

# **MAYTAG**

## **Sloped-Front Dryer**

### **Service Manual Supplement**

Attached is Supplement One for service manual **16009968**.

This Maytag Washer Service Manual supplement covers **Models MDE/MDG5500, and MDE/MDG7500**. The following information is supplemental to the information found in the basic manual part number **16009968**. Please refer to this manual for detailed service information.

We suggest you file this with your **16009968** Manual for reference.

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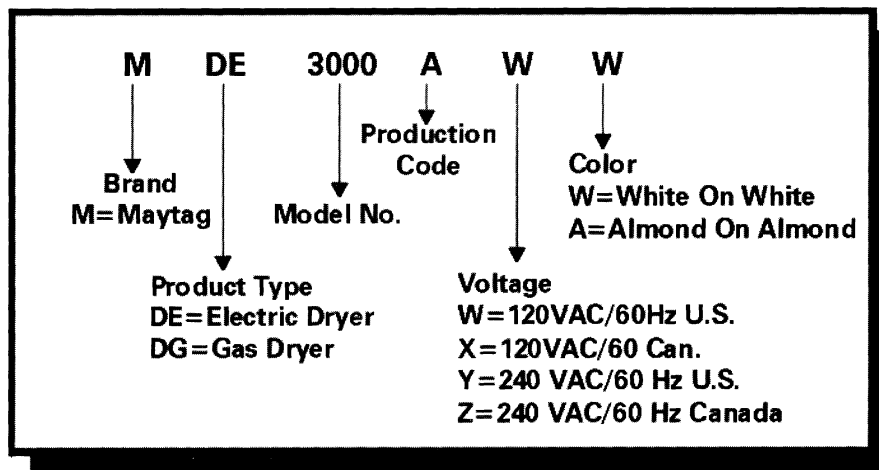
# INTRODUCTION

Each model will be covered separately in a section pertaining only to its control system and internal components. Because the basic structure for all dryers is the same, they will be generally covered without regard to model.

## **Models covered in this manual:**

MDE3000	MDG3000
MDE4000	MDG4000
MDE5000	MDG5500
MDE5500	MDG6000
MDE6000	MDG6200
MDE6200	MDG7057
MDE7057	MDG7500
MDE7500	MDG8000
MDE8000	
MDE8500	

## **Model Number Breakdown:**



For additional information on issues encompassed in this manual, including safety issues, contact:

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Cleveland, TN 37311

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# NOTES

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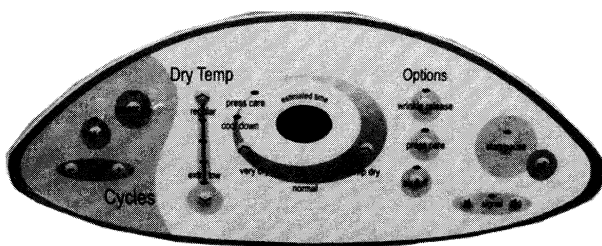
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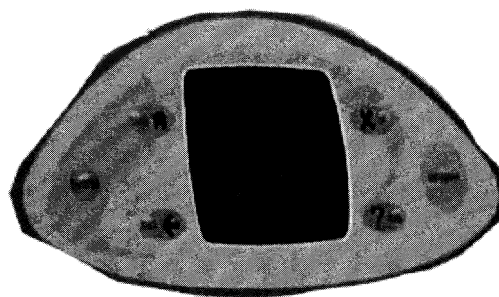


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## MDE/DG5500 Facia (LED Screen)



## MDE/DG7500 Facia (LCD Screen)



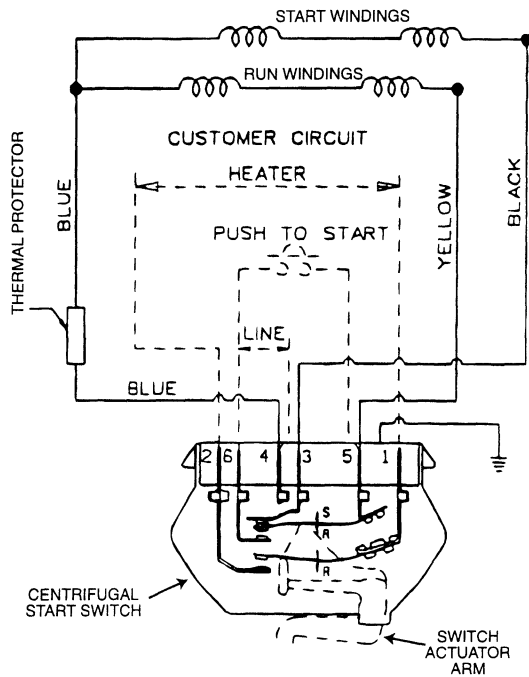
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## PRODUCT SPECIFICATIONS

Same specifications as outlined in service manual part number 16009968.







**Figure 2-4**

Winding	Terminal	Terminal	Ohms
Start	3	4	3.00
Run	5	4	2.25

## Motor Test Cord

A motor test cord may be used to electrically check operation of the various electrical components without removing them from the unit. Testing in this manner merely determines whether or not the part will function independently of other electrical components. In order to make an accurate test, proper connection of the motor test cord is important.

## Drive Motor Test

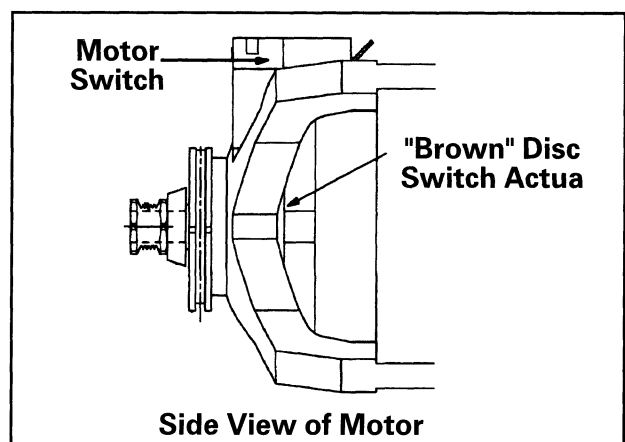
The motor may be checked in the dryer or removed and checked on the bench.

Two test leads are required to check operation of the dryer drive motor. To check the motor for operation, hook up the test cord to terminals 4 and 5. (*See Figure 2-4*)

## Centrifugal Switch


### Checking heater/gas valve-motor:

1. Disconnect the wire harness from the motor.
2. Place ohm meter leads to terminals 1 and 2. (*See Figure 2-4*)
3. With your thumbs, depress the BROWN disc located behind the motor switch on the motor shaft. (*See Figure 2-5*) The BROWN disc actuates the lever of the motor switch when the motor is at rest. At optimum motor speed, the disc moves away from the switch lever. When the disc is pressed inward toward the windings, the actuator arm of the centrifugal switch will be relaxed. This in turn, will allow the contacts to close, completing the heater circuit. If no continuity is found when the disc is depressed, change the centrifugal switch.



**Figure 2-5**

ELECTRICAL TESTS LCD/LED Dryers



**WARNING**

**Warning - Always shut off electrical power to the dryer before beginning any service repair procedures.**

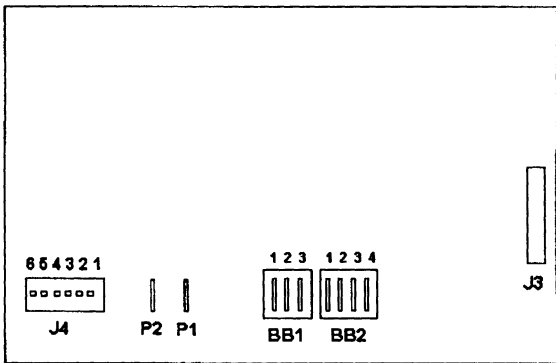
Grounded Components

When performing service diagnostics, replacements and repairs, always check to determine whether all ground wires linking panel and components are reattached if removed.

Machine Control

The machine control microprocessor board is located in the control console, mounted to the plastic console. The board receives input from the membrane pad/touch screen, door switch, thermistor and sensor bars. The control board controls the motor, gas valve/heater via relays on the board. On the LCD electric dryer only, there is an additional external relay.

LCD Dryer



Both incoming and exiting voltage is monitored through the machine control board and the surrounding circuitry. The following tables list the voltages for the various terminals on the microprocessor board. *(Figure 2-6)*

If proper voltage is not present, check switches and wiring for possible loose connections or open circuits by disconnecting the power supply and performing continuity checks of individual circuits.

The machine control board outputs can be verified by placing the dryer into the Service Mode and performing a System Check Mode Test. *(See Section 9; Service Mode; System Check Mode Test.)*

LED Dryer

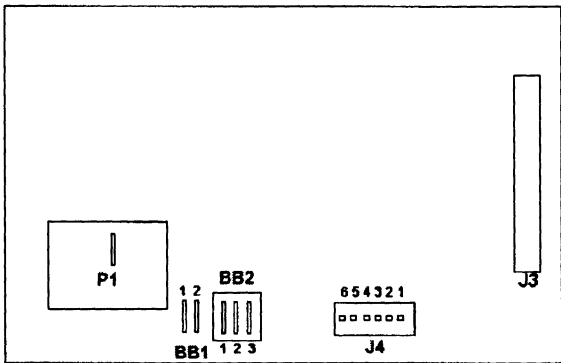


Figure 2-6

## CONSOLE WITH MEMBRANE PAD

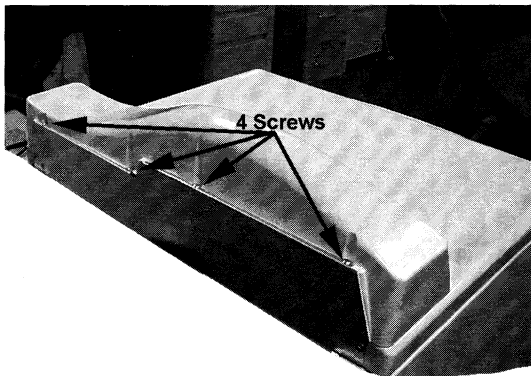


**WARNING** - Always shut off electrical power to the dryer before beginning any service repair procedures.

The replacement console assembly consists of the console, medallion and membrane pad.

### CONSOLE REMOVAL

1. Disconnect power to the unit.
2. Remove the four screws securing the console to the rear cover plate.



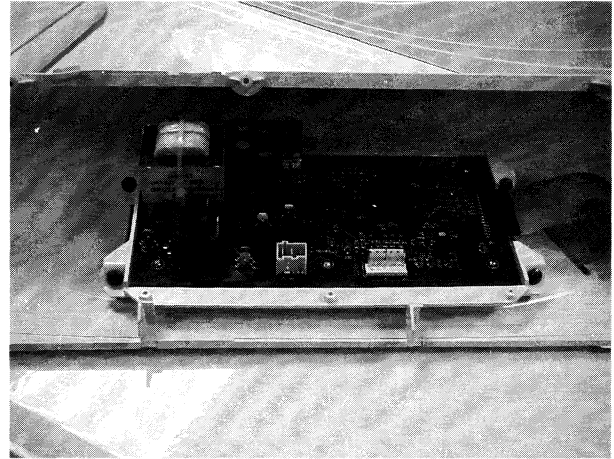
**Figure 4-8**

3. Lay a drop cloth across the top cover of the washer.
4. Grasp the top of the console and gently rock the top of the console forward away from the rear console back. Note the hooked tabs on bottom of the console, which engage the slots in the top cover.



**Figure 4-9**

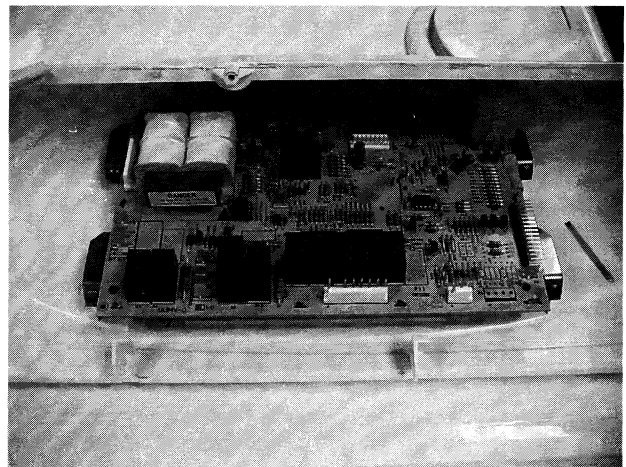
5. For reinstallation, reverse the aforementioned steps.



**Figure 4-10**

### MICROPROCESSOR BOARD REMOVAL

1. Disconnect power to the dryer.
2. Remove the console assembly.
3. Carefully remove the membrane pad harness and other wires from the microprocessor board.



**Figure 4-11**



## SECTION 9. DRYER CONTROLS OVERVIEW

### DRYER CONTROLS OVERVIEW

Models MDE/DG5500, and MDE/DG7500 are similar to the MDE/DG4000 dryer, with the exception being they have membrane switch and/or a touch screen versus console switches and a timer.

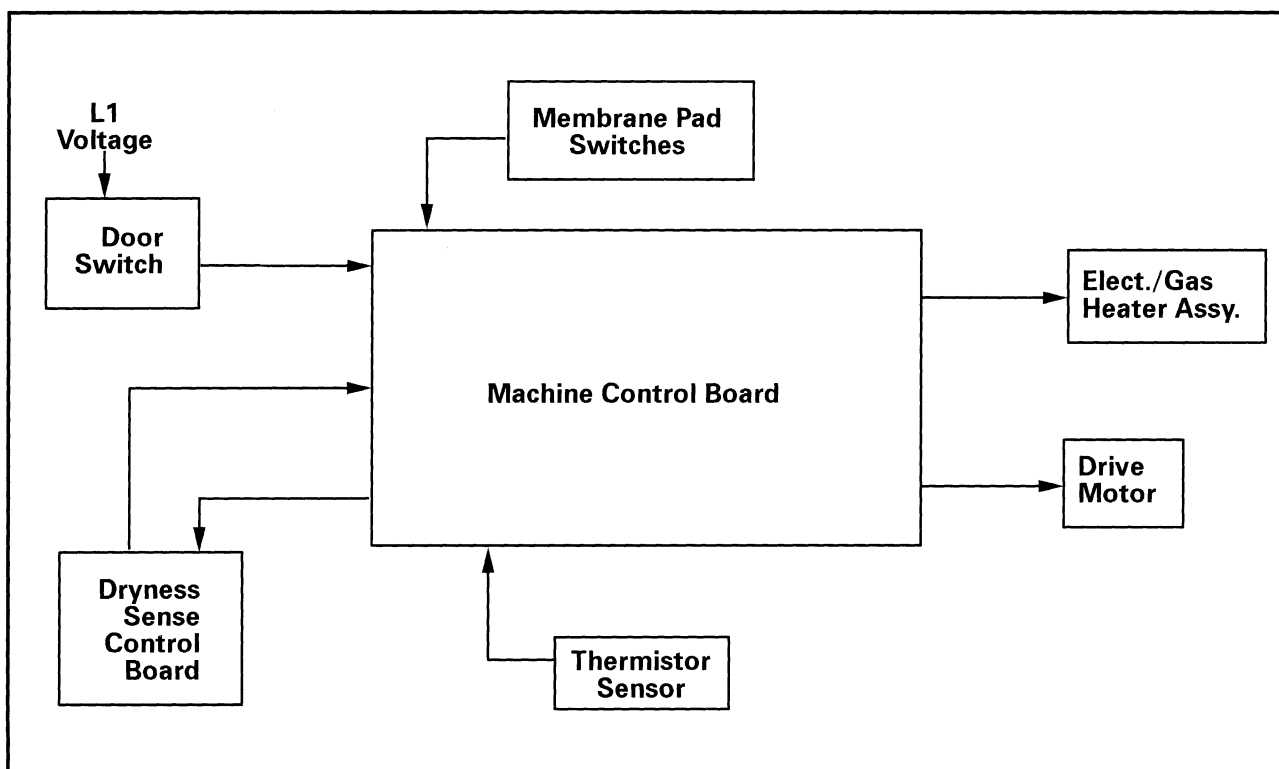
#### The key features of the LED Neptune Dryer:

- Membrane switch with LED display.
- Another dry cycle can be selected at any time during the dry cycle and the control will determine the completion of the cycle time.
- Control displays the estimated time remaining in the cycle for automatic sense dry cycles.
- The control stores codes to aid the service person in diagnostics.

