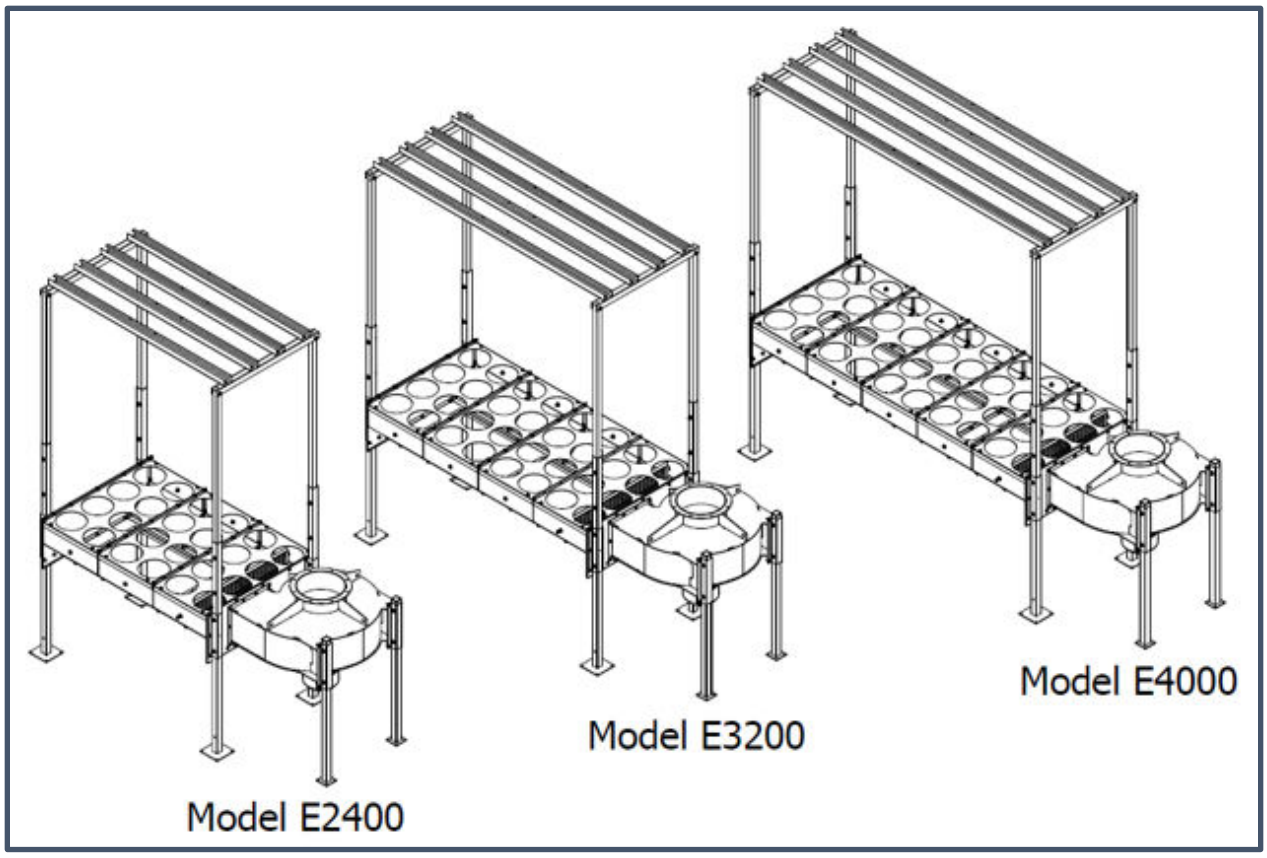
ENTECCO USA
filter technology

E SERIES DUST COLLECTOR

Installation Manual



 (2021-09)

CONGRATULATIONS…

…on your purchase of an ENTECCO E Series dust collector for use in your woodworking shop. This unit will provide you years of service. Units will arrive wrapped as shown below. Installation is quick – your unit will be up and running in just a few hours.

From stretch-wrap to suction in less than two hours!

