

Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Roof

Machine: Air Conditioning Unit



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Thermostat in server room

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Thermostat in server room



Isolating Device Location 1

Toggle switch on unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Air Conditioning Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. Restart the equipment.



Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Roof

Machine: Condensing Unit #1 - Carrier



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Computer controls in engineer's office

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Computer controls in engineer's office



Isolating Device Location 1

Knife switch on unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Condensing Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. Restart the equipment.



Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Roof

Machine: Air Conditioning Unit - Comfortmaker



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Thermostat in main office

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Thermostat in main office



Isolating Device Location 1

Knife switch next to unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Air Conditioning Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. Restart the equipment.



Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Roof

Machine: Condensing Unit #38 - McQuay



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Computer controls in engineer's office

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Computer controls in engineer's office



Isolating Device Location 1

Knife switch on unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: *Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.*

Restoring Condensing Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. Restart the equipment.



Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Roof

Machine: Condensing Unit #41 - McQuay



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Computer controls in engineer's office

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Computer controls in engineer's office



Isolating Device Location 1

Knife switch on unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Condensing Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. Restart the equipment.



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Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Roof

Machine: Condensing Unit #37 - McQuay



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Computer controls in engineer's office

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Computer controls in engineer's office



Isolating Device Location 1

Knife switch on unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: *Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.*

Restoring Condensing Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. Restart the equipment.



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Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Roof

Machine: Condensing Unit #39 - McQuay



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Computer controls in engineer's office

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Computer controls in engineer's office



Isolating Device Location 1

Knife switch on unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: *Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.*

Restoring Condensing Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. **Restart the equipment.**



Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Roof

Machine: Condensing Unit #40 - McQuay



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Computer controls in engineer's office

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Computer controls in engineer's office



Isolating Device Location 1

Knife switch on unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: *Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.*

Restoring Condensing Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. Restart the equipment.



Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Boiler Room Penthouse

Machine: Cooler Compressor



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Thermostat in cooler

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Thermostat in cooler



Isolating Device Location 1

Knife switch next to unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Cooler Compressor to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. Restart the equipment.



Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Boiler Room Penthouse

Machine: Freezer Compressor



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Thermostat in freezer

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Thermostat in freezer



Isolating Device Location 1

Knife switch next to unit

No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Freezer Compressor to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. Restart the equipment.





Energy Control Procedure : Oak Hill – Boiler Room

Equipment: Hot water heater

Energy Source(s): Electric, Gas

Manufacturer: Intellihot

Scope: This scope covers any servicing or maintenance of the equipment that may expose the maintenance person(s) to hazard.

Purpose: To provide specific guidance to authorized personnel on how to de-energize the equipment, to prevent the unexpected start-up or release of energy that could result in injury or death to employee or authorized others.

Authorization: Authorized employees trained in lockout & tag out procedures are to install lockout & tag out devices in accordance with company procedure. Lockout and tag out devices will only be removed by the installer or the maintenance leader.

Compliance: Failure to comply with established procedure will result in disciplinary action or termination.

Shutdown Step 1: Notify affected employees of shut down (operators, area personnel)

Shutdown Step 2

Turn off machine using accepted procedure (operator) allowing machine to cool down if needed.

Shutdown Step 3

Electrical Panel D5
Turn off Breaker #28
Attach breaker device
Then tag and lock

Shutdown Step 4

Ball Valves (Gas)
Turn off valves
Attach ball valve lock out device
Then tag and lock

Shutdown Step 5

Ball Valves (Gas)
Turn off valves
Attach ball valve lock out device
Then tag and lock



Shutdown Step 6

Attempt to start machine; make sure that it CANNOT start. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector. Verify no pressure is in lines.

Restoring Equipment

Make sure work area is clear of equipment, personnel and ready for restarting.
Verify controls are in the off or neutral position.
Remove locks, tags and lockout devices and return control device to the “on” position.
Notify affected employees that equipment will be restarted.
Restart equipment using regular operating procedures.

Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Boiler Room

Machine: Air Compressor



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Air pressure regulator on unit

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Air pressure regulator on unit



Isolating Device Location 1

Knife switches (2) next to unit



Isolating Device Location 2

Pressure release valve on unit

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: Apply lockout device to source of electricity, bleed air from tank and lines
6. Verify that equipment is disconnected from the energy source (s) Attempt to start, check pressure gauge
***Caution:** Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.*

Restoring Air Compressor to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Electric/pneumatic
5. **Restart the equipment.**



Lockout Tagout Specific Procedure

Building: Oak Hill Elementary Boiler Room

Machine: Fire Jockey Pump Engine



1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Control panel on front of unit

3. Turn off the (Battery/diesel) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Control panel on front of unit



Isolating Device Location 1

Batteries



Isolating Device Location 2

Ball valve on diesel gas pipeline
supplying unit

4. Lockout the energy isolating device(s) with assigned individual locks.
5. Dissipate residual energy: Disconnect batteries, apply lockout device to source of diesel gas, allow unit to cool
6. Verify that equipment is disconnected from the energy source (s) Attempt to start

Caution: *Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.*

Restoring Fire Jockey Pump Engine to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

1. Notify affected employees that maintenance has finished and lock and tags will be removed.
2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
3. Verify that the controls are in neutral or off.
4. Remove the lockout devices and re-energize the Battery/diesel
5. Restart the equipment.





Energy Control Procedure : Oak Hill – Boiler Room

Equipment: Boiler #1

Energy Source(s): Electric, Gas, Hot Water

Manufacturer: Aerco

Scope: This scope covers any servicing or maintenance of the equipment that may expose the maintenance person(s) to hazard.

