



DEXTER[®]

80 LB.OPL MICRO REVERSING DRYER DTCH 80 V

Service Procedures and Parts Data



The Dexter Company
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Part number # 8533-051-001
3/05

Disconnect power before servicing

WARNING

FOR YOUR SAFETY, THE INFORMATION IN THIS MANUAL MUST BE FOLLOWED TO MINIMIZE THE RISK OF FIRE OR EXPLOSION OR TO PREVENT PROPERTY DAMEGE, PERSONAL INJURY OR LOSS OF LIFE.

IF YOU SMELL GAS:

- Do Not** try to light any appliace.
- Do Not** touch or operate any electrical switch.
- Do Not** use any phone in your building.
- Do** clear the room, building or area of all occupants.
- Do** immediately call your gas supplier from a neighbors phone. Follow the gas suppliers instructions.
- Do** call the fire department if your gas supplier is not available.



WARNING

DRY ONLY FABRICS WASHED IN WATER

TO AVOID THE RISK OF FIRE, INCLUDING SPONTANEOUS COMBUSTIONS, DO NOT DRY:

- ITEMS CONTAINING FOAM RUBBER. OR ANY SIMILARLY TEXTURED RUBBER-LIKE MATERIALS.
- ANY ITEMS ON WHICH YOU HAVE USED A CLEANING SOLVENT OR WHICH CONTAIN FLAMMABLE LIQUIDS OR SOLIDS, SUCH AS NAPTHA, GASOLINE, OR OTHER OILS OR WAXES.

SEND WARRANTY REGISTRATION AT STARTUP!!!!!!
WARRANTY REGISTRATION ACTIVATED WHEN
REGISTRATION RECEIVED AT FACTORY.



serial number on rear of dryer

Table of Contents

SECTION 1

Specifications page 4 - 5

SECTION 2

Installation & Operation page 7-25

Micro Fault Codes page 26-27

SECTION 3

Wiring Schematics page 28-29

SECTION 4

Service Procedures page 30-35

SECTION 5

Trouble Shooting page 36-38

SECTION 6

Parts Data page 39-53

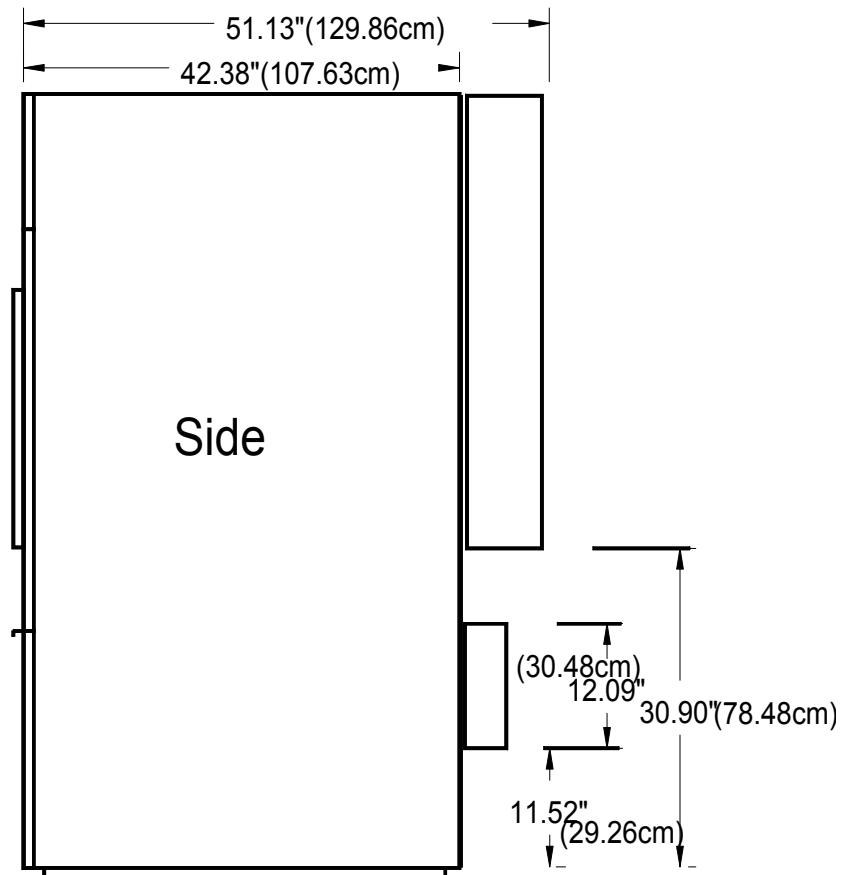
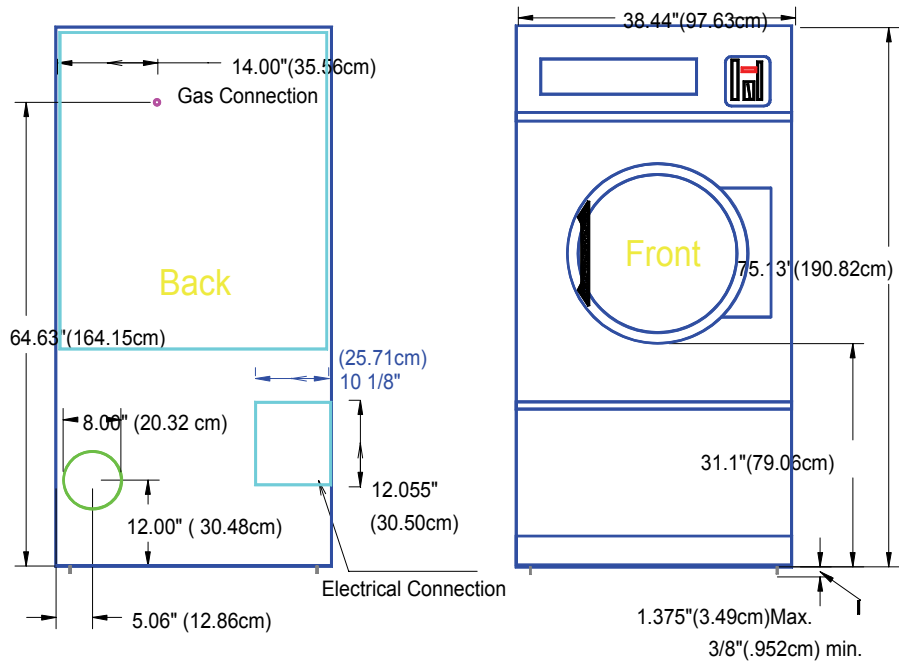
SECTION 7

Maintenance page 54

Section 1

Specifications

| | |
|------------------------------------|--|
| Model | DTCH80V Reversing Micro-controlled Industrial Dryer |
| Capacity | Maximum 80 pounds dry weight (36kg) |
| Cylinder dimensions | 36 1/2" (92.71cm) diameter 38" (96.52cm) depth |
| Cabinet dimensions | 38.44" W x 51.13" D x 75.5" H (w/legs) (97.63cm X 129.86cm X 191.77cm w/legs) |
| Motors | Drive motor - 1/2 HP (.373 Kw) Blower motor - 1/2 HP (.373 Kw) |
| Construction | Standard trunnion style cylinder support |
| Air flow | 1200 cfm total air flow (33.98M3/min) Fully perforated tumbler for cross flow air circulation |
| BTU rating | 215,000 BTU input (54,180 kcal) Natural gas standard, LP kits available separately from P&S |
| Ignition | Direct spark electronic ignition |
| Exhaust | One 8" connection (20.32cm) .3 Static Pressure Max. at rear of dryer |
| Gas line connection | 1/2" N.P.T. (1.27cm) |
| Electrical | 208-240 Volts, 60 HZ AC, 3 Ph. 15 amp circuit breaker or equivalent. |
| Micro control | 5 Programmable formulas |
| Temperature Control | Sensor |
| Weight (shipping lbs. / net lbs.) | 693/613 (312.16 kg / 276.12 kg) |
| Service | 3 wire + ground |
| Colors | White & Stainless Steel |



Section 2

Installation & Operation

Uncrating

1. Remove cardboard and innerpack.

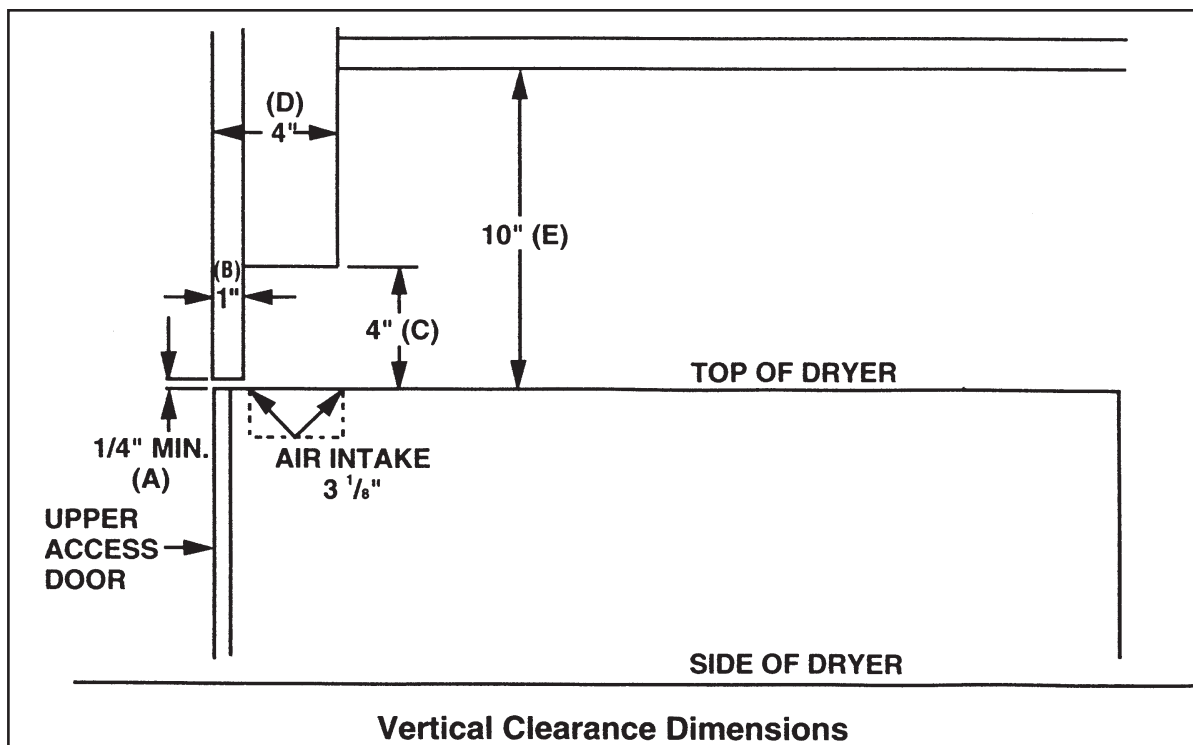
Installation

1. All commercial dryer installations must conform with local applicable local codes or in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1A-1988. Canadian installations must comply with current standard CAN/CGA-B149(.1 or .2) Installation Code for Gas Burning Appliances or

Equipment, and local codes if applicable. The appliance, when installed, must be electrically grounded in accordance with the National Electric Code, ANSI/NFPA No. 70-1990, 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.

1. Left side 0"
2. Right side 0" *Units may be installed in direct contact with an adjacent dryer, providing allowance is made for opening upper & lower service doors.
3. Back 18" (certified for 1" clearance; however 18" behind the guard is recommended to clean, service, & maintain the dryer)
4. Front 48" to allow use of dryer.
5. Top Certification allows 0" clearance at the top from the front back 1". However, a 1/4" clearance (A) is required to allow opening the upper service door. A 4" clearance (C) is required at the top, at a depth of 1" to 4" (D) from the front. A 10" clearance (E) is required from the top at all other points.
6. Floor This unit may be installed upon a combustible floor.



Make-up Air. Adequate make-up air must be supplied to replace air exhausted by dryers on all types of installations. Provide a minimum of 1 1/2 square foot of make-up air opening to the 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 air flow to the air intakes of all dryers. Multiple openings should be provided.

NOTE: The following considerations must be observed for gas dryer installations where dry cleaners are installed. 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 an open flame such as the gas flame present in clothes dryers. The decomposition products are highly corrosive and will cause damage to the dryer ducts and clothes loads.

NOTE: THE DRYER MUST BE GROUNDED BY A SEPARATE GROUND CONDUCTOR FROM THE GROUND SCREW ON THE DRYER TO THE NEUTRAL BAR IN THE SUPPLY BREAKER BOX.

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. 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 Fuel Gas Code and consulting 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 should be provided in the gas piping supplying the unit to catch dirt and other foreign articles. All pipe connections should be checked for leakage with soap solution or leak detector. Never check with an open flame.

Pressure Testing

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. 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. Max. 1/2 psig on supply side of manual gas valve.

Exhaust Installation

An 8" diameter exhaust connection is required. Exhausting of the dryer should always be planned and constructed so that minimum air restrictions occur. Any restriction due to pipe size or type of installation can cause slow drying time, excessive heat, and lint build up in the system and the room.

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

NOTE: Individual exhausting of the dryer 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 ducts 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 20 feet of straight 8" diameter pipe with two right angle elbows be used for each cylinder. When more than two elbows are used, two feet of straight pipe should be removed for each additional elbow. No more than four right angle elbows should be used to exhaust each cylinder. **Max. .3 Static Pressure at rear of dryer.**

NOTE: 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", of any objects which would cause air restrictions.

NOTE: Never install a protective screen over the exhaust outlet.

NOTE: 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.

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

NOTE: Installation of several dryers where a main discharge duct is necessary, will need the following considerations for installation. Individual 8" ducts from the dryers into the main discharge duct should be at a 45 degree angle in the direction of discharge air flow.

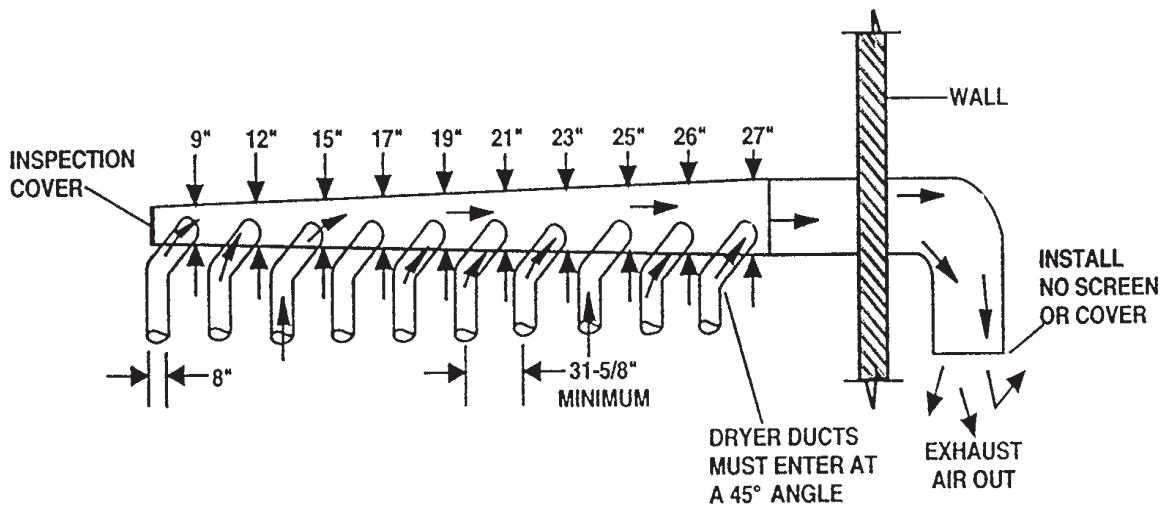
NOTE: Never install the 8" ducts at a right angle into the main discharge duct. The following illustration shows the various round main duct diameters to use with the individual dryer ducts. The main duct can be rectangular or round, provided adequate air flow is maintained. For each dryer, the total exhausting (main discharge duct plus duct outlet from the dryer) should not exceed the equivalent of 20 feet 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 air flow, 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.

DRYER SHUTDOWN

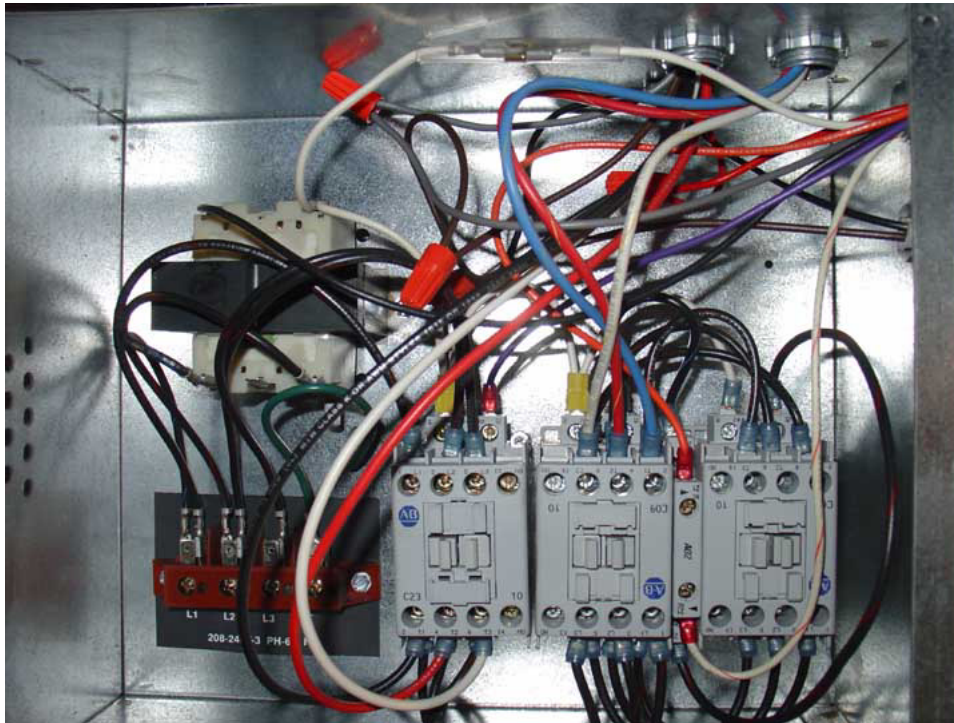
To render the dryer inoperative turn off the main gas shut-off valve and disconnect power to the dryer.

