



DEXTER
LAUNDRY



Industrial OPL Stack Dryers 30 and 50 Pound OPL Stacked Dryers

Service and Parts Data

Equipment Safety Warnings

Symbols and Terminology Used in this Equipment

⚠ DANGER	Indicates an imminently hazardous situation, which if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a potentially hazardous situation, which if not avoided could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. Minor burns, pinch points that result in bruises and minor chemical irritation.
NOTICE	Indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.
	This is the user caution symbol. It indicates a condition where damage to the equipment resulting in injury to the operator could occur if operational procedures are not followed. TO REDUCE THE RISK OF DAMAGE OR INJURY, refer to accompanying documents; follow all steps or procedures as instructed.
	This is the electrical hazard symbol. It indicates that there are DANGEROUS HIGH VOLTAGES PRESENT inside the enclosure of this product. TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, do not attempt to open the enclosure or gain access to areas where you are not instructed to do so. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY
	Caution! There are sharp edges on various sheet metal parts internal to the enclosure. Use safety consciousness when placing or moving your hands while working in the interior of this equipment.
	Caution! To reduce the risk of damage to the Water Inlet Valve, do not supply inlet water with a temperature that exceeds 70° C.
	Caution! To reduce the risk of fire or explosion, do not operate this equipment in any hazardous classified (ATEX) environment.

Equipment Safety Warnings

Symbols and Terminology Used in this Equipment



Warning! Do not operate equipment if door glass is damaged in any way.



Warning! Keep clear of rotating parts.



Prohibited! Do not enter this equipment or space.



Prohibited! Do not step or stand on this equipment.



Prohibited! Do not operate without all guards and covers in place.



Prohibited! Do not operate without all guards and covers in place.



Prohibited! Do not wash or Dry clothing impregnated with flammable liquids (petrochemical).



Prohibited! Do not allow children to play in or around equipment.

	Indicates an imminently hazardous situation, which if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation, which if not avoided could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. Minor burns, pinch points that result in bruises and minor chemical irritation.
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	Caution! To reduce the risk of fire or explosion, do not operate this equipment in any hazardous classified (ATEX) environment.



WARNING

	<ul style="list-style-type: none">• All Dryers must be installed in accordance to all applicable electrical, plumbing and all other local codes.• These installation and operation instructions are for use by qualified personnel only. To avoid injury and electrical shock, do not perform any servicing other than that contained in the installation and operation instructions, unless qualified.
	<p>Do not install Equipment in an explosive atmosphere.</p>
	<ul style="list-style-type: none">• Care must be stressed with all foundation work to ensure a stable unit installation, eliminating possibilities of excessive vibration.• Foundation must be level within 13 mm to ensure proper washer operation.
	<p>Do not operate washer or Dryer if door glass is damaged in any way.</p>
	<p>Do not wash or Dry clothing impregnated with flammable liquids (petrochemical).</p>



WARNING

	<p>Children should be supervised to ensure they do not operate or play in or around equipment.</p>
	<p>Keep all panels in place to protect against electrical shock and injury and add rigidity to washer.</p>

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

A washer should not be allowed to operate if any of the following occur:

- **Excessive high water level.**
- **Machine is not connected to a properly earthed circuit.**
- **Door does not remain securely locked during the entire cycle.**
- **Vibration or shaking from an inadequate mounting or foundation**

	<p>Warning! Do not operate equipment if door glass is damaged in any way.</p>
	<p>Warning! Keep clear of rotating parts.</p>
	<p>Prohibited! Do not enter this equipment or space.</p>
	<p>Prohibited! Do not step or stand on this equipment.</p>
	<p>Prohibited! Do not operate without all guards and covers in place.</p>
	<p>Prohibited! Do not operate without all guards and covers in place.</p>
	<p>Prohibited! Do not wash or Dry clothing impregnated with flammable liquids (petrochemical).</p>
	<p>Prohibited! Do not allow children to play in or around equipment.</p>

	<p>Prohibited! Do not attempt to open, touch, or proceed before referring to the manual or unless qualified.</p>
	<p>Mandatory! Read all supporting documentation before operating or maintaining equipment.</p>
	<p>Mandatory! Disconnect power before servicing equipment.</p>
	<p>Mandatory! Lock out and tag out before servicing this equipment.</p>
	<p>Mandatory! Children should be supervised to ensure they do not operate equipment.</p>

Dexter Safety Guidelines

! 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.

IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch: do not use any telephone in your building.
- Clear the room, building or area of all occupants.
- Immediately call your gas supplier from a neighbor's telephone.
- 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.

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 naphtha, gasoline, or other oils or waxes.

To activate your warranty, be sure to return your red warranty form to the factory. Please have serial number and model ready when calling for assistance.

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Section 1:

Specifications

Express Stack Dryer Specifications

Model	DN30X2NC-15	DN50X2NC-15
Cabinet Height	76 1/4" (1937mm)	79 1/4" (2012mm)
Cabinet Width	31 1/2" (800mm)	34 1/2" (876mm)
Overall Depth	49 1/2" (1270mm)	54 3/4" (1441mm)
Floor to Door Bottom	7 5/8" (186mm)	7" (178mm)
Door Opening	22 5/8" (576mm)	25 5/8" (651mm)
Dry Wt. Capacity	30 x 2 (13.6 x 2mm)	50 x 2 (22.7 x 2mm)
Cylinder Diameter	30" (762mm)	32 1/2" (826mm)
Cylinder Depth	27 1/2" (699mm)	33" (838mm)
Cylinder Volume	11.25 cu ft (319ltr)	15.84 (448ltr)
Lint Screen Area	453 sq in (2923sq.cm)	544 sq in (3510cm)
Gas Input/Hour (kW) (per pocket)	90,000 BTU (26.4)	108,000 BTU (31.7)
Gas Supply Connection	.5" (12.7mm)	.5" (12.7mm)
Natural Gas Supply (Water Column)	5-8"	5-8"
L.P. Supply (Water Column)	11.5-14"	11.5-14"
Exhaust Size	8" (203mm)	8" (203mm)
Make-up Air	1.5 sq. ft. (1394cm)	1.5 sq. ft. (1394cm)
Motor Size	1/2 HP (.38kW)	3/4 HP (.56 kW)

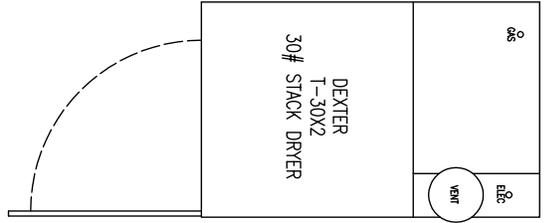
Electrical Specifications - 120/60/1

Voltage/Hz/Phase	120V/60Hz/1Phase	120V/60Hz/1Phase
Running Amps	8.0	24.0
Circuit Protection Amps	20	30
Wire Size	12 gauge	10 gauge
Electrical Service	2 wire + ground	2 wire + ground

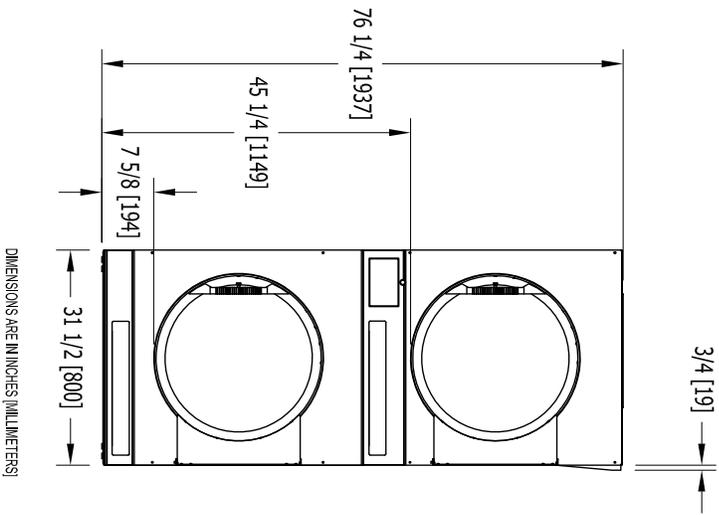
Electrical Specifications - 220-240/60/1

Voltage/Hz/Phase	220-240V/60Hz/1Phase	220-240V/60Hz/1Phase
Running Amps	10.0	12.0
Circuit Protection Amps	15	20
Wire Size	12 gauge	12 gauge
Electrical Service	2 wire + ground	2 wire + ground

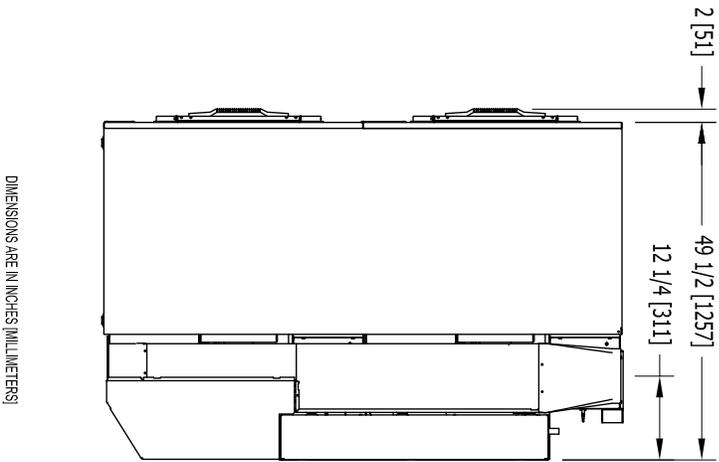
Shipping Weight	750 lbs (340 kg)	917 lbs (416 kg)
Net Weight	699 lbs (317 kg)	857 lbs (389 kg)
Clearance Behind Machines (min.)	18" (457mm)	18" (457mm)



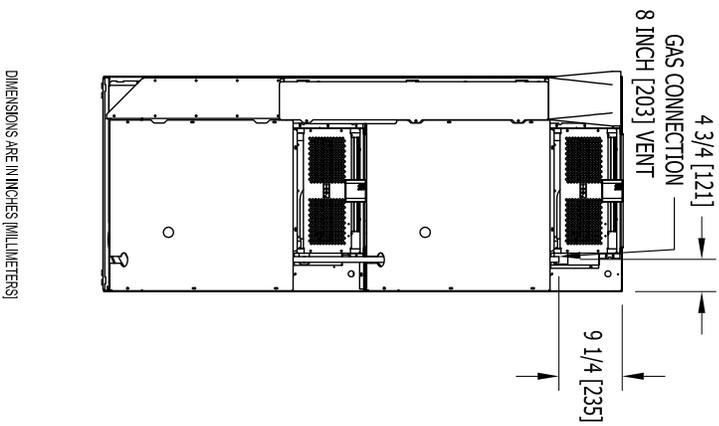
T-30X2 COMMERCIAL DRYER INSTALLATION DIMENSIONS



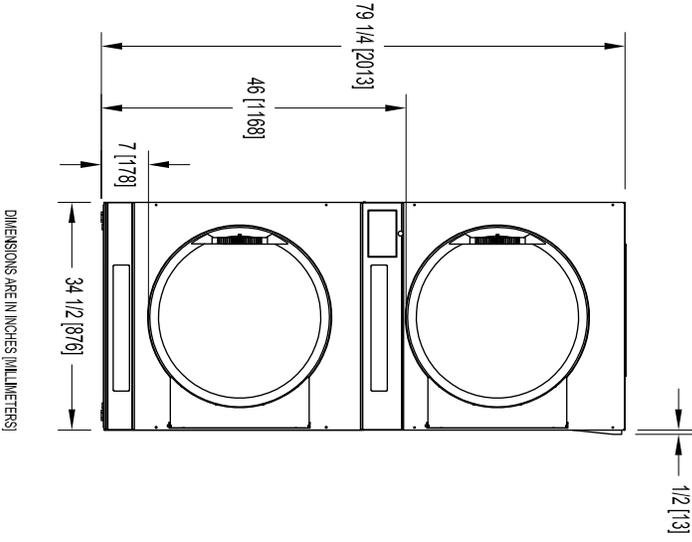
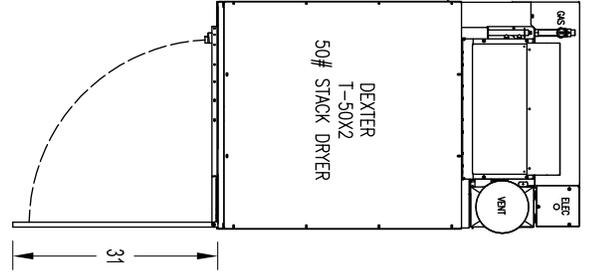
FRONT



SIDE

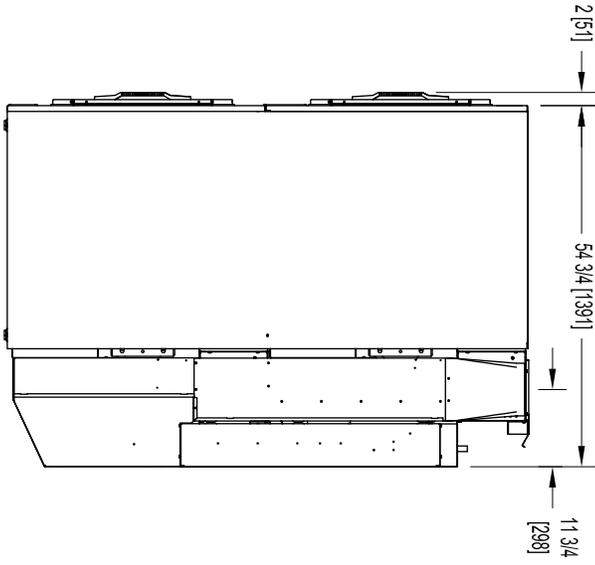


BACK



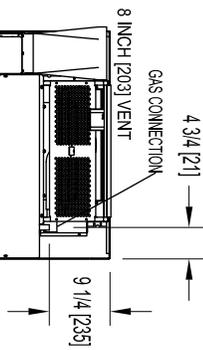
FRONT

DIMENSIONS ARE IN INCHES (MILLIMETERS)



SIDE

DIMENSIONS ARE IN INCHES (MILLIMETERS)



BACK

DIMENSIONS ARE IN INCHES (MILLIMETERS)

Section 2:

Installation & Operation

DRYER INSTALLATION

1. 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.

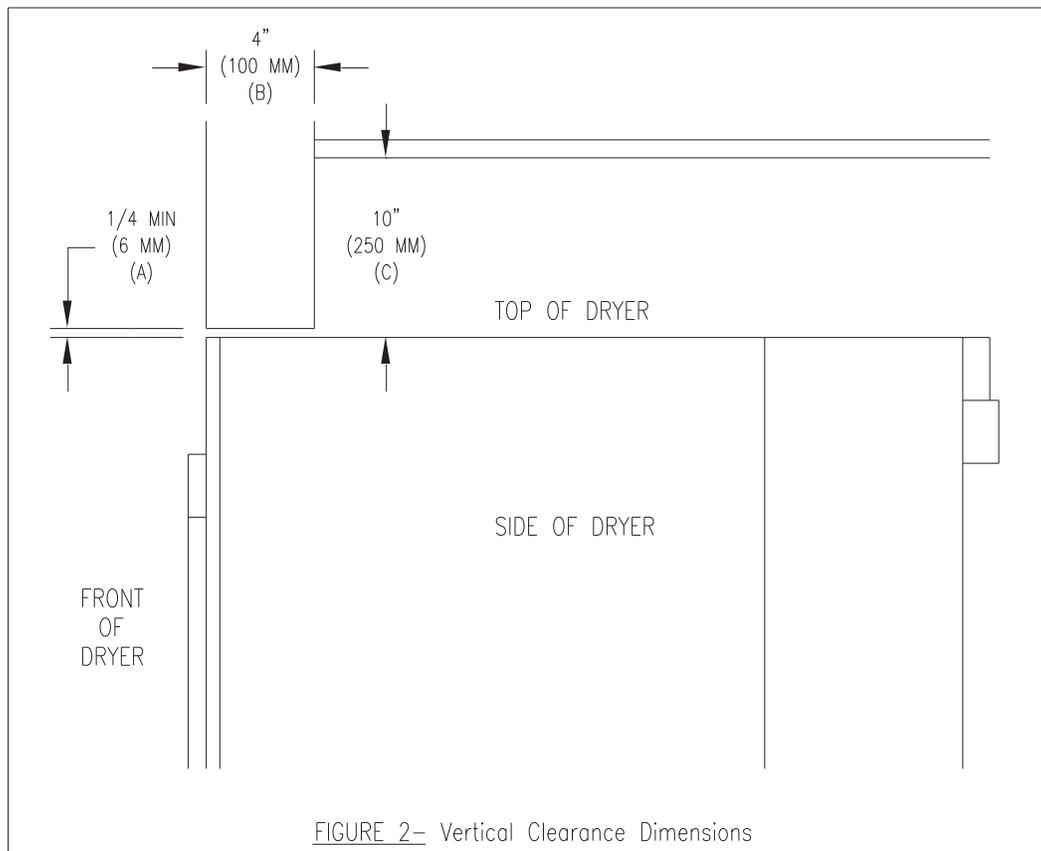
2. INSTALLATION CLEARANCES: This unit may be installed at the following alcove clearances:

- 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 in the schematic section of this manual.

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. An individual gas shutoff valve is recommended for each dryer and may be required by local code (not supplied). 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 must be disconnected from the gas supply piping system during any pressure testing of that system. Do not expose the dryer's gas control valve to testing pressure.

Burner Set-Up

All gas burner manifolds should be checked for proper gas pressure while burning. Stack dryer burners should be set at 3.5 W.C. while burner operating.

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.

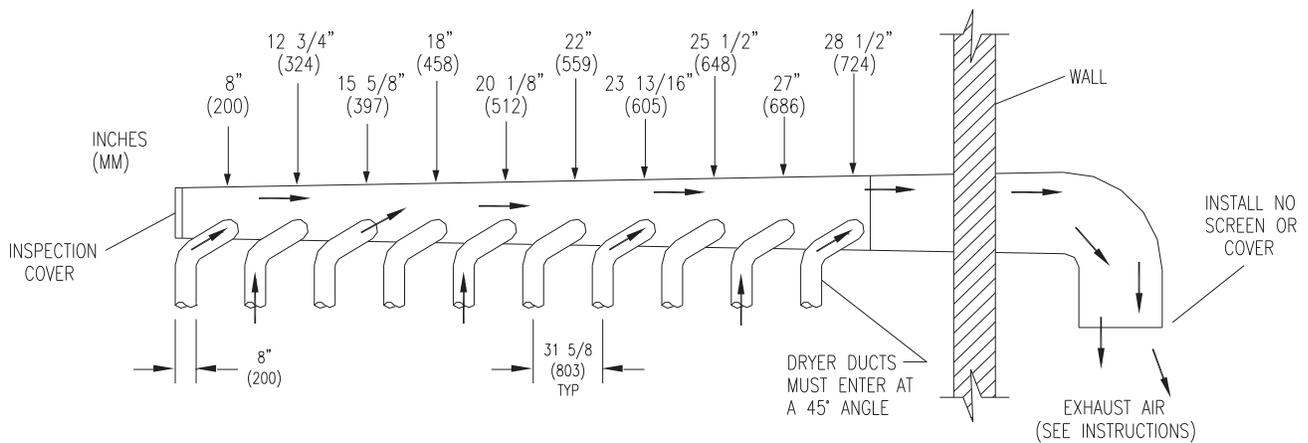
When exhausting a dryer straight up through a roof, the overall length of the duct has the same limits as exhausting through a wall. A rain cap must be placed on top of the exhaust and must be of such a type as to be free from clogging. The type using a cone shaped "roof" over the pipe is suitable for 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: STATIC BACK PRESSURE should be a maximum of 0.3 in. w.c (7.6 mm w.c) at the rear exhaust outlet of the dryer. If multiple dryers are connected to the common duct, ensure the back draft damper is installed properly.



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.

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.

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

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 links to a few suppliers of these devices for those who don't currently have a source.

MANUFACTURER	LINK
MCG Surge Protection	mcgsurge.com
Eaton Corporation	eaton.com/us/en-us
Schneider Electric	se.com/us/en
Asco Power Technologies	ascopower.com/us/en
Emerson Electric Co.	emerson.com/en-us

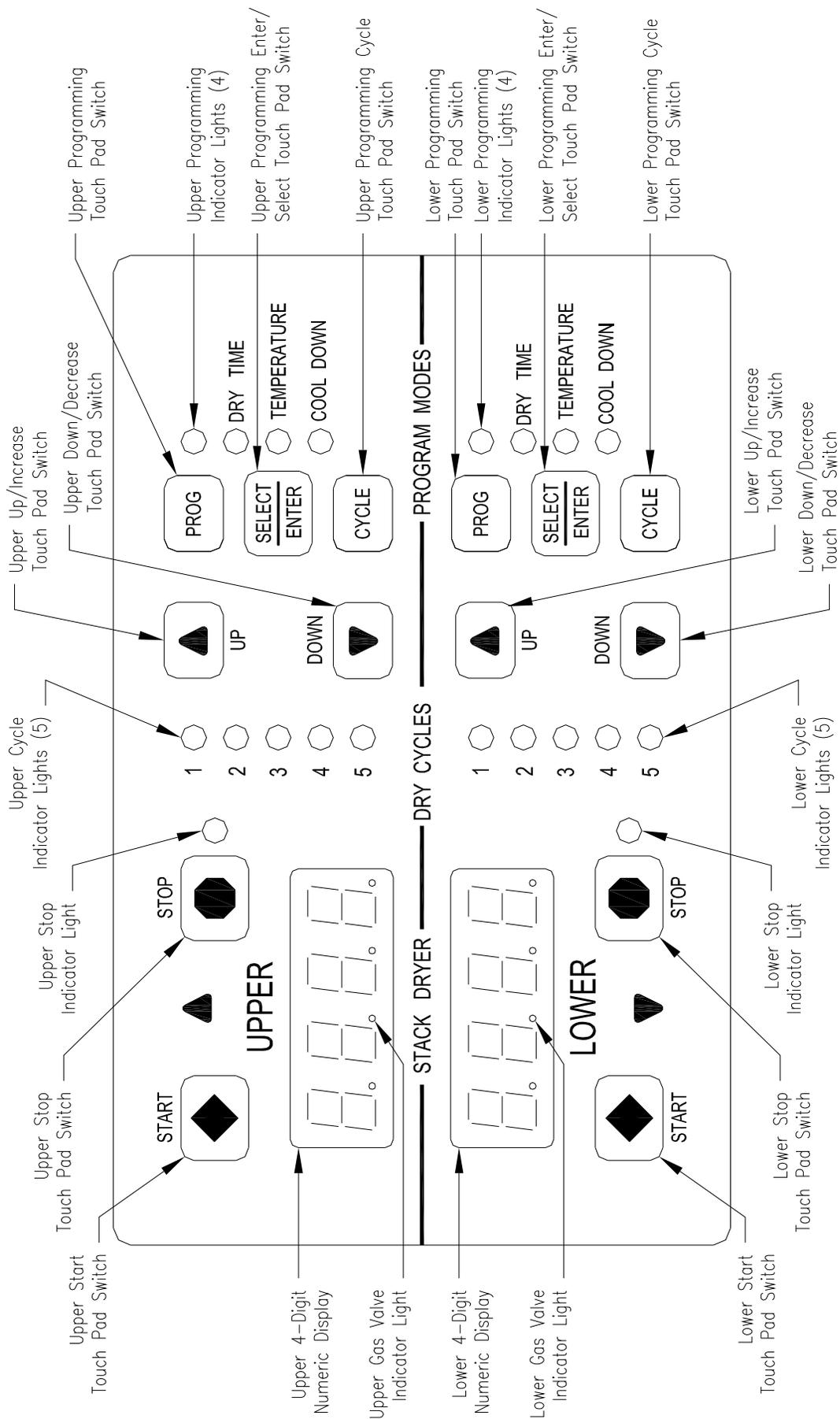


Figure 4: Non-Reversing Dryer Controller Interface

Touch Pad Description

Indicator Lights (LED's)

Description

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 not need to be on. The L.E.D. will be blinking when the gas valve needs to be on. The L.E.D. will not 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 (push buttons)

Description



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/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.



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 and holding this touch pad switch will display the current temperature of the dryer heat sensor as long as it is held in the depressed position.

Message

Description

- 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.
- donE** This message blinks immediately after completion of the dry cycle and continues to blink until the stop key on the dryer controller touch pad is pressed or the dryer loading door is opened.
- Prog** This message is displayed when entering the permanent programming mode.
- .15** This message appears while the dryer is in the heating time of a dry cycle. The decimal point will blink if the output for the gas valve is on, or remain on constantly if the output for the gas valve is not on. The number represents the total time left in the dry cycle (includes cool down time).
- C02** This message appears when the cool down time of the dry cycle is reached. The letter "C" represents the cool down (non-heating) part of the dry cycle. The number(s) after the letter "C" represent(s) the total time remaining in the dry cycle.
- F5** This message appears if there is a dryer fault. The letter "F" indicates a fault and the number after the "F" represents the specific fault that has occurred. There are five different faults that can appear (F1 through F5).

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 Dryer Controller Programming" or "Temporary Dryer Controller Programming" section of this manual.

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 tum, 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 60 minutes.

The default value of the five dry cycles is shown in the "Dryer Controller Factory Default Program Settings" table in this manual.

To improve the drying capabilities of this dryer, you should always separate (untangle) the individual articles in your load before using the dryer.

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 untangled 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.

4.

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 decrements 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 idle time of two minutes and tumble time of 10 seconds 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.

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

The jumper located at the back right side of the each 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 back and middle pins are for Celsius and the front 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 at the back middle side of each circuit board controls, 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 non-reversing position, which are the front and middle pins. If the jumper is in the reversing position, the heating part of the dry cycle will not operate properly. The dryer will not reverse direction either.

The push button, which is located at the middle center of each circuit board controls, 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.

If changing a jumper, remove power before moving jumper and then move jumper. Before restoring power, press and hold the DEFAULT SETTINGS pushbutton. Then, restore power and release the DEFAULT SETTINGS pushbutton after three seconds of restoring power.

Temporary Dryer Controller 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 choose 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 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 to change the total dry time.
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 (10 to 190 Fahrenheit or 40° to 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 60 minutes). To not change the cool down time, do not press the arrow keys. Go to the next step.
8. Press and release the SELECT/ENTER key. Once this key is pressed and released, the cool down L.E.D. and the programming L.E.D. will switch off, and the dry cycle L.E.D. will remain on. The flashing cool down time on the 4-digit display will stop flashing and remain.
9. 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 Dryer Controller Programming Example

Requirements: Dry a load with 40 minutes of actual heat at 18SoF and five minutes of cool down.

The following procedure will show you how to temporarily modify the existing dry cycle 1 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 Dryer Controller 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 1 is illuminated.
2. Press and release the CYCLE key on the dryer controller touch pad. You will see the number "35" 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 10 times so the display will show a flashing "45". When the UP arrow touch pad key is pressed the first time, the number "36" 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 "180", the temperature L.E.D. will illuminate, and the programming L.E.D. and dry cycle 1 L.E.D. will remain on.
5. Press and release the UP arrow key on the dryer controller touch pad one time 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 "5", the cool down L.E.D. will illuminate, and the programming L.E.D. and dry cycle 1 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 five minutes. After you press the SELECT/ENTER touch pad key on the controller, the cool down L.E.D. and programming L.E.D. will switch off. The controller display will remain at "5" and the cycle 1 L.E.D. will 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 1 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 the number "5" to the number "45" and dry cycle 1 will begin.

Permanent Dryer Controller 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 at the lower middle 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 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 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.
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.

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 (1050 Fahrenheit or 400 Celsius, up to 1950 Fahrenheit or 9(Celsius). If you do not want to change the drying temperature, do not press the arrow keys. Go to the next step.

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.

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 60 minutes). To not change the cool down time, do not press the arrow keys. Go to the next step.

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 4-digit numeric display will change to "Prog".

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.

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

Permanent Dryer Controller Programming Example

Requirements: Dry a load with 50 minutes of actual heat at 1950 F and three minutes of cool down. The following procedure will show you how to permanently modify the existing dry cycle 1 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 Dryer Controller 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 1 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 time 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 time 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 "35".
5. Press the UP arrow touch pad key 18 times until the dryer controller display shows the number "53".
6. Press and release the SELECT/ENTER touch pad key once. The dry time 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 "180".
7. Press and release the UP arrow touch pad key three times until the dryer controller display shows the number "195".
8. Press and release the SELECT/ENTER touch pad key. The dry time 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 "5".

