CONTENTS

INTRODUCTION

The information contained in this **supplement** pertains to the service procedures involved in maintaining and/or servicing the Maytag single and stack dryers **MDE/MDG12** and **MDE/MDG13** model machines. For other service related information not covered in this supplement, refer to part number **16000652**, Maytag commercial service manual. These models are single and stack dryers and are intended for use in commercial laundry installations.

Information in this manual can be used as a guide to assist in performance and servicing the product. As on other single and stack dryer models, the importance of proper installation cannot be over emphasized. For additional information, refer to the installation instructions that is supplied with each single and stack dryer.

This manual is divided into five sections covering the single and stack dryers. Refer to those sections for general information. If additional information is required, contact your commercial distributor.

Section 1 Covers general information and electrical test equipment.

Section 2 Provides information on the location of components and service procedures.

Section 3 Provides information on programming and set-up procedures.

Section 4 Covers general troubleshooting using a list of general complaints.

Section 5 Provides general wiring diagrams.

SECTION 1. GENERAL INFORMATION

HOW TO ORDER PARTS

Replacement parts can be ordered from the authorized Maytag commercial distributor who sold the machine or from a commercial distributor designated service firm.

IT IS STRONGLY RECOMMENDED THAT GENUINE FACTORY REPAIR PARTS BE USED. USE OF OTHER PARTS MAY HARM UNIT OR CAUSE OPERATIONAL PROBLEMS.

When ordering parts from your distributor or you are contacting him regarding machine or service, always have the following information ready:

MACHINE MODEL NUMBER:	
MACHINE SERIAL NUMBER:	
INSTALLATION DATE:	

Consult the parts catalog for correct parts. Further information if necessary, can be obtained from your authorized Maytag commercial distributor.

My Distributor is:

COMPANY NAME:	
ADDRESS: CITY, STATE:	
ZIP CODE:	
PERSON TO CONTACT: AND TELEPHONE NUMBER:	

UNCRATING

Before removing packaging, inspect for and note any carton damage. Carefully remove any packaging materials. The bottom skid is secured to the bottom frame of the washer. ***(See installation instructions for removal procedures of crating.)***

Inspection

As soon as the crating material is removed, the top load washer should be inspected. If any parts are found to be damaged, they must be replaced before installation.

NOTE: ***NEVER INSTALL A MACHINE HAVING DAMAGED PARTS EXPECTING TO REPLACE THEM AT A LATER DATE.***

If damage is noticed when the machine is delivered, notation should be placed on the transportation company's freight bill. If damage is discovered, the transportation company must be called to make an inspection. This request should be made within fifteen (15) days of date of delivery. Claims should be filed against the transportation company for this damage after the machine has been repaired. If the machine is damaged beyond repair, it should be refused.

NOTE: ***OUR RESPONSIBILITY FOR SHIPMENT REACHING ITS DESTINATION IN A SATISFACTORY CONDITION ENDS WITH THE DELIVERY OF THE MACHINE IN GOOD ORDER TO THE TRANSPORTATION COMPANY. ALL MACHINES SHOULD BE INSPECTED UPON RECEIPT AND BEFORE THEY ARE SIGNED FOR.***

Damage Claim

If the machine or any part of it is damaged and a claim is to be filed, the following documents should be presented to the delivering carrier:

1. Original freight bill.
2. Original bill of lading.
3. Copy of original invoice on which merchandise was purchased.
4. Inspection report, if damaged is of a concealed nature.
5. Invoice on which replacement parts are purchased.
6. Express receipt of freight bill on any replacement parts.
7. Salvage receipt (general receipt) from the truck line if there are parts which are salvageable turned over to the carrier.

NOTE: ***If damage is suspected, a notation on the freight bill reading "carton scuffed - may contain damage" and signed by the delivering carrier will protect you from a damage claim. This notation should be put on before delivering carrier leaves your premises. This notation MUST be on the carrier's copy and your copy of the freight bill. If a damage claim is to be filed, present the above documents to the delivering carrier.***

ELECTRICAL TEST EQUIPMENT

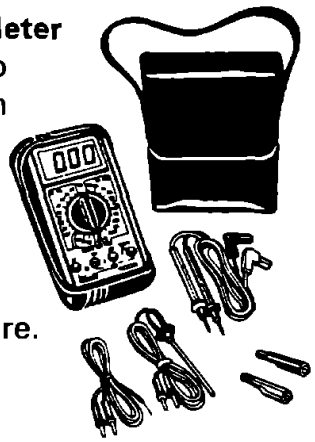
The equipment required to service Maytag products depends largely upon the conditions you encounter. Locating a malfunction will often require the use of electrical testing equipment such as:

Description	Part Number
Analog Test Meter	20000005
Digital Test Meter	20001001
Clamp-on Ammeter	20000002
AC Voltage Sensor	20000081
Water Column Manometer	038205
Air Test Meter	20000029

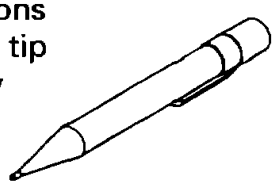
Analog Test Meter can be used to check for open or closed circuits, measure resistance, AC and DC volts, and temperature.

Clamp-On Ammeter can be used to detect shorts. Overloads on the circuit breaker or fuse can be traced to either the washer or circuit breaker by checking the washer current draw.