DIAMETER TO INCREASE AS SHOWN



Controls Transformer

This transformer is mounted in the control box on the back of the dryer and steps a range of 208 to 240 volts down to **24 volts** for the controls. There are three terminals on the controls transformer for the incoming power. The 208 VAC terminal is for 208 to 220 volts and the 240 VAC terminal is for 221 to 240 volts. The control voltage on secondary side is **24 volts**.



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. The electrical connection should be made to the terminal in the control box on the rear of the unit, using a wire size adequate to handle the amperage and voltage listed on the serial plate, but never smaller than **No. 12 AWG** wire. The **ground lug must be connected to a good external ground**. The schematic and wiring diagram are located on the belt guard on the back of the machine.

FUSE REQUIREMENTS : **15 amp circuit breaker 3 phase recommended**

NOTE: THE DRYER MUST BE GROUNDED BY A SEPARATE GROUND CONDUCTOR FROM THE GROUND SCREW ON THE DRYER TO THE NEUTRAL BAR IN THE SUPPLY BREAKER BOX.

OPERATING INSTRUCTIONS

To dry a load of items, you must choose one of the five-programmed dry cycles. Each of these five dry cycles may be modified in two different ways to match your load. Please refer to the “Permanent Programming” or “Temporary Programming” section of these instructions.

There are two parts to each dry cycle. The first part is the heating time, which is when the gas valve is cycled on and off according to the temperature setting in the dry cycle program. The second part is the cool down time, which is after the heating part of the dry cycle, and is when the cylinder continues to turn, but no heat is applied.

There will always be at least two minutes of cool down time for each dry cycle. The maximum amount of cool down time is 15 minutes.

During a reversing dry cycle, the tumbler will rotate in one direction for two minutes, decelerate for four seconds, and then rotate in the opposite direction for two minutes. This motion will repeat for the duration of the dry cycle.

In the following instruction steps, things that are displayed on the 4-digit numerical display will be in “quotation marks” and any keys on the dryer controller touch pad that physically need to be pressed will be in **CAPITAL AND BOLD LETTERS**.

- 1) Place your load into the dryer cylinder and close the dryer loading door. Notice that the dryer controller 4-digit numerical display should show the word “LOAD”. If it does not show this word, then press and release the **STOP** touch pad key on the dryer controller twice.
- 2) Press and release the **UP** or **DOWN** arrow touch pad key on the dryer controller to select a dry cycle.
- 3) Once the desired dry cycle is selected, press and release the **START** touch pad key.

After the dryer controller **START** touch pad key is pressed, the dryer cylinder will start rotating and the two-digit total dry cycle time, along with a decimal point, will appear on the dryer controller display.

The time shown on the dryer controller display will count down to the programmed cool down time. At that time, the display will change from the decimal point and two-digit number to a letter “C” and two digits.

The letter “C” represents the cool down portion of the dry cycle. The two digits represent the amount of time remaining in the dry cycle. The two-digit time, shown on the dryer controller display, will count down to zero.

When the time returns to zero, the dryer controller display will flash the word “donE” and the end of cycle tone will sound.

At that point, the wrinkle free cycle will automatically begin. This cycle will wait two minutes, if the door is not opened or the **STOP** touch pad key on the dryer controller is not pressed, and then rotate the cylinder for 10 seconds and stop. This two minutes of idle time and 10 seconds of tumble time will repeat a total of 10 times, at which time the wrinkle free cycle stops. The cylinder will not rotate again until a new dry cycle is started.

During the wrinkle free cycle the gas valve will not be operated and there will be no heat applied to the load. The word “donE” will also continue to flash and do so even after the wrinkle free cycle is finished. When the dryer loading door is opened, or the **STOP** touch pad key is pressed, the word “donE” will change to the word “LOAd” on the dryer controller display. The dryer will then be ready for another dry cycle.

During the dry cycle, either pressing the STOP touch pad key on the dryer controller or opening the dryer loading door, will stop the dry cycle and not clear it. If you press the STOP touch pad key on the controller and then open the dryer loading door the dry cycle will not be cleared. However, if you open (or open and close) the dryer loading door and then press the STOP touch pad key on the dryer controller, the present dry cycle will be cleared and the word “LOAd” will appear on the dryer controller display.



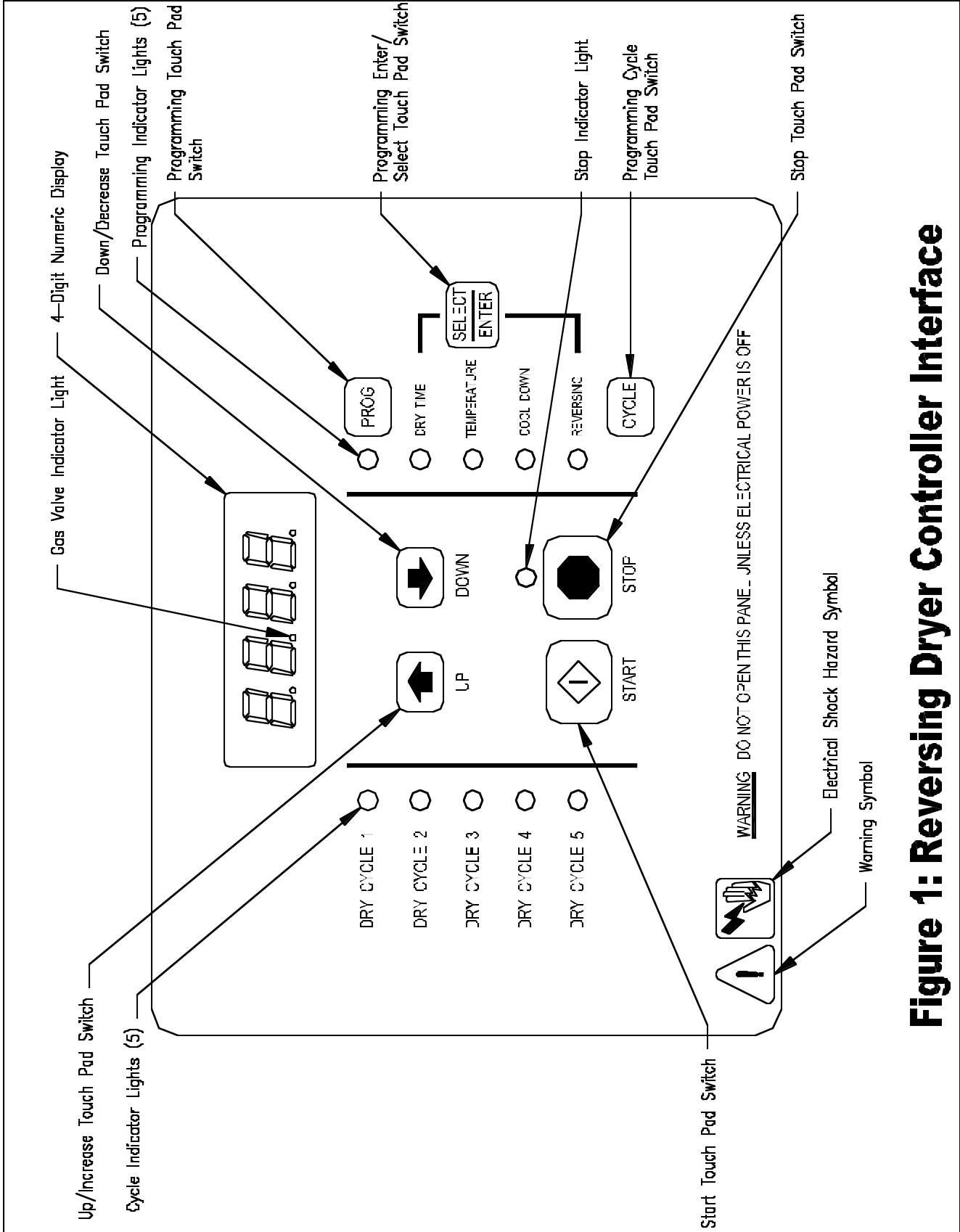





Figure 1: Reversing Dryer Controller Interface

TOUCH PAD DESCRIPTION





INDICATOR LIGHTS (L.E.D.s)

| | <u>Description</u> |
|---------------------|---|
| Cycle (1 through 5) | These L.E.D.s are on solid when a particular cycle is chosen for operation or programming. |
| Gas Valve | This L.E.D. is part of the 4-digit numeric display and will be on solid during the drying part of a cycle when the gas valve does <u>not</u> need to be on. The L.E.D. will be blinking when the gas valve needs to be on. The L.E.D. will <u>not</u> be on solid or blinking (off) if the cycle is stopped, complete, in cool down, or terminated. |
| Programming | These L.E.D.s are on solid as they are selected during the programming of the dryer controller. |
| Stop | This L.E.D. is on solid when either the STOP button is pressed once or the door is opened during an operating cycle. |

SWITCHES (Pushbuttons)

| | <u>Description</u> |
|--|--|
|  UP Up/Increase | This touch pad switch will increment (increase) dry time, cool down time, and drying temperature. It will also scroll upwards when selecting a dry cycle. |
|  DOWN Down/Decrease | This touch pad switch will decrement (decrease) dry time, cool down time and drying temperature. It will also scroll downwards when selecting a dry cycle. |
|  Program | This touch pad switch allows the dryer controller to enter the permanent programming mode. |

SWITCHES (Pushbuttons) - continued

| | <u>Description</u> |
|---|--|
|  Select/Enter | This touch pad switch will select one of the three variable parts of the dry cycle (dry time, temperature, or cool down) by sequencing through them. Once one of the variable parts of the dry cycle is chosen and changed, this touch pad switch will enter the new (changed) value into the dry cycle program. |
|  Cycle | This touch pad switch allows the dryer controller to enter the temporary programming mode. |
|  Stop | This touch pad switch will stop the dryer during a dry cycle without clearing the present drying cycle if pressed once. If pressed and released twice, consecutively, the present dry cycle will be cleared. |
|  Start | This touch pad switch will start the operation of a dry cycle if pressed and released once. Pressing <u>and holding</u> this touch pad switch will display the current temperature of the dryer heat sensor as long as it is held in the depressed position. |

4-DIGIT NUMERICAL DISPLAY MESSAGES

| <u>Message</u> | <u>Description</u> |
|----------------|---|
| LOAD | This message is displayed after a dry cycle is complete and the dryer loading door has been opened or the STOP touch pad key on the dryer controller has been pressed and released twice. |

TEMPORARY PROGRAMMING

The temporary programming mode will allow the change of the stored dry cycle settings in the dryer controller for one complete dry cycle. After the dry cycle is complete, the default settings that existed before the temporary change are restored. The temporary dry cycle can be stopped and cleared at any time during the dry cycle operation.

To temporarily change a dryer controller cycle, follow the procedures below. Things that are displayed on the 4-digit numeric display will be in “quotation marks”. Keys on the dryer controller touch pad that physically need to be pressed will be in **CAPITAL AND BOLD LETTERS**.

If, at any time, you want to escape the temporary programming mode while changing the program settings, you can press the **STOP** key on the dryer controller touch pad if the 4-digit numeric display is not flashing. The **SELECT/ENTER** key on the dryer controller touch pad can be pressed and released to enter the flashing value shown on the 4-digit numeric display and allow you to escape.

If you press and release the **STOP** key on the dryer controller touch pad, when the 4-digit numeric display is not flashing, the temporary changes to the dry cycle program will be cancelled. The stored dry cycle settings that existed before the temporary change will then be restored.

If, at any time, you want to start the temporary dry cycle during the temporary programming mode, press and release the **START** key on the dryer controller touch pad if the 4-digit numeric display is not flashing. The **SELECT/ENTER** key on the dryer controller touch pad can be pressed and released to enter the flashing value shown on the 4-digit numeric display and allow you to start the temporary dry cycle. If you start the temporary dry cycle, the 4-digit numerical display will change to the total dry time and count down to 0 as the dry cycle progresses.

PROCEDURE

- 1) Make sure the dryer is not in a dry cycle. The 4-digit numeric display on the dryer controller will show “LOAd” when the dryer is not in a dry cycle.
- 2) Press and release the **UP** or **DOWN** arrow keys on the dryer controller touch pad to chose the dry cycle that you want to change (dry cycle 1 through 5). The dry cycle L.E.D. will illuminate to indicate which dry cycle you are choosing. If you press either arrow key and hold it down, the controller will sequence through the five dry cycles.

3) Press and release the **CYCLE** key on the dryer controller touch pad once you have chosen the dry cycle you want to change. After you press this key, the programming L.E.D. and the dry time L.E.D. will illuminate. The dry cycle L.E.D. will remain illuminated. The total dry time will also be displayed on the 4-digit numeric display.

4) Press and release the **UP** or **DOWN** arrow keys to change the total dry time. Once either of the arrow keys is pressed, the dry time L.E.D. and the total dry time on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) through the total dry times available (1 through 60 minutes). This displayed dry time includes the cool down time along with the heated time. To not change the total dry time, do not press the arrow keys. Go to the next step.

5) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the dry time L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the temperature L.E.D. will illuminate. The drying temperature will also be shown on the 4-digit numeric display.

6) Press and release the **UP** or **DOWN** arrow keys to change the drying temperature. Each press and release of the arrow keys will either increase or decrease the temperature by five degrees Fahrenheit or three degrees Celsius, depending on how your dryer controller is set up. Once either of the arrow keys is pressed, the temperature L.E.D. and the drying temperature on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) your way through the available drying temperatures (105° Fahrenheit or 41° Celsius, up to 195° Fahrenheit or 90° Celsius). If you do not want to change the drying temperature, do not press the arrow keys. Go to the next step.

7) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the temperature L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the cool down L.E.D. will illuminate. The cool down time will also be shown on the 4-digit numeric display.

8) Press and release the **UP** or **DOWN** arrow keys to change the cool down time. Once either of the arrow keys is pressed, the cool down L.E.D. and the cool down time on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) through the cool down times available (2 through 15 minutes). To not change the cool down time, do not press the arrow keys. Go to the next step.

9) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the cool down L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the reversing L.E.D. will illuminate. Either “rEv” (reversing mode) or “nrEv” (non-reversing mode) will also be shown on the 4-digit numeric display.

10) Press and release the **UP** or **DOWN** arrow keys to switch between reversing and non-reversing operation. Once either of the arrow keys is pressed, the reversing L.E.D. and the “rEv” (reversing mode) or the “nrEv” (non-reversing mode) shown on the 4-digit numeric display will flash. To not change the reversing or non-reversing mode of operation, do not press the arrow keys. Go to the next step.

11) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the programming L.E.D. will switch off. The reversing L.E.D. and the dry cycle L.E.D. will remain on. The flashing reversing (rEv) or the non-reversing (nrEv) on the 4-digit numeric display will stop flashing and remain.

12) At this point, you have two choices. 1) You can perform the modified dry cycle by pressing and releasing the **START** key on the dryer controller touch pad, or 2) You can clear the modified dry cycle program by pressing and releasing the **STOP** key once. If you start the modified cycle, the total dry time will appear on the 4-digit numeric display and it will count down to 0 as the dry cycle progresses. If you choose to clear the modified dry cycle, the 4-digit numeric display will change to “LOAD”.



TEMPORARY PROGRAMMING EXAMPLE

REQUIREMENTS: Dry a load, in reverse mode, with 40 minutes of actual heat at 185°F and two minutes of cool down.

The following procedure will show you how to temporarily modify the existing dry cycle 5 program for one cycle of drying. It is based on the assumption that the factory defaults have not been permanently changed. If they have been changed, the steps of this procedure will be the same, but the values that are displayed will be different. The amount of times that the dryer controller touch pad UP or DOWN keys must be pressed and released may also be different.

If you want the change to be permanent, go to the “PERMANENT PROGRAMMING” section of this manual.

PROCEDURE:

- 1) After the load has been placed in the dryer, press and release the **UP** or **DOWN** touch pad key on the dryer controller until the L.E.D. for dry cycle 5 is illuminated.
- 2) Press and release the **CYCLE** key on the dryer controller touch pad. You will see the number “25” on the dryer controller display. The programming L.E.D. and dry time L.E.D. will be illuminated.
- 3) Press and release the **UP** arrow key on the dryer controller touch pad 17 times so the display will show a flashing “42”. When the UP arrow touch pad key is pressed the first time, the number “26” will be flashing on the dryer controller display. Each number after that will also flash.
- 4) Now, press and release the **SELECT/ENTER** touch pad key on the dryer controller. The number “45” will stop flashing and the dry time L.E.D. will switch off. The dryer controller display will now show “175”, the temperature L.E.D. will illuminate, and the programming L.E.D. and dry cycle 5 L.E.D. will remain on.
- 5) Press and release the **UP** arrow key on the dryer controller touch pad two times so the controller display will show a flashing “185”. Each press of the UP arrow key will increment the temperature by five degrees.

- 6) Now, press and release the **SELECT/ENTER** touch pad key on the dryer controller. The number “185” will stop flashing and the temperature L.E.D. will switch off. The dryer control display will now show a number “2”, the cool down L.E.D. will illuminate, and the programming L.E.D. and dry cycle 5 L.E.D. will remain on.
- 7) Press and release the **SELECT/ENTER** key on the dryer controller touch pad, since the desired cool down time is two minutes. After you press the **SELECT/ENTER** touch pad key on the controller, the cool down L.E.D. will switch off. The dryer controller display will show “nrEv”, the reversing L.E.D. will illuminate, and the programming L.E.D. and dry cycle 5 L.E.D. remain on.
- 8) Press and release the **UP** or **DOWN** arrow key once. A flashing “rEv” will appear on the dryer controller display and the reversing L.E.D. will start to flash. Each press and release of either arrow key will toggle between the reversing mode (“rEv”) and non-reversing mode (“nrEv”).
- 9) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the programming L.E.D. and the reversing L.E.D. will switch off. The dry cycle 5 L.E.D. will remain on. The flashing “rEv” will stop flashing and remain on.

You are now ready to start the new dry cycle. This new dry cycle will be in effect for one dry cycle only. After the dry cycle is done, or if the **STOP** touch pad key on the dryer controller is pressed and released twice, consecutively, the cycle 5 program will revert to the factory default settings.

If you press the **START** touch pad key on the dryer controller, the controller display will change from “rEv” to the number “42” and dry cycle 5 will b

PERMANENT PROGRAMMING

The permanent programming mode will allow the change of the stored dry cycle settings in the dryer controller until the operator physically changes them again. The factory default settings can be restored in the dryer controller by pressing the default settings pushbutton on the back (component) side of the dryer controller circuit board. It is labeled and located on the upper right side of the printed circuit board, as you face the component side of the board. It must be pressed and held down for at least three seconds.

