CDC

Cartridge Collectors Parts / Instructions Supplement

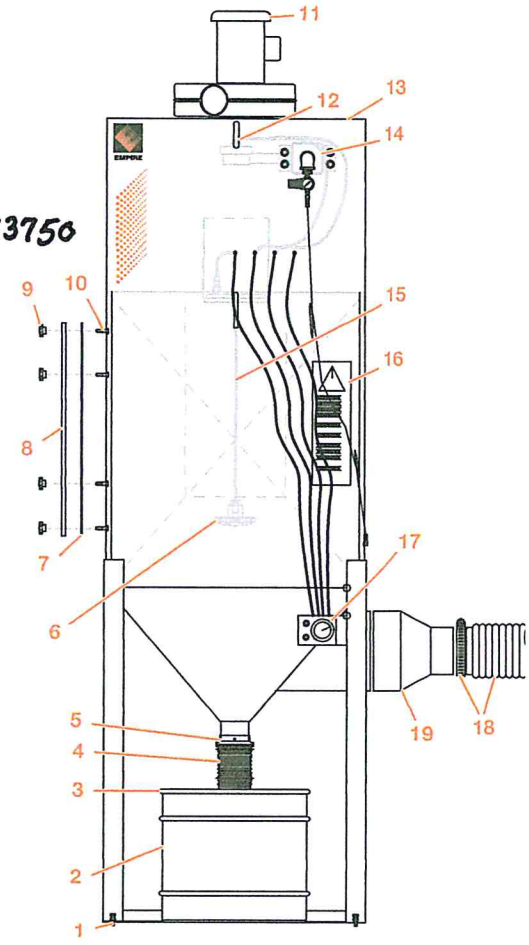
Guide to Part Numbers

For CDC-6 (PN 113007), CDC-9 (PN 113011) & CDC-12 (PN 113013)

"CDC" SERIES COMPONENTS		
Item	**Description**	**PART#**
1	Bolt, leveling, ⅜" - 16 x 2" (4 required)	553892
2	16 gallon drum	504016
3	Lid for 16 gallon drum	850099-1
	Gasket, dust drum lid, 5' (not shown)	800166
4	GUM TUBE ~~Dust hose~~, 4" ~~(specify length)~~ x 8"LG	~~522923~~ 523750
5	Hose clamp, 4" (2 required)	520531
	16 gallon drum assembly (includes items 2 through 5)	113015
6	Filter clamping screw	515526
7 †	Gasket, access door, ⅝" x ⅝", 103" section	525711
	Gasket, ⅝" x ⅝" (specify length)	525061
8	Access door, dust collector	760851
9	Knob, ⅜" - 16 (6 required)	510461
10	Bolt, ⅜" - 16 x 1¼" (6 required)	551852
	Empire logo	564305
11	Blower and blower motors ***(See page A45.)***	—
12	Diaphragm valve (2 required)	516350
	Top plate, CDC-6	760901
13	Top plate, CDC-9	760901
	Top plate, CDC-12	760187
14	Air supply assembly	140851
15 *	Cartridge filter (2 required)	515525
16	Decal, Instruction/Warning	567405
17	Mini-Helic package	550450
18	Ducting and adapters ***(See page A46.)***	—
19	Adapter, 10" ID x 6" OD for CDC-6	761801