#### The key features of the LCD Neptune Dryer:

- Membrane switch with LCD display and an analog touch screen.
- Another dry cycle can be selected at any time during the dry cycle and the control will determine the completion of the cycle time.
- The control will display the estimated time remaining in the cycle for automatic sense dry cycles. The control will display the true time remaining in the cycle for time dry cycles.
- The control stores codes to aid the service person in diagnostics.
- End of cycle signal adjustable.
- Dryel Cycle

### BASIC CONTROL BOARD PHILOSOPHY FOR BOTH DRYERS



The machine control board monitors several inputs and outputs to operate the dryer. For example, the dryer monitors the ambient air in the laundry room to determine what the normal heat up time cycle is to determine if the dryer is operating properly and also counts the number of dry cycles performed.

Input	Purpose
Line Current	Power down detection
User Interface - switches	Keyboard
Dryness Sense	Impedance from Sensor Bar
Door switch input	Sense status of the door switch
Motor Transistor Sense	Sense conditions of 2 motor transistors on machine control board.
Thermistor	Temperature of the air stream
LCD Display	Displays the various interface screens.

Output	Purpose
Motor Relay	Energize relay to run dryer motor
Heater/Gas Relay	Energize relay to supply heat to dryer.
Dryness Sense Circuit #1	Enable Dryness Sense Circuit
Dryness Sense Circuit #2	Set Circuit Impedance for Damp & Less Dry Detection Levels.
Dryness Sense Circuit #3	Set Circuit Impedance for Normal, More and Very Dry Detection Levels.
Two digit, seven segment LED display	Show the estimate count down of the cycle.
LCD Display	Displays the various interface screens.

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## BASIC MACHINE OPERATION

The **MDE/DG5500 (LED)** dryer incorporates a membrane switch with multiple keypads , embedded LEDs and a 2 digit display readout display.

The **MDE/DG7500 (LCD)** dryer incorporates a transparent touch screen keypad located over the display with graphics to indicate key functions.

The control board function of both dryers, regulates dryer temperature, controls the dryer motor and logs diagnostic events. The control board receives feedback from temperature sensors, dryness sensors and status sensors within the dryer.

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## LED DRYER CONTROL SELECTIONS

The user can select the setting of several features while in the User Interface Active Mode or the Main Dry Cycle. The user sets the features by pressing a key on the keypad and the machine goes into the set mode. If the machine is in the main dry cycle, additional criteria may be applied prior to changing the feature. The modes to set a feature are:

- Select Cycle Type:
  - Sensor Dry
  - Time Dry
  - Wrinkle Release
  - Air Fluff
- Set Temperature
- Set Signal Mode
- Set Dryness Mode
- Set Options Mode

### Sensor Dry

Provides a drying cycle that uses the sensor bars and a dryness control to control the length of the cycle. The cool down period is thermistor controlled to test the airstream for a temperature that is deemed acceptable for wrinkle reduction.

### Time Dry

Provides a user selectable time period of heated drying followed by 5 minutes of cool down. The 5 minute cool down is included in the displayed time period on the control panel.

### Time (+)(-)

Each keystroke will increment/decrement one minute up to 99 minutes. When changing the time for a "Time Dry" cycle, the "cool down" LED illuminates at the 5 minute point. Once the unit is in "Press Care" the time can not be adjusted. Opening the door or pausing the cycle, in Press Care will cancel the cycle.

### Temp ( ^ )(v)

Each actuation of the pad will increment/decrement one temperature level. These pads will NOT allow a continuous loop. The "up" pad takes the temperature to top. The "down" pad takes the temperature to the bottom. Wrinkle Release cycles always default to the highest temperature, but can be modified.

### Dryness ( ^ )(v)

Each actuation will increment/decrement one dryness level. Changing the dryness, does not allow a continuous loop. The (>) pad move to the damp dry setting. The (<) pad moves to the very dry setting.

### Wrinkle Release

This key provides a cycle that will aid in removing wrinkles that have been set in the clothing. This is essentially a "timed" cycle that provides 8 minutes of heat followed by a 10 minute cool down. (Previously called Permanent Press).

### Wrinkle Prevent Option

This provides an extended care portion for many cycles. The cycle is defined as: 95 minutes broken down as follows -- 20 minutes of continuous tumbling followed by intermittent tumbling (10 seconds of every 5 minute time period). Any time prior to initiation of the "press care" portion of the cycle (when the pad is active), the pad will function as an on/off toggle. Press Care is an available option for sensor dry, time dry and wrinkle release cycles. Signal: A signal is given: 1. At the end of the regular cycle 2. At the end of the 20 minute continuous tumble 3. At the end of each intermittent tumbling period.

**Note: If the door is opened during the "press care" the cycle is cancelled. If the user leaves the unit "paused," follow the normal time-out procedure.**



## Air Fluff

When "Air Fluff" is selected: Sensor Dry and time dry LEDs are "off". Twenty (20) minutes appears in the display and the "time +/-" pads are active (time +/- LED is "on").

**Note:** *Wrinkle Prevent is NOT available as an option with this temperature setting. This is essentially a no heat timed dry cycle of x minutes.*

## Start/Pause

This is the only pad capable of starting the dryer. If the "start" pad is pushed from the "sleep" mode, the dryer will immediately start using the settings from the previous run. If the pad is pushed while the drying is operating, the dryer will shut down and the control will "pause" (flashing the "start/pause" LED). This will suspend the cycle for four hours. If the cycle is paused (LED flashing), another actuation of the "start/pause" pad will restart the cycle at the point of interruption. If the cycle is paused by opening the door, the "start/pause" LED will flash. The control will power down to the "sleep" mode if the cycle is not re-initiated within four hours of the point the door was opened or after the machine has been placed into the idle mode. If the machine is idle for 10 minutes, the timer will time out.

## Signal

Each actuation will increment/decrement one volume level. Full advancement will not provide a continuous loop. The (-) pad stops at "off" and the (+) pad stops at the highest volume level. The full advancement rate is 1 volume level per 0.5 seconds. An audible feedback is provided (at the appropriate volume) for each volume level. There is no audible feedback and the LED turns off at the "off" level. Pads that are Not applicable will be inoperative and provide no feedback.

## Off

The "off" pad always functions to end the machine operation and put the control in the "sleep" mode.

## SIGNAL MODES

The volume level of the end of cycle signal is adjustable. The sound ranges from "off" to "3" in increments of 1. The user will be able to select the plus (+) to increase the volume level. The user will be able to select the minus (-) to decrease the volume level. When the user first presses either of these keys, the current signal level will be demonstrated.

Subsequent presses of either the plus or minus button within 5 seconds of the previous key press will increase or decrease one level. The new signal level will sound.

This signal is used in the following manner:

- **End of Cycle:**  
Sounds three long beeps at end of cycle.
- **Remind Chime:**
  - a) Press Care option – after 20 minute continuous tumble portion of press care, the signal is given, and then every 5 minutes after the intermittent tumble.
  - b) If the door has not been opened after the dry cycle, the signal is given every 5 minutes for 2 hours. (LCD dryer only)
- **Cool Down Signal:**  
Sounds 3 short beeps upon entering the Cool Down cycle.
  - a) Time Dry cycle
  - b) Sensor Dry cycle
  - c) Wrinkle Release cycle
- **Dryel cycle (LCD models only)** – at the beginning of cool down and every minute until the end of the cycle.

## DRYER TEMPERATURE CONTROL

There are two (2) thermostats in the dryer in addition to the thermistor. The thermistor is the control element used to cycle the heat for a normal cycle. There is also a 160°F cycling thermostat that is used for backup only on the blower housing.

In the event that the dryer control senses the temperatures (in the 160°F range) and cycles the heater or gas relay, it is likely that the control is cycling on the 160°F cycling thermostat. This would indicate that the thermistor control is not working.

The dryer also has a high limit thermostat that opens at 220°F on the gas models and at 220°F on the electric models.

The normal heater control function will perform the following tasks: check the temperature in dryer air stream (thermistor input) and control the heater depending on the temperature value read or the cycle requirements. The dryer will use the predetermined temperatures listed in the table below, to know when the heater is to be cycled on and off. These predetermined temperatures are selected by the consumer and may be cycle specific.

The values below are supplied only as an example of average resistance values seen by a number of thermistor controls tested.

### LED Dryer

Note, when in the Service Mode and the dryer is running, the control will indicate the temperature reading found in the blower housing via the thermistor. The reading will be displayed in Celsius due to the 2-digit display.

### LCD Dryer

When in the Service Mode and the dryer is running, the control will indicate the temperature reading found in the blower housing via the thermistor. The reading will be displayed in Fahrenheit.

### Smart Cool Down Function

As the customer uses the dryer, the control board will “learn” about the type of ducting and the customer’s habits to develop a more accurate cool down time for that dryer. To accomplish this, the thermistor is read at the end of each cycle to determine time to reach 100°F.

Ten cycle cool down times will be used to obtain an average of the time it takes the dryer to dry those cycles to the 100°F. This average time plus 1 standard deviation will then be used as a cool down time for all cycles.

The ten cycle average will be continually recalculated to adapt to changes in the ducting and the user’s habits. Those locations where the ambient temperature is higher than normal, the above specified cool down temperature may not be attainable.

### Dryer Sensor

The dryer provides a drying cycle that uses the sensor bars and a dryness sensor control board to control the length of the cycle. This selection provides an estimated time remaining in the cycle that is updated as the clothes reach the damp dry level and again at the normal dry levels.

**Note: If there are no impedance or sensor readings in the first 3 minutes, the dry cycle will be terminated immediately.**

Name	Temperature °F/°C	Cycles Off °F	Cycles On °F	Resistance (Ohms)
Regular	150/66	-15	15°F below heat	1860
Medium (factory default)	143/62	-15	15° below heat	2350
Delicate	135/57	-15	15° below heat	2700
Ultra Low	125/52	-10	10° below heat	3200
Air Fluff	Ambient			

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## SPECIAL FEATURES

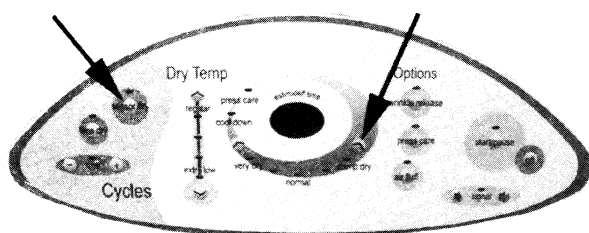
The LCD and LED dryers come with several new features not available with the earlier versions of the Neptune dryers. By pressing a combination of keys, the dryer can be placed into an Advertising Mode or into a Service Mode for the service technician.

### ADVERTISING MODE

This mode will continuously display the LEDs on the keyboard or illuminate the touch screen.

#### LED Dryer

Pressing the **damp dry** and **sensor dry** keys for 5 seconds will start the washer in the Advertising mode. No functions will be run except illuminating the LEDs.



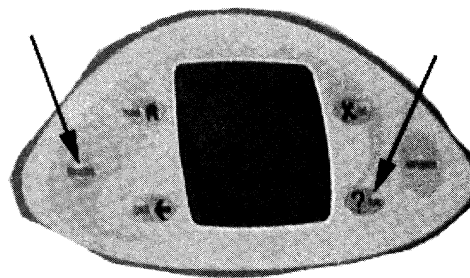
All the LEDs will light within 1.5 seconds in the following order and repeat: start/pause, signal, wrinkle prevent, wrinkle release, air fluff, damp dry, less dry, normal dry, more dry, very dry, cool down, wrinkle prevent indicator, temperatures (regular, medium, low, extra low), sensor dry, time dry, time(+), time(-), 7 segment display.

Enter and exit the advertising mode by using the same 2 key sequence or unplug the power cord.

#### LCD Dryer

This mode will continuously display the touch screen on the keyboard.

Pressing the **favorites** and **back** keys for 5 seconds will start the dryer in the Advertising mode. No functions will be run except illumination of the touch screen panel.



While in advertising mode, the display will cycle through eleven screens. If the touch screen or any key (except off) is pressed, the advertising sequence will be interrupted and the control will go to the Interactive State.

When this occurs, the user is able to navigate through the control as normal (including setting favorites, setting preferences, etc.), but the machine will not be allowed to run a cycle. The only methods of exiting the advertising mode is to remove power from the machine or to press and hold both the **help** key and the **favorites** key for 5 seconds. The off key will not be active in the service mode.

After 5 minutes of inactivity in the advertising mode, the control will time out and return to advertising mode and the advertising sequence will begin again. When the control times out in this manner, any settings or changes that the user had made while in the advertising mode will not be remembered.

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## SERVICE /DIAGNOSTIC MODE

This mode provides service personnel the ability to verify the operation of the dryer.

The service mode can be implemented in the middle of any dry cycle. While in the service mode, the servicer can start special service tests such as a system check mode, membrane pad check, display software revision number and display diagnostic/help code listings. (See Service Mode Table) The diagnostic/help code information displayed provides information about the machine.

To aid the service technician, special software was incorporated into the control boards of the MDE/DG5500 & MDE/DG7500 dryers. The software is used to monitor several functions of the dryer during operation and identify any abnormalities as they arise. These abnormalities can be monitored in the Service Mode and the board will list previously identified failures as either a Help or a Diagnostic code.

The Diagnostic codes are identified when the severity level of the abnormality detected is higher and service may be required.

Both code lists are stored in separate permanent memories with a maximum of nine codes per list.

