COMMERCIAL DRYER MODEL T-30X2 & T-50X2 VENDED C-SERIES CONTROL, NATURAL GAS/LP HEATED



OPERATOR'S MANUAL INSTALLATION & OPERATION INSTRUCTIONS

The dryer must not be stored or installed where it will be exposed to water and/or weather.

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 loss of life.

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

- WHAT TO 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.

Post the following **"For Your Safety"** caution 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.

It is important that you read this Manual and retain it for future reference. For service or replacement parts, contact the distributor in your area or the manufacturer.

AVERTISSEMENT. Assurez-vouz 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 matérial, 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 fournisseour 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

POUR VOTRE SÉCURITÉ

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

You, the purchaser, must post in a prominent location instructions to be followed in the event the user smells gas. Consult your local gas supplier for procedure to be followed if the odor of gas is present.

Dexter Laundry, Inc.

2211 W. Grimes Fairfield, Iowa 52556

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WARNINGS ABOUT USE AND OPERATION

DO NOT MODIFY THIS APPLIANCE. KEEP SHIELDS, GUARDS, AND COVERS IN PLACE. These safety devices are provided to protect everyone from injury.

It is **ABSOLUTELY ESSENTIAL** that the dryer be grounded to a known earth (zero) ground in accordance with local codes or, in the absence of local codes, with the latest editions of the National Electric Code, ANSI//NFPA 70 or Standard CSA C22.1 Canadian Electrical Code Part 1. This is not only for personal safety, but is necessary for proper operation of the controller. Failure to do so will void the warranty of the controller.

A DRYER SHOULD BE CONNECTED TO POWER FOR THREE (3) MINUTES before it is operated or before a program change is made. Operation or program changes, which occur during this "power up" period, are subject to loss in case of power interruption. After the initial three minutes, all programmed data is protected from power interruptions of any length and the customer's individual cycle is protected up to 3 seconds. This is done without batteries.

LEAVE THE ELECTRICAL POWER TO THE DRYER ON AT ALL TIMES except when necessary for service or other similar activities. The hour meter function adds only full hours to its reading. If the power is shut off every night, any fraction of an hour of time that is on the machine at that time will be lost. Turning the power off every night could also have some effect on the long-term life of the memory after a number of years. Turning power off occasionally won't affect the unit.

THIS DRYER IS EQUIPPED WITH AN OVER-TEMPERATURE THERMOSTAT located on the end of the burner housing above the gas valve. Should the dryer cease to operate, refer to your "Service Procedure and Parts Data" book for instructions.

CHECK THIS THERMOSTAT WHEN INSTALLING DRYER to assure it is not tripped. Impacts such as rough handling in shipment, may trip the thermostat. It may be reset by inserting a wooden pencil or dowel through the bushing in the cover.

DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE while in operation.

THIS APPLIANCE SHALL NOT BE USED TO DRY OFF SOLVENTS OR DRY-CLEANING FLUIDS.

SPECIFICATIONS

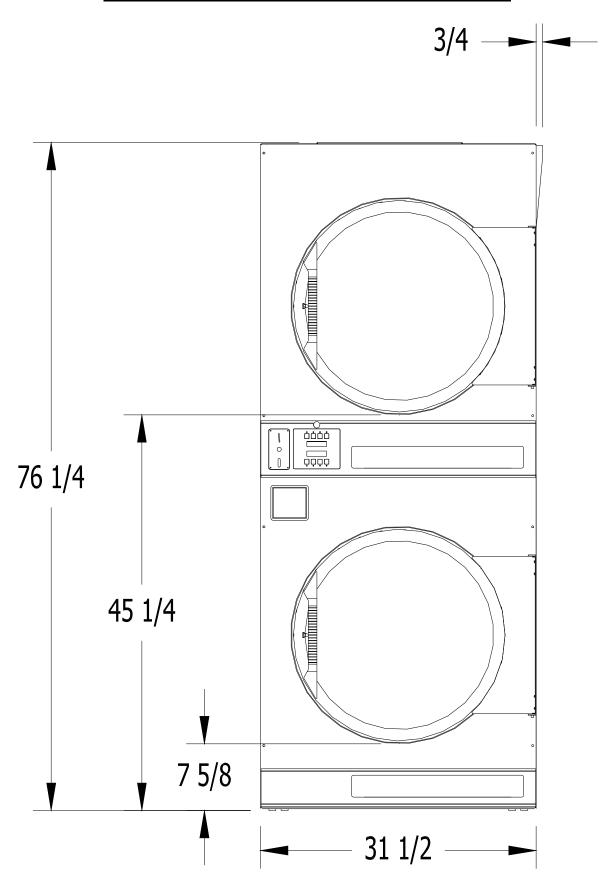
| 30 lb. Commercial Stack Dryer: T-3 | 0X2 - DC30X2NC-15EC2X (6 | 0 Hz), DC30X2NC-39AC2X (50 Hz) |
|---------------------------------------|--------------------------|--------------------------------|
| Cabinet Height | 76 1/4" | 1937 mm. |
| (Assumes minimum leveling leg | • | |
| Cabinet Width | 31 1/2" | 800 mm. |
| Cabinet Depth | 49 1/2" | 1257 mm. |
| Floor to Bottom of Door- Bottom Dryer | 7 5/8" | 194 mm. |
| Floor to Bottom of Door- Top Dryer | 45 1/4" | 1149 mm. |
| Door Opening | 22 5/8" | 575 mm. |
| Dry Wt. Capacity | 30 x 2 lbs. | 13.6 x 2 kg. |
| Cylinder Diameter | 30" | 762 mm. |
| Cylinder Depth | 27 1/2" | 699 mm. |
| Cylinder Volume | 11.25 cu. ft. | 319 liters |
| Lint Screen Area | 453 sq. in. | 2923 sq. cm. |
| Gas Input (per dryer- 60 hz) | 90,000 Btu/hr | 26.4 kW |
| Gas Input (per dryer- 50 hz) | 74,000 Btu/hr | 21.7 kW |
| | 1/2" | |
| Gas Supply Connection | | 12.7 mm. |
| Natural Gas Supply (Water Column) | 5-10" | 127 mm 254 mm. |
| Natural Burner Manifold | 2.5% | 00.0 |
| (60 hz Water Column) | 3.5" | 88.9 mm |
| (50 hz Water Column) | 3.4" | 86.4 mm |
| L.P. Supply (Water Column) | 11.5 -14" | 292 mm 356 mm. |
| L.P. Burner Manifold Pressure | 4.4% | |
| (60 hz Water Column) | 11" | 279 mm |
| (50 hz Water Column) | 10" | 254 mm |
| Exhaust Size | 8" | 203 mm. |
| Make-up Air | 1.5 sq. ft. | 1394 sq. cm. |
| Example: 1.5 sq. ft = 1 ft. long | | |
| Motor Size | 1/2 H.P. | .373 kW |
| Airflow (60 hz) | 600 CFM | 17.0 m^3/min |
| Airflow (50 hz) | 500 CFM | 14.2 m^3/min |
| Electrical Specifications - 120/60/2 | 1 | |
| Voltage/Hz/Phase | 120V/60Hz/1Phase | |
| Running Amps | 8.0 | |
| Circuit Protection Amps | 20 | |
| Wire Size | 12 gauge | |
| Electrical Service | 2 wire + ground | |
| Electrical Specifications - 208-240 | | |
| Voltage/Hz/Phase | 208-240V/60Hz/1Phase | |
| Running Amps | 5.0 | |
| Circuit Protection Amps | 15 | |
| Wire Size | 12 gauge | |
| Electrical Service | 2 wire + ground | |
| | 9 | |
| Electrical Specifications - 230/50/: | | |
| Voltage/Hz/Phase | 230V/50Hz/1Phase | |
| Running Amps | 10.0 15 | |
| Circuit Protection Amps | | |
| Wire Size | 12 gauge | |
| Electrical Service | 2 wire + ground | |
| Shipping Weight | 750 lbs. | 340 kg. |
| Net Weight | 699 lbs. | 317 kg. |
| Clearance Behind Machines (min.) | 18" | 457 mm. |
| | | |

