

W10251136B

SERVICE MANUAL

Maytag Square Door Commercial Single and Stack Gas and Electric Dryers

**MDE/MDG17 PR/PD/CS/MN****MDE/MDG18 PR/PD/CS/MN****MDE/MDG20 PR/PD/CS/MN****MLE/MLG24 PR/PD****MLE/MLG26 PR/PD****MLE/MLG27 PD**

MODELS: MDE/MDG17 PR/PD/CS/MN, MDE/MDG18 PR/PD/CS/MN, MDE/MDG20 PR/PD/CS/MN, MLE/MLG24 PR/PD, MLE/MLG26 PR/PD, MLE/MLG27 PD

TECHNICAL EDUCATION

FORWARD

This Service Manual, "Maytag Square Door Commercial Single and Stack Gas and Electric Dryers" (Part No. W10251136B), provides the Commercial Laundry Service Professional with information on the installation, operation, and service of the Maytag Square Door series 17 to 27 dryers. For specific information on the model being serviced, refer to the "Installation Instructions," or "Tech Sheet" provided with the dryer. The Wiring Diagrams used in this Service Manual are typical and should be used for training purposes only. Always use the Wiring Diagram supplied with the dryer when servicing.

GOALS AND OBJECTIVES

The goal of this Service Manual is to provide information that will enable the Commercial Laundry Service Professional to properly diagnose malfunctions and repair the Maytag Square Door Commercial Single and Stack Gas and Electric Dryers. The objectives of this Service Manual are to:

- Understand and follow proper safety messages.
- Successfully diagnose installation related problems.
- Successfully troubleshoot and diagnose malfunctions.
- Successfully perform necessary repairs.
- Successfully return the dryer to its proper operational status.

WHIRLPOOL CORPORATION assumes no responsibility
for any repairs made on our products by anyone other than
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Turn pages by dragging corner, clicking page shadow, scrolling mouse wheel, arrow keys, etc.


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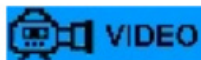
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VIEW EQUIPMENT & SAFETY VIDEO

— NOTES —

GENERAL

Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING." These words mean:



You can be killed or seriously injured if you don't immediately follow instructions.



You can be killed or seriously injured if you don't follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

IMPORTANT Electrostatic Discharge (ESD) Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic control assembly. The new control assembly may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

- Use an anti-static wrist strap. Connect wrist strap to green ground connection point or unpainted metal in the appliance

-OR-

Touch your finger repeatedly to a green ground connection point or unpainted metal in the appliance.

- Before removing the part from its package, touch the anti-static bag to a green ground connection point or unpainted metal in the appliance.
- Avoid touching electronic parts or terminal contacts; handle electronic control assembly by edges only.
- When repackaging failed electronic control assembly in anti-static bag, observe above instructions.

MODEL NUMBER DESIGNATIONS

MODEL NUMBER	M	DE	17	PD	A	Y	W	0
BRAND								
M Maytag								
PRODUCT GROUP								
DE Dryer - Electric								
DG Dryer - Gas								
LE Laundry Stack - Electric								
LG Laundry Stack - Gas								
DESCRIPTION								
17 27" Square Door Single-load Dryer								
18 27" Square Door Single-load Dryer								
24 Square Door Stack Single-load Dryer/Dryer								
26 Square Door Stack Single-load Dryer/Dryer								
27 Square Door Stack Single-load Dryer/Dryer								
CONTROL TYPE								
CS Mechanical - coin slide ready								
MN Mechanical - non-coin								
PD Processor - with coin drop								
PN Processor - non pay								
PR Processor - Card Reader Ready								
MARKETING CODE								
A First in series								
B Second in series								
C Third in series								
VOLTAGE CODE								
W 120V-60Hz (US)								
X 120V-60Hz (Canada)								
Y 240V-60Hz (US)								
Z 240V-60Hz (Canada)								
G 220-240V-50Hz (Generic Export)								
COLOR								
W White								
DIGIT CHANGE								
0 Engineering Digit Change 0-9								
(Indicates number of minor changes dryer has undergone)								

MODEL & SERIAL NUMBER LABEL AND TECH SHEET LOCATION

Location Of Model & Serial Number Label



Location Of Tech Sheet, Parts List & Wiring Diagram
Inside Lower Front Service Panel



1-3

WARRANTY

MAYTAG COMMERCIAL WASHER, DRYER, STACKED DRYER/ DRYER, COMMERCIAL STACK LAUNDRY, AND MULTI-LOAD COIN OPERATED COMMERCIAL WASHERS AND DRYERS WARRANTY

LIMITED WARRANTY ON PARTS

For the first five years from the date of purchase, when this commercial appliance is installed, maintained and operated according to the instructions attached to or furnished with the product, Maytag brand of Whirlpool Corporation (hereafter Maytag ") will pay for factory specified parts or original equipment manufacturer parts to correct defects in materials or workmanship. Proof of original purchase date is required to obtain service under this warranty.

ITEMS MAYTAG WILL NOT PAY FOR

1. All other costs including labor, transportation, or custom duties.
2. Service calls to correct the installation of your commercial appliance, to instruct you how to use your commercial appliance, to replace or repair fuses, or to correct external wiring or plumbing.
3. Repairs when your commercial appliance is used for other than normal, commercial use.
4. Damage resulting from improper handling of product during delivery, theft, accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation, installation not in accordance with local electrical or plumbing codes, or use of products not approved by Maytag.
5. Pickup and Delivery. This commercial appliance is designed to be repaired on location.
6. Repairs to parts or systems resulting from unauthorized modifications made to the commercial appliance.
7. The removal and reinstallation of your commercial appliance if it is installed in an inaccessible location or is not installed in accordance with published installation instructions.
8. Chemical damage is excluded from all warranty coverage.
9. Changes to the building, room, or location needed in order to make the commercial appliance operate correctly.

DISCLAIMER OF IMPLIED WARRANTIES; LIMITATIONS OF REMEDIES

CUSTOMER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY SHALL BE PRODUCT REPAIR AS PROVIDED HEREIN. IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR OR THE SHORTEST PERIOD ALLOWED BY LAW. WHIRLPOOL SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES AND PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATIONS ON THE DURATION OF IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS, SO THESE EXCLUSIONS OR LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE OR PROVINCE TO PROVINCE.

If you need service, please contact your authorized Maytag Commercial Laundry distributor. To locate your authorized Maytag Commercial Laundry distributor, or for web inquiries, visit www.MaytagCommercialLaundry.com.

9/07

For written correspondence:

Maytag Commercial Laundry Service Department
2000 M-63 North
Benton Harbor, Michigan 49085 USA

GENERAL USER INFORMATION

Blank display

This condition indicates the dryer is in an inoperative state. Enter set-up mode to view diagnostic code.

'0 Minutes' showing in display

This condition indicates the dryer cannot be operated. Coins dropped or debit inputs during this condition will be stored in escrow but cannot be used until normal operation is restored by opening and closing the door. If the door switch has failed, it must be replaced before normal operation can be restored.

Cold start (initial first use)

Dryer is programmed at the factory as follows:

- 5 minutes dry time per quarter (coin 1).
- \$1.50 dry price
(fixed cycle with top off - PD Models).
- \$0.00 dry price
(fixed cycle - PR Models).

Warm Start (after power failure)

A few seconds after power is restored, if a cycle was in progress at the time of the power failure, 'RESELECT CYCLE' will flash in the display. This is to indicate the need for a fabric setting button to be pressed to restart dryer.

Pricing

After the door is opened following the completion of a cycle, the display indicates the cycle price (unless set for free operation). As coins or debit inputs arrive, the display will change to lead the user through the initiation of a cycle.

There are four (4) types of pricing:

Fixed 'Vend' Pricing

A dryer set up for 'Fixed Cycle' operation can only accept additional time accumulated by increments equal to the length of a complete dry cycle. A maximum of 99 minutes may be purchased; no additional credit is given when 99 minutes is in the display.

Accumulator Pricing

If the price is set to one coin 1, then accumulator mode is in effect (stacked PD models also require Fixed Cycle with Top Off option to be selected). Cycle time can be purchased one coin at a time (PD models) up to the maximum time of 99 minutes. Stacked PD dryers will credit all money to a cycle with a single button press while in accumulator pricing.

Fixed Cycle With Top Off Pricing

A dryer set to offer 'Top Off' capability will allow time to be added to an existing dry cycle in increments equal to the number of minutes of dry time per quarter (coin 1), up to 99 minutes, regardless of the cost required to start the dryer. No credit is given for coins or debit inputs entered when the control is displaying 99 minutes.