-
9. Press and release the DOWN arrow touch pad key twice until the dryer controller display shows the number "3".
 10. Press and release the SELECT/ENTER touch pad key. The dry time L.E.D. and the programming L.E.D. will remain on and the cool down L.E.D. will switch off. The dryer controller display will change to "Prog".
 11. Press and release the STOP touch pad key. The dry time 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 1 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 at the middle center side of each circuit board controls.

Section 3:

Wiring Schematics

60HZ Wiring Schematic Dryer Idle - No Coins Added

Top Dryer Used For This Example

110 VAC 60Hz is supplied to the main power terminal block, L1 power, N=neutral, plus ground. BLK/Red coming off of L1 and BLK/BLU coming from N power the R1, and R2 motor relays. Red wire from L1 and the blue wire from N supply power and neutral to the step down transformer. After the stepdown transformer the control is protected by a 2.5 Amp fuse in the black wire. When there is power to the dryer the Computer Board will be powered and the display lighted from the 24 VAC secondary side of Control Step Down Transformer. 24 VAC from here is also on one side of the door switch on a black wire. Closing the loading door allows 24 VAC to pass on to the Computer Board on two blue wires. One blue wire makes 24 VAC available to one side of the Motor Run Relay on Computer Board. The other blue wire provides a 24 VAC signal to the Computer Board telling it that the door is closed and door light on the computer board should be illuminated.

Coins Added - Motor Starting and Running

Top Dryer Used For This Example

As each coin is added the Coin Switch closes and completes a circuit to the Computer Board. The Computer Board counts these signals and registers them against time. The time will display once the Start Button for Upper or Lower is pushed. When the Start Button is pushed again the Computer Board Motor Run Relay closes on the computer. With this Relay closed, 24 VAC is supplied to the Motor Control Relay (R1) on the red wire and also a violet wire going down to motor. The motor LED on the computer board should be illuminated anytime the computer calls for the motor to operate. With (R1) engaged and 110 VAC at motor the Motor Start Switch in motor is drawn in to the start position. In this position the incoming power 110 VAC is supplied directly to the main run winding and through the Start Capacitor to the Auxiliary Winding (start winding). As the Motor comes up to speed, the centrifugal switch inside motor opens the circuit to the Start Winding and closes the circuit to allow 24 VAC to pass to the Gas Relay on the Computer Board on the other violet wire. The heat circuit in the dryer can not operate if the motor is not running. The gas LED on the computer board will be illuminated when Computer Board calls for the heat after Motor Centrifugal Switch has closed.

Heat Circuit

Top Dryer Used For This Example

With the Drive Motor running and 24 VAC provided to the Computer Board Gas Relay, it will close if Computer Board senses programmed temperature is needed. The violet wire changes to an orange wire out of the Computer Board Gas Relay. When this relay closes it provides 24 VAC to the High Limit Thermostat. The High Limit Thermostat is normally closed. (It will open, turning off the heat circuit, if the dryer can't move enough air from problems such as an exhaust restriction or other problems.) 24 VAC now goes through to the normally open Air Switch (Sail Switch) on the brown wire. This switch is closed only if the dryer is running and has the correct air flow. With the dryer running and the Air Switch closed, 24 VAC is supplied to the normally closed upper manual reset Overtemp Thermostat on the gray wire and changes to the black wire out of switch and then changes to red wire and goes to the 1.5 amp in-line fuse that protects the Upper Ignition Controller(GREY BOX). With 24 VAC now supplied to the Upper Ignition Controller (GREY BOX) it will then send high voltage to the Spark Ignition Electrode via the High Voltage Lead Wire (this lead looks like an automotive spark plug wire). The Ignition Control Module (GREY BOX) simultaneously sends 24VAC to the Gas Valve Coil which open the Gas Valve and allows gas to pass through to the main burner. When ignition occurs the high voltage sparking stops and if Ignition Control Module (GREY BOX) gets a flame sense signal it will allow gas valve coil to remain energized and continue burner operation. If ignition does not occur, the Ignition Control Module (GREY BOX) will spark for 10 seconds before locking out.

Manual Reset Safety Shutoff Over-Temperature Thermostat

Top Dryer Used For This Example

This thermostat is manually reset by pushing in the red button. The Over Temperature Thermostat is a safety backup for the entire Heat Circuit and located in the recirculation chamber area on the side of the burner housing. If the dryer over heats this Over Temperature Thermostat it opens the line to turn off the heat but leaves the Computer Board lighted and the drive motor powered and turning so the basket will cool down.

Cool Down

Top Dryer Used For This Example

At the pre programmed time (2 minutes factory setting--adjustable) the Computer Board will open the Gas Relay Contact. This allows the Drive Motor to continue to run but without heat. The gas light on the computer board should not be illuminated anytime the computer is in cool down. This Cool Down period allows the clothing (zippers, snaps, etc.) time to cool down to a temperature that is easily handled by customers.

End of Cycle

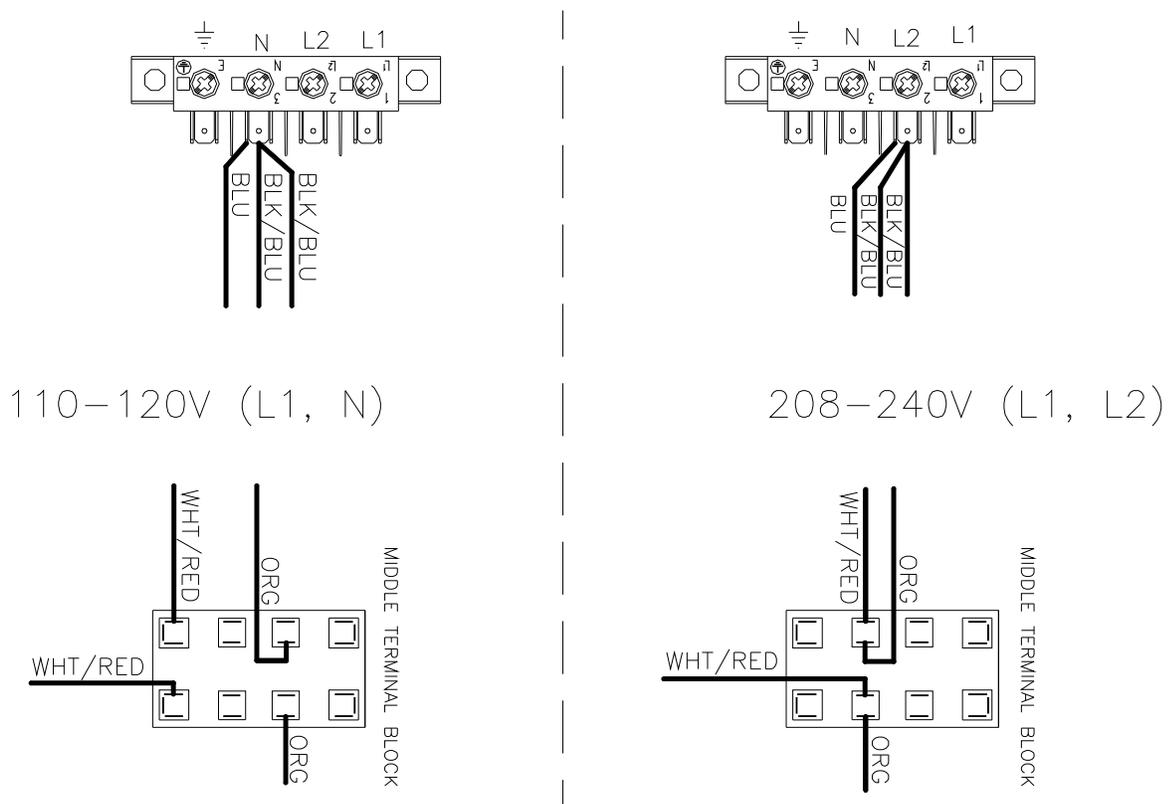
Top Dryer Used For This Example

At the end of the cool down, the Computer Board opens the Upper Run Relay, which removes power from the Motor Control Relay (R1) and also removes power to the Drive Motor. The motor light on the computer board should no longer be illuminated. The Drive Motor and tumbler stops and the Computer Board display now flashes until the dryer loading door is opened. Once the dryer loading door is opened to remove the clothing the display goes back to vend price.

Instructions - Convert a Dual Voltage Stack Dryer from 120V to 208-240V (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.

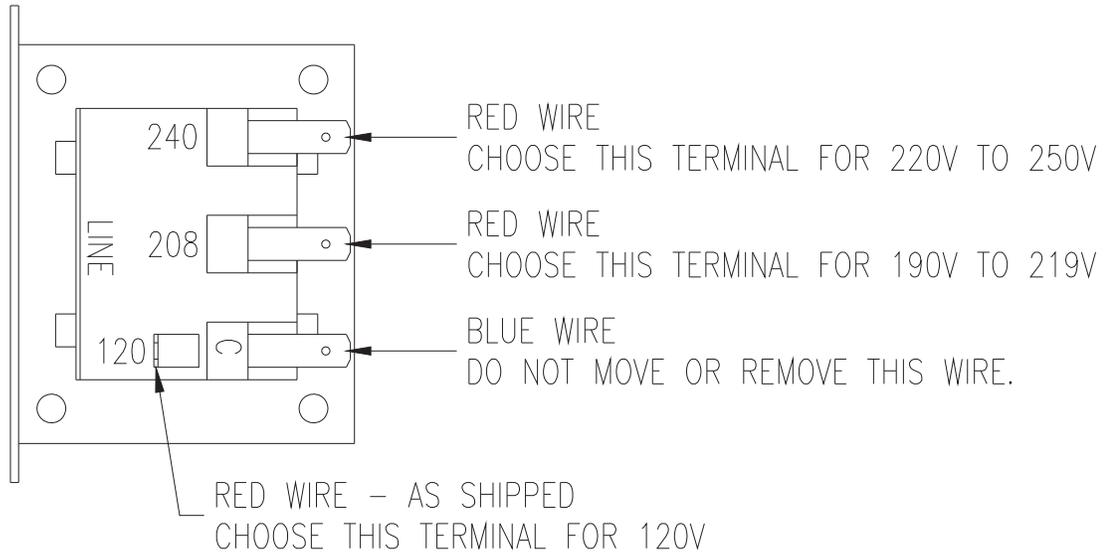
Conversion instructions continued on next page.



8514-259-001 REV B PAGE 30

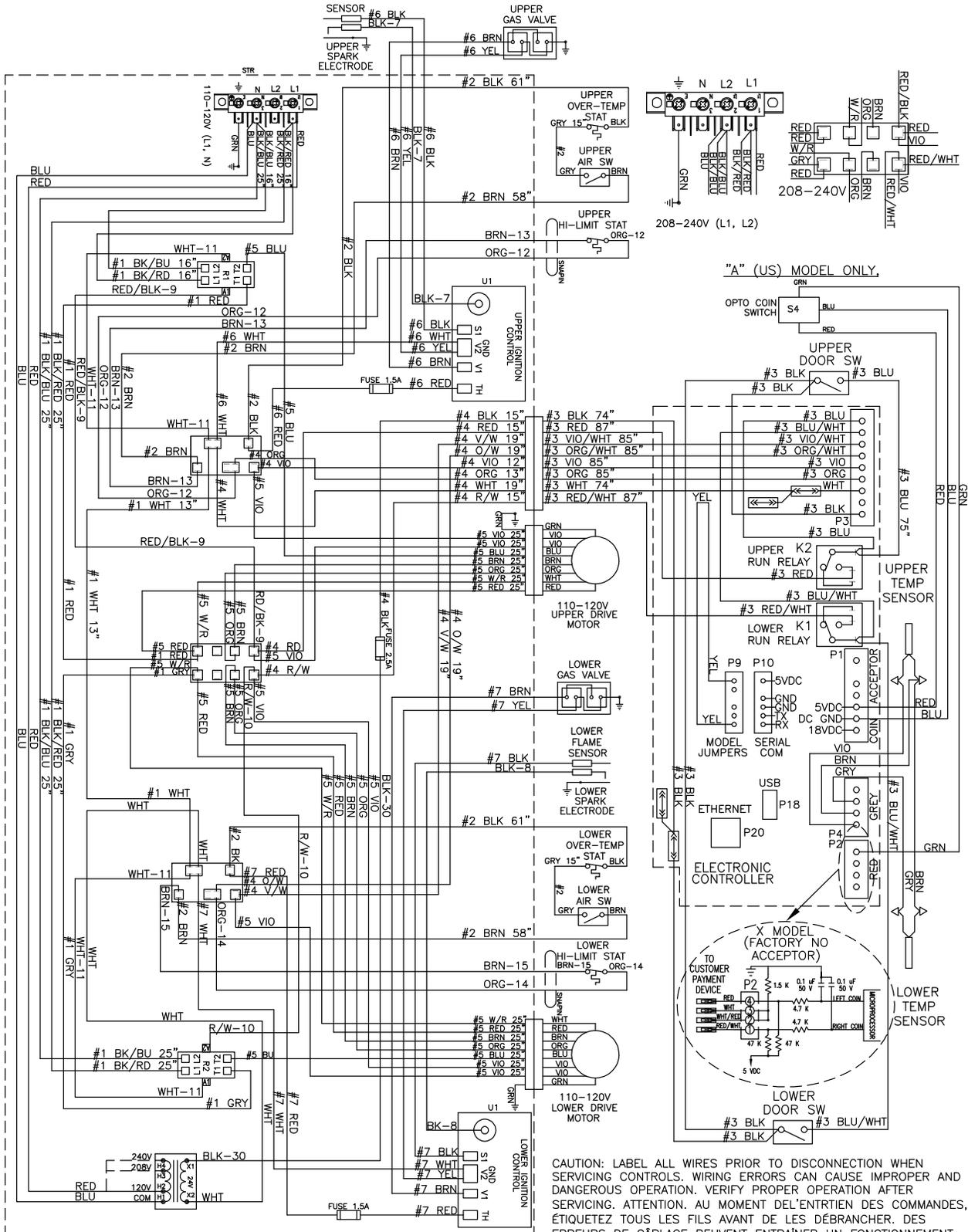
8. Move the red wire from the 120V tap on the transformer found in the bottom of control box to the required voltage tap based on actual supply voltage measurement. See figure below.

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.

30Lbs Wiring Diagram 60Hz

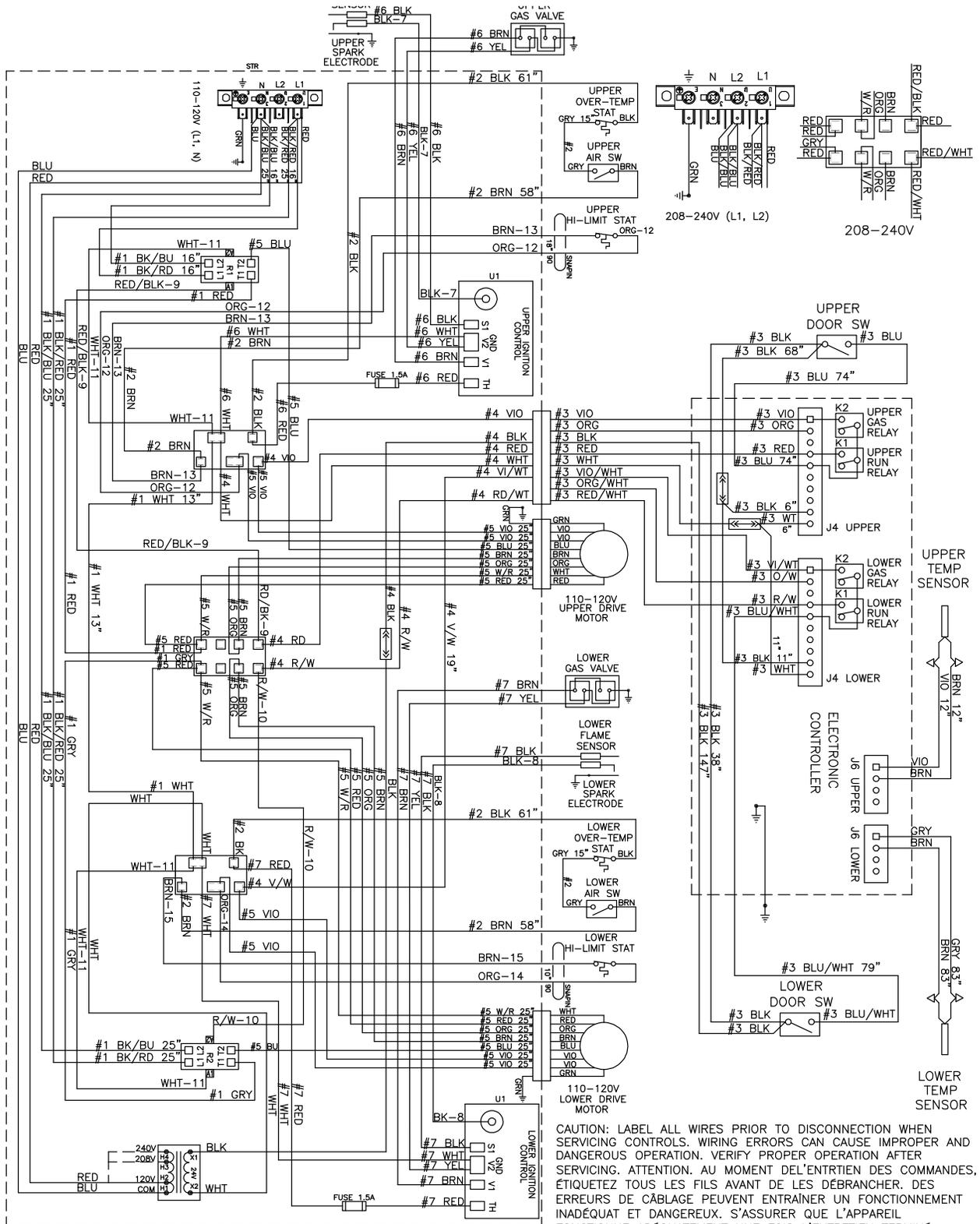


9506-596-001D WIRING DIAGRAM DC50X2N_-15EC2X-

IMPORTANT: RETAIN THIS ELECTRICAL DIAGRAM FOR SERVICE.

CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING. ATTENTION. AU MOMENT DEL'ENTRIEN DES COMMANDES, ÉTIQUETEZ TOUS LES FILS AVANT DE LES DÉBRANCHER. DES ERREURS DE CÂBLAGE PEUVENT ENTRAINER UN FONCTIONNEMENT INADÉQUAT ET DANGEREUX. S'ASSURER QUE L'APPAREIL FONCTIONNE ADÉQUATEMENT UNE FOIS L'ENTRIEN TERMINÉ.

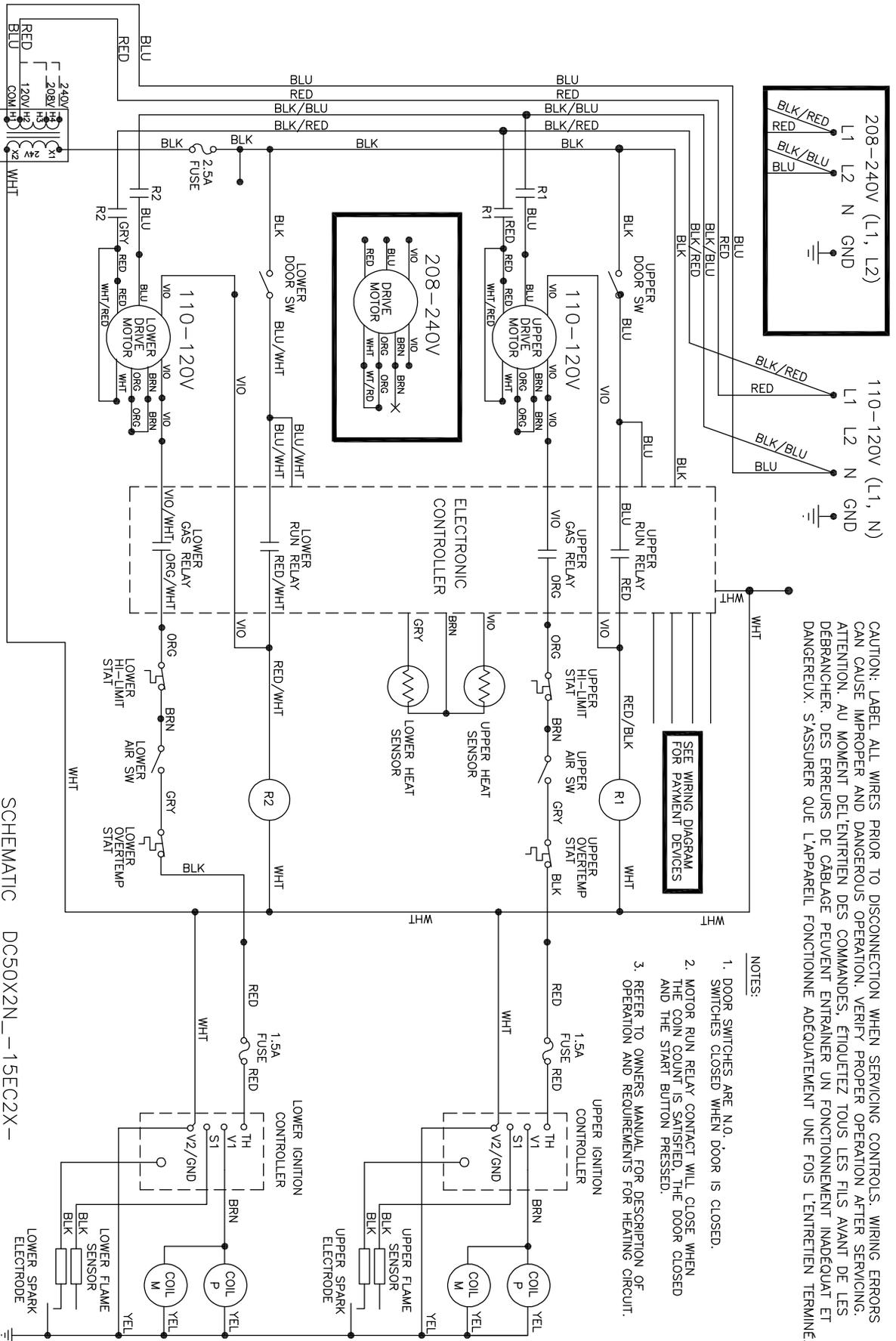
50Lbs Wiring Diagram 60Hz



9506-651-001D WIRING DIAGRAM DN(30/50)X2N_-15EB2X-

IMPORTANT: RETAIN THIS ELECTRICAL DIAGRAM FOR SERVICE.

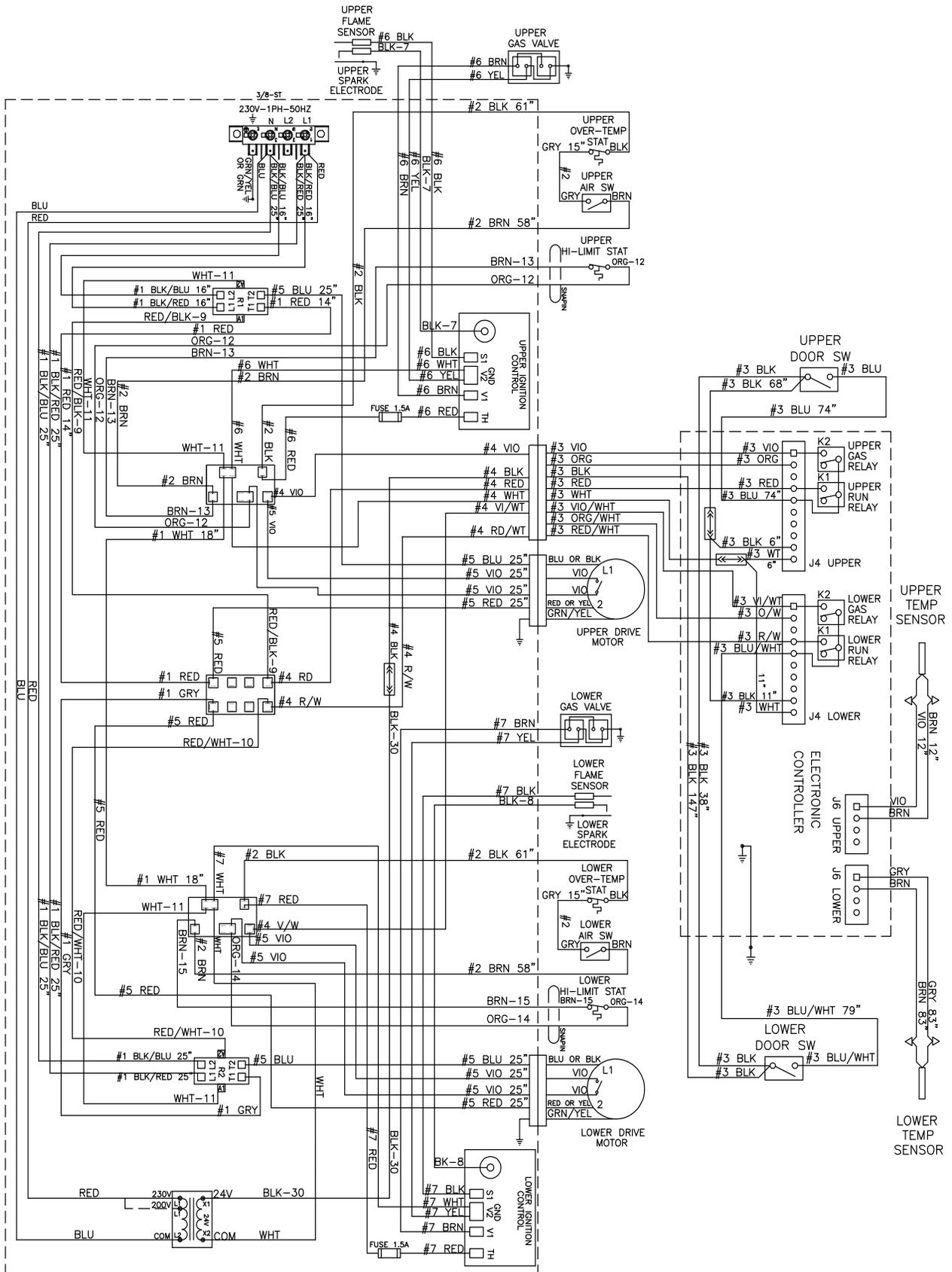
30Lbs - 50Lbs Schematic 60Hz



IMPORTANT: RETAIN THIS ELECTRICAL SCHEMATIC FOR SERVICE.

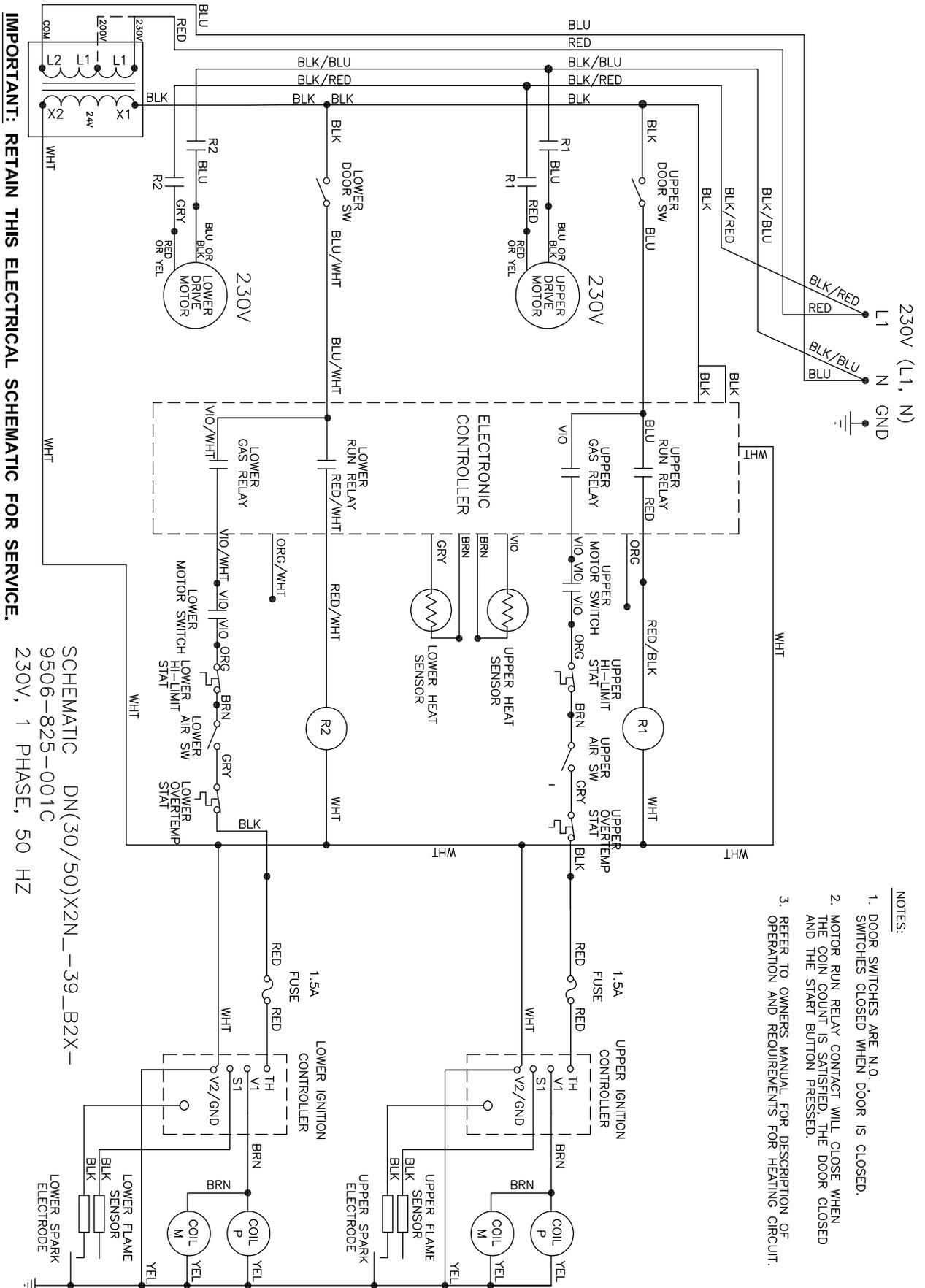
SCHEMATIC DC50X2N-15EC2X-
9506-596-001 REV. D
110-120/208-240V, 1 PHASE, 60 HZ

Wiring Diagram 50Hz



9506-825-001C WIRING DIAGRAM DN(30/50)X2N_-39_B2X-

Schematic Diagram 50Hz



IMPORTANT: RETAIN THIS ELECTRICAL SCHEMATIC FOR SERVICE.

