-1/8	31-1/8	38-1/4	46	52	58
B	28	32	34	38	42	50
C	23-7/8	27-7/8	34-7/8	41-7/8	47-7/8	53-7/8
D	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2
E	20	30	30	35-1/4	35-1/4	35-1/4
F	17	20	20	22	22	22
G	13-1/4	16	16	18	18	18-7/8
Wheel Dia.	18	20	24	30	36	42-1/2
Shaft Dia.	1	1	1	1-1/4	1-1/2	1-1/4
Inlet Dia.	13-1/4	14-1/2	17-1/2	20-1/2	24-1/2	30-1/3

Dayton®

PERFORMANCE

Model	HP	Blower RPM	Max BHP	Sones @ .250" SP @ 5 Ft.
5TCL3A	1/4	1969	0.26	19
	1/3	2174	0.35	21
	1/2	2480	0.52	25
2RB88A	1/4	1833	0.26	16.9
	1/3	2018	0.35	19.5
	1/2	2310	0.52	23
	3/4	2645	0.79	28
5TCL4A	1/4	1692	0.26	15.8
	1/3	1868	0.35	17.3
	1/2	2131	0.52	21
	3/4	2450	0.79	25
	1	2693	1.05	28
2RB89A	1/4	1609	0.26	15.0
	1/3	1772	0.35	16.4
	1/2	2029	0.52	19.6
	3/4	2323	0.79	23
	1	2556	1.05	26
5TCL5A	1/4	1366	0.26	11
	1/3	1508	0.35	12.5
	1/2	1721	0.52	15.7
	3/4	1979	0.79	19.1
	1	2174	1.05	23
	1-1/2	2488	1.57	30
10C389A	1/4	1292	0.26	11.8
	1/3	1427	0.35	13.6
	1/2	1627	0.52	15.8
	3/4	1872	0.79	20
	1	2057	1.05	23
	1-1/2	2351	1.57	30
5AV78A	1/4	800	0.11	6.7
	1/4	1076	0.26	10.7
	1/3	1185	0.35	11.9
	1/2	1356	0.52	13.9
	3/4	1553	0.79	16.0
	1	1709	1.05	18.0
	1-1/2	1956	1.57	23
	2	2153	2.10	30
5AV79A	1/4	873	0.26	8.6
	1/3	962	0.35	9.6
	1/2	1101	0.52	12.1
	3/4	1261	0.78	15.1
	1	1387	1.05	17.5
	1-1/2	1588	1.56	22
	2	1748	2.08	27
	3	2001	3.12	38

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.

CFM Air Delivery @ Static Pressure Shown									
.125"	.250"	.500"	.750"	1.00"	1.25"	1.50"	1.75"	2.00"	2.50"
404	383	331	272	211	141	—	—	—	—
451	432	387	335	283	225	161	—	—	—
520	502	466	424	378	332	285	229	174	—
720	687	613	524	424	—	—	—	—	—
799	769	704	630	545	452	269	—	—	—
924	897	842	784	716	643	563	445	—	—
1065	1041	995	945	894	835	773	705	—	—
964	913	796	651	433	—	—	—	—	—
1074	1029	927	809	660	—	—	—	—	—
1236	1199	1114	1021	913	784	632	—	—	—
1432	1399	1329	1253	1170	1077	980	849	716	—
1580	1550	1489	1421	1349	1272	1188	1099	989	717
1265	1207	1088	917	—	—	—	—	—	—
1405	1352	1247	1110	939	—	—	—	—	—
1623	1577	1484	1396	1262	1119	—	—	—	—
1871	1830	1749	1668	1591	1472	1358	1197	—	—
2066	2029	1956	1882	1810	1734	1626	1522	—	—
1470	1391	1225	1018	—	—	—	—	—	—
1639	1567	1421	1256	1032	—	—	—	—	—
1889	1827	1700	1567	1418	1235	—	—	—	—
2189	2135	2026	1915	1798	1670	1527	1321	—	—
2415	2366	2267	2166	2065	1956	1839	1715	1557	—
2777	2734	2648	2561	2473	2384	2291	2196	2089	1848
1650	1562	1326	955	—	—	—	—	—	—
1842	1758	1573	1306	—	—	—	—	—	—
2121	2045	1903	1708	1461	1087	—	—	—	—
2456	2398	2274	2138	1960	1753	1480	—	—	—
2708	2661	2543	2432	2294	2125	1935	1698	1364	—
3106	3069	2965	2871	2771	2653	2507	2351	2108	1720
1362	1185	—	—	—	—	—	—	—	—
1927	1810	1538	—	—	—	—	—	—	—
2142	2039	1807	1463	—	—	—	—	—	—
2476	2392	2197	1979	1636	—	—	—	—	—
2858	2787	2626	2449	2253	1964	1447	—	—	—
3159	3094	2953	2798	2635	2451	2177	1752	—	—
3633	3576	3461	3330	3193	3050	2894	2705	2457	—
4009	3958	3856	3741	3622	3494	3365	3225	3078	2627
2373	2209	1759	—	—	—	—	—	—	—
2643	2504	2150	—	—	—	—	—	—	—
3061	2944	2665	2301	—	—	—	—	—	—
3538	3436	3212	2946	2611	2071	—	—	—	—
3911	3818	3628	3402	3146	2815	2311	—	—	—
4503	4422	4259	4079	3880	3656	3389	3055	2566	—
4973	4899	4751	4603	4425	4240	4037	3802	3528	—
5713	5648	5519	5390	5260	5103	4946	4774	4596	4160

