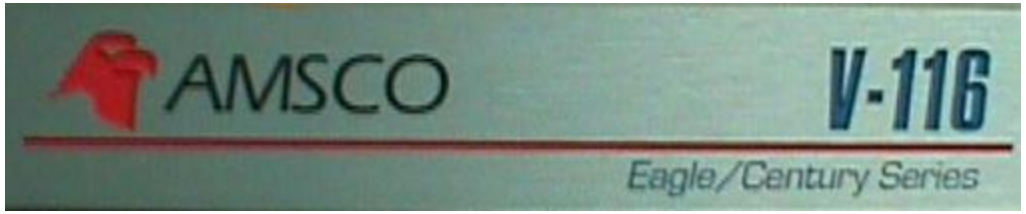
Intro To Sterilization

BIOMEDGUY

Welcome to Century Sterilization!



How To Verify Sterilization Process

- Biological/Spore Test- Test is placed with a test pack to indicate sterilization passed or failed.
- DART (Bowie-Dick) Test-It's designed to indicate the removal of air from the chamber and load, so the steam can penetrate the load. In other words it detects the presence of a vacuum.
- Vacuum Leak Test-In this cycle, the Sterilizer automatically checks for vacuum leaks in the piping and door seal.

  NOTE: The measured leak rate is calculated by the control over a timed 10 minute period. A leak rate of 1mm Hg/minute or less is passing.

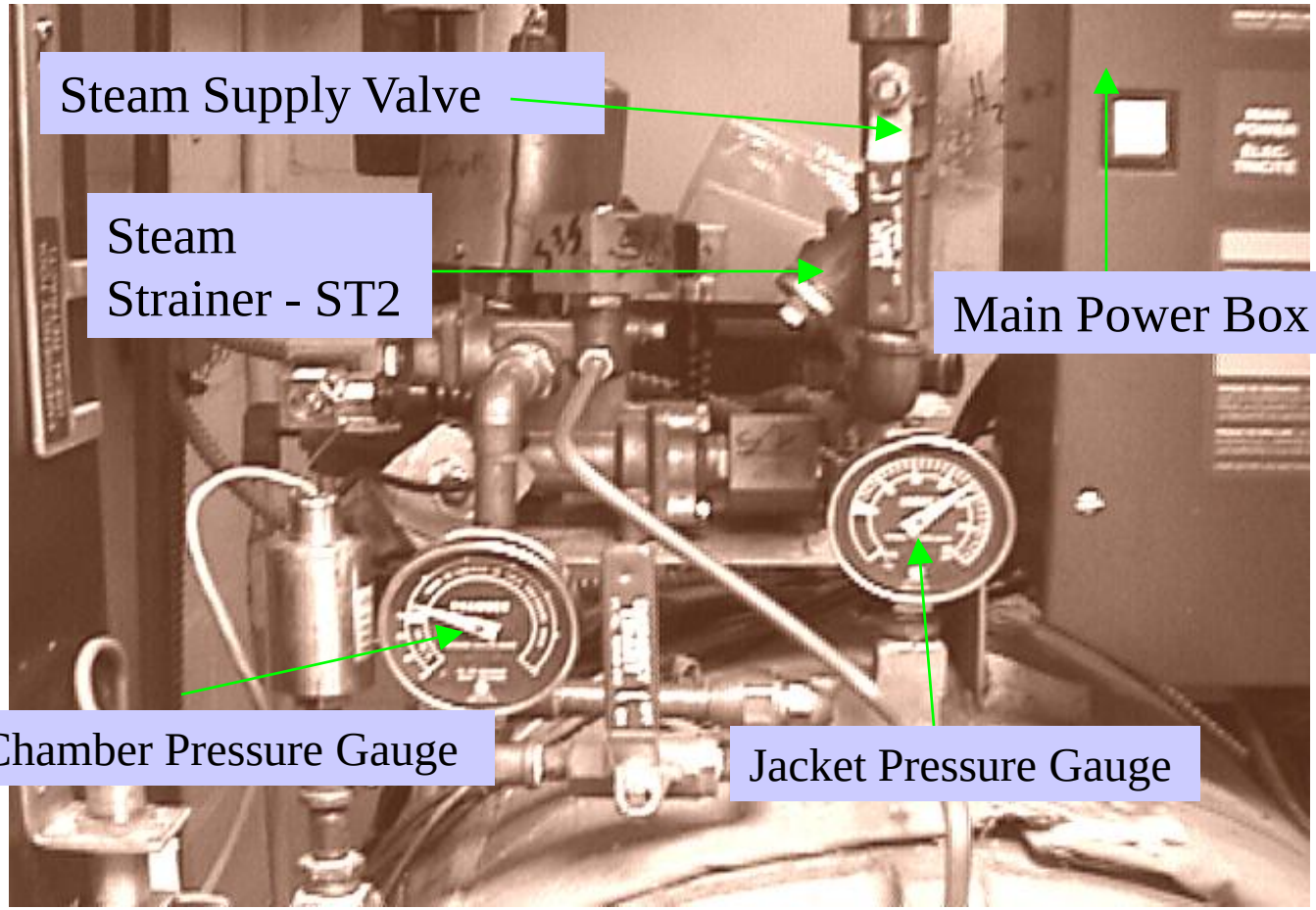
Sterilization Operation

- Check the computer print outs
  - Normal sterilization temperature should be at 270 ° F . (Minimum temperature)
  - Normal control temperature should be at 274° F . (Maximum temperature)
- Normal Jacket pressure should be at 40 p.s.i.
- Flash cycles are configured by section as needed so sterilization and dry times will vary (Flash is used for unwrapped instruments).

Sterilization Safety Checklist

- Always check chamber and jacket pressure gauges first while performing PM's or repairs to make sure system has been depressurized.
- If there is a steam generator follow the safety warnings before performing any PM's or repairs.
- Wear appropriate Protective gear before working or unloading Sterilizer to prevent serious burns.
  - Face shield.
  - Protective gown.
  - Kevlar Arm guards
  - Gloves

Top Component Identification



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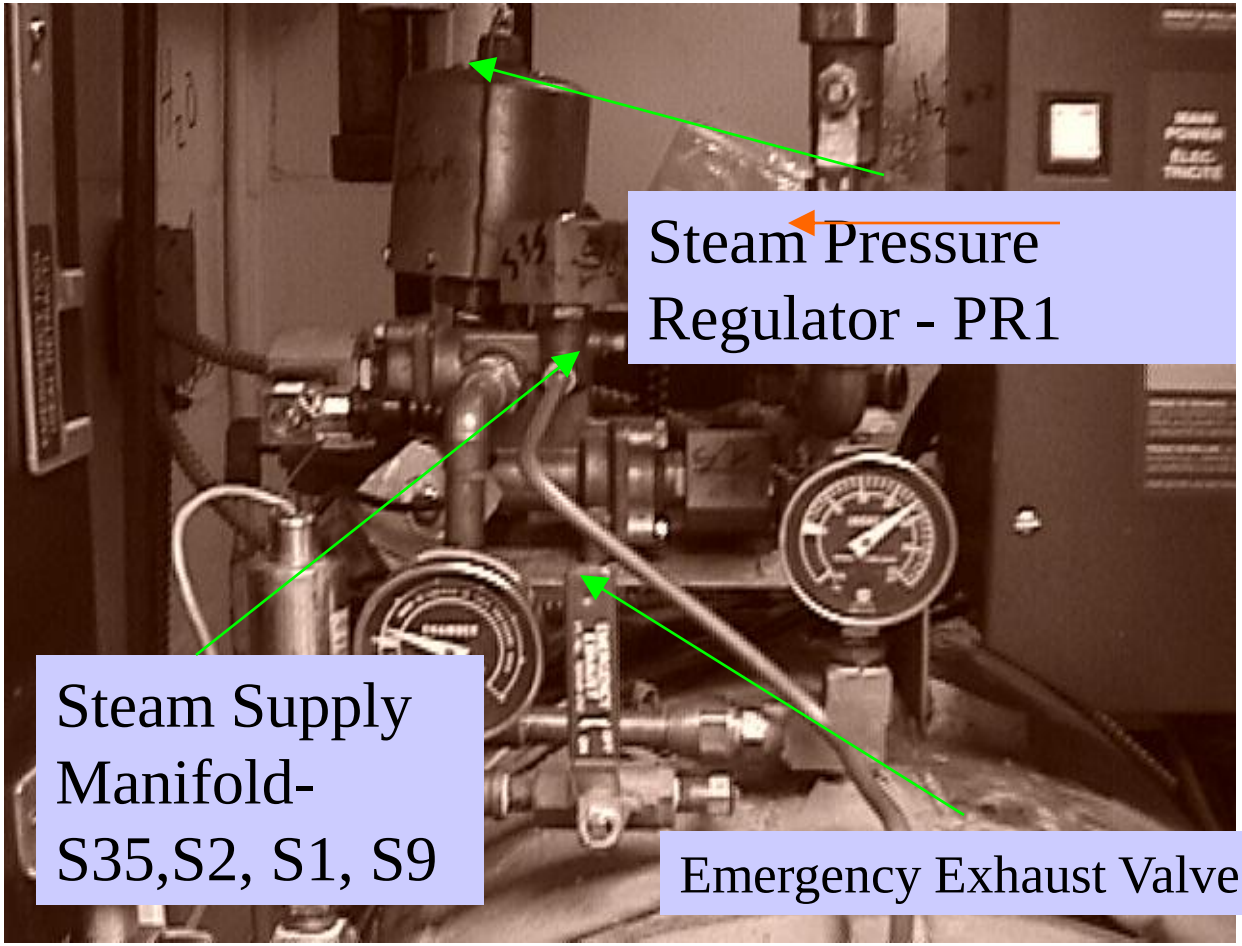