SCHEMATIC DN(30/50)X2N--39_B2X--
 9506-825-001C
 230V, 1 PHASE, 50 HZ

- NOTES:
1. DOOR SWITCHES ARE N.O. SWITCHES CLOSED WHEN DOOR IS CLOSED.
 2. MOTOR RUN RELAY CONTACT WILL CLOSE WHEN THE COIN COUNT IS SATISFIED, THE DOOR CLOSED AND THE START BUTTON PRESSED.
 3. REFER TO OWNERS MANUAL FOR DESCRIPTION OF OPERATION AND REQUIREMENTS FOR HEATING CIRCUIT.

Section 4:

Service Procedures

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.

NOTE: the spacer between the bottom of the door and the hinge.

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.

Door Switch Removal And Installation

1. Each door switch is located directly behind the hinge plate of the loading door assembly.
2. The entire switch can now be pulled from the front panel opening.
3. The switch has two clips that hold it in place on the rear of the switch.
4. With the panel removed, you can now squeeze the two clips and allow switch to be pushed back through panel and grasped from the front and switch removed.

Installation Of Clothes Door Window And Gasket

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

NOTE: Prewarming the gasket makes the installation much easier.

2. Install the window gasket on the clothes door flange. The wider lip of the gasket should be on the bottom side or front face of the clothes door and the ridges should be up.
3. Locate the seam at the latching stud.
4. Apply a soapy water solution or rubber lubricant to the gasket.
5. Slide the glass into the middle of the door ring and gasket with half of the glass above the door and half below.
6. While pressing down on the glass, stand the door up and use a modified screw driver with the end rounded off to install half of the glass. Lay the door down and install the other half.
7. At the six o'clock position, pry the glass up enough to install the black spacer. (reuse from old door gasket)

High Limit Thermostat Locations And Functions

A. Burner Housing- This hi-limit is located on the back side of each 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 Reset Over temperature Safety Thermostats- The second hi-limit thermostat is located on the right side of each burner housing as you view from the back of the machine. It is just above the gas valve and covered by a guard with a small access hole.

1. The manually resettable thermostat limits the operating temperature a dryer can reach should some abnormal situation occur.
2. Should one of the thermostats be tripped, that particular tumbler 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.

REMOVAL: To remove either the hi-limit thermostat on the rear of the burner housing or the over-temperature thermostat on the right side of the burner housing, remove the mounting screws holding its respective guard. Next, remove the terminal of each wires attached to the thermostat. Lastly, remove the mounting screws holding the thermostat to the burner.

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 shutoff 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.

Heat Sensor

This unit takes the place of the regulating thermostat on a mechanical timer dryer. The Heat Sensor is a thermistor. The way these work is fairly simple. As the temperature goes up, the resistance in the thermistor (heat sensor) goes down. As the temperature drops, the resistance in the thermistor (heat sensor) goes up.

Electronic Control Removal

Unlock the retaining lock in the control assembly. Slide the control out of the machine holding the control by the metal tray. There is enough wire length to allow removing the control tray from the machine before disconnecting the wires.

Membrane Switch Replacement

The control buttons are an adhesive membrane switch assembly which may be replaced separately. Slide the control out to gain access to disconnect the ribbon connector. The ribbon connector must be pushed solidly and squarely into its connector when connecting a new membrane switch.

Temperature Sensor Testing

If either tumbler display shows an F1 or F2, that is an indication of possible temperature sensor problems for that tumbler. Before replacing a sensor, check the wires and connections of the sensor for damage. The sensor lead wires are very small and care should be used in routing and connecting them. The sensors are located under the tumblers and may be viewed by removing the lint screen. The temperature sensor should have 10,000 ohms resistance at room temperature if okay.

Temperature Testing

To check the temperature in the dryer tumbler, press and hold the upper or lower start button for the tumbler being checked and while holding the start button also press the temperature button for the temperature to be checked. The display will read out the current temperature.

30Lb Stack Temperature Sensor Removal

UPPER - Remove front panel, see front panel removal procedure, in the Control area remove the two gray wire nuts connecting the Temp sensor harness. Remove cap plug and slide Temperature probe into the control compartment area, be careful not to loose the retainer clip (9486-137-002) that is on the Temp probe inside the lint tray area. Reinstall in reverse operation.

LOWER - Remove Lower Panel, see lower panel removal procedure, in the left lower cavity remove the two gray wire nuts connecting the Temperature Sensor harness. Slide the Temperature Probe to the left cavity area to remove, be careful not to loose the retainer clip (9486-137-002) that is on the Temp probe inside the lint tray area. Reinstall in reverse operation.

50Lb Stack Temperature Sensor Removal

UPPER - First remove Electronic Control. Once the Control is removed, disconnect Temp Sensor wires by removing the two gray wire nuts. Remove the two temp sensor mounting screws, 5/16 head, remove Temp Sensor bracket assy. Remove sensor from bracket and replace and reinstall in reverse operation.

LOWER -To remove the Lower Temp Sensor and Bracket it is necessary to remove the Lower front panel; note you will have to loosen the upper panel to remove the lower panel, and disconnect the door switch wires. Next disconnect Temp Sensor wires by removing the two gray wire nuts. Remove the two temp sensor mounting screws, 5/16 head, remove Temp Sensor bracket assy. Remove sensor from bracket and replace and reinstall in reverse operation.

30Lb Stack Upper Front Panel Removal

UPPER - To remove the front panel the door assembly must be removed. First remove control and lint screen, next remove Door hinge upper special screw, 9545-052-001 3/16 allen wrench, and remove door. Next remove the four hinge strap torque screws, T20, and the upper right torque screw, and the three torque screws on the left hand side. Now the panel is loose. Next you must disconnect the door switch wires before you can remove the panel.

LOWER - To remove the Lower front panel the Control and upper lint screen plus the door must be removed. The front panel has to be loosened by removing the two lower torque screws (T20) on the upper door hinge and the left lower torque screw to loosen the front panel. The lower lint screen must be removed. Next remove Door hinge lower special screw, 9545-052-001 3/16 allen wrench, and remove door. Next remove the four hinge strap torque screws, T20, and the two torque screws on the left hand side. Now the panel is loose. Next you must disconnect the door switch wires before you can remove the panel.

NOTE: Always remove power from the machine before performing maintenance on the machine.

50Lb Stack Upper Front Panel Removal

The loading door does not have to be removed to remove the front panels on this model.

1. Remove the left two screws with finish washers.
2. Remove the right two screws with finish washers, at this time the front panel is loose but connected by the harness to the door switch.

Lower Front Panel Removal

To remove the lower front panel a procedure similar to the upper may be used. However, the bottom of the upper panel must be loosened and pulled out to allow the upper flange of the lower panel clearance to be removed.

NOTE: Always remove power from the machine before changing drive belts or working with the drive 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. Cut the old motor belt and remove. The new motor drive belt fits inside of three of the four motor mounting bolts. To achieve this, remove these three bolts one at a time and slide the belt in past each in turn. In this way the motor is always supported by 3 bolts at any time.

NOTE: All drive belts are self adjusting.

Tumbler Pulley Removal And Installation

Remove the 1 1/2" nut and lock washer. Pull the pulley off the shaft. Watch for the locking key on the tumbler shaft. Upon installation, the tumbler nut should be torqued to 150 ft./lbs.

Intermediate Pulley And Tension Arm Removal

1. The intermediate pulley is retained with a snap ring. Remove the snap ring and the pulley slides off the shaft.
2. With the pulley off, there is access to the self adjusting tension arm assembly. The tension arm assembly may be removed by removing the snap ring that holds it to the tension arm support assembly pin. The arm assembly is replaced as a complete unit.
3. The grease fitting for the intermediate shaft should be greased monthly.

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.

Motor Blower Assembly Removal And Installation

1. Remove Belts
2. Disconnect Motor harness connector.
3. Remove Tumbler pulley. Remove 3/4" bolt, Next remove pulley using "T" bar puller (needed two 3/8"-16 UNC bolts).
4. Remove Idler pulley. Using snap ring pliers, remove snap ring and pulley.
5. Remove Blower back plate (Motor attached). Remove 1 5/16" harness clamp bolt, then remove nine 3/8" nuts and then tilt blower fan to remove.
6. Blower fan is held in place with 2 square headed set screws. Upon reassembly, one blower set screw should fit in the counter sink and the other should mount on the flat side of the shaft. Use red loctite on the set screws and torque to 165 in/lbs.
7. The Motor is mounted with 4 bolts to the motor mounting bracket on the rear of the dryer.
8. Reassemble in reverse order.

Air Flow Switch Operation And Adjustment

The air flow switch assembly is part of the ignition safety circuit and insures that the burners don't operate unless there is air flow. When the drive motor and blower are running the flat actuator is pulled in against the back of the dryer closing the switch. If this doesn't happen ignition will not occur. The air flow switch assembly is mounted by two screws through the bracket. It can be adjusted by loosening these mounting screws and moving the switch forward or backward.

Ignition Transformer Fuse

The 1 1/2 amp fuse protects the ignition transformer. To remove it just twist and pull it out.

Ignition Control Transformer

When heat is called for, the ignition control transformer steps 120VAC down to 24VAC to power the ignition control.



Electronic Ignition Module

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

1. The electronic ignition module for each tumbler is located inside the electrical box. This is the metal box on the back of each tumbler area directly to the right of the final drive pulleys.
2. The red wire from the transformer traveling thru the 1.5 amp fuse and into the module supplies the 24VAC 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 Ignition Module Removal

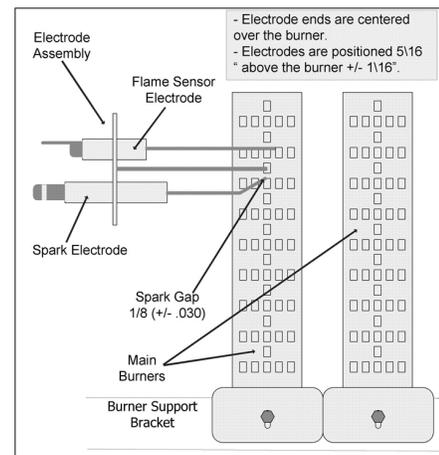
If the ignition modules are mounted on a bracket, see section A. Otherwise, see section B.

A: With mounting bracket

Remove the connector housing of the wiring harness attached to the ignition module. Then, remove the terminal of the hi-voltage cable attached to the ignition module. Next, remove the mounting screws holding the ignition module mounting bracket in the rear control box. Lastly, remove the nuts holding the ignition module on its mounting bracket.

B: Without mounting bracket

Remove all of the terminals of the wiring harness attached to the ignition module. Then, remove the terminal of the hi-voltage cable attached to the ignition module. Lastly, remove the mounting screws holding the ignition module in the control box. If there is no spark or intermittent spark, check black hi-voltage lead wire for damage



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 electronic control calls for heat.
2. If the drive motor is running, the motor safety circuit provides power to the electronic control. If the control senses that the heat should be on, a circuit is closed allowing power through the high limit thermostat and air flow switch to the ignition transformer. The transformer provides 24VAC to the ignition module and sparking occurs at the ignition electrode. At the same time 24VAC is applied to the gas valve.
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 electronic control will try this sequence for 3 tries. Normally the 10 seconds "Trial For Ignition" period is ample to establish and prove flame.
5. If the flame is shutdown or blown out during operation, the ignitor will immediately go into "Trial For Ignition" again for 10 seconds.
6. However, at the end of 3 separate retries of 10 seconds "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 "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.

Spark Electrode Assembly-Removal

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

Gas Valve Removal (shut off manual gas valve to stop gas flow before removing gas control valve)

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

1. Remove the 4 screws securing the cover for the burner housing and the one screw mounting the high limit cover. With the burner housing cover removed, there is complete access to the burner assemblies.

Recirculation Chamber Inspection

1. Remove Resettable manual overtemp sensor and remove inspection plate in burner chamber between main burners and rear back panel of dryer.

Cylinder Removal

1. Remove the front panel in front of the cylinder.
2. Remove drive belt, pulley, and key from cylinder shaft.
3. Pull the cylinder from the front of the machine.

Adjustment Of Cylinder Assembly With Front Panel Removed

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 1/4" thick shim at the 3 and 9 o'clock positions and a 1/8" 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, and 9 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.

Tumbler Through Bolt Access Cover

Remove 4 screws that mount the air flow switch to the back of the dryer. Remove 2 screws that retain access cover. With access cover removed, tightness on the tumbler through bolts can be checked and tumbler alignment can be adjusted.

Bearing Housing Removal

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

Section 5:

Troubleshooting

Trouble Shooting

Electronic Control Diagnostic Lights

The electronic control has 6 diagnostic lights to aid in service of the dryer. Each pocket has indicator lights for the motor circuit, door switch circuit, and the heat circuit. When the electronic control is carefully unlocked and moved forward these lights are visible on the circuit board. They are each labeled as to function indicated.

1. When either dryer door is closed, the appropriate door light on the computer should be illuminated indicating that the door is closed.
2. When either dryer is running, the appropriate motor light on the computer should be illuminated indicating that the computer is calling for the motor to operate.
3. When either dryer is calling for heat, the appropriate heat light on the computer should be illuminated indicating that the computer is calling for heat.

An example of their function would be troubleshooting an upper dryer pocket that did not heat.

1. Start the machine and insure that it did not heat.
2. Check the upper heat light and see if it is lit.
3. If the heat light is on, this would indicate that the computer was calling for heat and that it was not at fault. You would then go on to check the rest of the heat circuit.

Electronic Control Test Cycle

This test cycle allows the dryer to run for 5 minutes without the need for adding money while servicing. To actuate this 5 minute test cycle leave the loading doors closed, unlock the computer and push the program button on the right front corner of the computer as if you were putting it into the program mode. This will give a 5 minute cycle on both tumblers for evaluating the machine.

Trouble Shooting Fault Codes

- F1 Shorted sensor or shorted sensor wire harness
- F2 Open sensor or sensor wire harness disconnected
- F3 Possible grounding problem. Try powering down and repowering and then push programming button to start dryer. Try resetting with Palm Pilot (extra utilities file). If no success. Try removing battery and reinstall battery.
- F4 Micro Chip Problem. Replace controller.
- F5 Microchip Electrical Problem. Remove power for 1 minute and then power on. Try removing battery and reinstalling on control PCB/

Troubleshooting Tips

Symptom	Probable Cause	Suggested Remedy
Tumbler does not turn	Drive belts	Check both drive belts. Replace if failed.
	Drive motor	Check capacitor and motor. Replace if failed
	Door switch	Check door switch contacts and adjustment. Adjust or replace the door switch
	Electronic Control	Is electronic control closing motor relay to power drive motor? Check for motor light on electronic control. If no light change control. If light is on, check voltage and wiring to motor.

Symptom	Probable Cause	Suggested Remedy
Tumbler turns but no spark at burner	Glass fuse	Check small glass control fuse in back of dryer. Replace if failed.
	Temperature Sensor	The temperature sensor should have between 30,000 ohms and 60,000 ohms resistance at room temperature if okay. Replace if not in this range.
	Ignition	Check for 24VAC output from transformer.
	Transformer	Replace if have 120V between black & white and no 24V between red and yellow.
	Over temperature	Check to see if manually resettable thermostat. Thermostat is kicked out. Reset by pushing red reset button.
	Ignition control	Check for 24VAC coming into the control on the at burner red wire. If voltage, then check for 24VAC out on the brown wire. Also check for spark at the ignitor. If no 24VAC output or no spark to the ignitor, replace ignition control.
	Air Flow Switch	Check air flow switch to be sure it closes when dryer is running. If not, adjust or replace switch.
	Hi-limit	Check for continuity. Should be 0 ohms resistance when cold. If not, replace thermostat.
	Gas supply	No gas can cause system lockout
	Electronic Control	Is electronic control closing gas relay to power Control heat circuit? Check for gas light on electronic control. If no light change control. If light is on, check voltage and components in heat circuit at transformer at rear of unit.

Symptom	Probable Cause	Suggested Remedy
Tumbler turns, ignition sparks, no flame	Gas supply	Make sure gas supply is working.
	Gas pressure	Make manometer check of gas pressure. Adjust if necessary.
	Spark Electrode Sensor	Check for damage to electrode or mounting. Replace if necessary.
	Gas valve	Check coil continuity, replace valve if failed.
	Ignition Control	Check for 24VAC to gas valve coils. If no voltage replace ignition control.
Burner Lights, but goes on and off	Electrodes	Check low voltage harness for possible wire break or cuts to allow no signal back to ignition control

Symptom	Probable Cause	Suggested Remedy
Erratic display	Initial Start-up	If erratic on initial start-up, leave power on for approximately one hour and check machine operation again.
	Grounding	Machine must be grounded by separate conductor back to neutral bar in breaker box.
	Program	Check program and make corrections if necessary.
	Voltage spike	Power down machine for 20 seconds and repower. If no improvement, replace control.
Manual overtemp Tripping Frequently	Recirculating chamber Lint Accumulation	Remove manual overtemp thermostat and inspect in chamber for excessive lint build up. Access also gained to this chamber by removing recirculation duct mounted at bottom of chamber, or the panel inside burner chamber between burners and rear back panel
	Exhaust ducting Excessive lint buildup	Remove exhaust duct at rear of dryer and inspect for excessive lint build up in complete duct from dryer to where duct exits building.
	Clean lint on of top heat air chamber above tumbler	Remove front panel completely. Be careful of any wiring attached. Remove heated air chamber cover and clean above tumbler back to burner housing.



Section 6:

Parts Data
30# Stack

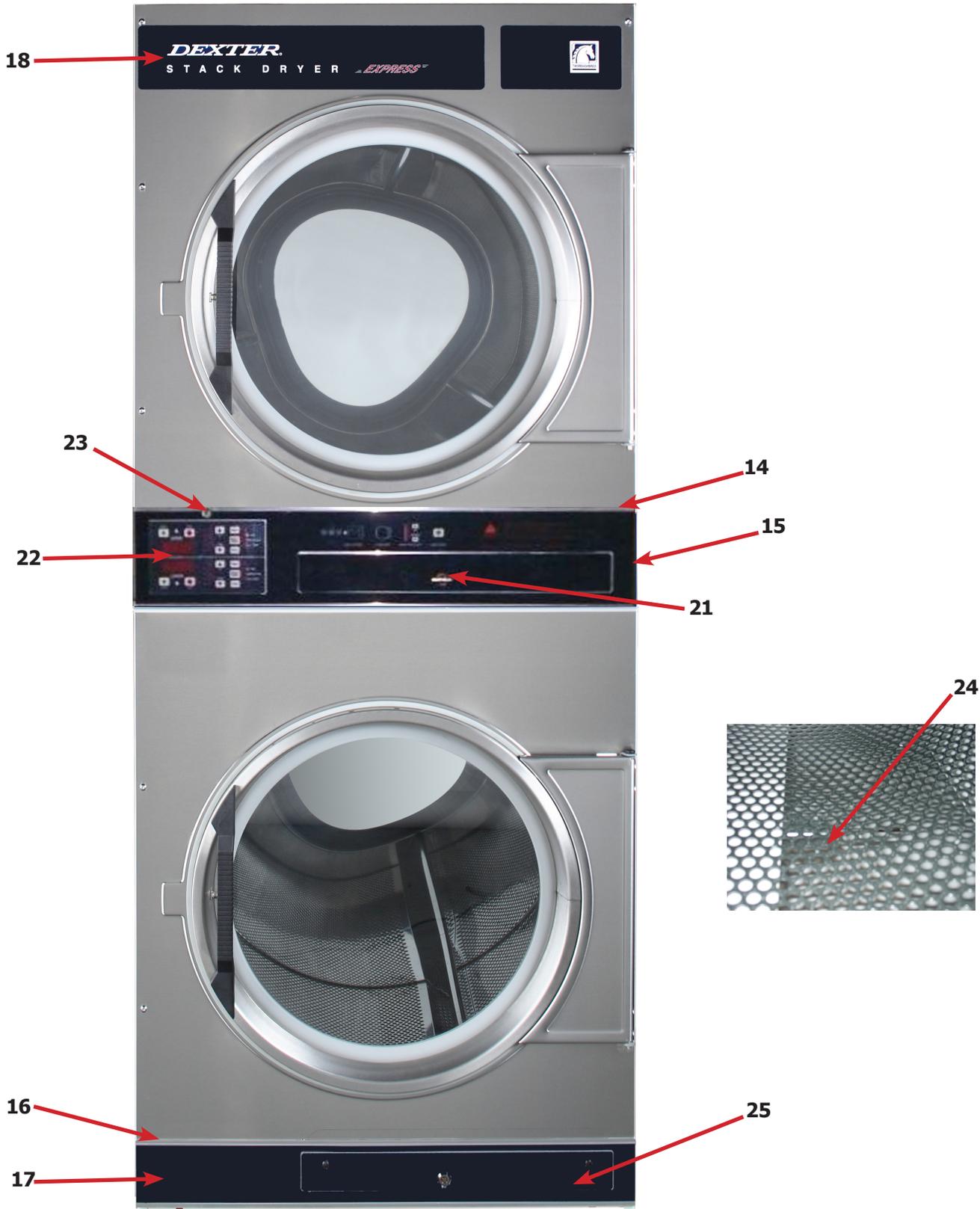


Cabinet Group - 30 lbs

Key	Part Number	Description	Quantity
*	9960-256-032	Door Assy., Loading Complete-Wht	2
*	9960-256-034	Door Assy., Loading Complete-SS	2
1	9960-255-008	Door Assy., Loading-SS(ring only)	2
2	9982-280-014	Plate Assy., Hinge (Wht) No Pin .....	.2
2	9982-280-012	Plate Assy., Hinge (SS) No Pin.....	2
*	9545-012-015	Screw, Hinge to Door	8
*	8640-413-002	Nut, Hinge to Door	8
3	9212-002-003	Glass, Door	2
4	9206-413-001	Gasket, Glass (Black).....	2
*	9548-117-000	Support, Door Glass .....	.2
5	9206-420-003	Gasket, Outer Rim (Black)	2
6	9244-082-001	Handle, Loading Door	2
*	9545-018-017	Screw, Handle 1/4-20 x 3/8	2
*	9531-033-001	Stud, Door Catch	2
*	8640-413-001	Nut, Hex	2
*	8640-413-003	Nut, Acorn	2
*	9086-015-002	Catch, Loading Door .....	.2
*	8638-190-009	Pop Rivet for mtg. catch	4
*	8641-582-019	Lockwasher	4
*	8640-399-001	Spring Nut .....	.6
7	9989-569-006	Panel Assy., Front- Lower (Wht)	1
7	9989-569-004	Panel Assy., Front- Lower (SS) .....	.1
8	9989-568-006	Panel Assy., Front- Upper (Wht)	1
8	9989-568-004	Panel Assy., Front- Upper (SS) .....	.1
9	9545-008-014	Screw, Phillips 10B x 1 3/4".....	14
9	8541-585-001	Washer finish	6
*	8640-399-001	Nut, Spring	12
10	9544-072-002	Strap, Hinge .....	.2
*	9345-012-028	Screw, Hinge to Panel	8
11	9545-052-001	Screw, Door to Hinge Strap (Special Black Type) .....	.2
*	8641-436-003	Washer, Fiber	2
*	9472-001-013	Cabinet Touch Up Paint (White)	1

Cabinet Group - 30 lbs (continued)

Key	Part Number	Description	Quantity
14	9141-175-002	Escutcheon, Upper	1
15	9435-026-001	Trim, Overlay-Upper (Blue).....	1
15	9435-034-001	Trim, Overlay-Upper (Black)	1
16	9141-176-002	Escutcheon, Lower	1
17	9435-020-001	Trim, Overlay-Lower (Blue).....	1
17	9435-028-001	Trim, Overlay-Lower Black)	1
18	9412-154-001	Nameplate Stack Dryer Express (Blue).....	.1
18	9412-167-001	Nameplate Stack Dryer Express (Black) .....	.1
21	8650-026-002	Lock, Thumb Turn	2
22	9857-187-001	Controls Assy, Electronic Mounted With Membrane Switch (Blue). 1	1
22	9857-187-003	Controls Assy, Electronic Mounted With Membrane Switch (Black) 1	1
22	9801-096-001	Membrane Switch Assy (Blue)	1
22	9801-105-001	Membrane Switch Assy (Black).....	1
23	8650-012-003	Lock and Key, Control #6324	1
24	9501-006-002	Sensor Temp Control.....	2
24	9486-137-002	Retainer - Push On.....	2
25	9866-004-010	Lint Drawer Assembly (Blue)	2
25	9866-004-013	Lint Drawer Assembly (Black).....	2
25	9435-003-009	Overlay trim, lint dwr, upper/lower (Blue)	1
25	9435-029-002	Overlay trim, lint dwr, upper/lower (Black).....	1
*	9545-020-009	Screw.....	10
*	9532-143-001	Felt Seal (back of lint screen assembly)	2
*	9181-036-001	Lint Screen Assembly ONLY (no front)	2
*	9555-057-002	Replaceable Lint Screen Only .....	.2
*	9095-044-001	Cam, Lock Lint Drawer .....	.2
*	9545-008-001	Lint Screen Strap Hold Down Screws 10Bx 1/4	32
*	9627-885-001	Harness, Electronic Control .....	.1
*	9095-044-001	Cam, Lock Control.....	1
*	6292-006-007	Key 6324 only for Computer.....	2
*	9627-886-001	Harness, Heat Sensor.....	1
*	9277-041-011	Insulation Cabinet Cover .....	.1
*	9209-037-002	Grommet, 3/16 ID	2
*	8544-006-001	Leg, Leveling 1/2"	4
*	8545-060-002	Leveling Leg Wrench	1
*	9074-261-001	Cover, Cabinet (Top).....	1
*	9732-102-011	LP Kit for DDAD Dryers.....	1
*	9732-243-001	Stack Dryer Trunnion Puller.....	1
*	9555-057-003	Replaceable Lint Screen Fine Mesh Only .....	.1
*	9277-063-001	Insulation-Front Panel-Top Half	2
*	9277-063-002	Insulation-Front Panel-Lower Half.....	2
*	8640-276-002	Wire Nut Connector Grey.....	4
*	9527-007-002	Standoff Wire Saddle.....	8
*	9544-041-002	Strap - Bead Tie.....	1