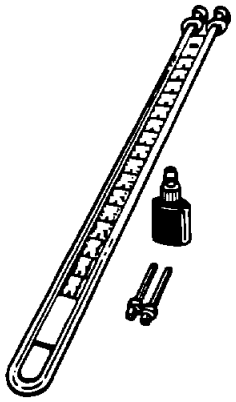
Digital Test Meter can be used to check for open or closed circuits, measure resistance, AC and DC volts, and temperature.



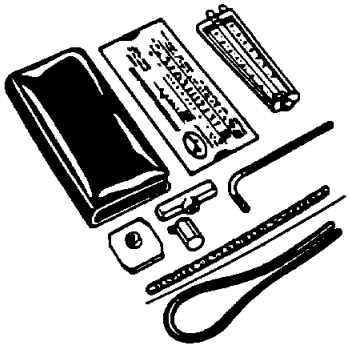
AC Voltage Sensor can be used to alert you if AC voltage is present so proper safety precautions can be observed. The tip of the sensor will glow bright red, if voltage is between 110-600 volts AC.



Water Column Manometer can be used to check gas pressure being supplied to the dryer and the outlet tap pressure on the gas valve.



Air Test Meter can be used to check back pressure in the exhaust duct. Vent restriction can cause back pressure and disrupt normal operations of the dryer.



SECTION 2. SERVICE PROCEDURES

Extreme caution should be taken when performing voltage checks due to danger of possible electrical shock.

Except as necessary to preform a particular step in servicing a product, the electrical power supply should ALWAYS be disconnected when servicing a product.

The following information and procedures are unique to the MDE/MDG12 and13, single and stack dryers. Otherwise, the service procedures are the same as those outlined in the commercial service manual (MDE/MDG10 and 11) part number **16000652**.

TOP COVER

There is a drip lip (raised edge) on the sides of the top cover. This drip lip helps prevent spills from running off the side of the top cover.

The top cover on a single pocket dryer is secured to the cabinet. To remove the top cover you must first **disconnect electrical power to the dryer.** Remove the two screws securing the front panel. Swing the bottom of the front panel out at approximately a 45 degree angle and the panel can be removed. After the panel has been removed, then remove the two screws in the top of the cabinet that are securing the top cover to the cabinet. At this time, you can proceed with removing wires from components as well as removing other components to change top cover if necessary.

FRONT PANEL

The front panel has a more rounded look along the side edges. In addition, the front panel has a smooth look from top to bottom. **Disconnect electrical power to the dryer.** Remove the two screws securing front panel to the cabinet. These two screws are located close to the bottom of the front panel. Pull the front panel up and away from the bottom. There will be two clips at the top of the panel securing the front panel at the top. When the panel is swung out at approximately a 45 degree angle, the clips will release.

METER CASE - COIN VAULT

The meter case on a single pocket dryer is secured to the console and the top cover. The same meter case is used on the CS and PD model washers. The coin vault area of the meter case is larger and can only be accessed with the use of the proper key to remove the coin vault. Additional information of the coin vault and meter case can be obtained from your distributor.

SURGE SUPPRESSOR

The surge suppressor provided with the MDE dryers can be used in case of electrical line disturbances. Microprocessors get their timing reference pulses from the power line. This makes them subject to scrambled timing if the surge pulses from the power line are strong enough to reset the timing circuits.

Continued . . .

For the majority of installations you would not even be aware of many of these considerations. The dryers are ready to handle normal line noise disturbance events. It is in the few rare situations that more protection may be required. It is those cases that a surge suppressor is included with the product.

To install a surge suppressor, the following procedures should be followed:

1) **Disconnect electrical power to the dryer.**

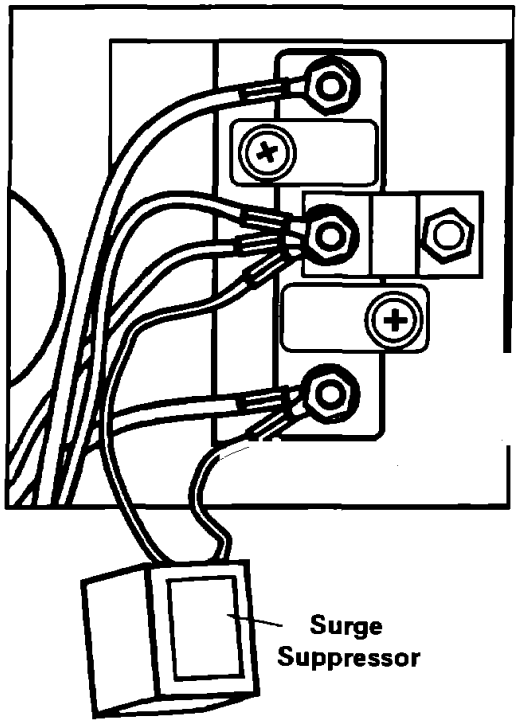
2) Remove power cord access panel.

3) Attach the terminal ends of the surge suppressor to the middle and bottom position of the terminal block as shown in the drawing.

4) Be sure all wires are connected and secured in the machine.

