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**HDD-8RB**  
with digital control  
**GALISO CYLINDER DRYER**

**INSTALLATION/OPERATION INSTRUCTION MANUAL**

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**!!!DANGER!!!**

**DO NOT USE THIS EQUIPMENT TO  
PURGE TOXIC OR FLAMMABLE GAS**

**AND**

**DO NOT USE THIS EQUIPMENT  
UNDER FLAMMABLE, VOLATILE OR  
TOXIC ENVIRONMENTAL  
CONDITIONS**

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## 1.0 INTRODUCTION

The HDD Galiso Heavy Duty Dryer has been designed to quickly dry up to eight drained 9" by 51" cylinders, in relatively short amount of time.

The HDD Cylinder Dryer features a PID controlled 8KW heating element and a 1.3 HP Blower Motor that moves hot air through Cylinders at 84 CFM. The Motor provides quiet, maintenance free, efficient operation. The HDD can produce temperatures up to 250°F to accelerate the drying of steel and aluminum cylinders.

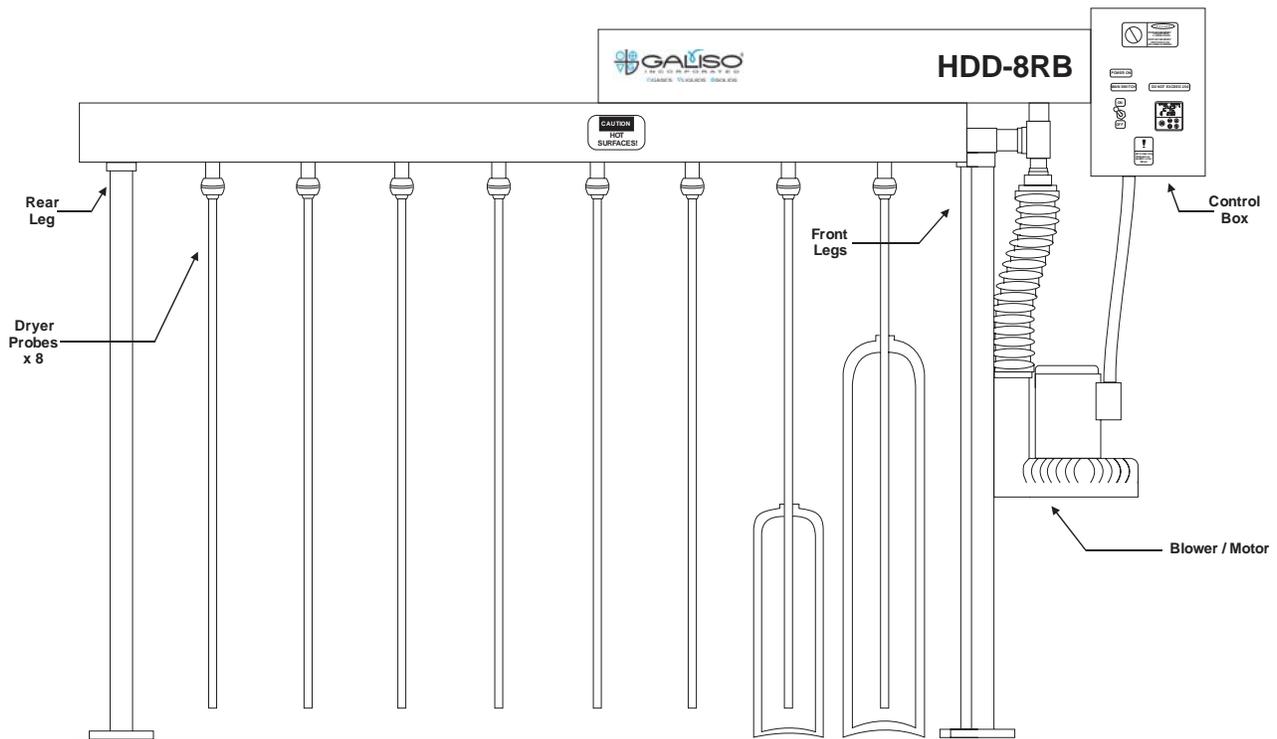
To speed the process of loading and unloading Cylinders, the Dryer Probes have a Quick Connect ends that allow easy attachment to the machine.