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.

Dayton®

PERFORMANCE CONTINUED

Model	HP	Blower RPM	Max BHP	Sones @ .250" SP @ 5 Ft.
5AV80A	1/3	791	0.35	10.9
	1/2	905	0.52	12.1
	3/4	1037	0.79	14.2
	1	1141	1.04	16.1
	1-1/2	1306	1.57	19.5
	2	1437	2.09	22
	3	1645	3.13	28
5AV81A	1/3	660	0.34	11.2
	1/2	756	0.52	12.0
	3/4	865	0.79	13.7
	1	952	1.04	15.5
	1-1/2	1090	1.57	18.9
	2	1200	2.09	22
	3	1373	3.12	27
5AV82A	1/2	569	0.51	11.8
	3/4	651	0.78	13.9
	1	717	1.04	15.9
	1-1/2	826	1.59	19.5
	2	903	2.09	22
	3	1034	3.14	27
	5	1225	5.20	40
5AV84	3/4	449	0.78	11.6
	1	494	1.04	13.8
	1-1/2	566	1.57	16.6
	2	623	2.09	19.0
	3	713	3.13	23
	5	845	5.23	27
	7-1/2	967	7.85	33
5AV85	1	376	1.04	12.5
	1-1/2	431	1.55	14.7
	2	474	2.09	16.6
	3	543	3.12	19.6
	5	643	5.19	27
	7-1/2	737	7.84	31
	10	811	10.45	34
10C395	3	445	3.13	20
	5	527	5.19	25
	7-1/2	604	7.84	31
	10	665	10.45	38

CFM Air Delivery @ Static Pressure Shown									
.125"	.250"	.500"	.750"	1.00"	1.25"	1.50"	1.75"	2.00"	2.50"
3051	2845	2217	—	—	—	—	—	—	—
3546	3366	2928	2175	—	—	—	—	—	—
4109	3955	3616	3179	2432	—	—	—	—	—
4549	4412	4127	3760	3290	2523	—	—	—	—
5242	5128	4878	4610	4281	3884	3332	—	—	—
5790	5686	5463	5236	4964	4662	4298	3814	3106	—
6656	6566	6377	6179	5981	5744	5485	5216	4866	3898
3315	3018	2042	—	—	—	—	—	—	—
3867	3624	3036	—	—	—	—	—	—	—
4484	4285	3812	3239	—	—	—	—	—	—
4972	4796	4391	3916	3203	—	—	—	—	—
5741	5587	5253	4874	4452	3878	—	—	—	—
6350	6210	5920	5597	5233	4836	4316	—	—	—
7303	7181	6936	6665	6383	6063	5738	5363	4839	—
5269	4833	3685	—	—	—	—	—	—	—
6132	5768	6946	—	—	—	—	—	—	—
6816	6498	5782	4884	—	—	—	—	—	—
7935	7680	7086	6425	5604	—	—	—	—	—
8720	8488	7960	7384	6756	589	—	—	—	—
10,048	9845	9409	8936	8421	7881	7219	6268	—	—
11,973	11,802	11,460	11,070	10,671	10,245	9804	9345	8797	7124
7693	7033	4827	—	—	—	—	—	—	—
8598	7982	6450	—	—	—	—	—	—	—
10,022	9469	8363	6662	—	—	—	—	—	—
11,129	10,636	9676	8418	—	—	—	—	—	—
12,862	12,446	11,588	10,703	9547	7803	—	—	—	—
15,380	15,041	14,307	13,604	12,860	11,957	10,839	9309	—	—
17,693	17,396	16,776	16,124	15,526	14,888	14,171	13,273	12,242	—
10,039	9008	—	—	—	—	—	—	—	—
11,720	10,872	8980	—	—	—	—	—	—	—
13,018	12,323	10,736	8489	—	—	—	—	—	—
15,081	14,544	13,112	11,627	9553	—	—	—	—	—
18,041	17,587	16,511	15,327	14,081	12,560	—	—	—	—
20,802	20,407	19,615	18,505	17,515	16,475	15,153	13,704	—	—
22,967	22,607	21,888	21,011	19,986	19,146	18,195	16,996	15,786	—
17,704	16,910	15,188	12,941	—	—	—	—	—	—
21,202	20,625	19,183	17,697	15,790	13,043	—	—	—	—
24,459	23,950	22,762	21,502	20,206	18,533	—	—	—	—
27,027	26,778	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.