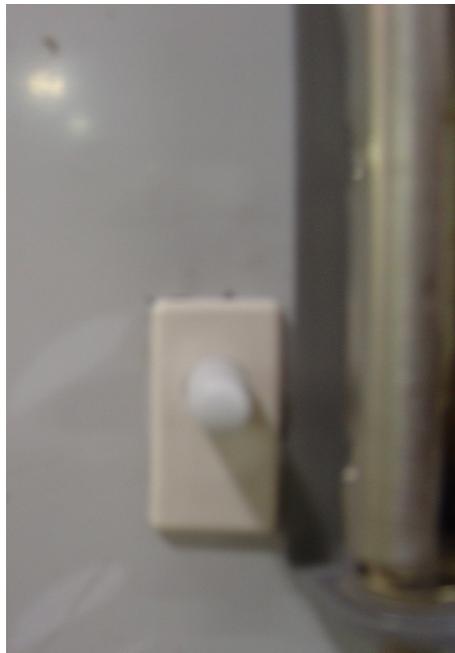
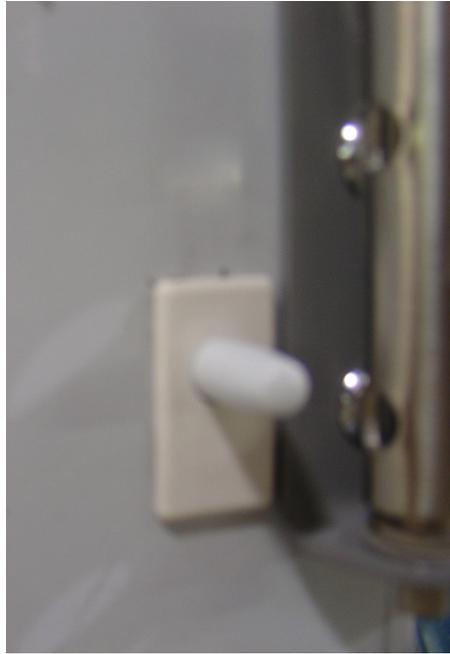


Door Switch Group - 30 lbs

Part Number
9539-487-001

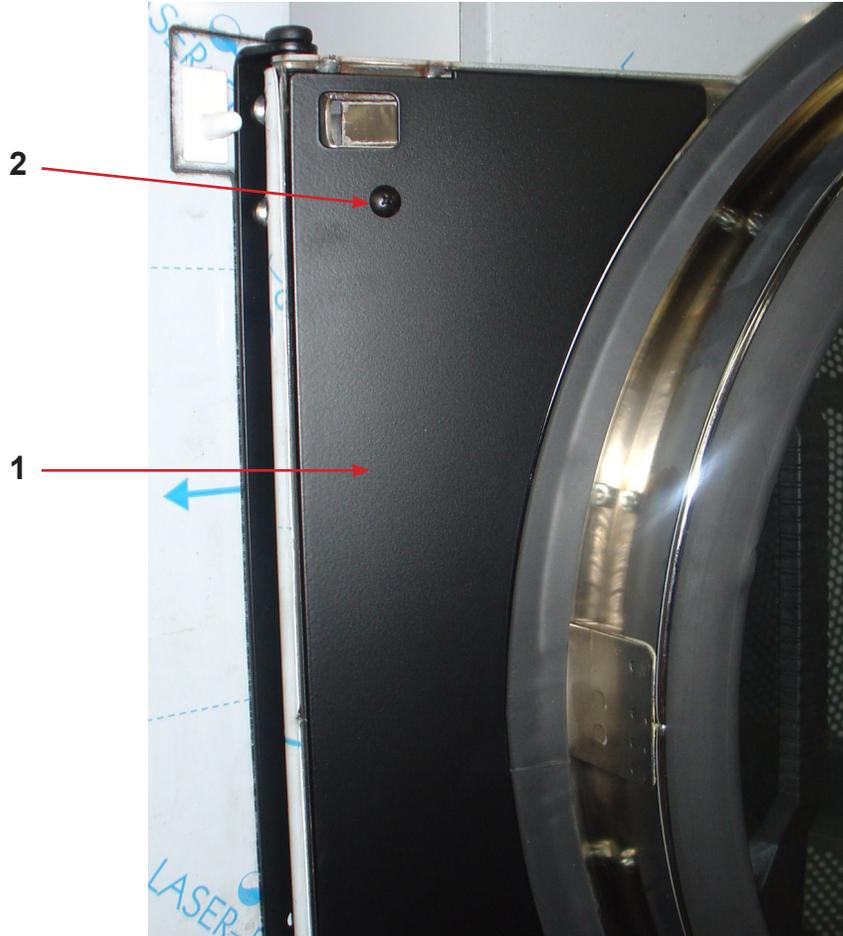
Description
Door Switches2

Quantity



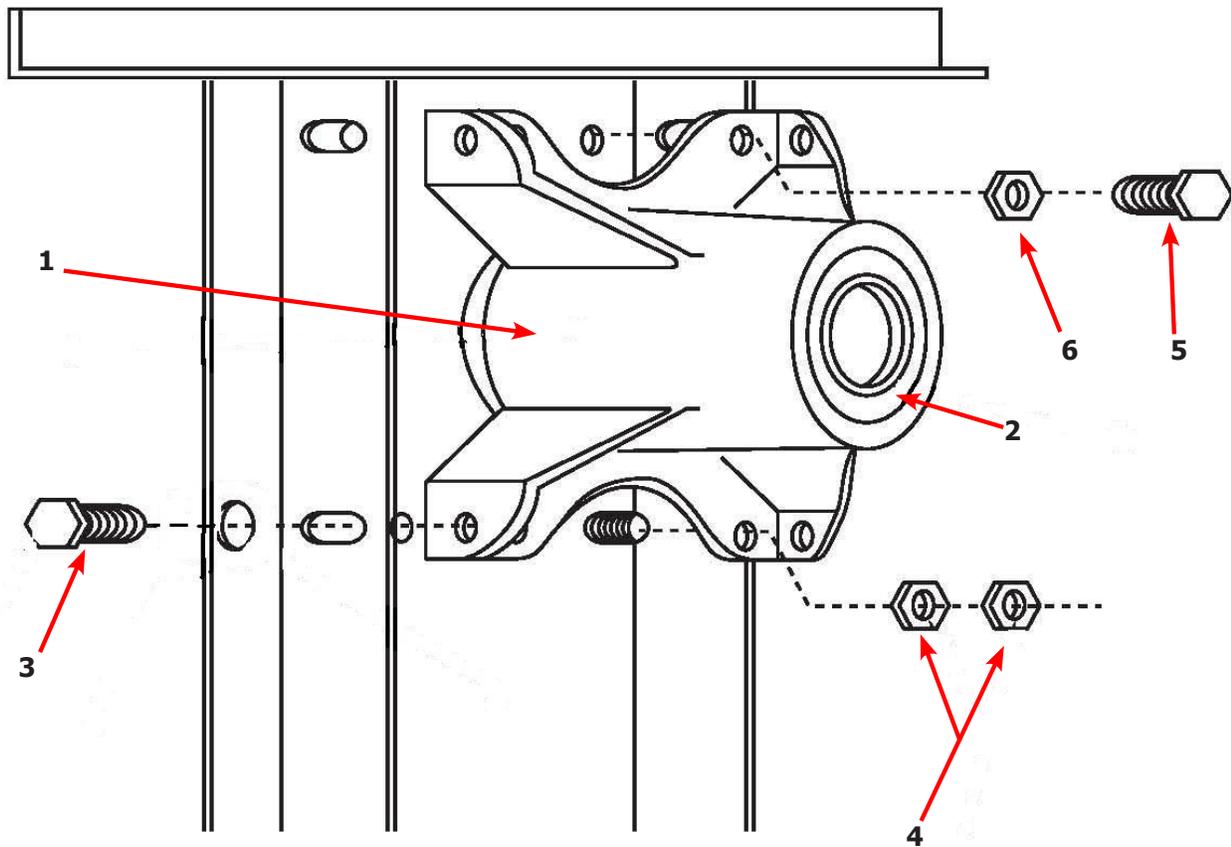
Hinge Plate Cover

1	9074-341-002	Cover-Hinge, Black.....	2
2	8636-018-001	Screw-TRHDCR, 10B x 3/8, Black.....	4



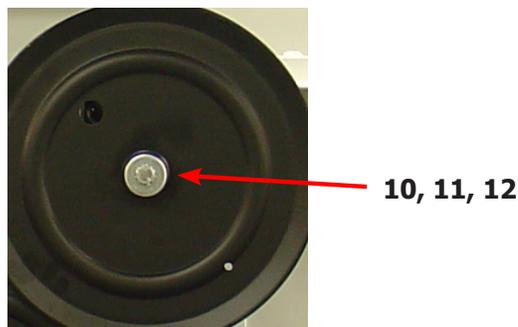
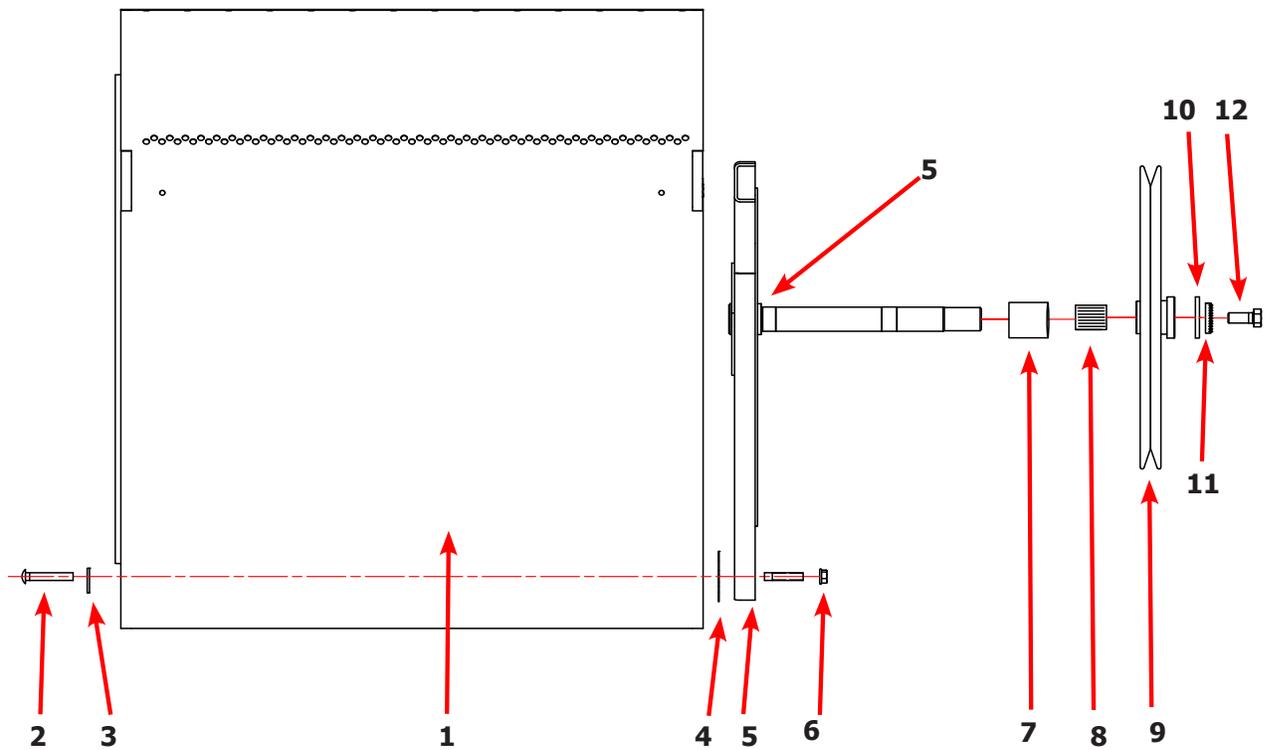
Bearing Housing Group

Key	Part Number	Description	Quantity
*	9803-160-003	Bearing Housing Complete Assy (Includes bearings & Spacer).....	1
1	9241-161-002	Housing, Bearing.....	1
*	9036-130-001	Bearing, Ball, Front	1
*	9538-139-002	Spacer, Bearing	1
2	9036-130-001	Bearing, Ball, Rear	1
3	9545-049-002	Screw-Wizlock, 3/8-24x3/4	4
4	8640-400-002	Nut, 5/16-18.....	4
5	9545-049-001	Screw, 3/8-24x1.....	2
6	8640-415-002	Nut, 3/8-24.....	2
*	9538-139-002	Shim, Tumbler	AR



Tumbler Group

Key	Part Number	Description	Quantity
*	9848-147-001	Tumbler Assy Complete W/Spider (GALV).....	1
*	9848-147-002	Tumbler Assy Complete W/Spider (SS & Galv front).....	1
1	9848-146-001	Tumbler Assy (Galvanized).....	1
1	9848-146-002	Tumbler Assy (Stainless Galvanized front).....	1
2	9497-019-003	Rod, Tumbler.....	3
3	8641-554-001	Washer, Special.....	3
4	9552-013-003	Shim.....	AR
5	9568-015-001	Spider Assy.....	1
6	8640-415-004	Nut, Wiz Lock.....	3
7	9538-164-001	Spacer-Shaft.....	1
8	9487-234-005	Tolerance Ring.....	1
9	9908-049-002	Pulley, Driven.....	1
10	8641-581-026	Washer -Flat.....	1
11	8641-582-016	LockWasher - IntTooth, 1".....	1
12	9545-017-009	Screw, 1/2-13x1 1/4.....	1

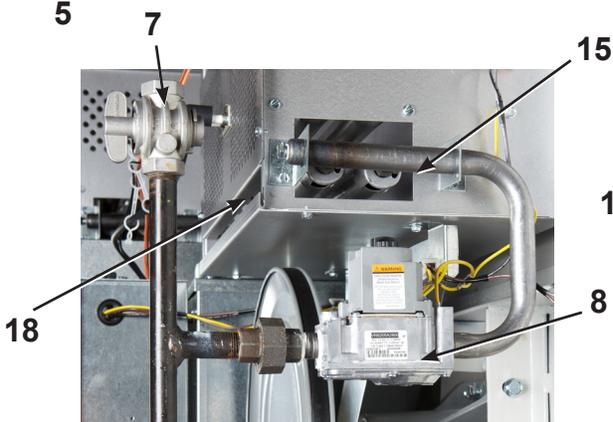
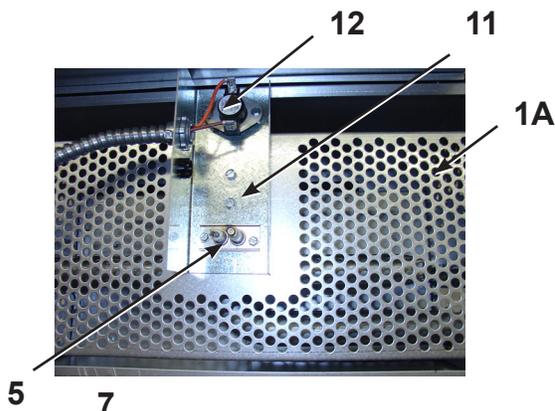
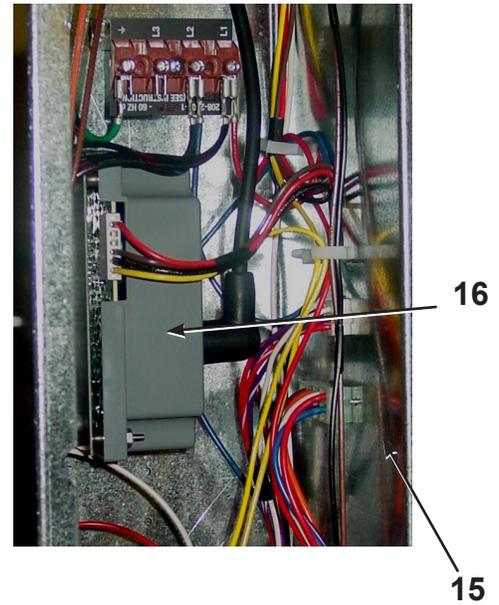
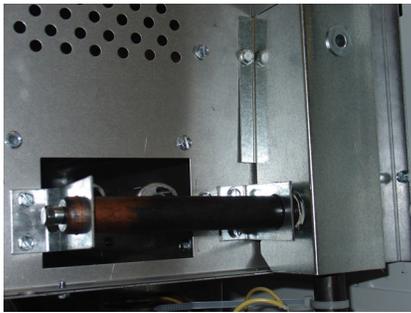
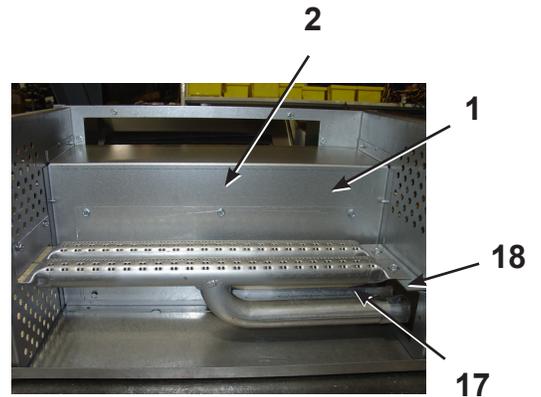
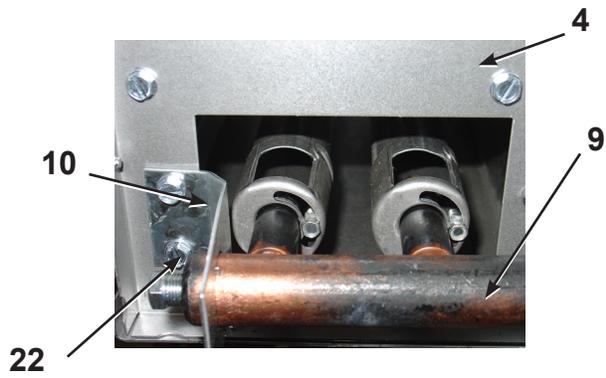


Burner Housing Group - 30 lbs

Key	Part Number	Description	Quantity
1a	9452-730-001	Service Burner Plate Front... ..	2
1	9452-729-001	Service Plate baffle Recirculation Chamber Clean Out	2
2	9545-008-001	Screw	16
18	9003-220-001	Angle, Burner Support	2
17	9048-020-001	Burner, Main	4
4	9545-008-001	Screw 10B x1/4" .....	.8
5	9875-002-003	Electrode Assy, Ignition	2
19	9545-045-001	Screw, Electrode Mtg 8B x 1/4"	4
7	9379-186-001	Valve, Gas Shut Off (Optional)	1
8	9857-192-001	Control Assy, Gas	2
9	9381-012-001	Manifold, Assy 2 Part 1 Piece	2
22	8615-104-038	Pipe Plug in end of Burner Manifold	2
11	9452-749-001	Plate Assy, Hi-Limit Stat Ignitor	2
12	9576-203-002	Thermostat, Hi-Limit	2
13	9074-329-001	Cover, Hi-Limit Stat Ignitor	2
15	9074-336-001	Cover, Safety Stat	2
16	9857-116-003	Control, Ignition Fenwall (3 trybox)	2
*	9803-229-001	Housing Assembly, Burner .....	.2
*	9545-008-006	Screw 10AB x 3/8"	4
*	9545-991-001	Panel, Back Burner Housing.....	2
*	9425-069-023	Orifice, Burner-Natural #125	4
*	9425-069-024	Orifice, Burner-LP #49.....	4
*	9039-915-001	Bracket, Gas Control	2
*	9545-008-006	Screw .....	.4
*	9538-142-001	Spacer, Hi-Limit	4
*	9545-045-007	Screw 8B x 3/4"	4
*	9545-008-006	Screw	6
*	9576-207-008	Thermostat, Safety Shutoff	2
*	9545-008-006	Screw	4
*	9545-008-006	Screw	4
*	9550-173-001	Shield, Burner Inlet .....	.1
*	9732-102-011	Kit, LP Conversion DDAD Kit .....	.2

^ Models built before 9/07

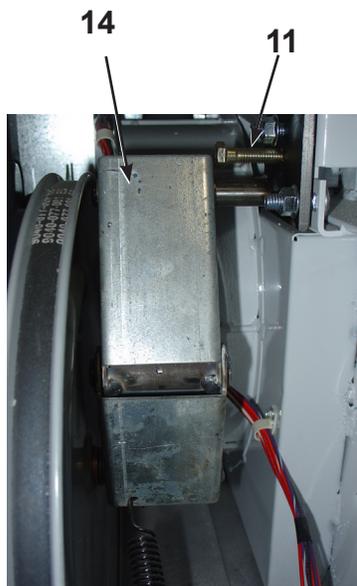
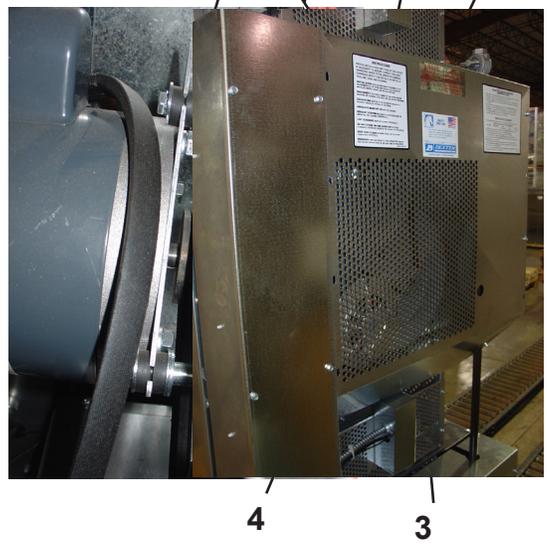
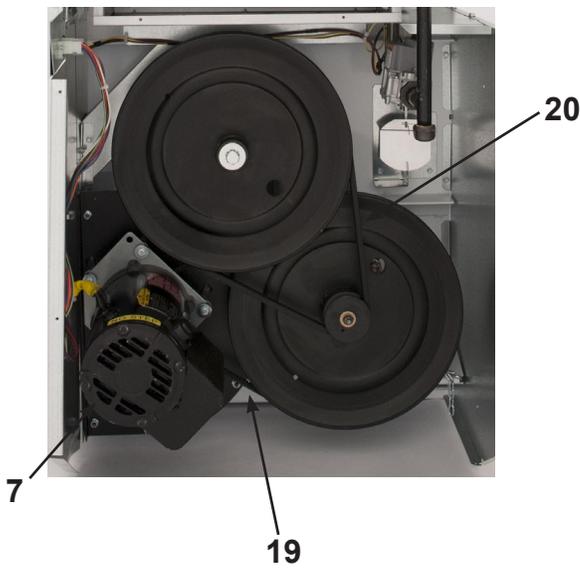
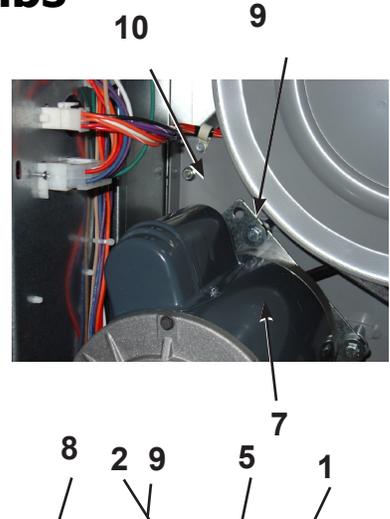
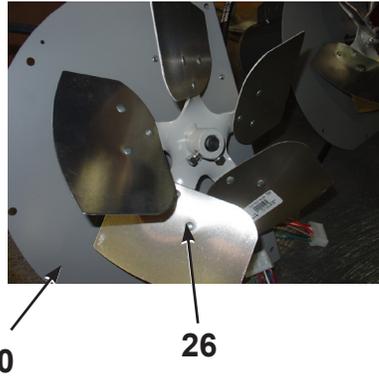
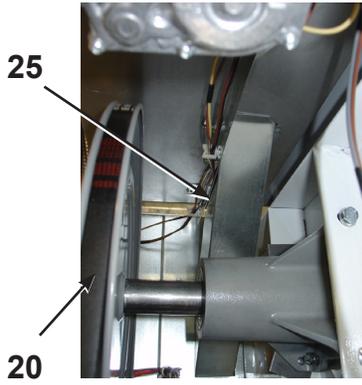
Burner Housing Group Photos - 30 lbs



Rear View - 30 lbs

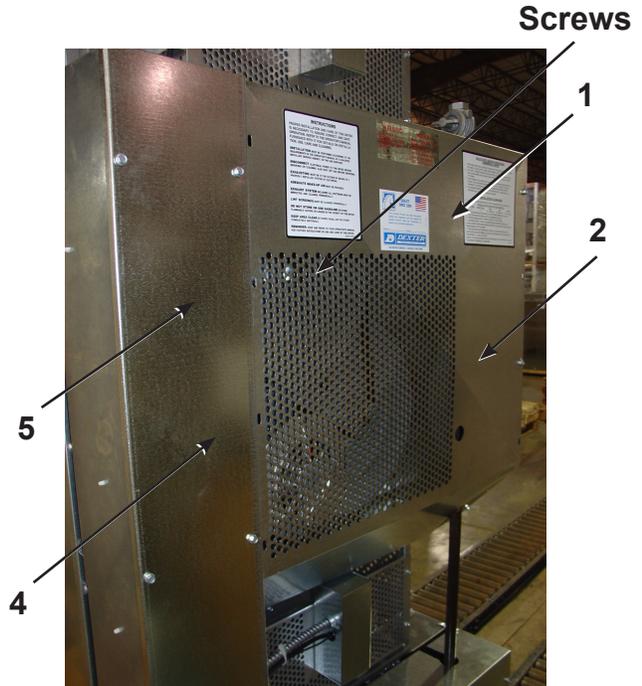
Key	Part Number	Description	Quantity
*	9627-861-001	Wire Harness Overtemperature Switch.....	2
*	9801-095-001	Switch Assy, Air Flow	2
1	9539-461-009	Switch, Air Flow.....	2
2	9029-174-001	Bracket, Switch- Air Flow	2
3	9008-007-001	Actuator, Switch	2
4	9451-169-002	Pin, Cotter	2
5	9545-020-001	Screw 4-40 x 5/8"	4
*	8640-401-001	Nut, Special Twin #4-40.....	2
*	9550-169-003	Shield, Switch.....	2
*	9545-008-001	Screw 10 Bx 1/4".....	6
7	9376-331-001	Motor, Drive 5hp	2
*	9732-202-026	Motor, Drive Kit.....	2
*	5191-108-003	Run Capacitor.....	2
*	5191-109-003	Start Capacitor.....	2
8	9452-740-001	Plate, Motor Mtg.....	2
*	9545-029-008	Bolt 3/8" - 16 x 3/4".....	8
*	8641-582-003	Lockwash Spring 3/8	8
9	9545-018-019	Screw, Motor Plate to Back Assy. 1/4-20x 2 1/2	8
9	86411-582-007	Lockwasher 1/4.....	8
9	9538-163-006	Spacer	8
9	8641-581-017	Flat Washer 1/4 x 7/8.....	24
9	9209-086-002	Rubber Grommet.....	8
*	9538-166-006	Grommet Spacers.....	8
*	9545-028-013	Screw, Set	4
10	9962-017-002	Back Assy, Blower Hsg.....	2
26	9278-039-001	Impeller, W/Set Screws.....	2
11	9991-053-001	Support Assy, Intermed. Pulley	2
12	9545-029-010	Bolt, Rd Hd 3/8-16 x 1 1/4.....	6
13	9545-029-003	Bolt, 3/8-16 x 1 1/2.....	2
12	8640-415-004	Nut Flange Wiziocok 3/8" - 16	6
12	8641-581-035	Washer, Flat.....	6
14	9861-022-001	Arm Assy-Tension, Complete	2
*	8641-581-035	Washer, Flat.....	2
15	9487-200-003	Ring-Retaining	6
16	9908-039-004	Pulley Assy, Intermediate with bronze flange bearing	2
*	9036-145-002	Bearing - Bronze Flange.....	4
17	9908-040-001	Pulley Driven.....	2
*	9306-006-000	Key Tumbler Shaft Woodcuff	2
*	8640-222-000	Nut Hex 1" - 14	2
*	8641-582-015	Washer Lock	2
*	9538-164-001	Spacer, Shaft	2
18	86Al-582-015	Washer, Lock	2
19	9040-077-001	Belt, Drive- Motor.....	2
20	9040-073-009	Belt, Drive- Tumbler	2
21	9534-319-002	Spring, Tension	2
22	9099-012-002	Chain, Tension.....	2
23	9248-022-002	Hook, Tension	2
*	9125-007-001	Damper Inside Duct Exhaust Upper	1
24	9451-146-001	Pin, Damper Hinge	2
*	8520-141-000	Nut, Spring	4
*	9425-007-002	Damper, Inside Duct Exhaust Lower	1
*	9545-008-026	Screw #10B x 1/2.....	6
25	9074-363-001	Cover Duct Upper.....	1
*	9074-364-001	Cover Duct Lower.....	1
*	9545-008-026	Screw 10ABx 1/2".....	14
25	9973-033-001	Heat Recirculation Assembly Duct.....	2
27	9453-157-001	Motor Pulley - Driver.....	1
*	9029-173-001	Bracket for Wire Harness Under Burner Housing.....	2
*	9545-008-024	Screw 10 AB x 3/8.....	58