For convenience a platform and a 110 Volt Electrical Outlet have been integrated, into the HDD design, to give an ideal location for placement and operation of a Cylinder Inspection Light.

The HDD series is available in 220 Volt single phase, 220 Volt Three phase or 440 Volt three phase operation to adapt to the power supply at your facility 50/60 Hz options.

In addition to the HDD series of Cylinder Dryers, Galiso also offers the (GCD) Galiso Cylinder Dryer, and the Small Cylinder Dryer (SCD), for drying smaller cylinders.

## 2.0 SPECIFICATIONS



**Figure 1, HDD Galiso Heavy Duty Dryer**

Power Requirements: 220 Volt, single phase, 50/60 Hz  
 220 Volt, three phase, 50/60 Hz  
 440 Volt, three phase, 50/60 Hz

Blower Motor: 1.3 HP, (generates 84 CFM of air.)

Heater Element: 8 KW, PID Controlled

Dimensions (frame and blower assembly): 10'2" L x 18" W x 6'6" H

Dryer Probes: ½" O.D. x 0.025" wall thickness x 58" std length, with Quick Connect

Warranty: One Year (see Galiso Warranty Terms, Form No GSO7805-1).

### 3.0 SAFETY

Read all instructions before attempting to install or operate this machine. GALISO, INCORPORATED IS NOT RESPONSIBLE FOR DAMAGE OR INJURY CAUSED BY UNSAFE USE, MAINTENANCE, APPLICATION, MODIFICATION OR IMPROPER INSTALLATION OF THIS MACHINE. Please contact Galiso, Inc. for guidance when you are in doubt as to the proper safety precautions to be taken when installing or operating this machine.

- A. Take care to keep the work area around the HDD clean, dry and free of debris. This will decrease the chance of operator injury due to slips or falls.
- B. Always wear gloves, eye protection and foot protection while operating the HDD.
- C. The HDD dryer is capable of producing considerable heat. Use insulating gloves to protect hands against possible burns from hot areas and items.
- D. Do not cover motor fan cowl. Do not drop screwdrivers, nails, etc., into the openings of the fan cowl.
- E. Make sure to bolt, or lag the HDD securely to the floor.

**NOTE:** An Over-temperature monitor has been installed to prevent this system from overheating. If temperatures are over reached, the system will shut off the Heater and an error message will be shown. Pressing Reset will restart operation, if the temperature has not exceeded the target pressure.

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## 4.0 INSTALLATION

- A. Read all instructions and familiarize yourself with the installation blueprints before attempting to install or operate the HDD Cylinder Dryer.
- B. Carefully uncrate the HDD Cylinder Dryer and remove all packing materials.

If there are any missing or damaged parts, please call Galiso, Inc. at 1 (800) 854-3789 and DO NOT attempt to install any pieces until concerns and possible safety issues have been discussed.

**NOTE:** The installation location should insure adequate clearance for unprotected shop personnel, and close to the power source.

- C. To facilitate assembly, lift the Upper Body of the unit with a forklift or hoist. Position the three Legs beneath the Upper Body. Thread the Legs into the Upper Body. Lower the Unit to the floor.
- D. Bolt the Blower/Motor Assembly to the Leg Brackets.
- E. Connect the Flexible Hose from the Blower/Motor to the grey plastic Adapter on the Upper Body.
- F. Take the Cover off of the Control Box. Fasten the Flexible Conduit to the Control Box and connect the Lead Wires to T1, T2, T3, and Ground, per the schematic (appropriate to the machines designated voltage and phase) located at the back of this manual.
- G. Once the Dryer has been placed in its' permanent location, bolt to the floor.
- H. Connect the Main Power Supply to L1, L2, L3 and Ground, per the schematic (appropriate to the machines designated voltage and phase) located at the back of this manual.
- I. Test for proper direction of Motor rotation by checking for air, exhausting at the Manifold Outlets.