**NOTE:** *Due to the various differences in the two dryer control systems, the following pages will focus first on the LED dryer then the LCD dryer.*

Press Keys	Special Test/Function
wrinkle release	Diagnostic Codes
dryer temp(^)	Sequences up the help/diagnostic code list
dryer temp(v)	Sequences down the help/diagnostic code list
time (-)	Displays Software Revision Number
very dry(<)	View current cycle temperature (C°)
start/pause	Start or pause cycle running but remain in Diagnostic mode

**Diagnostic Codes:**

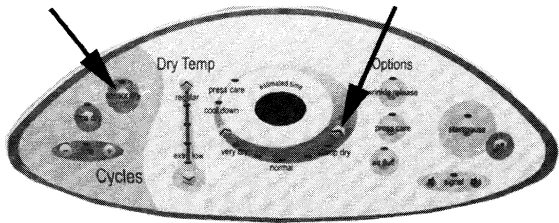
When a problem with the dry system is detected a diagnostic code is assigned and logged into the control board memory. An assigned diagnostic code indicates the dryer may need to be serviced. The control board will not log multiple same codes per cycle, however, it will log as many diagnostics as possible for the machine to continue running.

See the diagnostic code table for specific actions or references to where the proper action is defined. (See page 15)

**LED DRYER**

**Accessing Service/Diagnostic Mode:**

Pressing down the **damp dry** and **time (-)** keys for 5 seconds places the machine in the diagnostic mode.

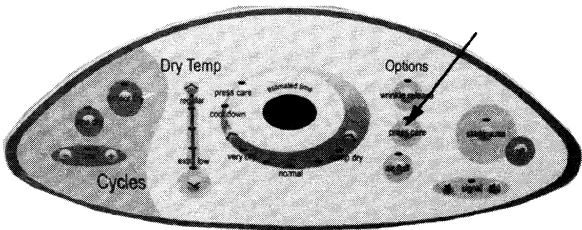


**SPECIAL TESTS**

The following table lists the various tests available while in the Service Mode, which can be accessed by pressing the following keys:

**Accessing Diagnostic Codes**

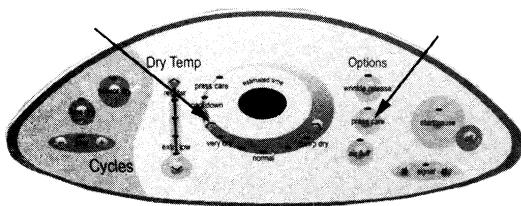
After the machine is in the diagnostic mode, a 'd' will display and let the technician know they are in the diagnostic mode. Pressing the **wrinkle release** key will access the diagnostic codes. The diagnostic codes can be viewed by using the temperature (^) & (v) keys.



The down arrow key will sequence down the list one each time it is pushed with no wrap. The first time the down arrow key is pushed the display will sequence to the next code logged. The last code being displayed being the oldest code. The up arrow will sequence up the list one code each time it is pushed until it reaches the top code. If there are no diagnostic codes available, '00' will be displayed for the diagnostic code.

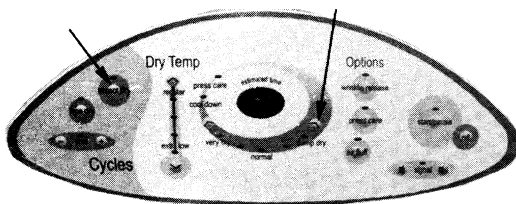
There will be no multiple occurrences of either a diagnostic code or help code generated in the same cycle reported on the list. But if the same code occurs in repeated cycles, it will be registered.

To **clear the diagnostic code list** press **wrinkle prevent** and **very dry (>)** for 5 seconds while viewing the list.



### System Check Mode

While in diagnostic mode, pressing the **damp dry** and **signal (+)** keys for 2 seconds, will put the dryer into the system check mode. "SC" will display.

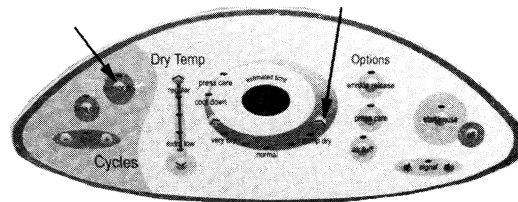


This mode will allow the various inputs and outputs to be controlled and viewed by the technician by pressing individual keys. If no activity is seen for 5 minutes after a key is depressed, the control will reset back to the normal mode. If no further activity is seen after an additional 5 minutes the washer will turn off. The following table lists the various functions based upon on keys being depressed.

Key Pressed:	Function Performed
<b>sensor dry</b>	Enable sensor dry circuit. (sense dry LED) When short circuit is detected across the sensor bars the normal dry LED will turn on.
<b>start/pause</b>	Cycles the motor relay on/off. When the motor is running the start/pause LED is on.
<b>dry temp(^)</b>	If motor is running, cycles the heater/gas valve on/off. When the heater is regular temp LED is on.
<b>very dry(&lt;)</b>	View current cycle temperature (C°)

### Membrane Pad Check

While in system check mode, pressing the **damp dry** and **sensor dry** keys for 5 seconds, will start a membrane pad switch test.

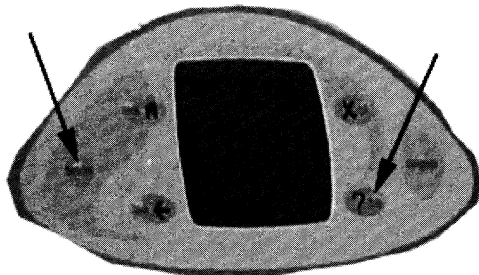


The membrane check involves turning all the embedded LED on the membrane pad on. All the LED's can be toggled off by pressing the key associated with the LED. To exit the test at any point, press the damp dry (>) & sensor dry keys again for 5 seconds or press the off key to exit diagnostic mode.

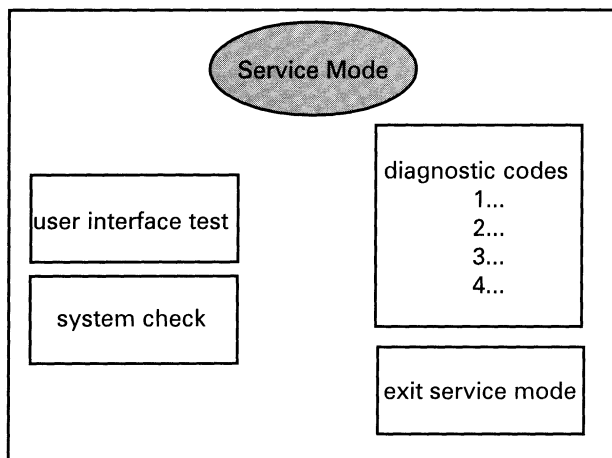
## LCD DRYER

### Accessing Service Mode

Press and hold the **back** and **help** keys for 5 seconds to start the Service Mode.



Pressing the Service Mode keys again, will take the machine out of the Service Mode.

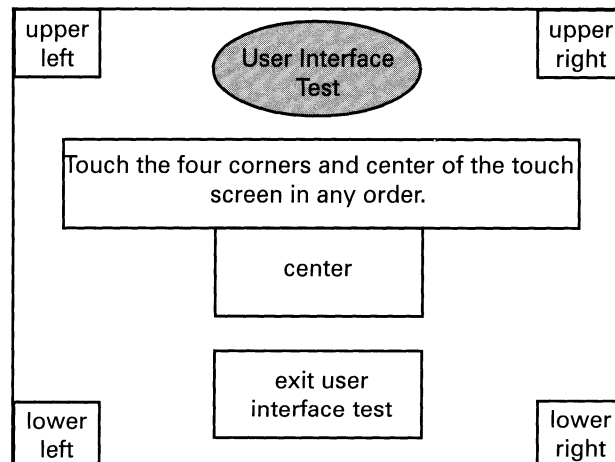


The Service Mode screen lists four different touch panels; user interface test (membrane switch test), system check, diagnostic codes and exit service mode. Pressing any of the touch screens will activate a different screen dedicated to that function.

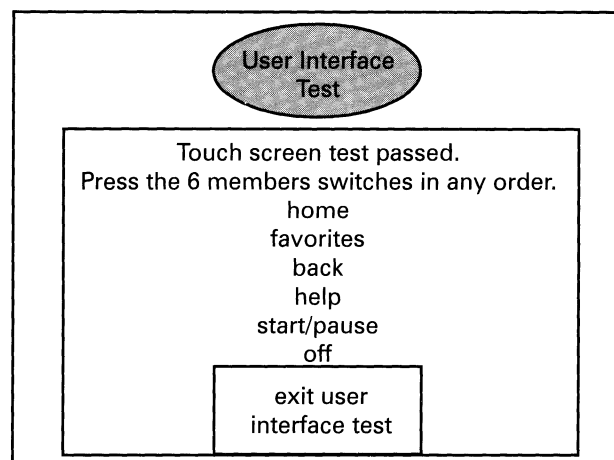
The diagnostic codes listed are the last four codes assigned by the dryer.

After 5 minutes of inactivity in Service Mode, the dryer will exit Service Mode and return to the state just prior to Service Mode. If a service test is being run, the control will remain in Service Mode until 5 minutes of inactivity has occurred at the end of this cycle.

### User Interface Test:



This will check the touch screen. The service technician is prompted to "Touch the four corners and center of the touch screen in any order." When each area is pressed, the display will reverse image. If all areas are sensed, the control will display "Touch screen test passed." If any area(s) is not sensed within 5 seconds, the technician will be prompted to "Touch the area(s) not highlighted." If the area can still not be sensed within 5 seconds, the control will display "Touch screen test failed." In either case scenario, the screen will step to the next screen to check the membrane switches.



This test checks the membrane switches on the console pad.

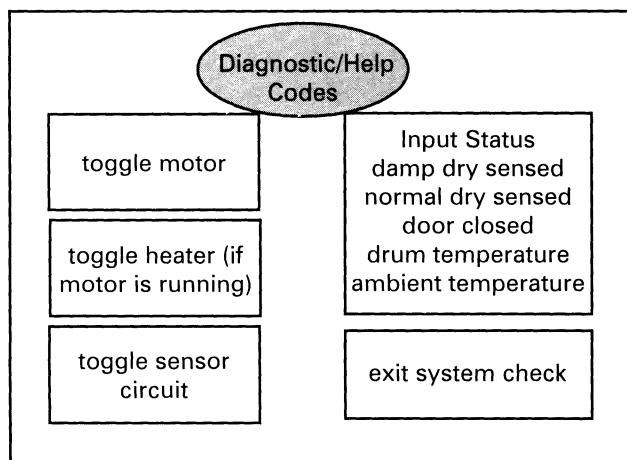
The screen displays the status of the touch screen test that was just performed. The

technician is then prompted to "Press the 6 membrane switches in any order." When each key is pressed, it will display in reverse image and remain that way. If all keys are sensed, the control will display "Membrane switch test passed." If any key (s) is not sensed within 5 seconds, the technician will be prompted to "Touch the key(s) that are not highlighted." If key(s) again are not sensed within 5 seconds, the control will display which key(s) failed.

The last step of the user interface test is to display the entire screen in reverse image for 2 seconds and then resume normal display mode. This is done as soon as the membrane switch test is complete. This is a visual test only.

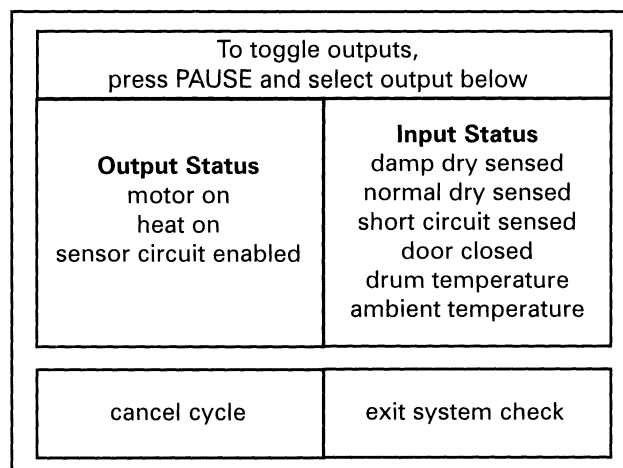
## SYSTEM CHECK

System checks can be run when the dryer is running a dry cycle or not. If the dryer **is not** in a dry cycle, the following screen will display and allow the technician to toggle various components On/Off.



At the same time, the screen will display the current status of the component inputs to the control board.

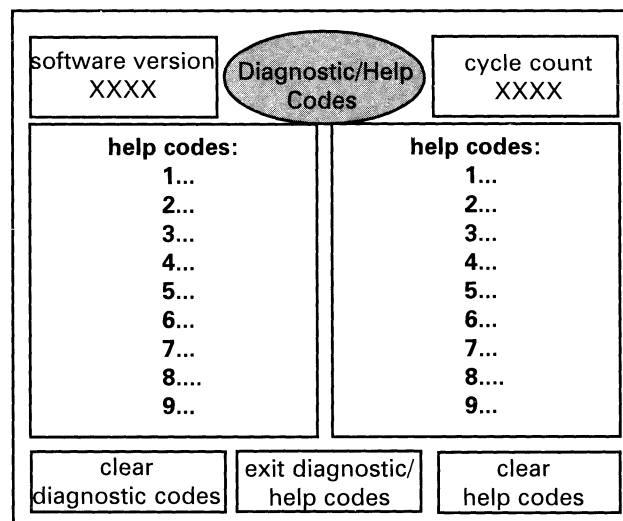
If the dryer is already running a cycle and the system check is activated, then the screen will display the status of all the outputs and inputs to the control board.



**Cancel cycle:** This will stop the current cycle.

**Exit system check:** This will exit the system check screen and revert back to the previous screen shown on the display panel.

