

# ADG-310

## Non-Tilt/Manual Door with Heat Fault Indicator

# Operator's Manual

**WARNING:** For your safety the information in this manual must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or death.

— Do not store or use gasoline or other flammable vapor and liquids in the vicinity of this or any other appliance.

### — WHAT DO YOU DO IF YOU SMELL GAS

- \* Do not try to light any appliance.
- \* Do not touch any electrical switch; do not use any phone in your building.
- \* Clear the room, building or area of all occupants.
- \* Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- \* If you cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

**AVERTISSEMENT:** Assurez-vous de bien suivre les instructions données dans cette notice pour réduire au minimum le risque d'incendie ou d'explosion ou pour éviter tout dommage matériel, toute blessure ou la mort.

— Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.

### — QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:

- \* Ne pas tenter d'allumer d'appareil.
- \* Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous vous trouvez..
- \* Évacuez la pièce, le bâtiment ou la zone.
- \* Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- \* Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.

— L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.



For replacement parts, contact the distributor from which the dryer was purchased or

**American Dryer Corporation**

88 Currant Road

Fall River MA 02720-4781

Telephone: (508) 678-9000 / Fax: (508) 678-9447

E-mail: [techsupport@amdry.com](mailto:techsupport@amdry.com)

# Retain This Manual In A Safe Place For Future Reference

American Dryer Corporation products embody advanced concepts in engineering, design, and safety. If this product is properly maintained, it will provide many years of safe, efficient, and trouble-free operation.

*ONLY qualified technicians should service this equipment.*

**OBSERVE ALL SAFETY PRECAUTIONS** displayed on the equipment or specified in the installation/operator's manual included with the dryer.

The following "FOR YOUR SAFETY" caution **must be** posted near the dryer in a prominent location.

**FOR YOUR SAFETY**

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

**POUR VOTRE SÉCURITÉ**

Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.

We have tried to make this manual as complete as possible and hope you will find it useful. ADC reserves the right to make changes from time to time, without notice or obligation, in prices, specifications, colors, and material, and to change or discontinue models.

## Important

For your convenience, log the following information:

DATE OF PURCHASE \_\_\_\_\_ MODEL NO. **AD-310** \_\_\_\_\_  
DISTRIBUTORS NAME \_\_\_\_\_  
Serial Number(s) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Replacement parts can be obtained from your distributor or the ADC factory. When ordering replacement parts from the factory, you can FAX your order to ADC at (508) 678-9447 or telephone your orders directly to the ADC Parts Department at (508) 678-9000. Please specify the dryer **model number** and **serial number** in addition to the **description** and **part number**, so that your order is processed accurately and promptly.

The illustrations on the following pages may not depict your particular dryer exactly. The illustrations are a composite of the various dryer models. Be sure to check the descriptions of the parts thoroughly before ordering.

**"IMPORTANT NOTE TO PURCHASER"**

Information must be obtained from your local gas supplier on the instructions to be followed if the user smells gas. These instructions must be posted in a prominent location near the dryer.

## **IMPORTANT**

**YOU MUST DISCONNECT and LOCKOUT THE ELECTRIC SUPPLY and THE GAS SUPPLY or THE STEAM SUPPLY BEFORE ANY COVERS or GUARDS ARE REMOVED FROM THE MACHINE TO ALLOW ACCESS FOR CLEANING, ADJUSTING, INSTALLATION, or TESTING OF ANY EQUIPMENT per OSHA (Occupational Safety and Health Administration) STANDARDS.**

“Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper operation.”

«Attention: Lors des opérations d'entretien des commandes étiqueter tous fils avant de les déconnecter. Toute erreur de câblage peut être une source de danger et de panne.»

