Safety Controls

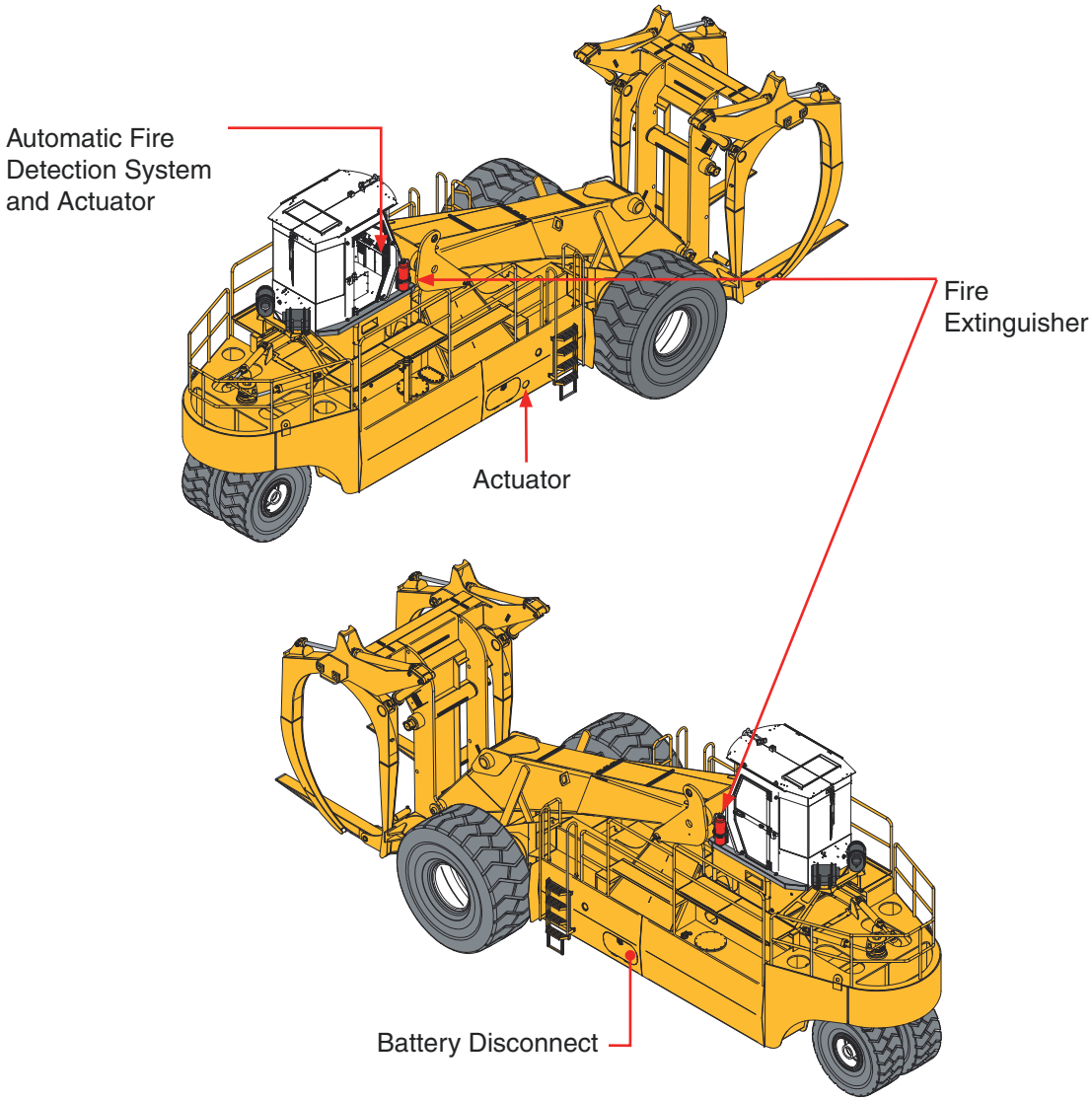

Figure 2-7-1 Safety Controls

Fire Suppression System

Your Fire Suppression System consists of an automatic detection system and two manual actuators. The automatic detection system is located to the right of the steering column, mounted to the right hand wall of the cab (see Figure 2-7-1). One actuator is located next to the automatic detection system and the other is mounted on the chassis, at ground level, just to the left of the right side boarding stairs (See Figure 2-7-1). Either actuator will set off the system.