Dayton®

PERFORMANCE, HP

Model	Blower RPM	HP	Max BHP	Sones @ .250" SP @ 5 Ft.
10C390A	1525	1/4	0.26	11.5
	1677	1/3	0.35	12.5
	1917	1/2	0.52	14.5
	2202	3/4	0.79	19.1
	2423	1	1.05	23
	2781	1-1/2	1.57	28
10C391A	1318	1/4	0.26	11.2
	1455	1/3	0.35	13.4
	1660	1/2	0.52	16.4
	1908	3/4	0.79	19.7
	2098	1	1.05	24
	2399	1-1/2	1.57	30
	2643	2	2.10	33
10C392A	1012	1/4	0.26	7.4
	1117	1/3	0.35	8.6
	1275	1/2	0.52	10.8
	1465	3/4	0.79	14.2
	1611	1	1.05	17.9
	1843	1-1/2	1.57	25
	2029	2	2.10	28
	2319	3	3.13	36
10C393A	921	1/3	0.35	9.8
	1051	1/2	0.52	11.6
	1208	3/4	0.79	14.1
	1328	1	1.05	16.2
	1519	1-1/2	1.57	20
	1673	2	2.10	25
	1911	3	3.13	33
10C394A	822	1	1.05	15.5
	940	1-1/2	1.57	18.1
	1035	2	2.10	20
	1182	3	3.13	25
	1399	5	5.19	33
	1610	7-1/2	7.84	43

CFM Air Delivery @ Static Pressure Shown									
.500"	.625"	.750"	1.00"	1.25"	1.50"	1.75"	2.00"	2.50"	2.75"
1019	953	889	680	—	—	—	—	—	—
1163	1112	1051	934	706	—	—	—	—	—
1381	1340	1295	1193	1092	926	684	—	—	—
1628	1595	1563	1484	1397	1306	1214	1048	—	—
1816	1786	1757	1693	1622	1542	1458	1379	1098	920
2117	2091	2065	2014	1960	1898	1836	1762	1620	1459
1252	1155	1039	—	—	—	—	—	—	—
1452	1373	1284	1062	—	—	—	—	—	—
1737	1671	1601	1449	1256	—	—	—	—	—
2060	2011	1958	1836	1706	1553	1370	—	—	—
2301	2259	2213	2111	2001	1882	1744	1585	—	—
2676	2639	2603	2525	2437	2339	2244	2134	1885	1732
2976	2943	2910	2843	2771	2691	2601	2515	2322	2210
1563	1377	1117	—	—	—	—	—	—	—
1847	1706	1537	—	—	—	—	—	—	—
2232	2133	2015	1724	1295	—	—	—	—	—
2671	2588	2504	2307	2059	1734	—	—	—	—
2991	2925	2849	2694	2503	2275	2002	1630	—	—
3490	3435	3379	3250	3117	2956	2776	2573	2018	—
3886	3835	3784	3680	3560	3439	3295	3141	2770	2552
4495	4451	4407	4318	4229	4125	4019	3913	3655	3506
2067	1877	1630	—	—	—	—	—	—	—
2527	2390	2236	1799	—	—	—	—	—	—
3040	2938	2822	2559	2205	—	—	—	—	—
3416	3327	3234	3018	2765	2438	—	—	—	—
3994	3924	3848	3685	3499	3296	3045	2744	—	—
4452	4390	4326	4187	4034	3866	3682	3468	2919	2025
5149	5096	5044	4931	4810	4685	4538	4388	4050	3848
4659	4419	4167	3516	—	—	—	—	—	—
5559	5371	5167	4730	4173	—	—	—	—	—
6266	6095	5924	5550	5146	4632	3791	—	—	—
7329	7189	7039	6740	6411	6065	5705	5198	—	—
8827	8732	8635	8382	8130	7873	7589	7301	6687	6244
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.