## **CAUTION**

**DRYERS SHOULD NEVER BE LEFT UNATTENDED WHILE IN OPERATION.**

## **WARNING**

**CHILDREN SHOULD NOT BE ALLOWED TO PLAY ON OR NEAR THE DRYER(S).  
CHILDREN SHOULD BE SUPERVISED IF NEAR DRYERS IN OPERATION.**

## **FOR YOUR SAFETY**

**DO NOT DRY MOP HEADS IN THE DRYER.  
DO NOT USE DRYER IN THE PRESENCE OF DRY CLEANING FUMES.**

## **WARNING**

**UNDER NO CIRCUMSTANCES should the door switch or the heat circuit devices ever be disabled.**

**WARNING**

**The dryer must never be operated with any of the back guards, outer tops, or service panels removed. PERSONAL INJURY or FIRE COULD RESULT.**

**WARNING**

**DRYER MUST NEVER BE OPERATED WITHOUT THE LINT FILTER/SCREEN IN PLACE, EVEN IF AN EXTERNAL LINT COLLECTION SYSTEM IS USED.**

**IMPORTANT**

**PLEASE OBSERVE ALL SAFETY PRECAUTIONS displayed on the equipment and/or specified in the installation and operator's manual included with the dryer.**

**Dryers must not be installed or stored in an area where it will be exposed to water or weather.**

**The wiring diagram for the dryer is located in the front electrical control box area.**

# ADG-310

## Non-Tilt/Manual Door with Heater Fault Indication

### MACHINE OPERATION SUMMARY

This AD-310 incorporates one (1) emergency stop button located on the right front of the machine. This button is "TURN TO RELEASE," and **must be** in the released mode to power the machine. When the emergency button is released, the Phase 5 micro computer's display will light. To turn on the AD-310's control voltage, press the green "ON" button located on the right front control panel.

**NOTE:** If a Sprinkler System is incorporated in the machine, the Sprinkler System **must be** powered for the control power to engage. Refer to the AD-310 Sprinkler System Addendum (ADC Part No. 112233) for sprinkler system information.

The ADG-310 has two (2) electronic controllers:

- Phase 5 microcomputer...for material drying.
- Micro-1 PLC (Programmable Logic Controller) -- burner status monitoring and end of cycle light control.

The Phase 5 micro computer responds to keypad commands only when the AD-310's doors and lint screen drawer is closed.

The Micro-1 PLC (Programmable Logic Controller) monitors burner status during a drying cycle, and stops the drying cycle if any fault is detected with the burners.

### ADG-310 DETAIL OPERATION INFORMATION

Anytime the airjet signal is asserted the "END OF CYCLE" light will begin to flash once a second and remain on until the "LOAD DOORS" are opened.

#### HEATER FAULT ROUTINE (Gas Models ONLY)

During a drying cycle the PLC monitors the status of the Phase 5's heat on/off signal, and the signals of the front and rear burner controllers to their respective gas valve.

## Heater Fault Test Routine

- At the start of every "HEAT ON" signal of the Phase 5 computer, the PLC monitors the time between the "HEAT ON" and "GAS VALVE ON" signals. If the time between these two (2) signals is greater than 15 seconds a "HEATER FAULT" will occur.
- After the initial 15 second time difference monitoring routine, the PLC will then continue to monitor the "HEAT ON"/"GAS VALVE STATUS" for any malfunction of either the front or rear burners. If the heat signal is asserted and either or both gas valves are not ignited "HEATER FAULT" will occur.

During a "HEATER FAULT" the following will occur:

- The "END OF CYCLE" light will begin to flash.
- The "HEATER FAULT RESET BUTTON" will begin to flash.
- The fan and tumbler will run a "COOL DOWN CYCLE" for two (2) minutes.

**IMPORTANT:** A "HEATER FAULT" indicates that there is a problem with one or both burners not igniting properly.

"HEATER FAULT" errors are caused by:

- Exhaust hi-limit switch open.
- Front or rear burner hi-limit switch open.
- Front or rear burner air flow switch open.
- Either no front or rear flame being sensed by their respective flame probes, caused by either no spark, faulty flame probe, faulty Direct Spark Ignition (DSI) module, or bad gas valve.

## "HEATER FAULT RESET"

The heater fault reset button's warning light will flash at a rate of once per second. Once the reset button is pressed, the following will occur:

- The "END OF CYCLE" and "HEATER FAULT" lights will stop flashing.
- The Phase 5 keyboard will respond to keystroke inputs, providing the machine lint drawer and load doors are closed.

**NOTE:** If "HEATER FAULTS" continue to occur, troubleshooting of the heater section will be required. Refer to the system ladder diagram for heater signal information.

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1- 12/20/94-10  
4- 03/23/99-5

2- 05/15/95-5  
5- 09/09/99-10

3- 12/15/95-50  
6- 09/28/00-20