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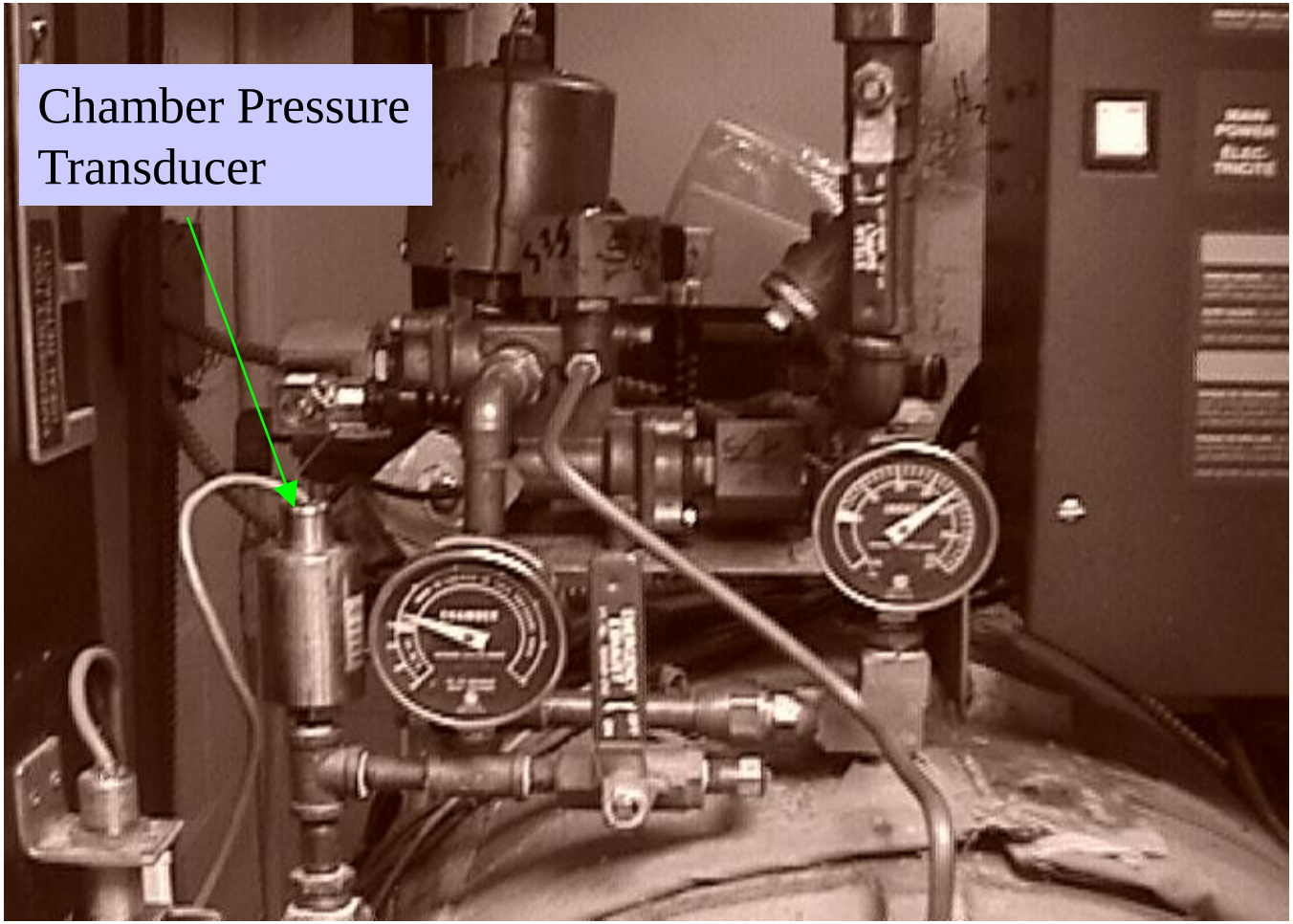

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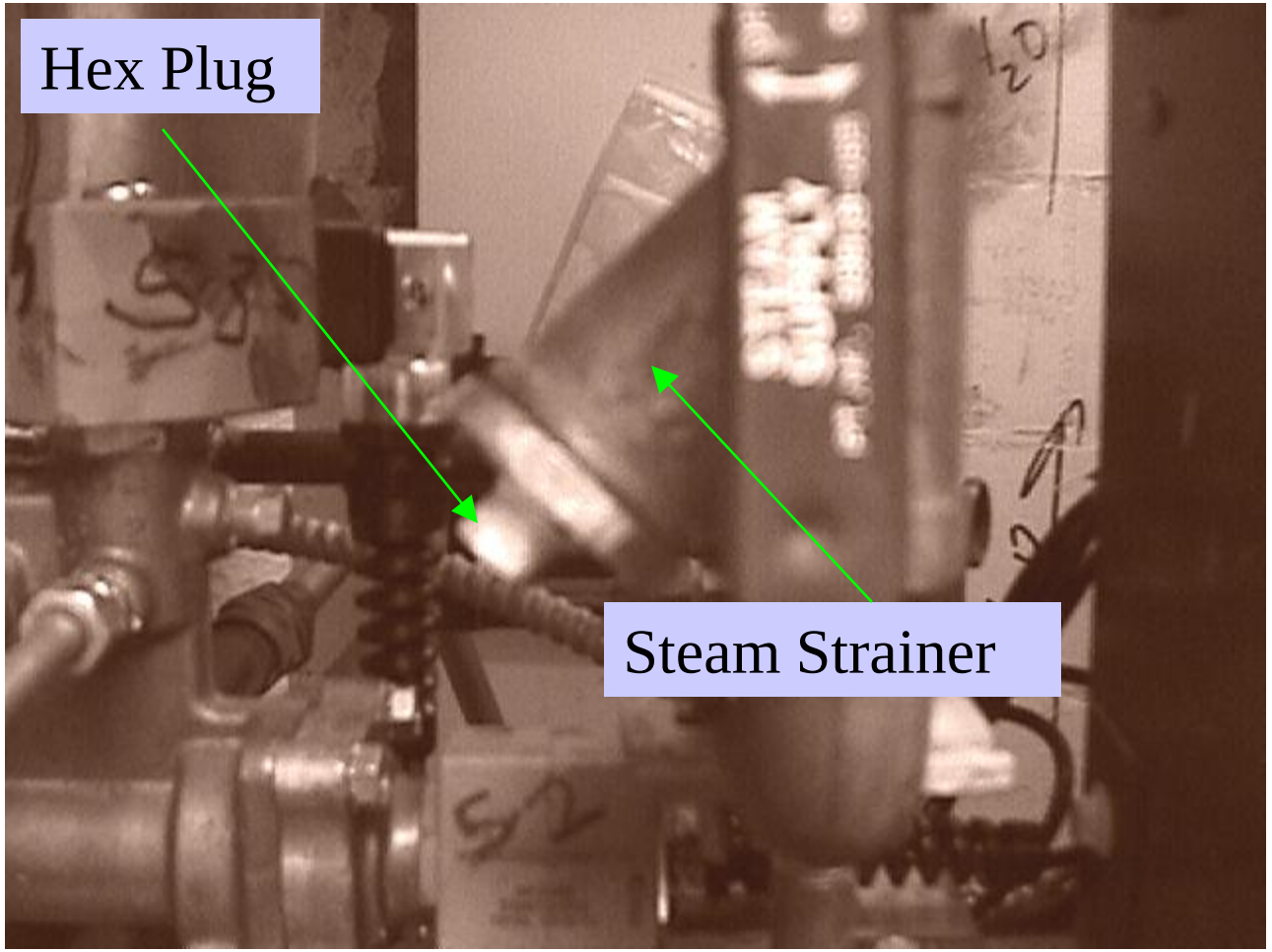

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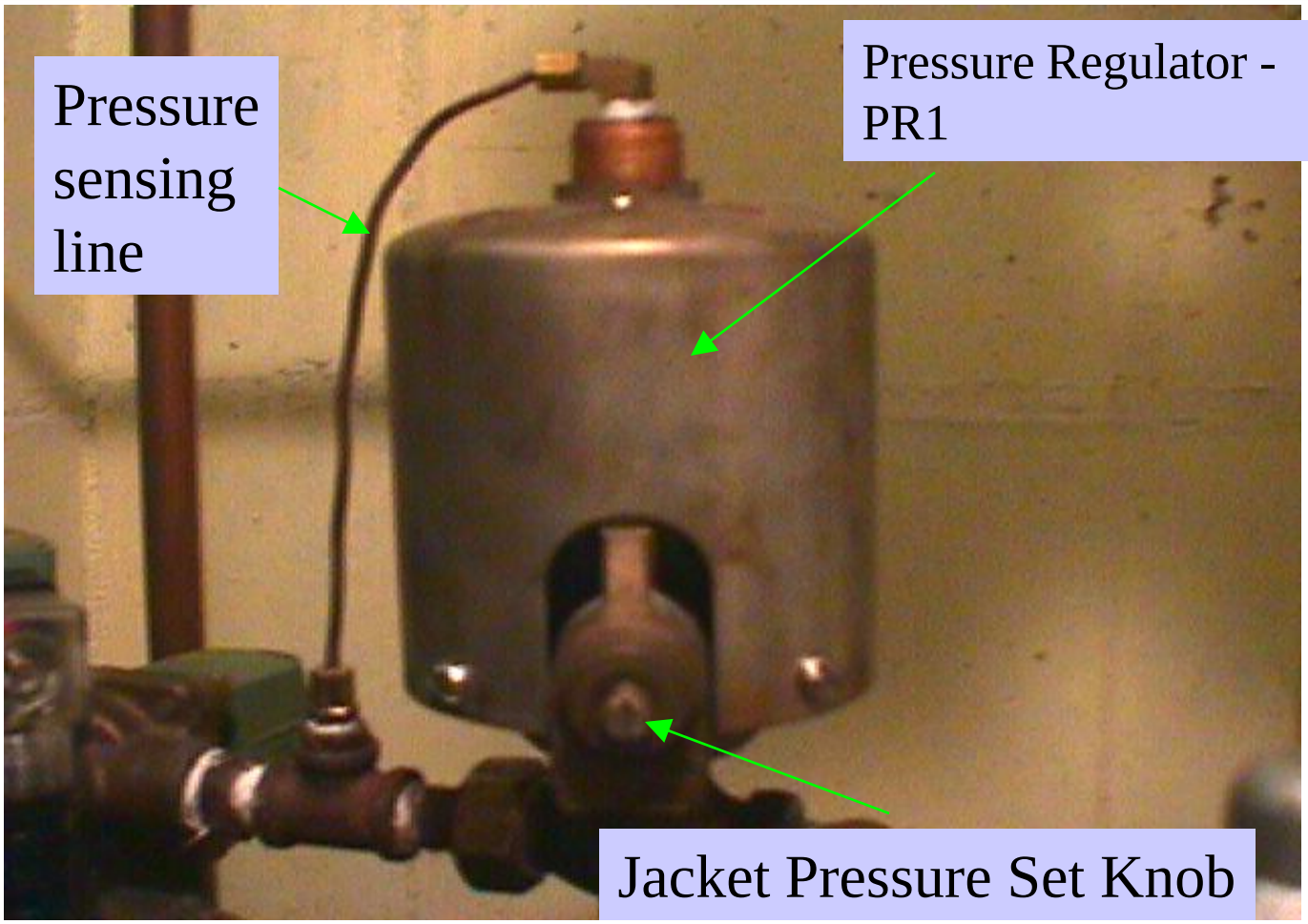