In Case Of Fire

Pull the safety pin on the actuator, strike the button, and LEAVE THE VEHICLE. Fire retardant will be released, the engine will shut down and the batteries will be disconnected from the electrical system. After the system has discharged watch carefully for flare ups and spot fires. Notify the Fire Department and/or service personnel as soon as possible.

Actuator - in cab right side

Actuator - by right side stairs

Figure 2-7-2 Actuators

⚠ CAUTION

All maintenance and servicing should be performed by a qualified service technician from your local authorized service center for your fire suppression system.

Automatic Detection System (Front Panel Indicators)

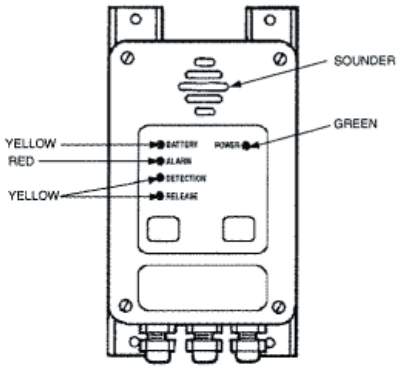

Figure 2-7-3 Fire Detection System

Battery Trouble (Yellow)

LED pulses once every 10 seconds when indicating battery trouble.

The yellow battery trouble LED will pulse when a low power condition is detected in either of the connected supplies (internal or external). If only one power source is used, the control module will automatically ignore the unconnected circuit upon resetting the control module. If a power source is once connected and recognized, a subsequent loss of that power source will be recognized as a Battery Trouble condition. If a power source is once connected, recognized, and then disconnected, the disconnected supply can be ignored by operating the RESET button.

Power Normal (Green)

LED pulses once every 3 seconds when indicating power normal.

The green Power Normal LED pulses “on” once every 3 seconds indicating power is normal from both sources of input power. If the power drops below an acceptable level from either the internal or external source of input power, the green Power LED will be extinguished. If only one source of power is used, the green Power LED will extinguish when the voltage level drops below an acceptable level.

Alarm (Red)

The alarm LED will flash if an alarm condition exists. An alarm condition is caused by operation of the detection circuit or operation of the manual pull/ pressure switch input circuit. The alarm condition will continue until the source of the alarm is removed and the control module is reset.

DETECTION CIRCUIT ACTIVATION MODE - Upon receipt of an input to the detection circuit, the Alarm LED and the sounder will pulse at a rate of 2 times per second and will continue at this rate until the first time delay period has expired.

After the first time delay, a second time delay mode is initiated. This causes the LED and sounder to pulse at a rate of 4 times per second.

After discharge, the LED and sounder will continue to pulse at a rate of 4 times per second for 30 seconds. After that, it will switch to the trouble mode and pulse once every 10 seconds.

ELECTRIC MANUAL RELEASE MODE - The first time delay mode will be by-passed and the LED will pulse at a rate of 4 pulses per second. After the time delay setting is reached, it will pulse another 30 seconds at the same rate. After that, the control module will go into the post-discharge mode, at which time the Alarm LED and Release LED will pulse at a rate of one pulse per 10 seconds.

PRESSURE SWITCH CIRCUIT (FEED BACK) ACTIVATED MODE - When this mode is actuated, the Alarm LED will pulse a minimum of 30 seconds at 4 pulses per second. The control module will then go into the post-discharge mode and the Alarm and Release LED will pulse at a rate of one pulse per 10 seconds.

Release Trouble (Yellow)

The Yellow Release LED and the audio will pulse at a rate of once every 10 seconds when a trouble condition is detected in the release circuit. The control module will return to normal when the trouble condition is cleared.

The Release Trouble will also pulse after the system has completed a discharge cycle or a pressure switch feed back signal has been received. The trouble signal in this condition is used to indicate a recharge of the fire suppression system is necessary. A Release Trouble under either of these conditions (see Figure 2-7-4) only be cleared by resetting the control module.

Detection Trouble (yellow)

The Yellow Detection Trouble LED and the audio pulse once every 10 seconds when the control module detects a trouble in the detection circuit. The control module will automatically return to normal when the trouble is cleared.