To permanently change a dryer controller cycle, follow the procedure below. Things that are displayed on the 4-digit numeric display will be in “quotation marks”. Keys on the touch pad that physically need to be pressed will be in **CAPITAL AND BOLD LETTERS**.

If, at any time, you want to escape the permanent programming mode while changing the settings, you can press and release the **STOP** key on the dryer controller touch pad if the 4-digit numeric display is not flashing. The **SELECT/ENTER** key on the dryer controller touch pad can be pressed and released to enter the flashing value shown on the 4-digit numeric display and allow you to escape.

PROCEDURE

- 1) Make sure the dryer is not in a dry cycle. The 4-digit numeric display on the dryer controller will show “LOAD” when the dryer is not in a dry cycle.
- 2) Press and release the **PROG** key on the dryer controller touch pad.
- 3) Press and release the **UP** arrow key on the dryer controller touch pad. The programming L.E.D. will illuminate and the 4-digit numeric display on the dryer controller will change to “Prog”.
- 4) Press and release the **UP** or **DOWN** arrow keys to choose the dry cycle you want to change (dry cycle 1 through 5). The dry cycle L.E.D. will illuminate to indicate which dry cycle you are choosing. If you press either arrow key and hold it down, the controller will sequence through the five dry cycles.
- 5) Press and release the **SELECT/ENTER** key once you have chosen the dry cycle you want to change. After you press this key, the dry time L.E.D. will illuminate. The dry cycle L.E.D. and the programming L.E.D. will remain illuminated. The total dry time will also be displayed on the 4-digit numeric display.
- 6) Press and release the **UP** or **DOWN** arrow keys to change the total cycle time. Once either of the arrow keys is pressed, the dry time L.E.D. and the total dry time on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) through the total dry times available (1 through 60 minutes). This displayed dry time includes the cool down time along with the heated time. To not change the total dry time, do not press the arrow keys. Go to the next step.

7) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the dry time L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the temperature L.E.D. will illuminate. The drying temperature will also be shown on the 4-digit numeric display.

8) Press and release the **UP** or **DOWN** arrow keys to change the drying temperature. Each press and release of the arrow keys will either increase or decrease the temperature by five degrees Fahrenheit or three degrees Celsius, depending on how your dryer controller is set up. Once either of the arrow keys is pressed, the temperature L.E.D. and the drying temperature on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) your way through the available drying temperatures (105° Fahrenheit or 41° Celsius, up to 195° Fahrenheit or 90° Celsius). If you do not want to change the drying temperature, do not press the arrow keys. Go to the next step.

9) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the temperature L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the cool down L.E.D. will illuminate. The cool down time will also be shown on the 4-digit numeric display.

10) Press and release the **UP** or **DOWN** arrow keys to change the cool down time. Once either of the arrow keys is pressed, the cool down L.E.D. and the cool down time on the 4-digit numeric display will flash. If you press and hold either arrow key down, you will increment (**UP** arrow) or decrement (**DOWN** arrow) through the cool down times available (2 through 15 minutes). To not change the cool down time, do not press the arrow keys. Go to the next step.

11) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the cool down L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on, and the reversing L.E.D. will illuminate. Either “rEv” (reversing mode) or “nrEv” (non-reversing mode) will also be shown on the 4-digit numeric display.

12) Press and release the **UP** or **DOWN** arrow keys to switch between reversing and non-reversing operation. Once either of the arrow keys is pressed, the reversing L.E.D. and the “rEv” (reversing mode) or the “nrEv” (non-reversing mode) shown on the 4-digit numeric display will flash. To not change the reversing or non-reversing mode of operation, do not press the arrow keys. Go to the next step.

13) Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the reversing L.E.D. will switch off, the dry cycle L.E.D. and programming L.E.D. will remain on. The 4-digit numeric display will change to “Prog”.

14) Press and release the **STOP** key to save the cycle program and escape the programming mode. If you want to change the same dry cycle program again, press the **SELECT/ENTER** key and continue at step 6 of this procedure. If you want to modify another dry cycle program, go to step 4 of this procedure and continue.

15) If you pressed the **STOP** key to escape the programming mode, you may now start the dry cycle by pressing the **START** key.

PERMANENT PROGRAMMING EXAMPLE

REQUIREMENTS: Dry a load, in reverse mode, with 50 minutes of actual heat at 195° F and three minutes of cool down.

The following procedure will show you how to permanently modify the existing dry cycle 5 program for one cycle of drying. It is based on the assumption that the factory defaults have not been permanently changed. If they have been changed, the steps of this procedure will be the same, but the values that are displayed will be different. The amount of times that the dryer controller touch pad UP or DOWN keys must be pressed and released may also be different.

If you want the change to be temporary (for only one dry cycle), go to the “TEMPORARY PROGRAMMING” section of this manual.

PROCEDURE:

1. After the load has been placed in the dryer, press and release the **UP** or **DOWN** touch pad key on the dryer controller until the L.E.D. for dry cycle 5 is illuminated.
2. Press and release the **PROG** touch pad key on the dryer controller. The dryer controller display will not change.
3. Immediately, press and release the **UP** arrow key on the dryer controller touch pad. The controller display will change from “LOAD” to “Prog”. You have now entered the permanent programming mode. The dry cycle 5 L.E.D. will remain on and the programming L.E.D. will illuminate.
4. Press and release the **SELECT/ENTER** touch pad key once. The dry cycle 5 L.E.D. and programming L.E.D. will remain on and the dry time L.E.D. will illuminate. The dryer controller will also show the number “25”.
5. Press the **UP** arrow touch pad key 28 times until the dryer controller display shows the number “53”.
6. Press and release the **SELECT/ENTER** touch pad key once. The dry cycle 5 L.E.D. and programming L.E.D. will remain on and the dry time L.E.D. will switch off. The temperature L.E.D. will illuminate and the dryer controller display will show the number “175”.

7. Press and release the **UP** arrow touch pad key four times until the dryer controller display shows the number “195”.
8. Press and release the **SELECT/ENTER** touch pad key. The dry cycle 5 L.E.D. and the programming L.E.D. will remain on and the temperature L.E.D. will switch off. The cool down L.E.D. will illuminate and the dryer controller display will show the number “2”.
9. Press and release the **UP** arrow touch pad key once so the dryer controller display shows the number “3”.
10. Press and release the **SELECT/ENTER** touch pad key. The dry cycle 5 L.E.D. and the programming L.E.D. will remain on and the cool down L.E.D. will switch off. The reversing L.E.D. will illuminate and the dryer controller display will show “nrEv”.
11. Press and release the **UP** or **DOWN** arrow key once. A blinking “rEv” will appear on the dryer controller display and the reversing L.E.D. will start to blink. Each press and release of either arrow key will toggle between the reversing mode (“rEv”) and non-reversing mode (“nrEv”).
12. Press and release the **SELECT/ENTER** key. Once this key is pressed and released, the reversing L.E.D. will switch off. The programming L.E.D. and the dry cycle 5 L.E.D. will remain on. The flashing “rEv” will be replaced by the word “Prog”.
13. Press and release the **STOP** touch pad key. The dry cycle 5 L.E.D. will remain on and the programming L.E.D. will switch off. The dryer controller display will change to the word “LOAD”.

The dryer is now ready for the new modified dry cycle to start. This modified dry cycle 5 program will remain in the dryer controller memory until the default settings push button is pressed. This default settings push button is located on the component side of the dryer controller printed circuit board in the upper right corner.

Fault Diagnostic Indicators

| Fault # | Fault Description | Action |
|---------|---|--|
| F1 | Shorted thermostat sensor. | Stop dryer, flash F1 on display. |
| F2 | Open thermostat sensor. | Stop dryer, flash F2 on display. |
| F3 | EEPROM corrupted. | Stop dryer, flash F3 on display. |
| F4 | Gas valve circuit not operating. (When temperature does not rise after 5 minutes of operation.) | Store F4 fault in memory for later recall. Does not stop the dryer. |
| F5 | Gas valve circuit active always. (When temperature rises to 25 degrees above the temperature setting.) | Continue to operate dryer, flash F5 on display. After door is open, flash F5 on display. |

The above code faults are displayed on the display.

The **F4** fault can be recalled by pushing and holding [ENTER] then push [STOP].

If there has been a **F4** fault, the message **F4** will be displayed.

The **F4** will remain while the switches are held plus for 2 seconds after one or both are released. Once viewed, the **F4** fault is cleared. If there has been no **F4** fault the display will be blank.

WARNING - If an F5 fault occurs, turn off the gas at the gas valve in the Upper Service area of the dryer. Allow the dryer to operate with the gas off for a minimum of 2 minutes (cool down) before stopping the dryer.

Micro PCB adjustments at rear of PCB

There are two jumpers and one push button on the component side of the dryer controller printed circuit board.

The jumper located roughly in the middle of the circuit board controls whether the controller display shows and operates in the **Fahrenheit** or **Celsius** mode. This jumper is labeled as **TEMP SELECT** and has three pins. The top and middle pins are for **Celsius** and the bottom and middle pins are for **Fahrenheit**, which is indicated by the letter **C** for **Celsius** and the letter **F** for **Fahrenheit**.

The other jumper, located in the middle of the right side of the component side of the dryer controller circuit board, is used for choosing either a reversing or non-reversing type of dryer. This jumper is labeled as **REV** and **NON-REV**. This jumper must be in the reversing position, which are the top and middle pins. If the jumper is in the non-reversing position, the dryer will not reverse direction.

The push button, which is located in the upper right side of the component side of the dryer controller circuit board, is used to reset all five of the dry cycles to the factory default settings. It is labeled as **DEFAULT SETTINGS**. Even the dry cycles that have been modified using the permanent programming procedure will be changed back to the factory default settings when using this push button. This push button must be pressed and held for at least three seconds with power applied to the dryer controller circuit board.

**REVERSING DRYER CONTROLLER FACTORY
DEFAULT PROGRAM SETTINGS**

| DRY CYCLE | DRYER DIRECTION | COOL DOWN TIME (MINUTES) | TOTAL CYCLE TIME (MINUTES) | DRYING TEMPERATURE | | DRYER LOAD |
|-----------|-----------------|--------------------------|----------------------------|--------------------|------|----------------------------|
| | | | | (°F) | (°C) | |
| 1 | REV. | 5 | 35 | 180 | 82 | Towels, pads, heavy cotton |
| 2 | REV. | 2 | 20 | 170 | 77 | Sheets, blended materials |
| 3 | REV. | 5 | 25 | 180 | 82 | Cotton |
| 4 | NON-REV. | 2 | 20 | 130 | 54 | Synthetic materials |
| 5 | NON-REV. | 2 | 25 | 175 | 79 | Blended materials |

REVERSING DRYER FAULT CODES

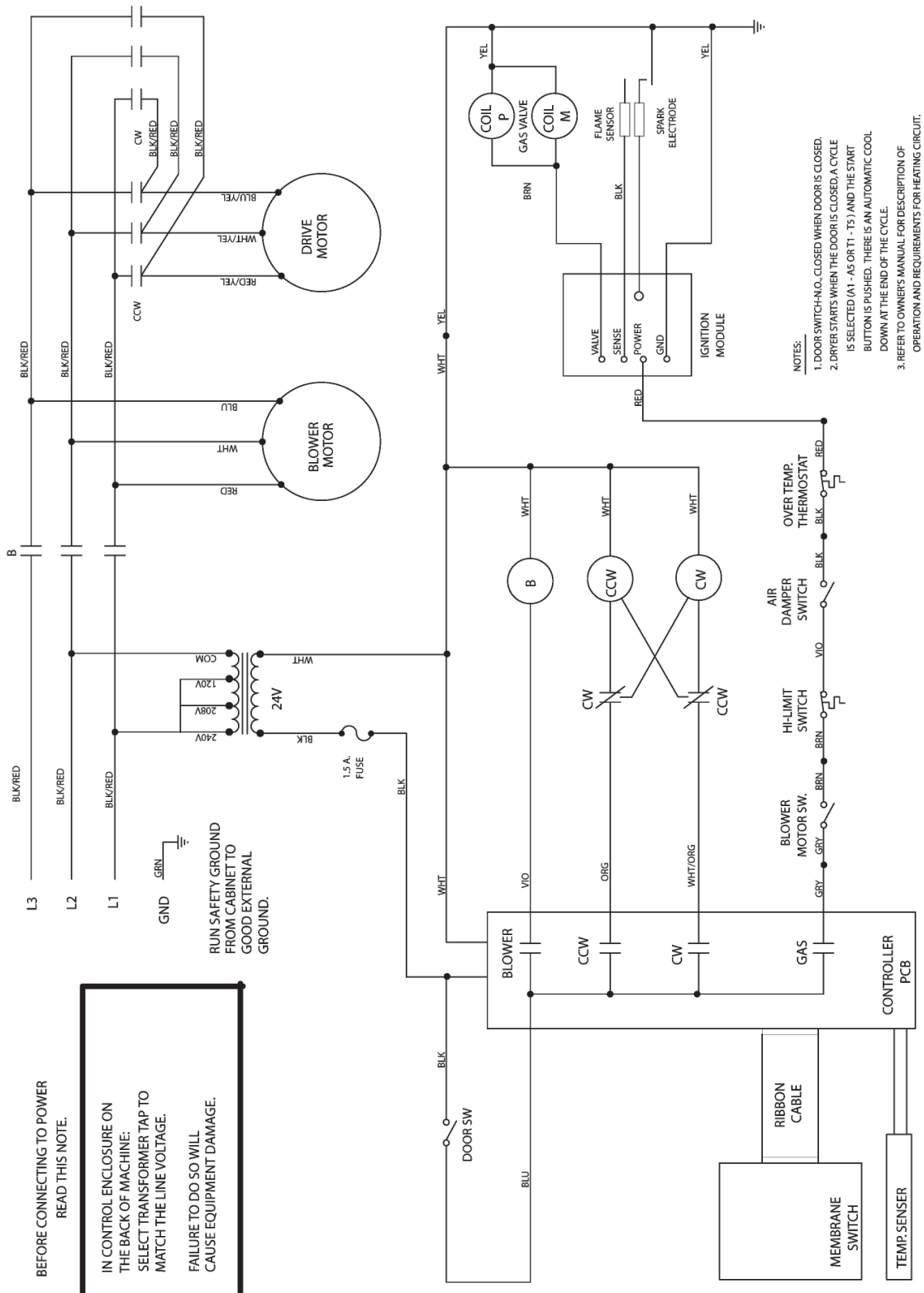
| FAULT# | FAULT DESCRIPTION | ACTION |
|--------|----------------------------|--|
| F1 | Shorted thermostat sensor. | Dryer stops and “F1” flashes on the 4-digit display. When short circuit on sensor input is removed, “LOAD” appears on the 4-digit display and the remaining dry time is reset. |
| F2 | Open thermostat sensor. | Dryer stops and “F2” flashes on the 4-digit display. When a good sensor is connected to sensor input, “LOAD” appears on the 4-digit display and the remaining dry time is reset. |
| F3 | EEPROM corrupted. | Dryer will not start and “F3” appears on the 4-digit display. The power to the dryer must be cycled to reset the controller. Fault should only occur when starting a dry cycle. |
| F4 | Gas valve on fault. | The drying temperature did not increase 1°F. in 5 minutes. “F4” will flash on the display and the dry cycle will finish without calling for heat (energizing gas valve). The power to the dryer must be cycled to reset the controller. |
| F5 | Temperature fault. | The drying temperature is at least 25°F. above the temperature setting. “F5” will flash on the 4-digit display and the dry cycle will finish without calling for heat (energizing the gas valve). The power to the dryer must be cycled to reset the controller. |
| | | |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

BEFORE CONNECTING TO POWER
READ THIS NOTE.

IN CONTROL ENCLOSURE ON
THE BACK OF MACHINE.
SELECT TRANSFORMER TAP TO
MATCH THE LINE VOLTAGE.
FAILURE TO DO SO WILL
CAUSE EQUIPMENT DAMAGE.

RUN SAFETY GROUND
FROM CABINET TO
GOOD EXTERNAL
GROUND.