**NOTE:** If rotation is incorrect, disconnect the Main Power Supply and switch the wires at T1 and T2.

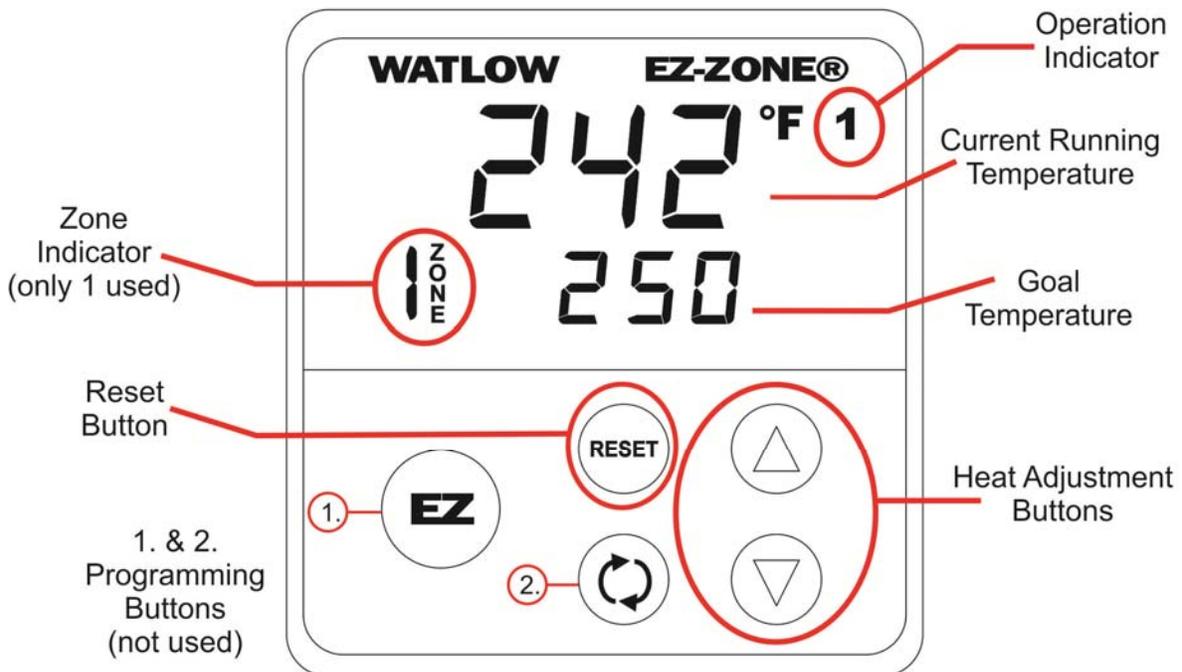
- J. Close the Control box Cover.

## 5.0 OPERATION

- A. Check that Cylinders are emptied and drained of water.
- B. Place a Probe into each Cylinder that is going to be dried, and align under each individual Manifold Outlet. Connect each Probe by pushing up into a Quick Connect on the Upper Body.

**NOTE:** Avoid bending or otherwise damaging the Probes.

- C. When cylinders have been loaded, flip the Power Switch up, to the ON position.
- D. The display on the PID Controller will read the last set temperature. For example, see Figure 2, below. The temperature to achieve (Goal Temperature), shown here is 250° F. Each time the HDD is powered up, the display will read the temperature that was set to achieve when the machine was turned off.



**Figure 2, HDD Controller**

- E. The Current Running Temperature of Air Flow, as measured in the Main Body Heat Tube. Shown here as 242°F. This will be an approximate of the temperature of air flow through the Probes.
- F. To change the desired temperature, simply press the Arrow Up  or Arrow Down  Buttons. Increments will change by 1°F by pressing once. By pressing and holding the Up or Down Buttons, increments will begin changing by 10° F.

## 5.0 OPERATION, continued

- G. The Operation Indicator will flash green while in operation.
- H. Zone Indicator will always display 1. Only one zone has been programmed for this Controller.
- I. The Reset Button  will only be used if over-temperature has been reached.

