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Advantage Installation Instructions for Wide Tunnels

Scan to see
Video Instructions

GENERAL:

- Refer to attached Footprint for your System.
- All measurements are from Outer Dimension (O.D.) of floor flange at base of Intake.
- Always install provided Stainless washers on each side of bolted connections.
- Concrete Anchors furnished by Customer. See page 4.

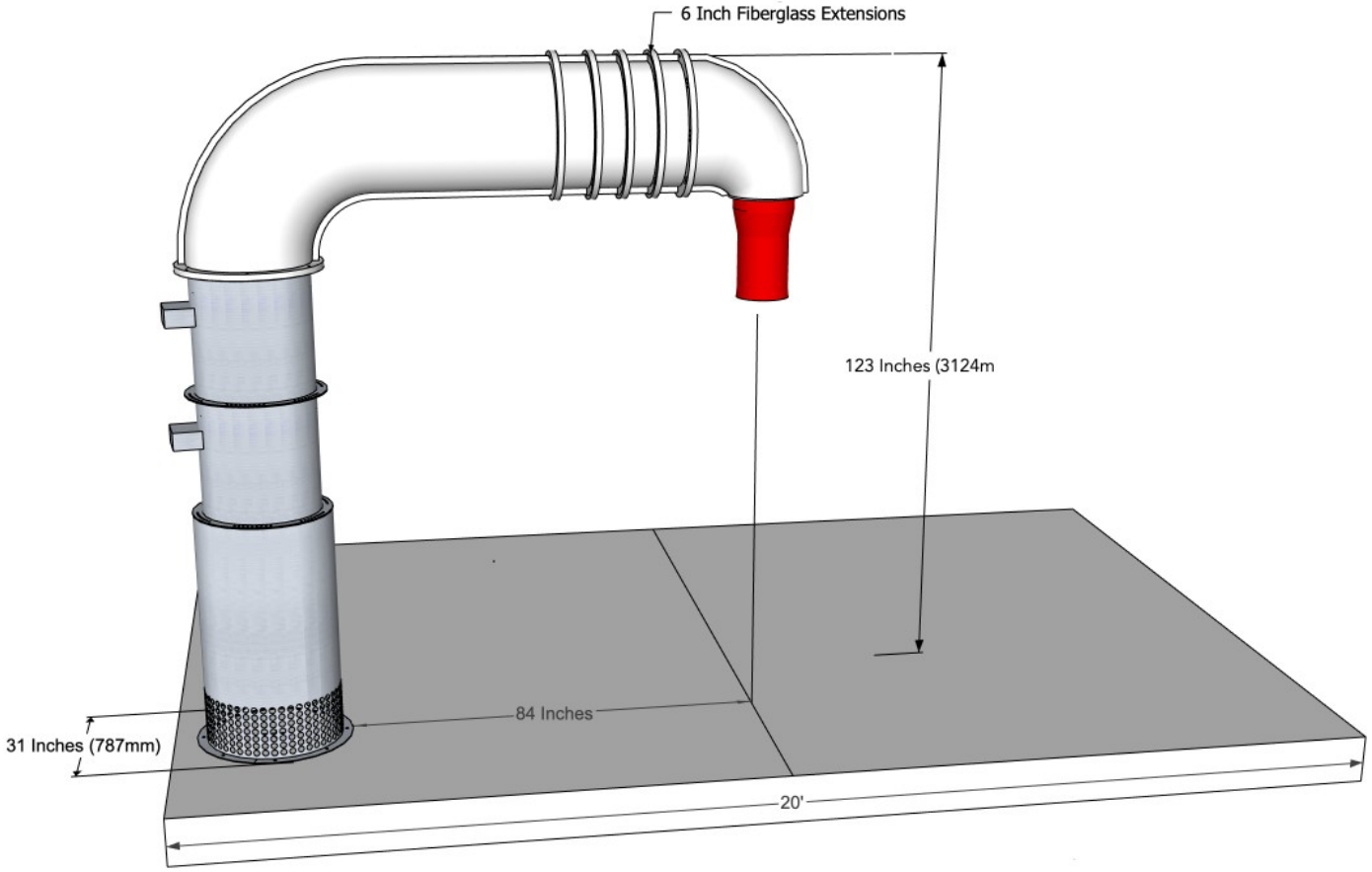
TOP DUCT(s): Find centerline of wash system

