

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 Downblast Exhaust Ventilators

Description

Dayton ventilators are designed for continuous operation to exhaust general clean, foul air and odors. Typically used for average length and/or average resistance duct work. When used with explosion proof motor, ventilator sizes 11" to 30½" may be use in potentially hazardous locations. Ventilators can handle temperatures up to 180°F. Weather resistant ventilators feature housings constructed of heavy gauge aluminum with a rigid internal support structure, spun aluminum curb cap, a birdscreen and a steel drive frame. All ventilators are UL/cUL listed Standard 705.

Motors are mounted out of the discharge stream in a positively cooled chamber fed by outside air drawn in under the motor cover.

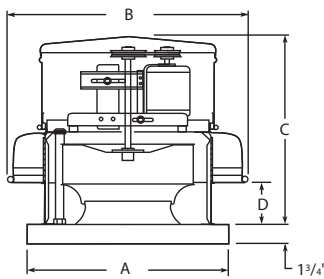


Figure 1 — Dimensions



Dayton Electric Mfg. Co. certifies that the ventilators 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.

Optional Accessories

General or UL 705	
Description	Model No.
NEMA 1 Dis. Switch:	
	1H400 (2 pole, 2 HP max)
	1H401 (3 pole, 7½ HP max)
Damper:	4HX64-4HX71
12" Fixed Roof Curb:	
	2RB75-2RB83, 5EFJ2, 5EFJ3
12" Adj. Roof Curb:	
	2ZV82-2ZV85, 2ZV87
Roof Curb Adapters:	
	3AZK1-3AZK9, 3AZL1-3AZL3
Hinge Kit:	4HX79, 4YY84-4YY86

⚠ WARNING Do not use in any kitchen exhaust application.

Dimensions and Specifications (See Figure 1)

Model Without Drive Package	Model With Drive Package, Assembled	Wheel Dia.	Shaft Dia.	A	B	C	D	Recommended Roof Opening	Recommended Damper Size
4YU92, 16D539	2RB59, 2RB60, 2RB61	11"	3/4"	19"	24¾"	24¾"	4¾"	14½ x 14½"	12 x 12"
4YU93	2RB62	11	3/4	22	24¾	24¾	4¾	17½ x 17½	15 x 15
16D540	—	13¼	3/4	19	24¾	24¾	4¾	14½ x 14½"	12 x 12"
4YU94	2RB63	13¼	3/4	22	24¾	24¾	4¾	17½ x 17½	15 x 15
16D541	—	13¾	3/4	19	28¾	25¾	4	14½ x 14½"	12 x 12"
5EFH7	—	13¾	3/4	22	28¾	25¾	4	17½ x 17½	15 x 15
16D542	—	14¾	3/4	22	28¾	25¾	4	17½ x 17½	15 x 15
4YU95A	2RB64A, 3HFL6A	14¾	3/4	26	28¾	25¾	4	21½ x 21½	19 x 19
16D543	—	16¾	3/4	22	28¾	27¼	4	17½ x 17½	15 x 15
4YU96	3HFL7	16¾	3/4	26	28¾	27¼	4	21½ x 21½	19 x 19
4YU97	3GY70G, 3GY66G	18½	3/4	30	35½	34¾	5½	25½ x 25½	23 x 23
4YU98	3GY71G, 3GY67G	21½	3/4	30	35½	34¾	5½	25½ x 25½	23 x 23
4YU99, 5EFH8	3GY68G	24½	1	34	42¾	38¾	5¾	29½ x 29½	27 x 27
5EFH9	—	26½	1	42	50	36	8¼	37½ x 37½	35 x 35
16D544	—	30½	1	40	50	36	8¼	29½ x 29½	27 x 27
4YY10	3GY69G, 3HFL8	30½	1	42	50	36	8¼	37½ x 37½	35 x 35
5EFJ0	—	33½	1¼	46	58¾	38½	8¾	41½ x 41½	39 x 39
4YY11	3HFL9	36	1¼	46	58¾	38½	8¾	41½ x 41½	39 x 39
5EFJ1	—	42	1¼	52	65¼	44	9¾	41½ x 41½	39 x 39
4YY12	—	50	1¼	64	83	50¾	14½	52½ x 52½	50 x 50