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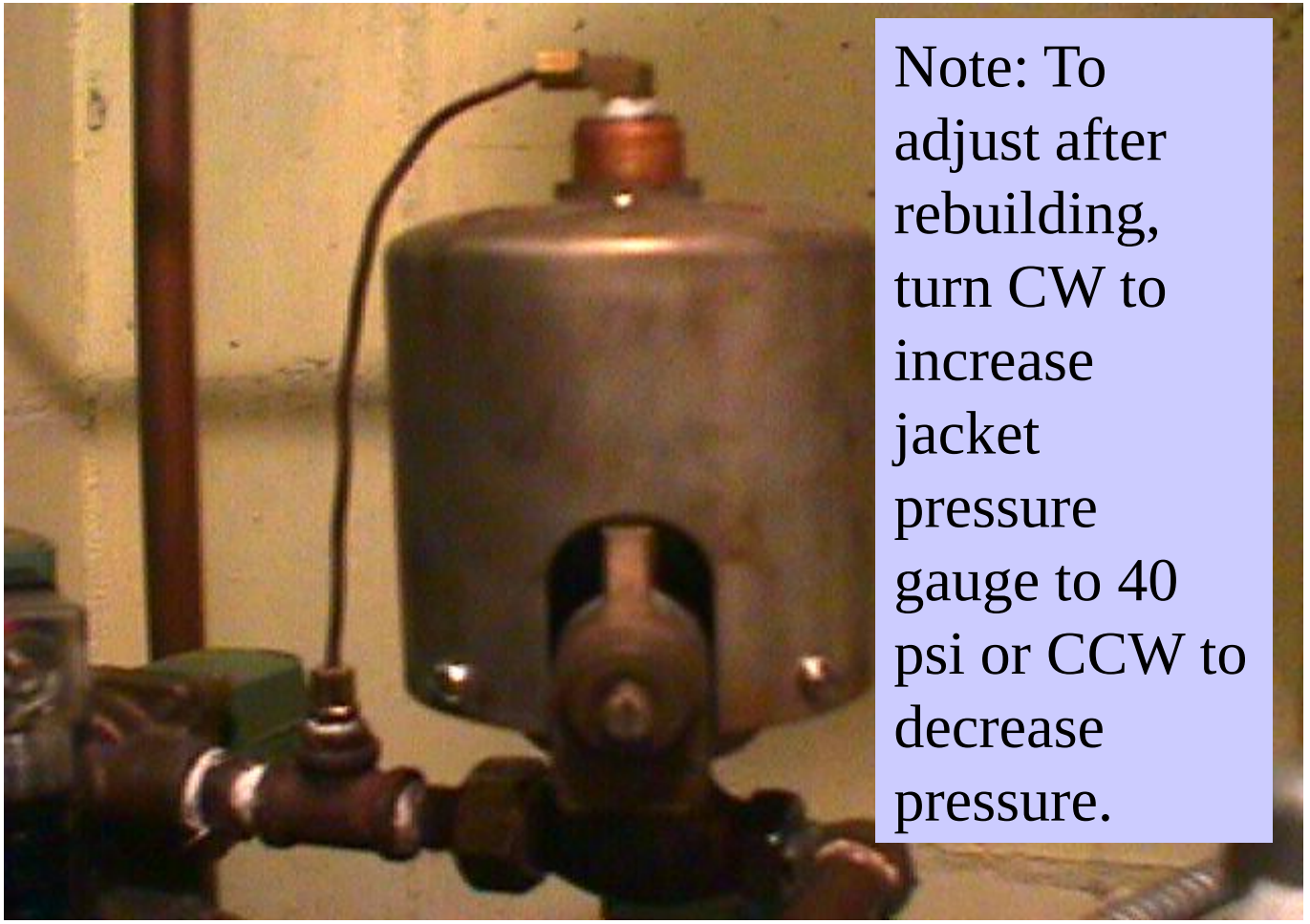

Note: To adjust after rebuilding, turn CW to increase jacket pressure gauge to 40 psi or CCW to decrease pressure.

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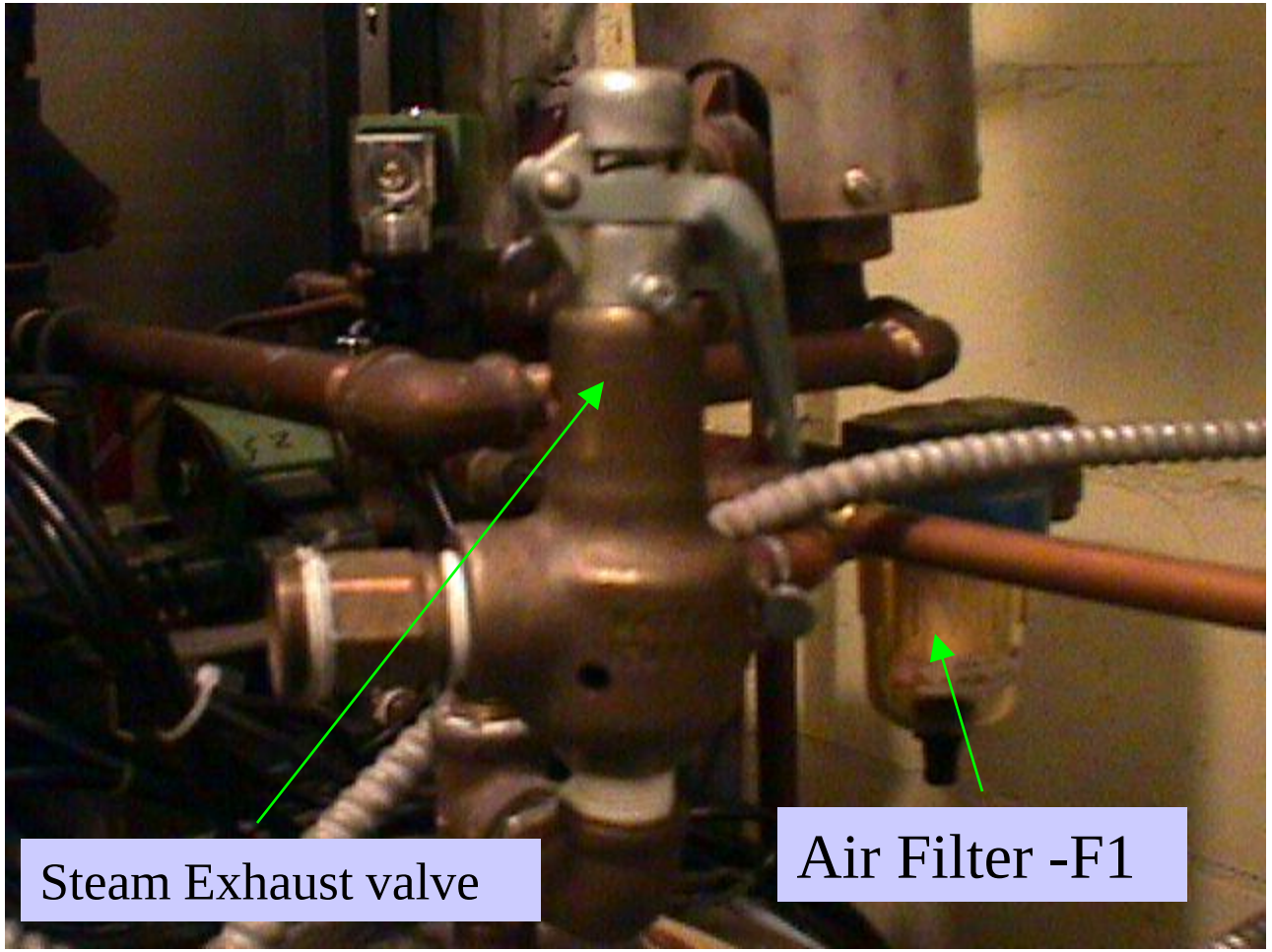

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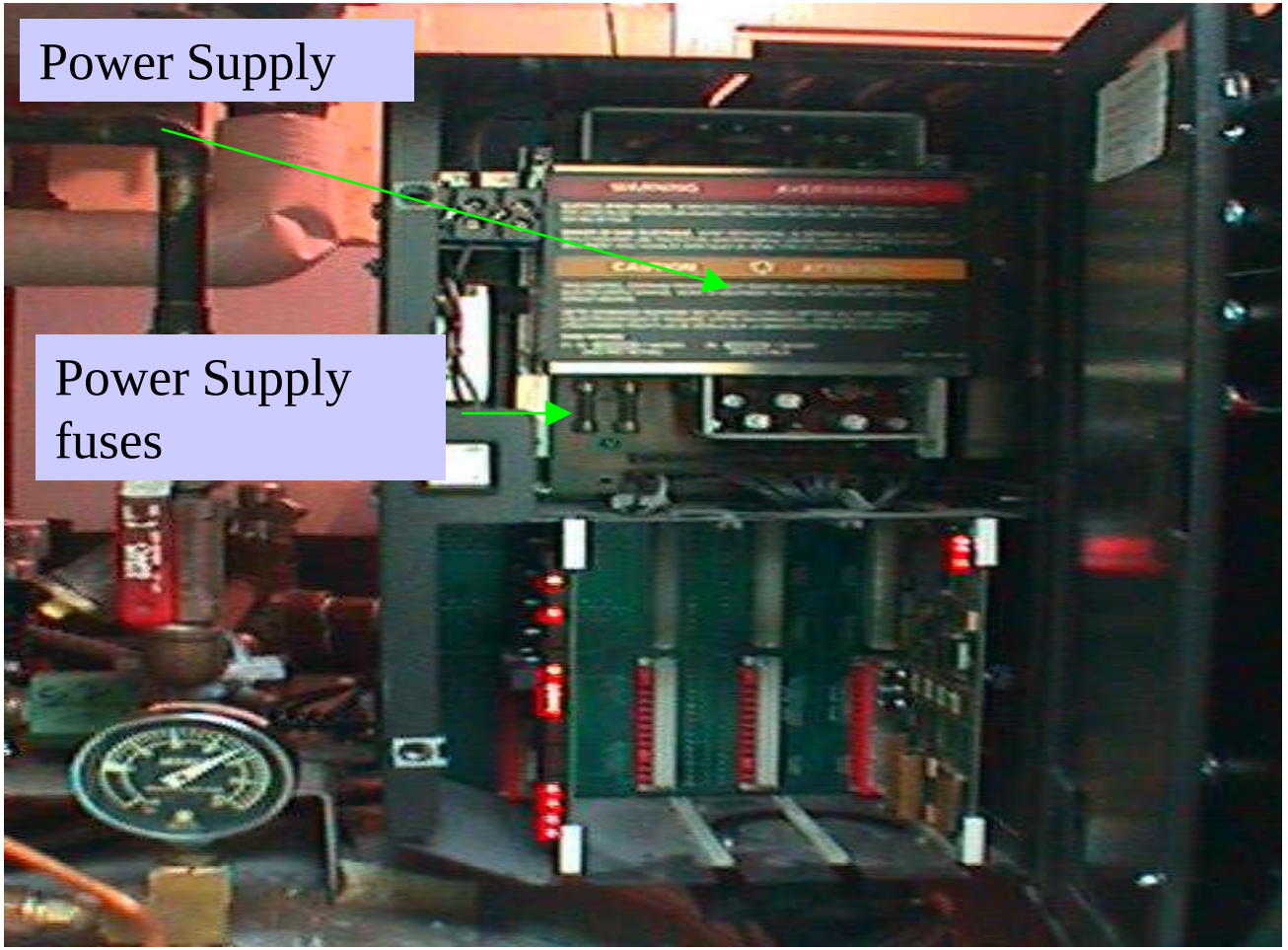
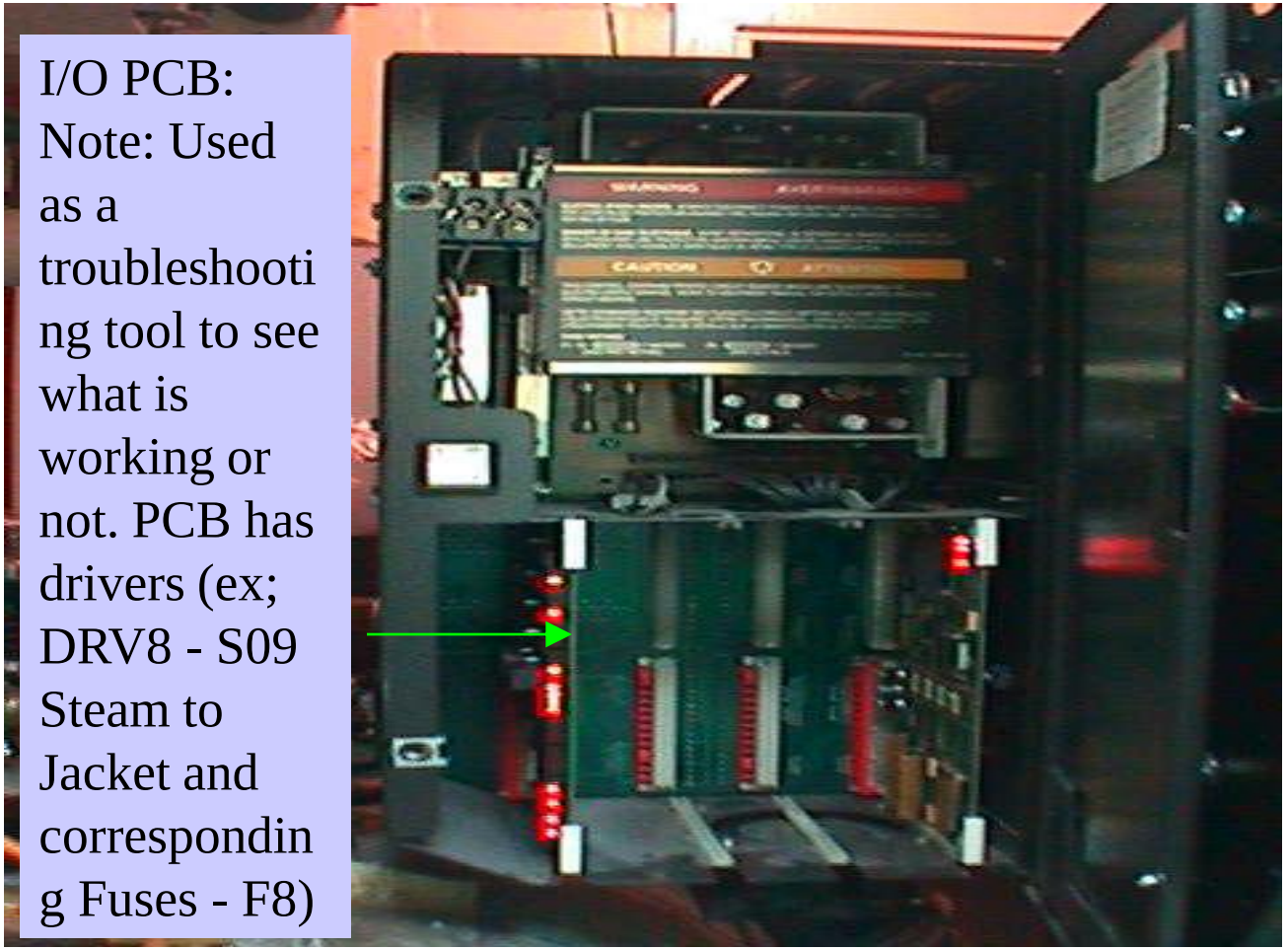