* Recommended spare part—Consumable wear item

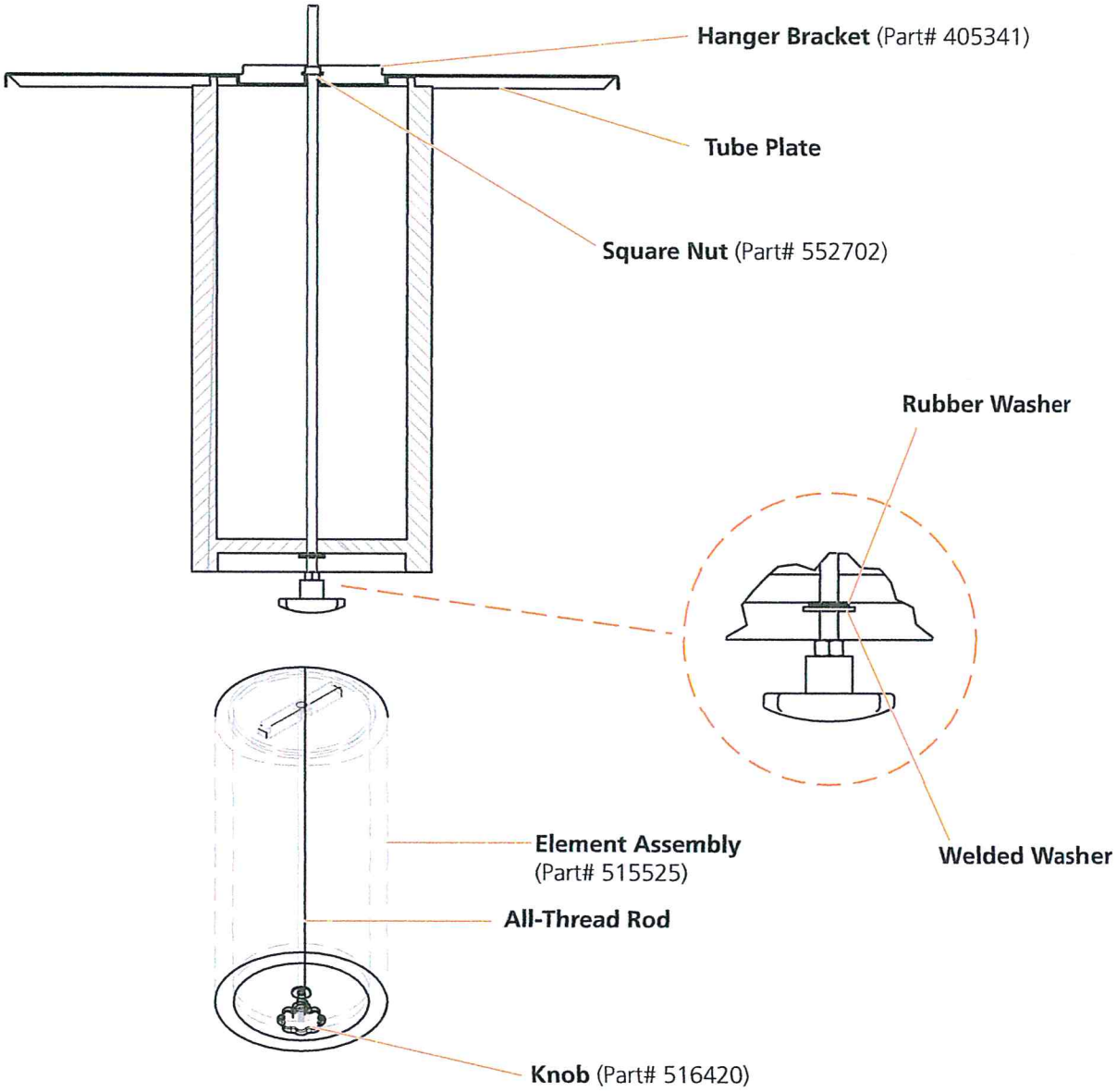
† Essential component to prevent downtime



Cartridge Dust Collector Options

	PART NUMBERS		
	FACTORY INSTALLED	**CUSTOMER INSTALLED**	**SEE PAGE**
HEPA filter captures very fine particles.	140215	140215	—
HEPA filter, pressure differential gauge assembly informs operator regarding filter cleanliness.	140221	140221	—
Leg extension kit raises collector so larger collection drum can be placed underneath.	140185	140185	—
Lid assembly for 55 gallon drum attaches securely to clean-out door.	140155	140155	A65
Photohelic cartridge cleaning improves system performance, saves operator time.	140900	140900	A66
Sound attenuator/damper reduces noise in the work place.			
Attenuator/damper for CDC-6	140361	140361	—
Attenuator/damper for CDC-9	140769	140769	—
Attenuator/damper for CDC-12	140680	140680	—

Cartridge Filter Replacement



Step 1. Remove the square nut from the threaded rod.