Dayton® Centrifugal Belt-Drive Downblast Exhaust Ventilators

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Without Drive Package Performance

Model	Wheel Dia.	HP	Fan RPM	Max BHP	Sones @ .250 SP	CFM Air Delivery @ Static Pressure Shown								
						.000"	.125"	.250"	.375"	.500"	.750"	1.000"	1.250"	1.500"
4YU92	11"	1/6	1401	0.14	10.0	1062	991	920	846	767	567	—	—	—
		1/4	1710	0.25	13.2	1296	1238	1180	1122	1062	934	785	—	—
4YU93, 16D539	11	1/4	1635	0.25	10.4	1386	1326	1269	1215	1162	1020	793	—	—
		1/3	1800	0.33	12.5	1526	1471	1419	1368	1321	1209	1065	793	—
4YU94, 16D540	13¼"	1/4	1395	0.26	12.3	1692	1625	1557	1484	1404	1214	907	—	—
		1/3	1550	0.36	14.3	1880	1820	1759	1696	1629	1475	1289	974	—
		1/2	1725	0.50	17.0	2093	2038	1984	1928	1871	1743	1600	1426	1180
5EFH7, 16D541	13¾"	1/4	1315	0.26	12.5	1866	1794	1718	1637	1545	1305	—	—	—
		1/3	1440	0.35	15.1	2044	1978	1911	1838	1759	1571	1299	—	—
		1/2	1685	0.56	16.3	2391	2335	2279	2219	2158	1946	1857	1654	1312
4YU95A, 16D542	14¾"	1/4	1075	0.26	9.4	1994	1882	1771	1647	1490	—	—	—	—
		1/3	1170	0.34	10.8	2170	2067	1966	1859	1734	1356	—	—	—
		1/2	1360	0.53	13.9	2523	2433	2347	2259	2166	1943	1602	—	—
		3/4	1545	0.78	17.4	2866	2787	2710	2634	2556	2384	2177	1890	—
		1	1705	1.05	20	3163	3091	3020	2952	2883	2739	2574	2370	2120
4YU96, 16D543	16¾"	1/4	865	0.26	9.7	2555	2360	2162	1933	1624	—	—	—	—
		1/3	945	0.34	11.5	2791	2612	2434	2236	2010	—	—	—	—
		1/2	1100	0.53	14.1	3249	3095	2943	2787	2615	2198	—	—	—
		3/4	1250	0.79	17.0	3692	3557	3422	3289	3149	2838	2444	—	—
		1	1375	1.05	19.6	4062	3938	3815	3694	3571	3304	3007	2609	2073
4YU97	18½"	1/4	730	0.26	7.2	2839	2668	2469	2213	1822	—	—	—	—
		1/3	810	0.35	8.7	3150	2997	2832	2624	2375	—	—	—	—
		1/2	940	0.54	12.0	3655	3527	3388	3234	3052	2601	—	—	—
		3/4	1055	0.77	14.9	4102	3990	3867	3742	3596	3252	2811	—	—
		1	1185	1.10	17.8	4608	4508	4401	4290	4179	3900	3575	3178	2499
		1½	1335	1.57	21	5191	5102	5010	4913	4814	4599	4344	4052	3713
		2	1460	2.05	24	5677	5596	5514	5425	5336	5155	4938	4699	4426
4YU98	21½"	1/4	600	0.26	7.3	3320	2984	2637	2089	—	—	—	—	—
		1/3	665	0.35	8.5	3680	3378	3085	2706	2087	—	—	—	—
		1/2	770	0.55	10.7	4261	4013	3744	3477	3141	—	—	—	—
		3/4	860	0.77	12.9	4759	4548	4289	4068	3811	3085	—	—	—
		1	965	1.09	15.4	5340	5158	4927	4720	4520	4015	3240	—	—
		1½	1090	1.56	18.9	6032	5870	5682	5473	5301	4925	4450	3751	—
		2	1200	2.09	23	6640	6494	6336	6145	5969	5651	5274	4829	4177
5EFH8	24½"	1/4	500	0.26	7.9	3799	3512	3132	2542	—	—	—	—	—
		1/3	550	0.35	8.9	4179	3924	3629	3158	2526	—	—	—	—
		1/2	640	0.55	12.1	4863	4654	4403	4120	3702	—	—	—	—
		3/4	710	0.75	14.4	5395	5206	4990	4762	4459	3633	—	—	—
		1	800	1.07	16.1	6079	5911	5732	5530	5326	4716	3929	—	—
		1½	895	1.50	18.8	6801	6651	6501	6323	6142	5723	5122	4401	—
		2	985	2.00	23	7485	7349	7212	7062	6898	6568	6107	5548	4883