SPECIFICATIONS

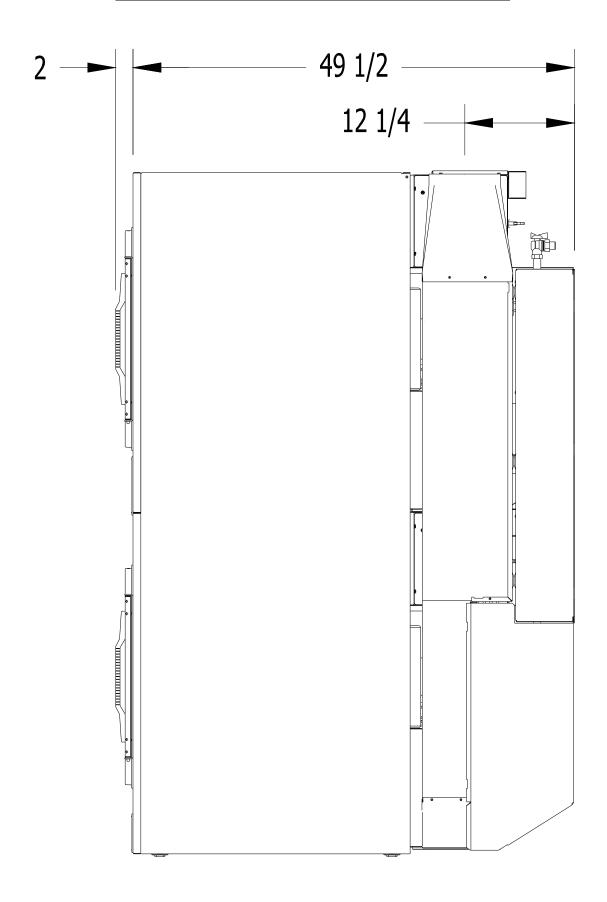
| 50 lb. Commercial Stack Dryer: T-50X2 - | DC50X2NC-15EC2X (60 Hz), | DC50X2NC-49AC2X (50 Hz) |
|--|--------------------------|-------------------------|
| Cabinet Height | 79 1/4" | 2012 mm. |
| (Assumes minimum leveling leg adjust | | |
| Cabinet Width | 34 1/2" | 876 mm. |
| Overall Depth | 56 3/4" | 1441 mm. |
| Floor to Bottom of Door- Bottom Dryer | 7" | 178 mm. |
| Floor to Bottom of Door- Top Dryer | 46" | 1168 mm. |
| Door Opening | 25 5/8" | 651 mm. |
| Dry Wt. Capacity | 50 x 2 lbs. | 22.7 x 2 kg. |
| Cylinder Diameter | 32 1/2" | 826 mm. |
| Cylinder Depth | 33" | 838 mm. |
| Cylinder Volume | 15.84 cu. ft. | 448 liters |
| Lint Screen Area | 544 sq. in. | 3510 sq. cm. |
| Gas Input (per dryer- 60 hz) | 108,000 Btu/hr | 31.7 kW |
| Gas Input (per dryer- 50 hz) | 96,500 Btu/hr | 28.3 kW |
| Gas Supply Connection | 1/2" | 12.7 mm. |
| Natural Gas Supply (Water Column) | 5-10" | 127 mm 254 mm. |
| Natural Burner Manifold | 2.5% | 00.0 |
| (60 hz Water Column) | 3.5" | 88.9 mm |
| (50 hz Water Column) | 3.5" | 88.9 mm |
| L.P. Supply (Water Column) | 11.5 -14" | 292 mm 356 mm. |
| L.P. Burner Manifold Pressure | 4.4 // | 270 |
| (60 hz Water Column) | 11" | 279 mm |
| (50 hz Water Column) | 10" 8" | 254 mm |
| Exhaust Size | - | 203 mm. |
| Make-up Air | 1.5 sq. ft. | 1394 sq. cm. |
| Example: 1.5 sq. ft = 1 ft. long X 1.5 f | | ECO LAN |
| Motor Size | 3/4 H.P. | .560 kW 18.4 m^3/min |
| Airflow (60 Hz) Airflow (50 hz) | 650 CFM 510 CFM | 14.4 m^3/min |
| Allflow (30 fiz) | 210 CLM | 14.4 111 3/111111 |
| Electrical Specifications - 120/60/1 | | |
| Voltage/Hz/Phase 120V/60Hz/1Phase | | |
| Running Amps | 24.0 | |
| Circuit Protection Amps | 30 | |
| Wire Size | 10 gauge | |
| Electrical Service | 2 wire + ground | |
| Electrical Specifications - 208-240/60/1 | 200 24014601: 4471 | |
| Voltage/Hz/Phase | 208-240V/60Hz/1Phase | |
| Running Amps | 12.0 | |
| Circuit Protection Amps | 20 | |
| Wire Size | 12 gauge | |
| Electrical Service | 2 wire + ground | |
| Electrical Specifications - 240/50/1 | 2.40) //5011 /4.51 | |
| Voltage/Hz/Phase | 240V/50Hz/1Phase | |
| Running Amps | 12.0 | |
| Circuit Protection Amps | 20 | |
| Wire Size | 12 gauge | |
| Electrical Service | 2 wire + ground | |
| Shipping Weight | 917 lbs. | 416 kg. |
| Net Weight | 857 lbs. | 389 kg. |
| Clearance Behind Machines (min.) | 18" | 457 mm. |
| | | |

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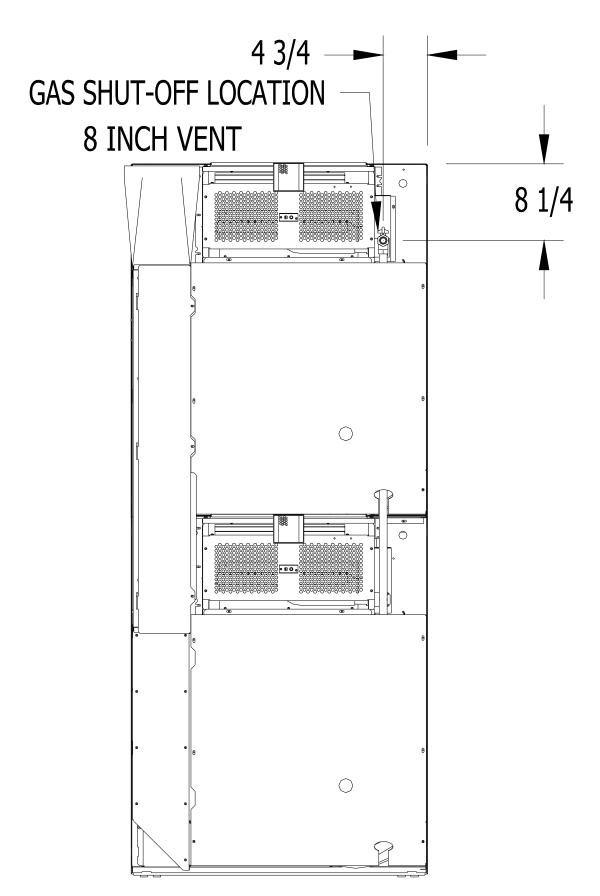
T-30X2 DRYER DIMENSIONS- FRONT VIEW