Rear View Photos - 30 lbs



Rear Panel & Cover Group - 30 lbs

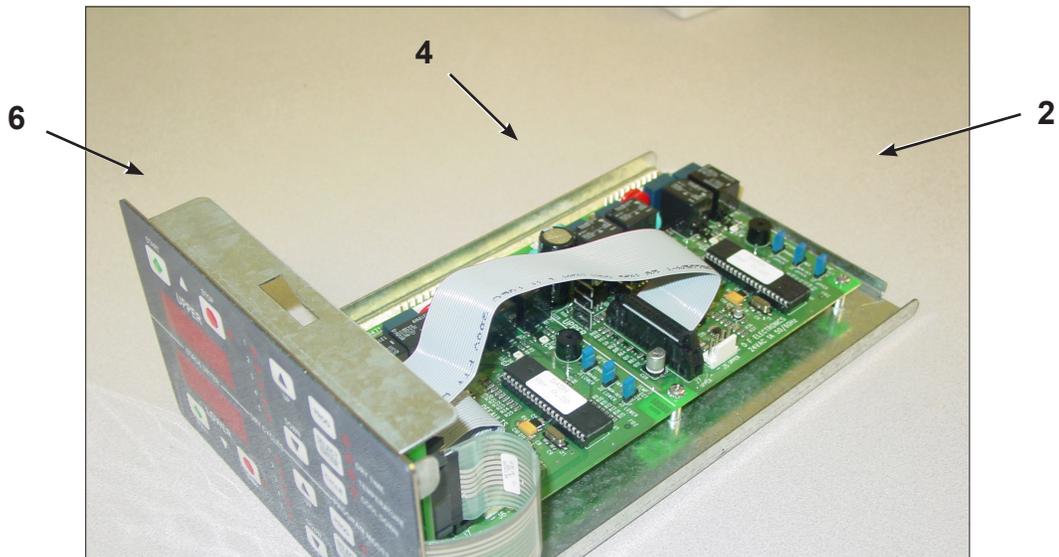
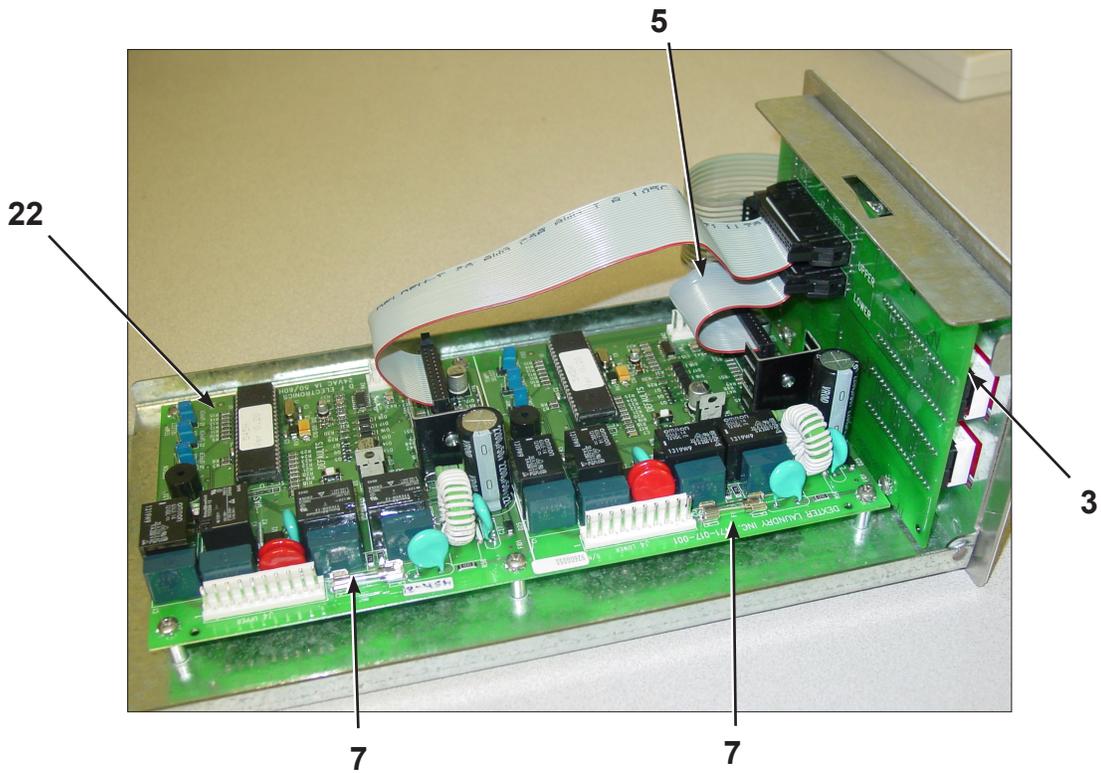
Key	Part Number	Description	Quantity
1	9208-083-001	Back Drive Guard Panel.....	2
*	9545-008-024	Screws, Guard.....	*
2	9208-076-001	Back Side Guard Panel Ass'y.....	2
3	9074-365-001	Cabinet (TOP COVER).....	1
*	8544-006-001	Legs Leveling.....	4
5	9545-008-024	Screws 10 AB x 3/8.....	4
6	9577-062-001	Top Duct w/ Oval.....	1
4	9108-117-001	Electric Box Cover w/ Hinge.....	1
*	9545-008-024	Screws, Electronic Box Cover.....	3



Screws

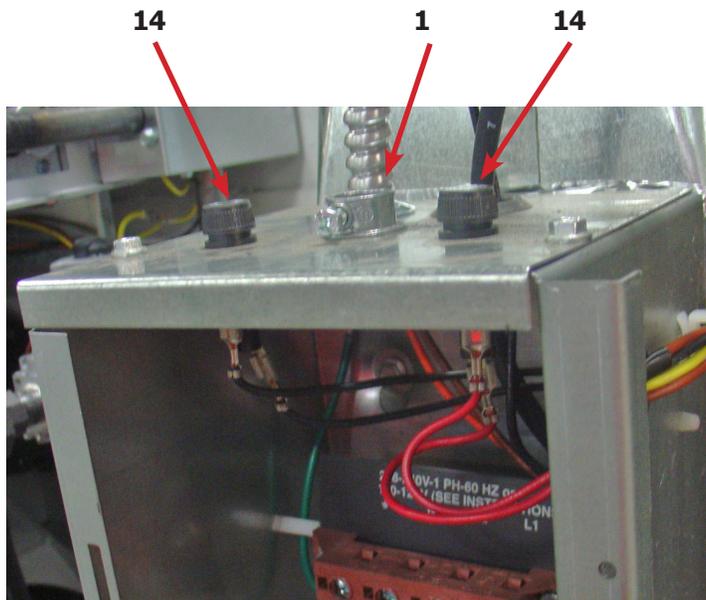
OPL Control Board - 30 lbs

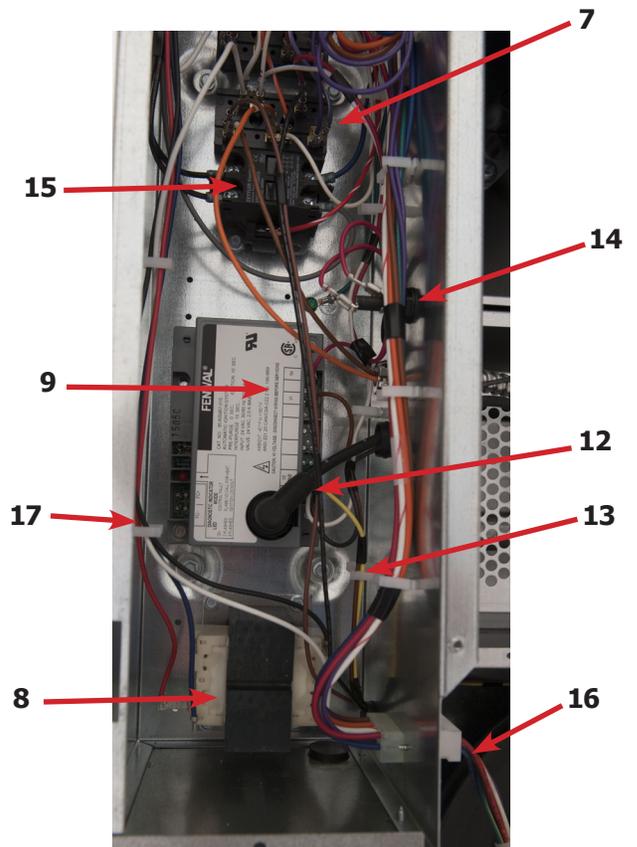
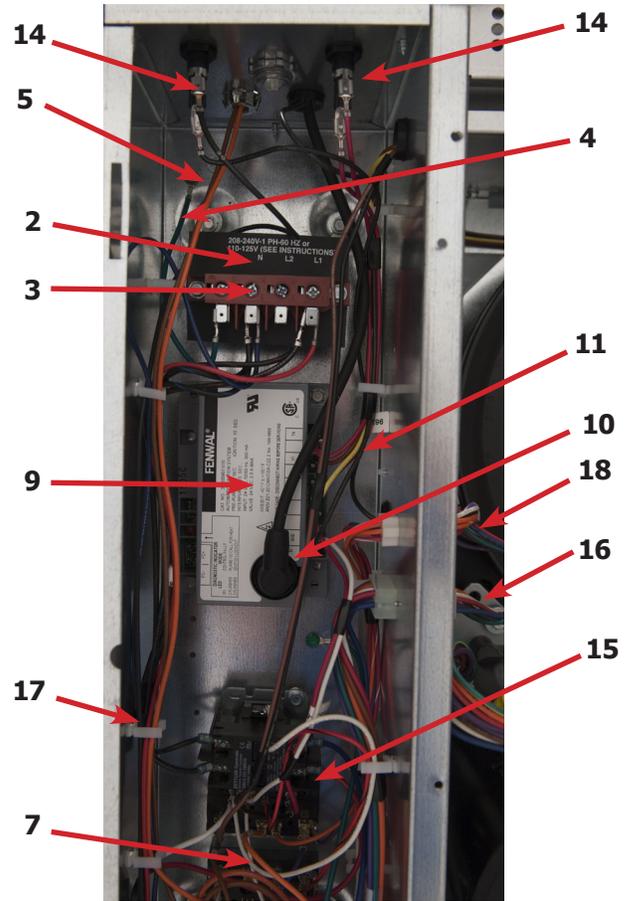
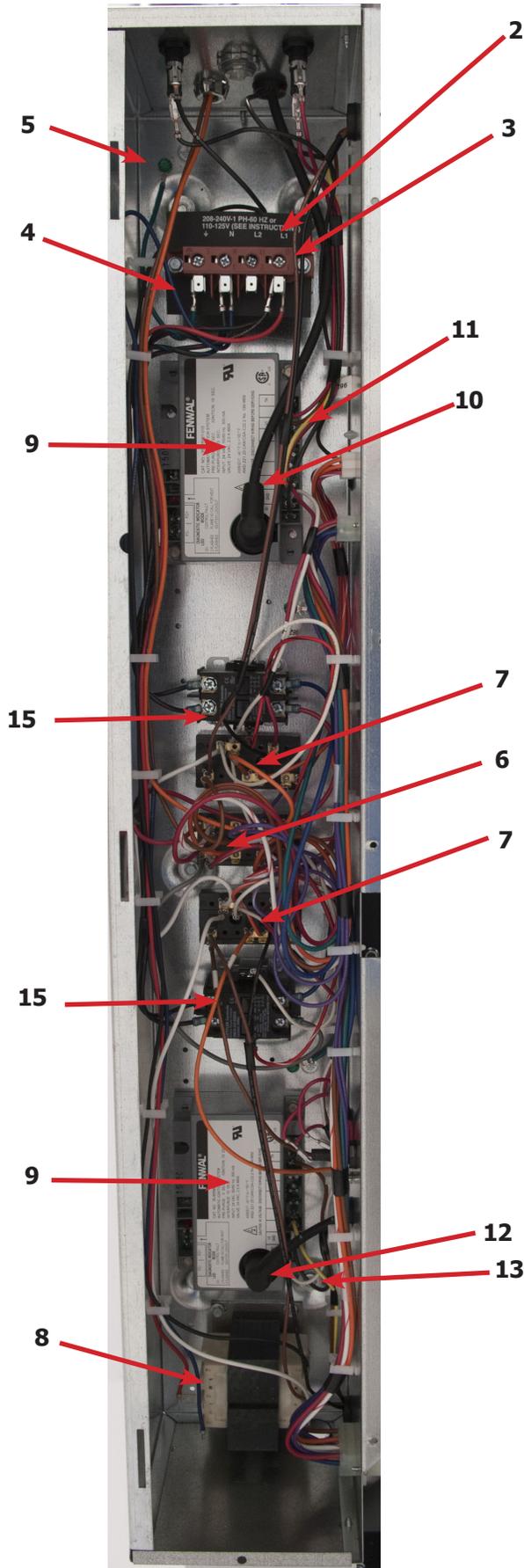
Key	Part Number	Description	Quantity
1	9857-187-001	Control Assembly (Blue)	1
1	9857-187-003	Control Assembly (Black)	1
2	9471-017-001	PCB Control Board	1
3	9471-018-001	PCB Display Board	1
4	9500-007-001	Cable, Upper Control Long	1
5	9500-007-002	Cable, Lower Control Long	1
6	9801-096-001	Membrane Switch Assembly (Blue)	1
6	9412-167-001	Membrane Switch Assembly (Black).....	1
7	8636-024-001	Fuse, 600ma / 250v	2
*	9627-885-001	Harness Main Control OPL Stack Dryer	1



Control Assembly Group

Key	Part Number	Description	Quantity
*	9857-187-003	Control Assembly Complete (all below included)	1
*	9074-317-001	Control Box Cover	1
1	8653-068-003	Connector Conduit 3/8" STR.....	1
2	9558-029-003	Strip Terminal Marker (Behind Input Power) to above #3	1
3	9897-035-001	Terminal Block Assembly Main Power Inlet	1
*	9545-008-024	Screws 10AB x 3/8"	4
*	9627-859-003	Wire Harness - Power Main	1
4	8220-001-478	Wire Assembly Green 7"	1
5	9545-008-027	Screw # 10-32 x 12 Green	1
*	8641-582-006	Lockwasher Ext Tooth #10.....	1
6	9897-026-002	Terminal Block Main Power Middle	1
7	9897-026-001	Terminal Block.....	2
*	9545-045-012	Screw #8 ABx1 2 for terminal block.....	6
8	8711-013-001	Transformer Control.....	1
*	9545-008-024	Screws 10AB x 3/8"	4
9	9857-182-001	Ignition Control	2
*	9545-008-018	Screws 10AB x 3/4"	4
10	9631-403-009	Wire Assembly High Voltage Upper	1
11	9627-867-005	Wire Harness Ignition Control Upper	1
12	9631-403-008	Wire Assembly High Voltage Lower	1
13	9627-867-006	Wire Harness Ignition Control Lower	1
*	9053-067-002	Bushing Wire 7/8".....	4
14	9200-001-002	Fuseholder Assembly.....	3
*	8636-018-001	Fuse 1.5 Amp.....	2
*	8636-018-004	Fuse 2.5 Amp.....	1
15	5192-299-001	Relay Power	2
*	9545-045-012	Screws Power #8 AB x 1/2".....	4
*	8220-062-036	Wire Assembly Red/Black 14"	1
*	8220-062-037	Wire Assembly Red/White 14"	1
16	9627-864-006	Wire Harness Motor Extension.....	2
17	9527-007-001	Stand Off - Wire Saddle / Arrowhead	5
18	9627-863-001	Wire Harness Main Extension Access Under Burner Housing	4





Wiring Group - 30 lbs

Key	Part Number	Description	Quantity
*	9627-859-003	Wiring Harness- Main Power	1
*	9631-403-008	Wire, Hi Voltage, Spark 18 1/2" Lower	1
*	9631-403-009	Wire High Voltage, Spark 29 1/4" Upper	1
*	8502-645-001	Label Instruction.....	1
*	9506-353-001	Wiring Label Schematic/Diagram.....	1
*	9627-867-005	Wire Harness Ignition Upper Low Voltage	1
*	9627-867-006	Wire Harness Ignition Lower Low Voltage	1
*	9627-887-001	Wire Harness Main Extension.....	1
*	9627-864-006	Wire Harness Motor Extension	2
*	8220-062-036	Wire Assembly Red/Black 14"	1
*	8220-062-037	Wire Assembly Red/White 14".....	1
*	8220-062-038	Wire Assembly White 14".....	2
*	9627-861-001	Wire Harness - Overtemp / Airswitch	2
*	9627-885-001	Wire Harness Main Controller	1
*	9627-866-001	Wire Harness - Heat Sensor	1
*	8527-112-001	Decal Lighting and Clearance.....	1
*	8502-600-001	Label Warning & Notice.....	2
*	9506-651-001	Schematic Label	1
*	8514-259-001	Owners Manual.....	1
*	8507-330-001	Instruction Transient Voltage Suppressor	1
*	8507-350-001	Instructions Dryer Install / Start	1
*	8220-137-001	Wire Assembly Green 24"	1
*	8220-001-466	Wire Assembly Yellow 4 7/8" Gas Valve	2
*	8220-095-038	Wire Assembly Orange 48"	2
*	9506-651-001	Wiring Diagram.....	1
*	8220-095-040	Wire Assembly Orange 24"	1
*	8220-095-041	Wire Assembly Brown 24".....	1
*	9053-067-002	Bushings Wire 7/8".....	7
*	8220-095-039	Wire Assembly Brown 48"	1
*	9897-026-001	Terminal Block.....	2
*	9897-026-002	Terminal Block.....	2
*	9200-001-002	Fuse Holder.....	2
*	8636-018-001	Fuse 1.5 A.....	2
*	5192-298-002	Relay, Power 24 VAC	2
*	9897-035-001	Terminal Block Power 4 Pole	1
*	9558-029-003	Strip Marker, Terminal	1



Section 7:

Parts Data
50# Stack

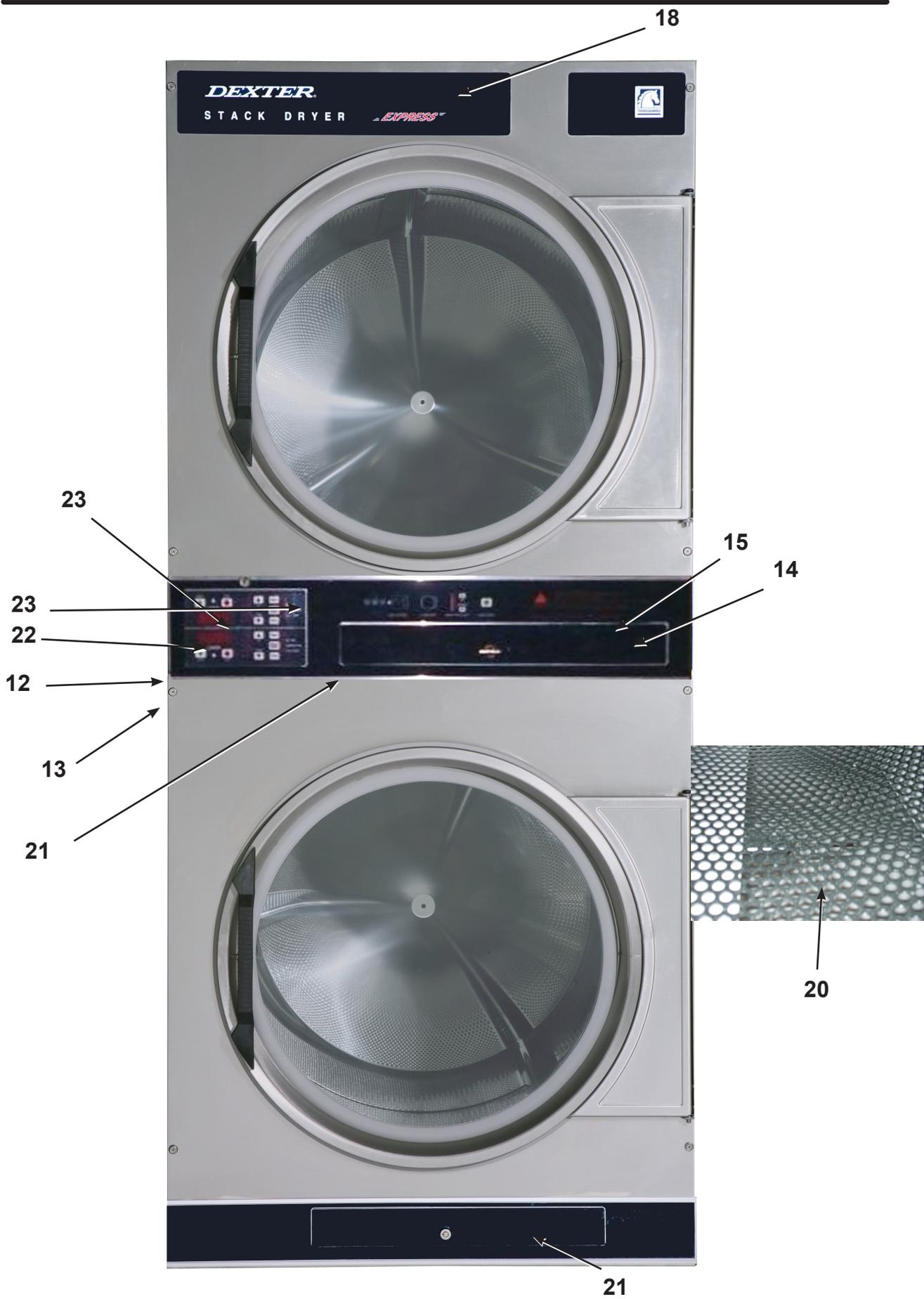


Cabinet Group - 50lb

Key	Part Number	Description	Quantity
*	9960-285-002	Door Assy., Loading Complete-Wht	2
*	9960-285-001	Door Assy., Loading Complete-SS	2
1	9960-284-002	Door Assy., Loading-SS(ring only)	2
2	9982-353-002	Plate Assy., Hinge (Wht) No Pin	2
2	9982-353-001	Plate Assy., Hinge (SS) No Pin.....	2
*	9545-012-015	Screw, Hinge to Door	8
*	8640-413-002	Nut, Hinge to Door	8
3	9212-002-004	Glass, Door	2
4	9206-164-010	Gasket, Glass (Gray).....	2
4	9206-413-002	Gasket, Glass (Black).....	2
*	9548-117-000	Support, Door Glass	2
5	9206-420-004	Gasket, Outer Rim (Gray)	2
5	9206-420-005	Gasket, Outer Rim (Black)	2
6	9244-082-001	Handle, Loading Door	2
*	9545-018-017	Screw, Handle 1/4-20 x 3/8	2
*	9531-033-001	Stud, Door Catch	2
*	8640-413-001	Nut, Hex	2
*	8640-413-003	Nut, Acorn	2
*	9086-015-002	Catch, Loading Door	2
*	8638-190-009	Pop Rivet for mtg. catch	4
*	8641-582-006	Lockwasher	4
*	8640-399-001	Spring Nut	6
7	9989-517-011	Panel Assy., Front- Lower (Wht)	1
7	9989-517-009	Panel Assy., Front- Lower (SS)	1
8	9989-517-015	Panel Assy., Front- Upper (Wht)	1
8	9989-517-013	Panel Assy., Front- Upper (SS)	1
*	9277-054-001	Insulation Front Panel, half moon (top).....	2
*	9277-054-002	Insulation Front Panel, half moon (bottom).....	2
*	9545-008-014	Screw, FLHDCR, 10B x 1.....	14
*	8641-582-019	Lockwasher	8
*	8640-399-001	Nut, Spring	12
10	9544-069-002	Strap, Hinge (Wht)	2
10	9544-069-004	Strap, Hinge (SS/Gray)	2
*	9545-012-028	Screw, Hinge to Panel	8
11	9545-052-001	Screw, Door to Hinge Strap (Special Black Type)	2
*	8641-436-003	Washer, Fiber	2
*	9472-001-013	Cabinet Touch Up Paint (White).....	1

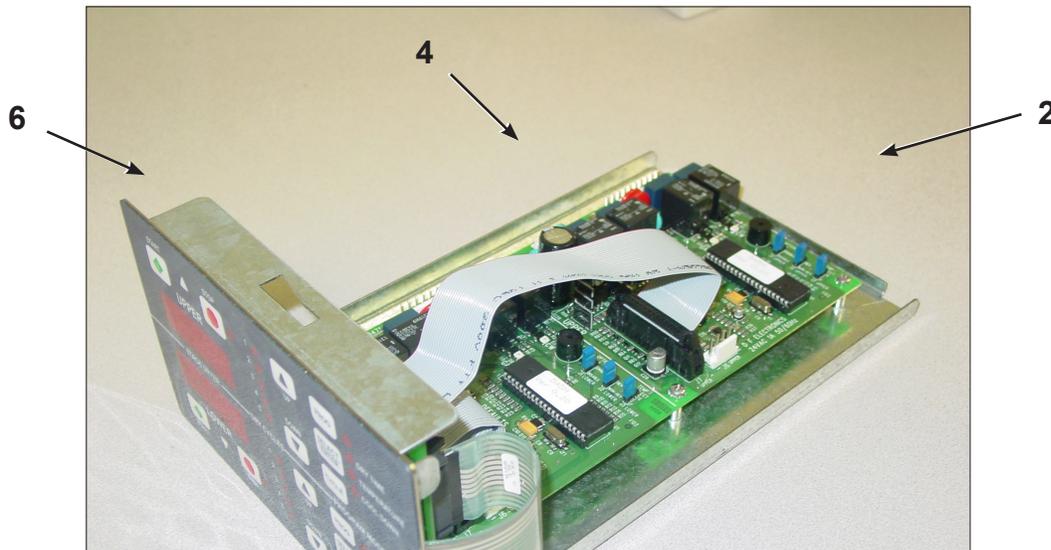
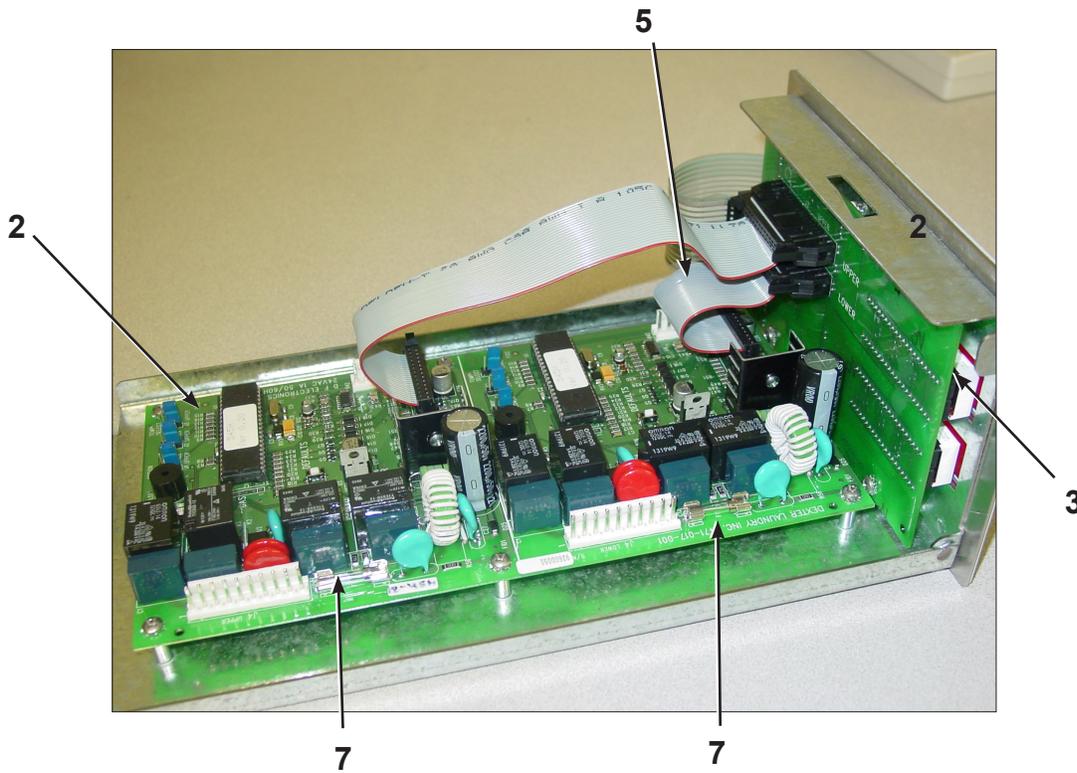
Cabinet Group - 50lb (Continued)

