

Exhibit K



**START UP PROCEDURE
VEHICLE ARREST SYSTEM**

START UP
PROCEDURE

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START UP INSTRUCTIONS
PHALANX MODEL BARRIERS WITH DELTA PUMPS

Safety Precautions

At all times observe good safety practices when working on either the electrical or mechanical system. Particular attention should be paid to the danger of working on the Barrier when the power is on. Barriers are powerful hydraulic presses that can easily crush anything in their way. Keep hands free of the mechanism when the power is on or the HPU is up to pressure. Turn off the electric power and bleed the hydraulic pressure down to zero before working on any part of the system. Traffic should be controlled around the Barrier during any work so that vehicular accidents do not occur if the Barrier should happen to rise. After work is complete, do not allow traffic over the Barrier until all control and safety functions have been verified to be properly working.

YOUR SPECIAL ATTENTION IS CALLED TO THE FOLLOWING:

Special Safety Considerations

Delta Barrier Systems are designed to deter, and as necessary stop unauthorized vehicle traffic by inserting a nearly immovable obstacle in a roadway. During normal servicing, maintenance and testing work, every effort must be made to protect pedestrian and vehicle traffic from entering traffic lanes where work is underway.

During work on either the Barrier(s), the control circuit, control logic, power unit, power feed or the control panel(s); traffic across or near the Barrier(s) should either be stopped or directed into a safe passage.

Prior to starting, restarting or restoring power to a Barrier system all remote input devices such as radio links, card readers, remote control panels, etc. should be checked to insure that they are properly set or are inactive. This is important to insure that a signal directing the Barrier to change status is not unexpectedly received at the time when the power is restored.

Note that any device (supplied by Delta or others) that produces a contact closure to change the Barrier direction must be checked to verify that stray signals or voltages cannot cause that device to produce a false signal.

When a Barrier is powered up, whether at start-up, following a power outage or following the completion of service or maintenance work, these same precautions should be taken.

Consult the other sections of this manual for additional safety and security instructions and warnings.

System Configuration

Depending on the threat analysis and the specific layout of an installation site, Barrier systems can be configured to react differently to a variety of input signals or events. The selection of components and the configuration to meet these requirements are usually incorporated in the system at the time of manufacture. However some changes can be made in the field or by changing the nature of supplied input.

Default Status Quo

In most locations, security considerations are such that a Barrier system can be configured to 'default status quo', that is the Barrier will not change status following a power outage or interruption. If a Barrier system so configured is in the open position when power is applied at initial start-up, following service or in the event of a local power outage, the Barrier will remain in the open position as when the power was removed or interrupted. Or if the Barrier is in the guard position it will return to the guard position upon resumption of power. An exception to this is the special situation as defined below in the 'power off' section.

Default Secure

In certain high security areas Barrier systems may be configured so as to default to the Secure Status when power is applied to a system, whether following the system having been turned off or after unexpected power interruption. Thus a system on stand-by automatically goes to the guard position when the power is applied. That is, should the power be interrupted and then restored, while the Barrier is in the open position, it will return to the guard position.

If a Barrier is in the guard position when the power is interrupted it is normally designed to hold the guard position.

Power Off Operation

A Barrier system with a battery back-up for the control circuit and the power off feature, can be operated a limited number of times during a power off condition. Once the power off reserve is exhausted, the last command the system receives will dictate the Barrier position when power is restored. Hence, if the Barrier is in the open position when the 'power off' reserve is spent, and the system then receives a close signal, the Barrier will remember that last signal and close when power once power is restored.

Additional Precautions

Delta Barrier system controls are configured to meet site specific security conditions and the operating logic is most often defined at the time of procurement.

If the security or safety consideration of the site where the Barrier is installed or to be installed, dictates that the operation be altered from the original specification, contact the Engineering Department of Delta Scientific Corporation for assistance in making the desired revisions.

During routine maintenance and service work, or during thunder storms or other weather related disturbances, power interruptions can occur.