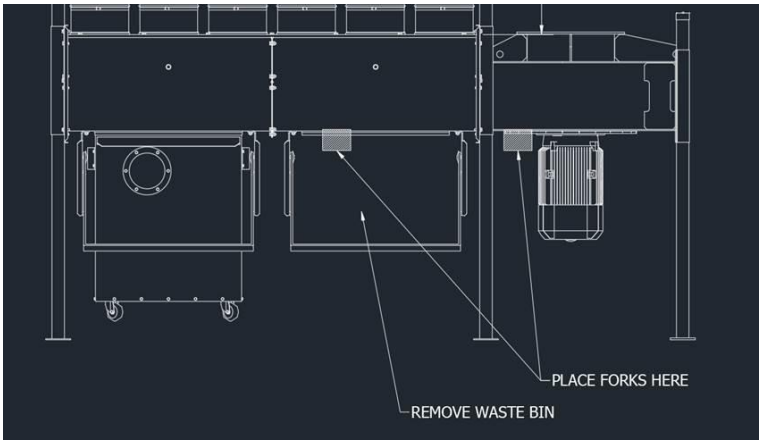
MECHANICAL INSTALLATION

SAFETY FIRST!! Your new dust collector is manufactured of galvanized steel and has sharp edges. Wear gloves and safety glasses. Use common sense and be careful. The unit weighs up to 4,000 lbs, so be careful when lifting and setting.

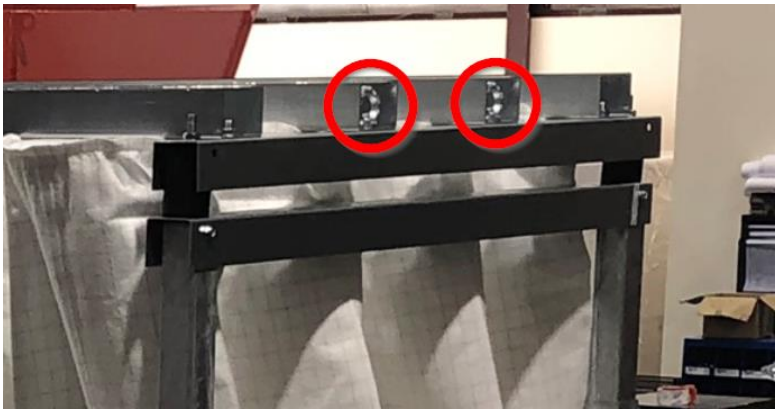
When unloading and moving the palletized unit, lift ONLY from the end with the fan. This is where the weight is. Use fork extensions for stability.

Remove the stretch wrap and cut the bands. Remove the totes or dump bin.

Lift the unit from the long side with the forks positioned as shown below. Each fork should have a wood block or blocks on top to avoid metal-to-metal contact. The fork under the fan will need to be shimmed to level the lift. Units with an airlock have different lift points. Set the filter in the desired location and use 3/8" x 4" anchor bolts with washers to lock its position to the ground. We recommend threaded anchor bolts as shown below.



The next step is to lift the upper frame. First, thread straps through the four eyebolts on the top of the unit.



Before lifting the frame, remove two bolts from each corner (see below). Keep them handy as they will be reinstalled after the frame is lifted.

Lift the frame with your forklift until the bags are tight and the upper bolt holes line up. Replace and tighten the bolts on each corner. Remove the lifting straps.

Return the totes under the filter. Push down the blue levers to seal them to the hopper.

Connect duct from the fan inlet back to your machinery.

If you need assistance, call ENTECCO's Service Manager at 336-989-3124 for support.

DUMP BIN INSTALLATION

If you purchased the dump bin with your unit, there are additional installation steps. The collars under the filter are fixed. There are two adjustable collars that mount to the top of the dump bin. These collars ship loose in the bin.

1. Slide the collars into place with the rolled lip up.

2. Roll the bin under the filter and slide the collars up into position.
3. Clamp the collars together.
4. Use a second clamp to lock the adjustable collar in place.

If you did not purchase this 1.5 cubic yard bin with your unit, it is easy to upgrade your unit in the field to give you more time between dumpster runs. Contact ENTECCO Sales at 336-989-3012.

AIRLOCK INSTALLATION

The airlock discharge is permitted when the dust collector is installed outdoors. There are two common arrangements.

1. Install the dust collector on our 3’ leg extensions to provide additional clearance under the airlock for a waste container. Fasten one end of the polyurethane chute to the airlock discharge. Cut the chute to the desired length. Attach the lower flange to pull the chute tight.
2. Alternatively, a transfer tube can be installed under the airlock so that the dust can be pneumatically conveyed to a covered container or into a central dust collector.

ELECTRICAL INSTALLATION

SAFETY FIRST!!

FAN

Every filter ships with a fan powered by an electric motor. These motors can be controlled with a direct starter, soft start, or variable frequency drive. The wiring diagram is inside the starter cover. It is good practice to bump the fan to check for proper rotation as part of the electrical installation. Be sure your electrician uses adequate wiring and fuses for the higher in-rush current.