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (BHP) does not include transmission losses. Performance ratings include the effects of a birdscreen in the airstream. 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 A: Free inlet hemispherical sone levels.

Models 2RB59 thru 2RB63, 2RB64A, 3GY66G thru 3GY71G, 3HFL6A, 3HFL7 thru 3HFL9, 4YU92 thru 4YU94, 4YU95A, 4YU96 thru 4YU99, 4YY10 thru 4YY12, 5EFH7 thru 5EFH9, 5EFJ0, 5EFJ1, 16D539 thru 16D544

Without Drive Package Performance (Continued)

Model	Wheel Dia.	HP	Fan RPM	Max BHP	Sones @ .250 SP	CFM Air Delivery @ Static Pressure Shown								
						.000"	.125"	.250"	.375"	.500"	.750"	1.000"	1.250"	1.500"
4YU99	24½"	1/4	460	0.26	5.7	4223	3785	3188	2036	—	—	—	—	—
		1/3	505	0.35	6.9	4637	4242	3761	3060	—	—	—	—	—
		1/2	585	0.55	9.1	5371	5031	4666	4195	3562	—	—	—	—
		3/4	660	0.79	11.8	6060	5757	5449	5094	4636	3217	—	—	—
		1	730	1.06	14.3	6702	6428	6158	5861	5507	4568	—	—	—
		1½	825	1.54	17.7	7575	7332	7092	6844	6574	5901	5002	—	—
		2	910	2.06	21	8355	8135	7916	7700	7467	6933	6240	5388	3707
		3	910	2.06	21	8355	8135	7916	7700	7467	6933	6240	5388	3707
5EFH9	26½"	1/2	465	0.54	10.4	6005	5570	5063	4484	3745	—	—	—	—
		3/4	520	0.75	11.3	6716	6324	5898	5413	4869	3008	—	—	—
		1	580	1.04	13.0	7491	7137	6775	6363	5912	4826	—	—	—
		1½	665	1.57	15.8	8588	8278	7979	7637	7274	6474	5465	3608	—
		2	735	2.13	18.3	9493	9212	8938	8652	8335	7649	6878	5916	4236
4YY10, 16D544	30½"	1/3	365	0.35	5.7	5912	5222	4340	—	—	—	—	—	—
		1/2	420	0.53	7.0	6803	6222	5537	4641	—	—	—	—	—
		3/4	475	0.77	9.6	7694	7197	6616	5955	5095	—	—	—	—
		1	530	1.07	12.2	8585	8150	7640	7094	6456	4195	—	—	—
		1½	600	1.55	14.9	9719	9334	8907	8446	7952	6721	—	—	—
		2	665	2.11	17.7	10,772	10,425	10,060	9648	9228	8269	7025	—	—
		3	760	3.15	21	12,311	12,007	11,704	11,357	10,997	10,242	9369	8293	6437
		5	890	5.09	28	14,416	14,157	13,898	13,639	13,335	12,716	12,073	11,379	10,536
5EFJ0	33½"	1	415	1.07	11.3	10,024	9401	8713	7927	7050	—	—	—	—
		1½	465	1.51	14.0	11,232	10,683	10,087	9425	8706	6966	—	—	—
		2	510	2.00	16.6	12,319	11,824	11,294	10,719	10,085	8696	6472	—	—
		3	590	3.09	21	14,251	13,825	13,376	12,908	12,408	11,307	10,081	8536	—
		5	700	5.17	27	16,908	16,549	16,185	14,987	15,408	14,564	13,624	12,640	11,538
4YY11	36"	1/2	325	0.56	6.8	8693	7830	6756	5001	—	—	—	—	—
		3/4	365	0.79	8.9	9763	9024	8109	7013	—	—	—	—	—
		1	410	1.12	11.9	10,966	10,330	9558	8686	7641	—	—	—	—
		1½	460	1.59	14.8	12,304	11,737	11,085	10,360	9568	7096	—	—	—
		2	505	2.09	17.3	13,507	12,991	12,431	11,795	11,096	9473	—	—	—
		3	580	3.18	22	15,513	15,064	14,614	14,077	13,523	12,289	10,813	—	—
		5	685	5.23	29	18,322	17,941	17,560	17,179	16,711	15,774	14,710	13,535	12,119
5EFJ1	42"	3	435	3.00	17.8	17,925	17,264	16,540	15,792	14,790	12,502	—	—	—
		5	515	4.98	23	21,222	20,663	20,081	19,459	18,826	17,162	15,254	12,312	—
		7½	600	7.87	30	24,725	24,245	23,765	23,243	22,709	21,621	20,104	18,585	16,590
4YY12	50"	1	214	1.04	8.7	17,245	14,939	12,242	—	—	—	—	—	—
		1½	245	1.54	11.0	19,743	17,749	15,481	12,983	—	—	—	—	—
		2	269	2.08	13.2	21,677	19,873	17,857	15,752	—	—	—	—	—
		3	308	2.96	16.9	24,820	23,263	21,627	19,752	17,903	—	—	—	—
		5	366	4.99	21	29,494	28,188	26,834	25,429	23,831	20,688	—	—	—
		7½	419	7.78	27	33,764	32,624	31,467	30,265	29,015	26,276	23,486	—	—
		10	460	10.26	32	37,068	36,030	34,991	33,900	32,805	30,342	27,917	—	—