PR Models: In Enhanced Debit Mode, the top off price can be set independently. (See VALUE OF COIN 2), and the top off time is calculated according to the following equation:

$$\frac{\text{top off price}}{\text{full cycle price}} = \frac{\text{top off time}}{\text{full cycle length}}$$

Penny increment offset is not applied to top off purchases.

Free Cycles and PR Models Setup as PN

This is established by setting the cycle price to zero. When this happens 'SELECT CYCLE' will be displayed rather than a cycle price. Any cycle started as a free cycle will automatically terminate when the door is opened.

Debit Card Ready

This dryer is debit card 'cable' ready. It will accept a variety of debit card systems; but, does NOT come with a debit card reader. Refer to the debit card reader manufacturer for proper dryer set-up. In models converted to a Generation 1 debit card system, debit pulses represent the equivalent of one coin (coin 1).

Refer to the debit card reader manufacturer for proper dryer set-up. In models converted to a Generation 1 debit card system, debit pulses represent the equivalent of one coin (coin 1).

CONTROL SET-UP PROCEDURES

IMPORTANT: Read all instructions before operating.

The fabric setting buttons along with the digital display are used to set-up the dryer controls. The display can contain 4 numbers and/or letters and a decimal point. These are used to indicate the set-up codes and related code values available for use in programming the dryer.

How to use the key pad to program the controls

1. The WHITES AND COLORS button is used to adjust the values associated with set-up codes. Pressing the button will increment the value by one (1). Rapid adjustment is possible by holding the button down.
2. The PERM. PRESS button will advance through the set-up codes. Pressing the button will advance to the next available set-up code. Holding the button down will automatically advance through the set-up codes at a rate of one (1) per second.
3. The DELICATES button is used to select or deselect options.

Start Operating Set-Up

- Single Load PD Models: Insert access door key, turn, and lift to remove access door.
- Single Load PR Models: Once the debit card reader is installed (according to the reader manufacturer's instructions), the set-up can be changed by inserting a manual set-up card (supplied by the reader manufacturer) into the card slot. If manual set-up card is not available, manual set-up mode can be entered by removing connector AA1 on the circuit board.

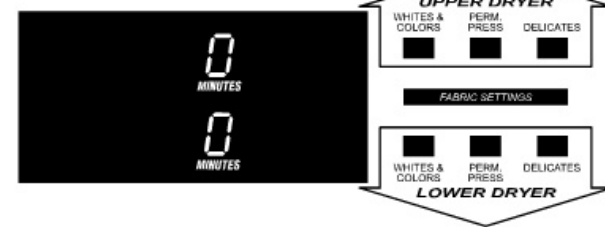
DISPLAY

After the dryer has been installed and plugged in, the display can show '0 minutes.'

Single Load Models



Stack Models



Once the dryer has been plugged in and the dryer door opened and closed the display will show the vend price. In PR models set for free cycles, the display will flash 'SELECT CYCLE' (not shown).

Single Load PD Models



Stack PD Models



IMPORTANT: The console must not be opened unless power is first removed from the dryer.

To access connector AA1:

1. Unplug dryer or disconnect power.
 2. Open console, disconnect plug on AA1, close console.
 3. Plug in dryer or reconnect power.
- Stacked PD/PR Models: Insert access panel key and turn counter-clockwise.
 - Stacked PR Models: Once the debit card reader is installed (according to the reader manufacturer's instructions), the set-up can only be changed by inserting a manual set-up card (supplied by the reader manufacturer) into the card slot. If manual set-up card is not available, only diagnostic mode can be entered by turning the access panel key.

The dryer is now in the set-up mode.

Before proceeding it is worth noting that, despite all the options available, an owner can simply choose to uncrate a new commercial dryer, hook it up, plug it in and have a dryer which operates.

NOTE: Prior to operation of a PD dryer, a payment system must be installed.

- PD dryers are pre-set at the factory for fixed cycle price with top off.
- PR dryers are pre-set for free cycle operation so they can be run without readers or coins.

SET-UP CODES

- The PERM. PRESS button will advance from code to code.
- The WHITE AND COLORS button will change the code value.
- The DELICATES button will select or deselect options.

FOR PR MODELS: The set-up codes are the same as for the PD models except where noted.

NOTE: On all stacked dryer models, programming selections apply to both dryers. Stacked dryer selections are accessed by pressing the LOWER DRYER buttons. The set-up code is indicated by the one or two left hand characters.

The set-up code value is indicated by the two or three right hand characters.

CODE	EXPLANATION
5.05	REGULAR CYCLE PRICE
5.05	Represents the number of quarters (coin 1); may adjust from 0-39. (See VALUE OF COIN 1) Advance from 0-39 by pressing WHITES AND COLORS. Factory preset for 6 quarters - \$1.50. PR & PN MODELS ONLY: Factory preset for 0 quarters.
→ Press PERM. PRESS key pad once to advance to next code.	
7.05	REGULAR DRY TIME
7.05	Represents the number of minutes per quarter (coin 1). Factory preset for 5 minutes per coin. Example: 6 quarters x 5 minutes = 30 minutes. By pressing the WHITES AND COLORS key pad you can adjust the value from 1-99 minutes. PN MODELS: Represents the cycle length for free cycles. As example: '730' represents 30 minutes.
→ Press PERM. PRESS key pad once to advance to next code.	
8.00	TYPE OF DRYER PRICING
8.00	Fixed Cycle with Top Off. For detailed description see General User Information.
8.FC	Fixed Cycle. For detailed description see General User Information. Use DELICATES key pad to make this selection. PR & PN MODELS ONLY: Factory preset for FC.
→ Press PERM. PRESS key pad once to advance to next code.	
9.00	CYCLE COUNTER OPTION
9.00	This option is either SELECTED 'ON' or NOT SELECTED 'OFF'. Not Selected 'OFF'.
9.0C	Selected 'ON' and not able to be deselected. Press DELICATES key pad 3 consecutive times to select 'ON'. Once selected 'ON' it cannot be deselected.
→ Press PERM. PRESS key pad once to advance to next code.	

CODE	EXPLANATION
1.00	MONEY COUNTER OPTION This option is either SELECTED 'ON' or NOT SELECTED 'OFF'.
1.00	Not Selected 'OFF'.
1.00	Selected 'ON'. Press DELICATES key pad 3 consecutive times to select 'ON' and 3 consecutive times to remove (Not Selected 'OFF'.) Counter resets by going from 'OFF' to 'ON'.
1.00	Selected 'ON' and not able to be deselected. To select 'ON' and not able to be deselected, first select 'ON', then within two seconds press DELICATES twice, WHITES AND COLORS once, and exit the set-up mode.
→ Press PERM. PRESS key pad once to advance to next code.	
2.00	SPECIAL PRICING OPTIONS This option is either SELECTED 'ON' or NOT SELECTED 'OFF'.
2.00	Not Selected 'OFF'.
2.50	Selected 'ON'. Press DELICATES key pad once for this selection.
If SPECIAL PRICING OPTION is selected, you have access to codes '3.' thru '9.'	
→ Press PERM. PRESS key pad once to advance to next code.	
OPTIONS TO USE IF SPECIAL PRICING IS SELECTED:	
3.06	SPECIAL CYCLE PRICE Represents the number of quarters (coin 1); may adjust from 0–39. (See VALUE OF COIN 1 b.05). Advance from 0–39 by pressing WHITES AND COLORS. Factory preset for 6 quarters = \$1.50. PR & PN MODELS: Factory preset for 0 quarters.
→ Press PERM. PRESS key pad once to advance to next code.	
4.05	SPECIAL DRY TIME Represents the number of minutes per quarter (coin 1). Factory preset for 5 minutes per coin. Example: 6 quarters x 5 minutes = 30 minutes. By pressing the WHITES AND COLORS key pad you can adjust the value from 1–99 minutes. PN MODELS: Represents the cycle length for free cycles. As example: '4.30' represents 30 minutes.
→ Press PERM. PRESS key pad once to advance to next code.	
5.00	TIME-OF-DAY CLOCK, MINUTES This is the TIME-OF-DAY CLOCK, minute setting; select 0–59 minutes by pressing WHITES AND COLORS key pad.
→ Press PERM. PRESS key pad once to advance to next code.	
6.00	TIME-OF-DAY CLOCK, HOURS NOTE: Uses military time – 24 hr. clock. This is the TIME-OF-DAY CLOCK, hour setting; select 0–23 hours by pressing WHITES AND COLORS key pad.
→ Press PERM. PRESS key pad once to advance to next code.	
7.00	SPECIAL PRICE START HOUR NOTE: Uses military time – 24 hr. clock. This is the start hour; 0–23 hours. Select START HOUR by pressing WHITES AND COLORS key pad.
→ Press PERM. PRESS key pad once to advance to next code.	
8.00	SPECIAL PRICE STOP HOUR NOTE: Uses military time – 24 hr. clock. This is the stop hour; 0–23 hours. Select STOP HOUR by pressing WHITES AND COLORS key pad.
→ Press PERM. PRESS key pad once to advance to next code.	