- Set Intake eighty-four (84) inches from centerline of wash, measured from the O.D. of floor flange. Place domed fiberglass plate under intake. Shim to level and secure by at least one (1) anchor during testing.
- Gasket, then bolt each Fiberglass Extension plus Outlet to fiberglass arm, lining up seams*.
- Lift assembled Fiberglass Outlet and bolt to stainless air producer(s).
- Lift completed assembly (fiberglass & air producers) onto Intake. Locate marked holes on Intake & line up with corresponding holes on Air Producer. Secure w/6 Stainless bolts and washers.
- Attach Large Silicone Nozzle to outlet using two (2) assembled worm gear clamps.
- Complete electrical connection. See Page 3. Wash & dry cars and adjust outlet slant.
- After all adjustments are made, install remaining floor anchors and hardware to secure each connection with six (6) sets of Stainless hardware

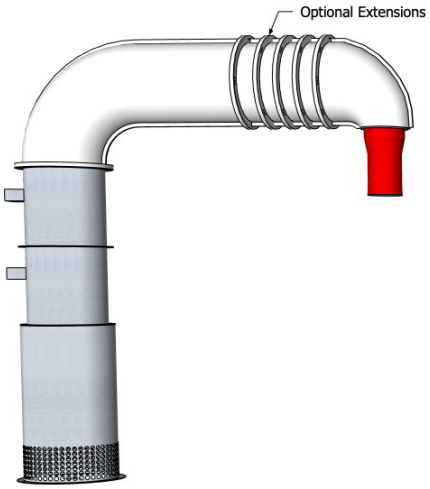
*Suggest slanting short fiberglass outlet on 1st overhead toward Entrance and slanting last overhead toward Exit using hole pattern in fiberglass. See Trimming on Page 4.

SIDE COLUMNS:

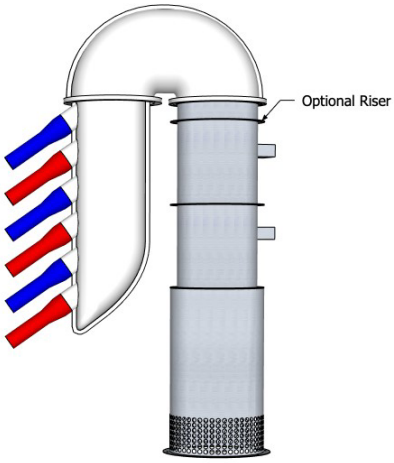
- Set Intake for passenger Side Column 1 – 2 feet from the Intake for the top duct and eighty-four (84) inches from Centerline of wash. Place domed fiberglass plate under intake. Shim to level and secure by at least one (1) anchor during testing.
- Lift Air Producer(s) assembly as shipped onto intake. Locate marked holes on Intake & line up with corresponding holes on Air Producer. Secure w/6 Stainless bolts washers.
- Lift Fiberglass Elbow to Air Producer assembly, perpendicular to conveyor with open end toward Centerline. Secure w/minimum four (4) Stainless bolts and washers.
- Apply gasket to Outlet Component, then use minimum four (4) heavy C-clamps to fasten outlet component to elbow. Angle back toward Entrance.
- Repeat steps for driver's Side Column.
- Attach flexible Silicone Nozzles with worm gear clamps. See Trimming on Page 4.
- Complete electrical connection. See Page 3. Wash & dry cars and adjust outlet angles.
- Replace C-clamps and secure Outlet Component with minimum four (4) sets of Stainless bolts/washers. Additional holes may be drilled through fiberglass flanges.
- After all adjustments are made, install remaining floor anchors and hardware to secure each connection with six (6) sets of stainless hardware



DIMENSION AND WEIGHT REFERENCE



Top Duct:
Height: 10 feet 3 inches (314.42cm)
Weight: Single 15 HP Tower: 800 lbs (363 kg)
Dual 15 HP Tower (30 HP): 1150 lbs (522 kg)



Advantage Side:
Height 10 feet 3 inches (314.42cm)
Weight: Single 15 HP Tower: 850 lbs (385 kg)
Dual 15 HP Tower (30 HP) 1175 lbs (533 kg)

Base Side:
Height: 8 feet 3 inches (251.46 cm)
Weight: 600 lbs (272 kg)

15 hp Motor Technical Data & Installation Requirements

Customer's qualified electrician provides materials and installs 3-phase power to motors through properly sized 3 pole circuit breakers & motor starters/VFDs with thermal overloads. Insure connections are grounded.