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Dayton® Centrifugal Belt-Drive Downblast Exhaust Ventilators

With Drive Package, Assembled Performance

Model	Wheel Dia.	HP	Fan RPM	Max BHP	Sones @ .250 SP	CFM Air Delivery @ Static Pressure Shown								
						.000"	.125"	.250"	.375"	.500"	.750"	1.000"	1.250"	1.500"
1-PHASE, 115/208-230														
2RB59	11"	1/4	1710	0.13	11.0	373	353	335	312	292	246	198	—	—
2RB60	11	1/4	1710	0.19	12.1	856	821	785	748	710	630	511	—	—
2RB61	11	1/4	1710	0.25	13.2	1296	1238	1180	1122	1062	934	785	—	—
2RB62	11	1/3	1800	0.33	12.5	1526	1471	1419	1368	1321	1209	1065	793	—
2RB63	13¼	1/2	1725	0.50	17.0	2093	2038	1984	1928	1871	1743	1600	1426	1180
3HFL6A	14¾	1/4	1075	0.26	9.4	1994	1882	1771	1647	1490	—	—	—	—
2RB64A	14¾	1/2	1360	0.53	13.9	2523	2433	2347	2259	2166	1943	1602	—	—
3HFL7	16¾	1/2	1100	0.53	14.1	3249	3095	2943	2787	2615	2198	—	—	—
3GY70G	18½	1	1185	1.10	17.8	4608	4508	4401	4290	4179	3900	3575	3178	2499
3GY71G	21½	1½	1090	1.56	18.9	6032	5870	5682	5473	5301	4925	4450	3751	—
3HFL8	30½	1½	600	1.55	14.9	9719	9334	8907	8446	7952	7388	6721	5743	—
3-PHASE, 208-230/460														
3GY66G	18½"	1	1185	1.10	17.8	4608	4508	4401	4290	4179	3900	3575	3178	2499
3GY67G	21½	1½	1090	1.56	18.9	6032	5870	5682	5473	5301	4925	4450	3751	—
3GY68G	24½	2	910	2.06	21	8355	8135	7916	7700	7467	6933	6240	5388	3707
3GY69G	30½	3	760	3.15	21	12,311	12,007	11,704	11,357	10,997	10,242	9369	8293	6437
3HFL9	36	5	685	5.23	29	18,322	17,941	17,560	17,179	16,711	15,774	14,710	13,535	12,119

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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 fan. 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 fan, motor openings or drives while motor is connected to power source.