CODE	EXPLANATION																								
OPTIONS TO USE IF SPECIAL PRICING IS SELECTED (continued):																									
9.10	SPECIAL PRICE DAY																								
9.10	This represents the day of the week and whether special pricing is selected for that day. A number followed by '0' indicates no selection that particular day (9.10). A number followed by an 'S' indicates selected for that day (9.1S). Day of week (1-7) can be chosen by pressing the WHITES AND COLORS key pad. Press DELICATES key pad once to select special pricing for each day chosen. When exiting setup code '9.', the display must show current day of week:																								
	<table><tr><th>DISPLAY</th><th>DAY OF WEEK</th><th>CODE (selected)</th></tr><tr><td>10</td><td>Day 1 = Sunday</td><td>1S</td></tr><tr><td>20</td><td>Day 2 = Monday</td><td>2S</td></tr><tr><td>30</td><td>Day 3 = Tuesday</td><td>3S</td></tr><tr><td>40</td><td>Day 4 = Wednesday</td><td>4S</td></tr><tr><td>50</td><td>Day 5 = Thursday</td><td>5S</td></tr><tr><td>60</td><td>Day 6 = Friday</td><td>6S</td></tr><tr><td>70</td><td>Day 7 = Saturday</td><td>7S</td></tr></table>	DISPLAY	DAY OF WEEK	CODE (selected)	10	Day 1 = Sunday	1S	20	Day 2 = Monday	2S	30	Day 3 = Tuesday	3S	40	Day 4 = Wednesday	4S	50	Day 5 = Thursday	5S	60	Day 6 = Friday	6S	70	Day 7 = Saturday	7S
DISPLAY	DAY OF WEEK	CODE (selected)																							
10	Day 1 = Sunday	1S																							
20	Day 2 = Monday	2S																							
30	Day 3 = Tuesday	3S																							
40	Day 4 = Wednesday	4S																							
50	Day 5 = Thursday	5S																							
60	Day 6 = Friday	6S																							
70	Day 7 = Saturday	7S																							
→ Press PERM. PRESS key pad once to advance to next code.																									
9.00	VAULT VIEWING OPTION																								
9.00	This option is either SELECTED 'ON' or NOT SELECTED 'OFF'.																								
9.00	Not Selected 'OFF'.																								
9.50	Selected 'ON'. Press DELICATES key pad once for this selection. When selected, the money and/or cycle counts will be viewable (if counting is selected) when the coin box is removed.																								
→ Press PERM. PRESS key pad once to advance to next code.																									
b.05	VALUE OF COIN 1																								
b.05	This represents the value of coin 1 in number of nickels. 05 = \$0.25. By pressing WHITES AND COLORS key pad you have the option of 1–199 nickels.																								
→ Press PERM. PRESS key pad once to advance to next code.																									
c.20	VALUE OF COIN 2																								
c.20	This represents the value of coin 2 in number of nickels. 20 = \$1.00. By pressing WHITES AND COLORS key pad you have the option of 1–199 nickels. PR MODELS ONLY: For PR models using Enhanced Debit, this field represents the value of top off in nickels. PR & PN MODELS: Factory preset for \$.25.																								
→ Press PERM. PRESS key pad once to advance to next code.																									
d.00	COIN SLIDE OPTION																								
d.00	This option is either SELECTED 'ON' or NOT SELECTED 'OFF'.																								
d.00	Not Selected 'OFF'.																								
d.05	Selected 'ON'. Press DELICATES key pad 3 consecutive times for this selection. When coin slide mode is selected, set 'b.' equal to value of slide in nickels. Set '606' (REGULAR CYCLE PRICE) and '3.06' (SPECIAL CYCLE PRICE) to number of slide operations. NOTE: If the installer sets up 'CS' on a coin drop model, it will not register coins.																								
→ Press PERM. PRESS key pad once to advance to next code.																									
e.00	ADD COINS OPTION																								
e.00	This option is either SELECTED 'ON' or NOT SELECTED 'OFF'. This option causes the customer display to show the number of coins (coin 1) to enter, rather than the dollars-and-cents amount.																								
e.00	Not Selected 'OFF'.																								
e.00	Selected 'ON'. Press DELICATES key pad 3 consecutive times for this selection. PR MODELS ONLY: In enhanced debit mode, this option is not selectable.																								
→ Press PERM. PRESS key pad once to advance to next code.																									

CODE	EXPLANATION
<u>J</u> <u>E</u> <u>d</u>	COIN/DEBIT OPTION
<u>J</u> <u>E</u> <u>d</u>	Both coin & debit selected.
<u>J</u> <u>E</u> <u>-</u>	Coins selected, debit disabled. Press DELICATES key pad for this selection.
<u>J</u> <u>-</u> <u>d</u>	Debit Card selected, coin disabled. Press DELICATES key pad for this selection.
<u>J</u> <u>E</u> <u>d</u>	Enhanced debit is self-selected when a Generation 2 card reader is installed in the dryer. The 'Ed' option cannot be manually selected or deselected. PN MODELS ONLY: Must be set for ' _d'.
→ Press PERM. PRESS key pad once to advance to next code.	
<u>L</u> <u>00</u>	PRICE SUPPRESSION OPTION This option is either SELECTED 'ON' OR NOT SELECTED 'OFF'. This option causes the customer display to show 'AVAILABLE' or 'ADD' rather than the amount of money to add. (Used mainly in debit installations.)
<u>L</u> <u>00</u>	Not Selected 'OFF'.
<u>L</u> <u>P5</u>	Selected 'ON'. Press DELICATES key pad once for this selection.
→ Press PERM. PRESS key pad once to advance to next code.	
<u>n</u> <u>E</u> <u>E</u>	CLEAR ESCROW OPTION This option is either SELECTED 'ON' OR NOT SELECTED 'OFF'. When selected, money held in escrow for 30 minutes without further escrow or cycle activity will be cleared.
<u>n</u> <u>E</u> <u>E</u>	Selected 'ON'.
<u>n</u> <u>00</u>	Not Selected 'OFF'. Press DELICATES key pad once to deselect this option.
→ Press PERM. PRESS key pad once to advance to next code.	
<u>U</u> <u>00</u>	PENNY INCREMENT OFFSET
<u>U</u> <u>00</u>	This represents the penny increment price offset used in Generation 2 (Enhanced Debit) PR models. Choose from 0-4 pennies by pressing the WHITES AND COLORS key pad.
→ Press PERM. PRESS key pad once to advance to next code.	

If cycle counter (90C) is selected, the following is true:

100 Represents the number of cycles in HUNDREDS.	1 02 = 200
200 Represents the number of cycles in ONES.	2 25 = 25
TOTAL = 225 cycles	

This is 'VIEW ONLY' and cannot be cleared.

Press the PERM. PRESS key pad once to advance to next code.

If money counter (1.0C or 1.C0) is selected, the following is true:

300 Number of dollars in HUNDREDS.	3 01 = \$100.00
400 Number of dollars in ONES.	4 68 = \$ 68.00
500 Number of CENTS.	5 75 = \$ 00.75
TOTAL = \$168.75	

END OF SET-UP PROCEDURES
EXIT FROM SET-UP MODE

- SINGLE LOAD PD MODELS: Reinstall access door.
- SINGLE LOAD PR MODELS:
 - Unplug dryer or disconnect power.
 - Open console, reinsert plug into AA1, close console.
 - Plug in dryer or reconnect power.
- STACKED MODELS: Turn access panel key back to original position.

— NOTES —

INSTALLATION INFORMATION

TOOLS AND PARTS

Gather the required tools and parts before starting installation. Read and follow the instructions provided with any tools listed here.

Tools needed:

- 8" or 10" Pipe wrench
- 8" or 10" adjustable wrench that opens to 1" (2.5 cm)
- Flat-blade screwdriver
- Phillips screwdriver
- Torx 20 Security screwdriver or bit
- Level
- 5/16" socket with wrench
- Utility knife
- Pipe-joint compound resistant to type of gas used
- Caulking gun and caulk (for installing new exhaust vent)
- Pliers
- Putty knife

Parts supplied:

Remove parts bag from dryer drum. Check that all parts were included.