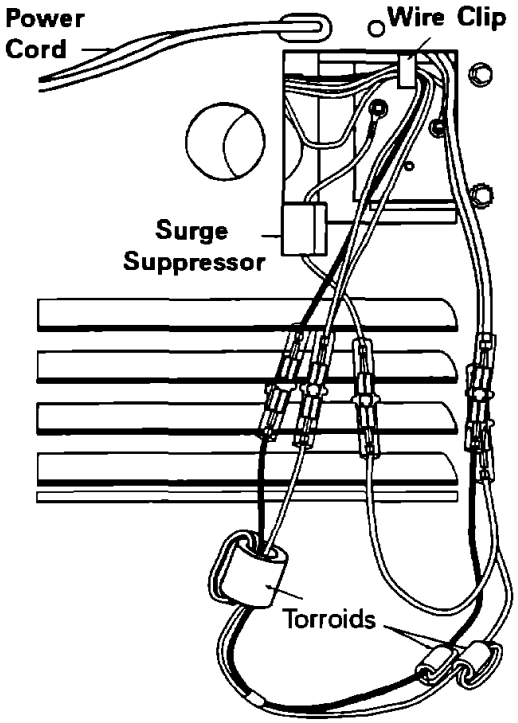
5) Reinstall access panel.

6) Restore electrical power to dryer.



SURGE SUPPRESSOR AND TORROID

On MDG stack PD dryers, a surge suppressor and torroids are part of the wiring harness that are preinstalled. This set-up is installed in case of electrical line disturbances as discussed earlier in the surge suppressor.



SERVICE DOOR AND COIN VAULT MONITOR SWITCHES

These two switches are used on the PD, PR and PS model dryers. However, the PR model single pocket dryer does not use a coin vault switch.

The service door switch is mounted to a bracket located in the meter case under the service access door. Whenever the service door is closed the switch plunger is depressed closing the switch. Whenever the service door is lifted the switch will open for access into the programming modes of the washer. To remove the switch from the meter case:

1) **Disconnect electrical power to the dryer.**

2) Remove the 1/4" hex head screw securing the switch mounting bracket and lift the switch from the meter case.

The coin vault switch on the MDE/MDG12 is located close to the bottom of the meter case and access to this switch can be gained through the service access door. On the MDE/MDG13, the switch is located behind the vault assembly. Access to the switch is through the bottom dryer after the tumbler has been removed.

When the coin vault is in place the plung er of the switch is depressed. If the switch is not closed the display on the microprocessor will flash continuously. For removal of this switch the coin vault will need to be removed.

1) **Disconnect electrical power to the dryer.**

2) Remove service door and coin vault. On stack dryers, remove coin vault and lower dryer front panel, front shroud and tumbler.

3) From the service access door side of the meter case, squeeze the two tabs on the coin vault, and push the switch through toward the coin vault side.

4) Reverse the procedures for reinstalling the coin vault switch.

COIN DROP ACCEPTOR

The coin drop acceptor is used only in the PD model dryers. This is a mechanical coin drop assembly with a coin sensor attached. In normal use, occasional cleaning in hot water is all that is needed to maintain reliable operation of the coin drop acceptor. The coin drop does not need to be oiled. This only causes dust or dirt to build up and disrupt the operation of the acceptor.

If a coin jams in the coin acceptor, there is a coin return button that can be pressed. When it is pressed, the button presses against a tab which is pushed to one side spreading the coin acceptor plates apart. This allows the coin to fall and roll into the coin return bail area. The face plate has a coin bail (arched area for coin) which is located at the base of coin return slot.

The face plate can be removed from the coin acceptor by removing the two screws from the back side of the face plate.

The coin sensor is mounted to a bar located at the back of the coin acceptor. There is a window period for a coin to pass the coin sensor. If the coin fails to pass through at a certain speed, then the microprocessor may assume someone is tampering with the machine or it is a non-valid coin. The control will enter a standby mode and not accept any coins. The coin sensor is set in position at the time of manufacturing for the proper reading of coins.

SECTION 3. PROGRAMMING AND SET-UP PROCEDURES

PD, PR AND PS CONTROLS

FOR INFORMATION OUTLINING THE PROCEDURES FOR PROGRAMMING, SET-UP OF CONTROLS AND DIAGNOSTIC CODES, PLEASE REFER TO COMMERCIAL SINGLE AND STACK DRYER SERVICE MANUAL **16000652,** SECTION 3. THE INSTALLATION GUIDE THAT COMES WITH EACH PRODUCT CAN ALSO BE USED FOR THESE PROCEDURES. THE "PR" AND "PS" PROGRAMMING PROCEDURES WOULD BE SIMILAR TO THE "PD" MODEL DRYERS.

SECTION 4. TROUBLESHOOTING

FOR INFORMATION OUTLINING PROCEDURES FOR THE ELECTRICAL AND MECHANICAL TROUBLESHOOTING, PLEASE REFER TO COMMERCIAL SINGLE AND STACK DRYERS SERVICE MANUAL 16000652, SECTION 4.

GENERAL INFORMATION

Extreme caution should be taken when performing voltage check due to danger of possible electrical shock.

There are a number of factors which can contribute to noisy or improper dryer operations. Some of these are listed along with areas to check for possible corrections.

The malfunction of an electrical circuit cannot be easily diagnosed unless you first understand how it functions when operating normally. The electrical schematic and wiring diagram includes a cycle sequence chart keyed to the contacts in the timer, relays and/or control switches. A shaded increment indicates contact closure at that point in the cycle. An open or unshaded increment indicates an open contact at that point.

A cycle chart indicates the cycle progression from the start of the cycle on the left, to the end of the cycle on the right.

COMPONENTS

There are two basic categories for electrical components, switches and loads. A switch controls the current path to a load component. Door switches, selector switches, relays and timers are examples of switching components.

An electrical load uses electricity to perform some functions. Timer motors and drive motors convert electricity to magnetic fields and then to mechanical motion. Solenoids use magnetic fields to push or pull. Lamps convert electricity to light.

