

# DCT1000 TIMER CONTROLLER - PERIODICAL ADJUSTMENTS

## HOW IT WORKS

DCT1000 TIMER CONTROLLER

Static pressure loss



High limit / Low limit

### MONITORING OF PRESSURE DROPS

The DCT1000 monitors the static pressure differential between the clean and the dirty sides of cartridge filters – so-called pressure drop. As the filters load with dust, the resistance to air flow increases, and so does the pressure drop.

Brand new cartridge filter set will indicate a process value between **0.2 and 1.0**. During the first few hours of operation, dust will build up on the cartridges' pores in order to reach their optimal filtration capacities – this process is commonly referred to as the "dust cake".

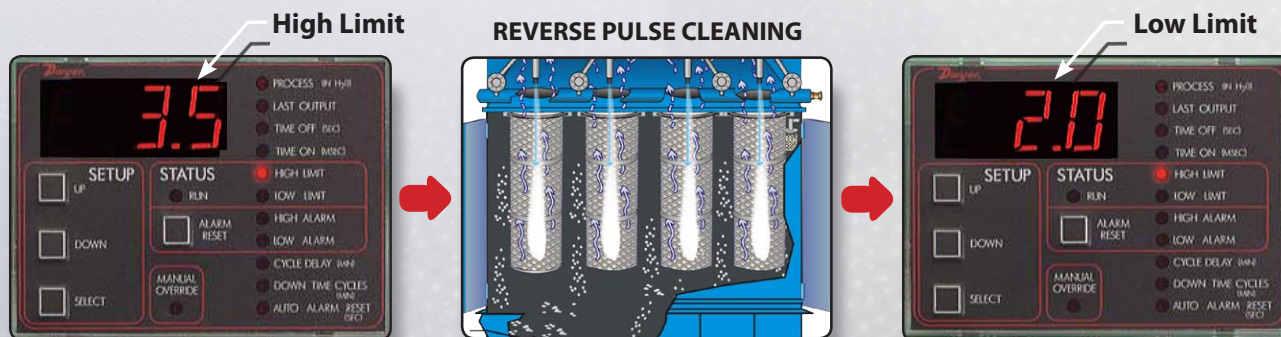
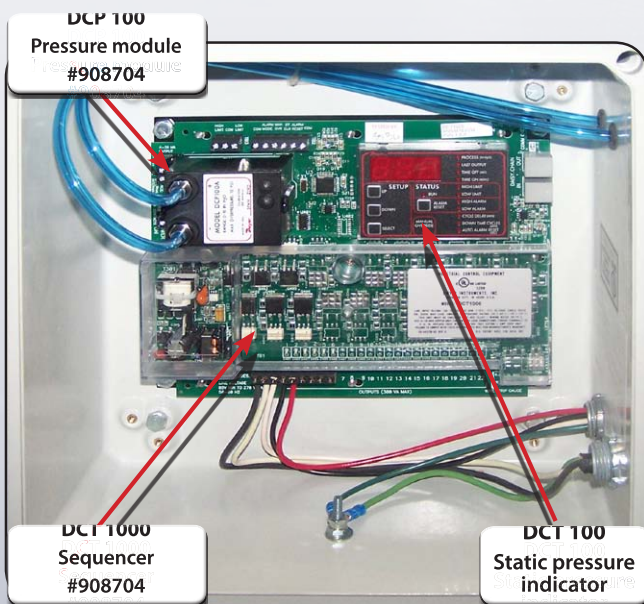
High limit : 3.5  
Low limit : 2.0

Once the new cartridges are saturated with a dust layer, the normal operating value should be between **2 and 3.5** – which are the initial **Low Limit** and **High Limit** defined in the DCT1000.

### CARTRIDGE CLEANING

When the process value reaches the **High Limit**, the cleaning cycle starts emitting a series of pulses of air through each cartridge in order to dislodge exceeding amount of dust buildups. Pulses of air can be heard when the cycle is on.

During the cleaning cycle, the pressure drops should decrease on each pulse until it reaches the **Low Limit** which interrupts the cleaning cycle.



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## HOW IT WORKS

### INITIAL VALUES

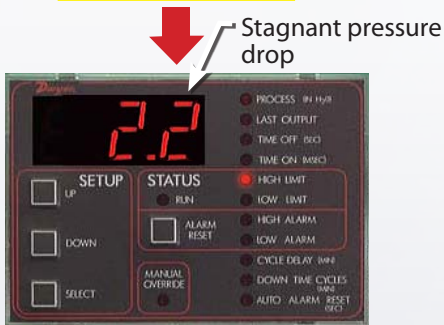
High limit : 3.5  
Low limit : 2.0

Follow the procedure below in order to extend the life span of your cartridge filters while maximizing the filtration capacity of your dust collector.

When the cleaning process of the cartridges is no longer able to reach the **Low Limit** value, the cleaning cycle will run continuously.

At that moment, it is advised to increase the **Low Limit** and **High Limit** in order to extend the life span of the cartridge media to a certain limit.

Start increasing the **Low Limit** and **High Limit** of the cleaning process by 2 decimals above the stagnant value. For example, if the cleaning cycle runs continuously and the process value on the DCT1000 indicates **2.2**, set the new **Low Limit to 2.4** and the new **High Limit to 3.9**.



### NEW VALUES

High limit : 3.9  
Low limit : 2.4

### NEED TO REPLACE CARTRIDGES

### FINAL VALUES

High limit : 8.5  
Low limit : 7.0

Keep increasing moderately until your cartridges are incapable of reaching a **Low Limit of 7.0**. At that moment, it is time to change your cartridge filters and reset your process values to initial **Low Limit 2.0** and **High Limit 3.5**.

### REPLACEMENT OF CARTRIDGE FILTERS

Change all your cartridge filters at the same time, regardless of their individual condition.

If you notice a damaged cartridge, immediately replace all your cartridge filters at once – if a cartridge filter is damaged and/or perforated, it may cause severe damage to your impeller and mislead the DCT1000 timer controller in its ability to control the cartridges cleaning cycles properly.

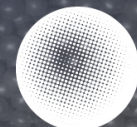
**Refer to the owner's manual for parts number and changing procedure.**



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# DCT1000 TIMER CONTROLLER

## ADJUSTMENTS

Use the keys (Select) and (Up) (Down) you will be able to change some parameter

Note: Your unit has been programmed in the factory, if you change some settings be sure to write down the initial settings

### SETTINGS

**Process:** Value displayed during operation of the fan (inches of water restriction cartridges)

**Last Output:** Number of active solenoid (this value can not be changed because the system auto-detects the number of active coil connected to the card)

**Time Off:** downtime between each pulse (value 10 seconds)

**ON Time:** Time pulse valves (value 250 milliseconds)

**High Limit:** The value to which the cleanup will begin (value between 2.5 and 3.5)

**Low limit:** The value to which the cleaning will stop automatically (value between 1.5 and 2.5)

**High Alarm:** Value must be reached to activate alarm (High limit value 2)

**Low Alarm:** Value must be reached to activate alarm (value = 0)

**Cycle Delay:** This value is to operate in manual mode (value = 0)

**Down time cycles:** This value is to operate in manual mode (value = 0)

**Auto Alarm reset:** This value is to operate in manual mode (value = 0)