⚠ WARNING Do not use this equipment in explosive atmospheres unless motor and disconnect are suitable for use in hazardous environments.

1. Read and follow all instructions and cautionary markings. Make sure electrical power source conforms to requirements of equipment and local codes.
2. Ventilators 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) and the Occupational Safety and Health Act (OSHA) 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 ventilator is installed within 7 feet of floor or working level.

UL/cUL Standards require OSHA complying guards when ventilator is installed within 8 feet of floor or working level.

Models 2RB59 thru 2RB63, 2RB64A, 3GY66G thru 3GY71G, 3HFL6A, 3HFL7 thru 3HFL9, 4YU92 thru 4YU94, 4YU95A, 4YU96 thru 4YU99, 4YY10 thru 4YY12, 5EFH7 thru 5EFH9, 5EFJ0, 5EFJ1, 16D539 thru 16D544

General Safety Information (Continued)

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 ventilator running.
7. Motor must be securely and adequately grounded. This can be accomplished 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.

ROOF MOUNTING

NOTE: Mount unit with a Dayton roof curb (purchased separately).

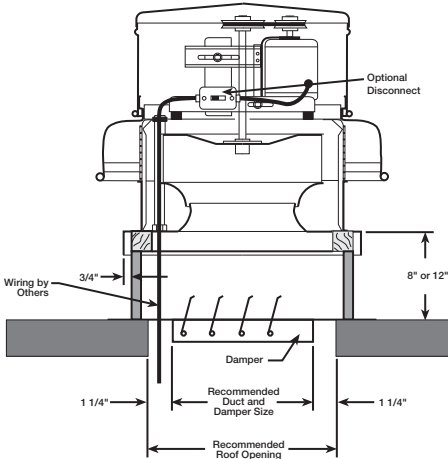


Figure 2 — Typical Roof-Mount

1. Cut an appropriate sized hole in the roof surface. Follow curb manufacturer's installation instructions. Caulk and flash curb to ensure a water tight seal.
 2. Install optional backdraft damper. Secure damper flange to curb damper tray.
 3. Remove motor cover by removing fasteners.
- CAUTION** Do not raise ventilator by its windband; use a sling or platform.
4. Use lifting lugs on the drive frame to lift and place the unit on top of curb. Refer to Figure 3.

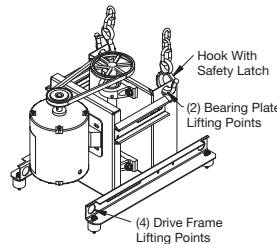


Figure 3 — Lifting Lugs on Drive Frame

5. Secure ventilator to roof curb using a minimum of eight fasteners.
6. Check ventilator wheel for free rotation.
7. Check all fasteners for tightness.
8. Mount and wire safety disconnect switch under ventilator cover and wire motor per connection wiring diagram on motor. See Electrical Connection, Figure 7. Wire control switches at ground level.
9. Replace motor cover.

MOTOR AND PULLEY MOUNTING

NOTE: For UL Listed units, the motor used with this fan must be designated as such by Dayton.

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

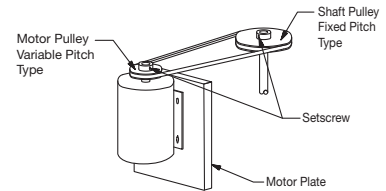


Figure 4 — Drive Package Diagram

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.

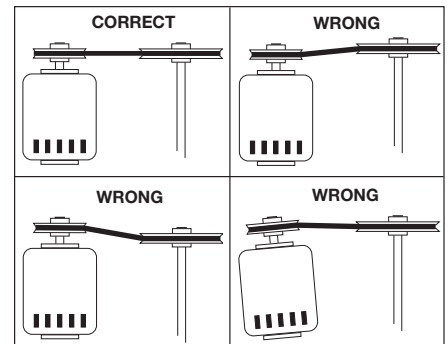


Figure 5 — Pulley Alignment

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.

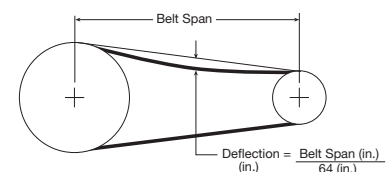


Figure 6 — Belt Tension

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Dayton® Centrifugal Belt-Drive Downblast Exhaust Ventilators

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Installation (Continued)

- 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.