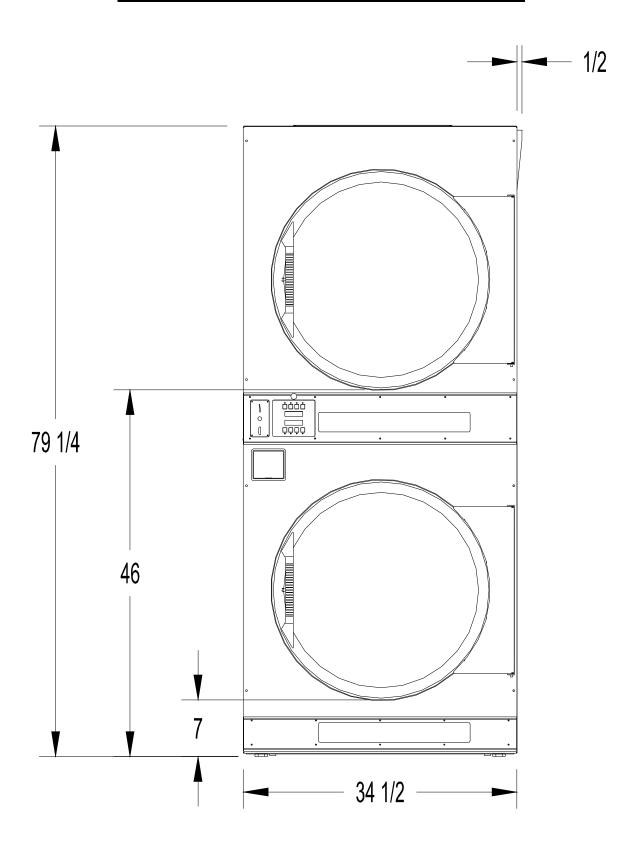
T-30X2 DRYER DIMENSIONS - SIDE VIEW



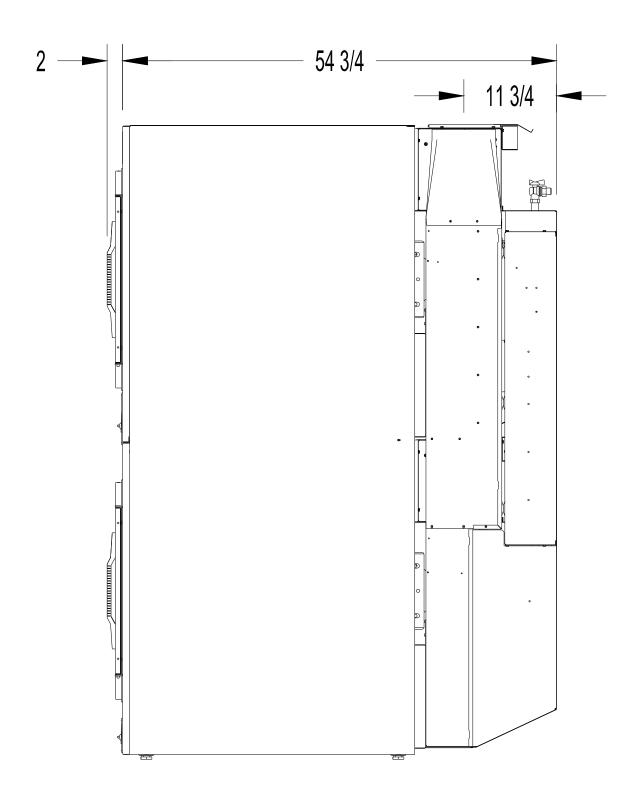
T-30X2 DRYER DIMENSIONS - REAR VIEW



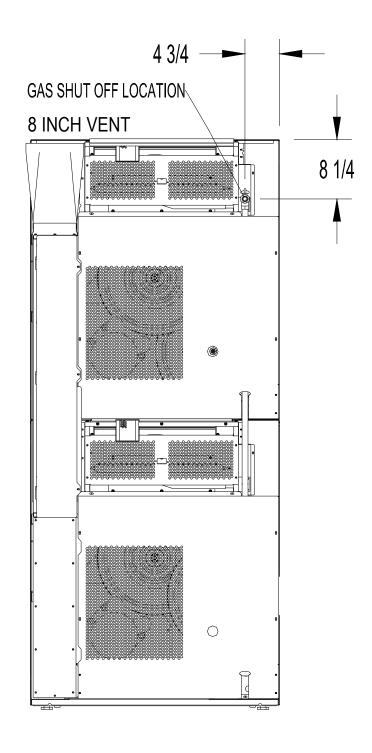
T-50X2 DRYER DIMENSIONS- FRONT VIEW



T-50X2 DRYER DIMENSIONS - SIDE VIEW



T-50X2 DRYER DIMENSIONS - REAR VIEW



INSTALLATION INSTRUCTIONS

UNCRATING AND PLACING DRYER

Tools Required: 3/4" (19 mm) hex socket & ratchet driver, wood block 4" (100 mm) or 5" (125 mm) thick, a knife and a groove joint pliers, which will open to 1 3/8" (35 mm).

- 1. Remove and discard packaging.
- 2. The crate base is attached to the dryer by (4) cap screws driven upward from below the crate base. Remove crate base from dryer, by tipping dryer sidewise and place block under crate base rail in center of dryer. Using a ratchet and 3/4" hex socket, remove and discard (2) crating bolts from side, which is raised. Remove block from under crate base. Repeat for other side. Save the bolts for use if the dryer is ever moved again.
- 3. With a walking motion move dryer completely off crate base. Save the crate base for use if the dryer is ever moved again.
- 4. Slide unit into position where it will be installed. Adjust leveling legs, using the groove joint pliers, to level and align dryer with adjacent units.

Note: If the dryer is ever moved again, the dryer should be re-mounted on its crate base and its crating bolts re-inserted and tightened, in the reverse order as above.

DRYER INSTALLATION

- CODE CONFORMITY: All commercial dryer installations must conform with local codes, or in the absence of local codes, with the latest edition of the National Fuel Gas Code ANSI Z223.1. Canadian installations must comply with the current Standard CAN/CGA-B149 (.1 or .2) Installation Code for Gas Burning Appliances or Equipment, and local codes if applicable. Australian installations must meet installation requirements and pipe sizing requirements of AS/NZA 5601. The appliance, when installed, must be electrically grounded in accordance with the latest edition of the National Electric Code, ANSI/NFPA70, or, when installed in Canada, with Standard CSA C22.1 Canadian Electrical Code Part 1.
- 2. INSTALLATION CLEARANCES: This unit may be installed at the following alcove clearances:

I. Left Side 0"
II. Right Side 0"

III. Back 18" (457 mm) (Certified for 6" (150 mm) clearance; however, 18" (457 mm) clearance is

necessary behind the motors to allow servicing and maintenance.)

IV. Front 48" (1220 mm) (to allow use of dryer)

V. Top Refer to figure labeled "Vertical Clearance Dimensions".

AB. Certification allows 0" clearance at the top 4" (100 mm) back from the front. However, a 1/4" (6 mm) clearance should be allowed in case the dryer needs moving.

C. A 10" (250 mm) clearance is required from top at all other points.

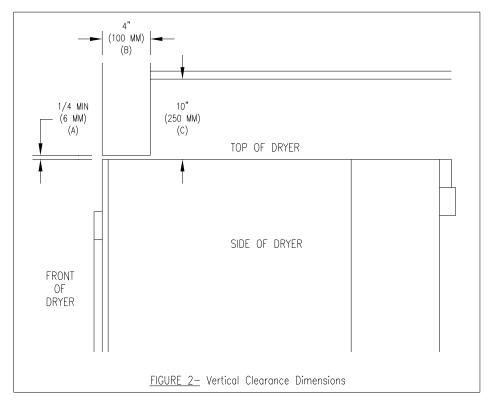
VI. Floor This unit may be installed upon a combustible floor.