Dayton®

INSTALLATION INSTRUCTIONS

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

In-line Installation

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.

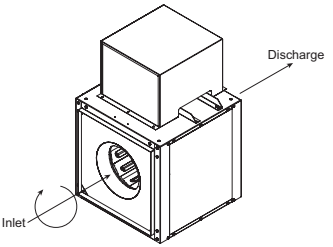


Figure 2 — Discharge

IMPORTANT: The inlet and outlet duct length should be approximately 2-1/2 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 (fasteners provided by others). Holes will align when the motor frame (shaft end) is flush with the edge of the motor plate.

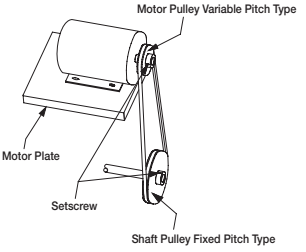


Figure 3 — Drive Package Diagram

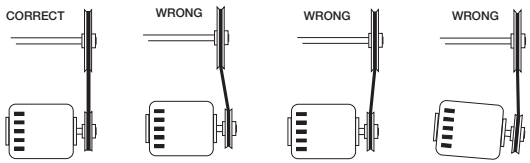


Figure 4 — Pulley Alignment

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.

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.

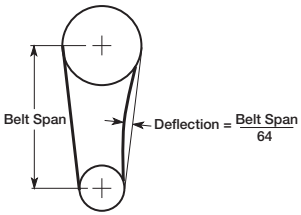


Figure 5 — Belt Tension

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.

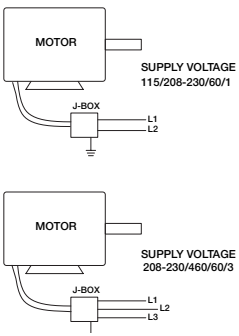


Figure 6 — Typical Wiring Diagram

Dayton®

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.

TROUBLESHOOTING GUIDE

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 5, 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

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.***

4. Periodically check bearing lubrication.
   a. All bearings are factory lubricated and require no further lubrication under normal use (between -20ºF and 180ºF 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.***

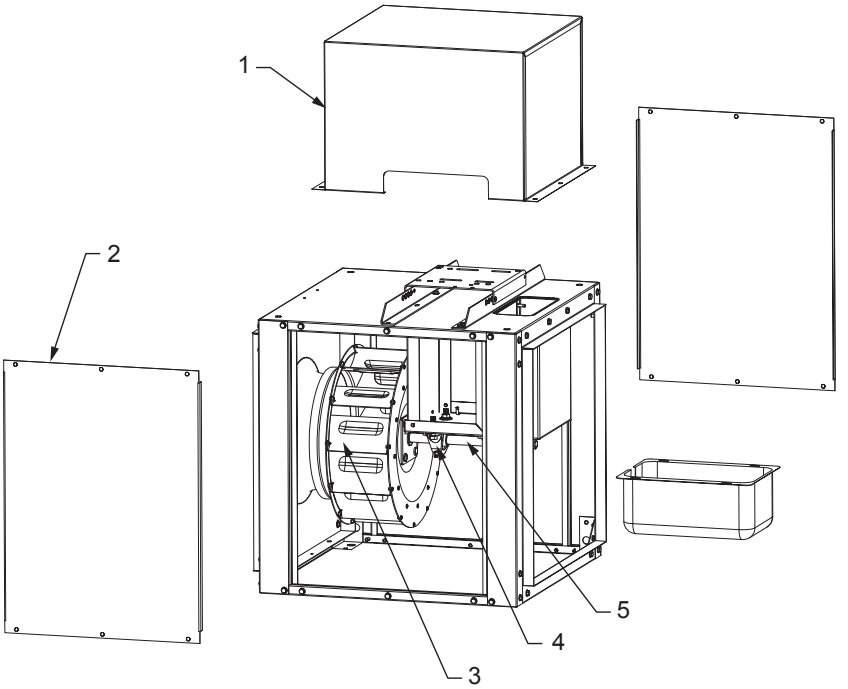
   d. Grease should be pumped in very slowly until a slight bead forms around the seal.
5. Generally clean and lubricate (where applicable) motor.