- Foot boot (4)
- Dryer foot (4)

Additional parts supplied with PR models:

- Card reader bezel, card reader wire harness.

Additional parts supplied with CS & PD models:

- Security wedge cone
- 5/16"-18 x 2 1/2" bolt
- Cam for service door lock

Additional parts supplied with CS models:

- 3 pin / 60 minute timing cam
- 6 pin / 30 minute timing cam

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LOCATION REQUIREMENTS



If installing a gas dryer:

IMPORTANT: Observe all governing codes and ordinances.

- Check code requirements: Some codes limit or do not permit installation of clothes dryers in garages, closets, or sleeping quarters. Contact the local building inspector.
- Ensure that lower edges of the cabinet, plus the back and bottom sides of the dryer, are free of obstructions to permit adequate clearance of air openings for combustion air. See "Recessed Area and Closet Installation Instructions" below for minimum spacing requirements.

NOTE: The dryer must not be installed in an area where it will be exposed to water and/or weather.

Recessed Area and Closet Installation Instructions:

Commercial dryers may be installed in a recessed area or closet. For recessed area and closet installations, minimum clearances can be found in the Installation Instructions.

The installation spacing is in inches and is the minimum allowable. Additional spacing should be considered for ease of installation, servicing, and compliance with local codes and ordinances.

If closet door is installed, the minimum unobstructed air opening in the top and bottom is required. Louvered doors with equivalent air openings are acceptable.

The dryer must be exhausted outdoors. No other fuel-burning appliance may be installed in the same closet as the dryer.

VENTING REQUIREMENTS

 WARNING

<p style="text-align: center;">Fire Hazard</p> <p>Use a heavy metal vent.</p> <p>Do not use plastic vent.</p> <p>Do not use metal foil vent.</p> <p>Failure to follow these instructions can result in death or fire.</p>

WARNING: To reduce the risk of fire, this dryer **MUST BE EXHAUSTED OUTDOORS.**

- The dryer vent must not be connected into any gas vent, chimney, wall, ceiling, or a concealed space of a building.
- Do not use an exhaust hood with a magnetic latch.
- Do not install flexible metal vent in enclosed walls, ceilings or floors.
- 4" (10.2 cm) diameter rigid metal vent and clamps must be used.
- Use clamps to seal all joints. Vent must not be connected or secured with screws or other fastening devices which extend into the interior of the vent. Do not use duct tape.

IMPORTANT: Observe all governing codes and ordinances.

Use a heavy metal vent. Do not use plastic or metal foil vent.

Rigid metal vent is recommended to avoid crushing and kinking.

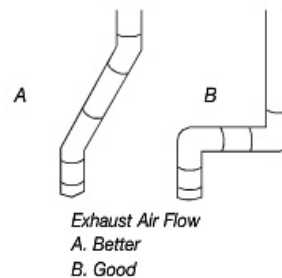
Flexible metal vent must be fully extended and supported when the dryer is in its final position. Remove excess flexible metal vent to avoid sagging and kinking that may result in reduced airflow and poor performance.

An exhaust hood should cap the vent to avoid rodents and insects from entering the home or business.

Exhaust hood must be at least 12" (30.5 cm) from the ground or any object that may be in the path of the exhaust (such as flowers, rocks or bushes).

If using an existing vent system, clean lint from the entire length of the system and ensure exhaust hood is not plugged with lint. Replace any plastic or metal foil vent with rigid metal or flexible metal vent.

Plan installation to use the fewest number of elbows and turns.



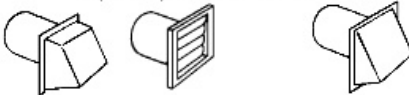
Allow as much room as possible when using elbows or making turns. Bend vent gradually to avoid kinking.

Vent outlets are located at the bottom of the dryer in the rear, on the bottom panel and on the right and left side panels. Vents can be routed up, down, left, right, behind the dryer or straight out the back of the dryer.

Vent System Length

Maximum length of vent system depends upon the type of vent used, number of elbows and type of exhaust hood. The maximum length for both rigid and flexible vent is shown in the chart.

4" (10.2 cm) Diameter Exhaust Hoods



Rigid Metal Vent		
No. of 90° turns	Box Hood and Louvered Style	Angled Hood Style
0	135 ft. (41.2 m)	129 ft. (39.3 m)
1	125 ft. (38.1 m)	119 ft. (36.3 m)
2	115 ft. (35.1 m)	109 ft. (33.2 m)
3	106 ft. (32.3 m)	100 ft. (30.5 m)
4	98 ft. (29.9 m)	92 ft. (28.0 m)

Flexible Metal Vent		
No. of 90° turns	Box Hood and Louvered Style	Angled Hood Style
0	76 ft. (23.2 m)	62 ft. (18.9 m)
1	71 ft. (21.6 m)	57 ft. (17.4 m)
2	67 ft. (20.4 m)	53 ft. (16.2 m)
3	65 ft. (19.8 m)	51 ft. (15.6 m)
4	63 ft. (19.2 m)	49 ft. (14.9 m)

If dryer is installed in a confined area, such as a bedroom, bathroom or closet, provision must be made for enough air for combustion and ventilation. (Check governing codes and ordinances.) See "Recessed Area and Closet Installation Instructions" in the "Location Requirements" section of the installation instructions.

4" (10.2 cm) outlet hoods are preferred. This is a hood that measures 4" from the wall to the bottom outside edge of the hood. However, 2 1/2" angled (6.4 cm) outlet exhaust hoods may be used. 2 1/2" angled (6.4 cm) outlet hoods create greater back pressure than other hood types.

For permanent installation, a stationary vent system is required. 4" rigid vent pipe is always the preferred ventilation piping for single-load dryer installations.

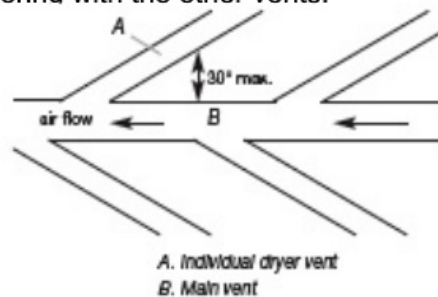
Multiple Dryer Venting

- A main vent can be used for venting a group of dryers. Main vent should be sized to remove 200 CFM of air per dryer. Large-capacity lint screens of proper design may be used in the main vent if checked and cleaned frequently. The room where the dryers are located should have make-up air equal to or greater than the CFM of all the dryers in the room, see below.

Unobstructed air openings are required for make up combustion air. A static opening of 24 square inches (1 inch² per 1,000 BTU of burner) is the minimum required for each dryer in operation. A common opening may be used if the return air is distributed equally to all dryers in operation.

- Back-draft dampers are available and should be installed in each dryer's vent to avoid exhausted air from returning into the dryers and to keep the exhaust in balance within the main vent.

Each vent should enter the main vent at an angle pointing in the direction of the airflow. Vents entering from the opposite side should be staggered to reduce the exhausted air from interfering with the other vents.

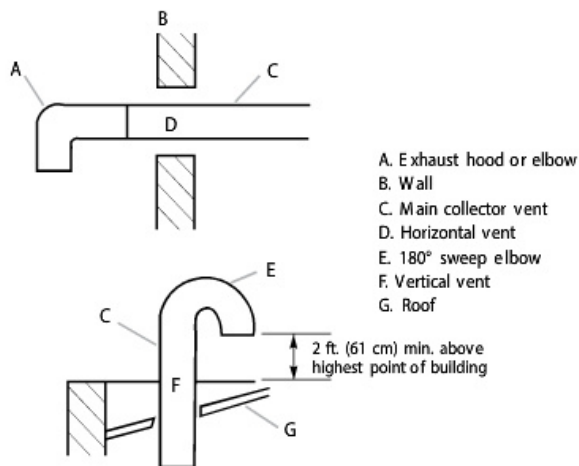


The maximum angle of each vent entering the main vent should be no more than 30°. Keep air openings free of dry cleaning fluid fumes. Fumes create acids which, when drawn through the dryer heating elements, can damage dryers and loads being dried.

A clean-out cover should be located on the main vent for periodic cleaning of the vent system.