**NOTE:** An Over-temperature monitor has been installed to prevent this system from overheating. If temperatures are over reached, the system will shut off the Heater and an error message will be shown. Pressing Reset  will restart operation, if the temperature has not exceeded the target pressure.

- J. The following Buttons are only used for programming purposes;  . For any problems or programming questions, please contact Galiso®, Inc. At 1-800-854-3789.
- K. After cylinders have been drying for a short time (5-10 minutes), check each cylinder for dryness, and replace on the dryer if necessary or, load the next cylinder.

**NOTE:** Cylinder dry times can vary, depending on the size and/or material. Galiso, Inc. recommends using low temperature settings for composite cylinders.

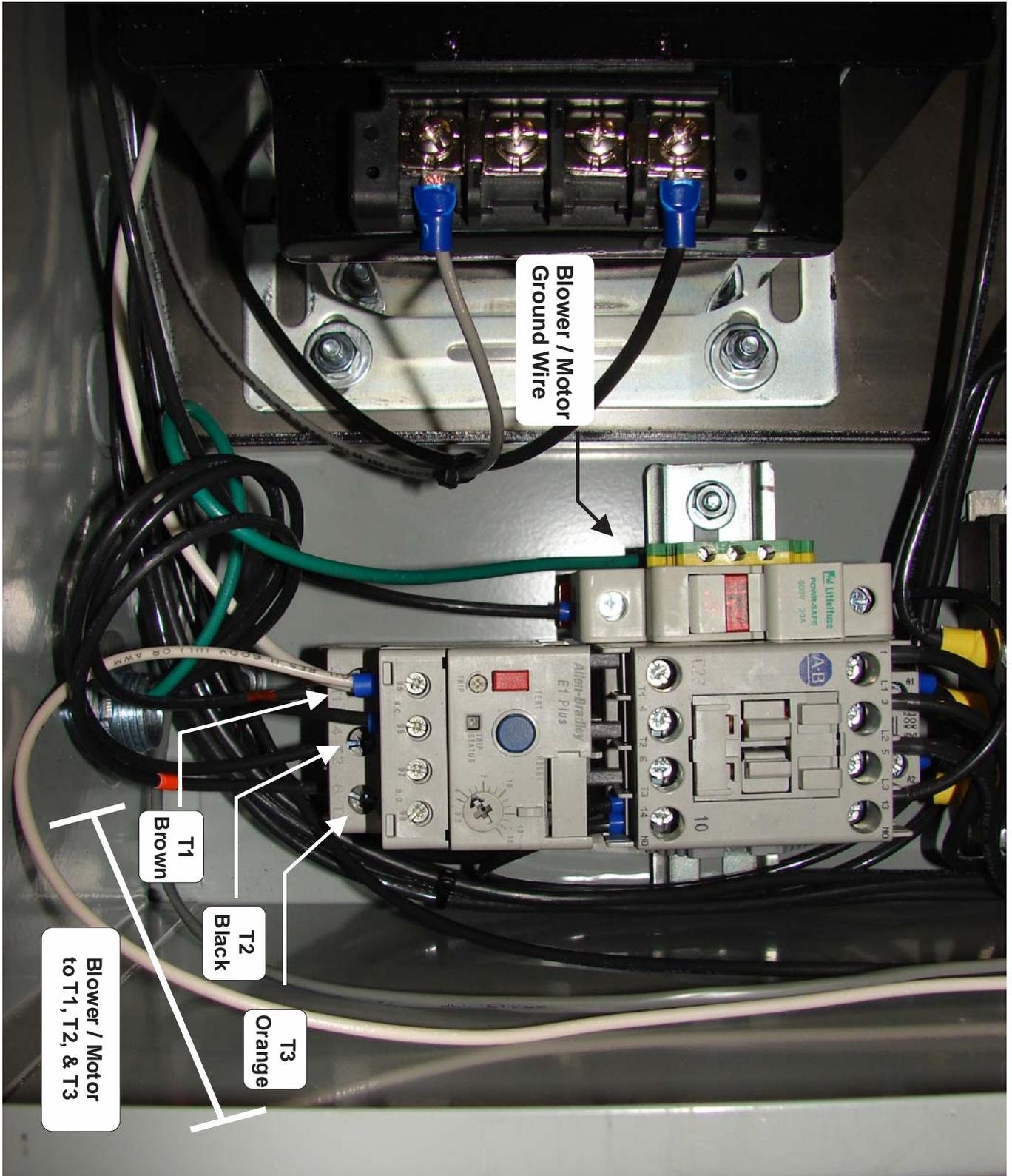
### **! CAUTION !**

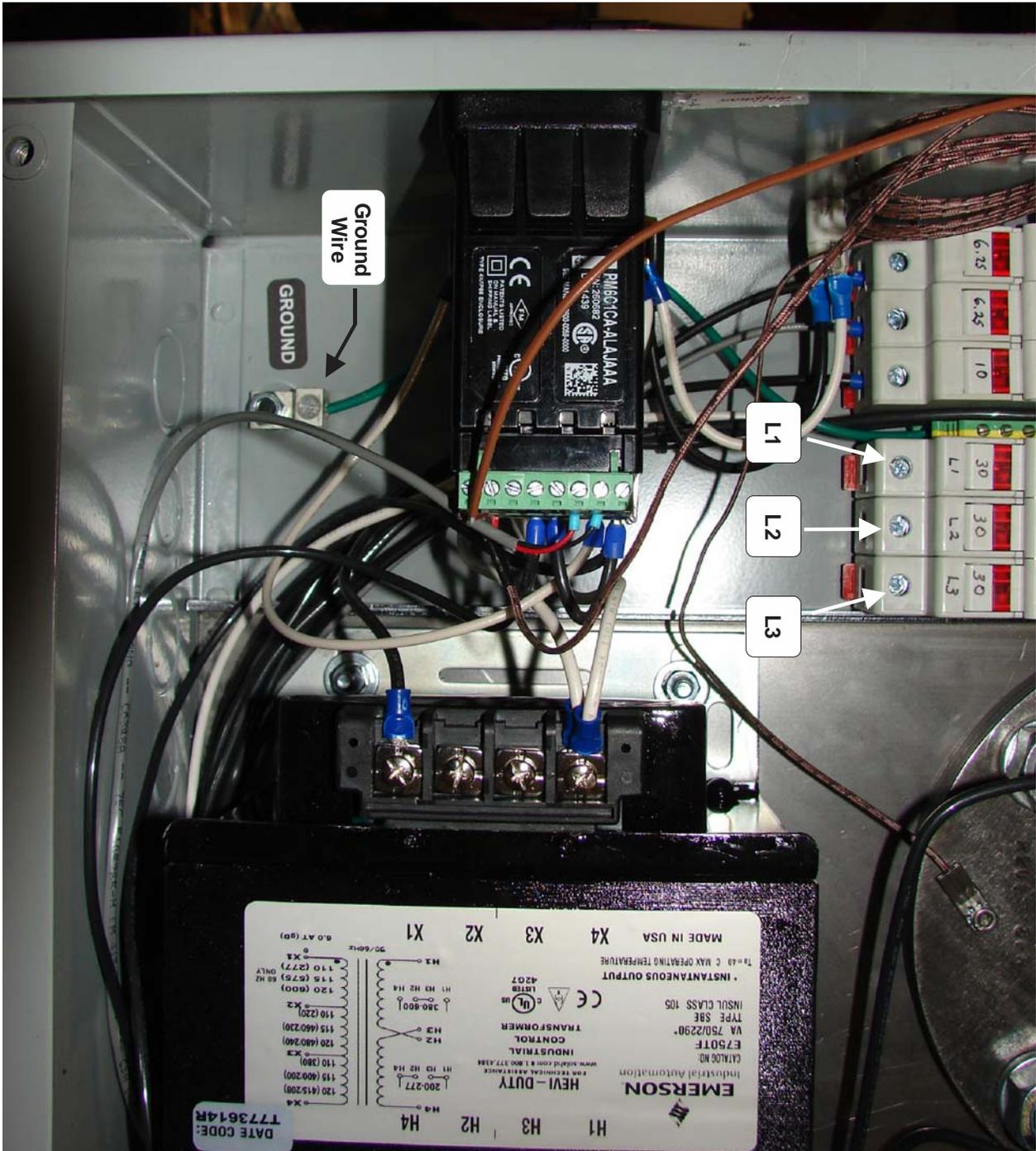
**The dryer can remain “On” when changing out cylinders but the operator should be careful to avoid touching the Manifold Frame, as it may be hot. Also, Always wear Insulated Gloves when removing the Probes.**

