# 1.0 INTRODUCTION

**1.1** These instructions explain the adjustment of the pulse pressure and pulse cycle for Pulsar and CDC-1 dust collector automatic-pulse kits. If the kit is field-installed, for assembly instructions refer to one of the applicable drawing provided with the kit:

- Pulsar Automatic-Pulse Kit
  - Refer to Drawing B21773.
- CDC-1 Dust Collector Automatic-Pulse Kit
  Refer to Drawing B28936.

**1.2** Refer to the cabinet and dust collector owner's manuals for operation of the cabinet and dust collector.

## 2.0 THEORY OF OPERATION

**2.1** The pulse interval is controlled by timers located inside the sequence panel. The timer on the left controls the ON time (the length of time for each pulse) and the timer on the right controls the OFF time (the length of time between each pulse). The ON time should never be adjusted. The lower the setting for the OFF time, the shorter the length of time between each pulse.

**2.2** The panel is supplied with a power cord and 120-volt U-ground plug. A toggle switch (sequence switch) located on the sequence panel cover, enables or disables the timing sequence. The toggle must be turned on and off independently of the cabinet controls. However, A qualified electrician could wire the panel into the cabinet controls to start and stop the pulse sequence when the exhauster is turned on and off.

#### 3.0 SEASONING CARTRIDGE

**3.1** New cartridges must be seasoned by letting a dust cake develop on the outer surface of the filter media before starting the pulsing cycle.

**3.2** If the dust collector is not equipped with a differential pressure gauge, use the following instructions to season the cartridge. Refer to Section 3.3 if the collector is equipped with a differential pressure gauge.

**3.2.1** Operate the cabinet without pulsing (toggle switch off) for about two hours or until visibility decreases noticeably, whichever comes first. At that time set the pulse pressure to 60 psi, and turn the sequence switch ON to begin the pulse cycle.

**3.3** Use the following instructions to season the cartridge when the dust collector is equipped with a differential pressure gauge. Refer to Section 3.2 if the collector is not equipped with a gauge.

**3.3.1** Turn OFF the Sequence switch and Turn ON the exhauster. Make note of the initial differential pressure reading in the space provided below.

Initial reading \_\_\_\_\_.

**3.3.2** Operate the cabinet without pulsing (sequence switch turned OFF) until the differential pressure gauge reads 1 inch above the initial reading. At that time set the pulse pressure to 60 psi, and turn the sequence ON to start the pulse cycle.

### 4.0 PULSE PRESSURE

**4.1** Adjust pulse pressure using the existing pulse regulator mounted in back of the cabinet or dust collector; refer to the cabinet or dust collector manual for exact location. Initially set pulse to about 60 psi.

**4.2** Do not increase pulse pressure until the pulse is at maximum intervals as described in Section 5.0.

**4.3** When any of the following are noted, increase pulse pressure in increments of 5 psi to 10 psi until the maximum of 90 psi is reached:

- When the frequency of the pulse cycle will not lower the differential pressure to less than 4 inches of water (4" w.c.) above the initial reading.
- Decreased visibility in the cabinet.
- Decrease in media recovery or reclaimer cleaning efficiency.

#### 5.0 Pulse Sequence Control Panel and Timers

**5.1** The timers are factory set at 40 seconds OFF and about 15/100 of a second ON. Every 40 seconds the cartridge is pulsed.

**5.2** As the cartridges cake with dust, the differential pressure increases. Adjust the OFF time (right timer) setting by half when visibility in the cabinet decreases, or when the optional differential pressure gauge shows a constant pressure difference greater than 4 inches, DO NOT ADJUST ON, LEFT SIDE TIMER. Increasing ON time will consume more air, but will NOT increase cleaning efficiency. When the additional pulsing does not lower differential pressure below 4 inches, increase pulse pressure by 5 psi to 10 psi and reset pulse OFF time to 40 seconds.

**5.3** Continue to alternate pulse pressure and OFF time until the maximum pulse pressure of 90 psi and minimum pulse OFF time of 20 second is attained. When the frequency of the pulse cycle and higher pulse pressure will not lower the differential pressure, the filter cartridges should be replaced per instructions in the owner's manual, reset pulse pressure to 60 psi and reset OFF time to 40 seconds.