If an exhaust hood cannot be used:

The outside end of the main vent should have a sweep elbow directed downward. If the main vent travels vertically through the roof, rather than through the wall, install a 180° sweep elbow on the end of the vent at least 2 ft. (61 cm) above the highest part of the building. The opening, wall or roof, shall have a diameter 1/2" (1.3 cm) larger than the vent diameter.



The vent should be centered in the opening.
 Do not install screening or cap over the end of the vent.

GAS PIPE CHART (NATURAL GAS)

The chart shows the maximum capacity in terms of cubic feet of gas per hour, for various sizes of pipe at lengths of from 10 feet to 200 feet. The column on the left is the nominal iron pipe size shown in inches. Sizes range from 1/4" to 4". The next column shows the internal diameter of the pipe in decimal inches.

The numbers across the top of the chart are lengths of pipe from 10 feet up to 200 feet. The numbers in the body of the chart are maximum capacities of cubic feet of gas per hour.

To determine the cubic feet of gas required per hour, divide the total BTU input of all the dryers which will be on the line by the average BTU heating value per cubic foot of the gas used.

EXAMPLE:

The dryer has a rating of 30,000 BTU. If the average BTU rating of natural gas is 1000, divide 30,000 by 1000 and get 30. If for example, eight dryers are to be operated on a gas line, the following figures would be used:

$$\begin{array}{rcl} 30 & \text{Cubic feet per hour each} & \\ \times 8 & \text{Dryers} & \\ \hline 240 & \text{Total cubic feet of gas per hour} & \end{array}$$


Let's assume 40 feet of pipe is required.
Here's how to use the chart:

1. Look across the top of the chart and find 40 feet of pipe.
2. Look down into the body of the chart to get to, or just over the maximum needed cubic feet of gas per hour. In this case it will be 245.
3. Look to the left column and see a 1" pipe is required.

Nominal iron pipe size, inches	Internal diameter inches	Length of pipe, feet													
		10	20	30	40	50	60	70	80	90	100	125	150	175	200
1/4	.364	32	22	18	15	14	12	11	11	10	9	8	8	7	6
3/8	.493	72	49	40	34	30	27	25	23	22	21	18	17	15	14
1/2	.622	132	92	73	63	56	50	46	43	40	38	34	31	28	26
3/4	.842	278	190	152	130	115	105	96	90	84	79	72	64	59	55
1	1.048	520	350	285	245	215	195	160	170	160	150	130	120	110	100
1 1/4	1.380	1050	730	590	500	440	400	370	350	320	305	275	250	225	210
1 1/2	1.610	1600	1100	890	760	670	610	560	530	490	400	410	380	350	320
2	2.087	3050	2100	1650	1450	1270	1150	1050	990	930	870	780	710	650	610
2 1/2	2.169	4860	3300	2700	2300	2000	1850	1700	1600	1500	1400	1250	1130	1050	980
3	3.068	8500	5900	4700	4100	3600	3250	3000	2800	2600	2500	2200	2000	1850	1700
4	4.026	17,500	12,000	9700	8300	7400	6800	6200	5800	5400	5100	4500	4100	3800	3500

THEORY OF OPERATION

STARTING THE DRYER

⚠ WARNING

<p>Explosion Hazard</p> <p>Keep flammable materials and vapors, such as gasoline, away from dryer.</p> <p>Do not dry anything that has ever had anything flammable on it (even after washing).</p> <p>Failure to follow these instructions can result in death, explosion, or fire.</p>

⚠ WARNING

<p>Fire Hazard</p> <p>No washer can completely remove oil.</p> <p>Do not dry anything that has ever had any type of oil on it (including cooking oils).</p> <p>Do not dry items containing foam, rubber, or plastic in this dryer.</p> <p>Doing so can result in death or fire.</p>

Commercial dryers may or may not require a payment system to operate. If required, once payment is established, following the instructions on the console lead the user through the procedure for selecting a cycle to care for their particular fabrics. After the dryer has started, either indicator lights will be illuminated marking the cycle or the display will show the selected cycle as well as the countdown of the time left in the cycle.

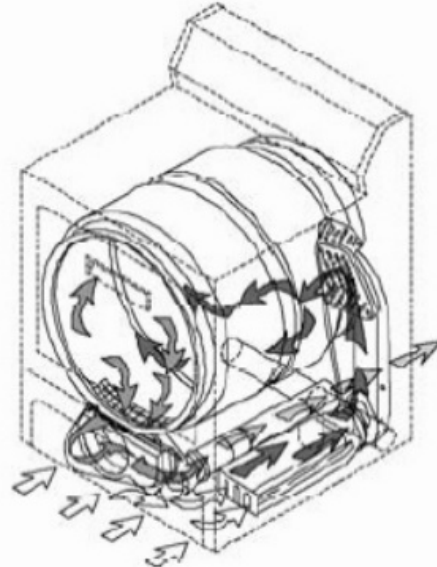
AIR INTAKE AND EXHAUST

Room temperature air (white arrows) enters the lower portion of the dryer through a gap formed behind the bottom of the lower front panel. Therefore it is very important to raise the bottom of the dryer by installing the feet properly. This room air is drawn through the heating system (gas burner or electric element).

Heated dry air (dark arrows) is then drawn up the heat duct mounted behind the rear bulkhead and then into the drum.

As the dry heated air circulates in the drum it picks up moisture from the wet clothes. The more space around tumbling clothes for dry heated air to come into contact with fabric, the faster clothes will dry.

The moistened heated air is drawn down through the lint filter, through the blower and into the exhaust duct, where it is vented out of the dryer and out of the building.



Capacity	7.4 Cubic Feet	One washer load is a full dryer load
Motor	Thermo-protected against overload auto-reset	1/4 HP, 120 Volt, 60 Hz
Air Flow	Cubic feet per minute exhausted from dryer	215 CFM Electric 230 CFM GAS
Tumbler	Revolution per minute	50 RPM \pm 1.5
Rotation	Drum Turning, when viewed from the front	Clockwise
Heat Source	<ul style="list-style-type: none"> • Electric • Electric • Gas 	<ul style="list-style-type: none"> • USA 240 v, 5600 watts, 30 amp fuse • Canada 240 v, 5250 watts, 30 amp fuse • Single port burner 24,000 BTU/hr. glow bar ignition, automatic shut-off
Exhaust	Venting size	4"(10.2 cm) duct, rigid duct (See installation instructions provided with the dryer for additional information)
Makeup Air	Free opening	Requires 24 sq. in. per dryer pocket
Static Pressure	Single unit exhausting, 4" round rigid duct.	Should not exceed 0.92" or less than 0" water column.

DESCRIPTION	WATTAGES
Gas Dryer	350 Maximum without igniter
Electric Dryer USA / Canada	5550 watts (240 v) / 4600 watts (208 v)
Heating Element USA / Canada	5250 watts (240 v) / 4100 watts (208 v)
Igniter (NOTE: Ohm room temperature 180-400)	600

TYPICAL CYCLE OF OPERATION

When WHITES AND COLORS is selected, the high heat cycle is activated. The high temp cycle uses the circuit that involves the 155°F operating thermostat.

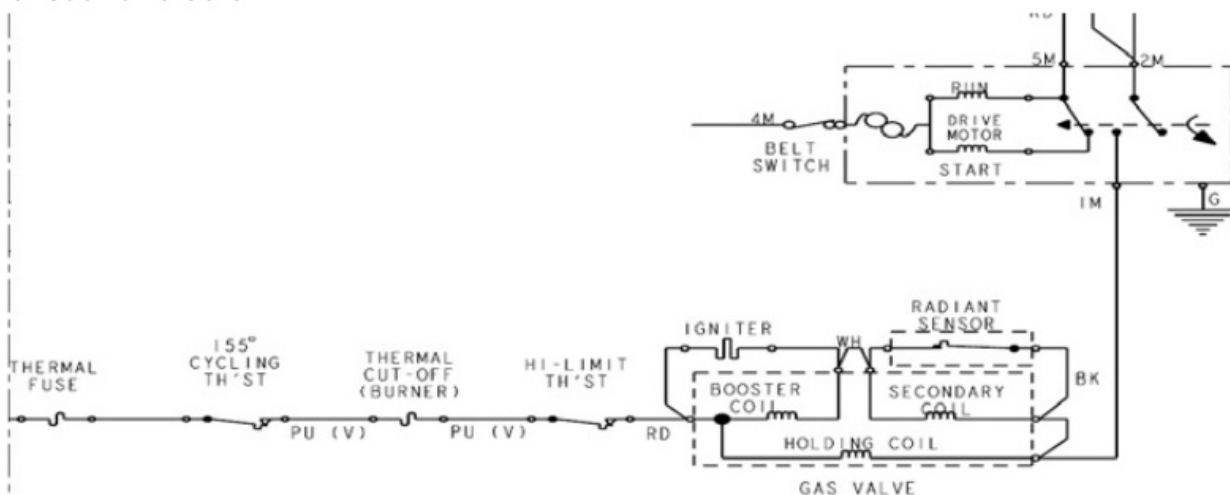
When the cycle type is selected on PD models the dryer motor circuit is energized. The motor has power sent to both the Run and the Start windings. When the motor reaches run speed the centrifugal switch snaps closed and the switches in the motor switch change position. Motor switch 5M continues to power the main motor winding but the switch contact to the Start winding is opened, which drops the start winding out of the circuit. At the same time motor switch 1M closes to motor switch 2M which allows the circuit to close, completing the heater circuit. Now the blower, the drum, and the heat are all working.