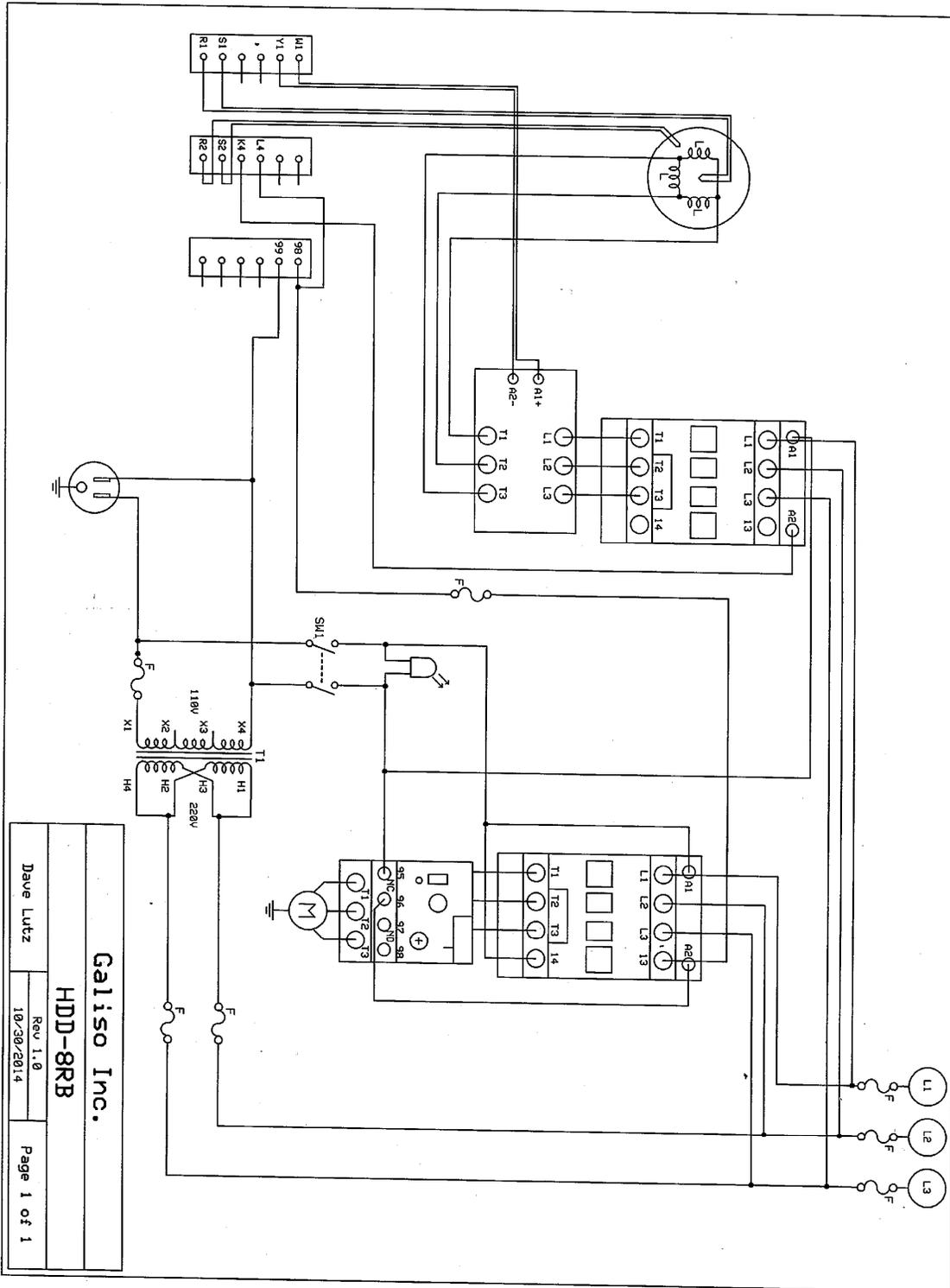
- L. To shut down at the end of the day, flip the Power Switch to the “OFF” position.