The main load components in the dryer are the drive motor, gas valve solenoid and heater.

The schematic wiring diagram is followed much like a road map. The lines represent the wiring connections between components. Connections in the wiring are indicated by a small circle. If the lines cross, but no circle is present at the intersection, there is no connection. As much as possible, switches are shown in their normal or most common configuration.

CAUTION

Except as necessary to perform a particular step in servicing a product, the electrical power supply should ALWAYS be disconnected when servicing a product

SECTION 5. WIRING SCHEMATICS

AN ELECTRICAL SCHEMATIC IS PACKED IN EVERY COMMERCIAL SINGLE AND STACK DRYER. IN THE MDE/MDG12 DRYER, IT IS LOCATED INSIDE THE CONTROL CONSOLE. ON THE MDE/MDG13, IT IS LOCATED BEHIND THE UPPER DRYER FRONT PANEL. ALWAYS REMEMBER TO RETURN THE SCHEMATIC TO ITS ORIGINAL LOCATION FOR FUTURE REFERENCE.

The wiring schematics shown in this section cover the MDE/MDG12 and13 PR model dryers. For other MDE/MDG12 and 13 model dryers, refer to the schematic that comes with each product.

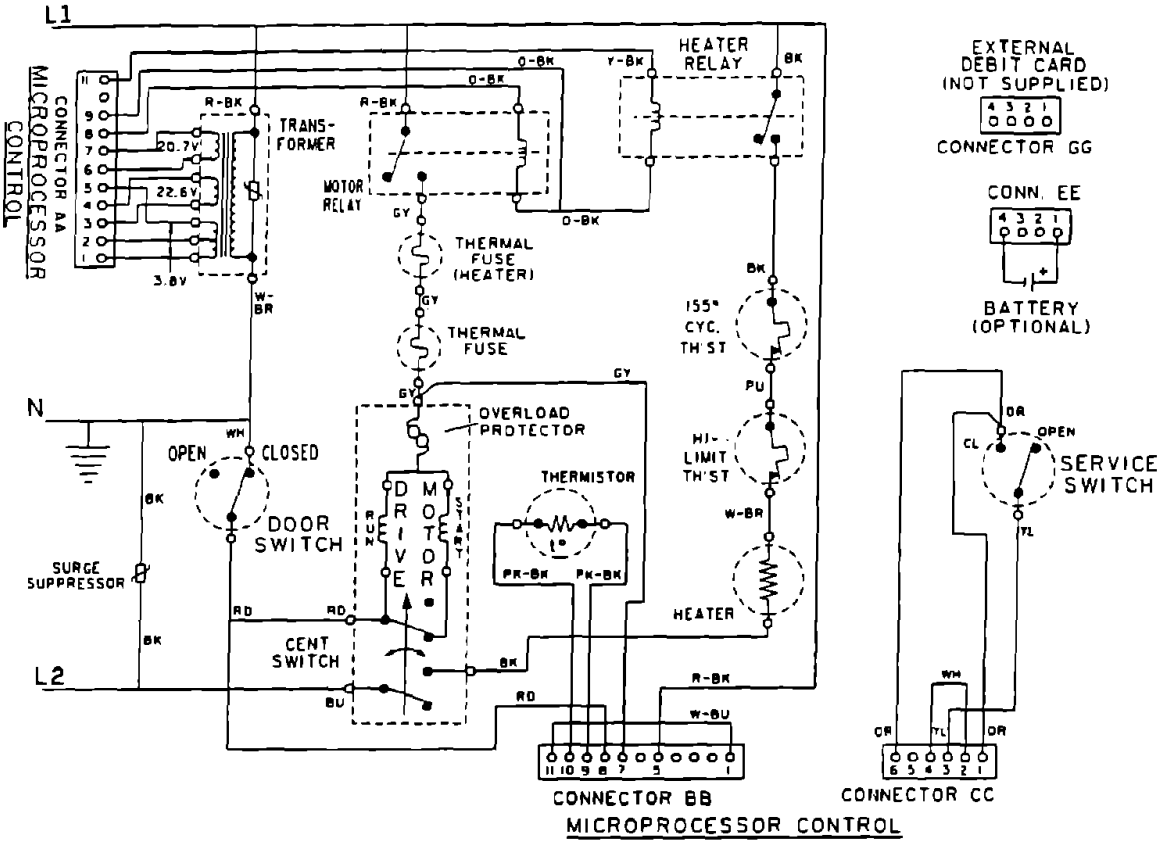
MDE12PR

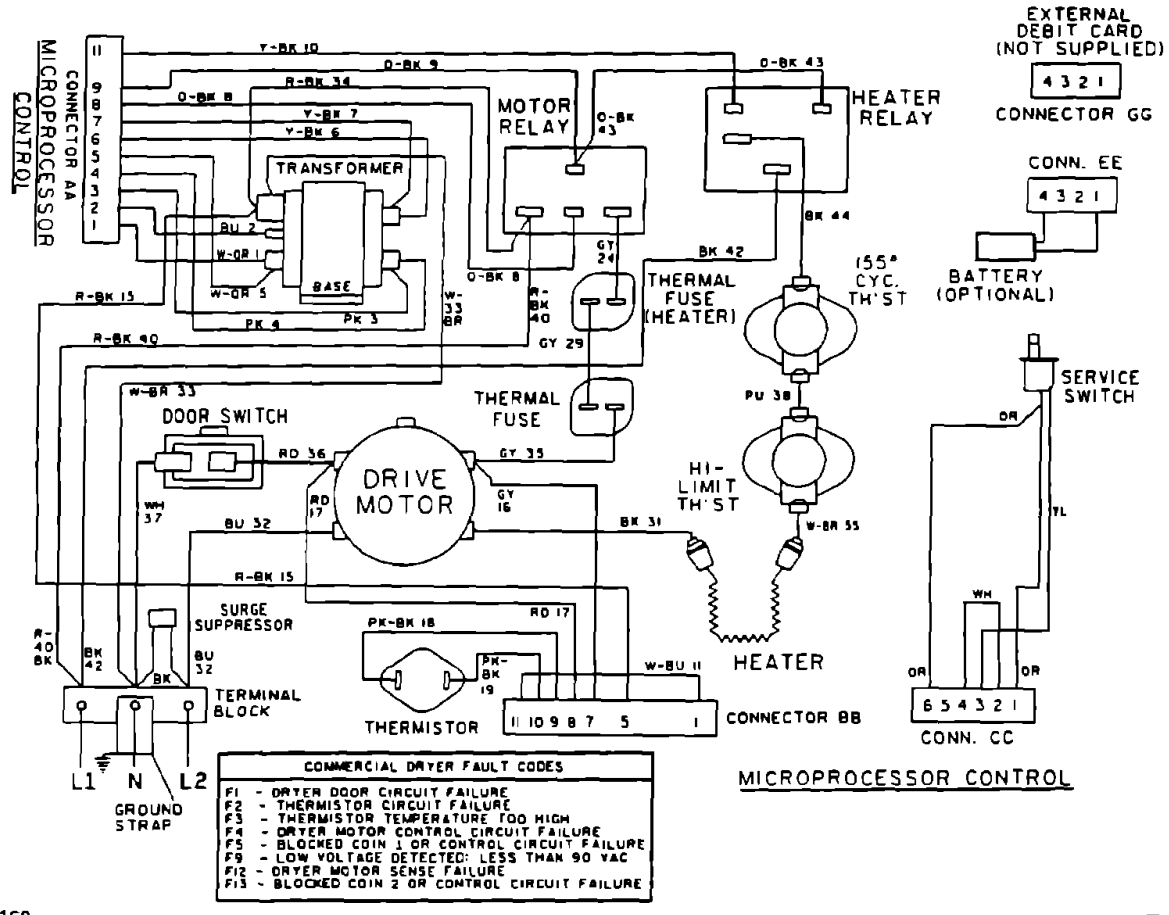
MDG12PR

MDE13PR

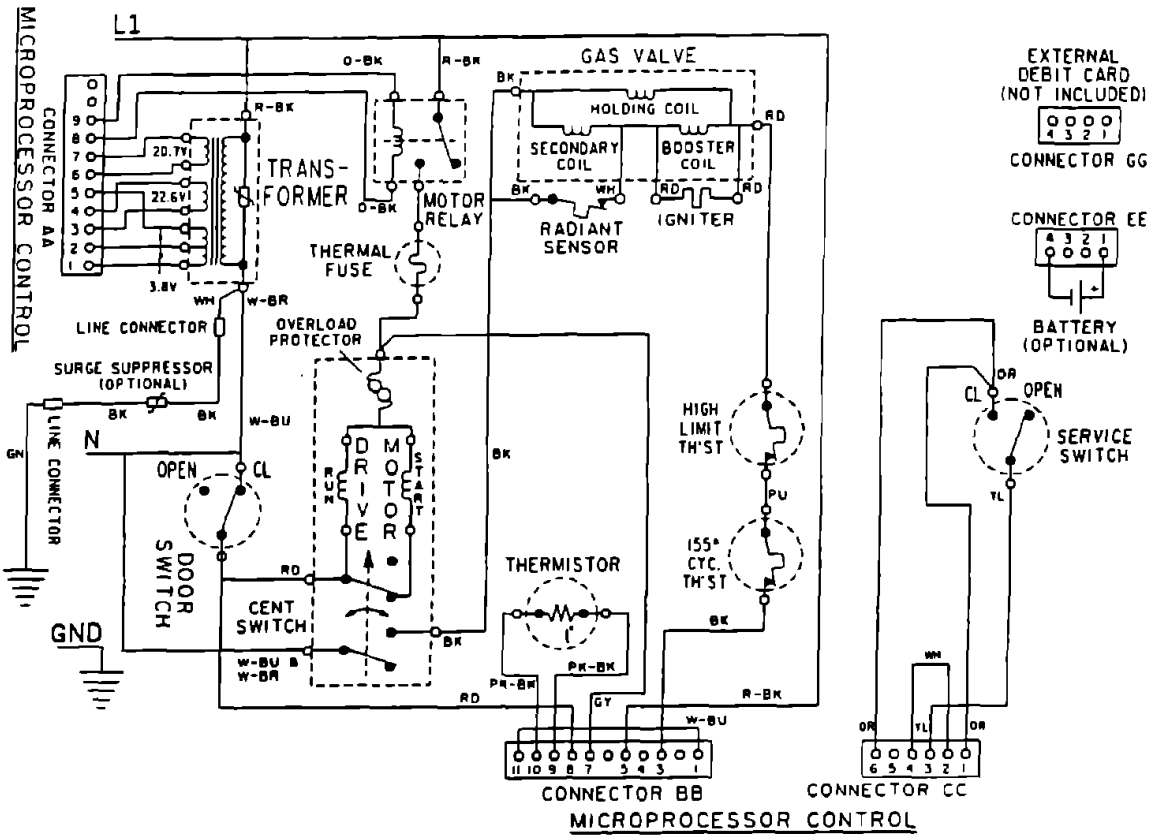
MDG13PR

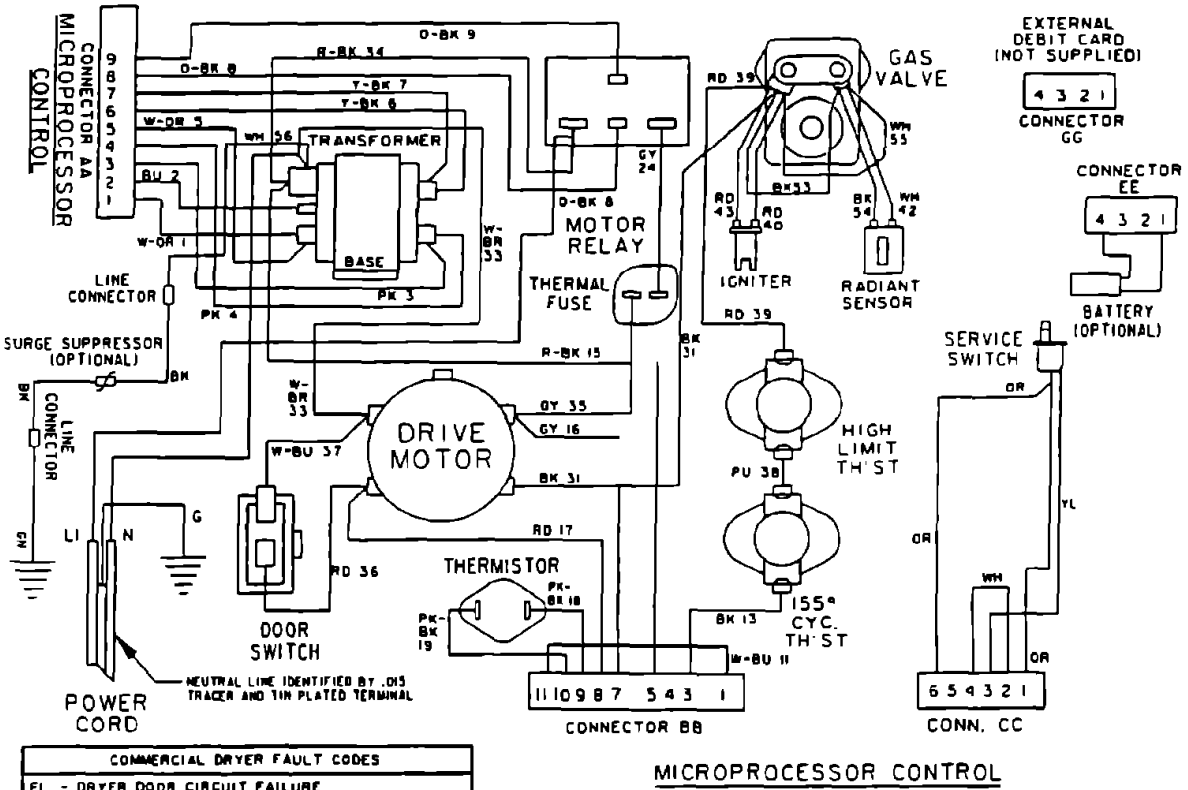
MDE12PR WIRING DIAGRAM & ELECTRICAL SCHEMATIC