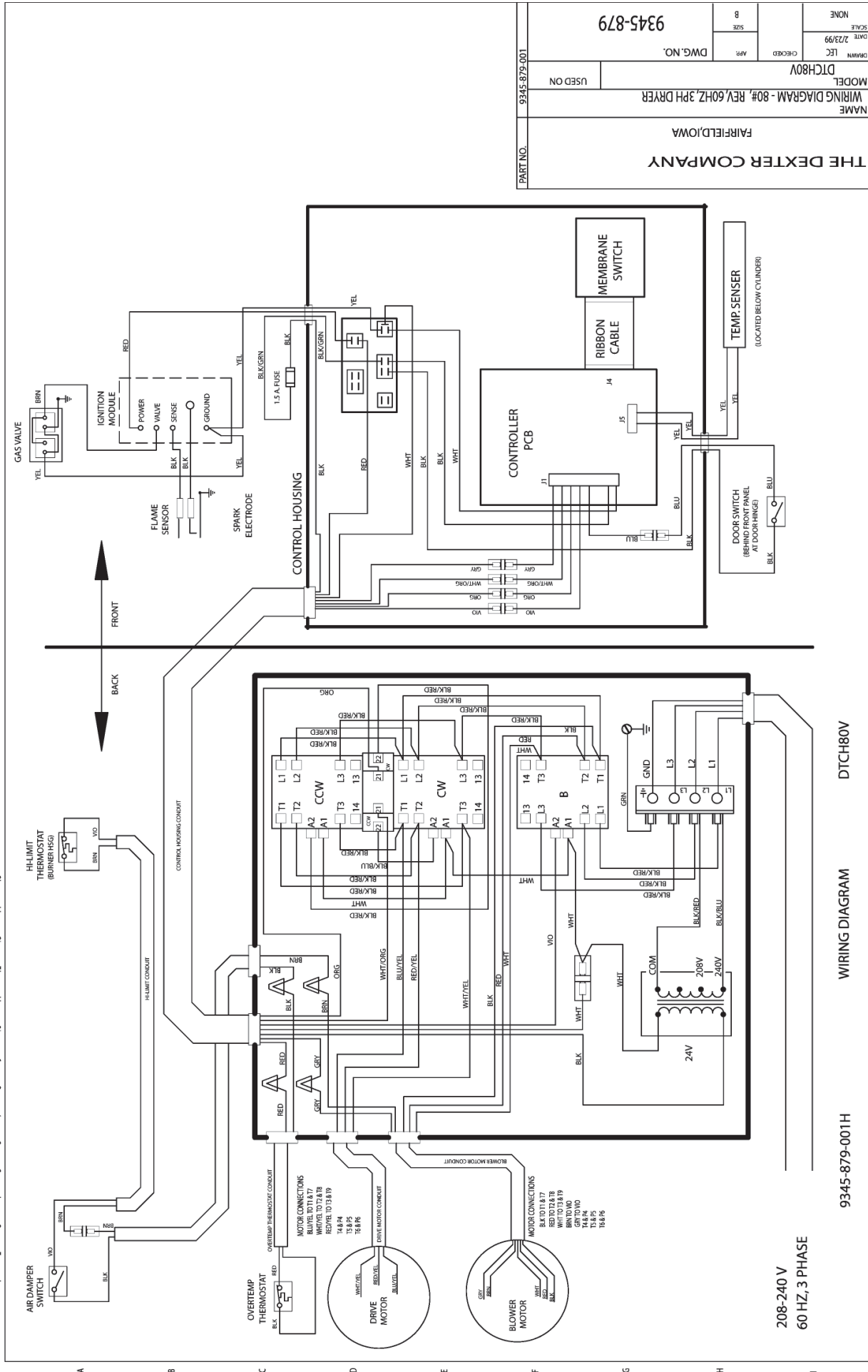


- NOTES:
1. DOOR SWITCH-N.O. CLOSED WHEN DOOR IS CLOSED.
 2. DRYER STARTS WHEN THE DOOR IS CLOSED, A CYCLE IS SELECTED (A1 - A5 OR T1 - T5) AND THE START BUTTON IS PUSHED. THERE IS AN AUTOMATIC COOL DOWN AT THE END OF THE CYCLE.
 3. REFER TO OWNER'S MANUAL FOR DESCRIPTION OF OPERATION AND REQUIREMENTS FOR HEATING CIRCUIT.

| | | | |
|---|-------|-----------------|-------|
| THE DEXTER COMPANY | | FAIRFIELD, IOWA | |
| NAME | | | |
| SCHEMATIC - 80# REV 60 HZ 3 PHASE DRYER | | | |
| MODEL | | | |
| DTCH80V | | | |
| USED ON | | DWG. NO. | |
| 9345-878-001 | | 9345-878 | |
| DATE | SCALE | SIZE | DRWNG |
| 2/23/99 | NONE | 8 | LEC |
| CHECKED | | APPROVED | |

9345-878-001E SCHEMATIC DTCH80V

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



Section 4

Service Procedures

Clothes Door Removal

1. The clothes door may be removed from the hinge bracket by unscrewing and removing the allen head pivot screw located at the door upper hinge point.
2. Next lean the door out of the top of the hinge bracket and lift the door from the bottom hinge pin.

Clothes Door Latch Adjustment

1. Loosen the lock nut on the latching stud. It is located directly behind the door handle.
2. Open the loading door.
3. Screw the door catch stud in or out as necessary and then retighten the lock nut.

Installation of Clothes Door Window & Gasket

1. Remove the loading door.
2. Place the clothes door, with its face down, on a solid surface.

Note: Prewarming the gasket under a heat lamp makes the installation much easier.

3. Put the door glass gasket on the loading door with the ridges in the wide side up. Locate the seam at the door latching stud.

NOTE: The gasket has one narrow opening on one side and a wide opening on the other. The narrow side mounts to the door. The wide side holds the glass. The wide side has ridges on one interior lip. This ridged side should go up with the door laying face down.

4. Coat the inside and outside of the gasket with rubber lubricant or liquid soap.
5. Slide the glass into the middle of the gasket with half of the glass above the door and half below the door.
6. While pressing on the glass, use a modified screwdriver (grind the end off so that it is round and put a slight bend in it) and run it around half of the glass.
7. With half of the glass installed, turn the door over and repeat step 6.
8. Insert the modified screwdriver at the 6 o'clock position and pry the glass up enough to install the door glass support spacer (small diameter rubber tube).

Door Switch Removal & Installation

1. The door switch is located directly behind the hinge plate of the loading door assembly. Open the door for access to the switch area. Remove the two screws holding the switch box cover in position. This will allow the removal of the cover and the switch actuator plate.
2. The entire switch box can now be pulled from the front panel opening, creating access to the door switch mounting screws.
3. Remove these two mounting screws and twin nut which frees the door switch and insulating shield. Remove wires.
4. When installing the door switch make certain the insulating shield is reassembled
5. The actuator plate and switch box cover should be assembled as illustrated in the parts section of the book.

Door Switch Operation & Testing

1. The normally open door switch must be closed (0 ohms resistance) for the motor and heat circuits to operate. When the door is opened, the door switch breaks the 24 volt control circuit.

Door Switch Adjustment

1. Remove the two switch box cover screws.
2. Remove the switch cover and actuator plate.
3. Pull the entire switch box out from the opening in the front panel.
4. Loosen the bottom door switch mounting screw.
5. A slotted mounting allows the switch to slide in or out for adjustment.

High Limit Thermostat Locations & Functions

- A. Burner Housing-** This hi-limit is located on the left side of the burner housing.
1. The thermostat opens the circuit to the main burners in the event of malfunction in the gas control area or temperature control. This thermostat will open quickly if there is a significant loss of air flow over the burner area.
 2. It is covered by a guard and is held in place by two screws. There are spacers between the thermostat and bracket which must be used to give proper operation.
- B. Manual Resettable Over Temperature Safety Thermostat-** The second hi-limit thermostat is located outside the rear exhaust opening mounted on back panel of the machine.
1. The manually resettable thermostat limits the operating temperature a dryer can reach should some abnormal situation occur.
 2. Should the thermostat be tripped, the dryer will cease to heat until the thermostat is reset. Once the dryer cools, the thermostat may be reset by inserting a pencil or stick through the opening in the thermostat cover and pushing the button in.

Pressure Regulator Adjustment

Use the following procedure whenever it is necessary to check the pressure regulator setting.

NOTE: Any adjustment of the pressure regulator must be made with a manometer attached at the plug in the main burner manifold.

1. Shut off the gas supply to the dryer.
2. Remove the 1/8" pipe plug from the end of the main burner manifold.
3. Attach a manometer to the manifold end.
4. Remove the pressure regulator cover screw on the gas valve.
5. Open the shut-off valve, and operate the dryer.
6. Adjust the pressure for a manometer reading of 3.5" water column gas pressure. (11.0" for L.P.)

NOTE: The main burners must be operating when adjusting the pressure regulator.

7. Shut off the gas supply to the dryer. Remove the manometer and install the 1/8" pipe plug in the manifold.
8. Open the shut-off valve, start the dryer, and check for gas leaks while the burners are ignited.

Front Panel Removal

To remove the front panel, first remove the loading door from the panel. Then remove the two left side screws and the four right side screws. The trim does not have to be removed. (The panel may be removed with the door left in place, although it is much heavier and more awkward to do so.)

NOTE: Always remove power from the machine before changing drive belts or working with the drive and fan system.

Final Drive Belt Replacement

To replace the final drive belt turn the cylinder slowly by hand and work the belt off of the large pulley.

Motor Drive Belt Replacement

To replace the motor drive belt the final drive belt should be removed as above. Next turn the intermediate drive pulley and work the belt off of it similarly to the above belt.

Blower Impeller Removal

Remove the lint hood that is located inside the lower service door. Take notice of the location of the impeller location on the shaft. Remove the two set screws that hold the motor to the shaft.

Air Switch Removal & Adjustment

The air switch assembly is part of the ignition safety circuit and insures that the burners don't operate unless there is air flow. If this doesn't happen ignition will not occur. The air switch assembly is mounted on the right rear of the back panel at about half way up.

Electronic Ignition Module

This machine uses an electronic spark ignition system to directly light the burners.

1. The electronic ignition module (gray box) is located inside the upper access door in the control box.
2. The red wire from the transformer, thru the 1.5 amp fuse and into the module supplies the 24 volts required to operate the entire direct ignition system.
3. The black colored hi-voltage wire (spark plug type) plugs onto the post connector on the module, and the multi-wire plug fits into the side of the module.

Spark Electrode

Assembly-Function

1. The spark electrode and sensing electrodes are located directly over the burners inside the burner housing.
2. The electrode with the black hi-voltage wire conducts the spark to the center grounding probe, directly over the burner. The gap between these two areas should be 1/8". The distance from the electrode to the burner assembly should be 3/8"
3. The electrode with the black sensing wire detects ignition and monitors flame by signaling the module.

Spark Electrode Assembly-Removal

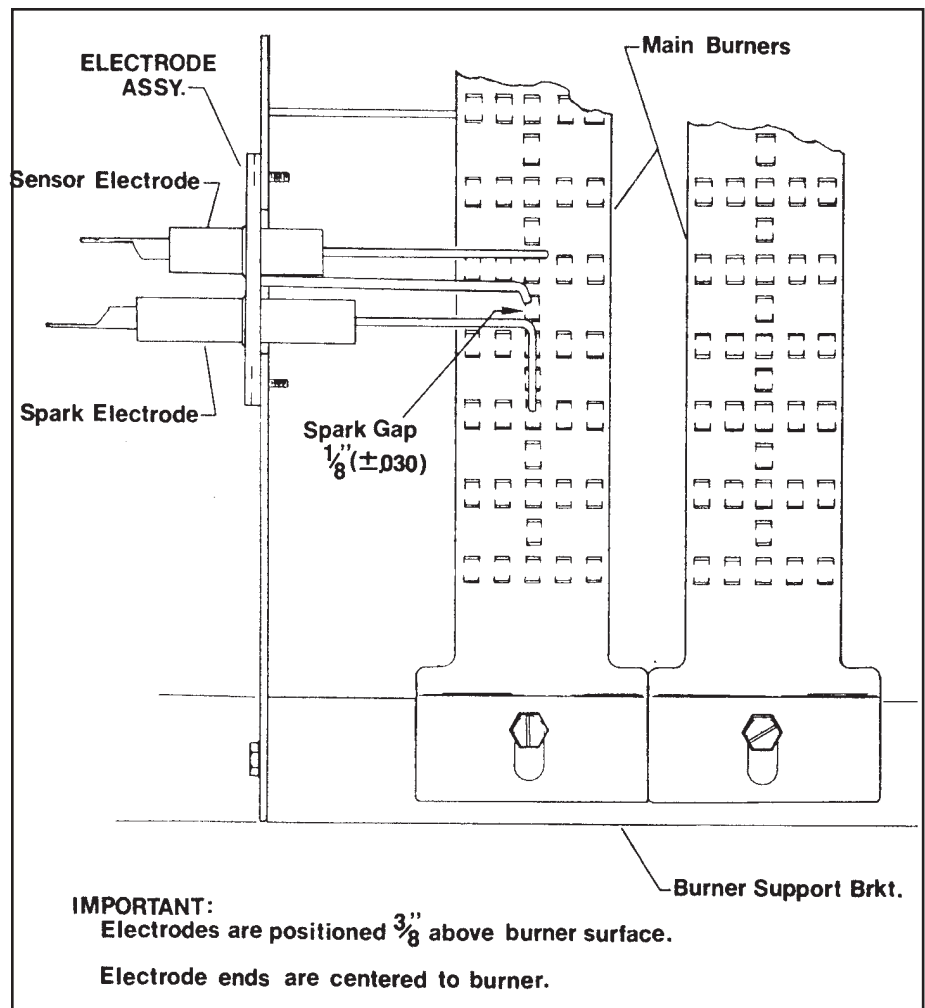
1. Remove electrode cover and disconnect wires to electrodes.
2. Remove two screws to detach electrode assembly.

NOTE: Proper grounding of the ignition system (yellow wires) is very critical for proper ignition sequence.

Ignition System - Function & Sequence

During normal dryer operation, the following occurs:

1. The dryer thermostat calls for heat.
2. If the drive motor is running, the motor safety circuit provides power to the hi-limit thermostat, air damper switch, and cycling thermostat in that order. If the thermostat senses that the temperature is low enough to require the heat should be on a circuit is closed allowing power to the ignition module (gray box). After approximately 10 seconds of purge time power is applied to open the gas valve and at the same time sparking occurs at the ignition electrode.
3. Once the flame is established, the sensing electrode detects the presence of flame and the sparking stops.
4. If for any reason the flame is not established in a period of 10 seconds, the gray box shuts down the sparking and closes the gas valve which is now in "Safety Lock-Out". Normally the 10 seconds "Trial For Ignition" period is more than ample to establish and prove flame.



5. If the flame is shut down or blown out during operation, the ignitor will immediately go into “Trial For Ignition” again for 10 seconds.
6. However, if during any 10 second “Trial for Ignition”, the flame is not established, the ignition system goes into “Safety Lock-Out” and will not reactivate the “Trial for Ignition” until there is a current interruption for a period of 15 seconds. This interruption can be provided by opening the dryer loading door and allowing the machine to come to a complete stop for 15 seconds.

Ignition System Checkout

1. If flame is present during the “Trial For Ignition” period but the system shuts down, there may be an improper ground. The entire ignition system is grounded together including the electrode assembly, the electrode mounting bracket, the burners and the burner bracket. Shutdown can also occur if for some reason the system isn’t sensing the flame. Check the sensor for damage and check the connections of the sensor lead.
2. If there is no spark or intermittent spark, check black hi-voltage lead wire for damage or cracks in insulation. **(This lead wire must not be taped or connected to any metal edges along its length to prevent pinching and arcing. Also, do not bundle this wire with other wires.)**

NOTE: Spark gap and electrode location are important. If the electrode is damaged or mounting is changed the spark gap may not be correct for ignition to occur. Check for cracks in the ceramic insulator. Replace electrode assembly if necessary. Also check for carbon or foreign material on the electrodes and clean if necessary.

Gas Valve & Manifold Removal

1. Disconnect union at gas valve and disconnect wires from gas valve operator coils.
2. Remove right manifold mounting bracket screws and slide manifold to remove from left bracket.

Main Burner Orifice Removal

1. Remove manifold and gas valve assembly as above.
2. Using an open end wrench, remove orifices from manifold.

Main Burner Removal

Remove manifold & gas valve assembly as previously discussed. Remove the screw securing the front of the burner to the support bracket. The burner may now be removed.

Cylinder Pulley Removal

Remove nut holding pulley to cylinder shaft. Pull pulley straight off of shaft. Do not lose the tolerance ring that grips the shaft.

Intermediate Pulley Removal

The intermediate pulley can be removed by removing the snap ring holding the pulley to the tension arms.

UPPER & LOWER Tension Arm Assembly Removal

The tension arm assembly may be removed by removing the snap ring that holds it to the tension arm support assembly pin. If it is necessary the arm assembly is replaced as a complete unit .

UPPER & LOWER Tension Arm Support Assembly Adjustment

The tension arm support assembly may be adjusted for alignment of the intermediate pulley and also to align the belts. The three outer nuts allow the alignment of the pin to be adjusted by pivoting the assembly on the center bolt. The center bolt can be screwed in to allow bringing the complete assembly farther back if necessary for belt alignment.

Cylinder Removal

Adjustment of Cylinder Assembly

1. Loosen the two top adjusting bolts and two bottom adjusting nuts and lock nuts holding the bearing housing to the drive plate.
2. Loosen the four mounting bolts on the side channels.
3. Open the clothes door and insert a $\frac{1}{8}$ " thick shim at the 3 and 9 o'clock positions and a $\frac{1}{4}$ " thick shim at the 6 o'clock position.
4. Tighten the two bottom adjusting nuts and tighten locking nuts.
5. Tighten the bottom right mounting bolt, then the top left mounting bolt. Tighten the remaining two bolts. (Shim where and if necessary.)
6. Tighten the two top adjusting bolts.
7. Remove all the shims from between the front panel flange and cylinder (3,6,9 and 12 o'clock).
8. Spin the cylinder to check for rubbing baffles, pressing down hard while rotating. If rubbing is detected, repeat procedure paying particular attention to placement of shims between bearing housing and side channels.

Bearing Housing Removal

After removing cylinder as previously outlined, simply unbolt the bearing housing and remove.

Section 5

Trouble Shooting

| Symptom | Probable Cause | Suggested Remedy |
|--------------------------------------|--|---|
| Tumbler does not turn | Drive belts | Check both drive belts |
| | Drive motor | Check capacitor and motor |
| | Door switch | Check door switch contacts and adjustment |
| | Micro control | Check that LED's are lit and green start key pushed |
| | Motor Relay | Check motor relay coils (24v) and contacts. |
| Tumbler turns but no spark at burner | Temperature | Check for selected temperature in formula . |
| | Spark Electrode | Check electrode for damage to electrode or mounting |
| | Temperature sensor | Check by plugging in good sensor |
| | Ignition transformer | Check for 24 V out of transformer to ignition control |
| | Ignition control | Try another control |
| | Air flow switch | Check for circuit through air flow switch |
| | Hi-limit | Check hi-limit |
| | Over-temp (Manual Reset) | Check by inserting pencil eraser side thru hole and push to reset |
| Gas supply | No gas can cause system lockout check for W.C. of more than 3.5 W.C. | |

Tumbler turns
ignition sparks
no flame

Gas supply

Make sure gas supply is working

Gas pressure

Make manometer check of gas pressure
for 3 .5" W.C. or more at supply side

Spark electrode

Check electrode for damage to electrode
or mounting

Gas valve

Check coil continuity,replace valve if bad

Slow drying

Thermostat

What is temperature set at on control

Air flow

Restrictions follow installation guidelines
for static back pressure and make up air

Lint screen

Clean screen

Exhaust

Check complete exhaust system for
excessive back pressure in the duct work.
No more than .3 static pressure, at rear
outlet

Makeup air

Check for adequate makeup air
(1.5 sq. Ft.)