## DIAGNOSTIC/HELP CODES



**Diagnostic codes:** Display all diagnostic codes and how many cycles ago the codes occurred.

**Help codes:** Display all help codes and how many cycles ago the codes occurred.

**Cycle count:** Display the cycle count.

**Exit diagnostic/help codes:** Clear diagnostic codes: Clear the entire list of diagnostic codes.

**Software version:** Display current software version

For a listing of available diagnostic codes see below:

## DIAGNOSTIC CODE TABLE

Code	Description	Trigger	Action To BeTaken
01	Thermistor Short Sensed	If temperature > 200 degrees for 2 minutes.	<u>Check for:</u> <ul style="list-style-type: none"><li>- Clogged lint screen.</li><li>- Restricted vent system.</li><li>- Failed thermistor.</li></ul>
02	Thermistor Open Sensed	If the temperature is low and we are calling for increase in temperature and we see that there is no increase in the temperature occurring in 3 minutes.	<u>Check for:</u> <ul style="list-style-type: none"><li>- Low ambient temperature in room (Below 50°F/10°C).</li><li>- Outside vent damper is stuck open in Winter time.</li><li>- Loose or open wire terminals.</li></ul>
03	Door Circuit Failure	Low for more than 1 second.	<u>Check for:</u> <ul style="list-style-type: none"><li>- Loose or open wire terminals in Door Sense circuit.</li></ul>
04	Possible motor transistor error	If either motor transistor is seen open or shorted during startup:	<u>Check for:</u> <ul style="list-style-type: none"><li>- Loose connections in motor circuit.</li><li>- Run System Check Mode and check the motor relay function.</li><li>-- If relay functions, disregard the diagnostic code.</li><li>-- If relay does not function, replace machine control board.</li></ul>
08	Stuck Key	A key is sensed to be pressed more than 75 seconds, the key shall be assumed to be stuck and will blink to indicate the location of the stuck key.	<u>Check for:</u> <ul style="list-style-type: none"><li>- Run membrane pad check and replace console w/membrane pad if necessary.</li></ul>

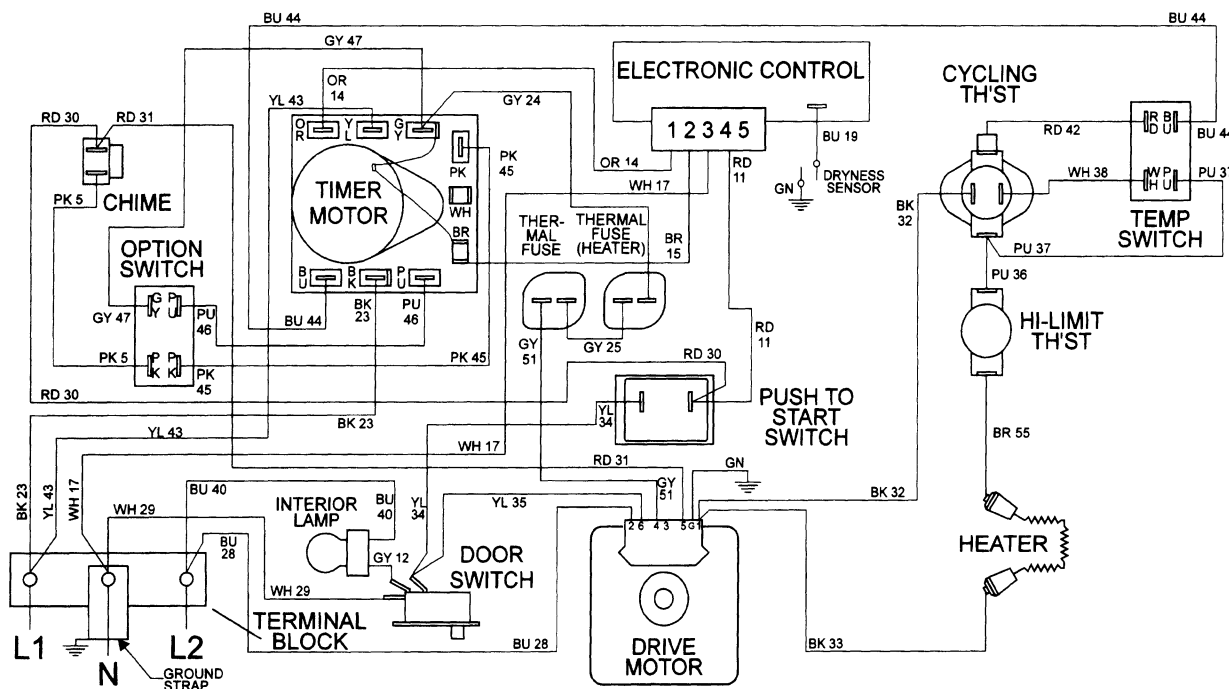
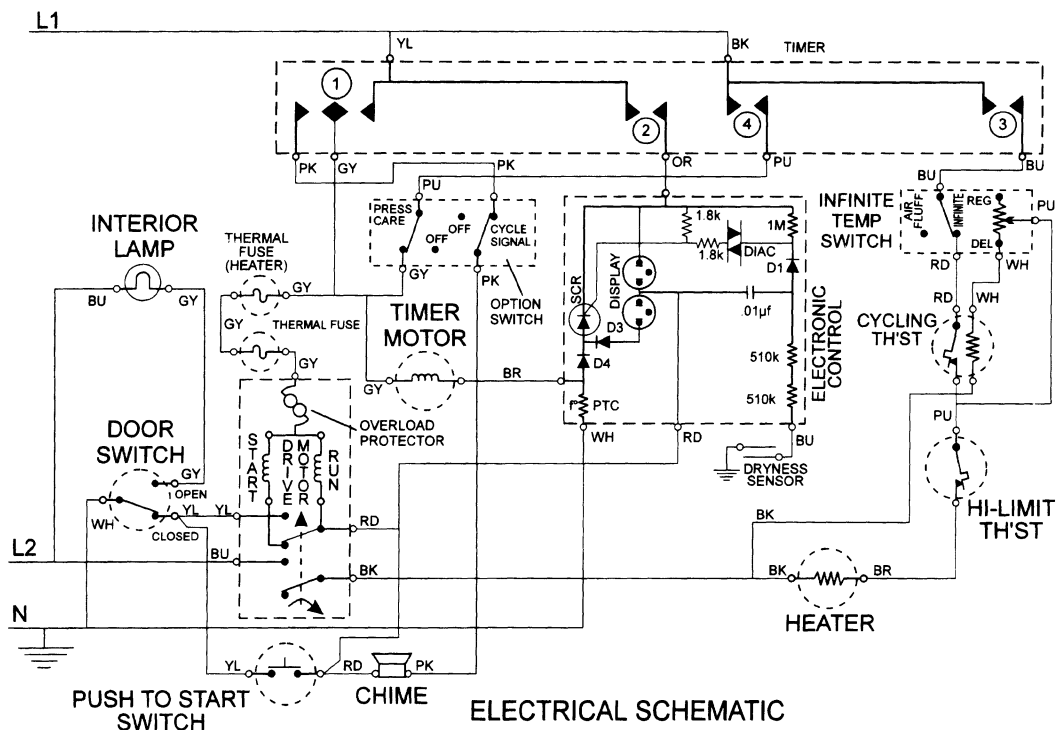




# SECTION 10 - WIRING DIAGRAMS

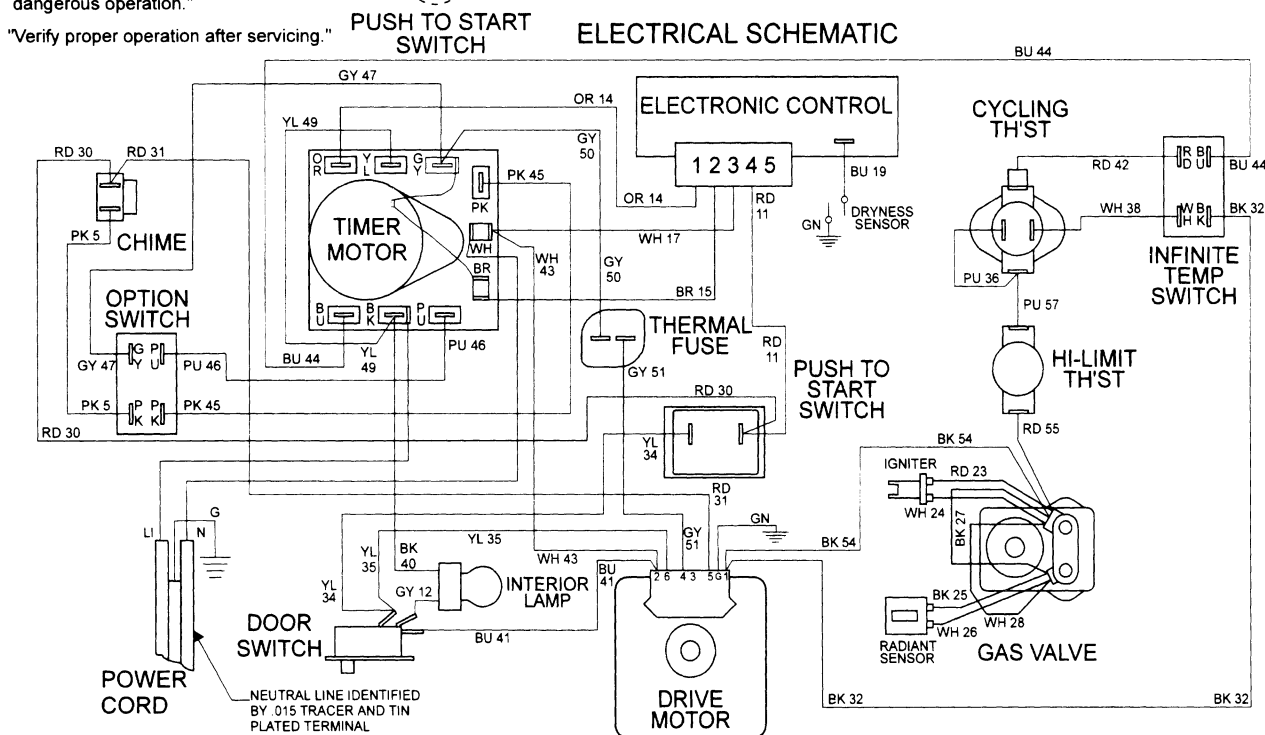
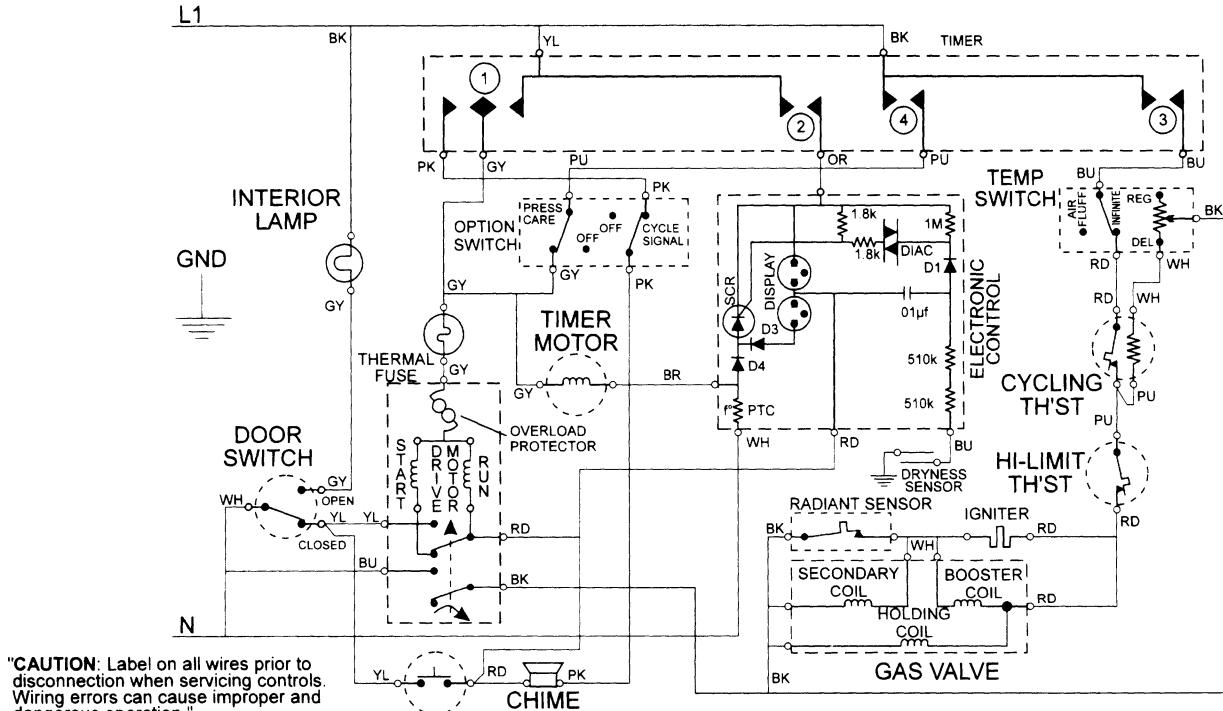
## MDE3000

	CIRCUIT	FUNCTION	OFF	REG. FABRICS	OFF	TIME DRY	OFF	PERMANENT PRESS
①	GY-PK	CHIME						
	YL-GY	DRIVE MOTOR						
②	YL-OR	ELECTRONIC CONTROL						
③	BK-BU	HEATER						
④	BK-PU	PRESS CARE						



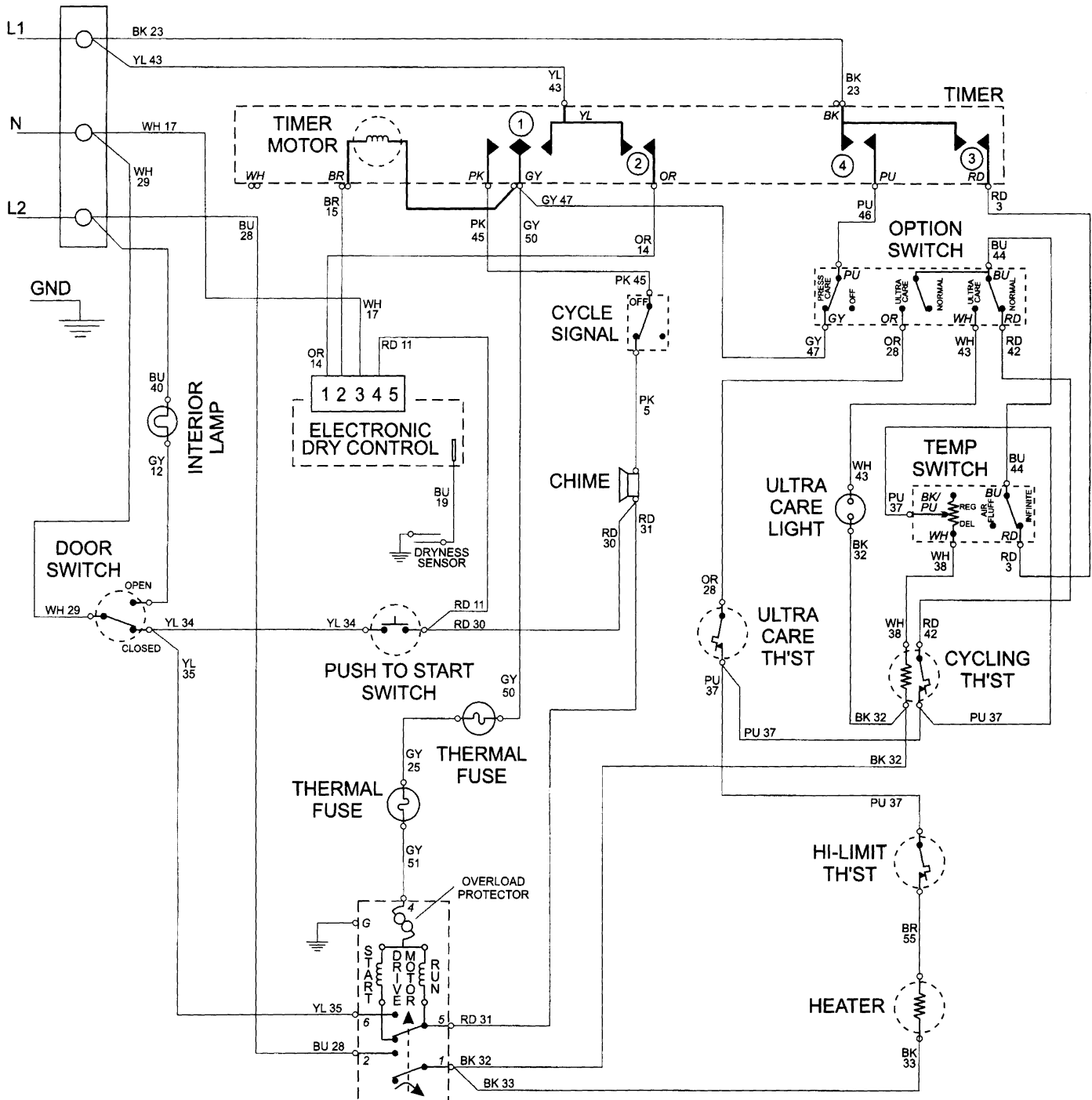
# MDG3000

CIRCUIT	FUNCTION	REG FABRICS		TIME DRY		PERMANENT PRESS	
		OFF	ON	OFF	ON	OFF	ON
①	GY-PK CHIME						
②	YL-GY DRIVE MOTOR						
③	YL-OR ELECTRONIC CONTROL						
④	BK-BU HEATER						
⑤	BK-PU PRESS CARE						