Do not obstruct the flow of combustion and ventilation air.

Maintain minimum of 1" (25 mm) clearance between duct and combustible material.

Refer to the label attached to the Belt Guard on the rear of the dryer for other installation information and start-up instructions.

3. MAKE-UP AIR: Adequate make-up air must be supplied to replace air exhausted by dryers on all types of installations. Refer to specifications for the minimum amount of make-up air opening to outside for each dryer. This is a net requirement of effective area. Screens, grills or louvers, which will restrict the flow of air, must be considered. Consult the supplier to determine the free area equivalent for the grill being used. The source of make-up air should be located sufficiently away from the dryers to allow an even airflow to the air intakes of all dryers. Multiple openings should be provided.



The sources of all make-up air and room ventilation air movement to all dryers must be located away from any dry cleaners. This is necessary so that solvent vapors will not be drawn into the dryer inlet ducts. Dry cleaner solvent vapors will decompose in contact with open flame such as the gas flame present in clothes dryers. The decomposition products are highly corrosive and will cause damage to the dryer(s) ducts and clothes loads.

4. ELECTRICAL REQUIREMENTS. The electrical power requirements necessary to operate the unit satisfactorily are listed on the serial plate located on the back panel of each dryer and in the specifications section of this manual. The electrical connection should be made to the terminal board, on the rear of the unit. It is absolutely necessary that the dryer be grounded to a known ground. Individual circuit breakers for each stacked dryer are required. Dryer -15 models are adjusted for 120V as shipped. They can be converted to 208-240V as required. Instructions for this conversion are located at this end of this manual.

IMPORTANT: TRANSIENT VOLTAGE SURGE SUPPRESSORS

Like most electrical equipment, your new machine can be damaged or have its life shortened by voltage surges due to lightning strikes which are not covered by factory warranty. Local power distribution problems also can be detrimental to the life of electrical components. We recommend the installation of transient voltage surge suppressors for your new equipment. These devices may be placed at the power supply panel for the complete installation and don't require an individual device for each machine.

These surge protectors help to protect equipment from large spikes and also from small ongoing spikes in the power that occur on a day to day basis. These smaller surges can shorten overall life of electrical components of all types and cause their failure at a later date. Although they can't protect against all events, these protective devices have a good reputation for significantly lengthening the useful life of electronic components. Electronic components are helped to have a longer useful life when they are supplied with the clean stable electrical power they like.

We are including the following names and phone numbers of a few suppliers of these devices for those who don't currently have a source.

| <u>MANUFACTURER</u> | CONTACT | <u>PHONE</u> |
|---------------------------------------|------------------------------------|---|
| Innovative Technology, Inc | Factory | 1-800-647-8877 or <u>www.itvss.com</u> |
| EFI Electronics Corporation | Factory Distributor – Surge Pro | 1-800-877-1174 or <u>www.efinet.com</u> 1-877-233-0153 |
| MCG Surge Protection | Factory | 1-800-851-1508 or <u>www.mcgsurge.com</u> |
| Advanced Protection Technologies Inc. | Factory | 1-800-237-4567 or info@apttvss.com |

5. GAS REQUIREMENTS. The complete gas requirements necessary to operate the dryer satisfactorily are listed on the serial plate located on the back panel of the dryer and in the specifications section of this manual. The inlet gas connection to the unit is 1/2-inch pipe thread. However, the size of the piping to supply the dryer should be determined by reference to the National Fuel Gas Code ANSI Z223.1A and consultation with the local gas supplier.

A joint compound resistant to the action of liquefied petroleum gases should be employed in making pipe connections.

A 1/8-inch NPT plugged tapping, accessible for test gage connection, must be installed immediately upstream of the gas supply connection to the dryer.

A drip tee is provided in the unit gas piping to catch dirt and other foreign articles.

All pipe connections should be checked for leakage with soap solution. Never check with an open flame.

For altitudes above 2,000 feet (610m), it is necessary to derate the BTU input. Contact your local distributor for instructions.

L.P. gas conversion kits are available for this dryer. Contact your local distributor.

CAUTION: The dryer and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (34.5 mbar). The dryer must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (34.5 mbar).

6. EXHAUST INSTALLATION. (Refer to Figure 3) Exhausting of the dryer(s) should be planned and constructed so that no air restrictions occur. Any restriction due to pipe size or type of installation can cause slow drying time, excessive heat, and lint in the room.

From an operational standpoint, incorrect or inadequate exhausting can cause a cycling of the high limit thermostat, which shuts off the main burners and results in inefficient drying.

The exhaust duct connection near the top of the dryer will accept an 8" (200 mm) round duct. Individual exhausting of the dryers is recommended. All heat, moisture, and lint should be exhausted outside by attaching a pipe of the proper diameter to the dryer adapter collars and extending it out through an outside wall. This pipe must be very smooth on the inside, as rough surfaces tend to collect lint, which will eventually clog the duct and prevent the dryer from exhausting properly. All elbows must be smooth on the inside. All joints must be made so the exhaust end of one pipe is inside the next one downstream. The addition of an exhaust pipe tends to reduce the amount of air the blower can exhaust. This does not affect the dryer operation if held within practical limits. For the most efficient operation, it is recommended that no more than 14 ft. (4.25 m) of straight 8 in. diameter pipe with two right angle elbows be used for each cylinder.

Maintain a minimum of 1'' (25mm) clearance between duct and combustible material.

If the exhaust pipe passes through a wall, a metal sleeve of slightly larger diameter should be set in the wall and the exhaust pipe passed through this sleeve. This practice is required by some local codes and is recommended in all cases to protect the wall.

This type of installation should have a means provided to prevent rain and high winds from entering the exhaust when the dryer is not in use. A hood with a hinged damper can be used for this purpose. Another method would be to point the outlet end of the pipe downward to prevent entrance of wind and rain. In either case, the outlet should be kept clear, by at least 24 in. (610 mm) of any objects, which would cause air restriction.

Never install a protective screen over the exhaust outlet.

When exhausting a dryer straight up through a roof, the overall length of the duct has the same limits as exhausting through a wall. A rain cap must be placed on top of the exhaust and must be of such a type as to be free from clogging. The type using a cone shaped "roof" over the pipe is suitable for this application.

Exhausting the dryer into a chimney or under a building is not permitted. In either case there is a danger of lint buildup, which can be highly combustible.

Installation of several dryers, where a main discharge duct is necessary, will need the following considerations for installation (see Figure 3). Individual 8" (200 mm) exhaust ducts from each dryer should enter main discharge duct at a 45-degree angle in the direction of discharge airflow.

NOTE: Never install the individual ducts at a right angle into the main discharge duct. The individual ducts from the dryers can enter at the sides or bottom of the main discharge duct. Figure 3 indicates the various round main duct diameters to use with the individual dryer ducts. The main duct can be rectangular or round, provided adequate airflow is maintained. The total exhausting (main discharge duct plus duct outlet from the dryer) should not exceed the equivalent of 14 ft. (4.25 m) and two elbows. The diameter of the main discharge duct at the last dryer must be maintained to exhaust end.

NOTE: A small diameter duct will restrict airflow; a large diameter duct will reduce air velocity - both contributing to lint build up. An inspection door should be provided for periodic clean out of the main duct.