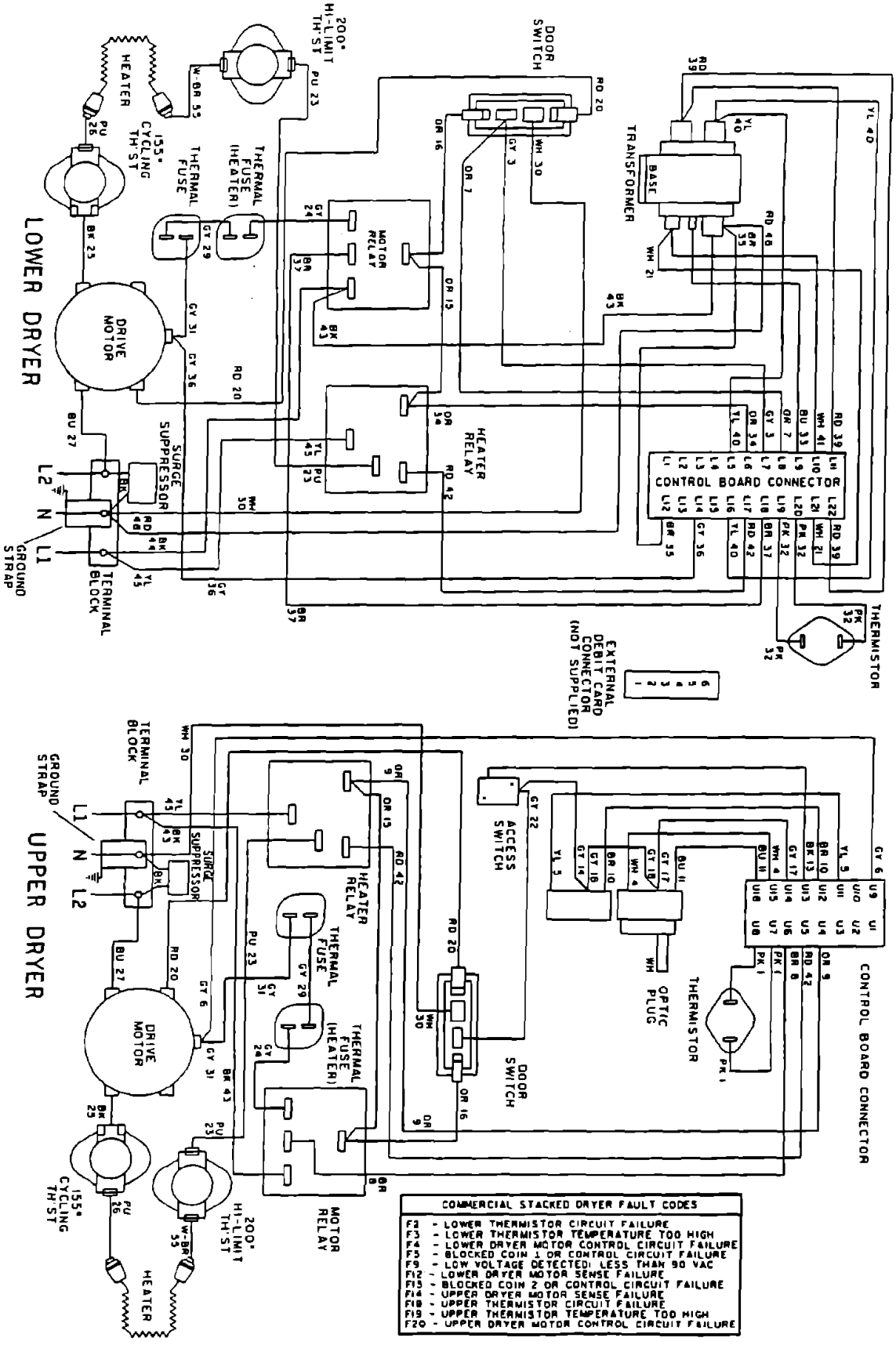
MDG12PR WIRING DIAGRAM & ELECTRICAL SCHEMATIC