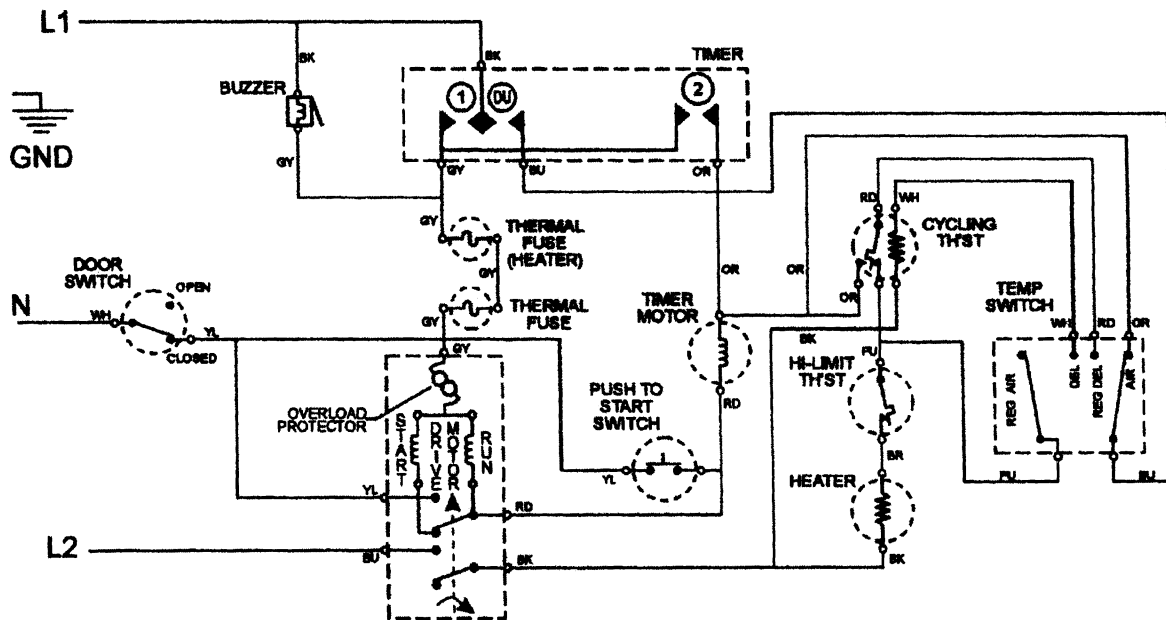
# MDE4000AZ, MDE8000AZ

CIRCUIT	FUNCTION	60	120	180	240	300
①	GY-PK CHIME					
②	GY-YL DRIVE MOTOR					
③	YL-OR ELECTRONIC CONTROL					
④	BK-RD HEATER					
⑤	BK-PU PRESS CARE					
		OFF	REG. FABRICS	OFF	TIME DRY	OFF
					PERMANENT PRESS	PRESS CARE

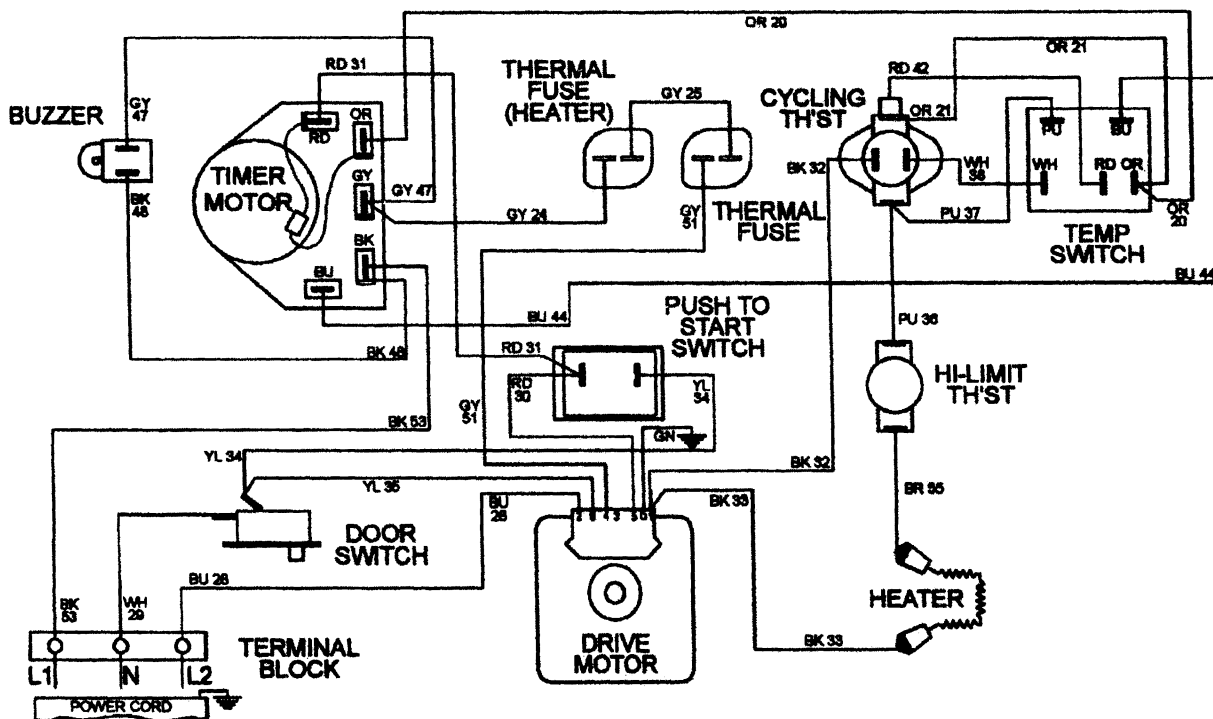


6 3711670-1298

CIRCUIT	FUNCTION	REG. FABRICS	TIME DRY	PERMANENT PRESS
①	BK-GY DRIVE MOTOR			
	BK-BU HEATER			
②	BK-OR TIMER MOTOR			



ELECTRICAL SCHEMATIC

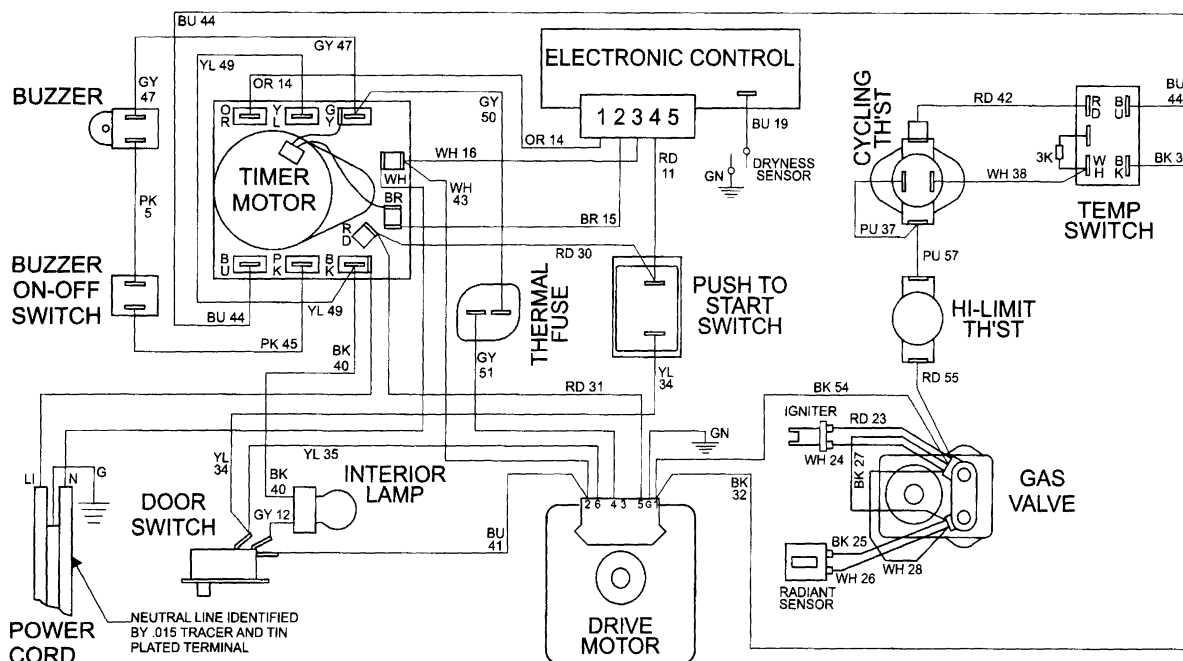
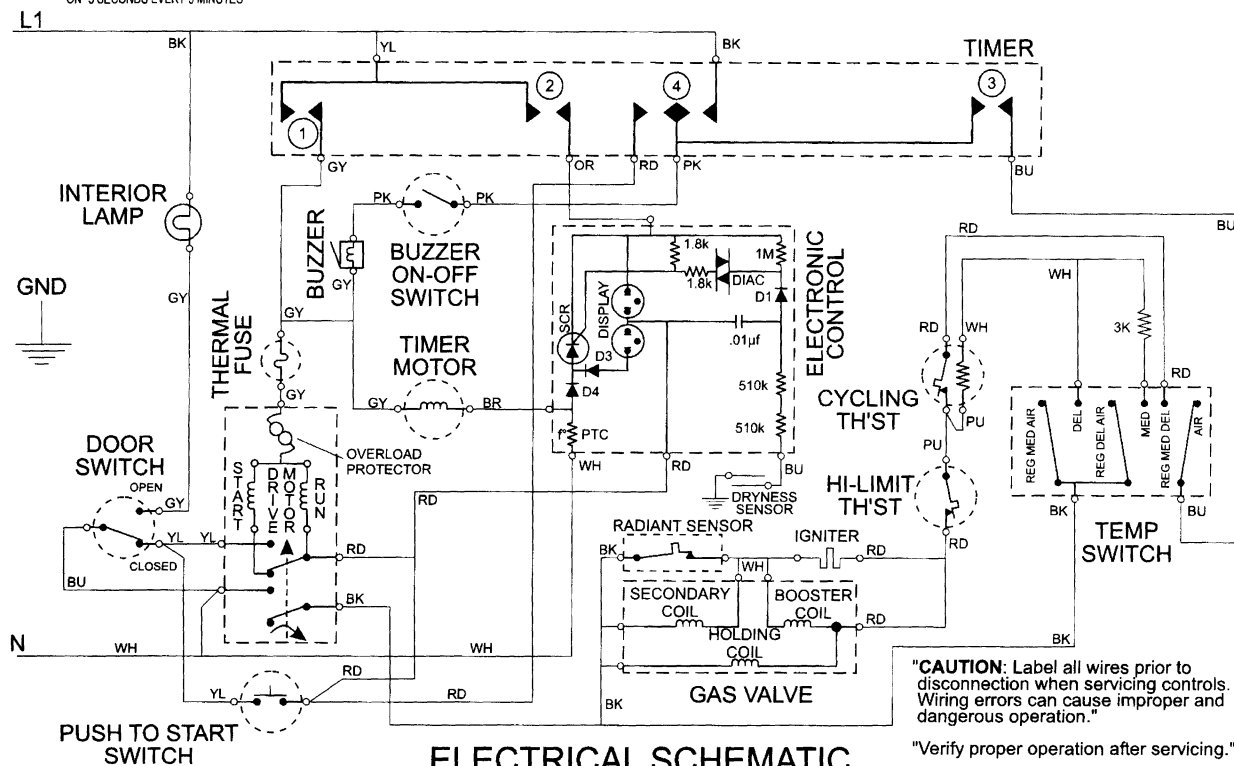


ELECTRICAL WIRING DIAGRAM

# MDG7057

CIRCUIT	FUNCTION	OFF	REG FABRICS	OFF	TIME DRY	OFF	PERMANENT PRESS	OFF
①	YL-GY DRIVE MOTOR							
②	YL-OR TIMER MOTOR							
③	BK-BU HEATER							
④	PK-BK BUZZER/HEATER							
④	PK-RD BUZZER/PULSER*							