Key	Part Number	Description	Quantity
14	9994-049-001	Escutcheon, Upper	1
15	9435-025-001	Trim, Overlay-Upper (Blue)	1
15	9435-033-001	Trim, Overlay-Upper (Black)	1
16	9994-051-001	Escutcheon, Lower	1
17	9435-023-001	Trim, Overlay-Lower (Blue)	1
17	9435-031-002	Trim, Overlay-Lower (Black)	1
*	9545-020-009	Screw	10
18	9412-154-002	Nameplate Stack Dryer Express (Blue).....	.1
18	9412-167-001	Nameplate Stack Dryer Express (Black) .....	.1
21	9866-007-002	Lint Drawer Assembly (Blue).....	2
21	9866-007-003	Lint Drawer Assembly (Black)	2
21	9435-024-001	Overlay Trim, Lint Drwr (Blue).....	1
21	9435-032-001	Overlay Trim, Lint Drwr (Black)	1
*	9532-143-001	Felt Seal (back of lint screen assembly)	2
*	9805-039-001	Lint Screen Assembly ONLY (no front)	2
*	9555-057-008	Replaceable Lint Screen Only .....	.2
24	8650-026-002	Lock and Key, Lint Drawer Thumb Turn	2
*	9505-043-001	Cam, Lock.....	.2
*	9545-008-001	Lint Screen Strap Hold Down Screws 10Bx 1/4	32
22	9857-187-001	Controls Assy, Electronic w/Membrane Switch (Blue)	1
22	9857-187-003	Controls Assy, Electronic w/Membrane Switch (Black)	1
22	9801-096-001	Membrane Switch Assy (Blue).....	1
22	9801-105-001	Membrane Switch Assy (Black)	1
*	9627-885-001	Harness, Electronic Control .....	.1
*	6292-006-007	Cam, Lock Control	1
*	9627-886-001	Harness, Heat Sensor .....	.1
*	9277-041-017	Insulation Cabinet Cover .....	.1
20	9501-004-004	Sensor Temp Control (10K Ohms).....	2
*	9545-045-005	Screw, Round Head (Mounts sensor; phillips head).....	2
*	9209-037-002	Grommet, 3/16 ID	2
*	8544-006-001	Leg, Leveling 1/2"	4
*	8545-061-002	Leveling Leg Wrench	1
*	9074-320-001	Cover, Cabinet (Top)	1
*	9732-253-001	DDAD Kit for Dryers without Neutral and using 208-240 volt....	1
*	9732-102-013	LP Kit for DDAD Dryers 108K BTU	1
*	9732-243-001	Stack Dryer Trunnion Puller	1
*	9555-057-010	Replaceable Lint Screen Fine Mesh Only .....	.1
*	9277-054-001	Insulation-Front Panel-Top Half	2
*	9277-054-002	Insulation-Front Panel-Lower Half	2
*	9501-008-002	Bracket for Heat Sensor Mounting (Under Basket) with Sensor ..	2
*	8640-276-002	Wire Nut Connector Grey.....	4
*	9527-007-002	Standoff Wire Saddle	8
*	9544-041-002	Strap - Bead Tie	1



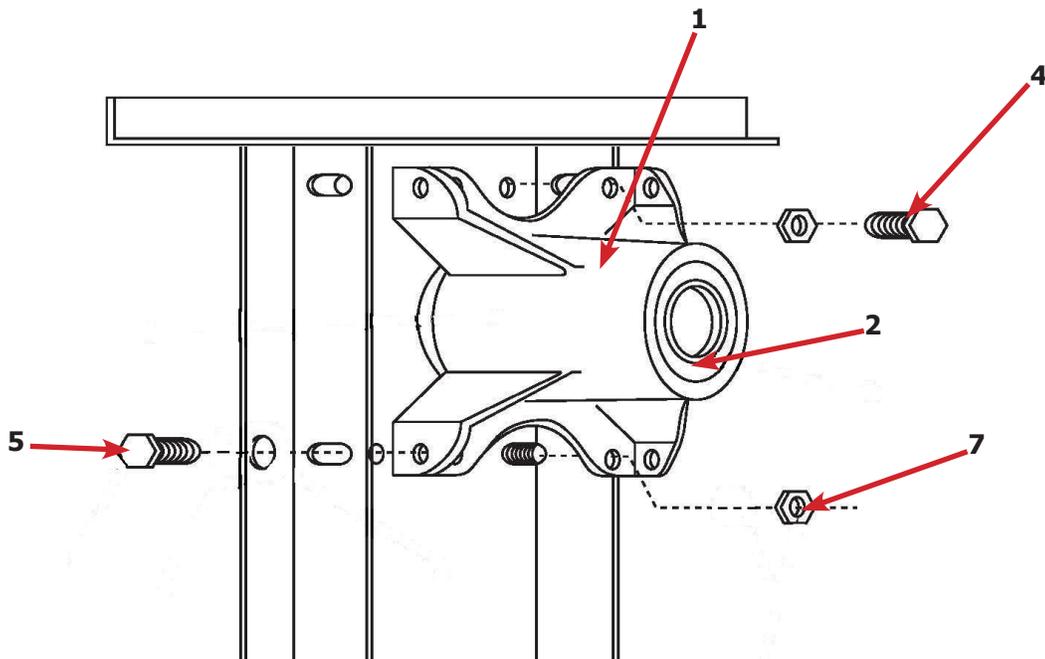
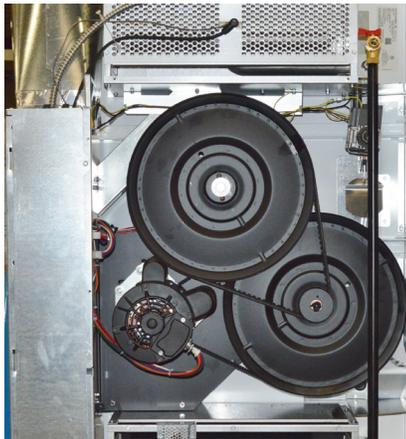
OPL Control Board

Key	Part Number	Description	Quantity
1	9857-187-001	Control Assembly (Blue)	1
1	9857-187-003	Control Assembly (Black)	1
2	9471-017-001	PCB Control Board	1
3	9471-018-001	PCB Display Board	1
4	9500-007-001	Cable, Upper Control Long	1
5	9500-007-002	Cable, Lower Control Long	1
6	9801-096-001	Membrane Switch Assembly (Blue)	1
6	9412-167-001	Membrane Switch Assembly (Black).....	1
7	8636-024-001	Fuse, 600ma / 250v	2
*	9627-885-001	Harness Main Control OPL Stack Dryer	1



Bearing Housing Group

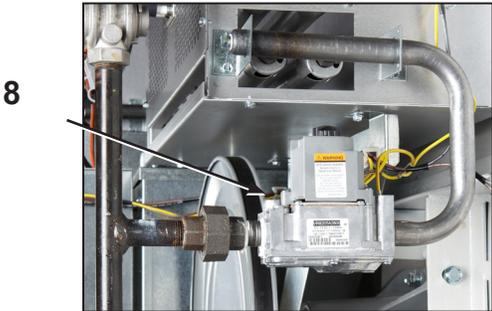
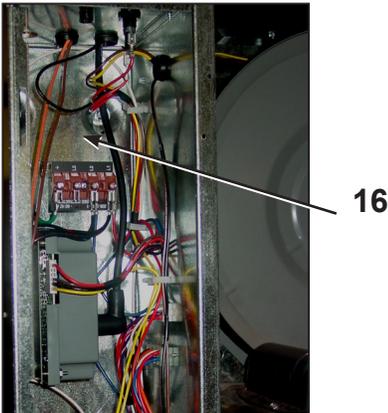
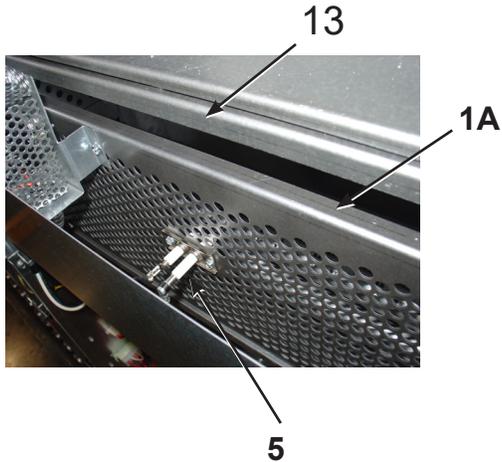
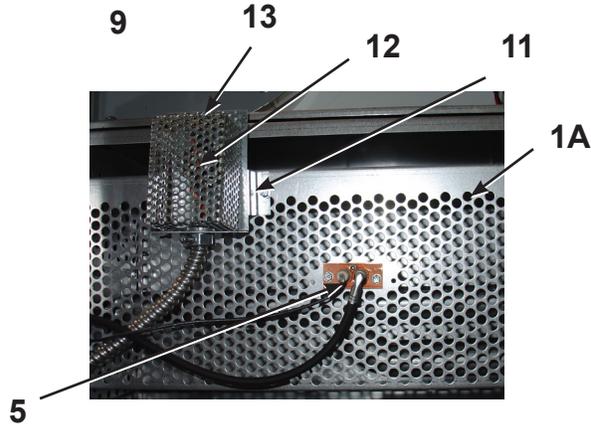
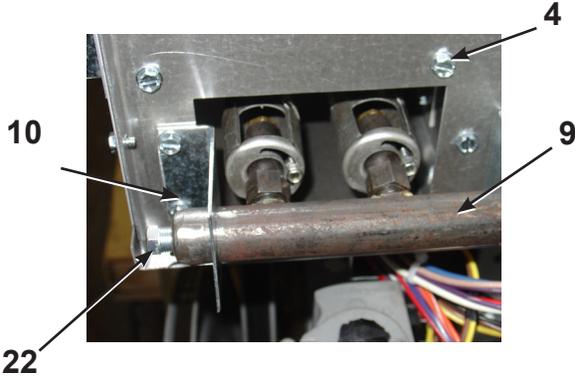
Key	Part Number	Description	Quantity
1	9241-189-002	Housing, Bearing	2
2	9036-159-003	Bearing, Ball Rear.....	2
*	9538-183-001	Spacer, Bearing	2
*	9036-159-001	Bearing, Ball Front.....	2
5	9545-017-017	Bolt, 1/2 x 3/4.....	8
7	8640-417-002	Nut, 1/2	8
*	9803-201-001	Bearing Housing Complete Ass'y (includes bearings,spacer)	2
4	9545-017-018	Screw 1/2 x 1 1/2	4



Burner Housing Group - 50lb

Key	Part Number	Description	Quantity
*	9803-230-001	Housing Assembly, Burner .....	.2
1a	9452-730-001	Service Burner Plate Front... ..	2
1	9452-850-001	Service Plate baffle Recirculation Chamber Clean Out	2
*	9545-008-006	Screws	8
2	9545-008-001	Screw	16
18	9003-220-001	Angle, Burner Support	2
*	9545-008-006	Screw .....	.4
17	9048-020-002	Burner, Main	4
*	9545-008-006	Screw 10AB x 3/8"	4
*	9454-992-001	Panel, Back Burner Housing.....	2
4	9545-008-001	Screw 10B x1/4" .....	.8
5	9875-002-003	Electrode Assy, Ignition	2
19	9545-045-001	Screw, Electrode Mtg 8B x 1/4"	4
7	9379-186-001	Valve, Gas Shut Off (Optional)	1
8	9587-192-001	Control Assy, Gas	2
9	9381-012-001	Manifold, Assembly 2 Part 1 Piece	2
*	9425-069-021	Orifice, Burner-Natural #29.....	4
*	9425-069-022	Orifice, Burner-LP #46.....	4
10, 14	9029-175-001	Bracket, Manifold .....	.4
22	8615-104-038	Pipe Plug in end of Burner Manifold	2
*	9545-008-006	Screw .....	.4
12	9576-203-002	Thermostat, Hi-Limit	2
*	9538-142-001	Spacer, Hi-Limit	4
*	9545-045-007	Screw 8B x 3/4"	4
13	9074-329-001	Cover, Hi-Limit Stat Ignitor	2
*	9545-008-006	Screw	6
*	9576-207-008	Thermostat, Safety Shutoff	2
*	9545-008-006	Screw	4
15	9825-062-001	Cover, Safety Stat	2
*	9545-008-006	Screw	4
16	9857-116-003	Control, Ignition Fenwall (3 trybox)	2
*	9732-102-013	Kit, LP Conversion DDAD Kit .....	.2
*	9838-018-003	Welded One Piece Gas Pipe Assembly	1

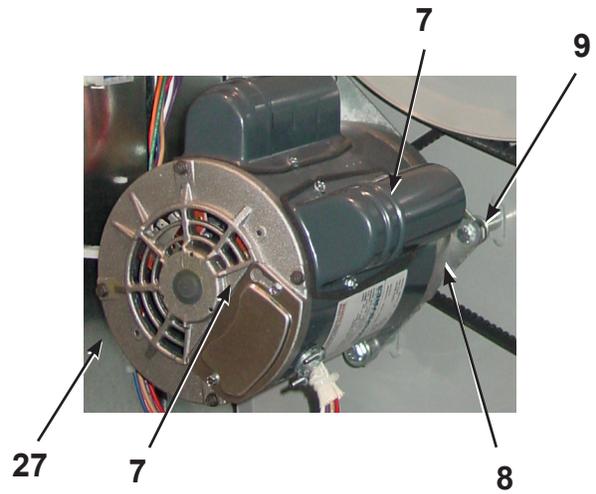
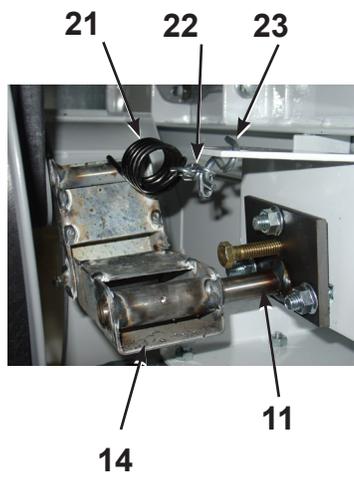
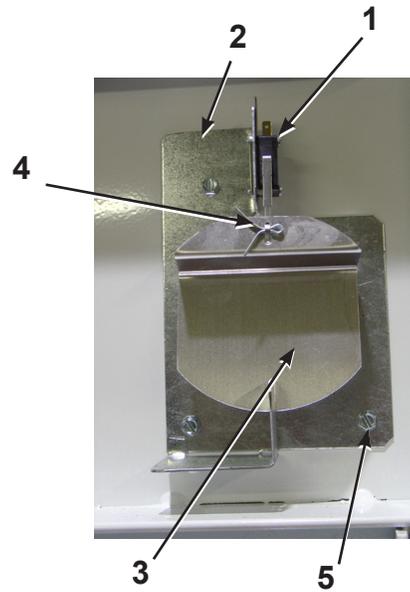
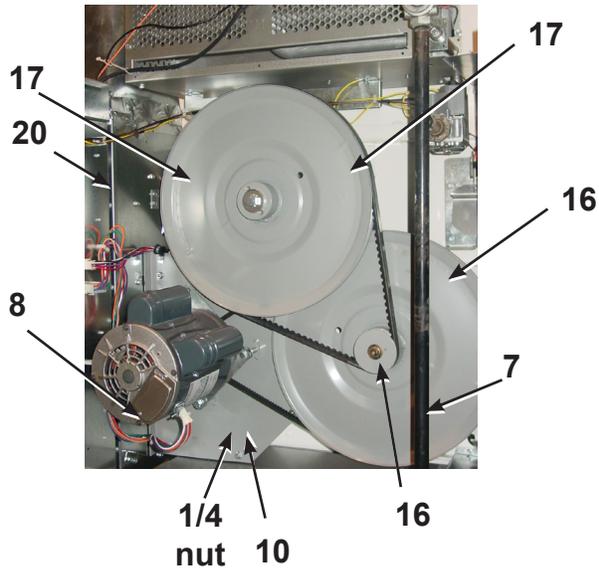
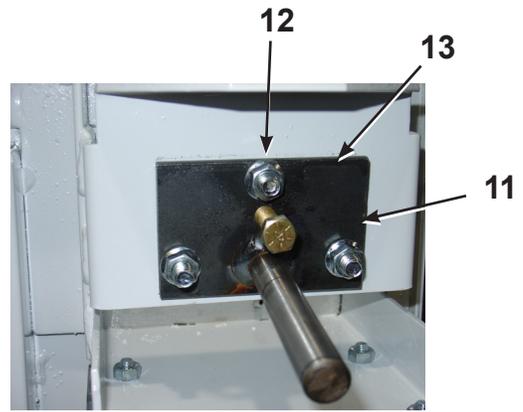
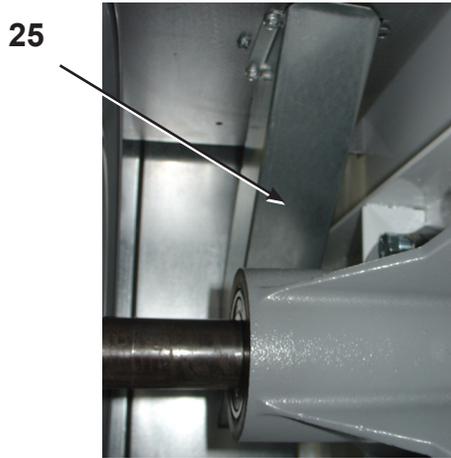
Burner Housing Group Photos - 50lb



Rear View

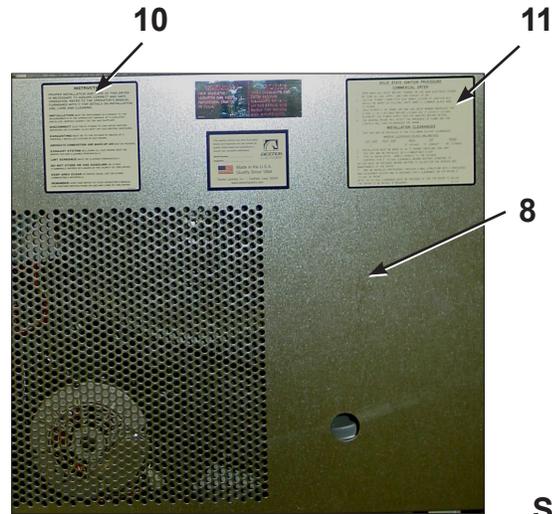
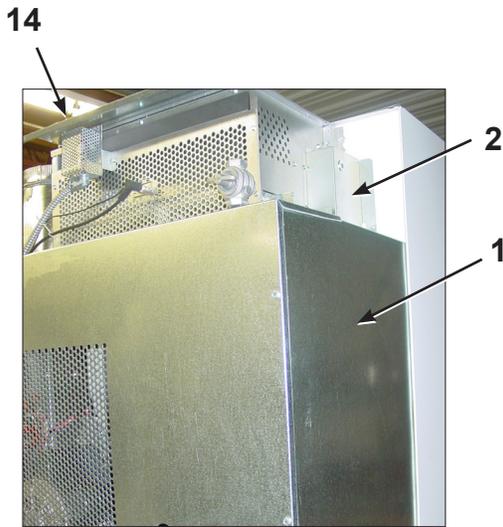
Key	Part Number	Description	Quantity
*	9627-861-001	Wire Harness, Overtemperature Switch Upper	1
*	9801-098-001	Switch Assy, Air Flow	2
1	9539-461-009	Switch, Air Flow	2
2	9029-200-001	Bracket, Switch-Air Flow	2
*	8640-401-001	Nut, Special Twin .#4-40	2
*	9550-169-003	Shield, Switch	2
3	9008-007-001	Actuator, Switch.....	2
4	9451-169-002	Pin, Cotter.....	2
5	9545-020-001	Screw, 4-40x 5/8	4
7	9376-322-001	Motor, Drive	2
*	5191-108-002	Run Capacitor.....	2
*	5191-109-002	Start Capacitor.....	2
27	9453-169-013	Motor-Pulley, Driver.....	2
*	9452-770-001	Plate, Motor Mounting	2
9	9962-018-002	Plate, Impeller Mounting.....	2
*	9538-163-006	Spacer, Motor Mounting	8
*	9545-029-008	Screws, Hex Cap.....	8
*	8641-582-003	Lock Washers	8
*	9545-018-019	Screw HXHD 1/4-20 x 2 1/2	8
*	8641-581-017	Washer-Flat, 1/4 x 7/8	32
*	9538-166-006	Spacer, Metal.....	8
12	9991-053-001	Support Assy, Intermediate pulley	2
12	9545-029-010	Bolt, Rd Hd 3/8-16 x 1 1/4	6
12	8640-415-004	Nut Flange Wizlock 3/8 - 16	6
12	8641-581-035	Washer, Flat	6
13	9545-029-003	Bolt, 3/8 - 16 x 1 1/2.....	2
14	9861-022-001	Arm Assy-Tension, Complete.....	2
*	9487-200-003	Ring-Retaining	6
16	9908-048-003	Pulley Assy, Intermediate w/Bronze Flange Bearing	2
*	9036-145-002	Bearing - Bronze Flange	4
17	9908-047-002	Pulley Driven, Tumbler.....	2
*	9487-234-005	Tolerance Ring.....	2
34	8641-581-026	Washer, Flat 1/2" for Tumbler Pulley	2
35	9545-017-009	Bolt, 1/2" - 13 x 1 1/4	2
36	8641-582-016	Washer, Star 1/2" for Tumbler Pulley	2
*	9538-184-001	Spacer, Shaft.....	2
19	9040-076-009	Belt, Drive Motor and intermediate.....	2
20	9040-073-011	Belt, Driven-intermediate to	2
21	9534-151-000	Spring, Tension.....	2
22	9099-012-005	Chain Tension	2
23	9248-022-002	Hook, Tension	2
*	9451-146-001	Pin, Damper Hinge.....	2
*	8520-141-000	Nut, Spring.....	4
*	9825-334-001	Cover, Duct-Upper	1
25	9973-032-001	Heat Recirculation Assembly Duct	2
*	9545-028-013	Set Screw.....	2
30	9278-043-001	Impeller	2
*	9125-007-001	Damper, Exhaust Duct - Upper	1
*	9125-007-002	Damper, Exhaust Duct - Lower	1
*	8520-141-000	Nut, Spring.....	4
*	9545-008-026	Screw #10B x 1/2	14
*	9074-335-001	Cover, Duct - Lower	1
*	9545-008-024	Screw #10AB x 3/8	58
*	9029-173-001	Bracket for Wire Harness Under Burner Housing	2

Rear View Photos - 50lb

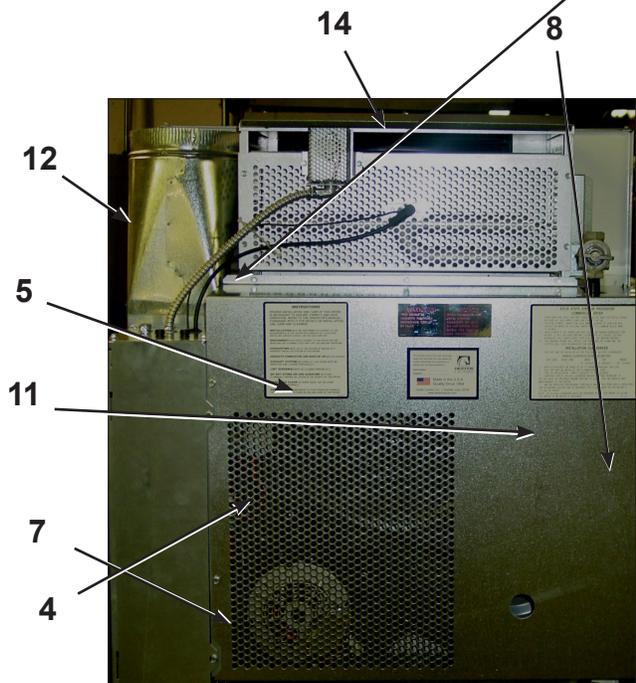
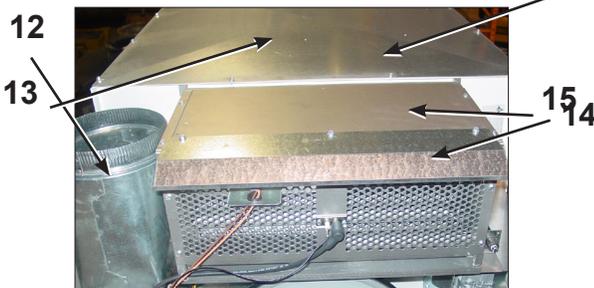


Rear Panel & Cover Group - 50 lbs

Key	Part Number	Description	Quantity
1	9208-090-001	Rear Guard Side Panel 1	2
4	9545-008-024	Screws 10 AB x 3/8	30
*	9208-089-001	Rear Guard Top, Lower	1
7	9545-008-024	Screws 10 AB x 3/8	6
8	9208-089-001	Rear Guard Back Panel	2
*	9545-008-024	Screws, Guard	*
10	8502-600-001	Label Warning & Notice	1
11	8502-645-001	Label - Instructions	1
12	9109-113-001	Transition Assembly Outlet	1
13	9074-320-001	Top Cover Dryer Panel	1
14	9550-188-001	Top Burner Housing Heat Shield	1
*	9973-034-001	8" Slide Open Clean Out Duct (Optional)	1

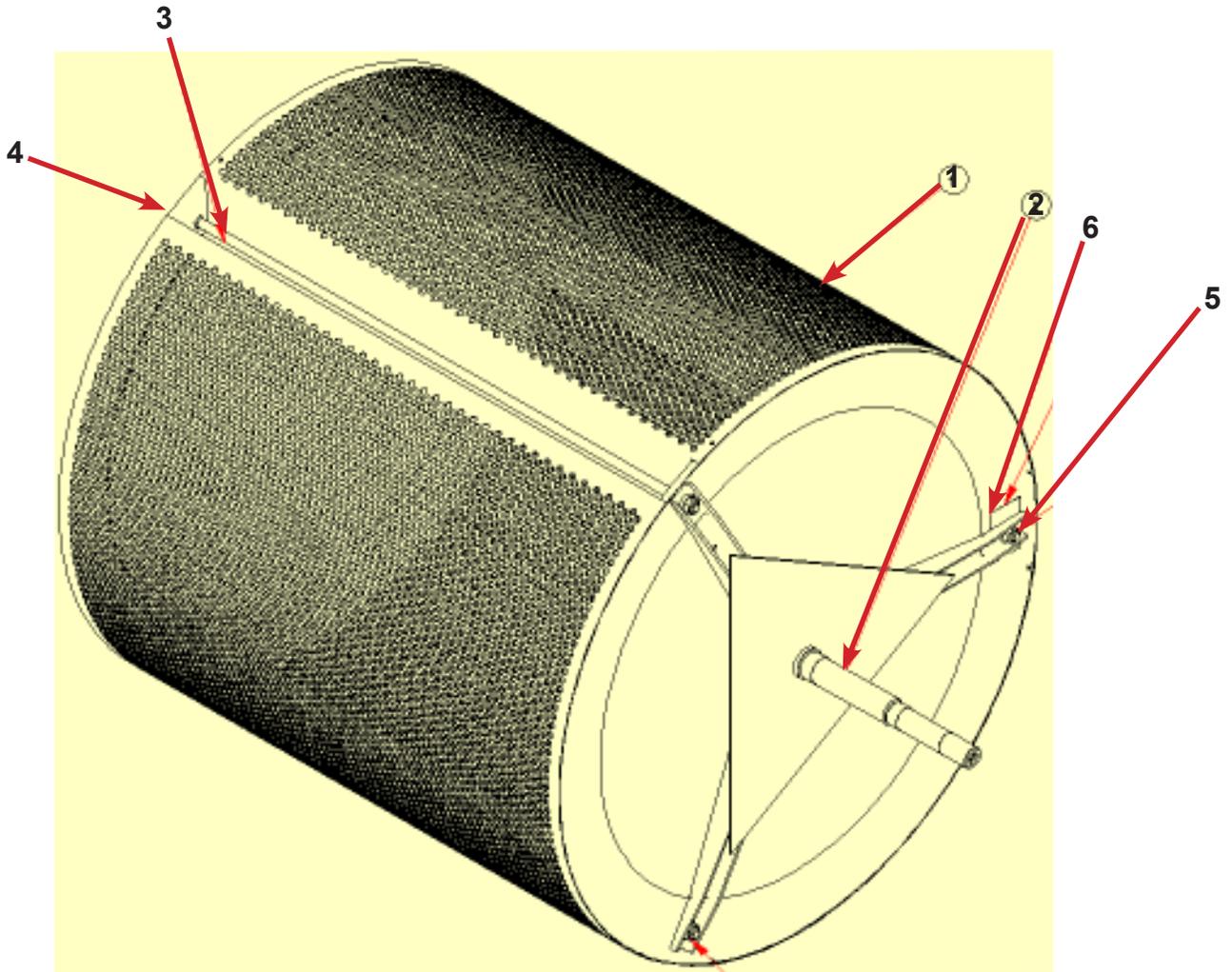


Screws



Tumbler Group

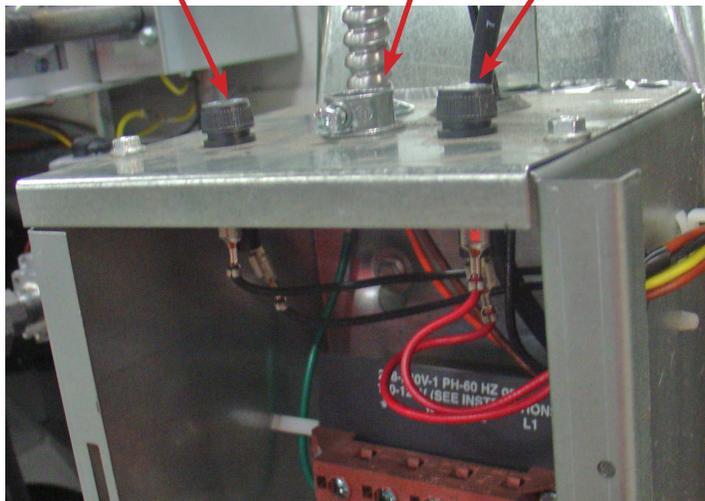
Key	Part Number	Description	Quantity
1	9848-148-001	Tumber Assembly Galvanized.....	2
*	9848-157-001	New Tumbler, Taller Baffles (Anti-Roping).....	2
*	9848-148-002	Tumbler Assembly Stainless Steel.....	2
*	9848-149-001	Tumbler Assembly Galvanized w/spider.....	2
*	9848-158-001	New Tumbler, Taller Baffles (Anti-Roping) w/spider.....	2
*	9848-149-002	Tumbler Assembly Stainless w/spider.....	2
2	9568-013-001	Spider Assembly	2
3	9497-226-002	Rod, Tumbler	6
5	8640-417-005	Nut, 1/2 - 13 .....	.6
4	8641-590-002	Washer, Special	6
6	9552-013-000	Shim .....	.AR