Temp sensor

Clean or replace sensor if necessary

Gas Check gas pressure at burner
(3.5"W.C.) while burning

Blower Impeller
& Motor

Check impeller for operation and
check mounting set screw

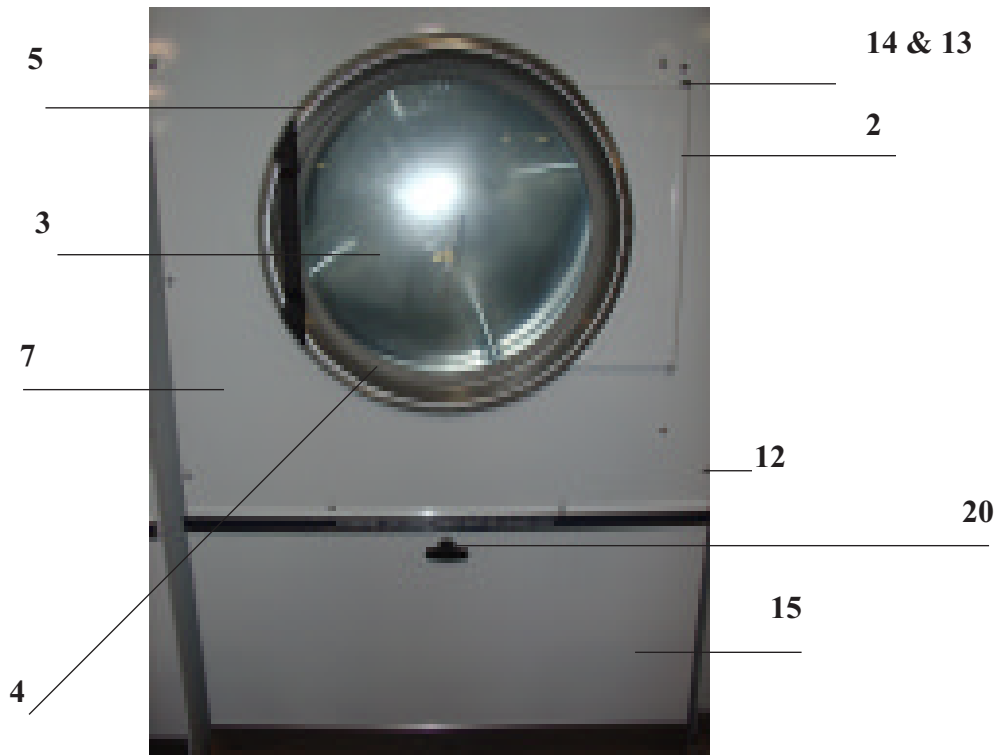
Section 6

Parts Data

CABINET GROUP

| Key | Part Number | Description | Qty. |
|-----|--------------|--|------|
| * | 9960-256-021 | Door Assy., Loading Complete-Wht | 1 |
| * | 9960-256-025 | Door Assy., Loading Complete-SS | 1 |
| 1 | 9960-255-007 | Door Assy.ONLY, Loading-SS | 1 |
| 2 | 9982-280-002 | Plate Assy., Hinge (Wht) | 1 |
| 2 | 9982-280-011 | Plate Assy., Hinge (SS) | 1 |
| * | 9545-012-015 | Screw, Hinge to Door 10-32 x 3/8" | 4 |
| * | 8640-413-002 | Nut, Hinge to Door #10-32 UNF | 4 |
| 3 | 9212-002-003 | Glass, Door | 1 |
| 4 | 9206-164-009 | Gasket, Glass | 1 |
| * | 9548-117-000 | Support, Door Glass (inside gasket) | 1 |
| 5 | 9206-420-002 | Gasket, Outer Rim | 1 |
| 6 | 9244-082-001 | Handle, Loading Door | 1 |
| * | 9545-018-017 | Screw, Handle 1/4"-13 x 1 1/4" | 2 |
| * | 9531-033-001 | Stud, Door Catch | 1 |
| * | 8640-413-001 | Nut, Hex | 1 |
| * | 8640-413-003 | Nut , Acorn # 10-32 | 1 |
| * | 9086-015-002 | Catch, Loading Door | 1 |
| * | 8638-190-009 | Pop Rivet for mtg.catch | 2 |
| 7 | 9989-460-003 | Panel Assy., Front- white | 1 |
| 7 | 9989-460-001 | Panel Assy., Front- S. Steel | 1 |
| * | 9277-049-001 | Insulation Front Panel top | 1 |
| * | 9277-049-002 | Insulation Front Panel bottom | 1 |
| 8 | 9108-100-004 | Door, Upper Service-S.S | 1 |
| 8 | 9108-100-006 | Door, Upper Service-White | 1 |
| 9 | 9578-090-002 | Trim, Door-Upper Service | 1 |
| * | 9491-007-002 | Rivet- Semitubular | 4 |
| * | 6292-006-006 | Key (only) (FJWCC) | 1 |
| 10 | 8650-006-003 | Lock w/ nut, Upper Service Door | 1 |
| * | 9206-176-000 | Gasket Spacer | 3 |
| * | 8638-211-001 | Rivet, Drive | 2 |
| * | 8641-581-005 | Washer, Flat 3/16" | 2 |
| * | 9548-243-002 | Support, Upper Door | 1 |
| * | 8502-617-001 | Label "Made In USA" | 1 |
| 11 | 9412-127-001 | Nameplate, Industrial Dryer | 1 |
| 12 | 9545-008-020 | Screw, Chrome 10AB x 3/4" | 10 |
| * | 8641-582-019 | Lockwasher # 10 | 10 |
| * | 8640-399-001 | Nut, Spring U type 10Z | 6 |
| 13 | 9544-047-002 | Strap, Hinge (White) | 1 |
| 13 | 9544-047-007 | Strap, Hinge (Gray) | 1 |
| * | 9545-012-003 | Screw, Hinge to Panel 10T-32 x 1/2" | 4 |
| 14 | 9545-052-001 | Screw, Door to Hinge Strap (special) | 1 |
| * | 8641-436-003 | Washer, Fiber/ Plastic | 1 |

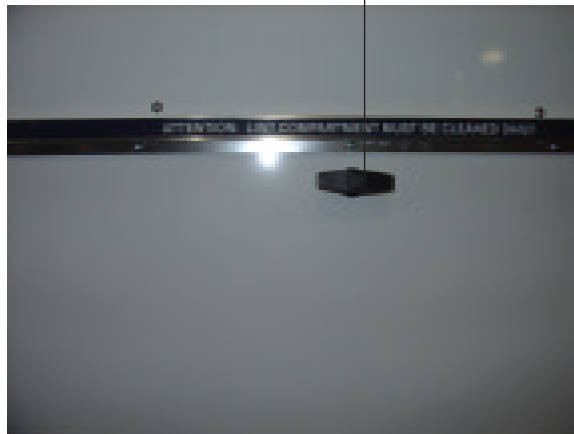
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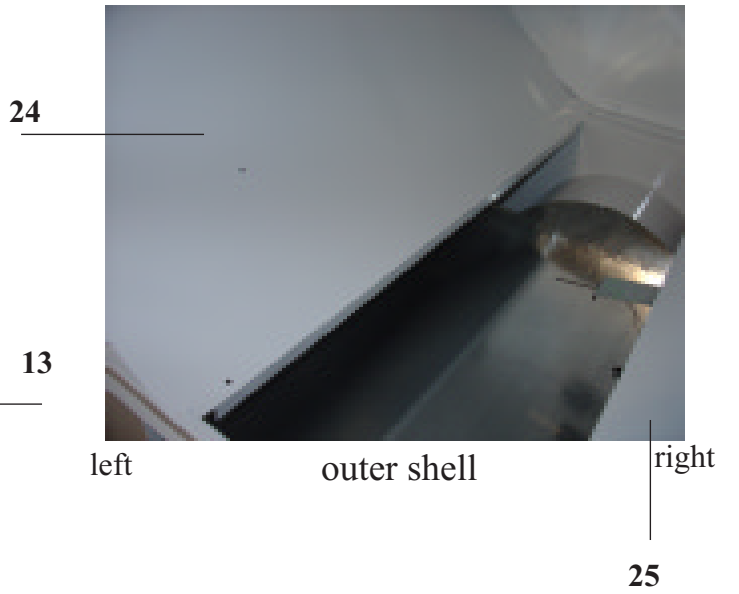


CABINET GROUP (continued)

| Key | Part Number | Description | Qty. |
|-----|--------------|---------------------------------------|------|
| 15 | 9960-281-001 | Door Ass'y, Lower Service-SS | 1 |
| 15 | 9960-281-003 | Door Ass'y, Lower Service-White | 1 |
| 16 | 9578-088-001 | Trim, Door - Lower Service | 1 |
| * | 9435-016-003 | Overlay-Trim Lower service door | 1 |
| 17 | 9545-008-021 | Screw,Pn Hd Cr., #10Bx3/8 | 5 |
| * | 9277-050-002 | Insulation Lower Service Door | 1 |
| 18 | 9578-084-002 | Trim, Kick- Lower Service Door | 1 |
| 19 | 9545-008-010 | Screw, Tr Hd Cr-#10x1/2 Blk..... | 3 |
| 20 | 9244-084-001 | Handle Lower Service Door | 1 |
| * | 8641-581-012 | Washer flat 3/4x11/4 | 2 |
| * | 9206-176-000 | Gasket spacer | 2 |
| * | 8544-006-001 | Leg, Leveling | 4 |
| 24 | 9812-013-001 | Baffle Assy., Cabinet- Left | 1 |
| 25 | 9812-013-002 | Baffle Assy., Cabinet- Right | 1 |
| * | 9545-008-003 | Screw, #10x1/2 TEK | 8 |
| * | 9277-051-001 | Insulation Side Panel | 4 |
| * | 9277-047-001 | Insulation Black 1/4" | 1 |
| * | 9277-047-002 | Insulation Black 1/4" | 1 |
| 21 | 9074-273-001 | Cover, Cabinet | 1 |
| 22 | 9545-008-024 | Screw | 10 |
| 23 | 9801-084-001 | Membrane switch assembly | 1 |

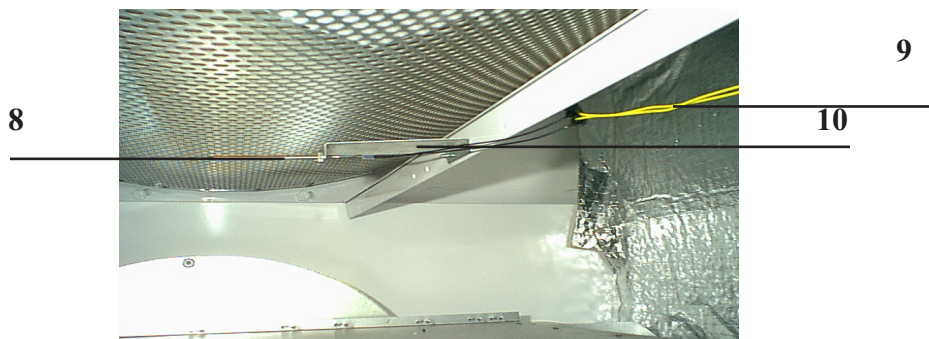
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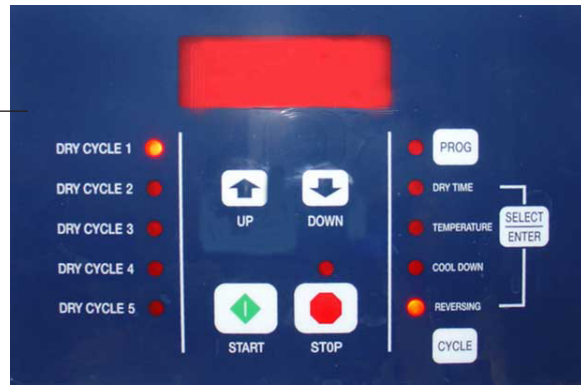


Control Housing Group

| Key | Part Number | Description | Qty. |
|-----|--------------|--|------|
| 1 | 9471-015-001 | Electronic Control | 1 |
| 2 | 9538-157-015 | Spacers, Circuit Board - #8 x 1/2 | 4 |
| 3 | 8639-621-007 | Screw, #10-32x1/2 GRN. | 1 |
| 3 | 8641-582-006 | Lockwasher #10 ext tooth | 1 |
| 4 | 8220-060-001 | Wire Assembly Green 12" | 1 |
| 5 | 8640-411-003 | Nut, Keps - Circuit Board (for grounding) | 4 |
| 6 | 9801-084-001 | Switch Assy., Membrane | 1 |
| - | 9857-136-001 | Control Assembly # 1- # 6 above and #11 below included | 1 |
| 7 | 9627-770-001 | Harness, Wiring (Micro Reversing) | 1 |
| 8 | 9501-004-002 | Sensor, Temperature Thermistor | 1 |
| 9 | 9627-679-002 | Wiring Harness, Temperature Sensor | 1 |
| 10 | 9029-111-001 | Bracket, Sensor Mounting | 1 |
| * | 9545-045-005 | Screw Mtg.sensor 8Bx1/4 | 1 |
| 11 | 9982-326-002 | Plate Assy., Electronic Control | 1 |
| 12 | 9451-146-005 | Pin, Hinge - Control Plate Assy. | 2 |
| 13 | 9545-045-008 | Screw, Mtg.sensor bracket #8ABx3/8 | 2 |
| * | 8640-276-005 | Wire Connector Nut #71B black | 2 |
| 14 | 9039-981-001 | Bracket panel attachment | 1 |
| 14 | 9545-045-002 | Screw #8Bx1/2 panel mtg | 1 |
| 17 | 9897-026-001 | Terminal Block Power | 1 |
| * | 9545-031-004 | Screw Terminal Block Mtg. | 2 |
| 18 | 9053-067-001 | Bushing, Door Switch Wires | 2 |
| * | 9631-403-003 | Wire Ass'y, High Voltage | 1 |
| * | 9627-711-001 | Harness, Low Voltage Ignition | 1 |
| 22 | 9054-045-001 | Fuseholder | 1 |
| 23 | 8636-018-001 | Fuse, 1.5 amps | 1 |
| 24 | 9545-031-005 | Screw #6B x 3/8 | 1 |
| 25 | 8220-001-350 | Wire Assembly Blk/Grn | 1 |
| 25 | 9857-116-002 | Control, Ignition | 1 |
| 26 | 9545-044-002 | Screw 6-32 x 1" | 2 |
| 27 | 8640-411-003 | Nut, Hex Keps #6-32 | 2 |



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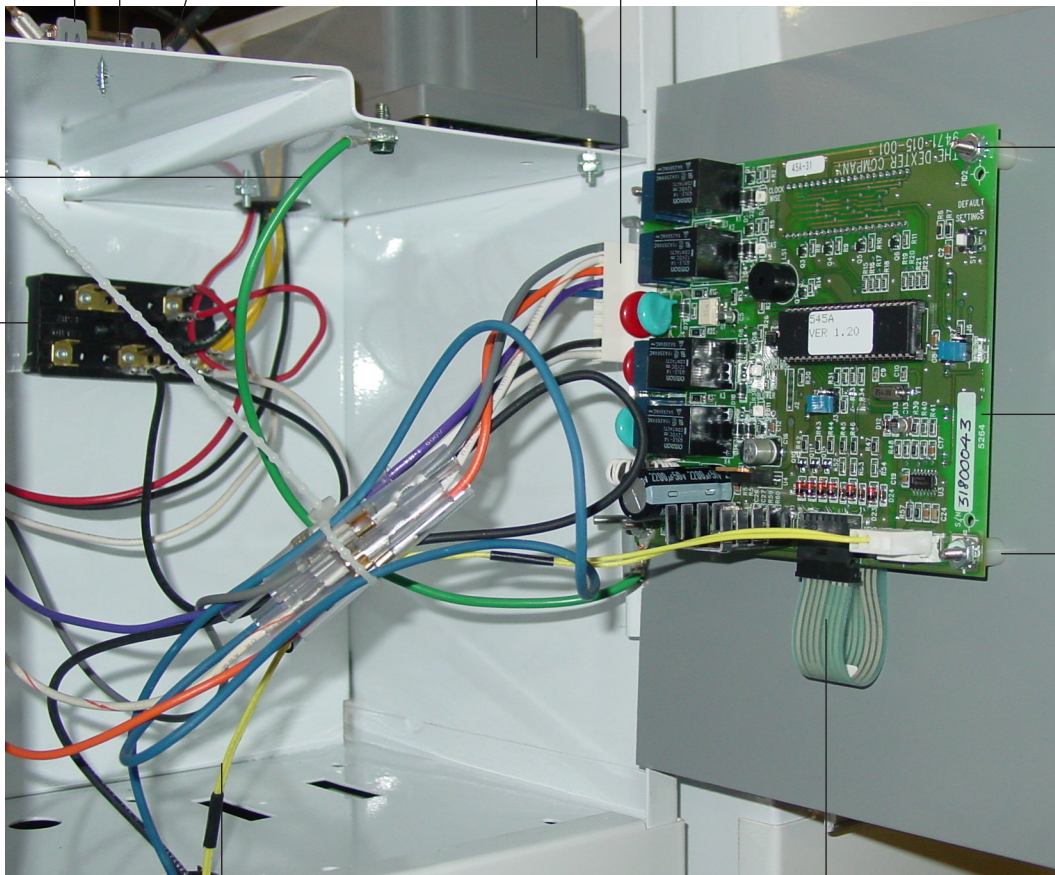
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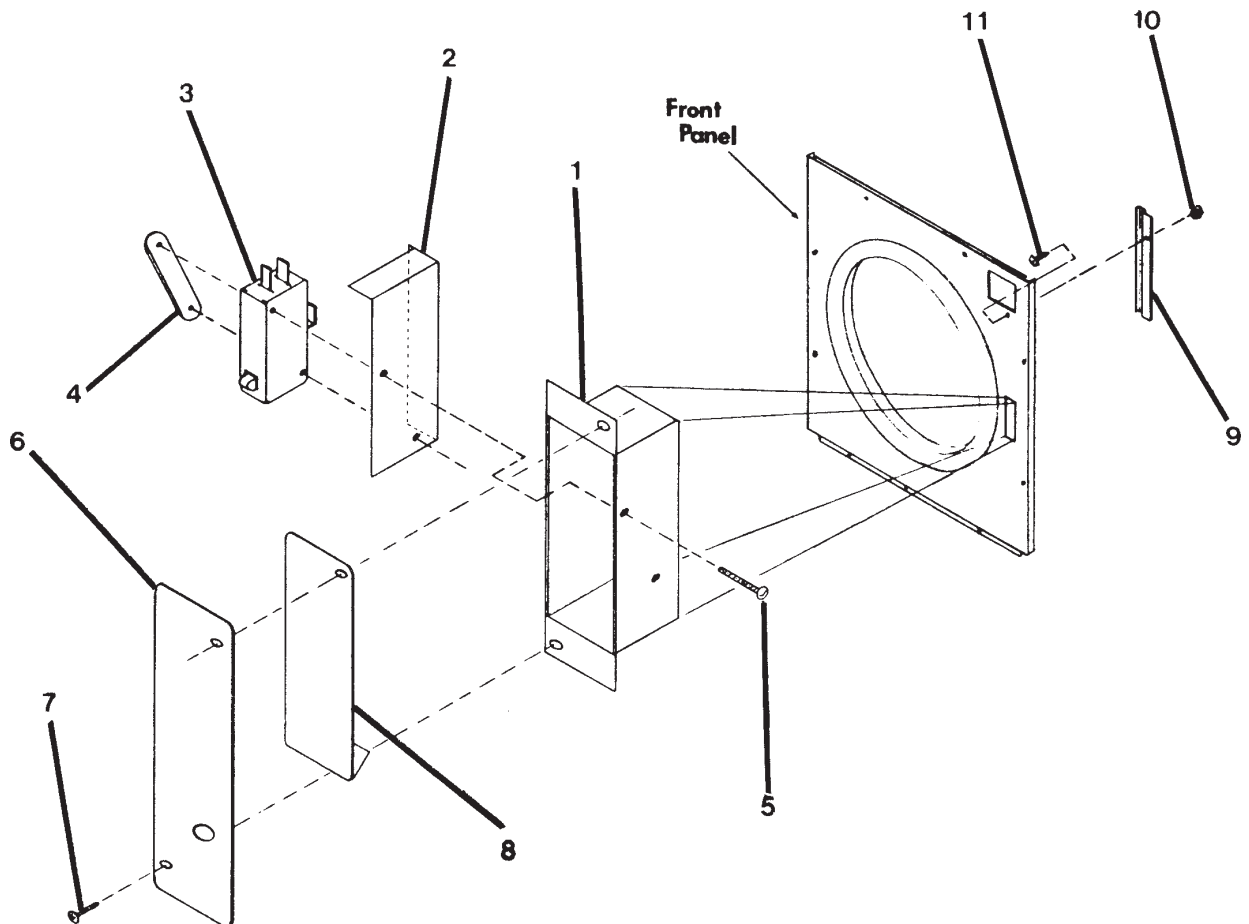
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DOOR SWITCH GROUP