\*ON\* 5 SECONDS EVERY 5 MINUTES



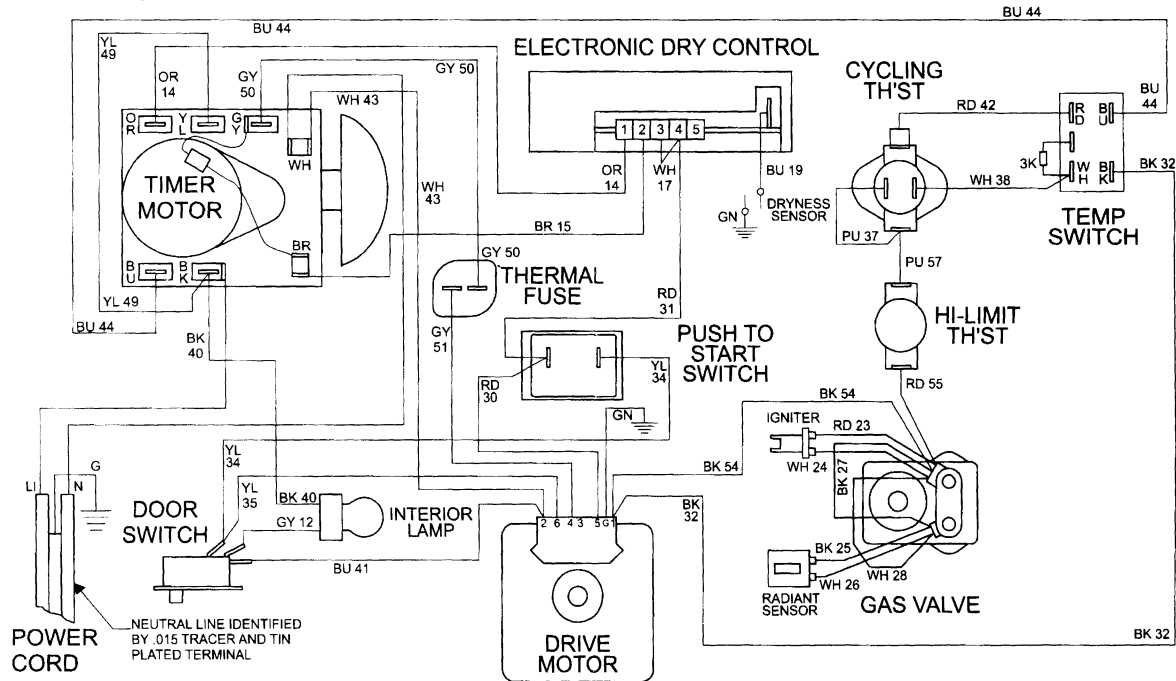
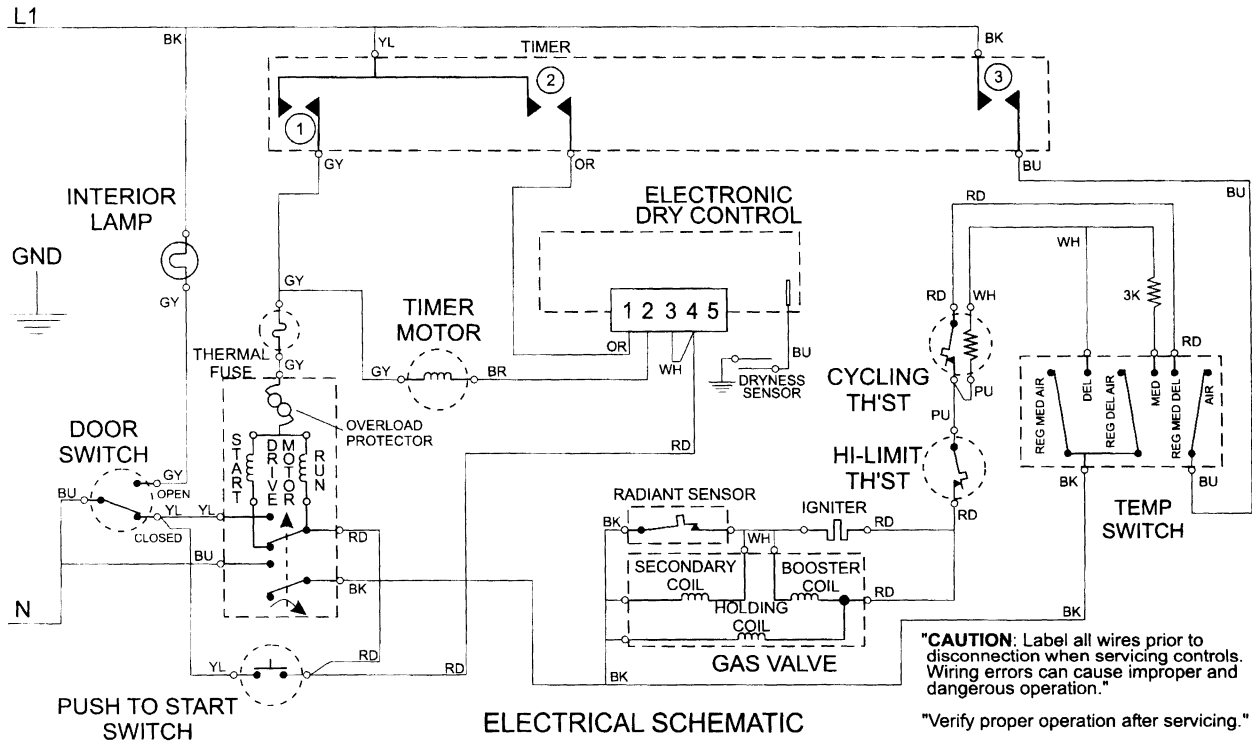
63710910-1098

ELECTRICAL WIRING DIAGRAM

# MDG6000, MDG7000

	CIRCUIT	FUNCTION	OFF	REG FABRICS	OFF	TIME DRY	OFF	PERMANENT PRESS
1	YL-GY	DRIVE MOTOR						PRESS CARE
2	YL-OR	TIMER MOTOR						
3	BK-BU	HEATER						
4		BELL ACTUATOR *						

\* RING ONCE EVERY 75 SECONDS



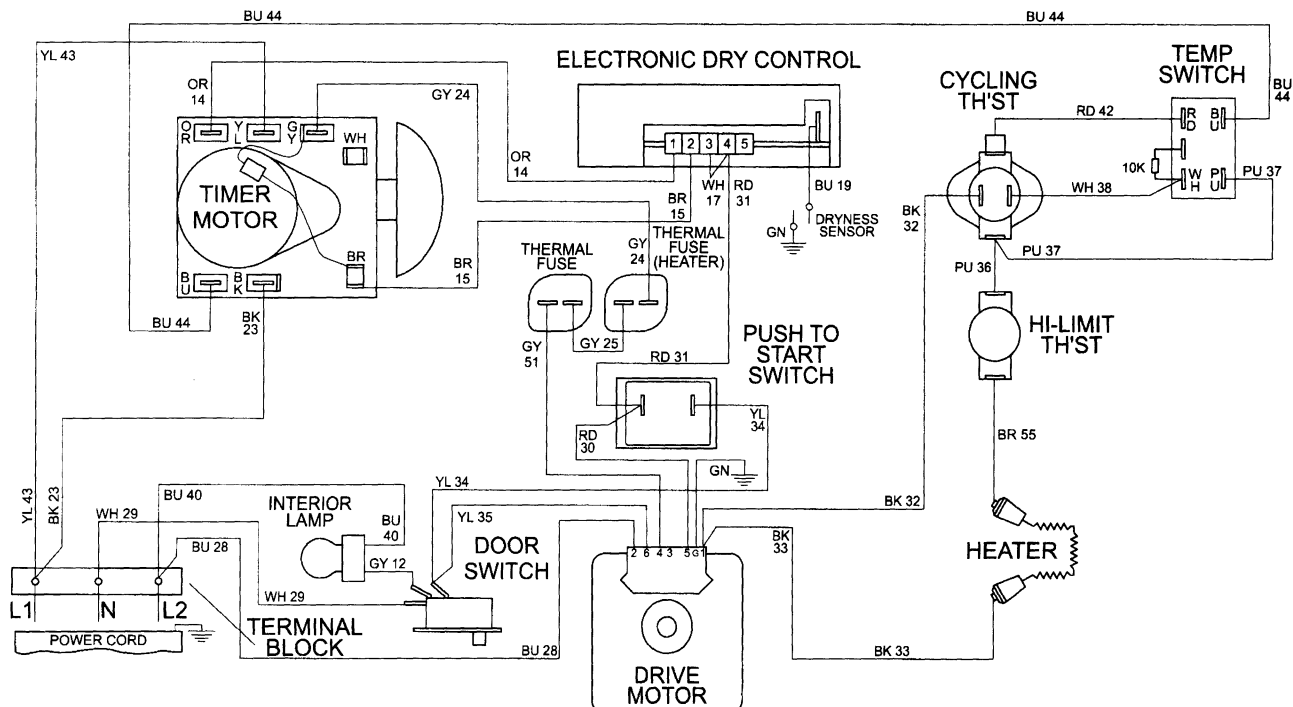
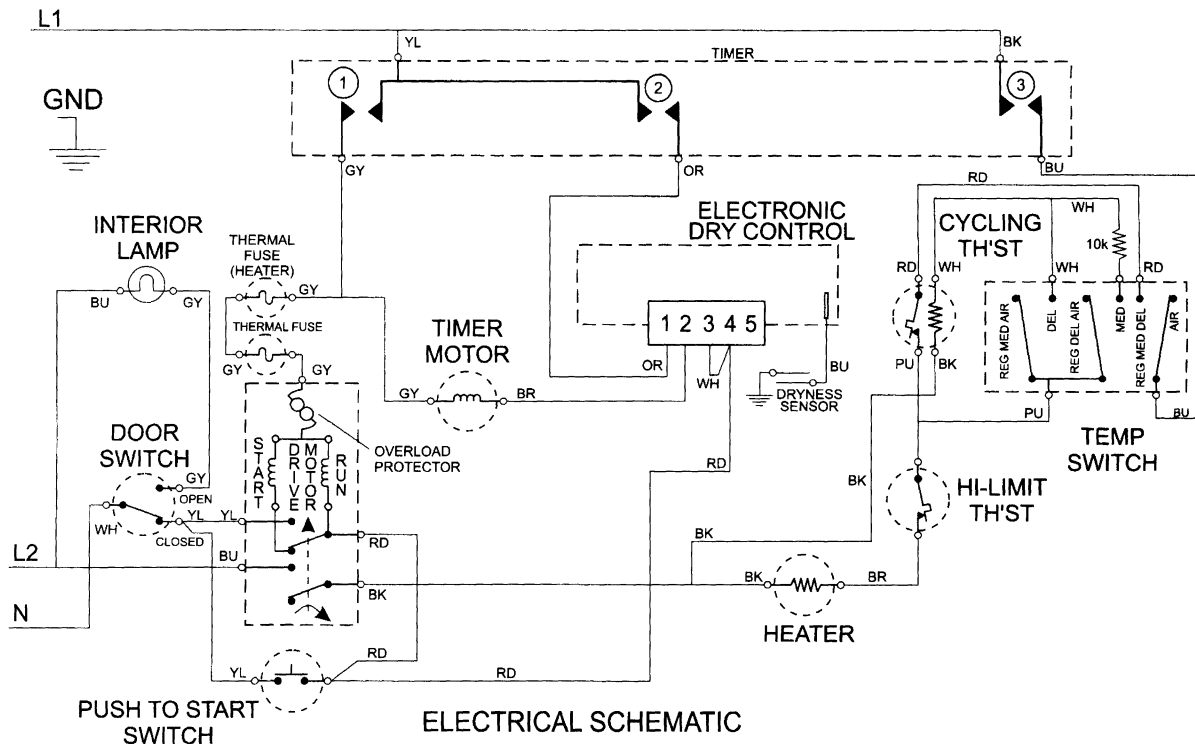
6 3702340-0398

ELECTRICAL WIRING DIAGRAM

# MDE6000AZ, MDE7000AZ

	CIRCUIT	FUNCTION	OFF	REG. FABRICS	OFF	TIME DRY	OFF	PERMANENT PRESS
①	YL-GY	DRIVE MOTOR						PRESS CARE
②	YL-OR	TIMER MOTOR						
③	BK-BU	HEATER						
④		BELL ACTUATOR *						

\* RING ONCE EVERY 75 SECONDS



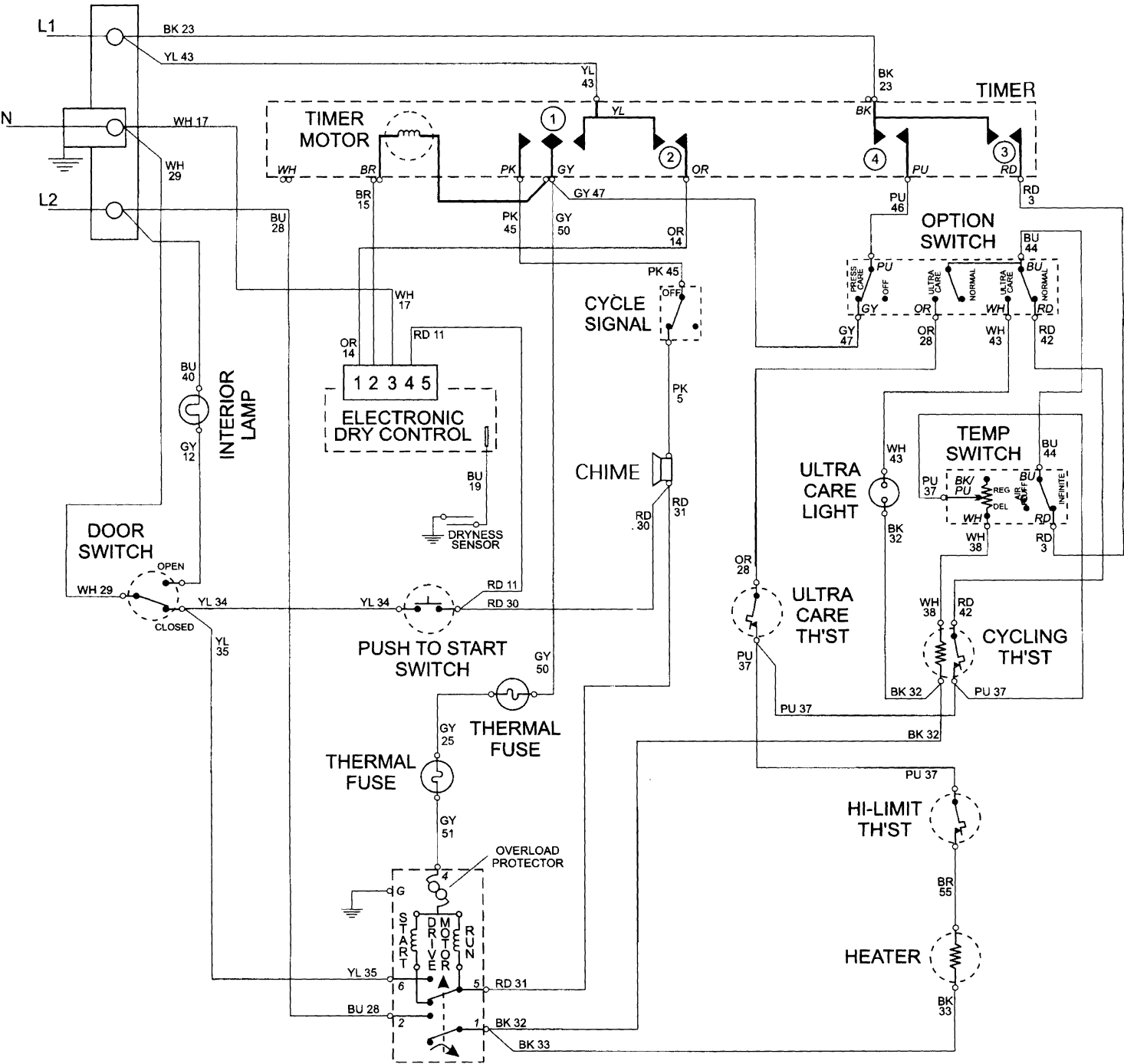
6 3702420-0398

ELECTRICAL WIRING DIAGRAM



MDE4000AY, MDE8000AY

	CIRCUIT	FUNCTION	60	120	180	240	300
①	GY-PK GY-YL	CHIME DRIVE MOTOR					
②	YL-OR	ELECTRONIC CONTROL					
③	BK-RD	HEATER					
④	BK-PU	PRESS CARE					
			OFF	REG. FABRICS	TIME DRY	OFF	PERMANENT PRESS
							PRESS CARE

