
PPS Preventive Maintenance Procedure: CID/Sector 0

This document has been approved by:

Controls Dept. Head

Date

Controls Section Leader

Date

PPS Group Leader

Date

1: Introduction

1.1 Purpose

The purpose of this preventive maintenance procedure is to verify that Personnel Protection Systems (PPS) safety devices for CID/Sector 0 are adequately maintained to ensure continued safe and satisfactory operation.

1.2 Scope

This document certifies that the status and control devices for CID and Sector 0 have been inspected and maintained.

2: Applicability

- 2.0.1 The preventive maintenance procedure should be completed during major downtimes.
- 2.0.2 The Controls Department, PPS Group, is responsible for completing the preventive maintenance procedure.

3: Prerequisite Actions

**Initial Items
Tested**

3.0.1 Verify in the PPS Bypass Logbook, located in the PPS Group Leader's office, that all bypasses for CID and Sector 0 have been removed. (If so, skip the next step.)

3.0.2 If all bypasses have NOT been removed, a PPS Engineer should verify that the bypasses do not invalidate the outcome of the maintenance routine. Note bypasses here:

3.0.3 The maintenance person will need the following tools:

- Flashlight
- Screw driver
- Voltmeter
- Door knobset tool
- Lubricants
- Cleaning fluid

4: Outer Door Check

4.1 Crash Bar

**Maintenance
Complete**

- 4.1.1 Inspect, clean and lubricate crash bar. _____
- 4.1.2 Inspect crash bar trip switches for proper adjustment. _____
- 4.1.3 Operate the crash bar from inside the Outer Door and verify proper operation. _____
- 4.1.4 Operate the crash bar from outside the Outer Door and verify proper operation. _____
- 4.1.5 Set the CID Vault to **CONTROLLED ACCESS**, release a keybank key, and obtain a door release. Check the electric strike for proper operation. _____

4.2 Door Limit Switches

**Maintenance
Complete**

- 4.2.1 Inspect and adjust (if necessary) the door limit switches (located on top of the door frame). _____
- 4.2.2 Inspect the lever arms (possibly bent or loose). _____
- 4.2.3 Check for loose wiring (termination points and strain relief). _____

4.3 Door

**Maintenance
Complete**

- 4.3.1 Lubricate the door hinges. _____
- 4.3.2 Inspect the door to ensure correct alignment and closure. _____

5: Keybank Check

**Maintenance
Complete**

- | | | |
|--------|---|-------|
| 5.0.1 | Inspect the lockout cam pin hub for alignment and tightness. | _____ |
| 5.0.2 | Inspect the keysense pin hub for alignment and tightness. | _____ |
| 5.0.3 | Clean, adjust and lubricate the keybank. | _____ |
| 5.0.4 | Check the wiring termination points for shorts and loose connections. | _____ |
| 5.0.5 | Inspect all keys for cracks and bends. | _____ |
| 5.0.6 | Inspect the microswitches for correct adjustment. | _____ |
| 5.0.7 | Verify that the Emergency Entry/Exit break-away glass and hammer are in place. | _____ |
| 5.0.8 | Set CID Vault to CONTROLLED ACCESS and verify the proper functioning of the keybank. | _____ |
| 5.0.9 | Check the key release from inside the Outer Door. | _____ |
| 5.0.10 | Check the key release from outside the Outer Door. | _____ |

6: Inner Shield Door Check

6.1 Pneumatic Equipment

**Maintenance
Complete**

- 6.1.1 Inspect the pneumatic ram for obstructions, missing hardware, and pinched air line.a

- 6.1.2 Verify that the pneumatic control panel is not damaged.

- 6.1.3 Verify that the Shield Door status box wiring and LED are not loose or damaged.

6.2 Shield Door Limit Switches

**Maintenance
Complete**

- 6.2.1 Inspect and adjust (if necessary) the door limit switches.

- 6.2.2 Inspect the lever arms (possibly bent or loose).

- 6.2.3 Check for loose wiring (termination points and strain relief).