Sounder (Audio)

The sounder gives the audio indication for all alarm and trouble outputs. The sounder will pulse at the same rate as the visual corresponding LED.

The sounder gives the audio indications of the various outputs. The sounder is rated at 85 dB at 2 ft (0.6 m).

The pulse rates are as follows:

Alarm - Time Delay 1 = 2 pulses per second

Time Delay 2 = 4 pulses per second

Trouble - 1 pulse per 10 seconds

Loss of Power - 1 pulse per 10 seconds

Release Circuit Fired - 4 pulses per second for 30 seconds, then 1 pulse per 10 seconds

Low Battery - 1 pulse per 10 seconds

Front Panel Buttons

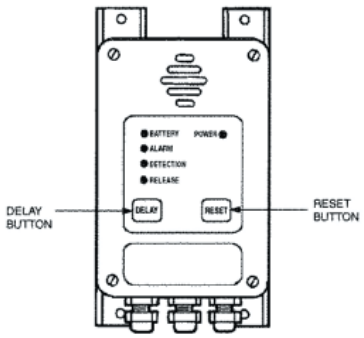

Figure 2-7-4 Automatic Fire Detection System

Delay

Pushing the “DELAY” button during the first time delay cycle will restart the time delay cycle. If the second time delay cycle has already started, the “DELAY” button will have no effect.

The “DELAY” button can also be used to check the diagnostics function. By depressing the delay button when the system is in the trouble condition, the LEDs will flash a pattern code. Each pattern code indicates a certain type of trouble. The code pattern is prioritized. The first trouble must be fixed before addressing the next one. Once the first trouble is taken care of, depressing the “DELAY” button will cause the LEDs to indicate the code for the next trouble, if there is one. When the “DELAY” button is pressed, three short audio and visual indications will acknowledge the switch has been depressed properly.

In a post discharge condition, pressing the DELAY button will silence the alarm relay if the alarm relay has been programmed to silence.

Reset

The “RESET” button is used to re-initialize the control panel. When depressed, it provides an indication that all LEDs and the sounder are functional. It is used to upload the manual programming into the control module.

If trouble(s) has not been cleared, the trouble indication will reappear after the RESET button is pressed.

When the “RESET” button is pressed, three short audio and visual indications will acknowledge the switch has been depressed properly.

Fire Extinguisher (hand held)

Mounted on each side of the cab (see Figure 2-7-5). Follow operating instructions located on the fire extinguisher.

Figure 2-7-5 Fire Extinguisher

Battery Disconnect Switch

Mounted in battery compartment on the left side of the machine (see Figure 2-7-6). The positive disconnect (+) switch isolates the batteries from the electrical circuits Turn the switches counterclockwise to disconnect the battery.

The negative disconnect (-) switch isolates the remote monitor from the electrical circuits. Turn the switches counterclockwise to disconnect the remote monitor.

The (+) disconnect should be turned off when the machine is not in use. Both disconnects should be turned off when servicing the electrical system. Turning off the (-) disconnect will trigger an alert on the remote monitor for a low battery voltage condition.

Follow your companies lock out procedure.

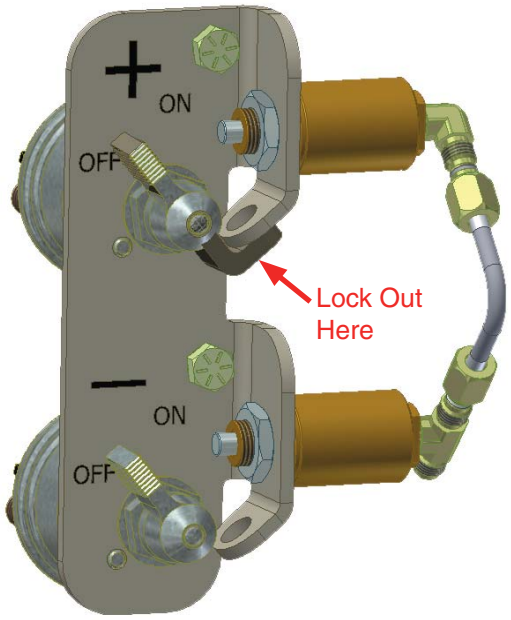

Figure 2-7-6 Battery Disconnect Switch