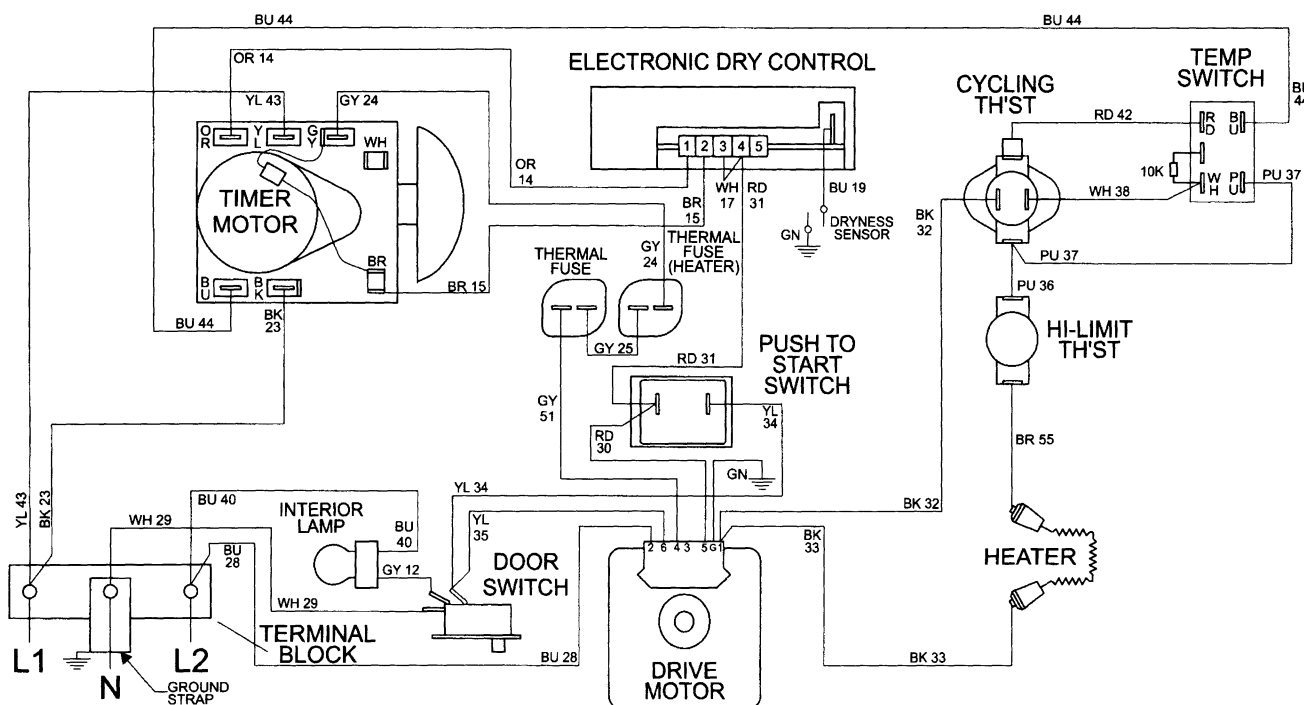
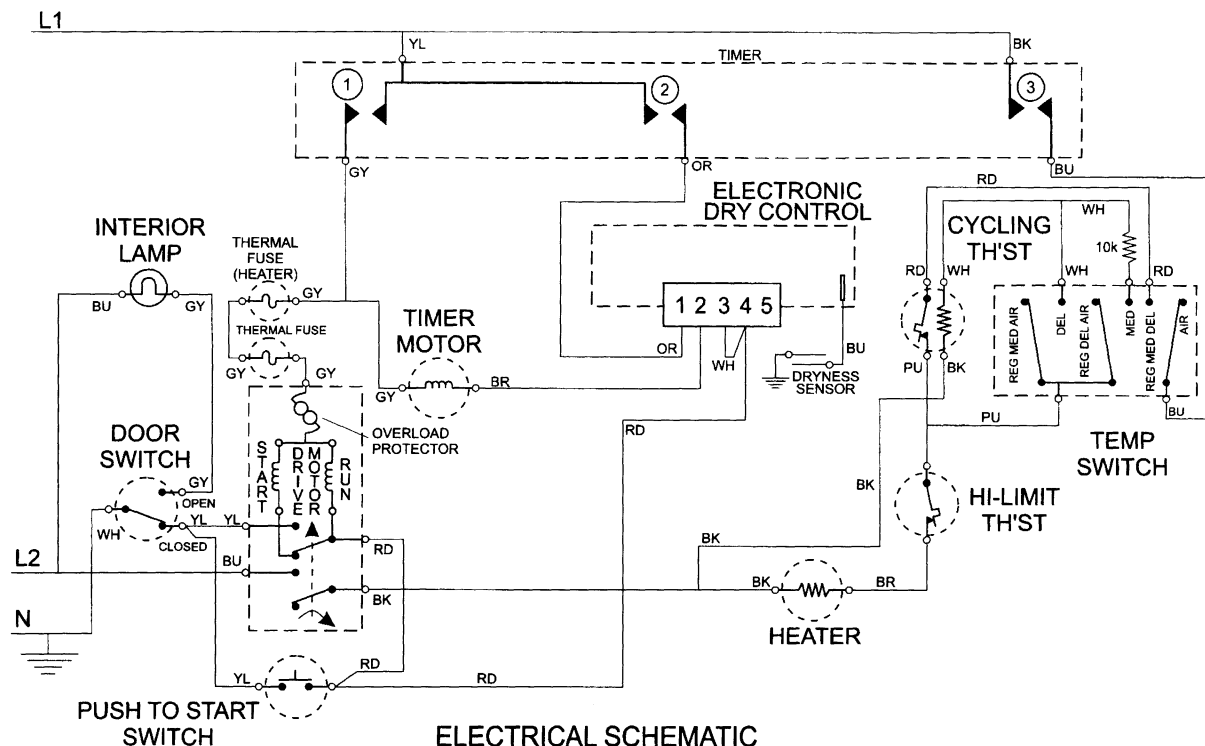


6 3711650-1298

# MDE6000AU/AY, MDE7000AY

	CIRCUIT	FUNCTION	OFF	REG. FABRICS	OFF	TIME DRY	OFF	PERMANENT PRESS	PRESS CARE
①	YL-GY	DRIVE MOTOR							
②	YL-OR	TIMER MOTOR							
③	BK-BU	HEATER							
④		BELL ACTUATOR *							

\* RING ONCE EVERY 75 SECONDS



6 3702330-0398

ELECTRICAL WIRING DIAGRAM

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\* "ON" 5 SECONDS EVERY 5 MINUTES