DIAMETER TO INCREASE AS SHOWN

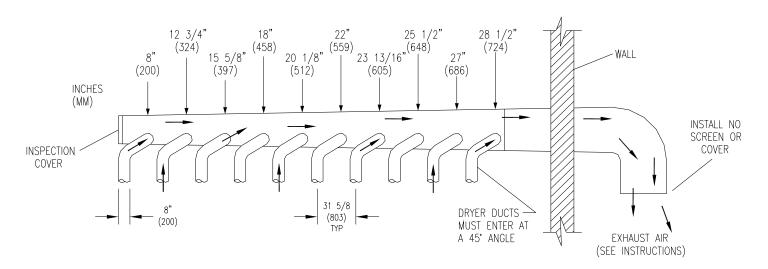


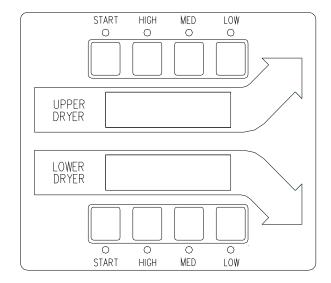
FIGURE 3— Dryer Exhausting Using A Main Discharge Duct.

- 7. DRYER IGNITION (SOLID STATE IGNITION): The solid-state ignition system lights the main burner gas by spark. The gas is ignited and burns only when the gas-relay (in the electronic controller) calls for heat. The procedure for first-time starting of a dryer is as follows.
 - i. First review and comply with the "Warnings About Use and Operation" found on the inside front cover of this manual. Be sure electrical power is connected correctly. The dryer must be properly grounded.
 - ii. Make sure all gas supply lines are purged of air. Close the main gas shut-off valve and wait for five minutes before turning it back on.
 - iii. Turn on the main electrical power switch. The dryer may be started by following the "Operating Instructions" found later in this manual.
 - iv. Natural gas and LPG fired dryers operate in the same manner. When the gas valve relay contacts are closed (indicating a demand for heat), the solid-state ignition control will automatically supply energy to the redundant gas valve. Sparking will continue until a flame is detected by the sensing probe, but not longer than ten seconds. If the gas fails to ignite in 10 seconds, the gas valve closes and the gas system pauses to allow gas to purge from the inside of the dryer. After the pause, the ignition control repeats the ignition trial cycle twice more. If the gas system fails to detect ignition after the three attempts, the system will "lock out". No further attempts will be performed automatically. To reset the ignition control electrical power to the ignition control must be interrupted. This can be done by opening the dryer door (stopping the dryer) for 15 seconds. Closing the door and pushing the "Start" button will repeat the ignition trial cycle.
- 8. MAIN BURNER ADJUSTMENT. The primary air shutter of each main burner must be properly adjusted for the correct air-gas ratio. Loosen the shutter locking screw. Adjust the shutter by closing it sufficiently to give a blue flame with a yellow tip. Next open the shutter until the yellow tips are at a minimum. After adjustment securely lock each shutter in position by tightening the shutter locking screws.

DRYER SHUTDOWN

To render the dryer inoperative, turn off the main gas shut off valve and disconnect the electrical supply to the dryer.

DESCRIPTION OF DRYER CONTROL



Both dryers are operated by the controller at the left midpoint of the dryer. The controller is two-in-one with the upper display and lights dedicated to the upper dryer and lower display and lights dedicated to the lower dryer.

When money has been deposited, the control will prompt the user to choose a drying temperature and press the "start" button. Time is not added until this occurs for either the upper or lower dryer. If no purchased time is available on the control, the vend price is displayed.

The drying program (temperature) selected by the user is indicated by the red lights at the top and bottom. When the dryer is in use, the drying temperature may be displayed by simultaneously pressing the "start" button and the button of the temperature selected.

OPERATING INSTRUCTIONS

STARTING THE DRYER

- 1. Load clothes into either the upper or lower dryer (or both). Close the door(s) completely.
- 2. Deposit coins equal to or greater than the displayed vend price. The control will prompt the user to choose a drying temperature. Time is not added until this occurs for either the upper or lower dryer.
- 3. Select drying temperature by pressing the appropriate button for the dryer to be used. This will turn on the red light showing the selected temperature.
- 4. Press "start" button to start dryer. This will display the drying time purchased.

RUNNING THE DRYER

- -Opening the door will stop the dryer. The dryer will restart, if time has not expired, upon closing the door and pressing the "start" button.
- -Selected temperature may be changed at any time (unless Temperature Pricing feature is activated).
- -Running time may be extended by depositing coins and pressing the "start" button for the correct dryer. Unless time has expired, the controller will accept coins whether or not the original vend price is equaled.

If time has run out, the dryer must be restarted as if it was at the beginning of drying the load, which requires meeting or exceeding the vend price.

PROGRAMMING THE DRYER CONTROL

The dryer control can be programmed to prompt the user for alternate vend prices, change dryer cycle times, temperatures and many other options. This can be accomplished in two ways:

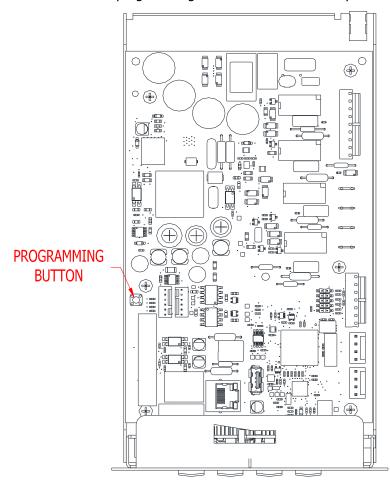
- 1. Manual programming utilizing the "Start", "High", "Medium" and "Low" buttons for the bottom dryer.
- 2. USB download of a customizable User File. For instructions on using the USB download feature, please contact your local Dexter distributor or visit DexterLive.com.

MANUAL PROGRAMMING:

The dryer must be in idle mode for the manual programming menus to be accessed. Idle mode is when the dryer is not actively running a drying cycle and the vend price is displayed on the screen (for both upper and lower dryers).

To enter the manual programming mode, the control tray on the dryer must be unlocked and pulled out to reveal the programming button. The programming button is then pressed for 1 second. The control should display "DRYER PROGRAMMING".

See the figure below for the location of the programming button on the control tray.

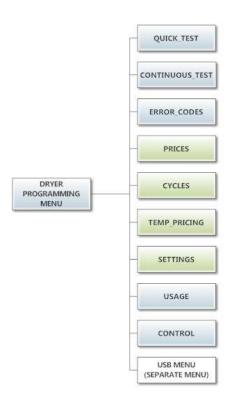


When manual programming mode is entered, the "Start", "High", "Medium" and "Low" buttons for the lower dryer perform alternate functions. Please note that the changes made using the lower dryer buttons affect both upper and lower dryers.

| Button Name | Alternate Function in Programming Mode |
|-------------|--|
| Start | Becomes the action to accept the displayed option or the "Enter" |

| | key |
|--------|--|
| High | Becomes the action to move UP through displayed options (Press & hold for accelerated scrolling) |
| Medium | Becomes the action to move DOWN through displayed options (Press & hold for accelerated scrolling) |
| Low | Becomes the action to move back a step (1 press) or EXIT from programming mode (press for 3 seconds) |

These alternate functions allow the user to move through a menu of options to choose various programmable settings. The figure below shows the top level menu. Choosing an option from the top level menu will then display the next level of options (the sub menu).



Quick Test Option:

When the Quick Test Option is chosen, the dryer will begin a shortened dry cycle without the displayed vend price being met. The purpose of this shortened cycle is to test all major components for proper operation. Error Codes should all function normally during this test. The display will show customer prompts in a similar way to a normal dry cycle.

Continuous Test Option:

Similar to the Quick Test, when the Continuous Test Option is chosen, the dryer will begin a dry cycle without the displayed vend price being met. However, in this case, it will be a continuously-running cycle. It will not time out after any designated amount of time.

CAUTION: This option is meant for factory use only. Do not operate the dryer with this cycle active without factory authorization.

Error Code Historical Log:

The last five occurring error codes will be stored in the control with a time and date stamp. The purpose of this option is only to observe the history of these code occurrences (no changes can be made).

The time is based off the Real Time Clock, but potentially shifted by the user's manual programming changes (Shift Hours option) and/or network time override. As additional error codes occur, the oldest of the five logged codes is cleared from memory.