| Key | Part Number | Description | Qty. |
|-----|--------------|-------------------------------------|------|
| 1 | 9041-076-001 | Box, Door Switch | 1 |
| 2 | 9550-159-001 | Shield, Door Switch | 1 |
| 3 | 9539-461-001 | Switch, Door | 1 |
| 4 | 8640-401-001 | Nut, Special Twin #4-40 | 1 |
| 5 | 9545-020-001 | Screw, Pn Hd Sl.#4-40x5/8 | 2 |
| 6 | 9074-255-001 | Cover, Switch Box | 1 |
| 7 | 9545-008-020 | Screw, Box Cover 10 AB x 3/4" | 2 |
| 8 | 9008-004-001 | Actuator, Switch- Lower | 1 |
| 9 | 6068-041-002 | Conduit | 1 |
| 11 | 9545-012-003 | Screw. 8-32 x 3 3/16" | 2 |
| * | 8641-436-000 | Washer, Fiber | 1 |
| 10 | 8640-413-004 | Nut, ElasticStop 10 -32 | 2 |

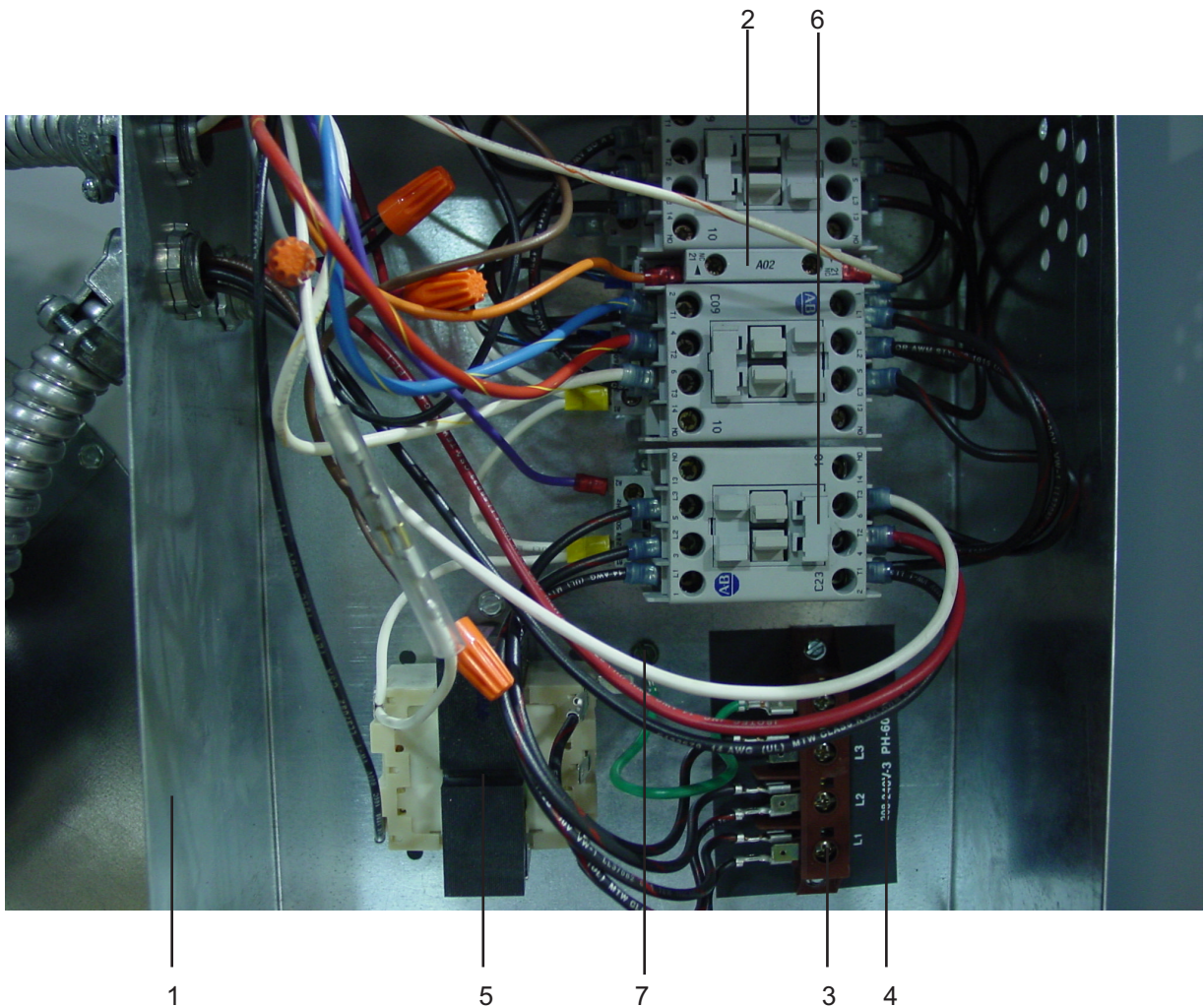
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CONTROL BOX GROUP

| Key | Part Number | Description | Qty. |
|-----|--------------|-------------------------------------|------|
| 1 | 9807-085-001 | Box Assembly, Control..... | 1 |
| * | 9074-284-001 | Cover, Control Box..... | 1 |
| * | 9545-008-026 | Screw..... | 4 |
| 2 | 5192-293-001 | Relay, Reversing | 1 |
| * | 9545-044-002 | Screw..... | 2 |
| * | 8640-411-003 | Nut..... | 2 |
| 3 | 9897-035-001 | Terminal Block Assembly, Power..... | 1 |
| 4 | 9558-029-002 | Strip, Terminal Marker..... | 1 |
| * | 9545-045-002 | Screw | 2 |
| 5 | 8711-007-001 | Transformer, Control..... | 1 |
| * | 9545-012-015 | Screw | 2 |
| 6 | 5192-295-012 | Relay, Blower | 1 |
| 7 | 8639-621-007 | Screw, Ground | 1 |
| * | 8641-582-006 | Lockwasher, Ground Screw | 1 |

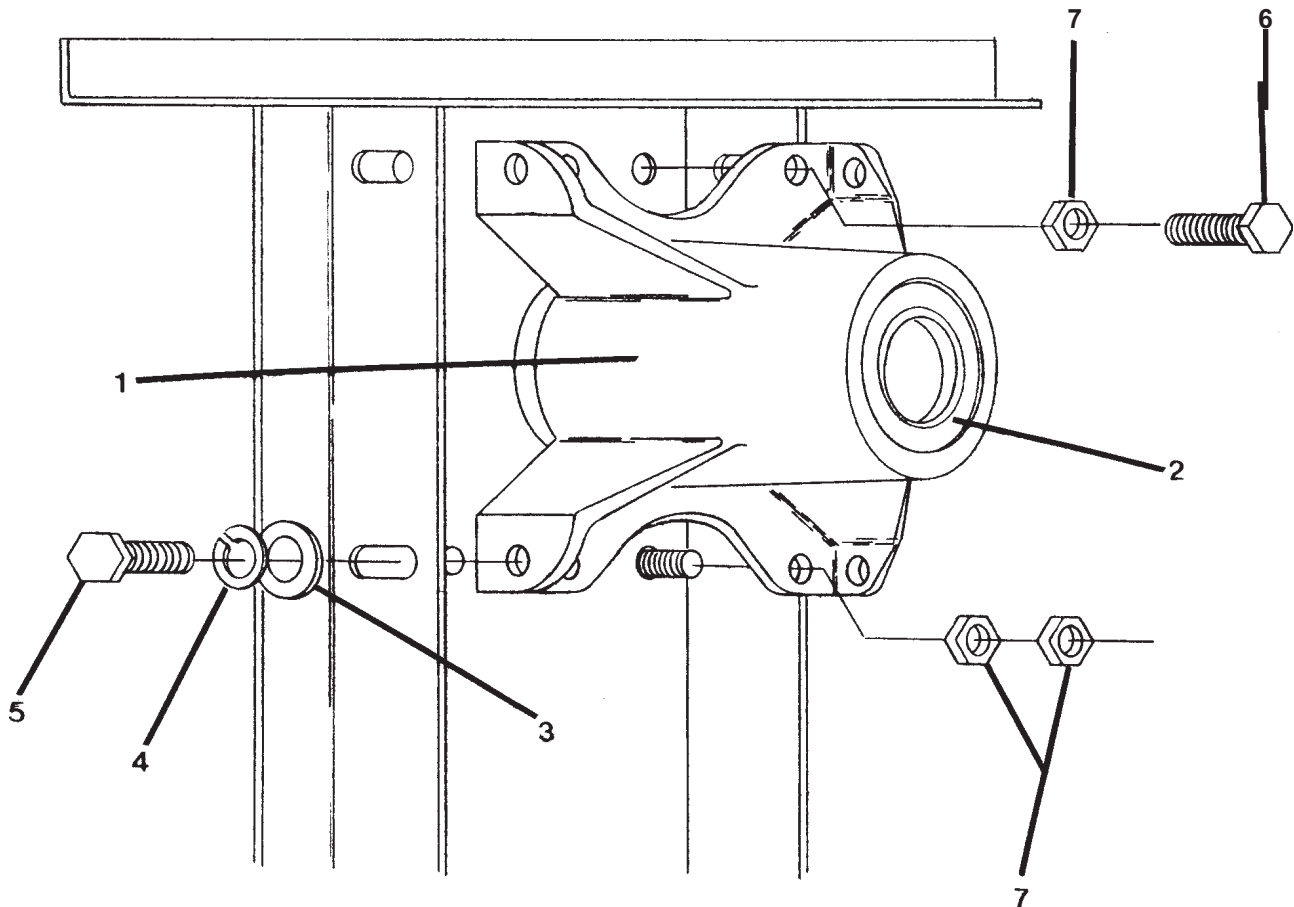
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BEARING HOUSING GROUP

| Key | Part Number | Description | Qty. |
|-----|--------------|---|------|
| * | 9803-189-001 | Housing, Bearing Ass'y w one (rear) bearing | 1 |
| 1 | 9241-183-003 | Housing, Bearing | 1 |
| 2 | 9036-159-001 | Bearing, Ball-Rear | 1 |
| 3 | 8641-581-026 | Washer, Flat 1/2" | 4 |
| 4 | 8641-582-004 | Lockwasher spring 1/2" | 4 |
| 5 | 9545-017-004 | Bolt, 1/2-13x1 | 4 |
| 6 | 9545-059-003 | Screw, 7/16-14x1 1/2 | 2 |
| * | 8641-582-013 | Lockwasher, 7/16 | 2 |
| 7 | 8640-416-001 | Nut, 7/16-14. | 4 |

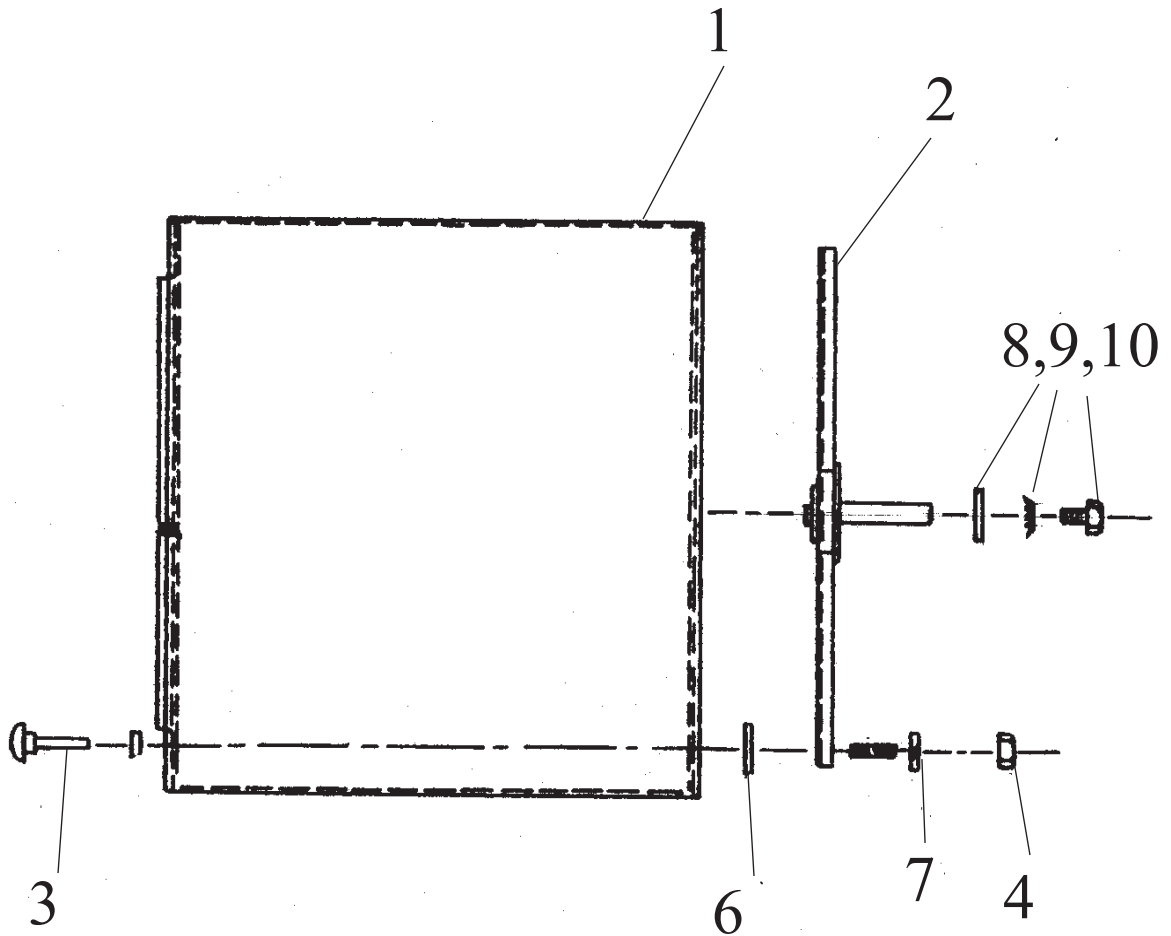
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TUMBLER GROUP

| Key | Part Number | Description | |
|-----|--------------|---|---|
| 1 | 9848-118-001 | Tumbler Ass'y | 1 |
| 2 | 9873-005-001 | Spider Ass'y with bearing on | 1 |
| 3 | 9497-226-001 | Rod, Tumbler | 4 |
| 4 | 8640-417-002 | Nut 1/2"-13 | 4 |
| 5 | 9552-013-000 | Shim | 4 |
| 6 | 8641-582-004 | Washer, Spring Lock | 4 |
| 7 | 8641-590-001 | Washer, Tumbler Rod Special | 4 |
| * | 9487-234-001 | Ring, Tolerance | 1 |
| 8 | 8641-582-016 | Lock Washer ext tooth 1/2", Tumbler Shaft | 1 |
| 9 | 8641-581-026 | Flat Washer 1/2", Tumbler Shaft | 1 |
| 10 | 9545-017-009 | Screw, Tumbler Shaft 1/2-13 x 1 1/4" | 1 |