Top Component Identification

I/O PCB: Note: Used as a troubleshooting tool to see what is working or not. PCB has drivers (ex; DRV8 - S09 Steam to Jacket and corresponding Fuses - F8)



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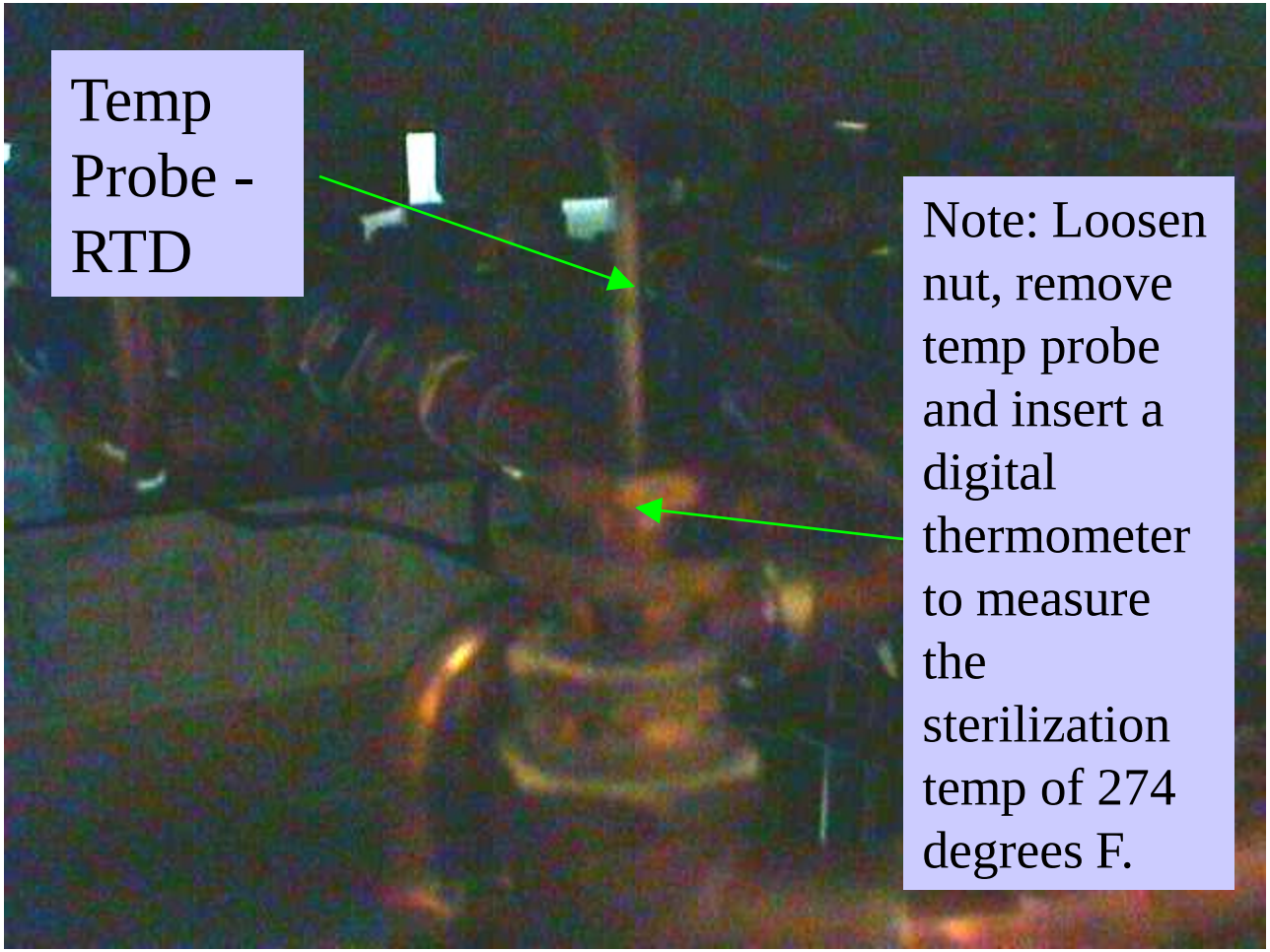
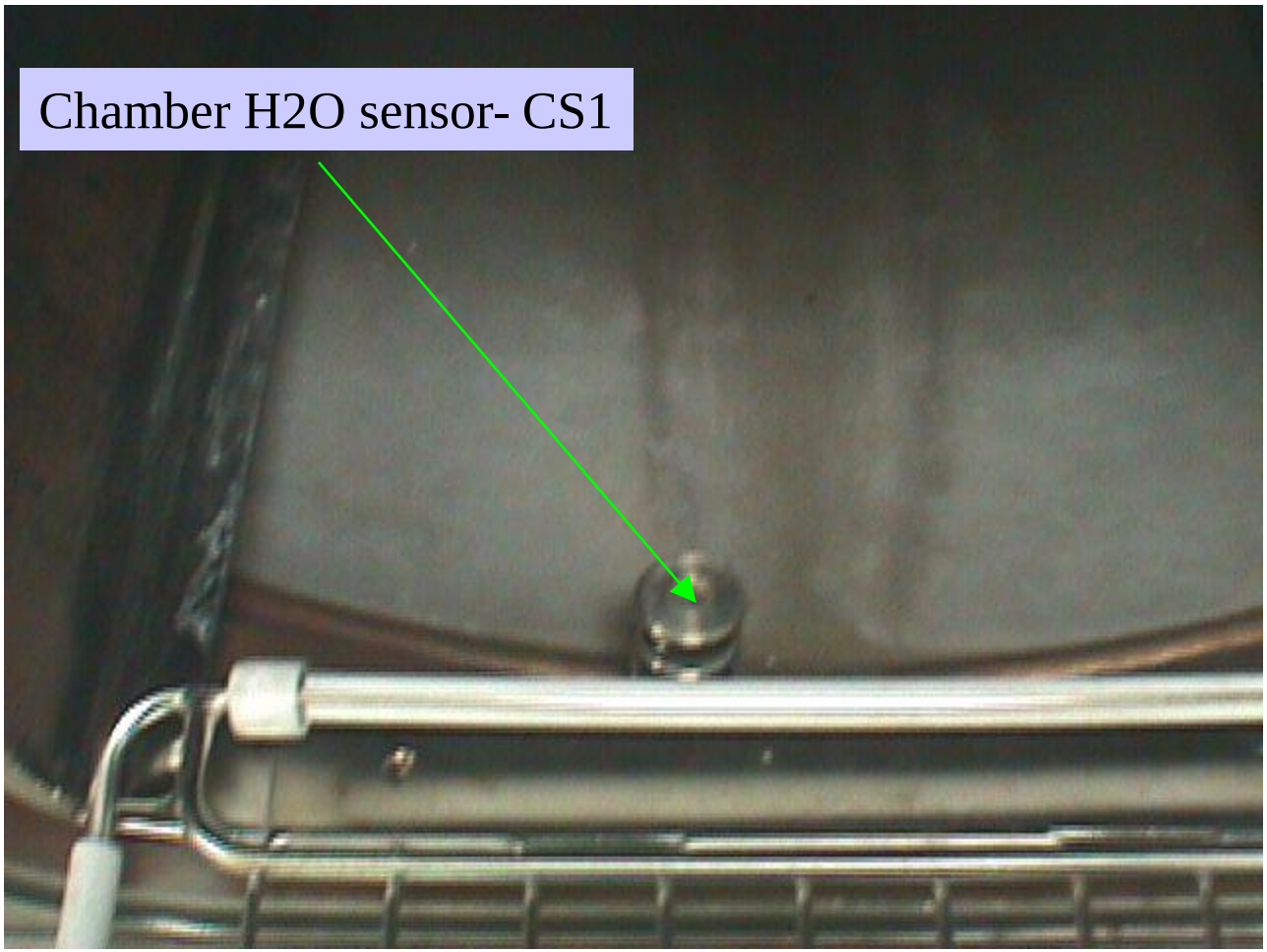