Notice the components in this gas heat circuit; heat can be shut off by opening any of the in-line components:

1. Thermal Fuse
2. Cycling Thermostat
3. Thermal Cut-Off
4. Hi-Limit T/Stat
5. Motor Switch 1M to 2M
6. Gas Valve Coils

Using this same theory we can show that if there is line voltage showing at the 2 pin connector for the gas valve, then all of the thermal components are closed and OK! We would also know that the motor switch 1M to 2M is closed as well, because the neutral side of line voltage must pass through this motor switch that is only closed if the motor is running.

With Electric heat models, as with gas heat models, when the motor reaches full speed and the centrifugal switch trips, the switches change state, although with electric heat models full line voltage (208-240volts) is supplied to the heating element when the motor switch M1 to M2 is closed.



The broken belt switch is in series with the motor and has one of its leads connect directly to a terminal on the motor thermal overload. If either the broken belt switch or the motor thermal overload opens the circuit, it will stop the motor, which in turn will cause the motor centrifugal switch to open and change the positions of the motor switch, opening motor switch 1M to 2M, which causes an open in the neutral in the gas coil circuit and L2 of an electric element circuit.

CS & MN models are controlled differently, as there is no micro-processor to control the functions. A mechanical timer and manually activated selector switches act as the user interface to communicate the user programming to the dryer. The addition of a Start Switch is also seen on mechanically controlled dryers. Shown here is the CS model wire diagram. The Motor & Heater Bypass Switches are located on the timer, and are closed when the timer is mechanically pushed to the start position by pushing the coinslide in. At the same time the timer is set for a full cycle and timing is determined by the amount of pins on the timer cam (factory preset with the 4 pin 45 min cam). This timer is a

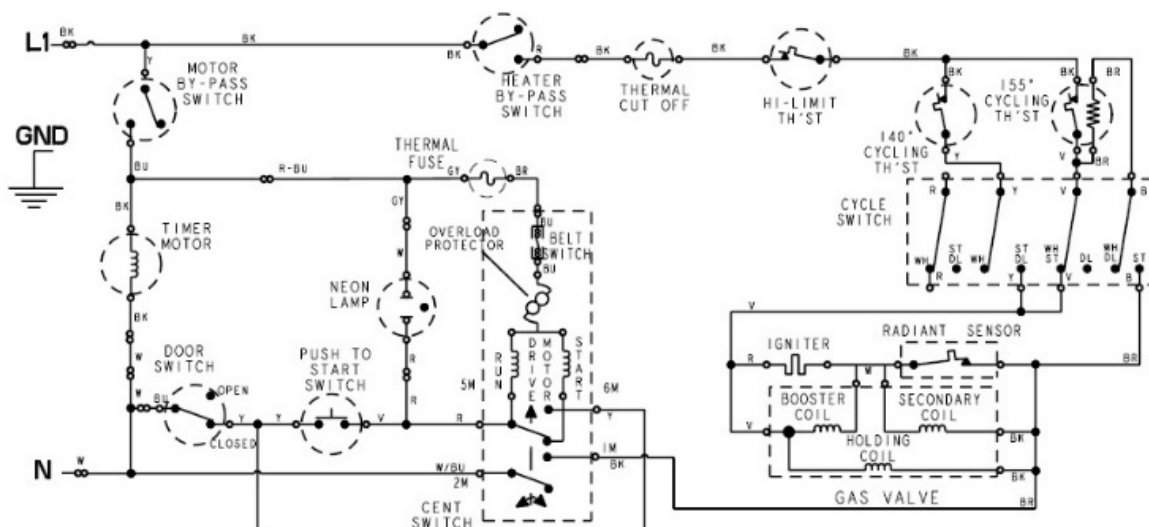
cumulative timer and can have as many as 11 cycles loaded at any one time by pushing the actuator on the timer multiple times or by using the coinslide multiple times.

In this diagram we can see that the Cycle Selector switch will determine which Cycling Thermostat will be in the circuit and whether the bias heater in the 155°F T/stat will be used if medium heat is required.

We notice that the Thermal fuse is now in series with the Broken Belt switch, the Motor Overload and the Motor windings instead of in the Heater circuit. Otherwise the operation is similar to the PD and PR models.

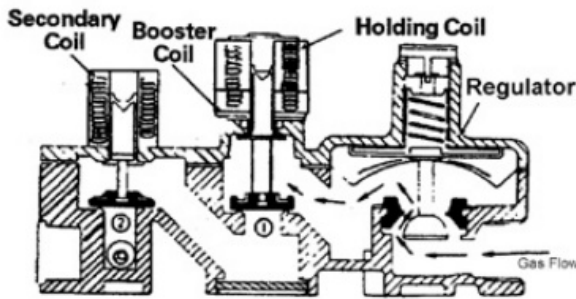
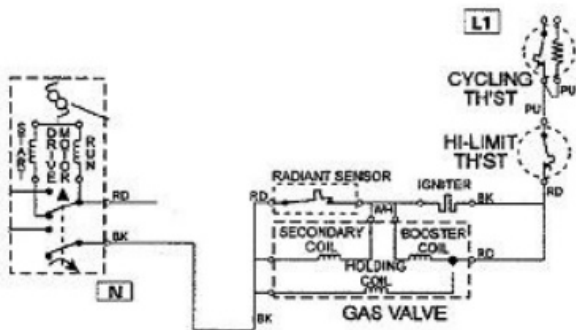
With all pay for use commercial dryers, whenever the power is supplied to the dryer and the cycle has been started, time continues to count down even if the cycle is interrupted by the opening of the door switch.

Dryers set for On Premises Laundry (OPL), which are micro-processor controlled dryers set for free vend; when a cycle is interrupted with a door opening, that cycle will be cancelled, and a new full cycle will need to be started if additional dry time is required.



UNDERSTANDING THE GAS VALVE AND IGNITION SYSTEM

The sensor, igniter and gas valve are interrelated and function as the ignition and heat source for gas dryers. At the start of the cycle the radiant sensor contacts are closed, the igniter is at room temperature and the gas valve is closed, blocking the flow of gas. In the wiring diagram below, the radiant sensor contacts are wired in parallel with the gas valve secondary coil. This bypasses current around the secondary coil when the radiant sensor contacts are closed. Therefore valve #2 cannot open as long as the radiant sensor contacts are closed.



The booster coil and the igniter are wired in parallel, although they are still wired in series with both the radiant sensor and secondary coil combination.

When the radiant sensor contacts are closed, full line voltage is available to the booster coil and to the igniter. When the radiant sensor contacts open, the current has to flow through the secondary coil on gas valve #2 in order to get to the booster coil and the igniter.

A significant voltage drop develops across the secondary coil, which renders both the booster coil and the igniter ineffective due to their low resistance and the reduced voltage available, even though they are still in the circuit.

Radiant Sensor Contacts Closed

The holding coil, the booster coil, and the igniter all receive line voltage. The holding coil and booster coil open gas valve #1. Gas valve #2 is still closed, prohibiting gas to flow to the burner. The igniter, operating at line voltage, begins to get very hot. (As the igniter gets hotter the resistance of the igniter drops) The igniter glow radiates heat to the radiant sensor and as long as the radiant sensor contacts are closed the secondary coil of the gas valve #2 are bypassed.

Radiant Sensor Contact Open

The igniter is now very hot and valve #1 is open. The radiant heat from the igniter causes the contacts in the radiant sensor to open. With the radiant sensor contacts open the secondary coil of the gas valve is no longer bypassed. The secondary coil is now in series with the parallel circuit combination of booster coil and igniter.