⚠ 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.
6. Clean wheel occasionally to remove oil and dust buildup, this will ensure smooth and safe operation.
7. All fasteners should be checked for tightness each time maintenance checks are performed prior to restarting unit.

Dayton®

REPAIR PARTS ILLUSTRATION FOR CENTRIFUGAL BELT-DRIVE IN-LINE DUCT BLOWERS



For Repair Parts, call 1-800-Grainger

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

REPAIR PARTS LIST FOR CENTRIFUGAL BELT-DRIVE IN-LINE BLOWERS

Ref. No.	Description	Part Number For Models: 2RB88A	2RB89A	5AV78A	5AV79A	5AV80A	5AV81A	5AV82A	5AV84	Qty.
1	Motor Cover	464F41	464F43	464F45	464F47	464F49	464F51	464F53	21EC27	1
2	Access Panel	464F42	464F44	464F46	464F48	464F50	464F52	464F54	21EC23	1
3	Wheel	21DP60	21DP61	21EC35	21EC34	21EC32	21EC33	21EC31	21EC36	1
4	Bearings	21DW60	21DW60	21DW56	21DT70	21DT70	21DT70	21DT70	21DW58	2
5	Shaft	21DP57	21EC16	21EC16	21EC15	21EC15	21EC17	21EC14	21EC18	1

Ref. No.	Description	Part Number For Models: 5AV85	5TCL3A	5TCL4A	5TCL5A	10C389A	10C390A	10C391A	10C392A	Qty.
1	Motor Cover	21EC27	464F57	464F59	464F61	464F63	464F65	464F67	464F69	1
2	Access Panel	21EC24	464F58	464F60	464F62	464F64	464F66	464F68	464F70	1
3	Wheel	21EC37	21DP60	21DP61	21DY82	21DZ41	21DV91	21DV92	21DV93	1
4	Bearings	21DW57	21DW60	21DW60	21DW60	21DW56	21DW56	21DW56	21DT70	2
5	Shaft	21EC19	21DP57	21EC16	21DW62	21DW62	21DW62	21EC16	21EC15	1

Ref. No.	Description	Part Number For Models: 10C393A	10C394A	10C395	Qty.
1	Motor Cover	464F71	464F73	21DV85	1
2	Access Panel	464F72	464F74	21DV89	1
3	Wheel	21DV94	21DV95	21DV96	1
4	Bearings	21DT70	21DT70	21DW57	2
5	Shaft	21EC15	21EC14	21DV97	1

DAYTON ONE-YEAR LIMITED WARRANTY

DAYTON ONE-YEAR LIMITED WARRANTY. *All Dayton® product models covered in this manual are warranted by Dayton Electric Mfg. Co. ("Dayton") to the original user against defects in workmanship or materials under normal use for one year after date of purchase. If the Dayton product is part of a set, only the portion that is defective is subject to this warranty. Any product or part which is determined to be defective in material or workmanship and returned to an authorized service location, as Dayton or Dayton's designee designates, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced with a new or reconditioned product or part of equal utility or a full refund given, at Dayton's or Dayton's designee's option, at no charge. For limited warranty claim procedures, see "Warranty Service" below. This warranty is void if there is evidence of misuse, mis-repair, mis-installation, abuse or alteration. This warranty does not cover normal wear and tear of Dayton products or portions of them, or products or portions of them which are consumable in normal use. This limited warranty gives purchasers specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.*

WARRANTY DISCLAIMERS AND LIMITATIONS OF LIABILITY RELATING TO ALL CUSTOMERS FOR ALL PRODUCTS

LIMITATION OF LIABILITY. *TO THE EXTENT ALLOWABLE UNDER APPLICABLE LAW, DAYTON'S LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES IS EXPRESSLY DISCLAIMED. DAYTON'S LIABILITY IN ALL EVENTS IS LIMITED TO AND SHALL NOT EXCEED THE PURCHASE PRICE PAID.*