Inside Chamber Component Identification



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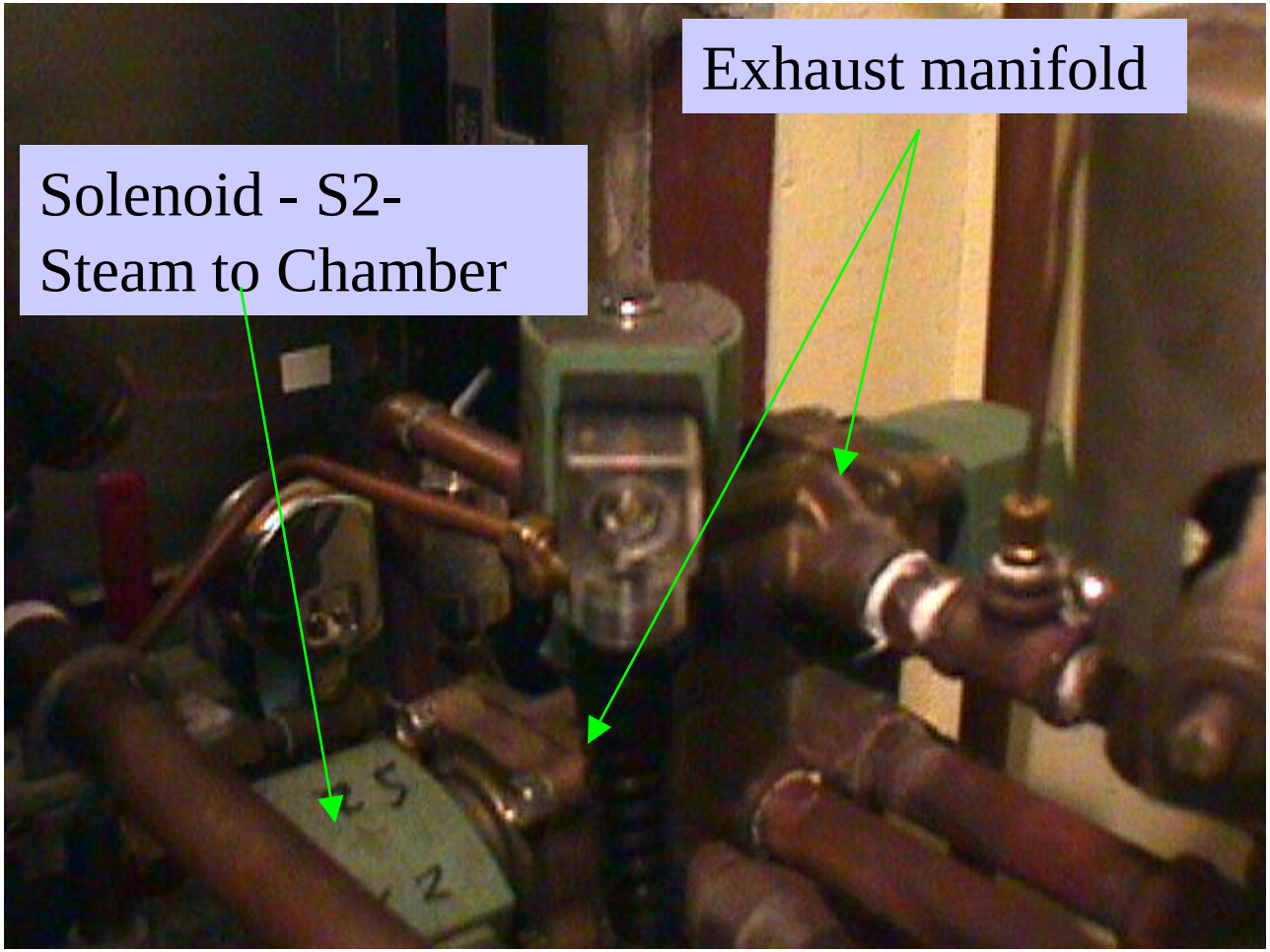
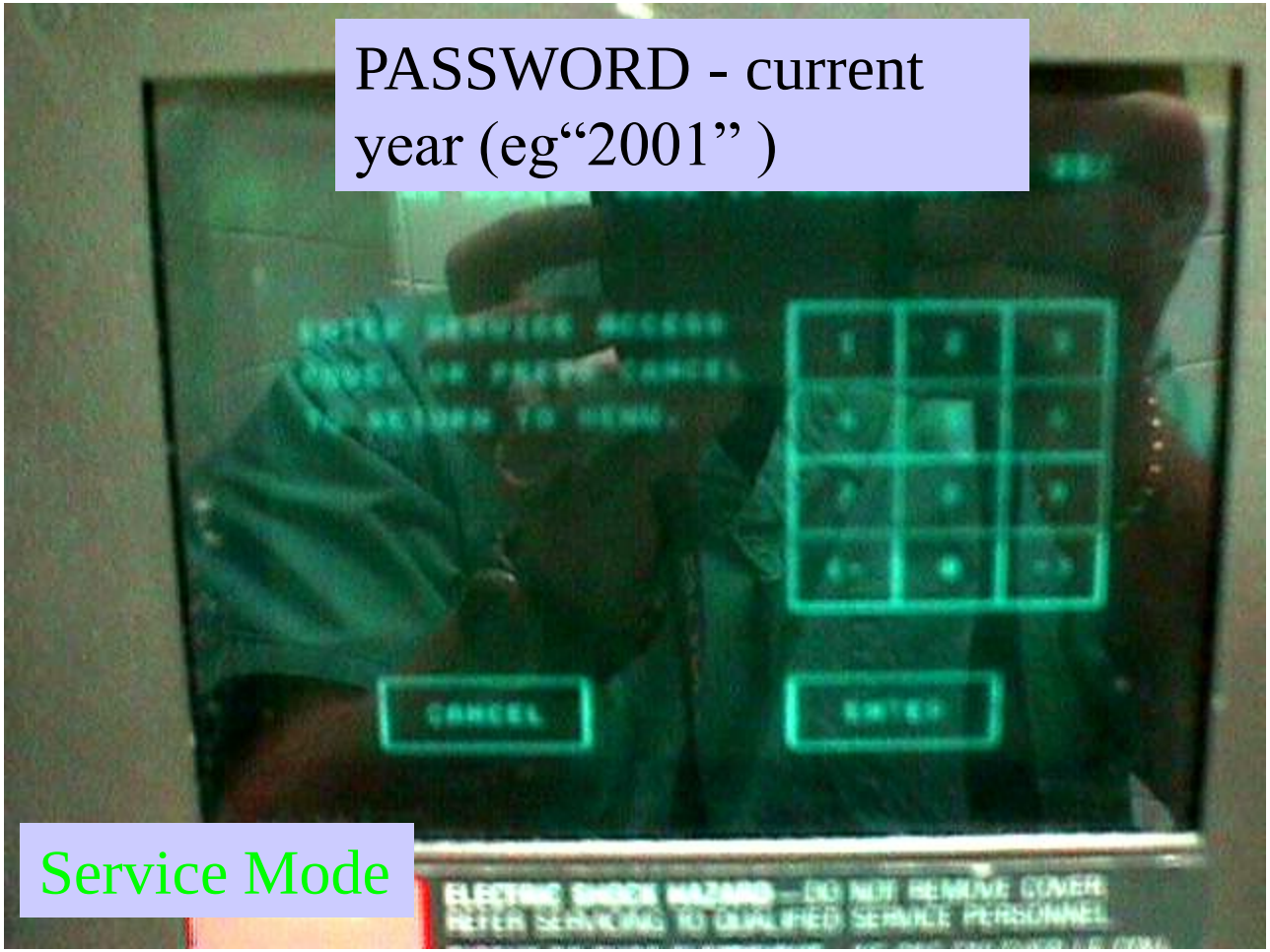


Front face Component Identification



Component Identification

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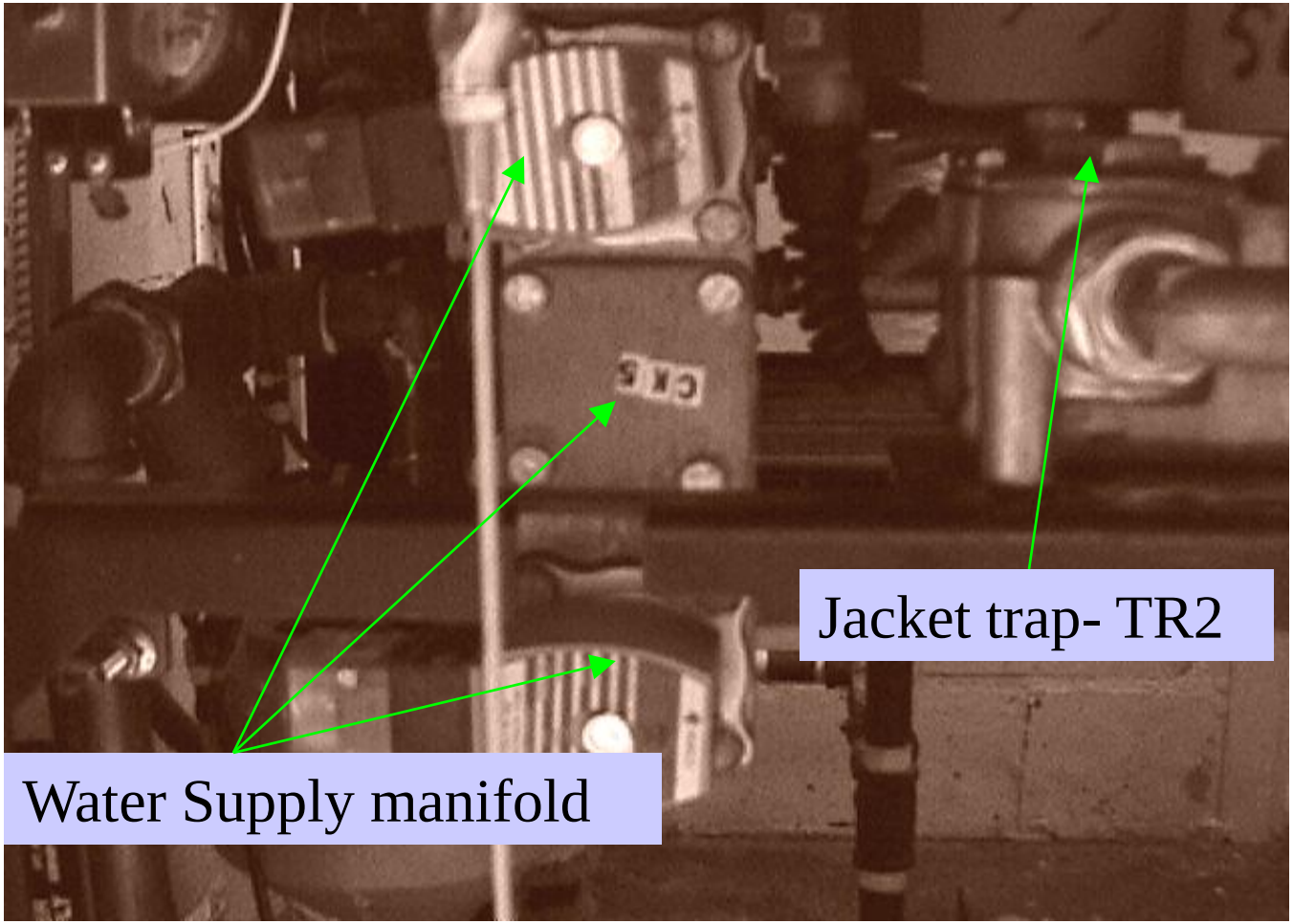