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

▲ WARNING *Comply with all local and national safety codes including the National Electrical Code (NEC) and National Fire Protection Act (NFPA).*

NOTE: Motor and disconnect must be classified as hazardous for fan to be suitable for use in hazardous environments. Installation must be performed by a qualified personnel with suitable motor and disconnect for application.

NOTE: Refer to Figure 7 for connection wiring diagram.

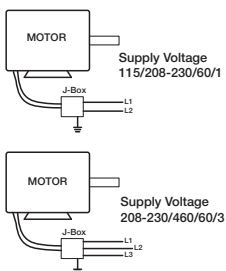


Figure 7 — Typical Wiring Diagram Operation

- Before starting up or operating your new Dayton ventilator, check all

fasteners for tightness. In particular, check to set screws in wheel hub (and sheaves, if applicable). While in the OFF position, or before connecting the ventilator to power, turn the fan wheel by hand to be sure it is not striking the orifice or any obstacle.

- Start the ventilator up and shut it off immediately to check rotation of the wheel with directional arrow in the motor compartment. Ventilator wheel should rotate **clockwise** when viewed from the top.
- When the ventilator is started, observe the operation and check for any unusual noises.
- With the system in full operation and all duct work attached, measure current input to the motor and compare with the nameplate rating to determine if the motor is operating under safe load conditions.

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

- Keep inlets and approaches to ventilator clean and free from obstruction.

Maintenance

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

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

- Keep inlets and approaches to ventilator clean and free from obstruction. Depending on the usage and severity of the contaminated air, a regularly scheduled inspection for cleaning the fan wheel, ventilator,

and surrounding areas should be established.

- Check for unusual noises when fan is running.
- Periodically inspect and tighten set-screws.
- Periodically check belts for wear and tightness.

NOTE: When replacing belts use the same type as supplied with the unit.

NOTE: 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.*

- Most ventilator bearings are pre-lubricated and require no further lubrication, check bearings.
- Follow motor manufacturer's instructions for motor lubrication.
- For disassembly of the motor or wheel, refer to the parts illustration.
- For critical applications, a spare motor and belts should be available.

RECOMMENDED RELUBRICATION FREQUENCY IN MONTHS

Operating Speed (RPM)	Shaft Dia. in Inches 1/2 to 1 1/2
Up to 500	6
500 - 1000	6
1000 - 1500	5

NOTE: If unusual environmental conditions exist - high temperature, moisture, or contaminants - more frequent lubrication is recommended. Any good quality lithium base grease conforming to NLGI Grade 2 consistency such as those listed here may be used.

Mobil 532	Texaco Multifak #2
Mobilux #2	Texaco Premium RB
B Shell Alvania #2	Unirex N2

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

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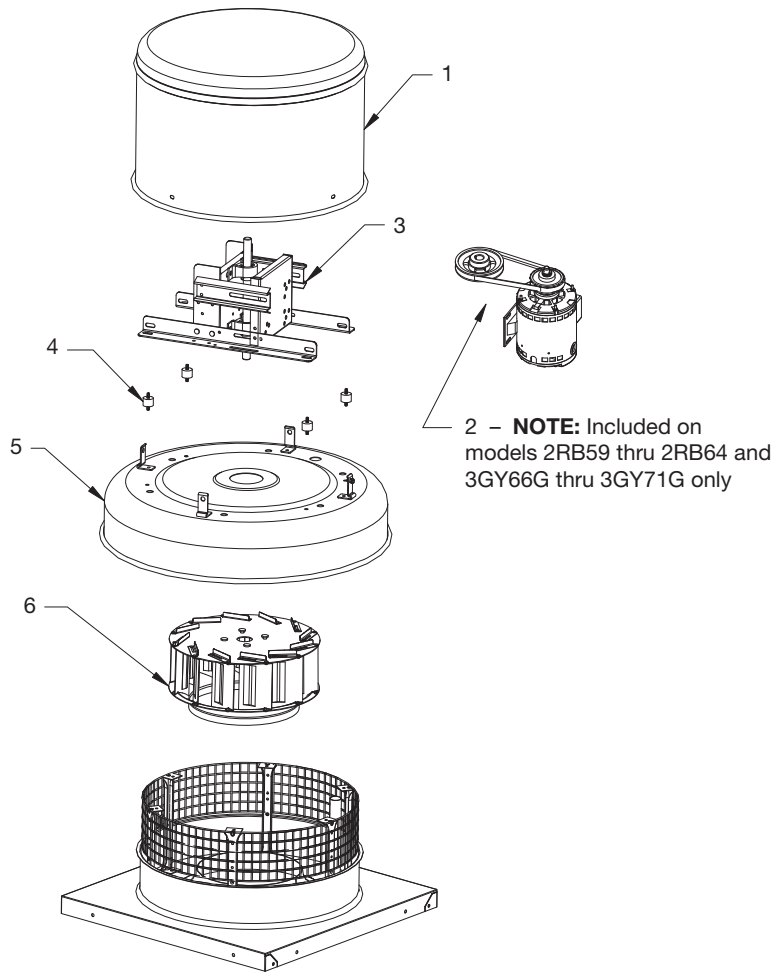