Because of the relatively low resistance of the hot glowing igniter, most of line voltage is dropped across the secondary coil. The remaining voltage is dropped across the booster coil and igniter. The secondary coil now opens gas valve #2 allowing the gas to flow through both valve #1 and valve #2 to the burner where it comes in contact with the still very hot igniter and the flame is ignited.


NOTE: Since the igniter will begin to cool, the tip of the igniter is left in the flame to keep the resistance low enough to keep the secondary coil powered, which keeps the gas flowing and the flame burning.

— NOTES —

COMPONENT ACCESS

OPEN CONTROL PANEL - PR


⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

-  1. Remove the two top T-20 security screws on the control panel.




2. To avoid damage, lay a towel, or another covering, on the dryer top and place the control panel, as well as removed hardware and tools, on the covering.

REMOVE FACIA - PR

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>


1. Open the control panel (See page 4-1).

-  2. Remove the bottom two T-20 security screws from the front of the facia.



3. Pull the facia away from the front of the control panel.

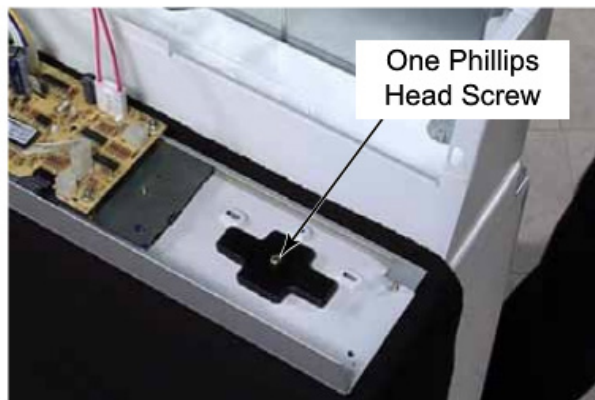
INSTALL A BEZEL FOR A SMART CARD READER - PR

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel and remove the fascia (See page 4-1).

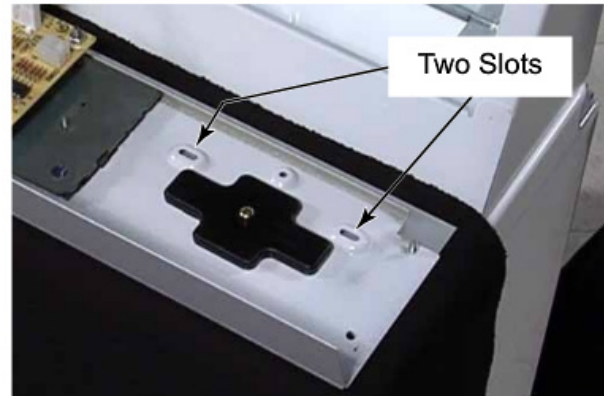


2. Remove the Phillips head screw in the middle of the blank plate used for a non-coin dryer.



3. Remove the plate from the back and the plate from the front of the fascia and lay it on a covered surface.
4. Install the bezel for a smart card reader by inserting the lower tabs first into the slot in the front of the control panel and press the top edge in to secure the top tabs in the top slots.


5. The two slots below the bezel on the inside of the panel are the mounting holes for the card reader. The screws are inserted from the front of the control panel.




6. Card Reader plugs into connector labeled AA3 on the processor control board.





REMOVE CONTROL BOARD LENS - PR/PD

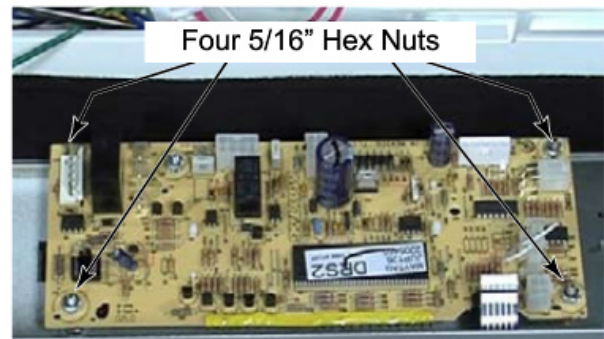
⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel (See page 4-1).
2. Remove the facia (See page 4-1).
-  3. Remove the control board lens from the notches in the front of the control panel.

REMOVE PROCESSOR CONTROL BOARD - PR/PD

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>


1. Open the control panel (See page 4-1).
-  2. Disconnect all of the wire connectors from the processor control board and the ribbon connector from the user interface.
3. Remove the four 5/16 inch hex nuts that secure the processor control board to the control panel.



4. Lift the processor control board off of the control panel.

TECH TIP: When reinstalling the user interface ribbon connector, ensure that the end of the ribbon is folded correctly when reinserting it. The extra length of plastic at the end of the ribbon connector must be bent back over the top of the end of the ribbon connector, not down and under or it will block the connections preventing operation.

REMOVE USER INTERFACE - PR/PD

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

6. Remove the user interface from behind the user interface cover.




1. Open the control panel (See page 4-1).
2. Remove the facia (See page 4-1).
3. Remove the processor control board (See page 4-3).
4. Remove the spacers for the control board from the bolts.
5. Remove two Phillips head screws from the front of the control panel.

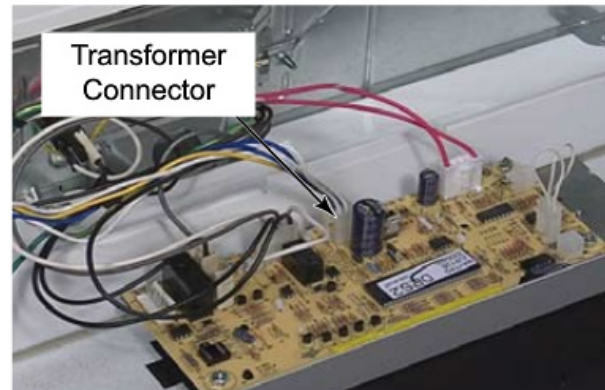


REMOVE CONTROL BOARD TRANSFORMER - PR/PD

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.



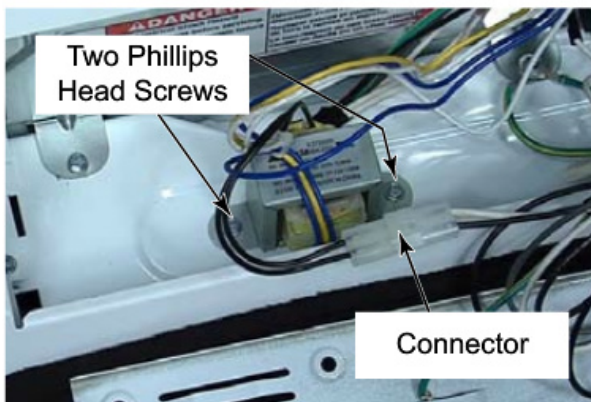
4. Remove the transformer by lifting it out.

1. Open the control panel (See page 4-1).




2. Remove two 1/4 inch hex head screws from the dryer top inside the control cover.

3. Disconnect two wire connectors to the transformer, one with a locking connector and the other from the processor control board.



OPEN CONTROL PANEL - CS/PD

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>




1. Remove the two top T-20 security screws on the control panel.



2. To avoid damage, lay a towel, or another covering, on the dryer top and place the control panel, as well as removed hardware and tools, on the covering.

REMOVE FACIA - CS/PD

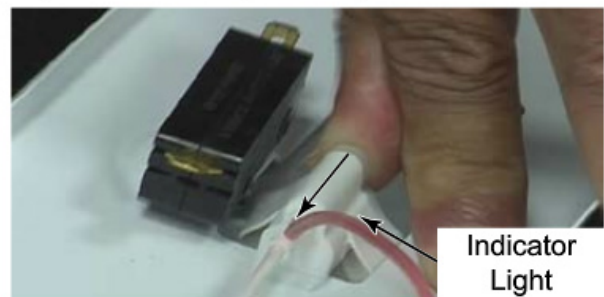
⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>



1. Open the control panel. (See left column)
2. Remove the remaining two T-20 security screws from the front of the facia.




3. Slide the indicator light off the indicator lens on the back side of the control panel. The indicator lens will slide out of the control panel when it is picked up.



4. Pull the facia away from the front of the control panel.

REMOVE CONTROL PANEL - CS

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel. (See page 4-6).