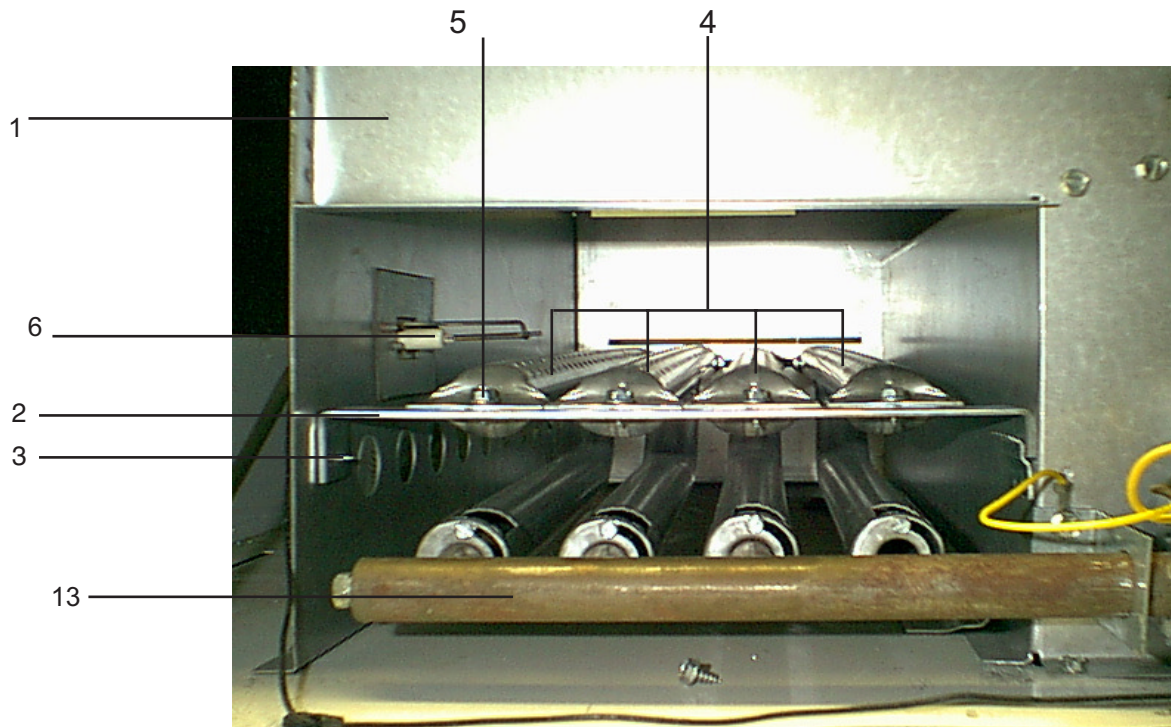
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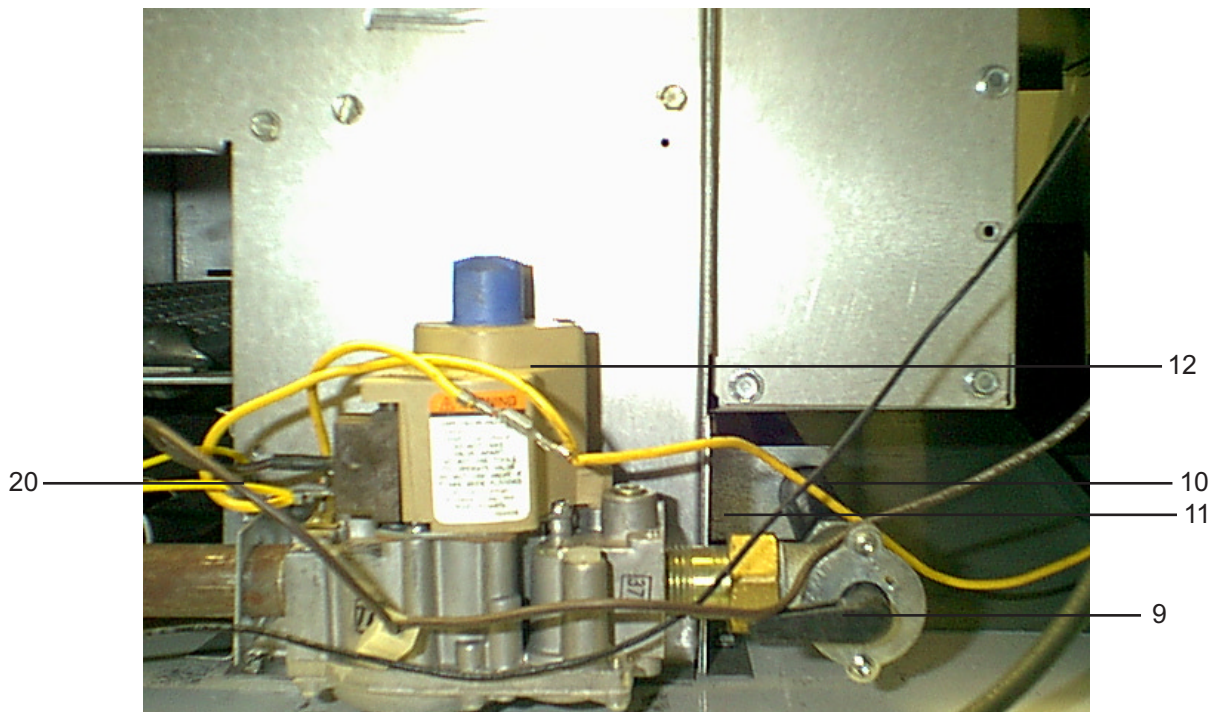
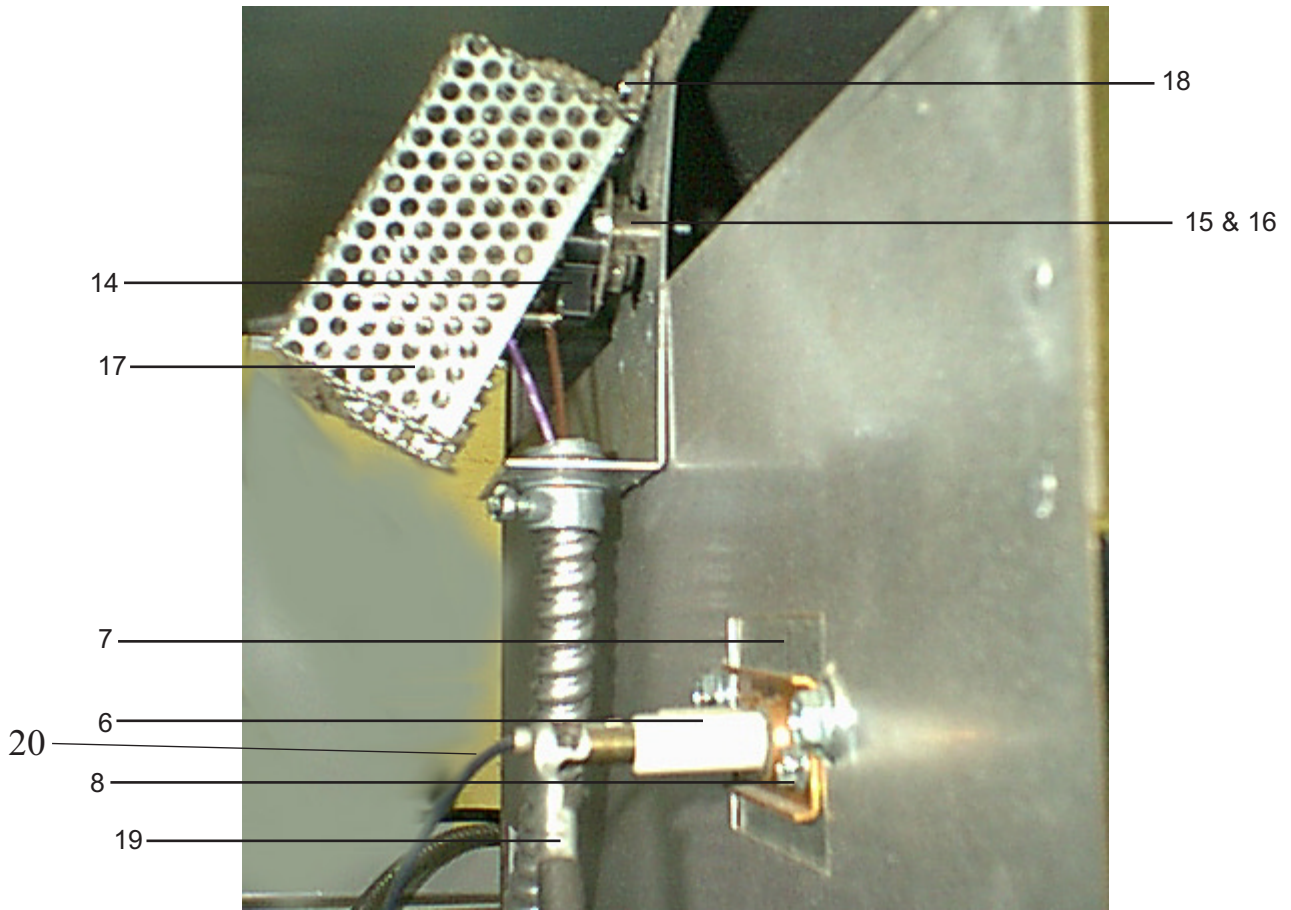


BURNER HOUSING GROUP

| Key | Part Number | Description | Qty. |
|-----|--------------|--|------|
| 1 | 9803-195-001 | Housing Assembly, Burner | 1 |
| * | 9545-008-024 | Screw | 4 |
| 2 | 9548-280-001 | Support, Front Burner | 1 |
| 3 | 9545-008-008 | Screw 10T-32 x 1/2" | 1 |
| 4 | 9048-018-001 | Burner, Main | 4 |
| 5 | 9545-008-008 | Screw 10T-32 x 1/2" | 4 |
| 6 | 9875-002-002 | Electrode, Ignition | 1 |
| 7 | 9452-645-001 | Plate, Electrode Mtg | 1 |
| 8 | 9545-045-001 | Screw, Electrode Mtg 8B x 11/4" | 2 |
| 9 | 9379-164-002 | Valve, Gas Shut-Off w/ brass union | 1 |
| 10 | 9458-020-004 | Pipe, Gas Line | 1 |
| 11 | 9039-915-001 | Bracket, Gas Line Pipe | 1 |
| 12 | 9857-134-002 | Control Assy, Gas | 1 |
| * | 8220-001-466 | Wire Assembly Yellow 4 7/8" | 1 |
| 13 | 9381-011-001 | Manifold Assy., 4 port | 1 |
| * | 9425-069-021 | Orifice, Burner - Natural | 4 |
| * | 9425-069-022 | Orifice, Burner - LP | 4 |
| * | 9732-102-010 | Kit, LP Conversion | 1 |
| 14 | 9576-203-002 | Thermostat, Hi-Limit | 1 |
| 15 | 9538-142-001 | Spacer, Hi-Limit | 2 |
| 16 | 9545-045-007 | Screw 8B x 3/4" | 2 |
| 17 | 9074-234-001 | Cover, Hi-Limit Stat | 1 |
| 18 | 9545-008-024 | Screw 10B x 3/8" | 1 |
| 19 | 9631-403-003 | Wire Ass'y, High Voltage | 1 |
| 20 | 9627-711-001 | Harness, Low Voltage Ignition | 1 |

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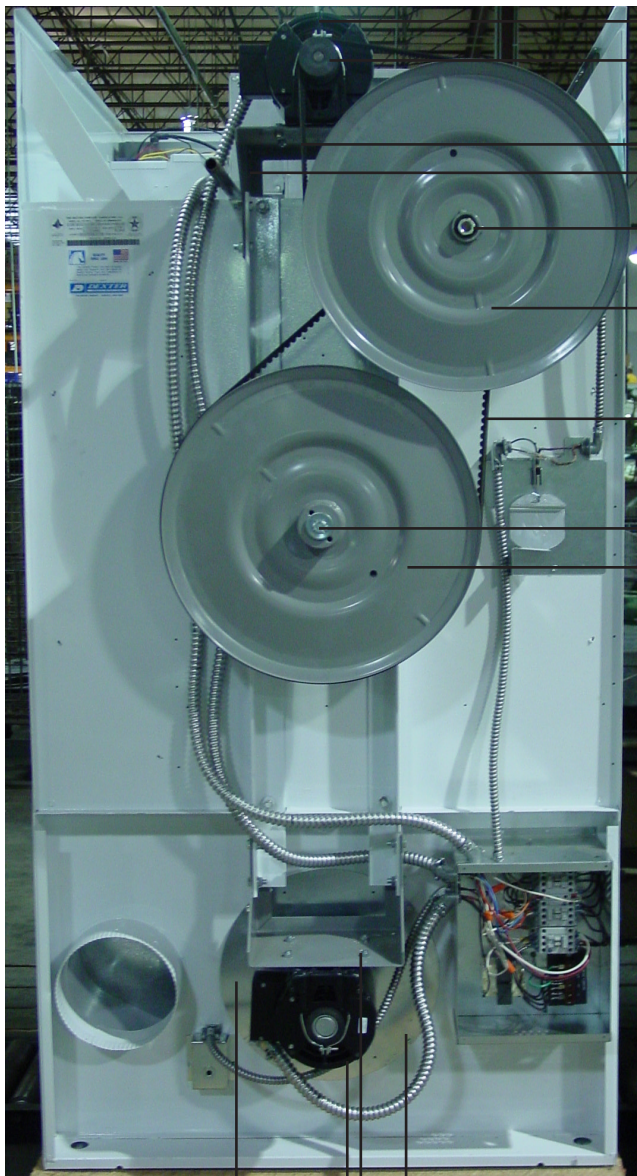




DRIVE GROUP

| Key | Part Number | Description | Qty. |
|-----|--------------|--|------|
| 1 | 9376-302-001 | Motor, Drive Tumble | 1 |
| * | 8640-276-003 | Wire Nut connector #73B (for302-001) | 3 |
| 1 | 9376-302-002 | Motor, Drive Blower | 1 |
| * | 8640-276-003 | Wire Nut connector #73B (for302-002) | 3 |
| * | 9545-014-004 | Screw, Hx 5/16-18X5/8 | 8 |
| * | 8640-400-003 | Nut 5/16-18 | 8 |
| * | 8641-581-008 | Washer Flat 5/16 | 2 |
| 2 | 9453-157-001 | Pulley, Motor (for302-001) | 1 |
| 2 | 9278-037-003 | Impeller, w/set screws (for302-002) | 1 |
| * | 9545-028-013 | Screw, Set 5/16-18x1/2" | 2 |
| 3 | 9991-054-006 | Support Ass'y, Motor (for302-001) | 1 |
| * | 9452-643-002 | Plate, Motor (for302-001) | 1 |
| 4 | 9545-029-005 | Screw 3/8-16 x 1" | 8 |
| 5 | 8640-415-004 | Nut 3/8-16 | 8 |
| 6 | 9991-053-001 | Support Assy, Intermed. Pulley (for302-001) | 1 |
| 7 | 9545-029-010 | Bolt, Rd Hd 3/8-16x1 1/4 | 3 |
| 8 | 9545-029-003 | Screw Hxcap 3/8-16x1 1/2 | 1 |
| 9 | 8640-415-004 | Nut 3/8-16 | 3 |
| * | 8641-581-035 | Washer, Flat | 4 |
| 10 | 9861-024-002 | Arm Assy-Tension Complete | 1 |
| * | 8641-581-035 | Washer, Flat | 1 |
| * | 9487-200-006 | Ring-Retaining | 1 |
| * | 8641-581-039 | Washer, Flat..... | 2 |
| 11 | 8640-425-002 | Nut-Hex, 5/8 x 11..... | 1 |
| 12 | 9908-042-006 | Pulley Assy, Intermediate - w/ bearings, spacer, & ret. ring (below) | 1 |
| * | 9036-159-007 | Bearing, Ball-Idler Pulley | 2 |
| * | 9538-173-002 | Spacer, Bearing | 1 |
| * | 9487-238-005 | Ring, Retaining | 1 |
| * | 9908-042-005 | Pulley Assembly intermediate | 1 |
| * | 8600-042-004 | Lubricant molycoat BR2-S | |
| 13 | 9487-200-003 | Ring, Retaining | 2 |
| 14 | 9908-043-002 | Pulley, Assembly Driven | 1 |
| * | 9487-234-001 | Ring, Tolerance | 1 |
| 15 | 8641-581-026 | Washer, Flat 1/2 | 1 |
| 15 | 8641-582-016 | Lockwasher Ext. 1/2 | 1 |
| 15 | 9545-017-009 | Screw, Hx Cap 1/2-13x11/2 | 1 |
| 16 | 9040-077-005 | Belt, Tumbler Drive | 1 |
| 17 | 9040-077-003 | Belt, Drive | 1 |
| 18 | 9534-151-000 | Spring, Belt Tension | 1 |
| 19 | 9099-012-002 | Chain, Spring Tension | 1 |
| 20 | 9248-022-002 | Hook, Tension | 1 |
| 21 | 9074-275-004 | Cover-Blower Impeller | 1 |
| 22 | 9074-275-005 | Cover-Blower Impeller | 1 |
| 23 | 9545-008-001 | Screw 10B x 1/4" | 4 |
| * | 9208-050-001 | Guard Rear, Drive | 1 |
| * | 9454-685-001 | Panel, Drive Guard, RH | 1 |
| * | 9550-180-001 | Shield, Motor | 1 |
| * | 9545-008-003 | Screw 10-16x 1/2 Tek | 2 |
| * | 9545-008-001 | Screw 10Bx1/4 | 11 |

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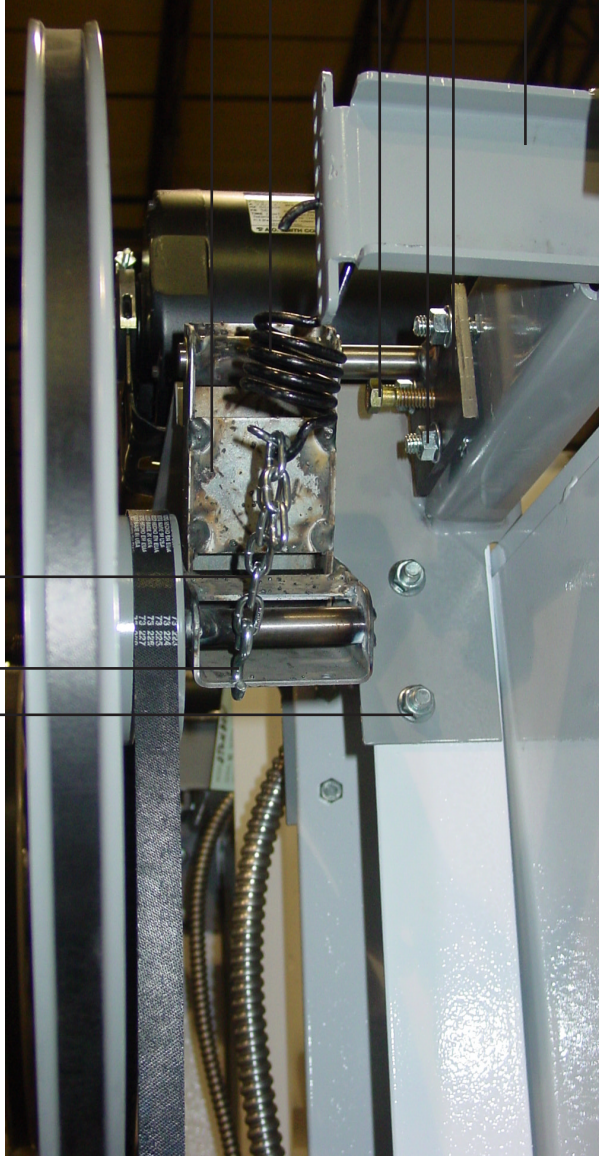