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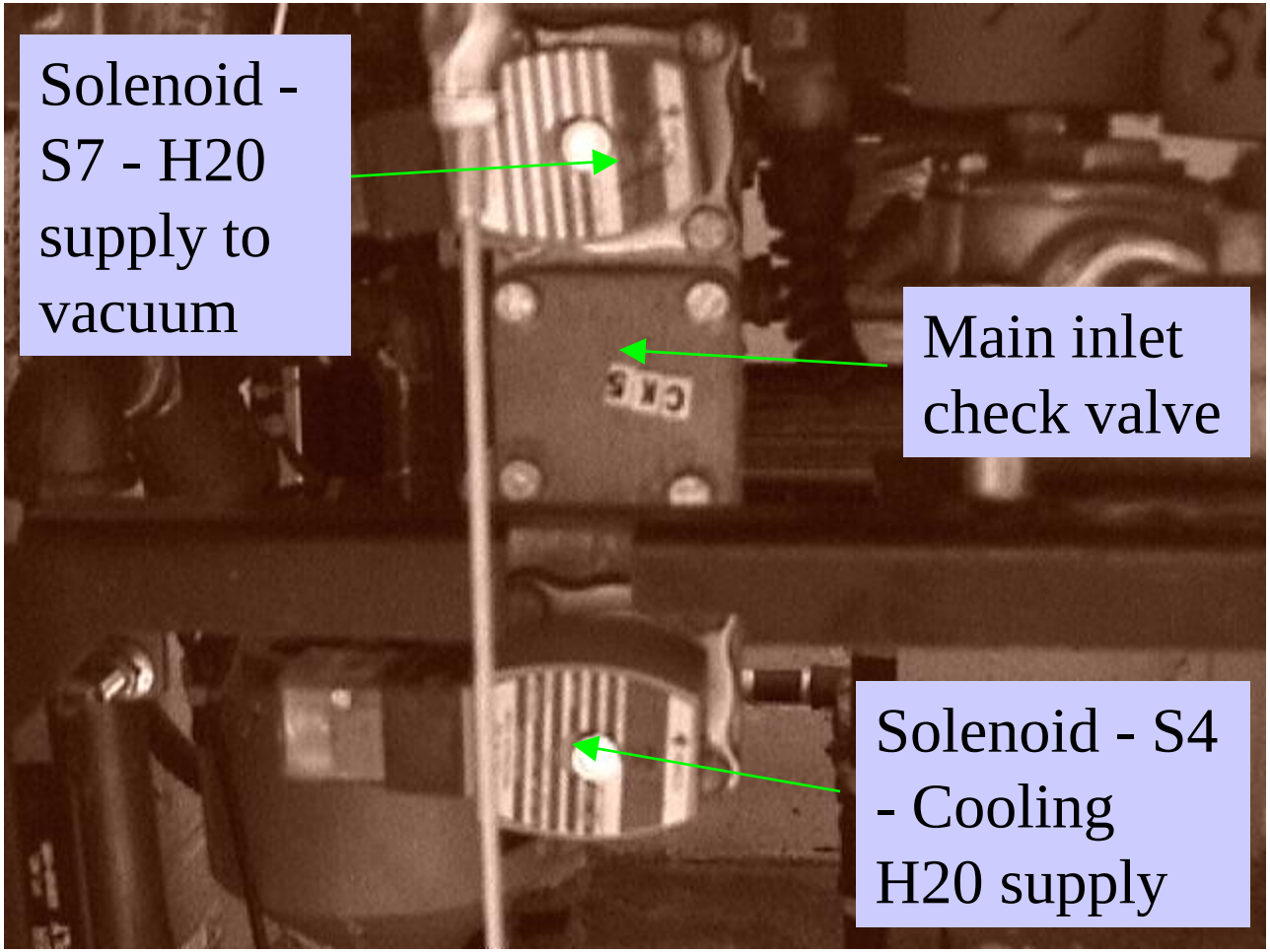

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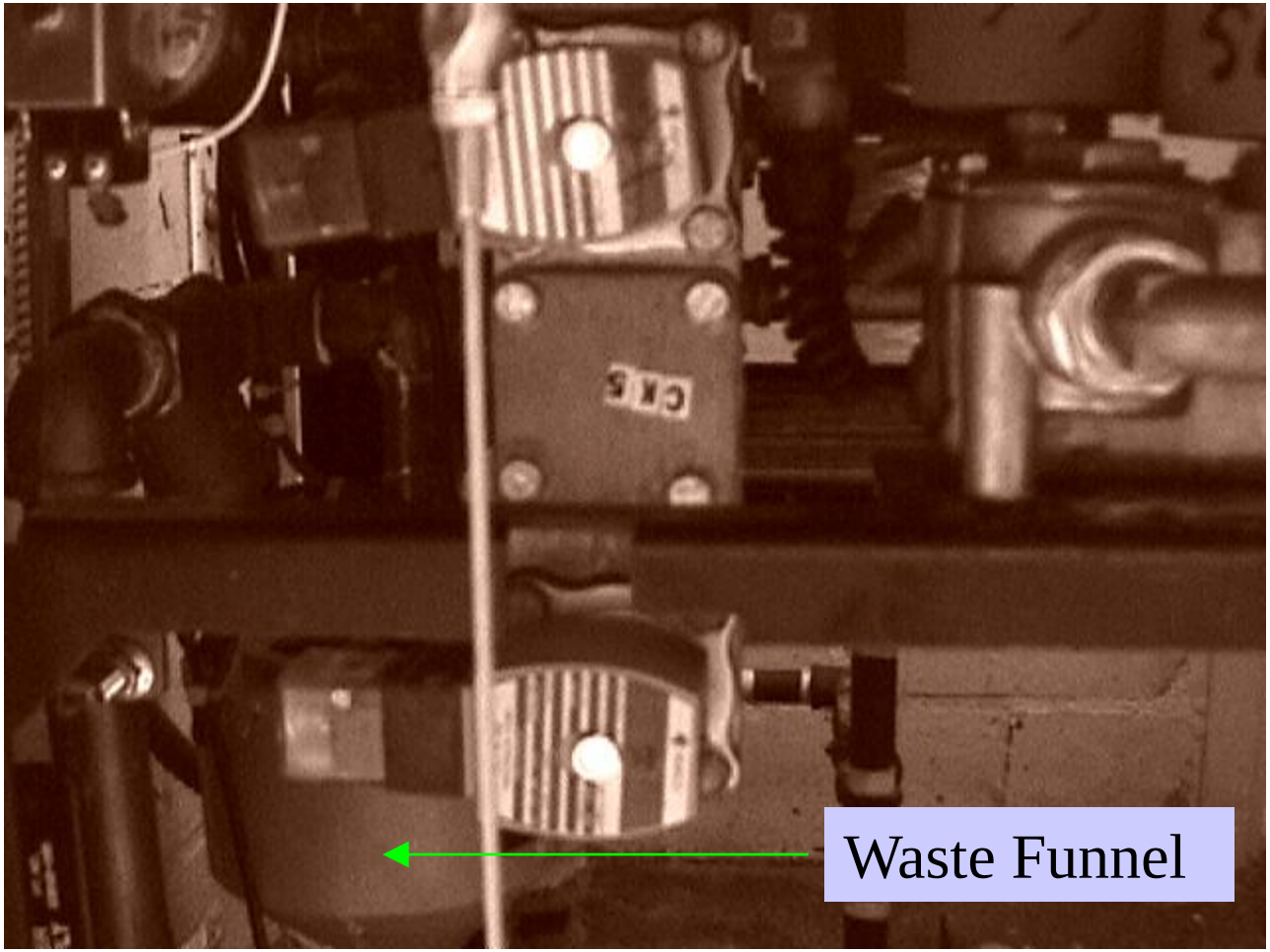