WARRANTY DISCLAIMER. *A DILIGENT EFFORT HAS BEEN MADE TO PROVIDE PRODUCT INFORMATION AND ILLUSTRATE THE PRODUCTS IN THIS LITERATURE ACCURATELY; HOWEVER, SUCH INFORMATION AND ILLUSTRATIONS ARE FOR THE SOLE PURPOSE OF IDENTIFICATION, AND DO NOT EXPRESS OR IMPLY A WARRANTY THAT THE PRODUCTS ARE MERCHANTABLE, OR FIT FOR A PARTICULAR PURPOSE, OR THAT THE PRODUCTS WILL NECESSARILY CONFORM TO THE ILLUSTRATIONS OR DESCRIPTIONS. EXCEPT AS PROVIDED BELOW, NO WARRANTY OR AFFIRMATION OF FACT, EXPRESSED OR IMPLIED, OTHER THAN AS STATED IN THE "LIMITED WARRANTY" ABOVE IS MADE OR AUTHORIZED BY DAYTON.*

PRODUCT SUITABILITY. *MANY JURISDICTIONS HAVE CODES AND REGULATIONS GOVERNING SALES, CONSTRUCTION, INSTALLATION, AND/OR USE OF PRODUCTS FOR CERTAIN PURPOSES, WHICH MAY VARY FROM THOSE IN NEIGHBORING AREAS. WHILE ATTEMPTS ARE MADE TO ASSURE THAT DAYTON PRODUCTS COMPLY WITH SUCH CODES, DAYTON CANNOT GUARANTEE COMPLIANCE, AND CANNOT BE RESPONSIBLE FOR HOW THE PRODUCT IS INSTALLED OR USED. BEFORE PURCHASE AND USE OF A PRODUCT, REVIEW THE SAFETY/SPECIFICATIONS, AND ALL APPLICABLE NATIONAL AND LOCAL CODES AND REGULATIONS, AND BE SURE THAT THE PRODUCT, INSTALLATION, AND USE WILL COMPLY WITH THEM.*

CONSUMERS ONLY. *CERTAIN ASPECTS OF DISCLAIMERS ARE NOT APPLICABLE TO CONSUMER PRODUCTS SOLD TO CONSUMERS; (A) SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU; (B) ALSO, SOME JURISDICTIONS DO NOT ALLOW A LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU; AND (C) BY LAW, DURING THE PERIOD OF THIS LIMITED WARRANTY, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO CONSUMER PRODUCTS PURCHASED BY CONSUMERS, MAY NOT BE EXCLUDED OR OTHERWISE DISCLAIMED.*

THIS LIMITED WARRANTY ONLY APPLIES TO UNITED STATES PURCHASERS FOR DELIVERY IN THE UNITED STATES.

WARRANTY SERVICE

To obtain warranty service if you purchased the covered product directly from W.W. Grainger, Inc. ("Grainger"), (i) write or call or visit the local Grainger branch from which the product was purchased or another Grainger branch near you (see www.grainger.com for a listing of Grainger branches); or (ii) contact Grainger by going to www.grainger.com and clicking on the "Contact Us" link at the top of the page, then clicking on the "Email us" link; or (iii) call Customer Care (toll free) at 1-888-361-8649. To obtain warranty service if you purchased the covered product from another distributor or retailer, (i) go to www.grainger.com for Warranty Service; (ii) write or call or visit a Grainger branch near you; or (iii) call Customer Care (toll free) at 1-888-361-8649. In any case, you will need to provide, to the extent available, the purchase date, the original invoice number, the stock number, a description of the defect, and anything else specified in this Dayton One-Year Limited Warranty. You may be required to send the product in for inspection at your cost. You can follow up on the progress of inspections and corrections in the same ways. Title and risk of loss pass to buyer on delivery to common carrier, so if product was damaged in transit to you, file claim with carrier, not retailer, Grainger or Dayton. For warranty information for purchasers and/or delivery outside the United States, please use the following applicable contact information:

Dayton Electric Mfg. Co.,
100 Grainger Parkway, Lake Forest, IL 60045 U.S.A.
or call +1-888-361-8649