Prices Option:

This option allows the user to set values for coin acceptor inputs, vend price & time and extend dry price & time. It also allows the user to return the values to factory defaults. After changing prices using the "Up" or "Down" buttons, the "Enter" button must be pressed again for the control to store the changes that have been made. Note that, in general, time values are set in 1 minute increments. This can be changed to 30 second increments, by changing the "Display Time" to "MIN+SEC" (refer to the "Settings" section").

- 1. "RIGHT COIN" and "LEFT COIN" are the two possible inputs from coin acceptors.
- 2. "PRICE SET VEND" is the actual Base Vend Price (or Vend Price A) that is shown on the control display. The value can be increased or reduced even down to "0". In this case, the displays will prompt "FREE" and the cycle will start as soon is the "Start' button is pressed (without any vend price being met).
- 3. "TIME SET VEND" is the cycle time that the customer has available once they've met the Base Vend Price.
- 4. "FREE SET TIME" is the cycle time that the customer has available if the Base Vend Price is set to "FREE".
- 5. "EXTEND DRY" sets the price and time for additional drying time that becomes available after the customer has already met the Base Vend Price.

To reset either the coin acceptor inputs or the vend price to factory default, press "Enter" when the "DEFAULT" prompt is shown. Press "Enter" again when the "RESET" prompt is shown to confirm the action.

Example- A store owner has programmed the control for the following values:

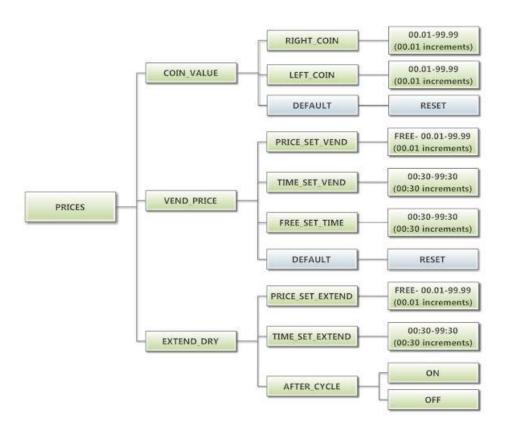
| Base Vend Price | \$1.00 |
|------------------|------------|
| Base Vend Time | 30 minutes |
| Extend Dry Price | \$.25 |
| Extend Dry Time | 8 minutes |

In this case, the customer adds 4 quarters to satisfy the \$1.00 Vend Price. The display shows 30 minutes of drying time. At this point, if an additional quarter is added, the customer display shows an additional 8 minutes of drying time (38 minutes total) as per the Extend Dry Price & Time.

The customer starts the drying cycle and at 25 minutes into the cycle (13 minutes displayed), they add an additional quarter. The controller adds 8 minutes to the displayed time again (21 minutes total) as per the Extend Dry Price & Time.

"AFTER CYCLE" allows the user to choose whether a customer is allowed to add "EXTEND DRY" time for up to 30 seconds after the dryer door is opened after a completed cycle.

The figure below shows the sub menu options for Prices:



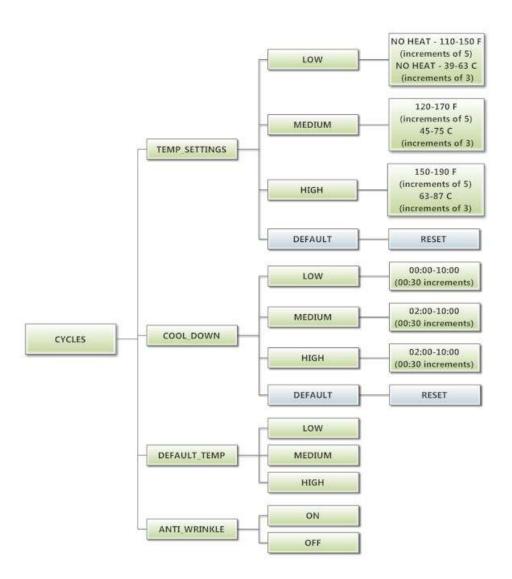
Cycles Option:

This option allows the user to set temperature and cooldown information for the drying cycle. It also allows the user to return the values to factory defaults.

- 1. "TEMP SETTINGS" allows the user to make adjustments, within a designated range, to the cycling temperature for each of the "Low", "Medium" and "High" customer choices.
- 2. In addition, on the "Low" setting, the user can reduce the cycling temperature below 110 degrees F. In this case, when the customer chooses the "Low" setting, the dryer will not turn on the gas valve. When checked, the displayed temperature will read "NO HEAT".
- 3. "COOLDOWN" allows the user to change the designated time at the end of a cycle where the gas valve relay is turned off. On "High" and "Medium" temperature settings, the designated time cannot be reduced to less than 2 minutes.
- 4. "DEFAULT TEMP" allows the user to choose which general temperature setting, "High", "Medium" or "Low", the control will default to at the beginning of each cycle if the customer does not make a choice.
- 5. "ANTI WRINKLE" is a feature that periodically rotates the dryers after a cycle is complete. If the door was closed at the end of the cycle, and is left closed for 5 minutes, the enunciator will sound and the display begins scrolling "ANTI WRINKLE". 5 seconds later, the dryer motor will turn on for 60 seconds and then turn off. The gas valves will not be turned on. The "ANTI WRINKLE" message will continue throughout the time that the motor is turned on. The user can choose to enable or disable this feature.

To reset all values in the Cycles option to factory default, press "Enter" when the "DEFAULT" prompt is shown. Press "Enter" again when the "RESET" prompt is shown to confirm the action.

The figure below shows the sub menu options for Cycles:



Temperature Pricing Option:

This option allows the user to require additional vend amounts be added based on the drying temperature chosen by the customer. This pricing adder is effective only for the Base Vend Price (it does not affect the Extend Dry Price). It allows a pricing adder separate for "Medium" and "Hot" temperature settings.

Example- A store owner has programmed the control for the following:

| Vend Price | \$1.00 |
|------------------|------------|
| Vend Time | 30 minutes |
| Extend Dry Price | \$.25 |
| Extend Dry Time | 8 minutes |
| Medium Adder | \$.25 |
| Hot Adder | \$.50 |

In this case, the Vend Price is displayed as:

- \$1.00 if Low Temperature is chosen
- \$1.25 if Medium Temperature is chosen
- \$1.50 if Hot Temperature is chosen

When Temperature Pricing Adders are in place (user has chosen a higher value then \$0.00), if the customer attempts to change their temperature selection from a lower temperature to a higher one during a drying cycle, there will be no change in the temperature selection. The higher temperature buttons are disabled until the drying cycle is complete and a new Vend Price is required.

The figure below shows the sub menu options for Temperature Pricing:



Settings Options:

The Settings options allow for the user to make various programming changes to change how the control operation affects the customer. See below for detailed information on each next level option.