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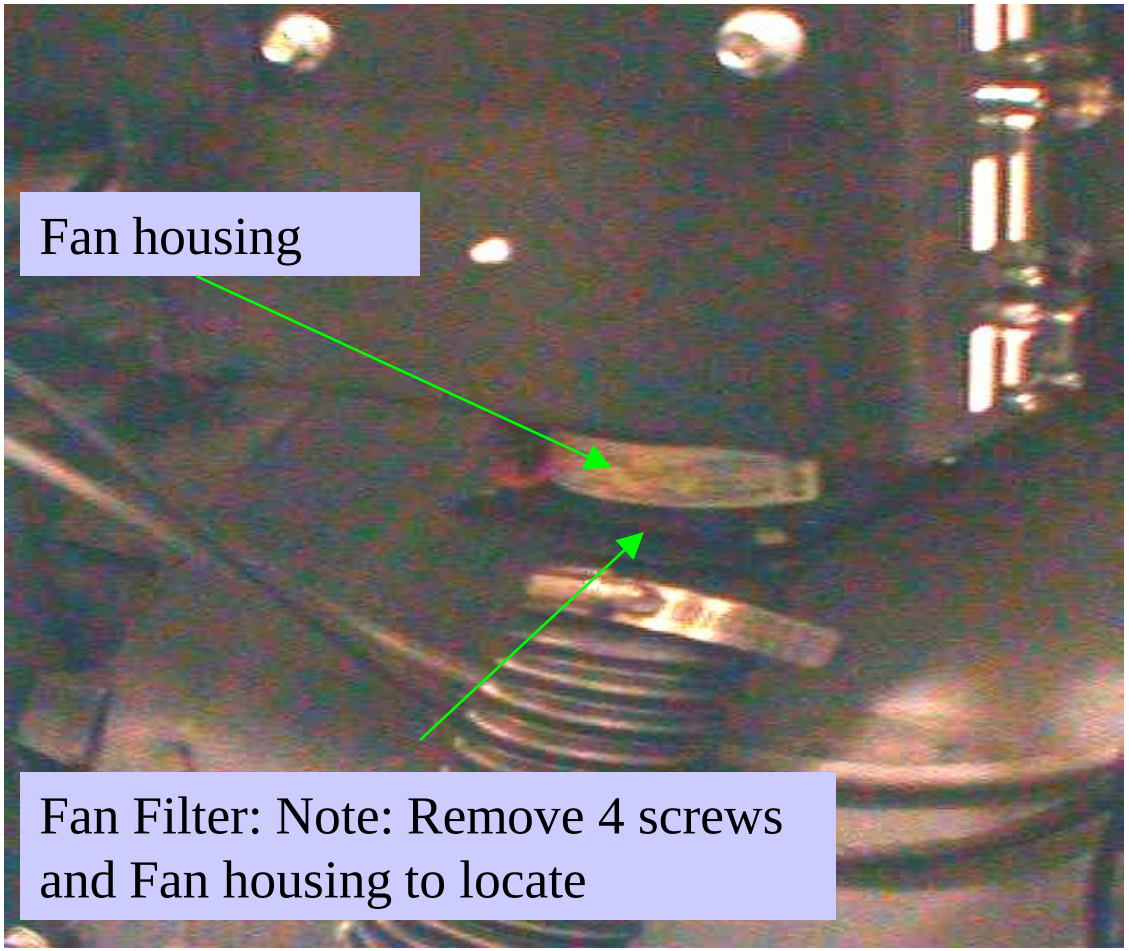
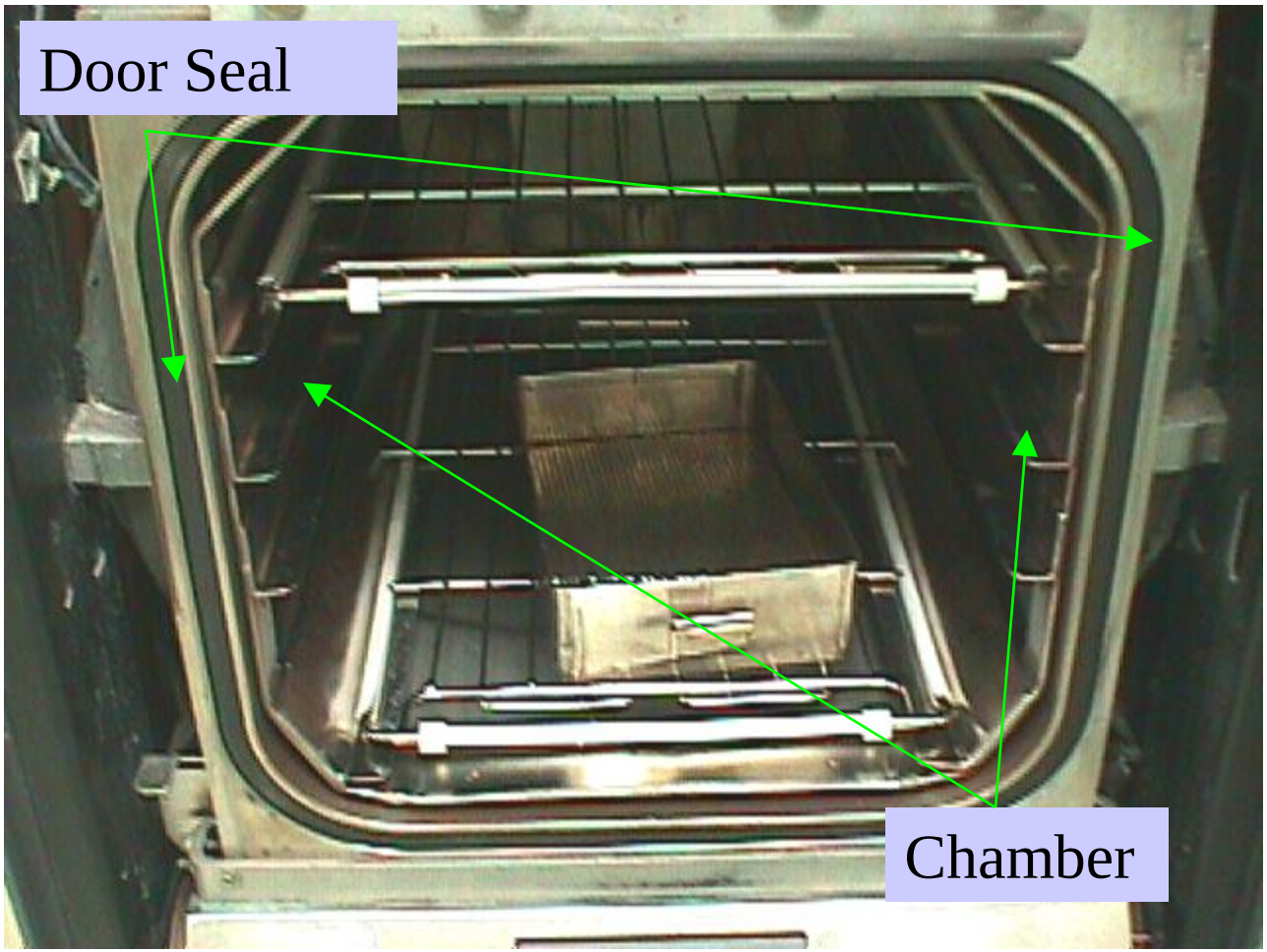


Inside chamber Component Identification



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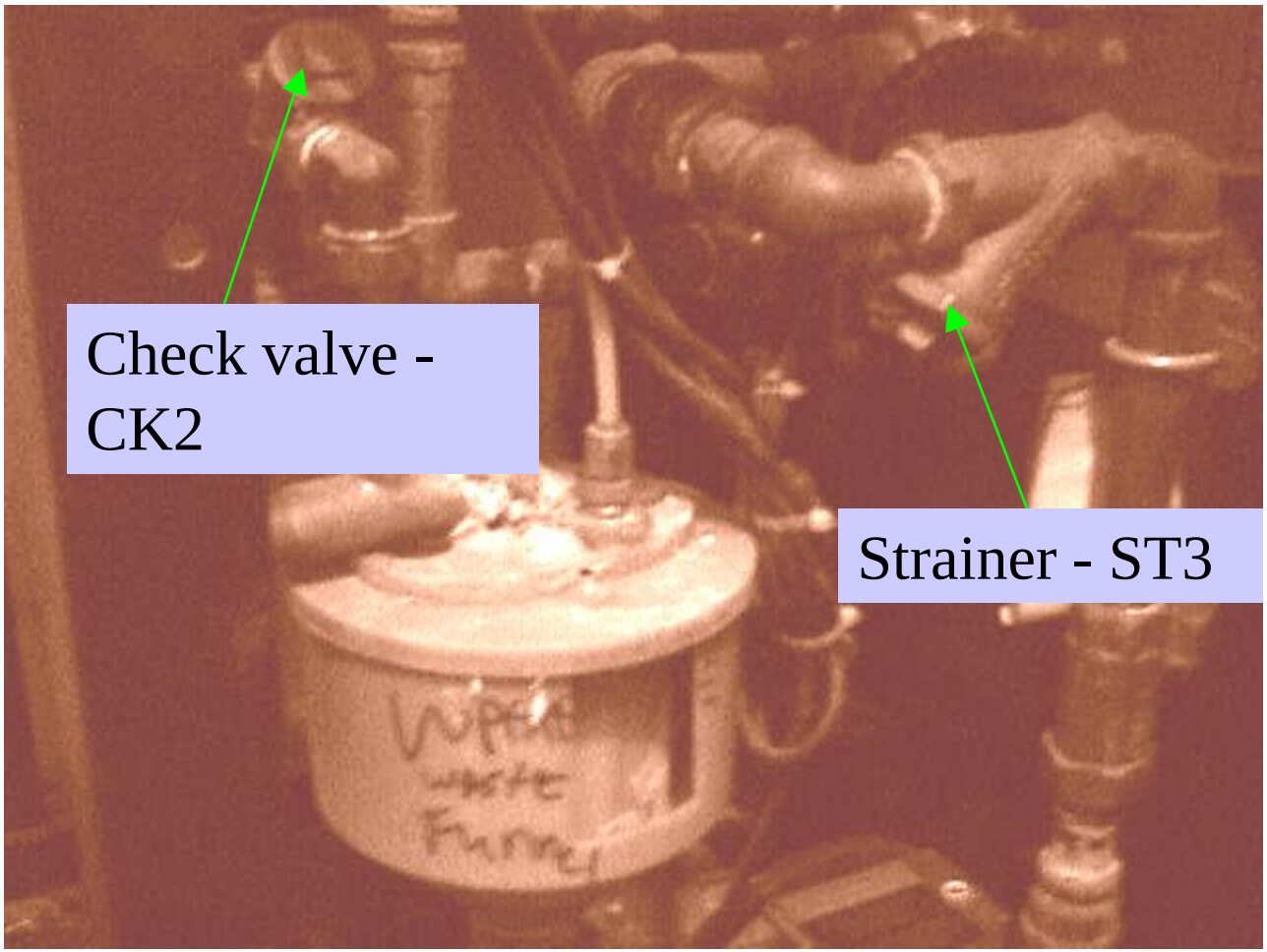

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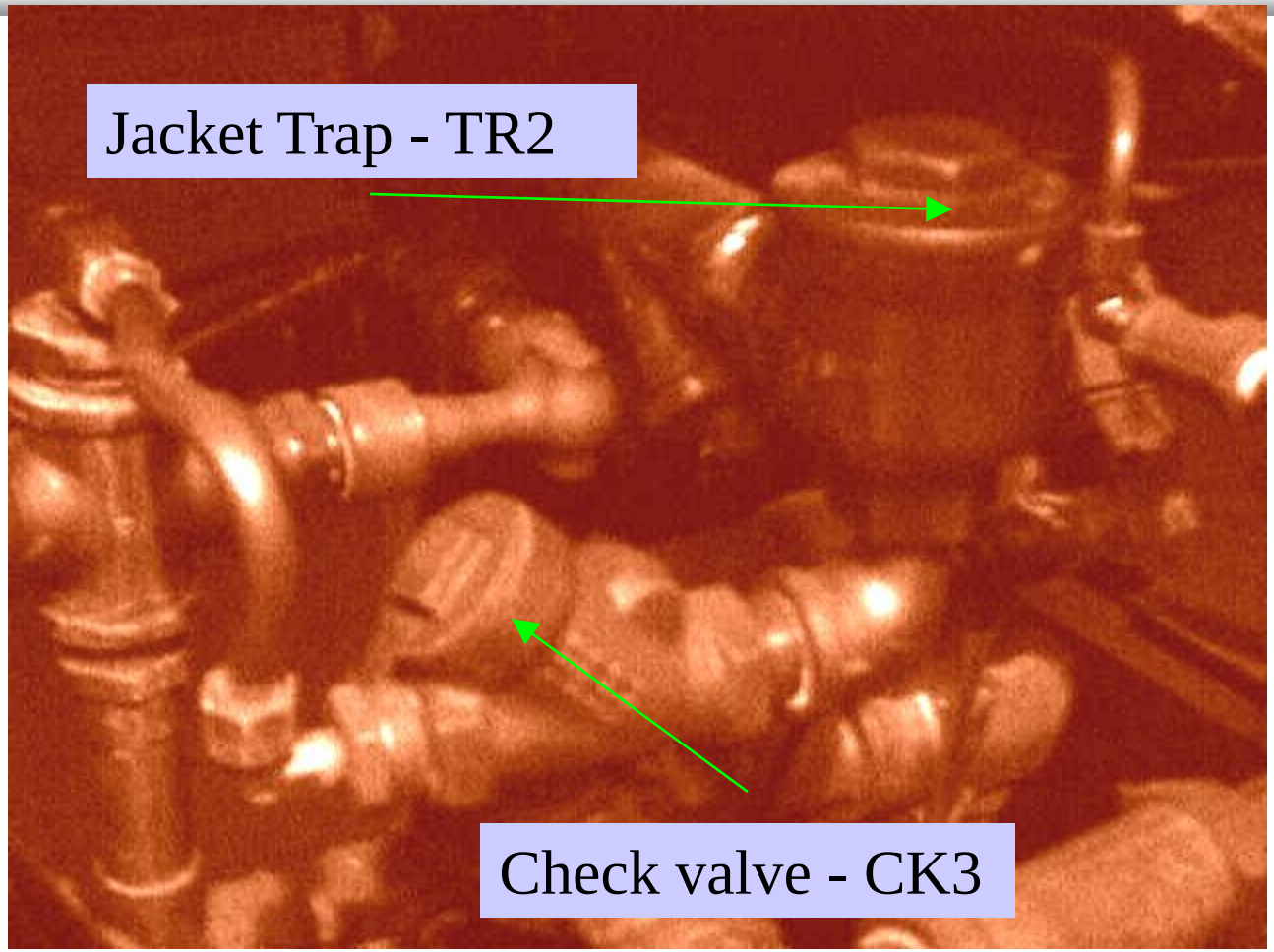