Step 2. Push the rubber washer down on top of the welded steel washer at the knob end.

Step 3. Thread the square nut onto the rod until it is flush with the end of the rod.

Step 4. While holding the cartridge filter and rod, insert the square nut into the center of the support bracket in the round hole in the tube plate.

Step 4. Turn the knob clockwise while holding the filter straight until the filter gasket makes contact with the tube plate.

Step 5. Tighten the knob until the gasket is compressed 50%.

NOTE:
Do **NOT** remove the filters from the dust collector unless you intend to replace them.

CDC Filter Efficiency Guidelines

Proper Operation of Empire Cartridge Dust Collectors.

When the dust collector is shipped from the factory, the filters are new and clean. The filters do not reach their maximum filtering efficiency until they develop a dust cake on the dirty side of the filters, bag or cartridge, this is called seasoning. The filters pass greater volumes of air when new and unseasoned.

We know that when the filters reach 2 inches (water column) that they are seasoned and at the rated efficiency for filtration. Empire systems are designed to permit the filters to build up additional dust until the pressure drop across the filters is 4 inches (water column). At 4 inches the filters should be cleaned back to the 2 inch pressure to ensure that the highest filtration efficiency is maintained.

When cartridge filters are seasoned, at 2 inches, their weight can increase to 50 - 70 lbs. depending on the type of dust. There is more damage done to filters by removing them from the collector and dropping them and damaging the paper filter media by blowing the filters off or by hitting them to remove dust.

"Rules for Cartridge Filters"

Watch the dust collector gauge for the condition of the filters and **never** remove filters unless installing new Empire filters. Do not substitute brands of filters, they may be less expensive but they do not function with the same efficiency as Empire filters.

CDC MANUAL FILTER CLEANING

Manual Pulse Jet Cleaning:

(Standard)

Filter elements are cleaned manually and should be done sequentially so that only one filter cartridge is off-line for cleaning at any given time.

To Activate Pulse:

1. Confirm ¼" airline from pipe string to pressure regulator (located on side of unit) is connected.
2. Adjust pressure regulator to 40-50 psi max.
3. Press and release the left (top) button, wait 5 seconds and press and release right (bottom) button.
4. Filters require cleaning only when the Minihelic gauge reads 4 inches water gauge. Continue cleaning until gauge reads 2 inches water gauge

During the filter element cleaning process, a diaphragm valve opens and sends a pulse of compressed air through the filter element from the inside outward. Excess collected dust and contaminates are forced away from the filter's surface and fall into the storage container.

CDC Photohelic Controlled Filter Cleaning
Automatic Pulse Jet Cleaning:
(Optional)

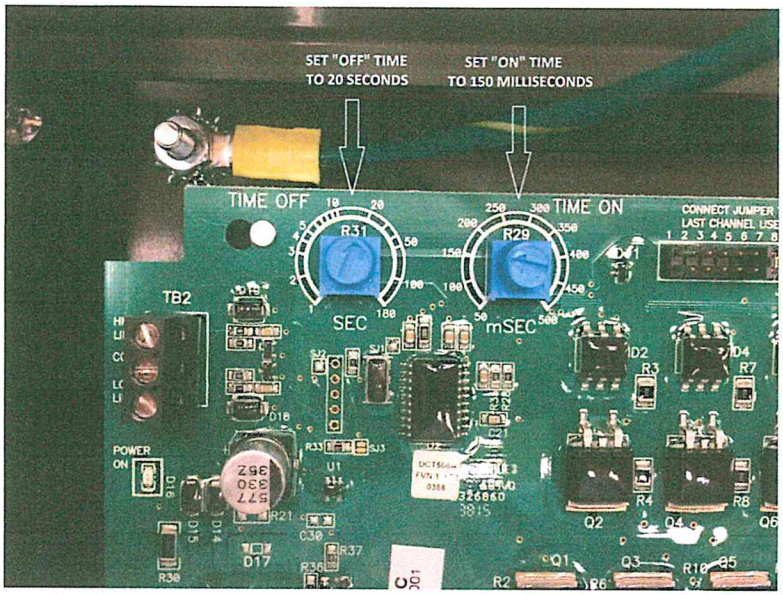
Filter elements are cleaned automatically and will be cleaned sequentially so that only one filter cartridge is off-line for cleaning at any given time. During the filter element cleaning process, a diaphragm valve opens and sends a pulse of compressed air through the filter element from the inside outward. Excess collected dust and contaminates are forced away from the filter's surface and fall into the storage container.