- 1. "Decimal Point": If the user programs the Decimal Point to "OFF", control display will not show a decimal point on any vend price values. The factory default is "ON".
- 2. "Display Time": If the user programs this value to "MIN", then minutes only will be shown for the cycle time. If it is programmed to "MIN+SEC", then minutes and seconds will be shown. This also allows other programming changes, involving time, to be made in either minute increments or minutes & seconds increments, as desired.
- 3. "Temp Scale": If the user programs this value to "F", then the temperatures will be displayed in Fahrenheit units. If it is programmed to "C", then the temperature will be in Celsius units.
- 4. "Sounds": If the user programs the Sounds to "OFF", the control will not sound the enunciator at the end of a dry cycle. The factory default is "ON".
- 5. "Password": If the user programs the password to any value other then 0000, the control will prompt the user to enter a password (the programmed value) before manual programming can be accessed. The factory default is "0000" (no password).
 - a. Note that if the user forgets the Password, it can be reset to factory default (no password), by performing a hard reset on the control. Please refer to the appropriate section of this manual to understand how to perform a hard reset.
 - b. The individual digits of the Password can be set by using the "Up" or "Down" buttons to change the number that is flashing. Once the desired number is chosen for a single digit, press the "Enter" button to move to the next one. Once all four desired digits are chosen, the "Enter" button must be held down for 3 seconds to confirm that the complete password should be set.
- 6. "Central Pay": If the user programs this value to "ON", the left and right coin inputs become upper and lower dryer coin inputs.

| Central Pay "OFF" | Central Pay "ON" |
|-------------------|-------------------|
| Left Coin Input | Upper Dryer Input |
| Right Coin Input | Lower Dryer Input |

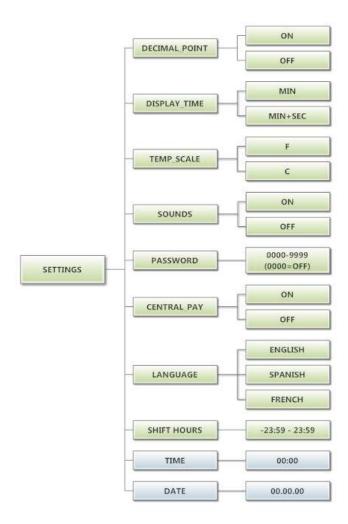
A system can then be installed that will register coin inputs per individual dryer remotely from a Central Pay kiosk. The left and right coin prices must be appropriately programmed. When this option is enabled, the controller will only display customer prompts for a designated dryer. This designated dryer is determined when coins are inserted at the Central Pay kiosk.

- 7. "Language": The control uses English for the default language of the customer prompts. Alternatively, the user can choose Spanish or French for the customer display prompts. However, all other prompts, such as Manual Programming, USB Programming and any Error Codes will still display in English.
- 8. "Shift Hours": This feature allows the user to shift the time used by the control from the time kept internally by the control. The control uses a Real Time Clock (RTC) to internally track the time and date. The RTC continues operation even if the control loses external power. The RTC is set for Central Standard Time and no daylight savings. Because the machine may be located in another time zone, the user can choose to create an alternate time & date that tracks in parallel to the RTC. When this alternate time is chosen, or shifted from the RTC, the alternate time will be used to, for example, track error code occurrences and set time-of-day pricing changes.
 - a. The hours in "SHIFT HOURS" can be set by using the "Up" or "Down" buttons to change the number that is flashing. Once the desired hour shift is chosen, press the "Enter" button to move to the minutes. Once the hours and minute shift are both chosen, the "Enter" button must be held down for 3 seconds to confirm that the complete shifted time is set.
- 9. "Time": The control uses a Real Time Clock (RTC) to internally track the time and date. The RTC continues operation even if the control loses external power. The RTC is set for Central Standard Time and no daylight savings. However, if a problem occurs and the RTC time is not accurate, it can be reset to the current time using this option.
 - a. The hours in "TIME" can be set by using the "Up" or "Down" buttons to change the number that is flashing. Once the desired hour is chosen, press the "Enter" button to move to the minutes. Once the hours and minute are both chosen, the "Enter" button must be held down for 3 seconds to confirm that RTC is meant to be reset to the complete entry.

- 10. "Date": Similar to "Time", if a problem occurs and the RTC date is not accurate, it can be reset to the current date using this option.
 - a. The day of the month in "DATE" can be set by using the "Up" or "Down" buttons to change the number that is flashing. Once the desired day of the month is chosen, press the "Enter" button to move to the month of the year. Once the desired month of the year is chosen, press the "Enter" button to move to the year. Once the day, month and year are all chosen, the "Enter" button must be held down for 3 seconds to confirm that RTC is meant to be reset to the complete entry.

To reset all values in the Settings options to factory default, press "Enter" when the "DEFAULT" prompt is shown. Press "Enter" again when the "RESET" prompt is shown to confirm the action.

The figure below shows the sub menu options for Settings:

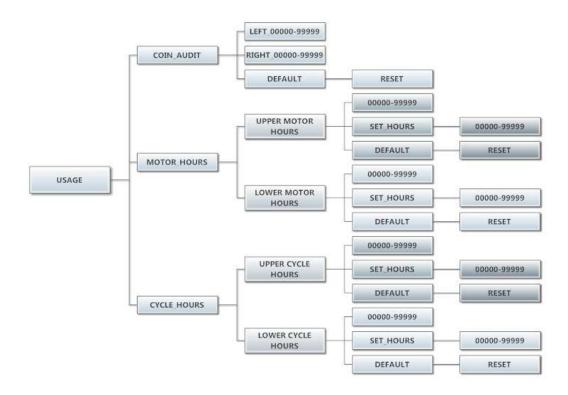


Usage Menu:

The Usage menu allows for the user to track data about machine usage. See below for detailed information on each sub menu option.

- 1. "Coin Audit": The coin audit field shows the accumulation of coin pulses that were sent to the control over each of the left and right coin inputs. Note that this is a count of coin pulses, not an accumulated report of vend value.
 - a. The user can also return the coin audit amounts to the factory default setting (zero). To reset all coin audit values, press "Enter" when the "DEFAULT" prompt is shown. Press "Enter" again when the "RESET" prompt is shown to confirm the action.
- 2. "Motor Hours": The motor hours field shows the accumulated hours of operation for both the upper and lower motors independently. In many cases, it will match the cycle hours of the machine. However, separate fields are provided in the event that a motor is replaced on a machine. The user can set the motor hours to a designated number. For example, if it is necessary to replace the control on a machine, the new control could be programmed to show the motor hours that were recorded by the previously installed control. The individual digits of the hours count can be set by using the "Up" or "Down" buttons to change the number that is flashing. Once the desired digit of the hours is chosen, press the "Enter" button to move to the next digit. Once the complete hours are chosen, the "Enter" button must be held down for 3 seconds to confirm the action.
 - a. The user can also return the motor hours to the factory default setting (zero). To reset the motor hours, press "Enter" when the "DEFAULT" prompt is shown. Press "Enter" again when the "RESET" prompt is shown to confirm the action.
- 3. "Cycle Hours": The cycle hours field shows the accumulated hours of operation for both the upper and lower dryer dryers independently. In many cases, it will match the motor hours of the machine. However, separate fields are provided in the event that a motor is replaced on a machine. See the Motor Hours description for more information.

The figure below shows the sub menu options for Usage:

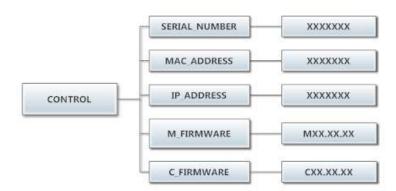


Control Menu:

The Control menu allows for the user to observe important technical information for the control. No changes can be made at this menu. See below for detailed information on each sub menu.

- 1. "Serial Number": This is the control serial number.
- 2. "MAC Address": The MAC Address is a unique identifier designated to the control by the manufacturer. It allows the control to be recognized by network routers.
- 3. "IP Address": The IP Address is the identifier given to the control by a network system.
- 4. "M Firmware": The M Firmware is the Main Firmware currently loaded onto the control.
- 5. "C Firmware": The C Firmware is the Communications Firmware currently loaded onto the control.