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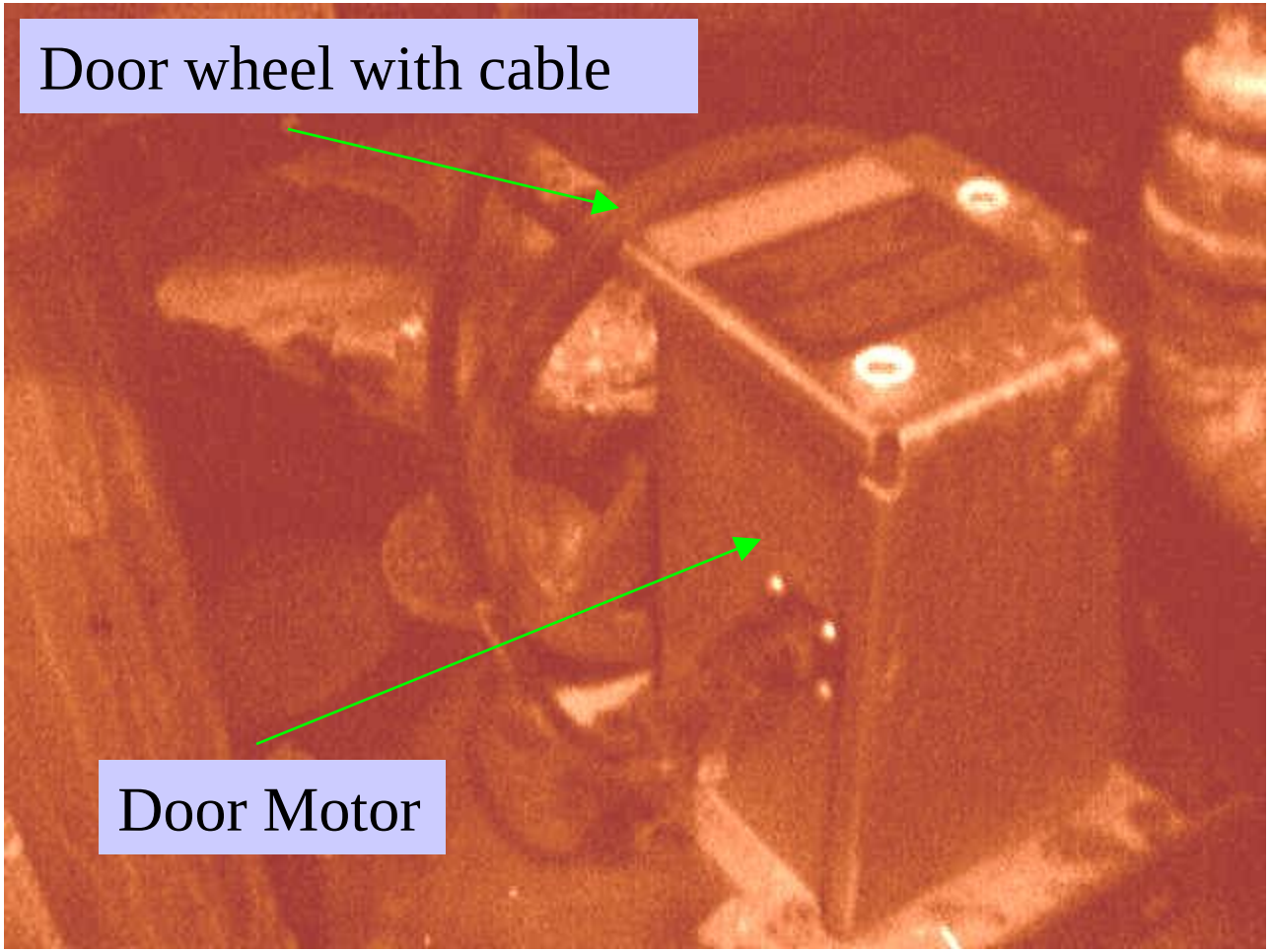
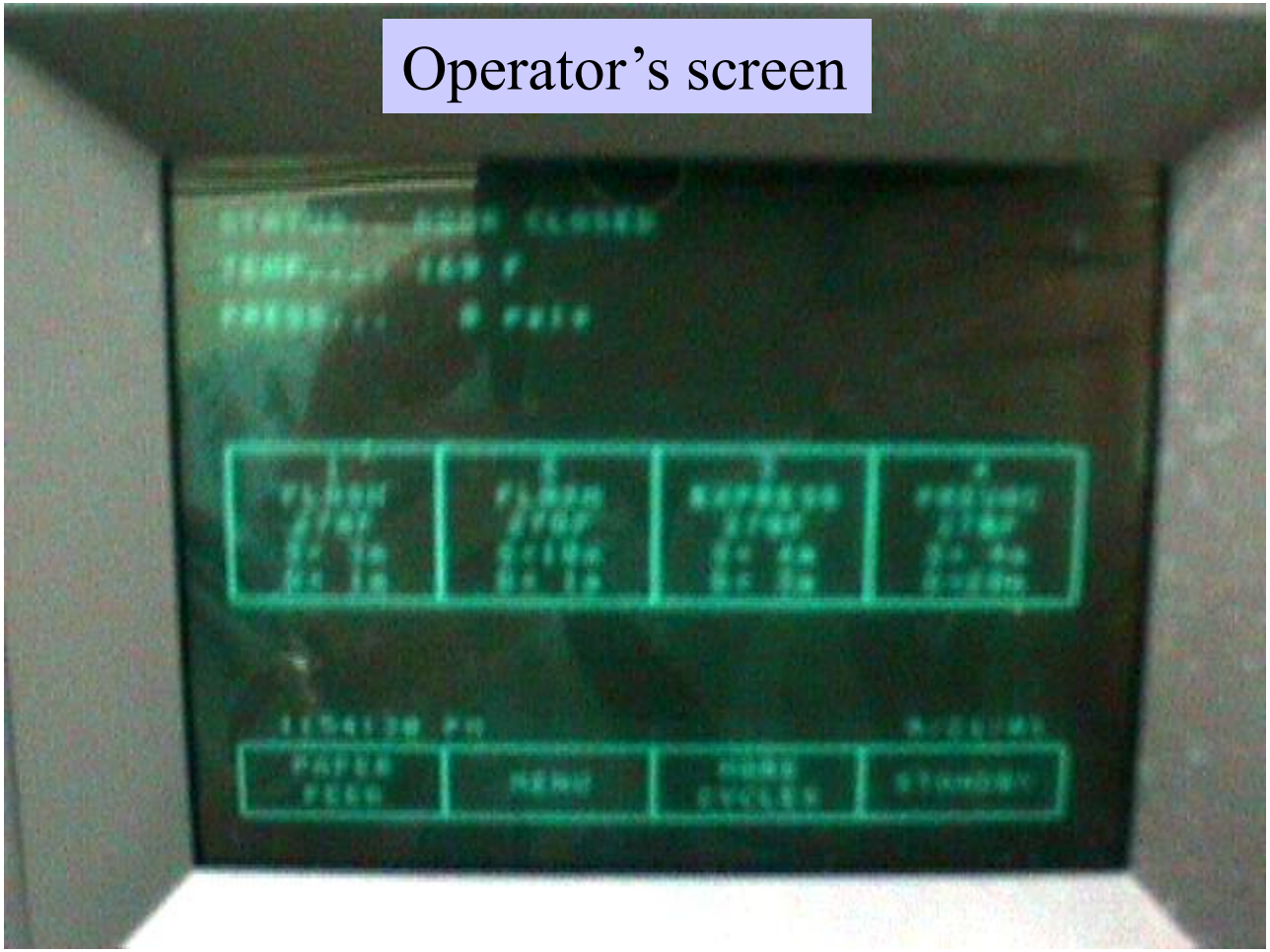


Front face Component Identification



Definitions - check valve

- **check valve, clack valve, non-return valve or one-way valve is a mechanical device, a valve, which normally allows fluid (liquid or gas) to flow through it in only one direction.**

Definitions - pressure regulator

- **pressure regulator** is a valve that automatically cuts off the flow of a liquid or gas at a certain pressure. Regulators are used to allow high-pressure fluid supply lines or tanks to be reduced to safe and/or usable pressures for various applications. Also called a 'pop-off' or 'safety' valve

Definitions - solenoid valve

- solenoid valve is an electromechanical valve for use with liquid or gas controlled by running or stopping an electric current through a solenoid, which is a coil of wire, thus changing the state of the valve. The operation of a solenoid valve is similar to that of a light switch, but typically controls the flow of air or water, instead of controls the flow of electricity.

Definitions – RTD probes

- Resistance Temperature Detectors (RTD), as the name implies, are sensors used to measure temperature by correlating the resistance of the RTD element with temperature.

Definitions – heat exchanger

- heat exchanger is a device built for efficient heat transfer from one medium to another.

Definitions - steam trap

- steam trap is a device used to discharge condensate and non condensable gases while not permitting the escape of live steam.
- Screwdriver pull test – put screwdriver blade again solenoid while activated to sense magnetic pull.

Definitions – site glass

- Site glass is a means of checking the water level and color.
- Sterilizer can be used without site glass as long as both top and bottom valves are closed.
- Belongs on the generator