7: CID/Sector 0 Door Check

7.1 Door Hardware

**Maintenance
Complete**

7.1.1 Clean and lubricate the door knobset.

7.1.2 Lubricate the door hinges.

7.1.3 Check the door for proper alignment and closure.

7.2 CID/Sector 0 Door Limit Switches

**Maintenance
Complete**

7.2.1 Inspect and adjust (if necessary) the door limit switches.

7.2.2 Inspect the lever arms (possibly bent or loose).

7.2.3 Check for loose wiring (termination points and strain relief).

7.3 CID Emergency Beam Shutoff Button Checks

7.3.1 Complete the following table:

PPS Preventive Maintenance Procedure: CID/Sector 0

Action	E/O #1	E/O #2	E/O #3	E/O #4
1. Verify that the pilot lights on the Emergency Off box are lit.	_____	_____	_____	_____
2. Verify that the Emergency Beam Shutoff sign is in place.	_____	_____	_____	_____
3. Verify that the button action is smooth.	_____	_____	_____	_____
4. Open the button box cover, place a voltmeter across the contact blocks, operate the switch and verify that it is operating correctly.	_____	_____	_____	_____
5. Check the wiring termination points for shorts, loose connections and proper strain relief.	_____	_____	_____	_____
6. Inspect contact block for radiation damage, loose connections or corrosion.	_____	_____	_____	_____

8: Sector 0 and Manway Check

8.1 Sector 0 Keybank

**Maintenance
Complete**

- 8.1.1 Inspect the lockout cam pin hub for alignment and tightness. _____
- 8.1.2 Inspect the keysense pin hub for alignment and tightness. _____
- 8.1.3 Clean, adjust and lubricate the keybank. _____
- 8.1.4 Check the wiring termination points for shorts and loose connections. _____
- 8.1.5 Inspect all keys for cracks and bends. _____
- 8.1.6 Inspect the microswitches for correct adjustment. _____
- 8.1.7 Verify that the Emergency Entry/Exit break-away glass and hammer are in place. _____
- 8.1.8 Set Sector 0 to **PERMITTED ACCESS** and verify the proper functioning of the keybank. _____

8.2 Door Hardware

**Maintenance
Complete**

- 8.2.1 Clean and lubricate the door knobset. _____
- 8.2.2 Lubricate the door hinges. _____
- 8.2.3 Check the door for proper alignment and closure. _____

8.3 Door Limit Switches

**Maintenance
Complete**

- 8.3.1 Inspect and adjust (if necessary) the door limit switches. _____

8.3.2 Inspect the lever arms (possibly bent or loose). _____

8.3.3 Check for loose wiring (termination points and strain relief). _____

8.4 Hatch

**Maintenance
Complete**

8.4.1 Lubricate the hatch hinges. _____

8.4.2 Check the hatch for proper alignment and closure. _____

8.4.3 Inspect the hatch lift cable for kinks and missing hardware. _____

8.4.4 Operate the hatch locally, and verify proper open and closure. _____

8.5 Hatch Limit Switches

**Maintenance
Complete**

8.5.1 Inspect and adjust (if necessary) the hatch limit switches. _____

8.5.2 Inspect the lever arms (possibly bent or loose). _____

8.5.3 Check for loose wiring (termination points and strain relief). _____

8.5.4 Inspect the limit switch activator arm for damage and missing hardware. _____

8.5.5 Verify the correct status in KA00 (0130) for: _____

[a] Hatch Not Full Closed _____

[b] Hatch Full Closed Channel A _____

[c] Hatch Full Closed Channel B _____

8.6 CID Emergency Beam Shutoff Button Checks

8.6.1 Complete the following table:

Action	E/O #1	E/O #2	E/O #3	E/O #4
1. Verify that the pilot lights on the Emergency Off box are lit.	_____	_____	_____	_____
2. Verify that the Emergency Beam Shutoff sign is in place.	_____	_____	_____	_____
3. Verify that the button action is smooth.	_____	_____	_____	_____
4. Open the button box cover, place a voltmeter across the contact blocks, operate the switch and verify that it is operating correctly.	_____	_____	_____	_____
5. Check the wiring termination points for shorts, loose connections and proper strain relief.	_____	_____	_____	_____
6. Inspect contact block for radiation damage, loose connections or corrosion.	_____	_____	_____	_____

9: Records and Reports

9.1 Maintenance Person

9.1.1 Comments

9.1.2 Completed by:

Signature of Maintenance Person _____

Name and title (print) _____

Date _____

- 9.1.3 The maintenance person verbally notifies the PPS Group Leader that the PPS preventive maintenance for CID/Sector 0 is complete.

9.2 Controls Department Approval

Signature

Name and title (print)

Date

9.3 PPS Follow-up

The PPS Group Leader files the approved preventive maintenance procedure in the designated PPS file area.