The figure below shows the sub menu options for Control:



SERVICING AND TROUBLESHOOTING

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

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

If any of the following symptoms occur on this dryer, check the suggested remedies listed below. If all probable causes have been eliminated and the symptom still exists, contact your local Dexter agent for further troubleshooting assistance. See contact information in Preventative Maintenance section. Parts & Service Manuals from Dexter are also available for further troubleshooting assistance.

| Symptom | Probable Cause | Suggested Remedy |
|---|---------------------------------------|---|
| Tumbler Does not turn | Control | Check that Control Display shows time available for drying. If not, deposit money as needed. |
| | Loading Door | Check that Loading Door is completely closed |
| | Lint Compartment Door | Check that Lint Compartment Door is completely closed. |
| | Drive Belts | Check drive belts for excessive wear. Replace as needed. |
| Tumbler Turns, but no burner flame is present | Gas shut-off valve | Make sure gas shut-off valve is in the open position |
| | Ignition Module | Follow the procedure for checking the ignition cycle listed in Dryer Ignition section of this manual. |
| Slow Drying | Control | Check that proper Temperature setting is chosen. |
| | Lint Screen | Clean Lint Screen |
| | Air flow Restrictions/ Make-up Air | Follow installation guidelines for static back pressure and make-up air |
| | Exhaust | Check exhaust for obstructions, follow installation guidelines |
| "Temp Sensor Short" or "Temp Sensor Open" Error Code displayed on control | Temperature Sensor | Press programming button to clear Error Code. If Error code persists, contact Dexter agent for assistance |
| "PCB Error" or "Comm Error" code displayed on control | Control Error | Cycle power to dryer to clear Error Code. If Error Code persists, contact Dexter Agent for Assistance |

PREVENTIVE MAINTENANCE INSTRUCTIONS

DAILY

- 1. Clean the lint screen. Use a soft brush if necessary.
- 2. Check the lint screen for tears. Replace if necessary.
- 3. Clean lint from the lint screen compartment.

MONTHLY

- 1. Remove lint accumulation from the end bells of the motor.
- 2. Remove lint accumulation from front control area.
- 3. Remove lint and dirt accumulation from the top of the dryer and all areas above, below, and around the burners and burner housing. Failure to keep this portion of the dryer clean can lead to a build-up of lint creating a fire hazard.
- 4. Place a few drops of light oil on the clothes door hinge.
- 5. Grease the bearings and the shaft of the intermediate drive pulley. Use an Alemite grease gun and Molykote BR2-S grease.

QUARTERLY

- 1. Check the belts for looseness, wear, or fraying.
- 2. Inspect the gasket of the door glass for excessive wear.
- 3. Check tightness of all fasteners holding parts to support channel.
- 4. Check tightness of all set screws.
- 5. Inspect the impeller for tightness of the blades to hub.
- 6. Check the tightness of the tumbler shaft retaining bolt.
- 7. Remove the air flow switch assembly and check the tumbler thru-bolts for tightness.
- 8. Remove lint accumulation from the primary air ports in the burners.
- 9. Apply a few drops of oil to each spacer tube on the tension arm assembly.
- 10. Grease the pivot pins and the tension arms where in contact with each other.

SEMI-ANNUALLY

- 1. Remove and clean the main burners.
- 2. Remove all orifices and examine for dirt and hole obstruction.
- 3. Remove all lint accumulation. Remove the front panel and the lint screen housing and remove lint accumulation.

ANNUALLY

- 1. Check the intermediate pulley bearings for wear.
- 2. Check and remove any lint accumulation from the exhaust system.

| SERVICE PARTS | PART NUMBER | PART NUMBER | |
|---------------------|--------------|--------------|--|
| | T-30X2 | T-50X2 | |
| DRIVE BELT, MOTOR | 9040-077-001 | 9040-076-009 | |
| DRIVE BELT, TUMBLER | 9040-073-009 | 9040-073-011 | |
| LINT SCREEN FILTER | 9555-057-002 | 9555-057-008 | |

For service and parts information, contact your local Dexter agent. To find your local Dexter agent, use the Distributor Locator at the website shown below. If a Dexter agent is not available, contact **Dexter Laundry**, **Inc.** directly as listed below:

Phone: 1-800-524-2954

Mailing Address: 2211 West Grimes Avenue

Fairfield, IA 52556

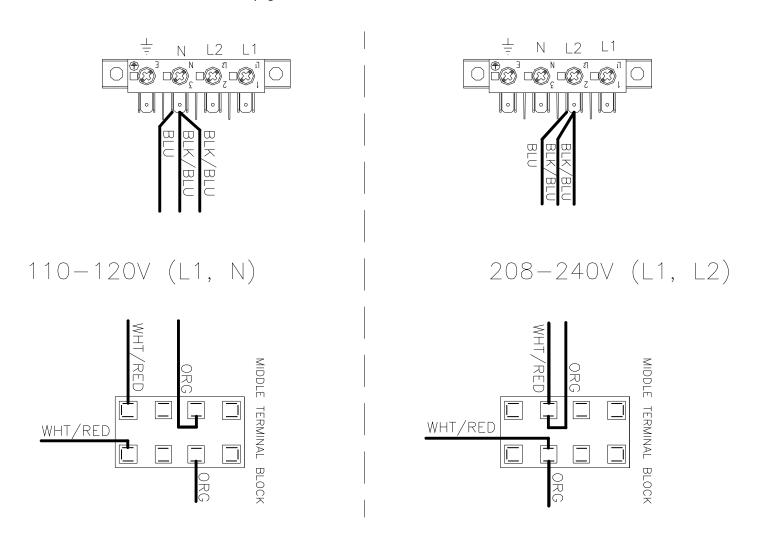
USA

Website: www.dexter.com

<u>Instructions - Convert a Dual Voltage Stack Dryer from 120V to 208-240V</u> (No Neutral Required)

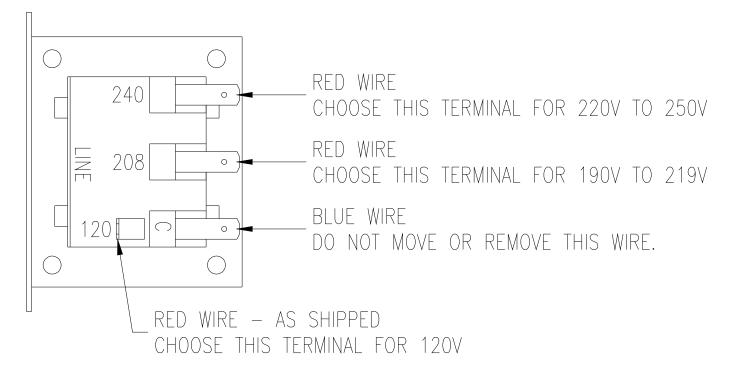
- 1. Remove incoming power from the dryer. Use a known working voltmeter to check power.
- 2. Remove the cover of the control box assembly from the dryer using a 5/16" wrench.
- 3. Move the black/blue wire AND the blue wire from the N position of the main power terminal block to the L2 position of the main power terminal block in the upper control box assembly. See figure below.
- 4. Move the white/red wire of the upper motor harness to an upper inner left terminal in the middle terminal block in the lower control box assembly. See figure below.
- 5. Move the orange wire of the upper motor harness to an upper inner left terminal in the middle terminal block in the lower control box assembly. See figure below.
- 6. Move the white/red wire of the lower motor harness to a lower inner left terminal in the middle terminal block in the lower control box assembly. See figure below.
- 7. Move the orange wire of the lower motor harness to a lower inner left terminal in the middle terminal block in the lower control box assembly. See figure below.

Conversion instructions continued on next page.



8. Move the red wire from the 120V tap on the transformer found in the bottom of control box to the required voltage tap based on actual supply voltage measurement. See figure below.

CONTROL TRANSFORMER CONNECTIONS AS VIEWED FROM SIDE OF TRANSFORMER



- 9. Reconnect power to the dryer and test to ensure proper operation; one line voltage to L1, one line voltage to L2 and the earth ground to E.
- 10. Reinstall the cover of the control box assembly on the dryer using a 5/16" wrench.