For detailed service, maintenance and safety information refer to the specific sections of this manual provided with each system.

Before operating the system for the first time, make sure that all on the interconnections have been made between the Barrier, control panels and the hydraulic power system. After you are sure that everything is in order, make a visual inspection of the site to check that tools and construction debris are removed and clear of the equipment.

Power

The electrical power that drives the system is typically supplied through a circuit breaker disconnect (customer furnished) that must be turned on before the system will operate. When the main power is turned on the pump motor will, in most cases, start and run until the system cut off pressure is reached. It is important on start up to **verify that the pump motor is turning in the proper direction** indicated by an arrow on the motor fan housing. Turning on the power without this check will destroy the pump in short order.

Control Devices and Their Function

Master Remote Control Panel On/Off Switch

The master control panel has a main power indication light to show that the control circuit power is 'on'. Turning the master control panel main power On/Off key switch to the ON position will in turn illuminate the panel 'on' light.

Barrier Up/Down Controls

There are two basic controls for each of the Barriers, one to **CLOSE** (raise) and one to **OPEN** (lower). The Barriers can be commanded to either **OPEN** or **CLOSE** at any time whether they are moving or stationary. The Barriers will instantly reverse direction if so commanded at any point in their operation.

Barrier Position Indication (optional)

The Barriers have position indication lights on the control panel. A green light indicates that the Barriers are **OPEN** (fully down) on the limit switches, any other position results in a red light indication.

Emergency Operate (optional)

This feature allows the Barriers to be raised at the maximum possible speed when the Emergency Operate button is pressed. Once the button is pressed, the panel is locked up so that all lower commands are overridden. Power is continuously applied to the UP solenoid valves as well as the EO valves until the Reset button is pressed, which will restore the system to normal operation.

Reset should be pressed within 15 minutes of EO use to prevent possible heat damage to the solenoid valves.

Annunciator (optional)

An annunciator feature is provided to alert the guards that the Barriers have been left in the down position for too long. The master remote control panel has an 'Annunciator Off/On' switch. With the switch in the 'Off' position, no alarm will sound. When placed in the 'On' position, the alarm will sound if the Barriers are left down longer than the preset value of the annunciator timer located in the control circuit. The alarm can be silenced by raising the Barriers or by turning the switch back to the 'Off' position. The timer is customer adjustable by accessing the inside of the master control panel.

Secondary, or Slave Panels (optional)

A secondary or slave panel may be incorporated in the system which allows for full operation of the Barriers from a location remote from the master control panel. The slave control panel is armed from the master control panel location. The slave panel has a main power indication light to show that the panel is armed from the master control panel. Turning the slave control panel main power On/Off key switch to the ON position will in turn illuminate the panel 'on' lights and allow full operation of the Barriers from the slave. The annunciator on/off and EO reset control is absent from the slave control panel although the slave panel does include the annunciator output siren.

Other Control Devices

Other control devices may be provided by Delta or by others. The Barrier can be raised or lowered by any normally opened, momentary closure type button or remote control device, such as radio, key pads, card readers, loops, etc.

Start Up Procedure

Safety Precautions

On initial start up, it is important to close off the roadway and clear the Barrier area of nonessential personnel. **Barrier movement may be very erratic at first.** In addition, each time the system is restarted or maintenance is performed the roadway should again be cleared to guard against unexpected Barrier movement.