Customer's electrician to provide materials & install power from programming equipment (start-stop system) to the actuation controls for each motor.

Programming equipment should be set to stagger-start the individual motors.

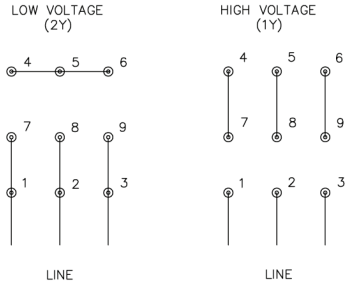
ENSURE ALL MOTORS ARE PROPERLY WIRED FOR THE SUPPLY VOLTAGE!

DO NOT USE WIRE NUTS OF ANY KIND.
WARRANTY WILL BE VOID.

SPLIT BOLT, NSI CONNECTORS OR SIMILAR COVERED WITH INSULATION TAPE AND RUBBER INSULATOR BOOTS ARE REQUIRED.

ABB SPEC	07K090R841G2
HP	15 HP TEAO
VOLTS	208 - 230 / 460
FLA *	36.4 - 33.8 / 16.9
RPM	3500
FRAME	254TZ HZ 60 PH 3
SER. F.	1.15
CLASS	F
NEMA NOM EFF	91% P.F. 90%

WIRING DIAGRAM



INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.

* At 60 Hz, you may find the Aerodry Fan is not drawing Full Load Amps. This depends on the strength of your facility service.

MOTOR ROTATION:
Start each individual motor independently insuring air flow is exiting outlet nozzles.

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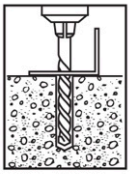
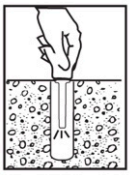
1/2" Redhead®
Trubolt Wedge Anchors

INSTALLATION STEPS



1. Select a carbide drill bit with a diameter equal to the anchor diameter. Drill hole to any depth exceeding the desired embedment. See chart for minimum recommended embedment.



2. Clean hole or continue drilling additional depth to accommodate drill fines.

3. Assemble washer and nut, leaving nut flush with end of anchor to protect threads. Drive anchor through material to be fastened until washer is flush to surface of material.

4. Expand anchor by tightening nut 3-5 turns past the hand tight position, or to the specified torque requirement.

**** ONLY FOR USE IN CONCRETE****

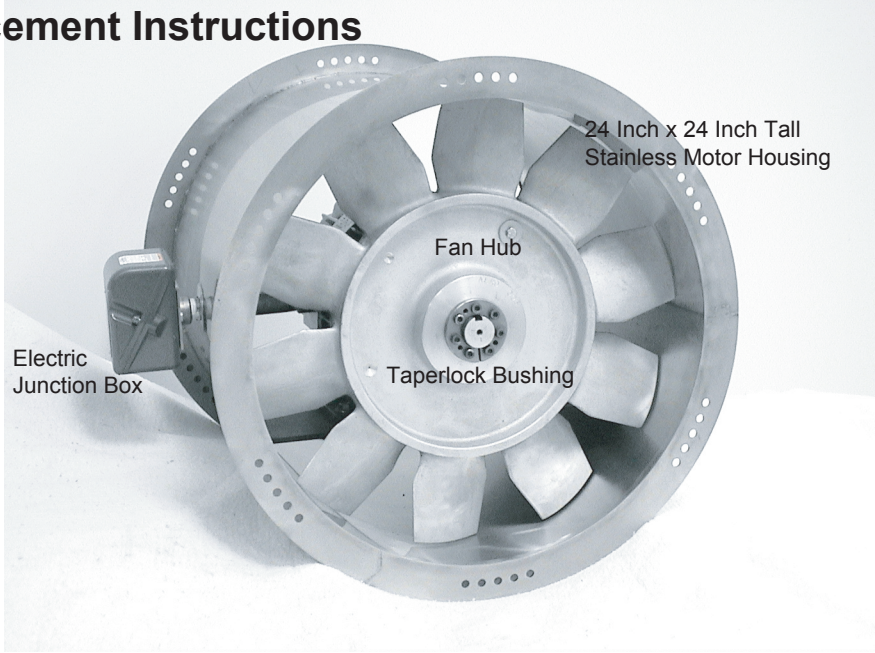
*Ultimate Tension and Shear Values (Lbs/kN) in Concrete**