Figure 8 – Repair Parts Illustration for Centrifugal Belt-Drive Downblast Exhaust Ventilators

Models 2RB59 thru 2RB63, 2RB64A, 3GY66G thru 3GY71G, 3HFL6A, 3HFL7 thru 3HFL9, 4YU92 thru 4YU94, 4YU95A, 4YU96 thru 4YU99, 4YY10 thru 4YY12, 5EFH7 thru 5EFH9, 5EFJ0, 5EFJ1, 16D539 thru 16D544

Repair Parts List for Without Drive Package

Reference Number	Description	Part Number For Models:								Qty.
		4YU92	4YU93	4YU94	4YU95A	4YU96	4YU97	4YU98	4YU99	
1	Motor Cover	6366497	6366497	6366497	6366498	6366498	6366494	6366494	6366495	1
2	Drive Package	—	—	—	—	—	—	—	—	1
3	Drive Frame Assembly	6366418	6366418	6366419	6366420	6366420	6366421	6366421	6366512	1
4	Isolator Kit	6366403	6366403	6366403	6366403	6366403	6366406	6366406	6366406	1
5	Shroud	6366369	6366369	6366369	6366370	6366370	6366447	6366447	51E090	1
6	Wheel	6366395	6366393	6366385	53J569	6366465	6366461	6366462	6366464	1

Reference Number	Description	Part Number For Models:								Qty.
		4YY10	4YY11	4YY12	5EFH7	5EFH8	5EFH9	5EFJ0	5EFJ1	
1	Motor Cover	6366496	6366499	6366505	6366497	6366495	6366496	6366499	51E094	1
2	Drive Package	—	—	—	—	—	—	—	—	1
3	Drive Frame Assembly	6366513	6366514	6366515	51E088	6366489	6366511	51E092	51E095	1
4	Isolator Kit	6366408	6366408	6366408	6366403	6366406	6366406	6366408	6366408	1
5	Shroud	51E091	51E093	6366478	51E089	51E090	51E091	51E093	51E096	1
6	Wheel	6366481	6366482	6366480	6366463	51E097	51E098	51E099	51E100	1

Reference Number	Description	Part Number For Models:						Qty.
		16D539	16D540	16D541	16D542	16D543	16D544	
1	Motor Cover	6366497	6366497	6366497	6366498	6366498	6366496	1
2	Drive Package	—	—	—	—	—	—	1
3	Drive Frame Assembly	6366418	6366419	51E088	6366420	6366420	6366513	1
4	Isolator Kit	6366403	6366403	6366403	6366403	6366403	6366408	1
5	Shroud	6366369	6366369	51E089	6366370	6366370	51E091	1
6	Wheel	6366393	6366385	6366463	53J569	6366465	6366481	1