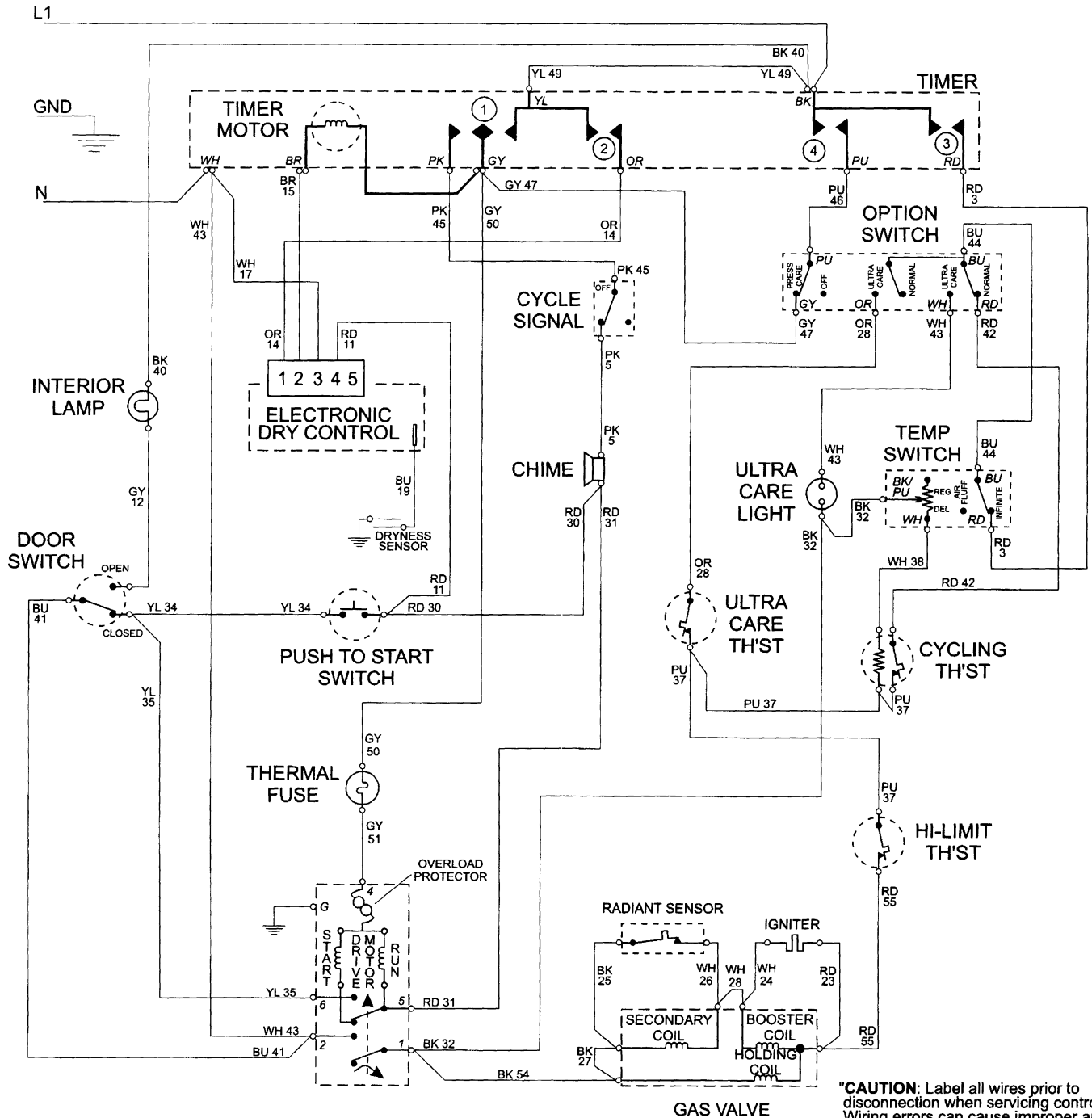


## ELECTRICAL SCHEMATIC

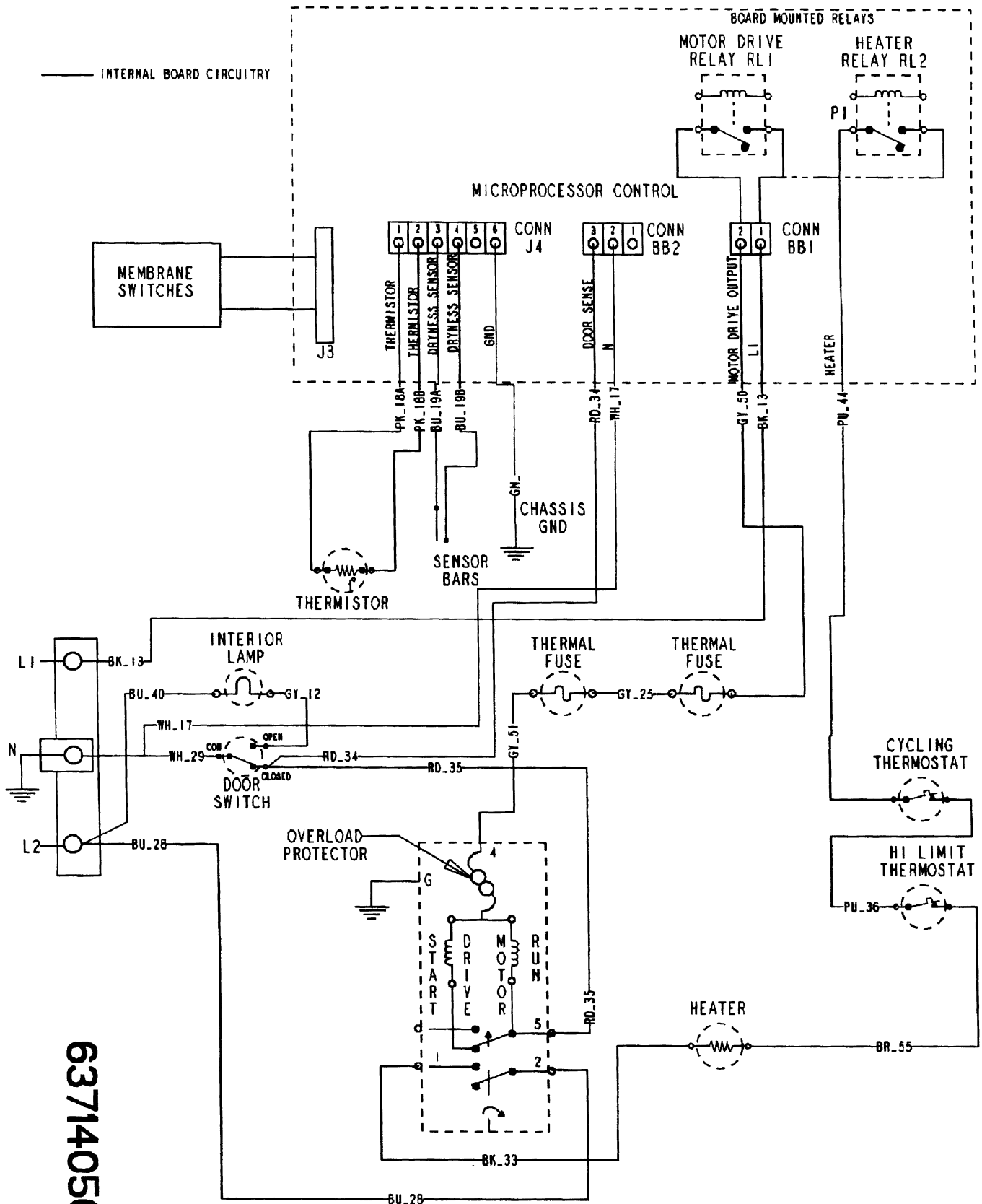
## ELECTRICAL WIRING DIAGRAM

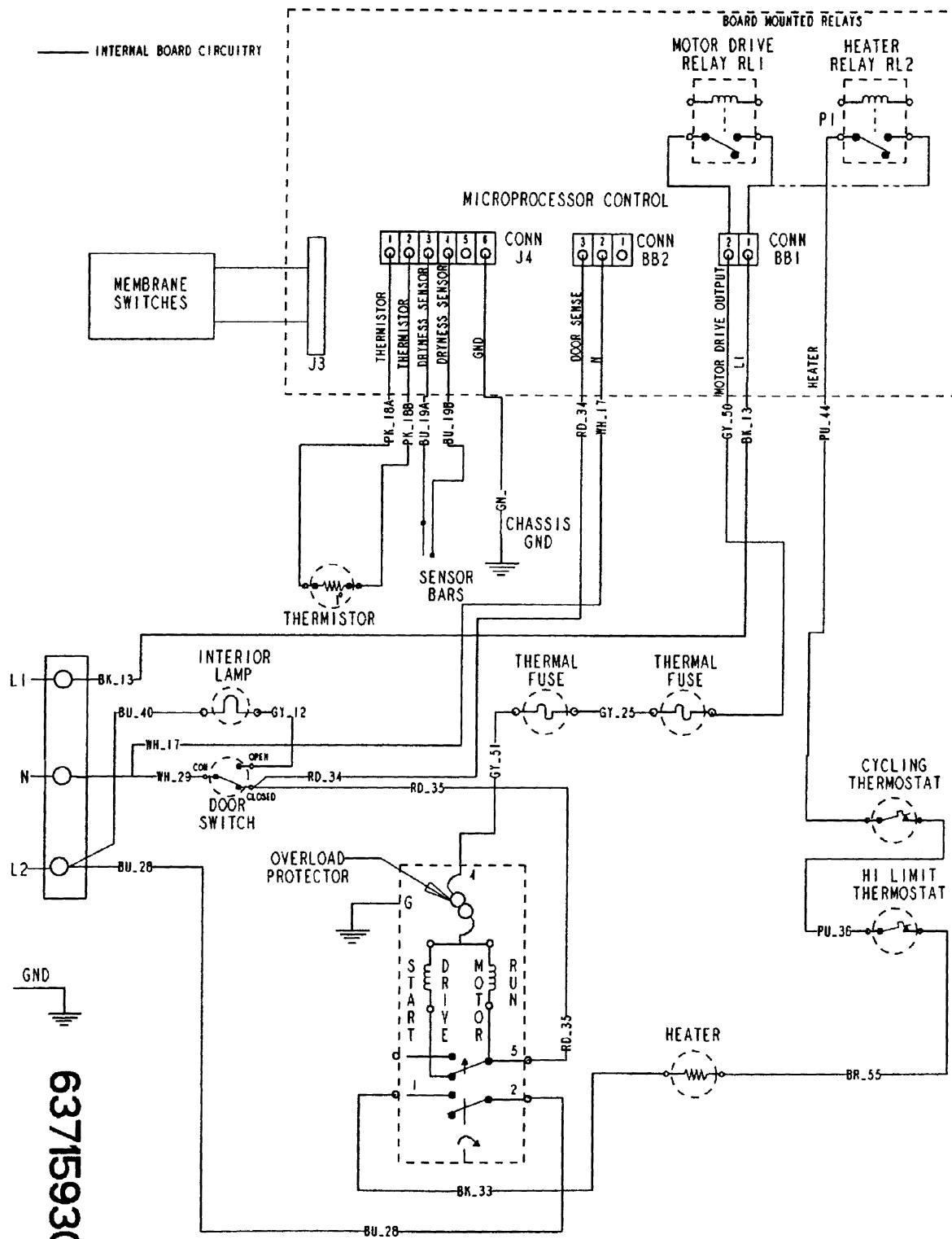
# MDG4000AW/AX/BW, MDG8000AW/BW

CIRCUIT	FUNCTION	60	120	180	240	300
①	GY-PK CHIME					
	GY-YL DRIVE MOTOR					
②	YL-OR ELECTRONIC CONTROL					
③	BK-RD HEATER					
④	BK-PU PRESS CARE					
		OFF	REG. FABRICS	OFF	TIME DRY	OFF
					PERMANENT PRESS	PRESS CARE

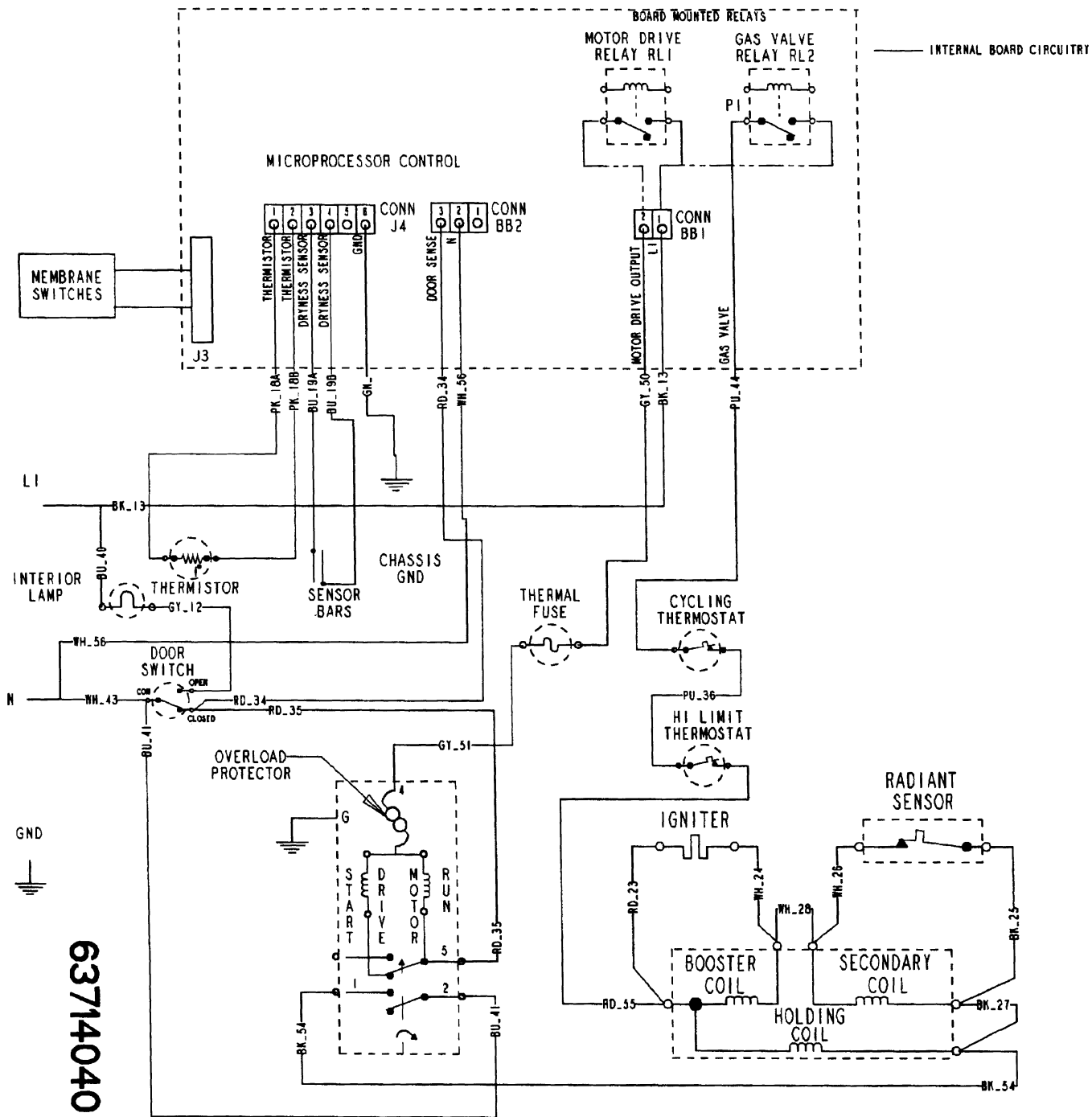


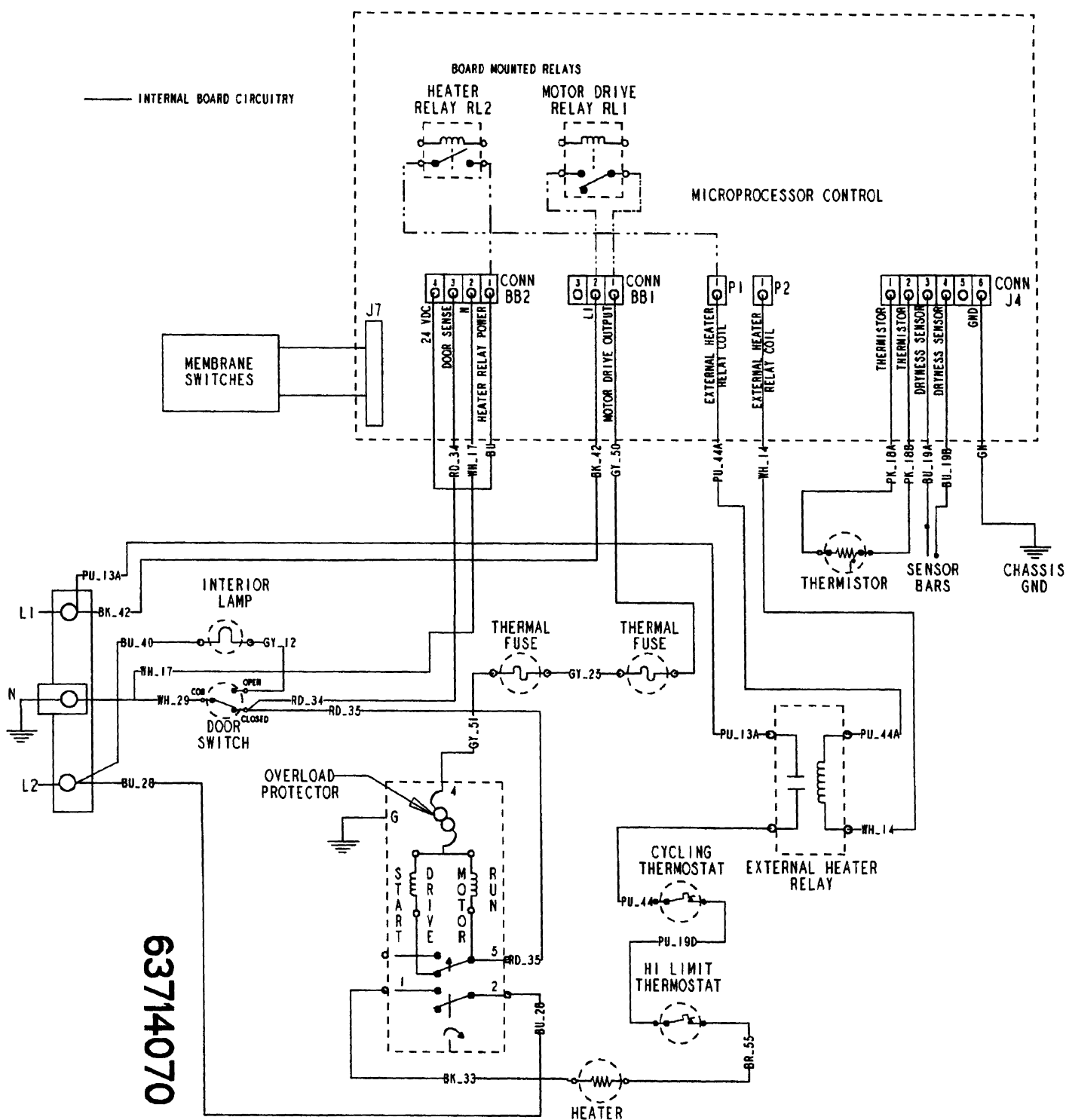
6 3711660-1298





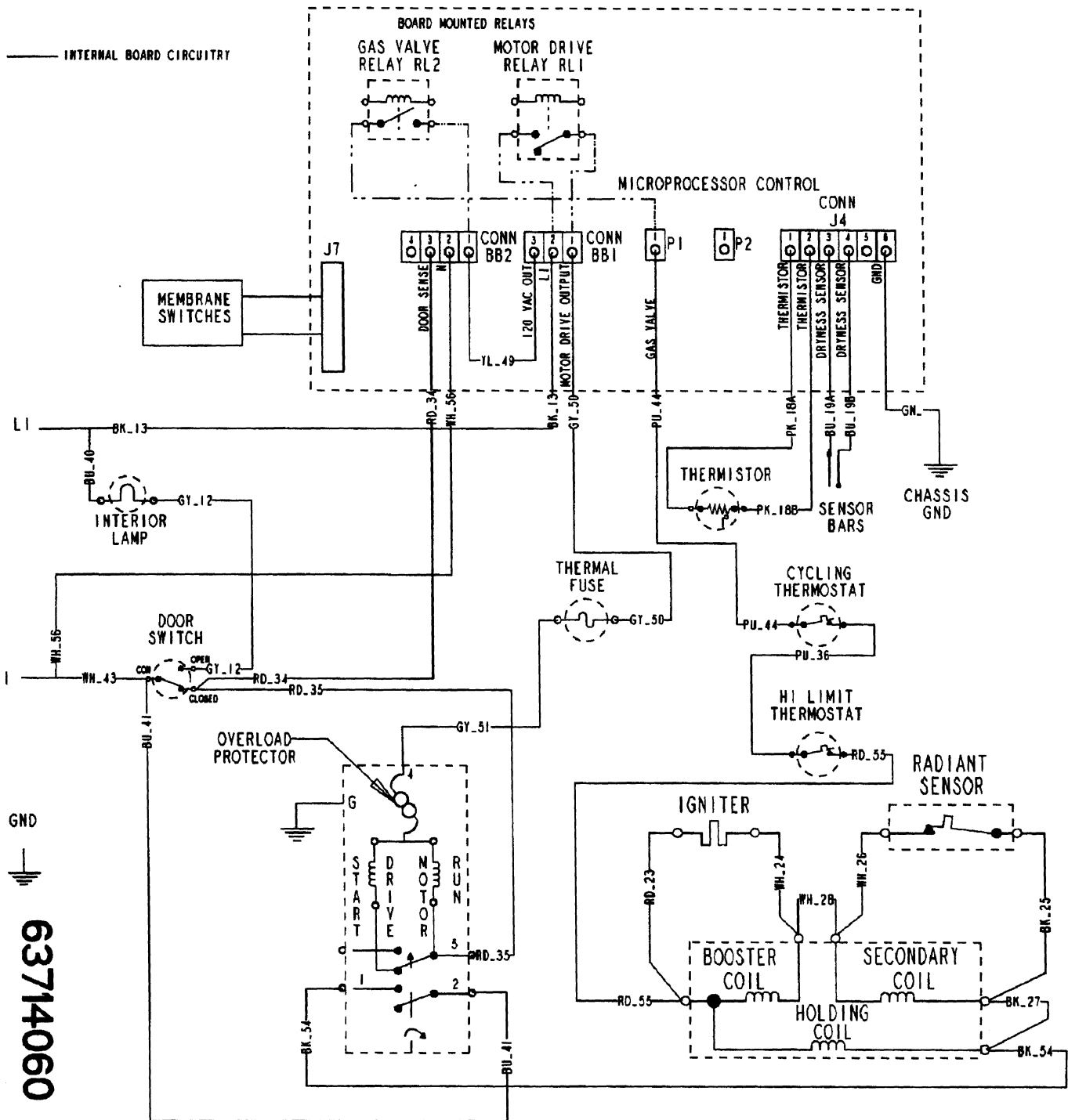
63715930











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## NOTES