ANCHOR DIA. In. (mm)	INSTALLATION TORQUE Ft. Lbs. (Nm)	EMBEDMENT DEPTH In. (mm)	ANCHOR TYPE	f'c = 2000 PSI (13.8 MPa)		f'c = 4000 PSI (27.6 MPa)		f'c = 6000 PSI (41.4 MPa)	
				TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)	TENSION Lbs. (kN)	SHEAR Lbs. (kN)
1/2 (12.7)	55 (74.6)	2-1/4 (57.2)	WS-Carbon or WS-G Hot-Dipped Galvanized WW-304 S.S. SWW-316 S.S.	4,660 (20.7)	4,760 (21.2)	5,100 (22.7)	4,760 (21.2)	7,040 (31.3)	7,040 (31.3)
		4-1/8 (104.8)		4,660 (20.7)	7,240 (32.2)	9,640 (42.9)	7,240 (32.2)	10,820 (48.1)	8,160 (36.3)
		6 (152.4)		5,340 (23.8)	7,240 (32.2)	9,640 (42.9)	7,240 (32.2)	10,820 (48.1)	8,160 (36.3)

Housekeeping & Routine Checks:

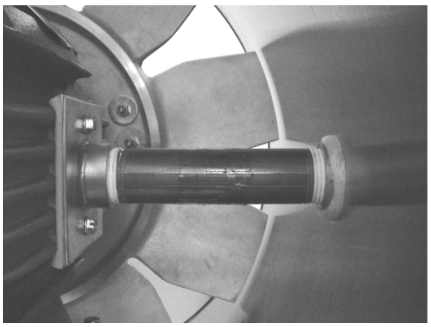
- ⇒ Remove excess paper from stainless and polish with damp cloth or stainless steel cleaner. *DO NOT USE CAUSTIC or ACID BASE SOLUTIONS*.
- ⇒ Clean fiberglass with gentle cleansers and damp cloth, then shine with liquid wax.
- ⇒ Keep air intakes clean and free of debris.
- ⇒ Routinely check electrical connections at exterior junction box.
- ⇒ Motors are sealed and do not require maintenance or greasing.
- ⇒ Trimming of Individual Nozzles: If nozzles are contacting the vehicles, air flow is obstructed, plus nozzle folding and damage may occur. When the air is impeded, nozzle splits/holes or bursting will develop from air volume and pressure. These holes will reduce air flow and can cause fluttering and noise. Observe and determine the correct amount of trim for the center nozzle to avoid contacting tall vehicles; then trim side nozzle(s), if necessary, with focus on nozzles contacting Truck mirrors.

Motor Replacement Instructions



1. Unbolt and remove ductwork above air producer (refer to weight reference contained in Installation Instructions).
2. Place housing on its side.
3. Loosen and remove taperlock bushing from fan hub. (6 mm bolts of Taperlock secure fan to motor shaft.)
4. Tip housing so fan is facing the floor.
5. Tap gently on back of **Fan Hub, *not* Fan Blades**, to remove fan from motor shaft.
6. Remove junction box and steel nipple by turning counter clockwise.
7. Remove motor mount bolts from footplate of motor. Remove motor.
8. *Remove and save pipe nipple along with both 4 inch square stainless plates with nut (one is bolted to motor and one is bolted to back of junction box.*

A) Remove junction box from new motor.
B) Install saved 4 in square stainless plates - one bolts to motor where junction box was located and one bolts to back of junction box. New bolts, nuts and washers provided.
C) Place new motor on housing motor plate lining up holes in motor footplate with holes on housing plate.
D) Place all four (4) bolts with nuts. Do not tighten at this time.
E) Place fan on motor shaft and insert new taperlock bushing.
F) **Tighten new taperlock bushing (6 mm) following bushing manufacturer's instructions attached here (30 ft-lbs).**
G) Center fan and motor and insert steel nipple with junction box attachment, while making sure fan is centered in housing.
H) **Tighten all four (4) bolts in footplate.**
I) Check free rotation by manually spinning fan in clockwise direction.
J) Refer to Installation Instructions to re-install complete air producer.



WIRE NUTS ARE NOT RELIABLE **to connect 3 Phase wiring at the Electric Motor Terminal Box. Split Bolt or NSI Connectors or Similar are required to maintain Warranty (see examples above). Cover with Electric Insulating Tape and Rubber Insulator Boots.**

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