## 6.0 MAINTENANCE

- A. No regular maintenance is required except to check the air filter on top of the muffler at least once a month and replace if needed.







**Galiso Inc.**  
**HDD-8RB**  
 Rev 1.0  
 Dave Lutz 10/20/2014 Page 1 of 1

1. **DURATION:** Galiso provides a one-year warranty from date of purchase, to the original purchaser, for standard products, unless otherwise specified. For all spare parts purchases, Galiso provides a 90-day warranty unless otherwise specified. Soft goods such as our speed seals, and O-rings, which are subject to wear in the normal course of operation, are not covered under this warranty.
2. **COVERAGE:** Galiso manufactured equipment is warranted against defective materials or workmanship. THIS WARRANTY IS VOID IF:
  - A) THE EQUIPMENT HAS BEEN DAMAGED BY ACCIDENT OR UNREASONABLE USE, IMPROPER SERVICE/MAINTENANCE, IMPROPER INSTALLATION, ABNORMAL OPERATING CONDITIONS, NEGLIGENCE, REPAIR BY ANY PERSON NOT AUTHORIZED BY GALISO, INC. OR OTHER CAUSES NOT RELATED TO MATERIAL DEFECTS OR WORKMANSHIP.
  - B) THE SERIAL NUMBER HAS BEEN ALTERED OR DEFACED.
3. **PERFORMANCE:** Galiso reserves the right to make warranty determination only after inspecting the item at the Galiso manufacturing facility. If the warranty determination indicates that the defective item is covered under warranty, the item will be repaired or replaced with the same parts/items or parts/items of equivalent quality, at the option of Galiso. In the event of replacements, the replacement unit will continue under the original equipment warranty or carry a 90-day warranty, whichever is longer. No charge will be made for warranty repairs, and/or replacements. All freight charges to and from Galiso Inc. or a Galiso Inc. authorized repair facility, are the responsibility of the customer requesting warranty service.

If the warranty determination indicates that the item is **not** covered by warranty, a repair/replacement cost estimate will be submitted to the customer/purchaser for approval prior to initiating any repair work.

4. **CLAIMS:** In the case of equipment malfunction, notify Galiso (1-800-854-3789) and provide the Model Name, Model Number, Serial Number and a description of the problem. Return Authorization Number, shipping and/or service information will be provided on receipt of the required information.
5. **SERVICE EQUIPMENT:** Galiso attempts to make available, whenever possible, a limited amount of service equipment at a minimal use charge, plus freight expense, for those customers wishing to avoid downtime during repair of their equipment. Such items are available on a first come, first served basis and are billable at the specific service charge applying with a one-month minimum.
6. **MODEL CHANGES:** Galiso reserves the right to make changes in materials and specifications, without notice. Galiso may offer, for a stipulated fee, the opportunity to upgrade your equipment to the latest configuration.
7. **DISCLAIMERS:** Galiso provides technical data and assistance to aid customers in the selection and use of our products. There are no implied warranties of merchantability nor suitability for a particular purpose associated with the transmittal of technical data and/or customer assistance.

Galiso does not assume liability for any consequential, incidental, or special damages. Liability under this warranty is limited to repairing, or replacing Galiso equipment items returned to the factory or an authorized facility.

8. **COMPUTER AND NETWORK VIRUS PROTECTION:** Galiso Inc. equipment, which utilizes internet access, comes equipped with a subscription to virus protection software. It is the responsibility of the equipment owner to maintain this virus protection subscription or other virus protection at their cost. Current virus subscriptions are mandatory to maintain the benefits of this warranty. Galiso does not assume liability for any or all damages related to or are the result of internet or network failure or malware or computer viruses or any other type of internet or network malfunction or attack.

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