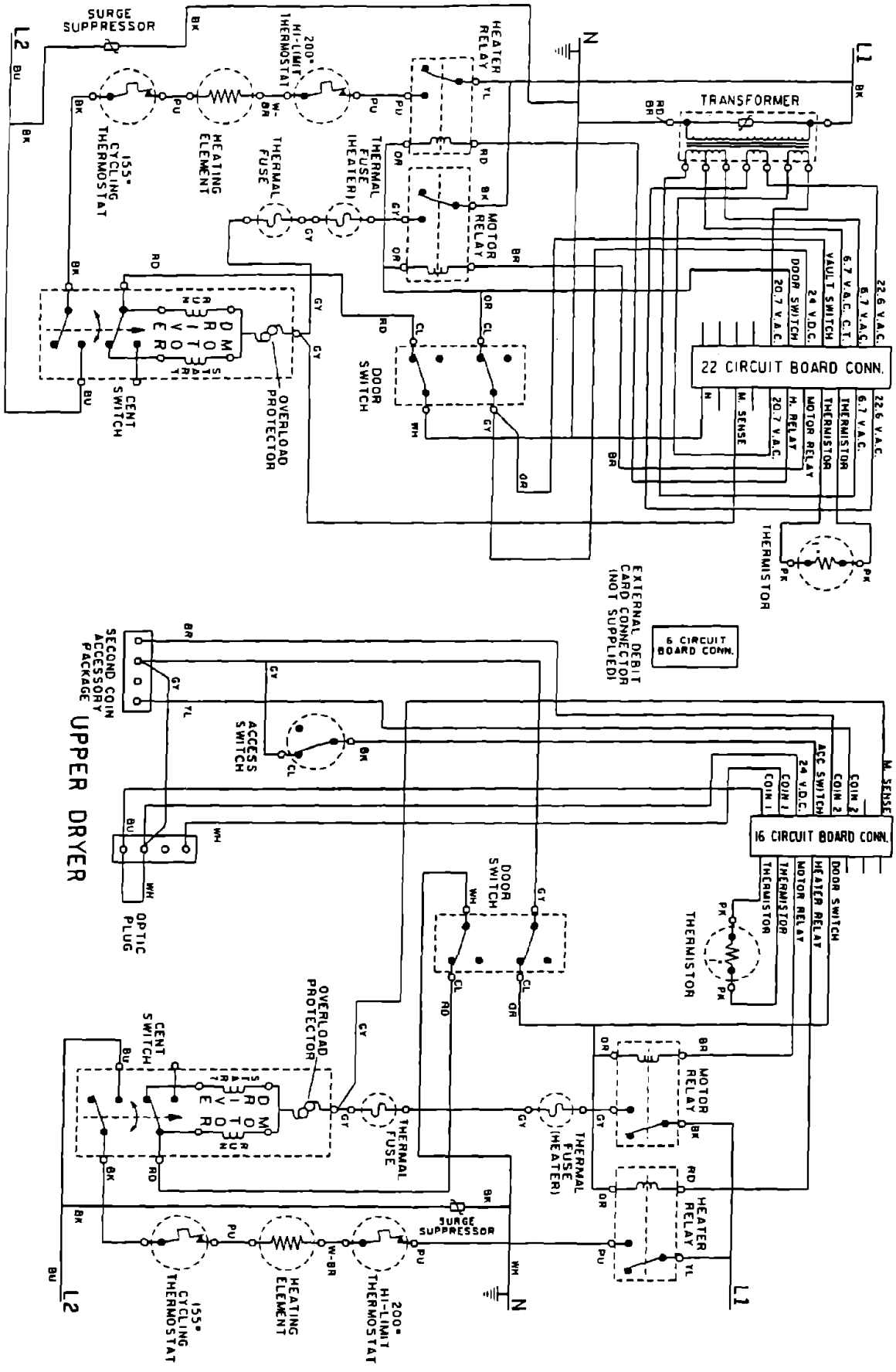


COMMERCIAL DRYER FAULT CODES
F1 - DRYER DOOR CIRCUIT FAILURE
F2 - THERMISTOR CIRCUIT FAILURE
F3 - THERMISTOR TEMPERATURE TOO HIGH
F4 - DRYER MOTOR CONTROL CIRCUIT FAILURE
F5 - BLOCKED COIN 1 OR CONTROL CIRCUIT FAILURE
F9 - LOW VOLTAGE DETECTED: LESS THAN 90 VAC
F12 - DRYER MOTOR SENSE FAILURE
F13 - BLOCKED COIN 2 OR CONTROL CIRCUIT FAILURE

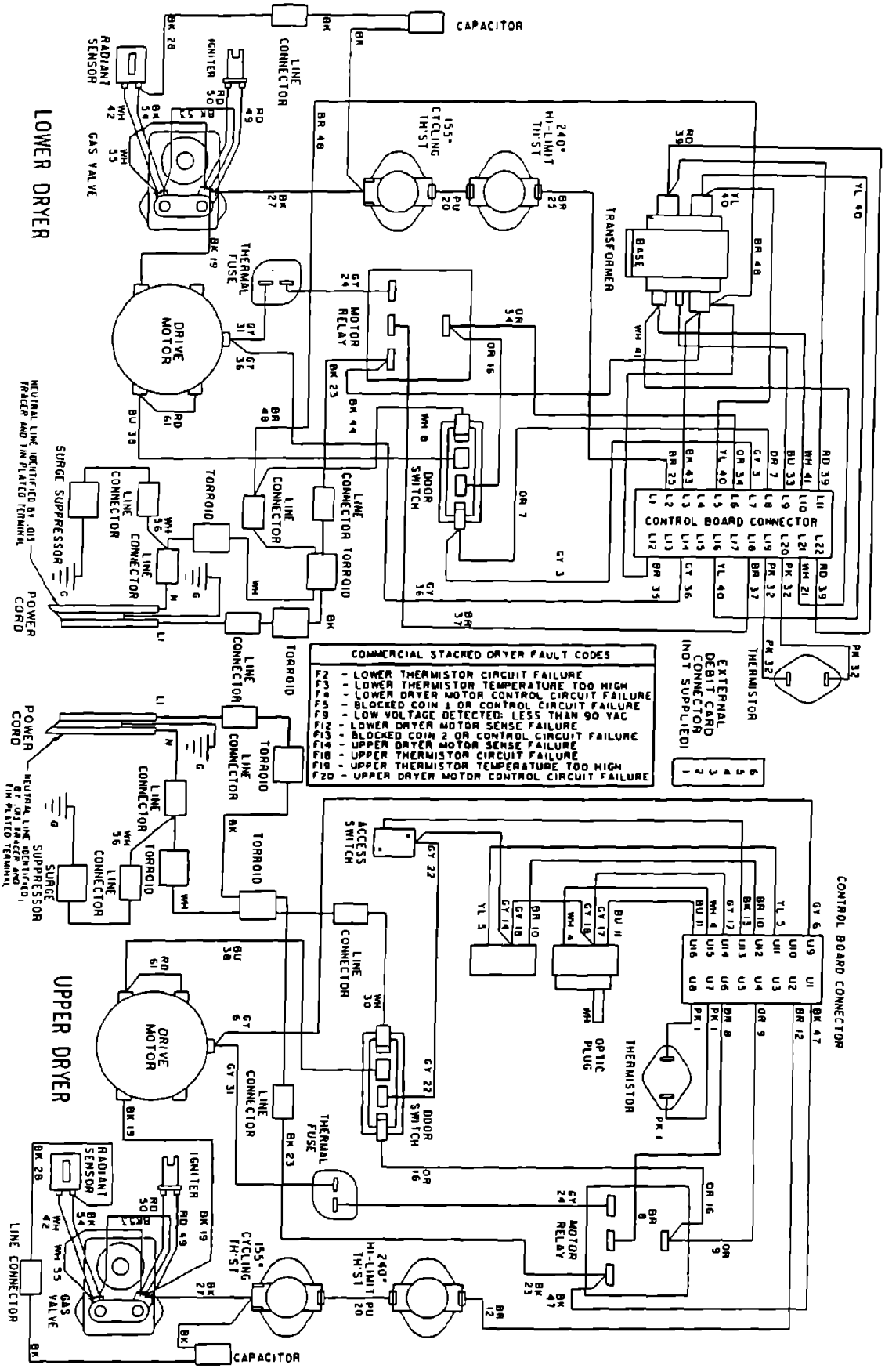
MDE13PR WIRING DIAGRAM



MDE13PR ELECTRICAL SCHEMATIC



MDG13PR WIRING DIAGRAM



MDG13PR ELECTRICAL SCHEMATIC