Repair Parts List for With Drive Package, Assembled

Reference Number	Description	Part Number For Models:								Qty.
		2RB59	2RB60	2RB61	2RB62	2RB63	2RB64A	3GY66G	3GY67G	
1	Motor Cover	6366497	6366497	6366497	6366497	6366497	6366498	6366494	6366494	1
2	Drive Package	—	—	—	—	—	—	—	—	1
	Motor	1AGG1	1AGG1	1AGG1	1AGG2	1AGG3	1AGG3	4YU38	4YU39	1
	Driver Sheave	3X274	3X274	3X274	3X274	3X264	3X264	3X263	3X264	1
	Belt	4L220	4L220	4L220	4L220	4L230	4L250	3VU43	6A139	1
	Driven Sheave	3X779	3X779	3X779	3X888	3X779	3X786	3X845	3X791	1
3	Drive Frame Assembly	6366418	6366418	6366418	6366418	6366418	6366420	6366421	6366509	1
4	Isolator Kit	6366403	6366403	6366403	6366403	6366403	6366403	6366406	6366406	1
5	Shroud	6366369	6366369	6366369	6366369	6366369	6366370	6366447	6366447	1
6	Wheel	50B880	50B880	6366395	6366393	6366385	53J569	6366461	6366462	1

Reference Number	Description	Part Number For Models:								Qty.
		3GY68G	3GY69G	3GY70G	3GY71G	3HFL6A	3HFL7	3HFL8	3HFL9	
1	Motor Cover	6366495	6366496	6366494	6366494	6366498	6366498	6366496	6366505	1
2	Drive Package	—	—	—	—	—	—	—	—	1
	Motor	4YU40	6XWJ0	4YU30	4YU31	1AGG1	1AGG3	4YU31	53J909	1
	Driver Sheave	3X264	3X945	3X263	3X264	3X274	3X264	3X494	3X400	1
	Belt	6A116	1A105	3VU43	6A139	4L280	4L280	3X704	3X546*	1
	Driven Sheave	3X795	3X805	3X845	3X791	3X592	3X591	3X609	3X571	1
	Driven Bushing	—	—	—	—	3X573	3X573	3X576	3X579	1
3	Drive Frame Assembly	6366510	6366511	6366421	6366509	6366420	6366420	6366513	6366515	1
4	Isolator Kit	6366406	6366408	6366406	6366406	6366403	6366403	6366408	6366408	1
5	Shroud	51E090	51E091	6366447	6366447	6366370	6366370	51E091	51E093	1
6	Wheel	6366464	6366481	6366461	6366462	53J569	6366465	6366481	6366482	1

(*) Two belts are required for model 3HFL9.

Dayton® Centrifugal Belt-Drive Downblast Exhaust Ventilators

Trouble Shooting Chart

Symptom	Possible Cause(s)	Corrective Action
Ventilator Inoperative	<ol style="list-style-type: none"> 1. Blown fuse or breaker 2. Defective motor 3. Incorrectly wired 4. Broken belts 	<ol style="list-style-type: none"> 1. Replace or repair 2. Replace or repair 3. Shut power OFF and check wiring for proper connections 4. Replace
Insufficient airflow	<ol style="list-style-type: none"> 1. Blocked duct or clogged filters 2. Speed too slow 3. Damper closed 4. Belt slippage 5. Incorrect wheel rotation 6. Loose fitting duct sections permitting air loss 	<ol style="list-style-type: none"> 1. Clean or replace 2. Check for correct drives 3. Inspect/repair 4. Replace/adjust tension 5. Check motor wiring 6. Check for secure connection where duct sections are joined (suggest duct tape at seams for sealed closure)
Excessive noise or vibration	<ol style="list-style-type: none"> 1. Belt(s) too loose/tight 2. Loose or defective bearings 3. Loose wheel or sheaves 4. Accumulation of material on wheel 5. Mis-aligned sheaves 6. Ventilator base not securely anchored 7. Motor hood loose and rattling 8. Fan wheel out of balance 	<ol style="list-style-type: none"> 1. Adjust tension 2. Replace bearings 3. Tighten set screws 4. Clean 5. Re-align 6. Secure properly 7. Tighten acorn nuts securing motor hood 8. Replace wheel
Motor overloads or overheats	<ol style="list-style-type: none"> 1. Wheel RPM too high 2. Shorted motor winding 3. Incorrect wheel rotation 4. Over/Under line voltage 5. Belt slippage 	<ol style="list-style-type: none"> 1. Check drives 2. Replace motor 3. Check motor wiring 4. Contact Power Co. 5. Tighten belt

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