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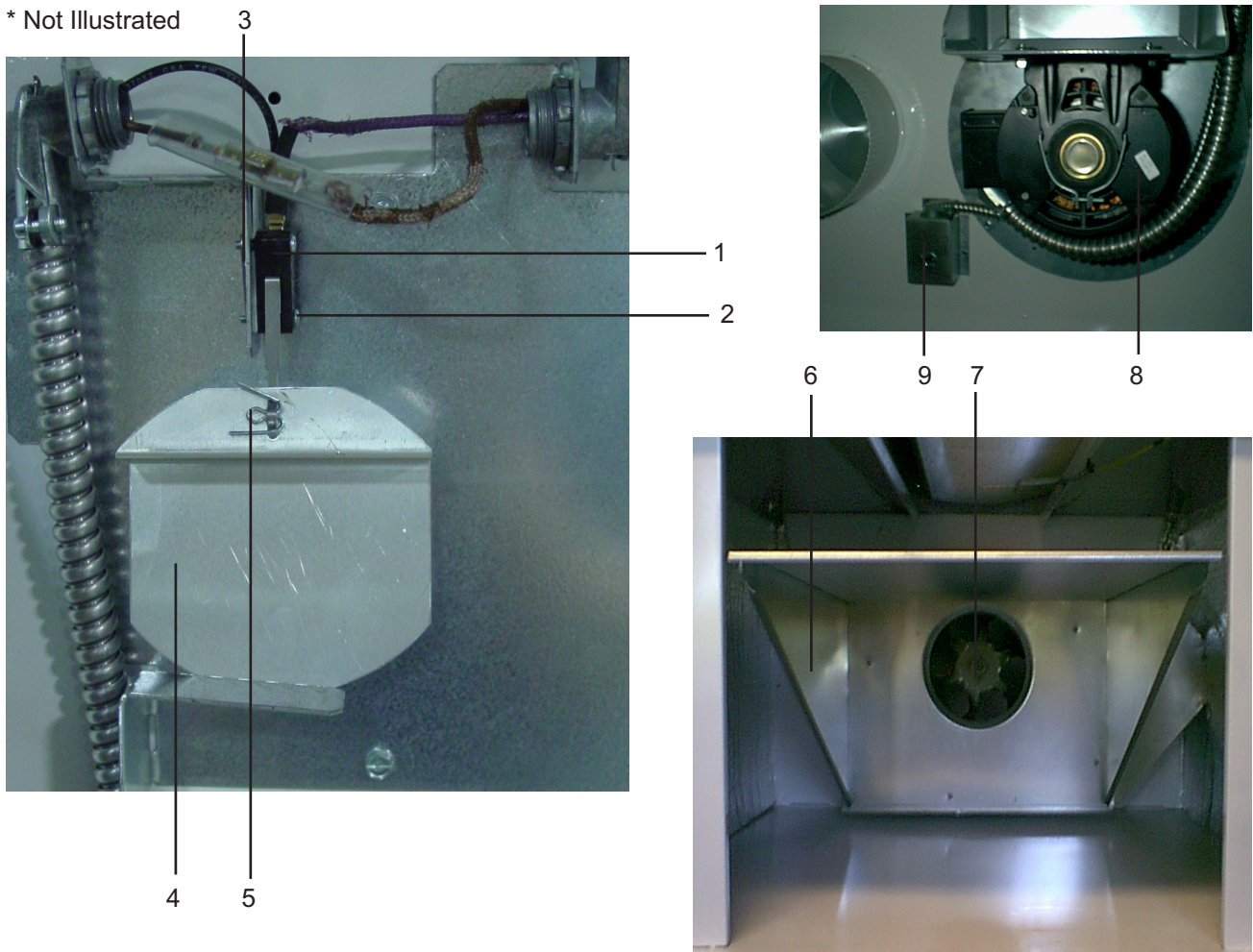
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AIR FLOW SWITCH, LINT HOOD & BLOWER IMPELLER GROUP

| Key | Part Number | Description | Qty. |
|-----|--------------|--|------|
| 1 | 9539-461-009 | Switch, Air Flow | 1 |
| * | 9550-169-003 | Shield, Air Flow Switch..... | 1 |
| 2 | 9545-020-001 | Screw, Hx #4-40x5/8 | 2 |
| 3 | 8640-401-001 | Nut, Special Twin #4-40 | 1 |
| 4 | 9008-007-001 | Actuator-Switch, Air Flow | 1 |
| 5 | 9451-169-002 | Pin, Cotter | 1 |
| 6 | 9834-009-001 | Hood Ass'y, Lint | 1 |
| * | 8640-412-004 | Nut, Whizlock | 6 |
| * | 9822-031-002 | Lint Screen 34" length | 1 |
| 7 | 9278-037-003 | Impeller, w/set screws | 1 |
| 8 | 9376-302-002 | Motor, Blower | 1 |
| * | 9074-275-002 | Cover-Half, Blower Impeller (Flat) | 1 |
| * | 9074-275-003 | Cover-Half, Blower Impeller (Formed) | 1 |
| * | 9545-008-001 | Screw, Hex #10Bx1/4 | 4 |
| * | 9576-207-006 | Thermostat, Safety | 1 |
| 9 | 9825-057-002 | Cover, Safety Thermostat..... | 1 |
| * | 9545-008-024 | Screw, Hx. #10ABx3/8 | 2 |

* Not Illustrated



WIRING GROUP

| Key | Part number | Description | Qty. |
|-----|--------------|---------------------------|------|
| 1 | 6068-044-008 | Conduit 1/2 x 66" | 1 |
| * | 8653-068-007 | Connector 1/2" 45 | 1 |
| * | 8653-068-005 | Connector 1/2" Str. | 1 |
| * | 2114-018-001 | Bushing Anti-short 1/2 | 2 |
| * | 8220-088-007 | Wire red/yel 79" | 1 |
| * | 8220-088-008 | Wire wht/yel 79" | 1 |
| * | 8220-088-009 | Wire blu/wht 79" | 1 |
| 2 | 6068-044-006 | Conduit 1/2 x 25" | 1 |
| * | 8653-068-005 | Connector 1/2" 45 | 2 |
| * | 2114-018-001 | Bushing Anti-short 1/2 | 2 |
| * | 8220-057-001 | Wire Assy. Gry, 34" | 1 |
| * | 8220-057-002 | Wire Assy. Brn, 34" | 1 |
| * | 8220-088-004 | Wire Assy, Red, 41" | 1 |
| * | 8220-088-005 | Wire Assy. Wht, 41" | 1 |
| * | 8220-088-006 | Wire Assy. Blk, 41" | 1 |
| 3 | 6068-037-026 | Conduit 3/8 x 44 1/2 | 1 |
| * | 8653-068-003 | Connector 3/8" Str | 1 |
| * | 8653-068-004 | Connector 3/8" 90 | 1 |
| * | 2114-008-000 | Bushing Anti-short 3/8 | 2 |
| * | 8220-095-023 | Wire Assy. Brn, 54" | 1 |
| * | 8220-103-001 | Wire Assy. Vio, 54" | 1 |
| 4 | 6068-037-028 | Conduit 3/8 x 26 1/2 | 1 |
| * | 8653-068-003 | Connector 3/8" Str | 1 |
| * | 8653-068-004 | Connector 3/8" 90 | 1 |
| * | 2114-008-000 | Bushing Anti-short 3/8 | 1 |
| * | 8220-078-007 | Wire Assy. Blk 40" | 1 |
| * | 8220-064-008 | Wire Assy. Brn 40" | 1 |
| 5 | 6068-037-022 | Conduit 3/8 x 23 1/2 | 1 |
| * | 8653-068-006 | Connector 3/8" 45 | 1 |
| * | 8653-068-004 | Connector 3/8" 90 | 1 |
| * | 2114-008-000 | Bushing Anti-short 3/8 | 2 |
| * | 8220-101-008 | Wire Assy. Blk. 34" | 1 |
| * | 8220-101-009 | Wire Assy. Red 34" | 1 |
| 6 | 6068-044-005 | Conduit 1/2 x 90" | 1 |
| * | 8653-068-005 | Connector 1/2" Str | 1 |
| * | 8653-068-007 | Connector 1/2" 45 | 1 |
| * | 2114-018-001 | Bushing Anti-short 1/2 | 2 |
| * | 8220-062-004 | Wire Assy. Wht. 108" | 1 |
| * | 8220-065-028 | Wire Assy. Vio 110" | 1 |
| * | 8220-062-006 | Wire Assy. Blk. 124" | 1 |
| * | 8220-064-005 | Wire Assy. Red 108" | 1 |
| * | 8220-064-006 | Wire Assy. Gray 110' | 1 |
| * | 8220-065-019 | Wire Assy. Wht/Org 110" | 1 |
| * | 8220-065-020 | Wire Assy. Org 110" | 1 |
| * | 8220-001-230 | Wire Assy. Blk/Red 8 1/2" | 1 |
| * | 8220-001-231 | Wire Assy. Blk/Blu | 1 |
| * | 8220-001-478 | Wire Assy. Grn. 7" | 1 |
| * | 8220-065-006 | Wire Assy. Blk/Red 11" | 3 |
| * | 8220-065-007 | Wire Assy. Blk/Blu 11" | 1 |
| * | 8220-068-001 | Wire Assy. Blk/Red 5" | 7 |
| * | 8220-068-002 | Wire Assy. Blk/Red 7" | 1 |
| * | 8220-068-004 | Wire Assy. Blk/Red 11" | 2 |
| * | 8220-112-001 | Wire Assy. Jumper | 1 |

Section 7

Maintenance

MAKE SURE ALL POWER IS DISCONNECTED BEFORE MAKING CHECKS INSIDE MACHINE.

Daily

1. Clean lint screen by unlocking and sliding out in their tracks for access. Use soft brush if necessary. Failure to do so will slow drying and increase gas usage and temperatures throughout the dryer.
2. Check lint screen for tears. Replace if necessary.

Monthly

1. Remove lint accumulation from end bells of motor.
2. Clean lint from lint screen compartment.
3. Remove lint and dirt accumulation from top of the dryer and all area above, 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 top and bottom pivots of the clothes door hinge.
5. Grease bearings and shaft of intermediate drive pulley.

Quarterly

1. Check belts for looseness, wear or fraying.
2. Inspect gasket of door glass for excessive wear.
3. Check tightness of all fasteners holding parts to support channel.
4. Check tightness of tumbler shaft retaining nut.
5. Remove lint accumulation from primary air ports in burners.
6. Grease pivot pins and tension arms where in contact with each other.

Semi-Annually

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

Annually

1. Check intermediate pulley bearings for wear.
2. Remove, inspect and clean main burner orifices of obstruc-



Specifications Industrial Dryers

| | | | | | | | | |
|--|---------------|--|---------------|--|---------------|--|----------------|--|
| Timer Model | DLH30 | | DRH55 | | DRH80 | | | |
| Micro Model | DTCH30 | | DTCH55 | | DTCH80 | | | |
| Micro Model w/ Reversing Cylinder | | | | | | | DTCH80V | |

| | | | | | | | | |
|---------------------|------------|------------------------|------------|-----------------------|----------|------------------------|----------|------------------------|
| Capacity | | | | | | | | |
| Dry Weight Capacity | 30 lbs | 13.5 kg | 55 lbs | 24.8 kg | 80 lbs | 36.3 kg | 80 lbs | 36.3 kg |
| Cylinder Diameter | 30" | 76.2 cm | 32.5" | 82.55 cm | 36.5" | 92.71 cm | 36.5" | 92.71 cm |
| Cylinder Depth | 29.5" | 74.93 cm | 38" | 96.52 cm | 38" | 96.52 cm | 38" | 96.52 cm |
| Cylinder Volume | 12.1 cu ft | 341.78 dm ³ | 18.2 cu ft | 516.5 dm ³ | 23 cu ft | 651.29 dm ³ | 23 cu ft | 651.29 dm ³ |

| | | | | | | | | |
|-------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| Dimensions | | | | | | | | |
| Cabinet Height (with feet)- Minimum | 72.625" | 184.47 cm | 72.25" | 183.52 cm | 75.5" | 191.77 cm | 75.5" | 191.77 cm |
| Cabinet Height (with feet)- Maximum | 73.625" | 187.01 cm | 73.25" | 186.06 cm | 76.5" | 194.31 cm | 76.5" | 194.31 cm |
| Cabinet Width | 31.5" | 80.01 cm | 34.4375" | 87.47 cm | 38.4375" | 97.53 cm | 38.4375" | 97.53 cm |
| Overall Depth | 43.375" | 110.17 cm | 51.125" | 129.86 cm | 51.125" | 129.86 cm | 51.125" | 129.86 cm |
| Floor to Door Bottom | 30.5625" | 77.63 cm | 29.5" | 74.93 cm | 31" | 78.74 cm | 31" | 78.74 cm |
| Door Opening | 22.6875" | 57.63 cm | 22.6875" | 57.63 cm | 22.6875" | 57.63 cm | 22.6875" | 57.63 cm |

| | | | | | | | | |
|-----------------------------------|-------------------|--------|-------------------|--------|-------------------|--------|-----------------|------------|
| Electrical | | | | | | | | |
| Electrical Phase | Single | | Single | | Single | | Three | |
| Electrical Voltage (60 Hz) | 120 V | | 120 V | | 120/208-240 V | | 208-240 V | |
| Electrical Running Amps (60 Hz) | 9.6 | | 7.8 | | 10.8 | | 5 | |
| Circuit Protection (60 Hz) | 15 AMP | | 15 AMP | | 15 AMP | | 15 AMP | |
| Electrical Voltage (50 Hz) | 220-240 V | | 220-240 V | | 220-240 V | | | |
| Electrical Running AMPs (50 Hz) | 5.1 | | 5 | | 7.5 | | | |
| Circuit Protection (50 Hz) | 10 AMP | | 10 AMP | | 10 AMP | | | |
| Electrical Wire Size | 12 gauge | | 12 gauge | | 12 gauge | | 12 gauge | |
| Electrical Service (Single Phase) | 2 wire + ground | | 2 wire + ground | | 2 wire + ground | | 3 wire + ground | |
| Motor Size | 1/2 HP | .37 kW | 3/4 HP | .56 kW | 1 HP | .75 kW | (2) 1 HP | (2) .75 kW |
| Tumble Direction | Counter Clockwise | | Counter Clockwise | | Counter Clockwise | | Reversing | |
| Tumble Speed | 47 RPM | | 45 RPM | | 40 RPM | | 40 RPM | |

| | | | | | | | | |
|-----------------------------------|------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
| Gas Heat | | | | | | | | |
| Gas Input/Hour | 90,000 BTU | 22,680 kcal | 160,000 BTU | 40,320 kcal | 215,000 BTU | 54,180 kcal | 215,000 BTU | 54,180 kcal |
| Gas Supply Connection (NPT) | 1/2" | 12.7 mm | 1/2" | 12.7 mm | 1/2" | 12.7 mm | 1/2" | 12.7 mm |
| Natural Gas Supply (Water Column) | 5 -10" | 12.7 - 25.4 cm | 5 -10" | 12.7 - 25.4 cm | 5 -10" | 12.7 - 25.4 cm | 5 -10" | 12.7 - 25.4 cm |
| L.P. Supply (Water Column) | 11 -13.5" | 27.9 - 34.29 cm | 11 -13.5" | 27.9 - 34.29 cm | 11 -13.5" | 27.9 - 34.29 cm | 11 -13.5" | 27.9 - 34.29 cm |

| | | | | | | |
|---|--------------|--------------------|--------------|--------------------|--------------|--------------------|
| Electric Heat (Voltage/Hz/Phase) | Model | AMP/Circuit | Model | AMP/Circuit | Model | AMP/Circuit |
| 208 / 60 / 1 - 20 kW | -60FA | 113/125 | | | | |
| 240 / 60 / 1 - 20 kW | -61FB | 99/110 | | | | |
| 208 / 60 / 3 - 24 kW | -16FC | 82/90 | -16FC | 80/80 | | |
| 240 / 60 / 3 - 24 kW | -18FD | 72/80 | -18FD | 71/90 | | |
| 208 / 60 / 3 - 30 kW | -16FE | 99/100 | -16FE | 97/100 | -16FE | 95/100 |
| 240 / 60 / 3 - 30 kW | -18FG | 88/90 | -18FG | 86/90 | -18FG | 83/90 |
| 208 / 60 / 3 - 35 kW | | | | | -16FH | 112/125 |
| 240 / 60 / 3 - 36 kW | | | | | -18FJ | 98/110 |

| | | | | | | | | |
|-------------------------------|-----------|----------|-----------|---------|-----------|---------|--|--|
| Steam Heat | | | | | | | | |
| At PSIG (bar) | 97 (6.69) | 3.25 BHP | 97 (6.69) | 5 BHP | 97 (6.69) | 6.3 BHP | | |
| BTU/Hour (kW) | 109,000 | 32 | 167,000 | 49 | 212,000 | 62 | | |
| Steam Supply Connection (NPT) | 1" | 25.4 mm | 1" | 25.4 mm | 1" | 25.4 mm | | |
| Steam Return Connection (NPT) | 3/4" | 19 mm | 3/4" | 19 mm | 3/4" | 19 mm | | |

| | | | | | | | | |
|-------------------------------------|-------------------|---------------------------|-------------------|---------------------------|---------------------|---------------------------|---------------------|---------------------------|
| Installation | | | | | | | | |
| Air Flow | 830 CFM | 23.51 M ³ /min | 910 CFM | 25.77 M ³ /min | 1,200 CFM | 33.98 M ³ /min | 1,200 CFM | 33.98 M ³ /min |
| Exhaust Size (Vent Diameter) | 8" | 20.32 cm | 8" | 20.32 cm | 8" | 20.32 cm | 8" | 20.32 cm |
| Make-Up Air (Minimum) | 1 ft ² | 929 cm ² | 1 ft ² | 929 cm ² | 1.5 ft ² | 1394 cm ² | 1.5 ft ² | 1394 cm ² |
| Net Weight | 452 lbs | 204 kg | 581 lbs | 262 kg | 613 lbs | 276 kg | 613 lbs | 276 kg |
| Net Weight w/ Reversing Option | | | | | 743 lbs | 335 kg | 743 lbs | 335 kg |
| Clearance Behind Machines (Minimum) | 18" | 45.72 cm | 18" | 45.72 cm | 18" | 45.72 cm | 18" | 45.72 cm |

2/4/5 Year Dryer Warranty
 Dexter warrants all dryer parts that fail under normal use for 2 years from date of installation.
 All dryer computers and ignition controls are warranted for 4 years from date of installation.
 The dryer bearings, bearing housing, and trunion are warranted for 5 years from date of installation.

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Specifications subject to change Rev. 5/04