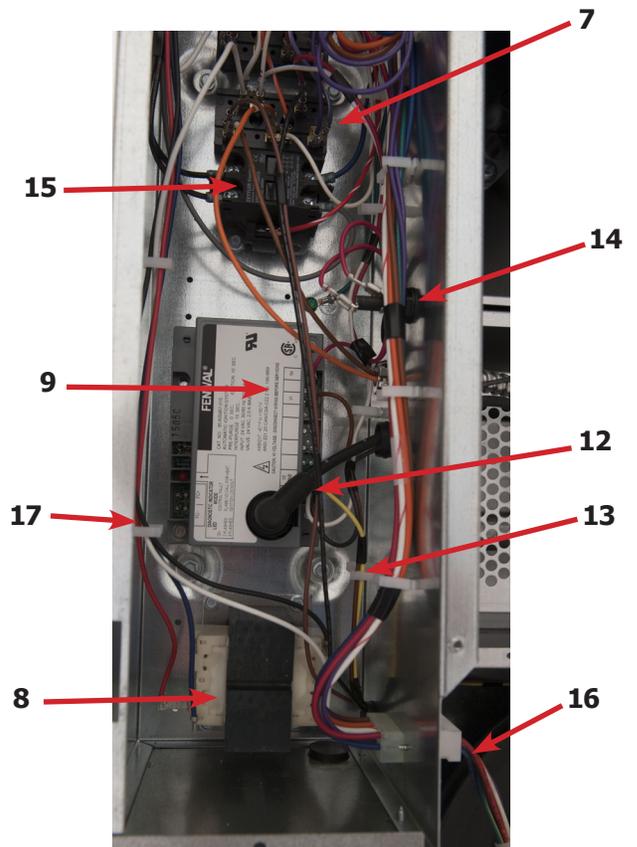
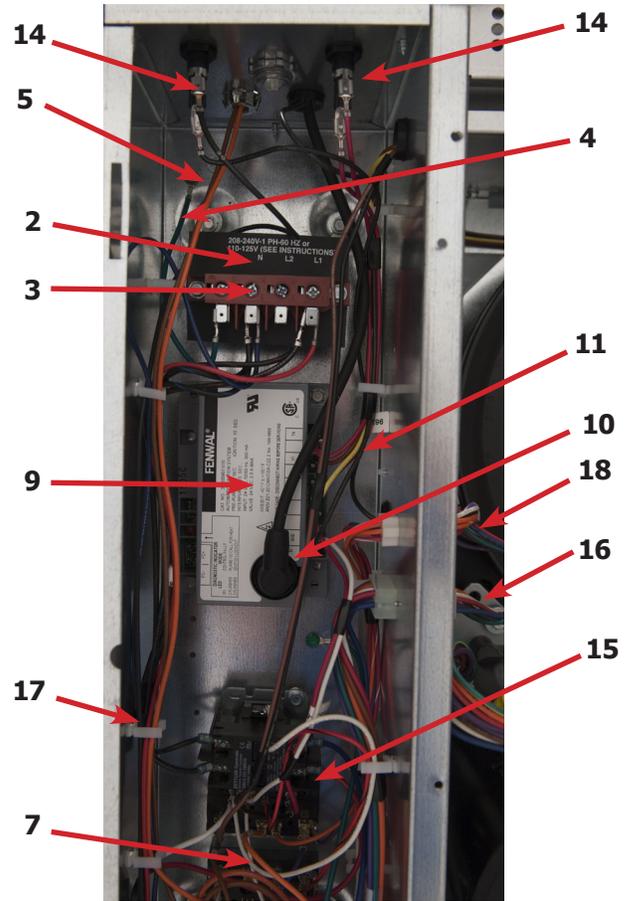
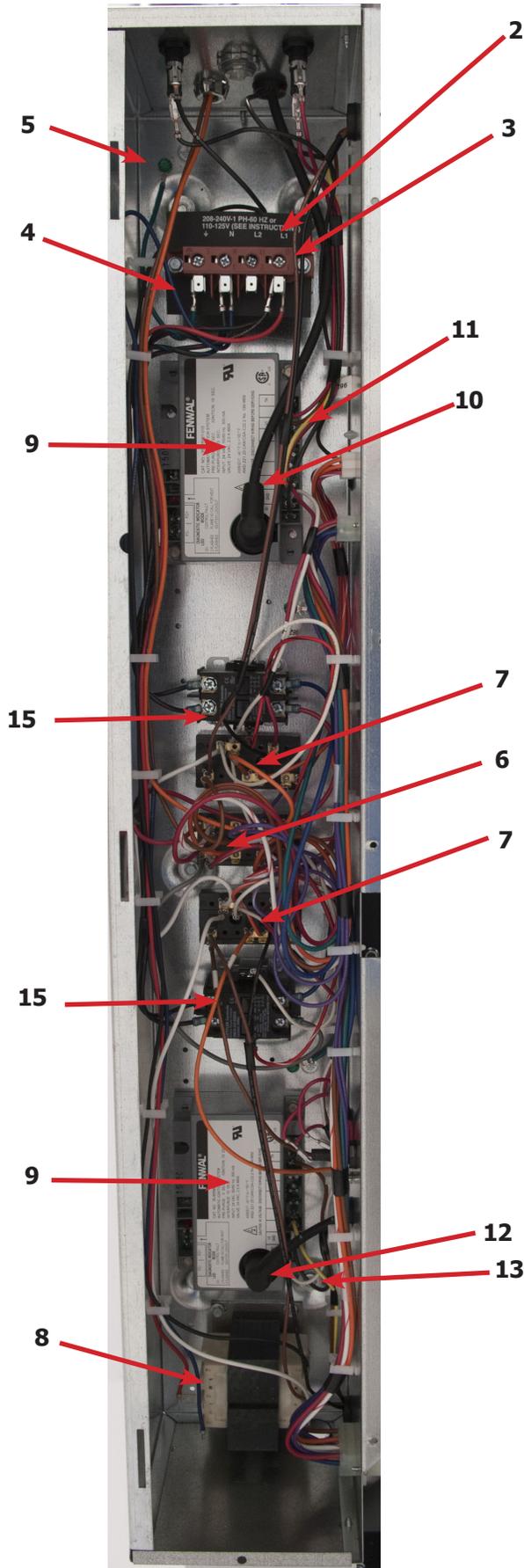
Control Assembly Group

Key	Part Number	Description	Quantity
*	9857-187-003	Control Assembly Complete (all below included)	1
*	9074-317-001	Control Box Cover	1
1	8653-068-003	Connector Conduit 3/8" STR.....	1
2	9558-029-003	Strip Terminal Marker (Behind Input Power) to above #3	1
3	9897-035-001	Terminal Block Assembly Main Power Inlet	1
*	9545-008-024	Screws 10AB x 3/8"	4
*	9627-859-003	Wire Harness - Power Main	1
4	8220-001-478	Wire Assembly Green 7"	1
5	9545-008-027	Screw # 10-32 x 12 Green	1
*	8641-582-006	Lockwasher Ext Tooth #10.....	1
6	9897-026-002	Terminal Block Main Power Middle	1
7	9897-026-001	Terminal Block.....	2
*	9545-045-012	Screw #8 ABx1 2 for terminal block.....	6
8	8711-013-001	Transformer Control.....	1
*	9545-008-024	Screws 10AB x 3/8"	4
9	9857-182-001	Ignition Control	2
*	9545-008-018	Screws 10AB x 3/4"	4
10	9631-403-009	Wire Assembly High Voltage Upper	1
11	9627-867-005	Wire Harness Ignition Control Upper	1
12	9631-403-008	Wire Assembly High Voltage Lower	1
13	9627-867-006	Wire Harness Ignition Control Lower	1
*	9053-067-002	Bushing Wire 7/8".....	4
14	9200-001-002	Fuseholder Assembly.....	3
*	8636-018-001	Fuse 1.5 Amp.....	2
*	8636-018-004	Fuse 2.5 Amp.....	1
15	5192-299-001	Relay Power	2
*	9545-045-012	Screws Power #8 AB x 1/2".....	4
*	8220-062-036	Wire Assembly Red/Black 14"	1
*	8220-062-037	Wire Assembly Red/White 14"	1
16	9627-864-006	Wire Harness Motor Extension.....	2
17	9527-007-001	Stand Off - Wire Saddle / Arrowhead	5
18	9627-863-001	Wire Harness Main Extension Access Under Burner Housing	4

Control Protection Fuse 2.5 Amp **14** **1** **14** Ignition Upper Pocket Protection Fuse 1.5 Amp



Not Shown:
24VAC Ignition Lower
Pocket Protection
Fuse

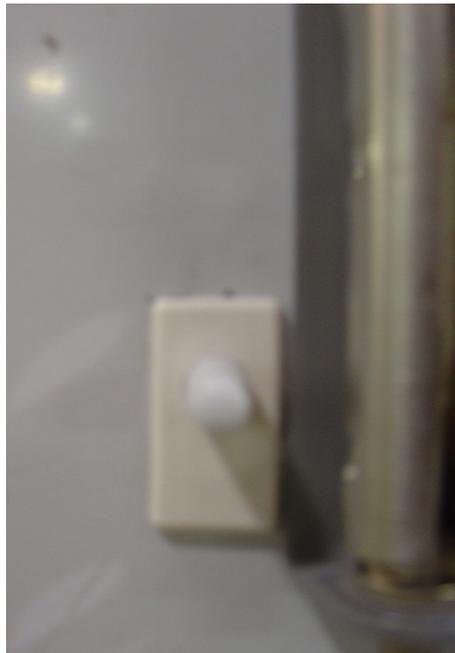
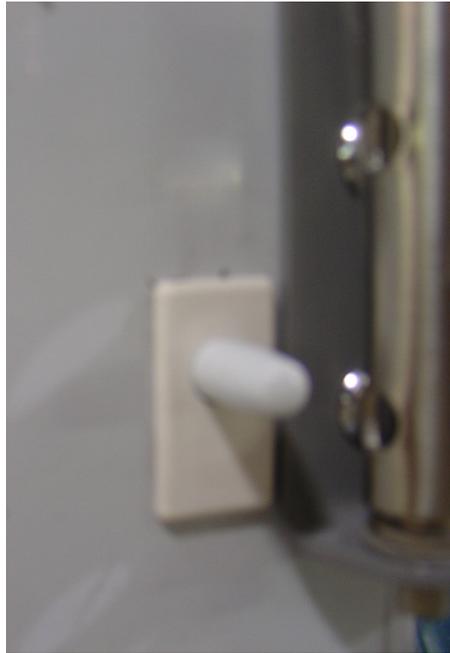


Door Switch Group

Part Number
9539-487-001

Description
Door Switches 2

Quantity



Section 8:

Electric Heated 60Hz

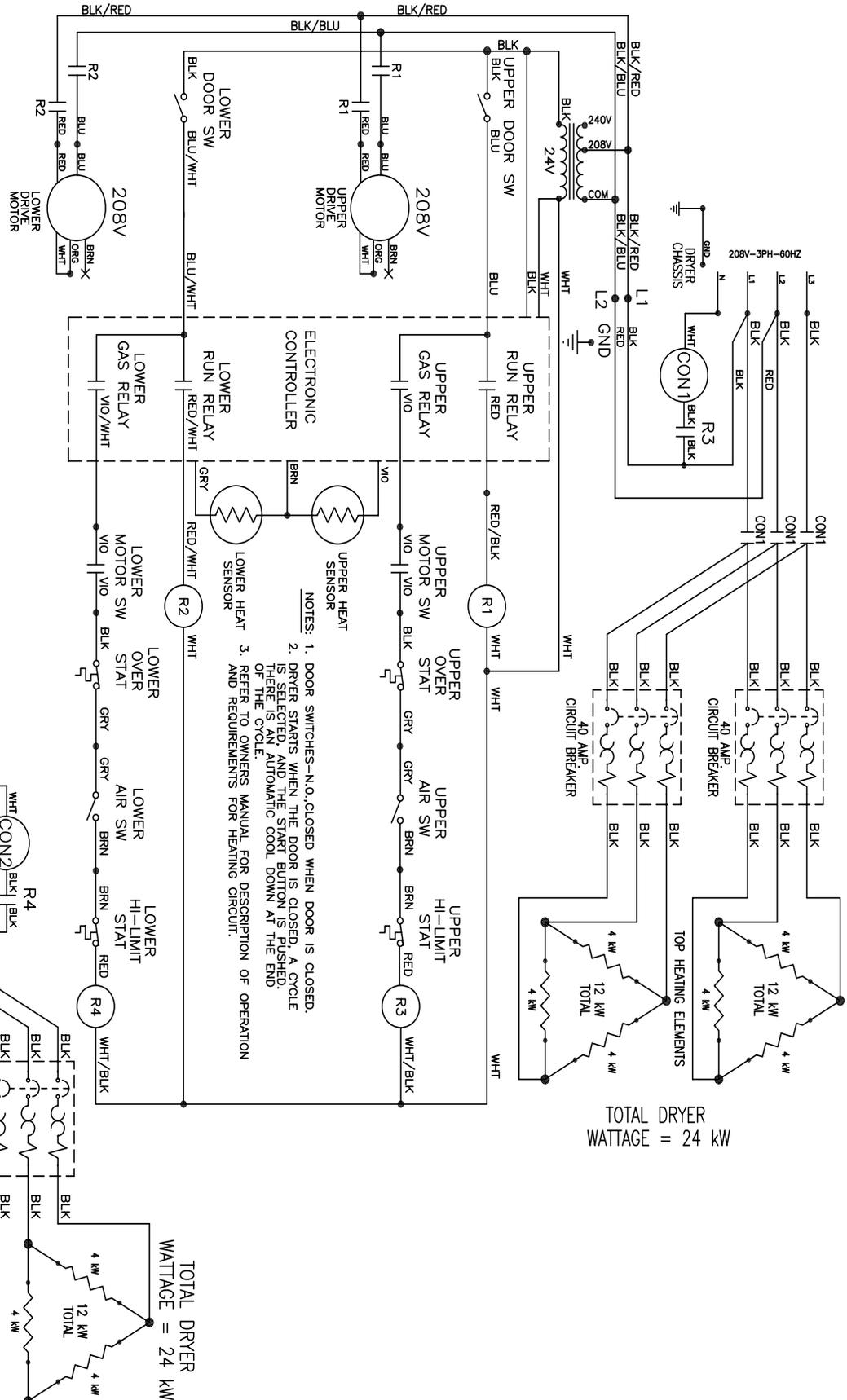
Electric Heated Parts DN30X2EC-71/-74EB

Key	Part Number	Description	Quantity
*	8220-001-499	Wire-BLK, 26"	2
*	8220-057-016	Wire-BLK, 8", 8 AWG.....	6
*	8220-057-021	Wire-WHT, 5 1/2", 18 AWG.....	2
*	8220-057-023	Wire-BLK, 9 1/2", 10 AWG.....	12
*	8220-057-031	Wire-BLK, 36", 12 AWG.....	1
*	8220-057-032	Wire-RED, 36", 12 AWG.....	1
*	8220-061-011	Wire-BLK, 17", 10 AWG	12
*	8220-063-020	Wire-WHT/BLK, 65" 18 AWG.....	1
*	8220-078-014	Wire-BLK, 22" 18 AWG.....	2
*	8220-095-023	Wire-BRN, 54" 18 AWG.....	2
*	8220-103-002	Wire-Red, 19" 18AWG.....	2
*	9636-155-001	Wrapper-Housing, Heater.....	2
*	9545-008-001	Screw 10B x 1/4.....	6
*	9551-032-001	Side-Housing, Heater, Right Hand.....	2
*	9551-033-001	Side-Housing, Heater, Left Hand.....	2
*	9551-040-001	Side Control Heater.....	4
*	9114-044-001	Defl ector-Bottom Housing.....	2
*	9545-008-024	Screw-10AB x 3/8.....	6
*	9058-026-001	Bottom-Housing, Heater.....	2
*	9545-008-024	Screw-10AB x 3/8.....	22
*	9114-045-001	Defl ector-Wraper, Housing.....	2
*	9545-008-024	Screw-10AB x 3/8.....	8
*	9114-046-001	Defl ector-Baffl e.....	12
*	9049-078-001	Baffl e-Housing, Heater.....	2
*	9636-191-001	Wrapper-Control, Heater.....	2
*	9074-293-001	Cover-Plate, Heater.....	2
*	9551-040-001	Side-Control Heater.....	4
*	9545-008-024	Screw-10AB x 3/8.....	16
*	9029-194-001	Bracket-Control, Heater.....	4
*	9074-333-001	Cover-Control, Heater.....	2
*	9545-018-014	Screw-1/4-20 x 3/4.....	8
*	9277-041-014	Insulation.....	2
*	9029-181-001	Bracket-Back, Panel.....	1
*	9074-337-001	Cover-Terminal, Heater.....	2
*	9576-207-006	Thermostat-Overtemp, Manual reset.....	2
*	9538-166-005	Spacer Over Temp Thermostat.....	4
*	9982-364-001	Plate Assembly-Overtemp switch.....	2
*	9627-861-002	Harness-Over Temp Switch.....	2
*	9348-066-001	Lever-Overtemp Switch.....	2
*	9452-769-001	Plate-Over Temp Switch.....	2
*	9497-229-001	Rod-Over Temp Switch.....	2
*	9488-011-002	Rail-Din, 35 x 15mm.....	2

DN30X2EC-71/-74EB 240/60/3 24KW

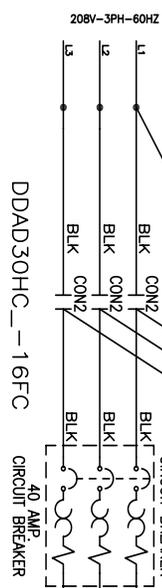
Key	Part Number	Description	Quantity
*	5192-285-004	Relay.....	2
*	5192-296-001	Relay, Heating Element.....	2
*	9377-003-001	Varister-Coil Suppressor.....	2
*	5198-213-002	Circuit Breaker-3 Pole.....	4
*	8652-134-002	Terminal-Lug, Solderless.....	4
*	9870-093-004	Heater Element, 12KW 208V.....	6
*	9295-004-002	Jumper-Formed.....	4
*	9295-005-002	Jumper-Straight.....	8
*	9897-037-001	Block-Power, 3 Pole.....	2
*	9897-038-001	Block-Power, 1 Pole.....	2
*	9506-466-001	Wiring-Schematic.....	1
*	9506-467-001	Wiring-Diagram.....	1
*	9506-468-001	Wiring-Diagram/Schematic.....	1
*	8514-202-001	Booklet-Owners, DDAD30HC_-16FC.....	1