Fan hp	FLA		
	460V	230V	208V
7.5	11	22	24.3
10	14	28	31
15	19	38	42
20	27	54	59.7
OPTIONAL			
0.1 (VCD)	0.18	0.35	0.39
0.75 (Airlock)	1.25	2.5	2.75

VIBRATORY CLEANING DEVICE

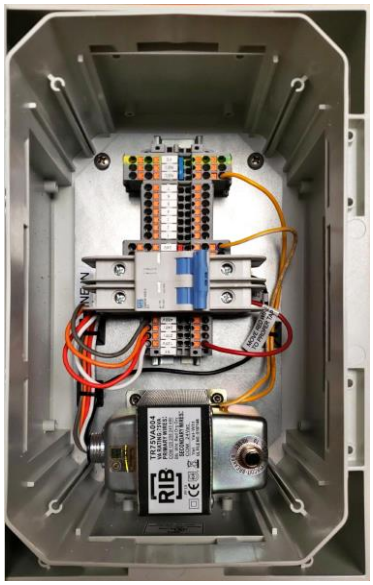
If you purchased a Vibratory Cleaning Device, it will already be installed on top of the unit with rubber isolators at the top of each leg. It also includes a momentary starter for the specified voltage. Wiring instructions are inside the starter cover.

If your configuration includes the rotary airlock, there will be a separate direct starter for the specified voltage. Wiring instructions are inside the starter cover.

 (2021-09)

AUTOMATIC GATES

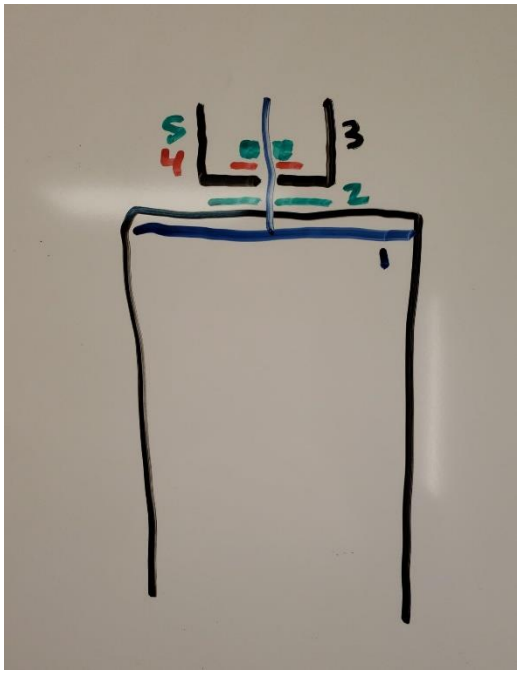
Automatic gates can be controlled by a current sensor that is clipped over the electric supply to the machine. Clip the sensor over the motor that you want to open the gate. This may be a spindle or belt conveyor. Follow the instructions on the sensor. It can be adjusted so that the gate only opens when a threshold amperage is reached. Pneumatic tubing is run from plant compressed air to the gate. 24 VAC signal from the controller to the solenoid at the gate opens and closes the gate. Wiring from the current sensor to the controller carries that signal.



PRESSURE TRANSDUCER KIT

The PTK is recommended with the Variable Frequency Drive (VFD) and automatic gates. If you purchased the PTK, first drill a ¼" hole in the duct above the fan inlet and install the brass barb. The plastic tubing is run back to the Dwyer Pressure Transducer to measure the inlet pressure that will be the control variable. The unit is powered by 24 VDC and a 4-20mA signal is carried back to the VFD to adjust the frequency to meet the target pressure.

INSTALLING FILTER BAGS



The dust collector arrives with the filter bags installed. When it is time to replace the filter bags, you can remove them and install a new set of bags according to the steps below. The first five steps are shown in the illustration to the right.

1. Insert the metal plate into the bag. Feed the threaded bolt through the hole in the closed end of the bag.
2. Add the flat washer.
3. Feed the threaded bolt through the hole in the upper frame.
4. Add the star washer.
5. Fasten the nut onto the bolt to hold the filter up.
6. Snap the snapband into the tubesheet hole directly below. This step is made easier by removing the corner bolts and temporarily lowering the upper frame to its shipping position.
7. Line up the vertical seam on the bag so that it is not twisted.
8. Repeat for up to 40 bags.