Start Up Sequence

1. Block all traffic during tests. Stay clear of Barriers.
2. Check that all electrical and hydraulic inter-connections are tight.
3. Fill system with **clean, filtered** oil to within 1" [25 mm] of the top of the sight glass.
4. Confirm that the pressure bleed down valve is turned fully clockwise to close. Do not over tighten.
5. Turn all flow control valves fully clockwise to close, then open each 2 full turns. This will be the starting point for the Barrier up/down speed adjustments.
6. Briefly apply power to the motor to confirm that the motor direction is per the direction arrow on the motor fan housing. Correct if necessary.
7. Apply power to the motor and allow the pump to bring the system up to the shutoff point as shown on the motor starter drawing, 1900 psig [131 bar].
8. Check for any leaking fittings.
9. Operate each Barrier manually by pushing the override pins on the ends of the solenoid valves.
10. Check that when the **left** side solenoid pin is depressed, the Barrier **raises**. When the **right** side pin is depressed the Barrier should **lower**.
11. Cycle the system manually several times to remove air from the system. When the air is removed from the lines (no bleeding should be necessary) the Barrier motion should be smooth.
12. As the Barrier is manually moved, confirm that the pressure switch is turning the pump motor off and on at the correct values as shown on the motor starter drawing; off at 1900 psig [131 bar], on again at 1400 psig [97 bar].
13. Turn power to the pump 'Off'.

14. Bleed the system pressure down to zero by opening the bypass valve. This will help prime the hand pump.
15. **With the system at zero pressure**, top off the reservoir oil tank with **clean, filtered** oil to within 1" [25 mm] of the sight glass top.
16. Test hand pump operation by lifting the Barrier. Approximately 65 to 75 strokes will be required for these Phalanx® Barriers.
17. Turn the motor/pump power back to 'On' to bring the system back to full pressure.
18. Apply power to the control circuit and turn the Master control panel key switch to 'ON'.
19. Run the Barrier Open and Closed several times allowing time for the HPU to recover pressure between each cycle. Check function of the indicator lights on the remote control panel.
20. With the Barrier(s) in the down position and after unit has again come to full pressure, depress the Emergency Operate button. Note that Barrier(s) come to the guard position at the maximum speed. Note that the 'EO Active' light is on. Check that the **OPEN** control buttons are inactive. Press reset button to clear EO condition and lower Barriers.
21. Arm the Slave control panel (if present) from the Master control panel and repeat steps 19) and 20).
22. Arm the annunciator siren from the Master control panel and lower one of the Barriers. Check that the siren sounds at the desired time interval. (The time interval may be adjusted by opening the Master control panel and turning the time knob on the timer.)
23. Adjust the Barrier operating speed to the desired value. Delta suggests that both the up and down speeds be approximately 3 to 5 seconds. The type and adjustments of the valves are in the Drawings section of this manual. Normal operating speeds of 2 seconds or less are possible, but the increased wear and tear on the equipment should negate any considerations to so operate the Barriers. Excess noise also accompanies the faster speeds. After final adjustment is made, lock valves in position.

OPERATIONAL SUMMARY

BARRIERS OPERATED FROM A NORMALLY UP POSITION

1. Barriers are to stay in the up and locked position and are to be lowered for the passage of one vehicle at a time.
2. During the normal hours of operation, the main power key switches shall be in the 'ON' position. The panels shall be turned 'OFF' and the keys removed when no guards are present at the control stations.
3. The control panel controls Barriers in each appropriate location. **CLOSE** and **OPEN** control is provided for each Barrier. Before operating any Barrier:
 - A) Check that vehicles and pedestrians are clear.
 - B) Check that the controls for the correct Barrier will be pressed.
 - C) Press **OPEN** to lower Barrier to permit access.
 - D) After vehicle is clear of Barrier, press **CLOSE**.
4. The **EMERGENCY OPERATE** button is to be used for **emergencies** only.
 - A) Pressing the **EO** button will raise **all** Barriers in approximately 1 to 2 seconds.
 - B) The controls are locked until the **RESET** button is pressed. A red light indication shows that the system is in the EO Mode.
 - C) The controls are locked even if all Barriers are UP when the **EO** button is pressed.
 - D) The **RESET** button should be pressed within 15 to 30 minutes of the EO Actuation.
5. **Do Not Place Items On The Control Panel.** The buttons are sensitive and the Barriers may move while not intended.
6. **Use The Barriers To Control Vehicles.** If a forced entry attempt occurs, use the **EMERGENCY OPERATE** button. The Barriers are powerful and can block or lift most all vehicles.