To Activate Automatic Pulse Cleaning:

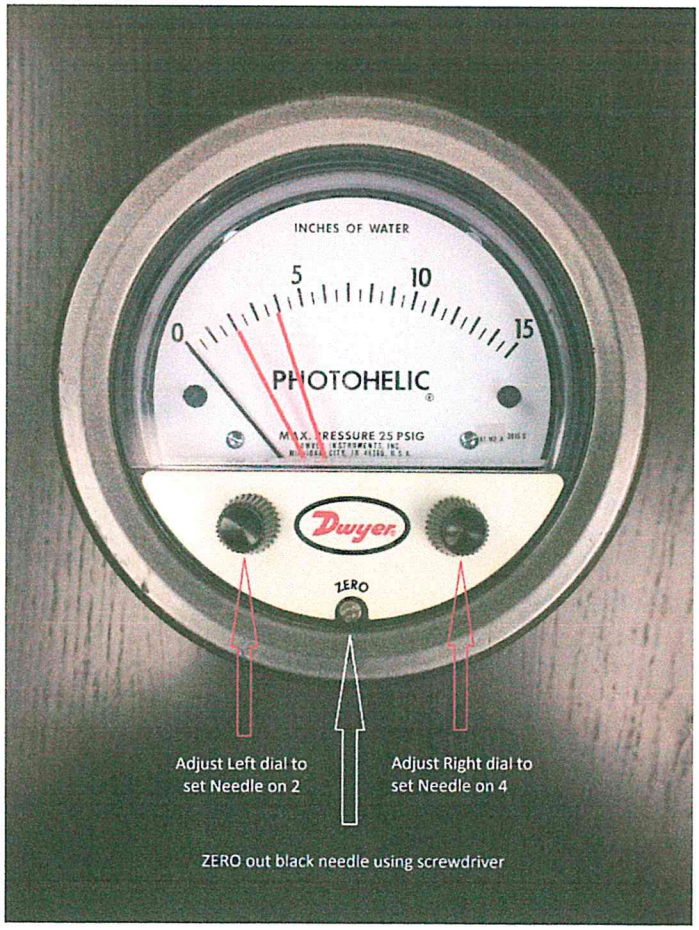
1. Supply 115 volt AC to Control Box Timer.
2. Connect compressed air line to regulator on side of collector.
3. Adjust pressure regulator to 40-50 psi max.
4. Adjust photohelic "low" set point to 2" on photohelic gauge
5. Adjust photohelic "high" set point to 4" on photohelic gauge

Timer Board Warning:
Do not adjust "ON" time, it has been factory set. Too much "ON" time or too little "ON" time can cause shortened filter element life.

- Pulse "ON" Time: Factory set at 150 milliseconds
- Pulse "OFF" Time: Factory set at 20 seconds
- Operating Temp. Range: -40 to +150 degrees Fahrenheit
- Solenoid Valves 115 VAC at 19.7 watts each



Jet Pulse On / Off Timer Settings
(newer model board shown)



Photohelic Gauge Needle Adjustments