30Lb Schematic Diagram -71

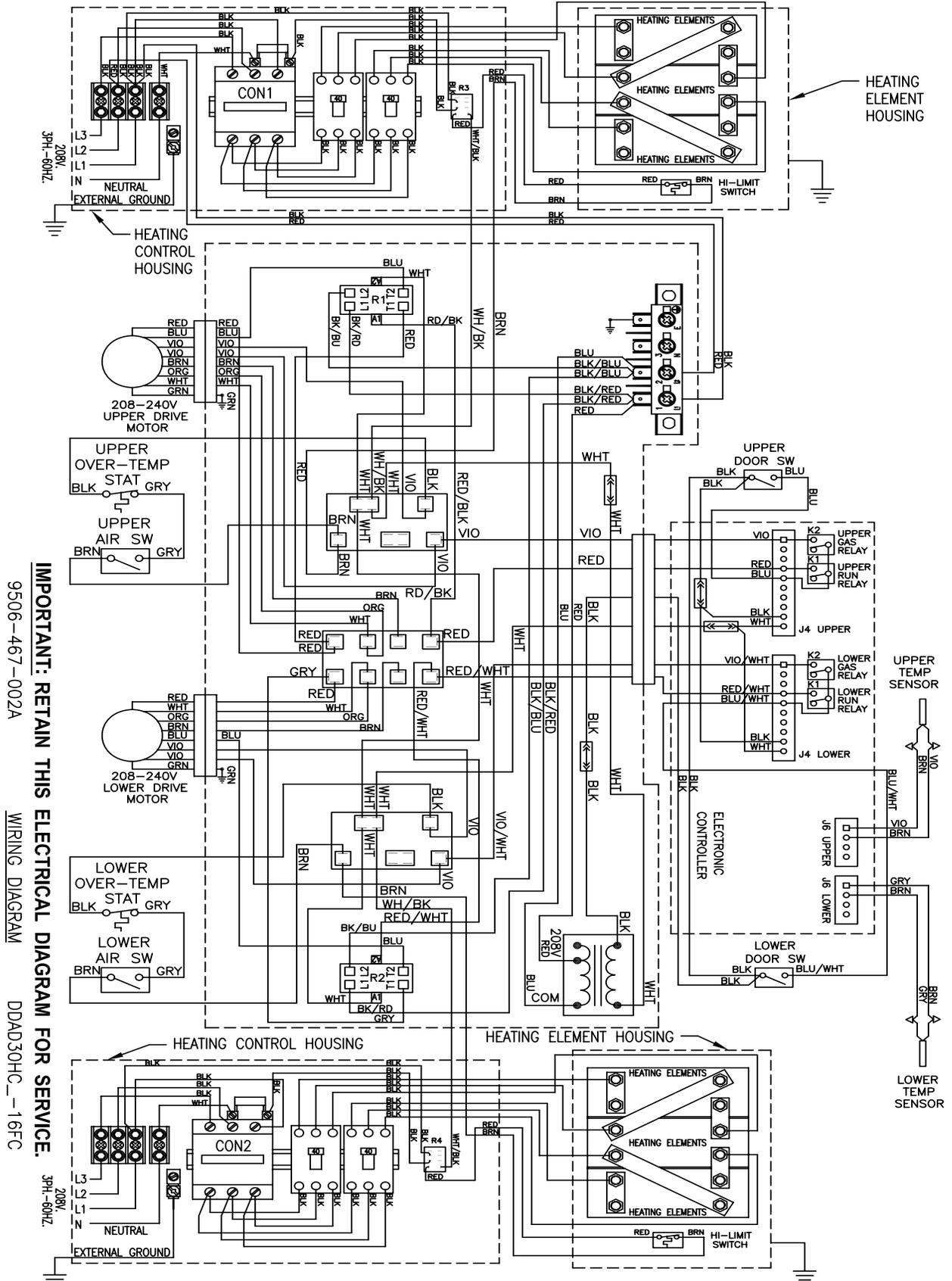


IMPORTANT: RETAIN THIS ELECTRICAL SCHEMATIC FOR SERVICE.
 9506-466-002PR

SCHEMATIC

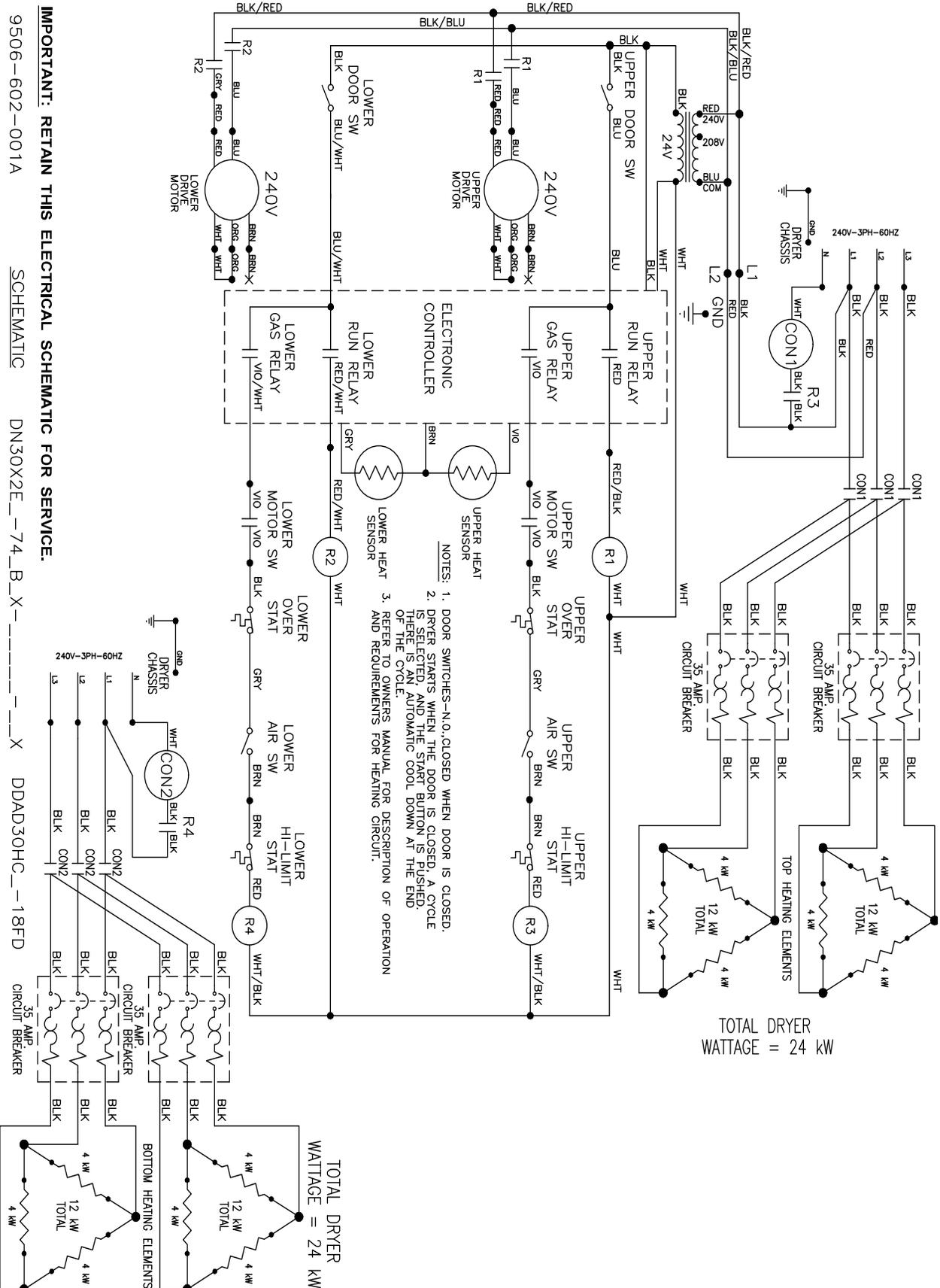


30Lb Wiring Diagram -71

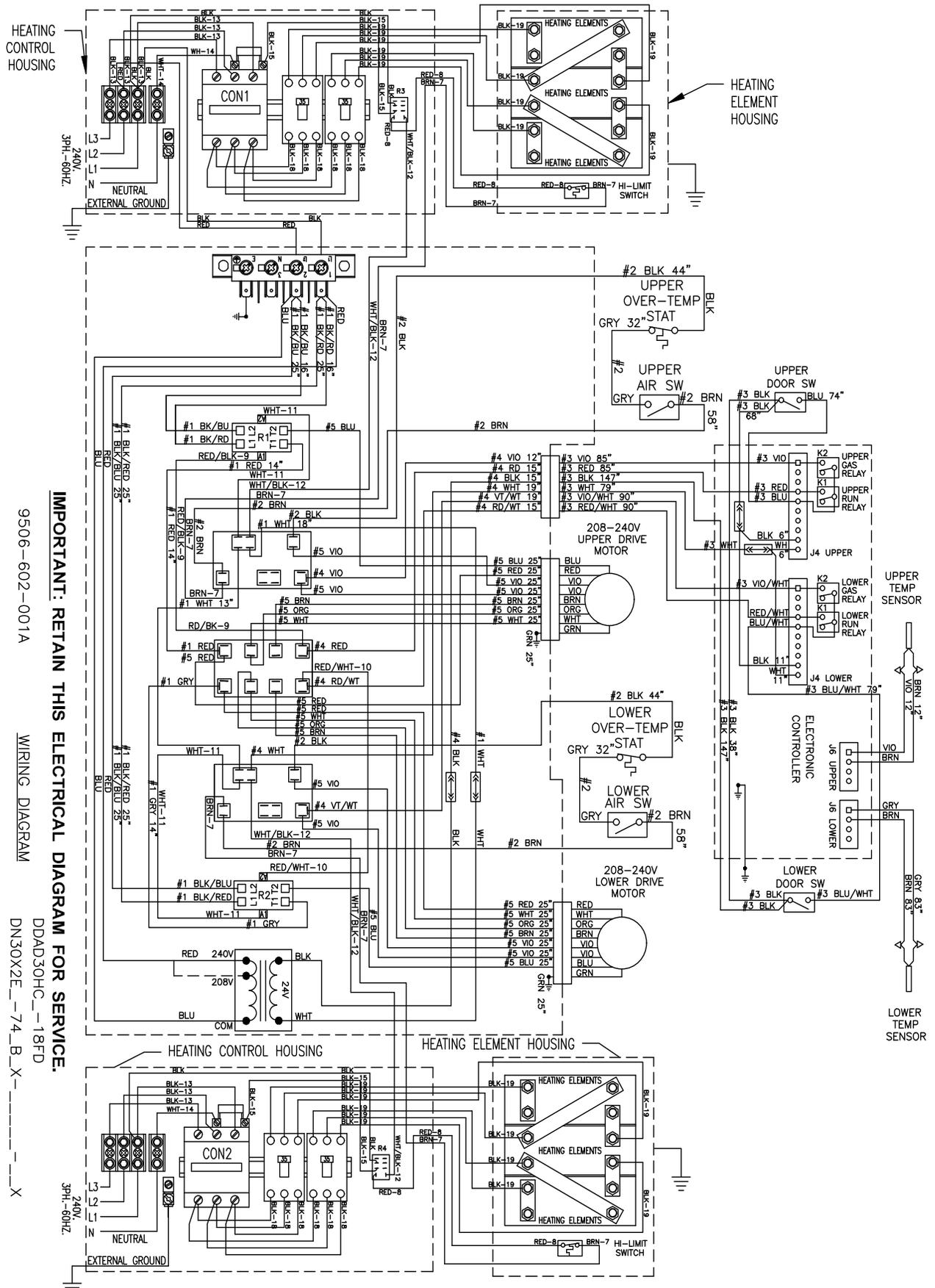


IMPORTANT: RETAIN THIS ELECTRICAL DIAGRAM FOR SERVICE.
 9506-467-002A
 WIRING DIAGRAM
 DDAD30HC--16FC

30Lb Schematic Diagram -74



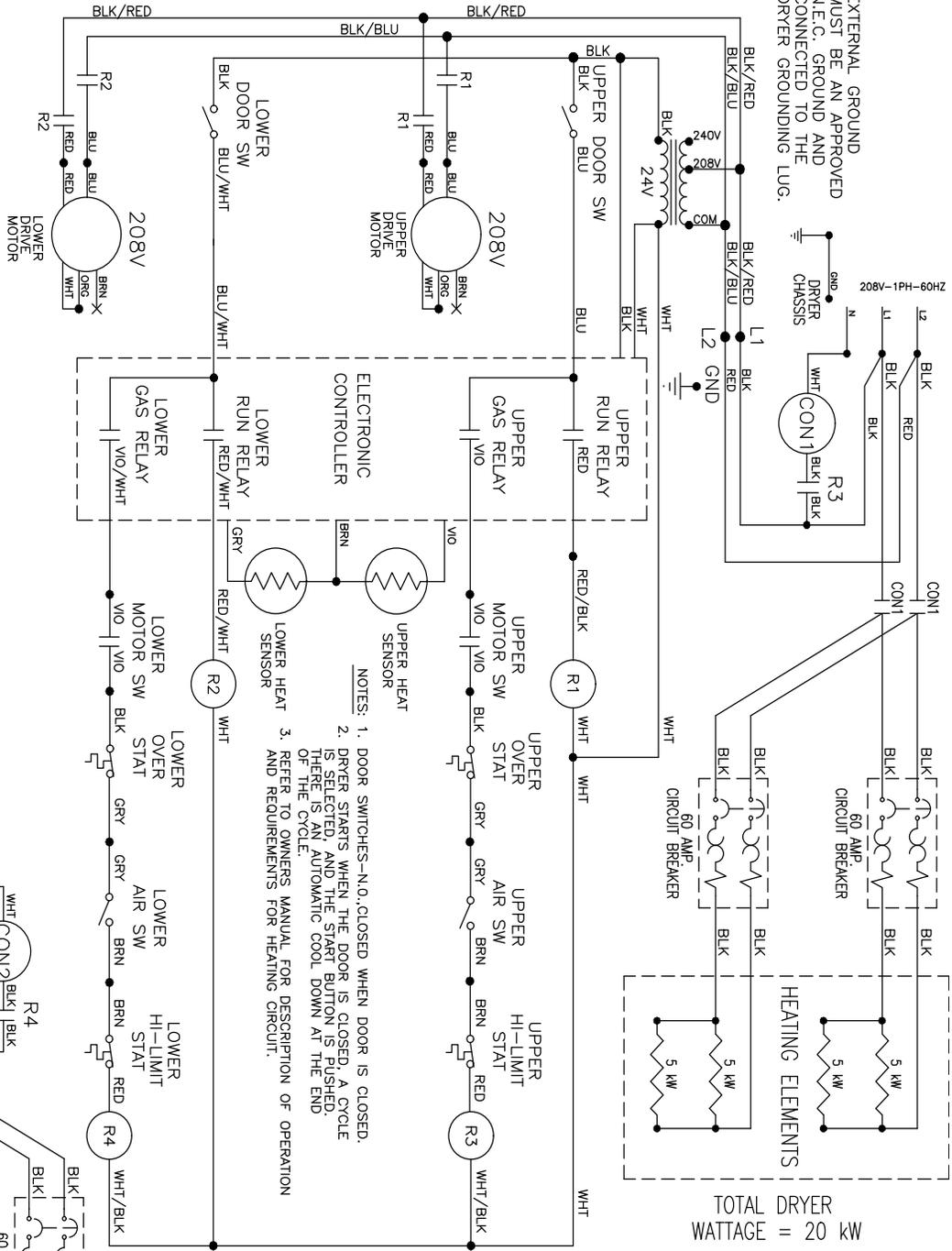
30Lb Wiring Diagram -74



IMPORTANT: RETAIN THIS ELECTRICAL DIAGRAM FOR SERVICE.
 9506-602-001A WIRING DIAGRAM
 DDAD30HC-18FD
 DN30X2E-74_B_X

30Lb Schematic Diagram -77

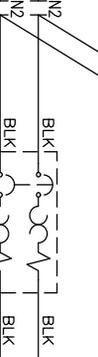
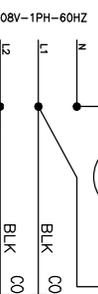
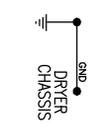
EXTERNAL GROUND MUST BE AN APPROVED N.E.C. GROUND AND CONNECTED TO THE DRYER GROUNDING LUG.



NOTES: 1. DOOR SWITCHES--N.O. CLOSED WHEN DOOR IS CLOSED.
 2. DRYER STARTS WHEN THE DOOR IS CLOSED. A CYCLE IS SELECTED AND THE START BUTTON IS PULSED. THERE IS AN AUTOMATIC COOL DOWN AT THE END OF THE CYCLE.
 3. REFER TO OWNERS MANUAL FOR DESCRIPTION OF OPERATION AND REQUIREMENTS FOR HEATING CIRCUIT.

TOTAL DRYER WATTAGE = 20 kW

EXTERNAL GROUND MUST BE AN APPROVED N.E.C. GROUND AND CONNECTED TO THE DRYER GROUNDING LUG.



TOTAL DRYER WATTAGE = 20 kW

IMPORTANT: RETAIN THIS ELECTRICAL SCHEMATIC FOR SERVICE.

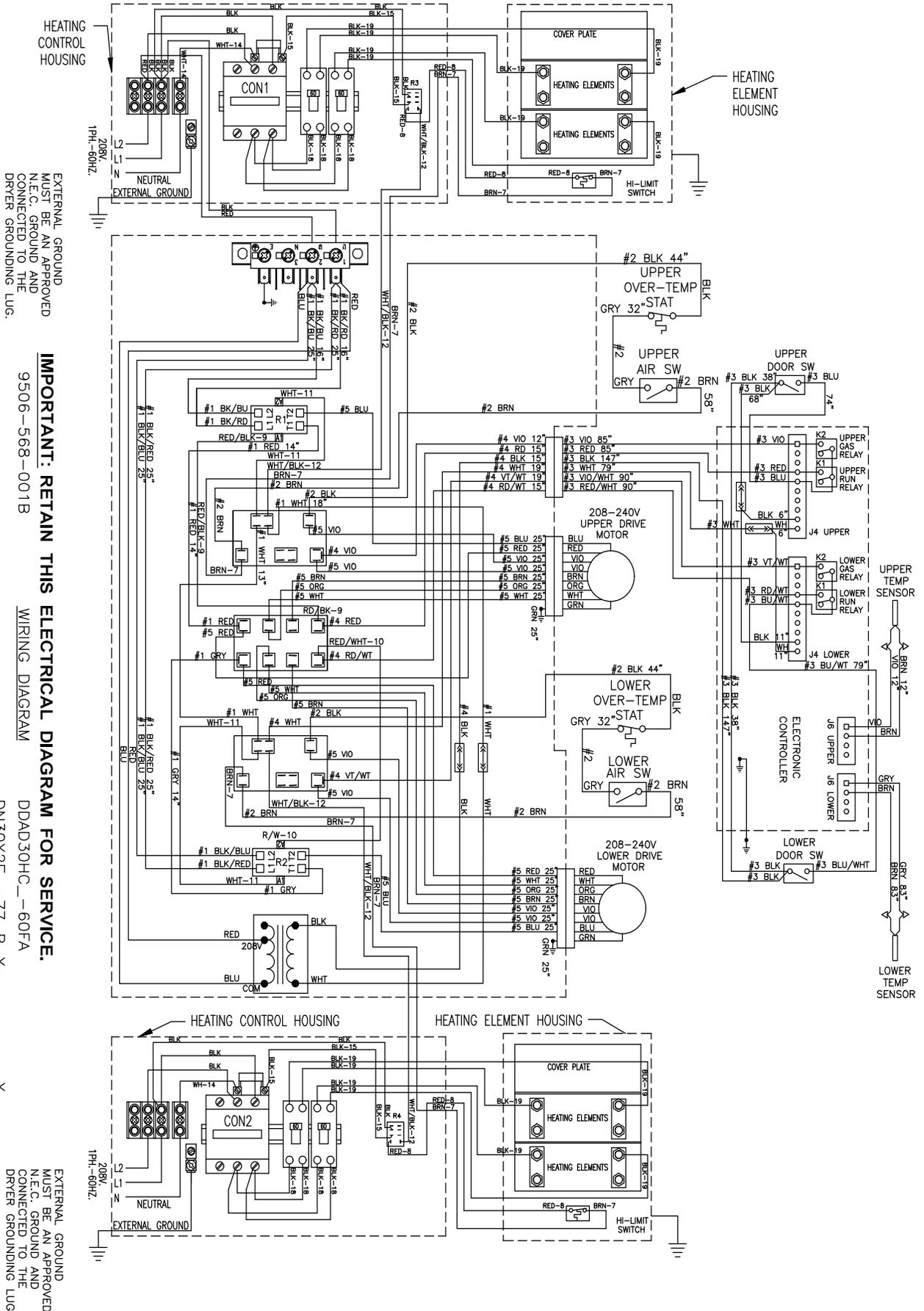
9506-567-001A

SCHEMATIC

DN30X2E--77_B_X--

DDAD30HC--60FA

30Lb Wiring Diagram -77



EXTERNAL GROUND
MUST BE AN APPROVED
N.E.C. GROUND AND
CONNECTED TO THE
DRYER GROUNDING LUG.

IMPORTANT: RETAIN THIS ELECTRICAL DIAGRAM FOR SERVICE.
9506-568-001B
WIRING DIAGRAM
DDAD30HC-60FA
DN30XE-77_B_X

EXTERNAL GROUND
MUST BE AN APPROVED
N.E.C. GROUND AND
CONNECTED TO THE
DRYER GROUNDING LUG.

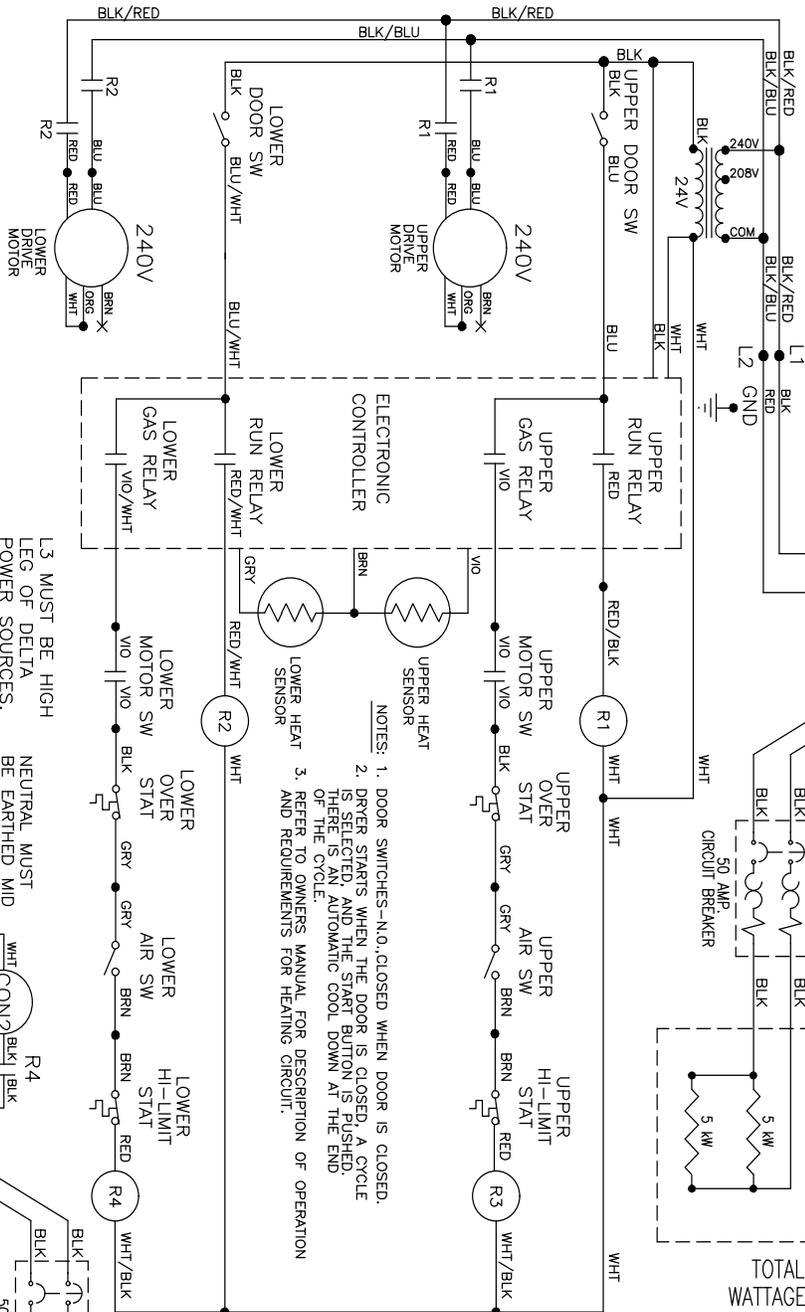
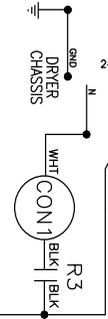
30Lb Schematic Diagram -78

L3 MUST BE HIGH
LEG OF DELTA
POWER SOURCES.

NEUTRAL MUST
BE EARTHED MID
POINT OF PHASE.

CONNECTION TO 208V-60HZ-1PH
ALLOWED & DECREASES WATTAGE 25%.

EXTERNAL GROUND
MUST BE AN APPROVED
N.E.C. GROUND AND
CONNECTED TO THE
DRYER GROUNDING LUG.



- NOTES:
1. DOOR SWITCHES-N.O. CLOSED WHEN DOOR IS CLOSED.
 2. DRYER STARTS WHEN THE DOOR IS CLOSED, A CYCLE IS SELECTED, AND THE START BUTTON IS PUSHED. THERE IS AN AUTOMATIC COOL DOWN AT THE END OF THE CYCLE.
 3. REFER TO OWNERS MANUAL FOR DESCRIPTION OF OPERATION AND REQUIREMENTS FOR HEATING CIRCUIT.

CONNECTION TO 208V-60HZ-1PH
ALLOWED & DECREASES WATTAGE 25%.

L3 MUST BE HIGH
LEG OF DELTA
POWER SOURCES.

NEUTRAL MUST
BE EARTHED MID
POINT OF PHASE.

IMPORTANT: RETAIN THIS ELECTRICAL SCHEMATIC FOR SERVICE.

9506-501-001B

SCHEMATIC

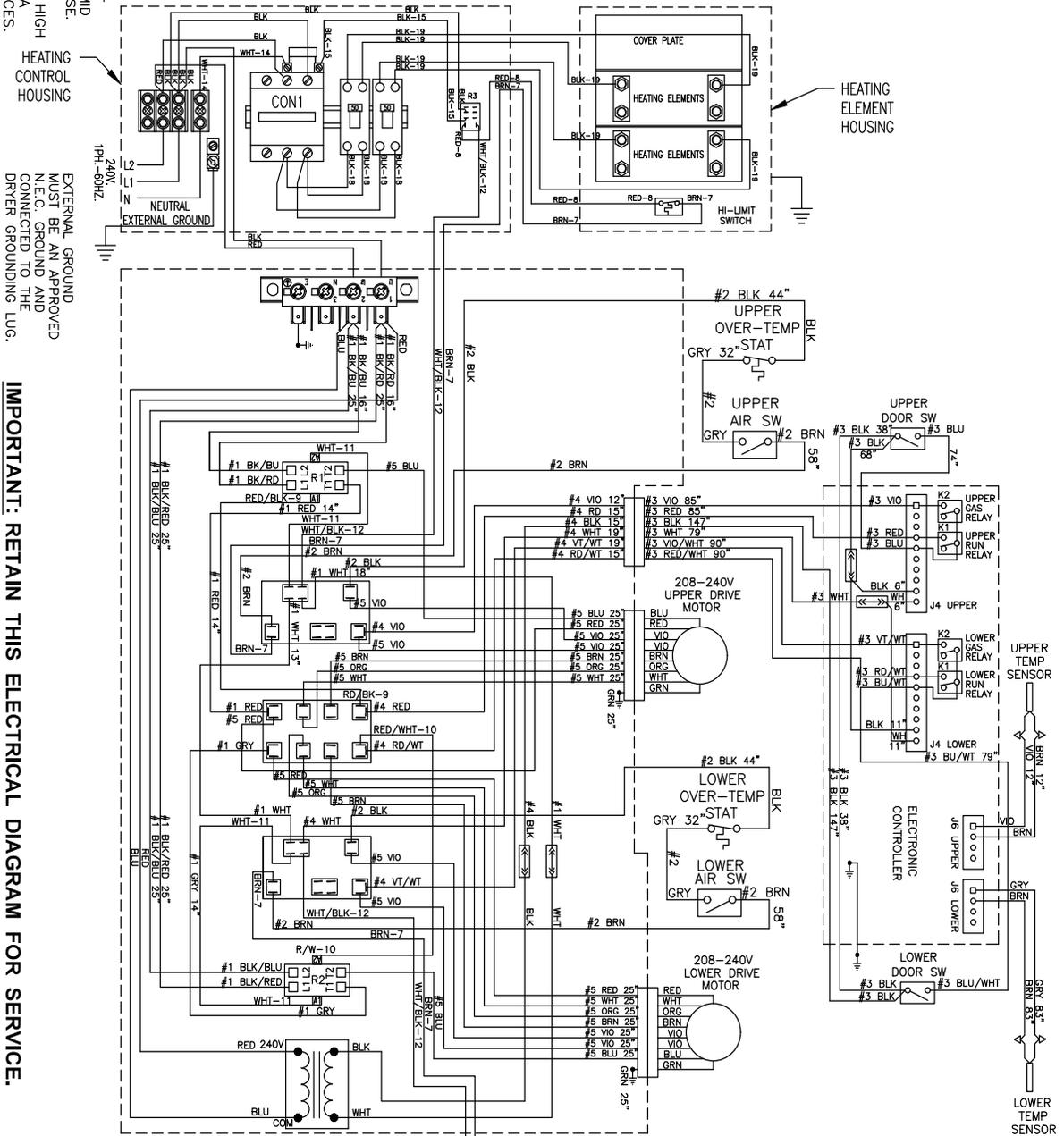
DN30X2E-78_B_X-

DDAD30HC-61FB

TOTAL DRYER WATTAGE = 20 kW

30Lb Wiring Diagram -78

NEUTRAL MUST BE EARTHED MID POINT OF PHASE.
L3 MUST BE HIGH LEG OF DELTA POWER SOURCES.
CONNECTION TO 208V-60HZ-1PH ALLOWED & DECREASES WATTAGE 25%.



IMPORTANT: RETAIN THIS ELECTRICAL DIAGRAM FOR SERVICE.

9506-502-001C

WIRING DIAGRAM

DDAD30HC_61FB

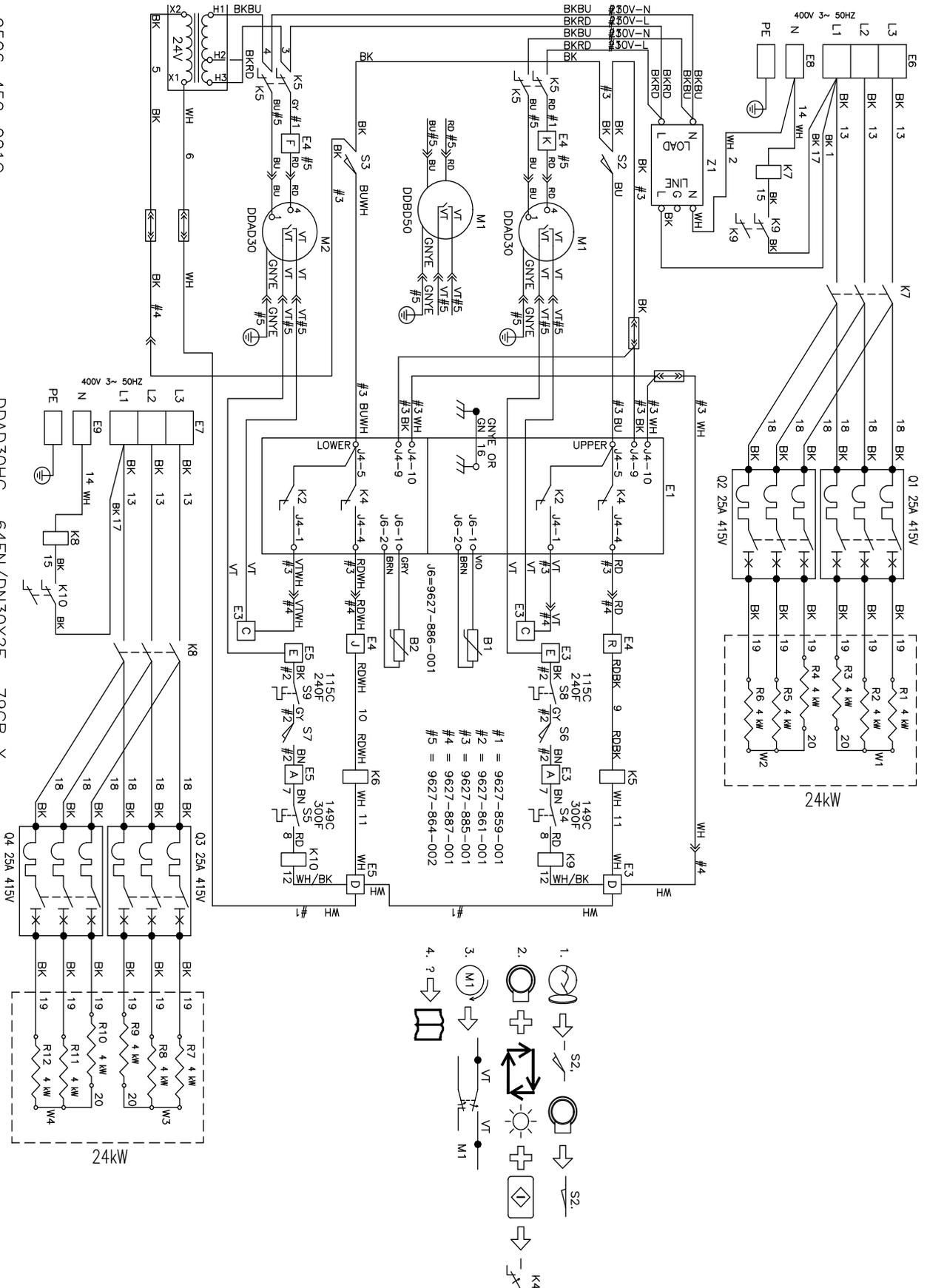
DN30XE_78_B_X

NEUTRAL MUST BE EARTHED MID POINT OF PHASE.
L3 MUST BE HIGH LEG OF DELTA POWER SOURCES.
CONNECTION TO 208V-60HZ-1PH ALLOWED & DECREASES WATTAGE 25%.

30Lb Schematic Diagram -79

9506-459-001C

DDAD30HC_--64FN/DN30X2E_--79CB_X



Section 9:

Maintenance

Preventative Maintenance

Daily

- Step 1:** Clean the lint screen free of lint and other debris. Use a soft brush and Hot water if necessary.
- Step 2:** Check the lint screen for tears. Replace if necessary.
- Step 3:** Clean lint from the lint screen compartment.
- Step 4:** Inspect felt seal on lint screen assembly, replace if needed.

Monthly

- Step 1:** Remove lint accumulation from the end bells of the motor.
- Step 2:** Remove lint accumulation from front control area.
- Step 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.
- Step 4:** Remove and clean coin acceptors. (Vended Models Only)

Quarterly

- Step 1:** Check the belts for looseness, wear, or fraying.
- Step 2:** Inspect the gasket of the door glass for excessive wear.
- Step 3:** Check tightness of all fasteners holding parts to support channel.
- Step 4:** Check tightness of all set screws.
- Step 5:** Remove the air flow switch assembly and check the tumbler thru-bolts for tightness.
- Step 6:** Apply a few drops of oil to pivot pins and the tension arms where in contact with each other.

Semi-Annually

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

Annually

- Step 1:** Check the intermediate pulley bearings for wear.
- Step 2:** Check and remove any lint accumulation from the exhaust system including recirculation chambers if applicable.
- Step 3:** Grease the bearings and the shaft of the intermediate pulley. Use an Alemite grease gun and Molykote BR2-S grease. (Where applicable)