Purpose: To provide specific guidance to authorized personnel on how to de-energize the equipment, to prevent the unexpected start-up or release of energy that could result in injury or death to employee or authorized others.

Authorization: Authorized employees trained in lockout & tag out procedures are to install lockout & tag out devices in accordance with company procedure. Lockout and tag out devices will only be removed by the installer or the maintenance leader.

Compliance: Failure to comply with established procedure will result in disciplinary action or termination.

Shutdown Step 1: Notify affected employees of shut down (operators, area personnel)

Shutdown Step 2

Turn off machine using accepted procedure (operator) allowing machine to cool down if needed.

Shutdown Step 3

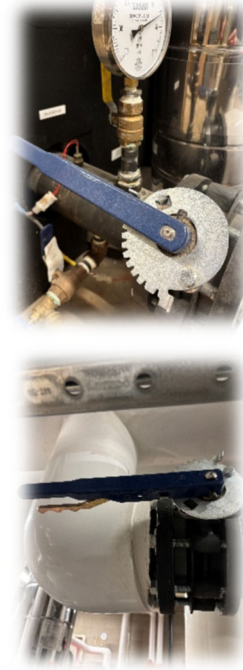
Electrical Panel P2
Turn off Breaker #13
Attach breaker device
Then tag and lock

Shutdown Step 4

Ball Valves (hot water)
Turn off valves
Attach ball valve lock out device
Then tag and lock

Shutdown Step 5

Ball Valve (Gas)
Turn off valve
Attach ball valve lock out devices
Then tag and lock



Shutdown Step 6

Attempt to start machine; make sure that it CANNOT start. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector. Verify no pressure is in lines.

Restoring Equipment

Make sure work area is clear of equipment, personnel and ready for restarting. Verify controls are in the off or neutral position. Remove locks, tags and lockout devices and return control device to the "on" position. Notify affected employees that equipment will be restarted. Restart equipment using regular operating procedures.



Energy Control Procedure : Oak Hill – Boiler Room

Equipment: Boiler #2

Energy Source(s): Electric, Gas, Hot Water

Manufacturer: Aerco

Scope: This scope covers any servicing or maintenance of the equipment that may expose the maintenance person(s) to hazard.

Purpose: To provide specific guidance to authorized personnel on how to de-energize the equipment, to prevent the unexpected start-up or release of energy that could result in injury or death to employee or authorized others.

Authorization: Authorized employees trained in lockout & tag out procedures are to install lockout & tag out devices in accordance with company procedure. Lockout and tag out devices will only be removed by the installer or the maintenance leader.

Compliance: Failure to comply with established procedure will result in disciplinary action or termination.

Shutdown Step 1: Notify affected employees of shut down (operators, area personnel)

<p><u>Shutdown Step 2</u> Turn off machine using accepted procedure (operator) allowing machine to cool down if needed.</p>	<p><u>Shutdown Step 3</u> Electrical Panel P2 Turn off Breaker #15 Attach breaker device Then tag and lock</p>	<p><u>Shutdown Step 4</u> Ball Valves (hot water) Turn off valves Attach ball valve lock out device Then tag and lock</p>	<p><u>Shutdown Step 5</u> Ball Valve (Gas) Turn off valve Attach ball valve lock out devices Then tag and lock</p>
			
<p><u>Shutdown Step 6</u> Attempt to start machine; make sure that it CANNOT start. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector. Verify no pressure is in lines.</p>		<p>Restoring Equipment Make sure work area is clear of equipment, personnel and ready for restarting. Verify controls are in the off or neutral position. Remove locks, tags and lockout devices and return control device to the “on” position. Notify affected employees that equipment will be restarted. Restart equipment using regular operating procedures.</p>	



Energy Control Procedure : Oak Hill – Boiler Room

Equipment: Boiler #3

Energy Source(s): Electric, Gas, Hot Water

Manufacturer: Aerco

Scope: This scope covers any servicing or maintenance of the equipment that may expose the maintenance person(s) to hazard.

Purpose: To provide specific guidance to authorized personnel on how to de-energize the equipment, to prevent the unexpected start-up or release of energy that could result in injury or death to employee or authorized others.

Authorization: Authorized employees trained in lockout & tag out procedures are to install lockout & tag out devices in accordance with company procedure. Lockout and tag out devices will only be removed by the installer or the maintenance leader.

Compliance: Failure to comply with established procedure will result in disciplinary action or termination.

Shutdown Step 1: Notify affected employees of shut down (operators, area personnel)

Shutdown Step 2

Turn off machine using accepted procedure (operator) allowing machine to cool down if needed.



Shutdown Step 3

Electrical Panel P2
Turn off Breaker #17
Attach breaker device
Then tag and lock



Shutdown Step 4

Ball Valves (hot water)
Turn off valves
Attach ball valve lock out device
Then tag and lock



Shutdown Step 5

Ball Valve (Gas)
Turn off valve
Attach ball valve lock out devices
Then tag and lock



Shutdown Step 6

Attempt to start machine; make sure that it CANNOT start. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector. Verify no pressure is in lines.

Restoring Equipment

Make sure work area is clear of equipment, personnel and ready for restarting. Verify controls are in the off or neutral position. Remove locks, tags and lockout devices and return control device to the “on” position. Notify affected employees that equipment will be restarted. Restart equipment using regular operating procedures.