2. Disconnect two wire connectors for the LED indicator light.

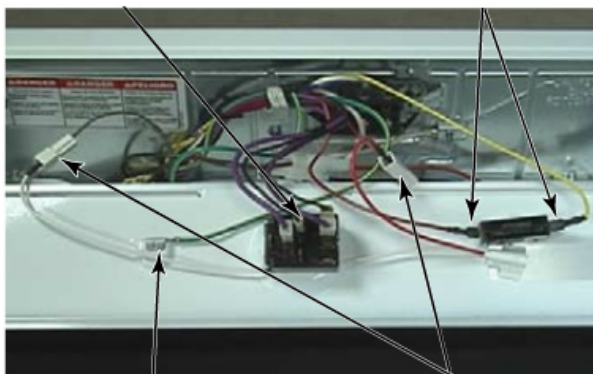
3. Disconnect two spade connectors from the start switch.

4. Disconnect four spade connectors from the selector switch.

5. Disconnect one ground wire clip.

4 Selector Switch Connectors


2 Start Switch Connectors



1 Ground Wire Clip

2 Indicator Light Connectors

REMOVE CONTROL COVER - CS/PD

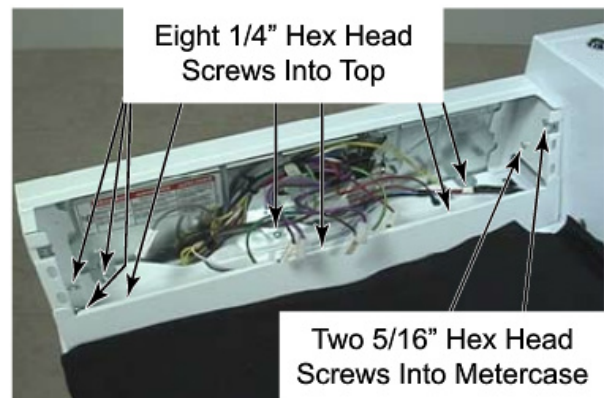
⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel. (See page 4-6).



2. Remove the eight 1/4" hex head screws that secure the control cover to the top of the dryer. These screws are just sheet metal screws so do not over tighten them when reinstalling the control cover.

3. Remove the two 5/16" hex head screws that secure the control cover to the metercase.



4. Remove the 5/16" hex head screw with molded-in washer that secures the ground wire to the dryer top, in the console.

5. Lift the control cover off the top of the dryer and pass the control panel through the control cover to remove the control cover.

REMOVE MECHANICAL TIMER - CS

⚠ WARNING

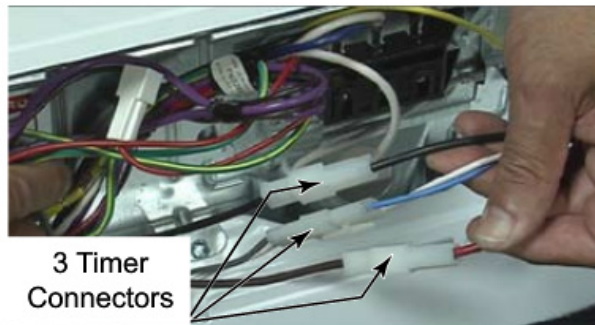


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

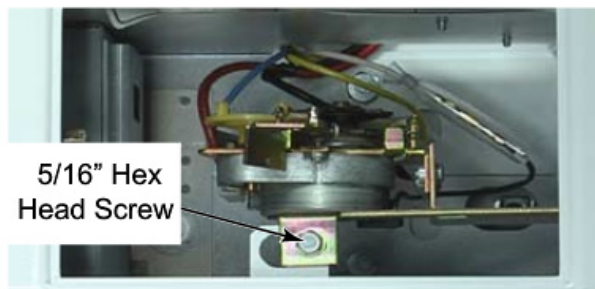
1. Open the control panel. (See page 4-6).



2. Disconnect the three wire connectors in the console that go to the timer.



3. Remove the service access door on top of the metercase.
4. Remove the 5/16" hex head screw from the bracket in the metercase.



5. Lift the timer out of the metercase with wires attached.

REMOVE TIMING CAM - CS

⚠ WARNING

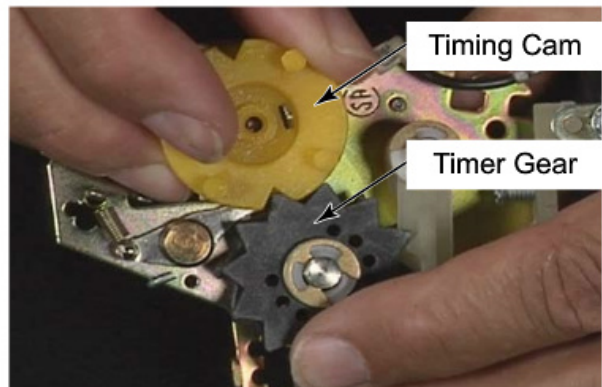


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

1. Remove the timer. (See left column)



2. Rotate the timing cam manually counter-clockwise until the 'V' notch is underneath one of the 'V' shaped spokes on the top black timer gear.



3. Lift the timing gear gently off the 'D' shaped timer shaft using a small thin flat-blade screwdriver or similar tool.



4. Remove the 'U' shaped brass colored drive cam from the timer shaft as well.



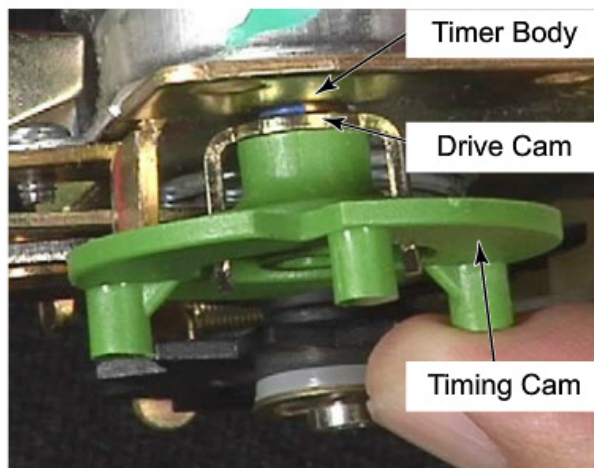
5. Mate the 'U' shaped drive cam with the matching slots in the new timing cam. There are 2 sizes of slots on the cam that match the sizes of the pins on the 'U' shaped drive.



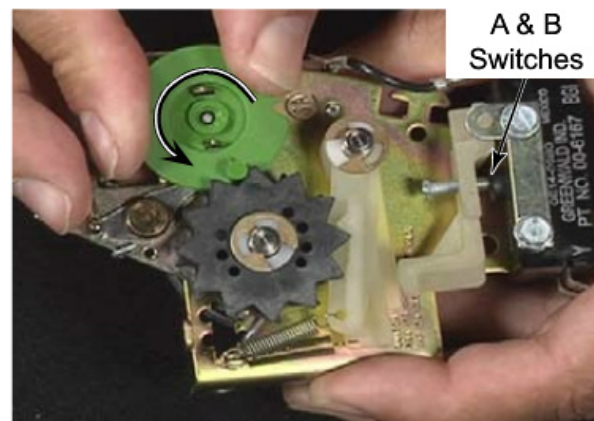
6. Reinstall the assembled timing cam onto the 'D' shaped timer shaft.

7. As the cam is sliding down the timer shaft, align the 'V' notch with the 'V' spoke to allow the cam to fully seat on the timer.

8. The drive cam must come in contact with the timer body to be fully seated/installed and avoid free vends.

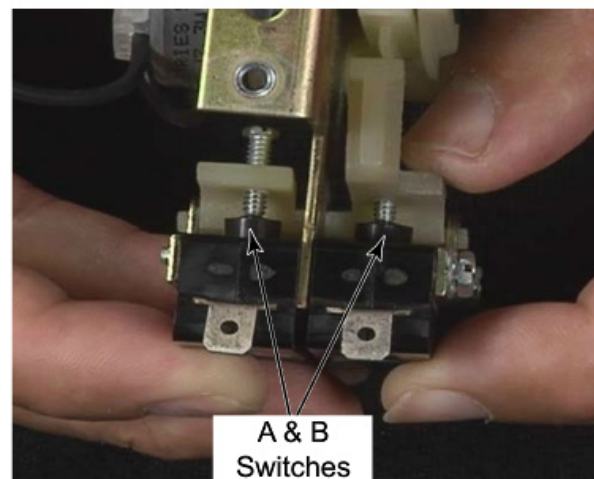


9. Remove any accumulated time by manually rotating the timing cam counter-clockwise until the both the A & B switches are depressed. This must be done gently as only slight pressure on the timing cam can over rotate the cam and cause the switches to be activated and add another vend cycle to the timer.



10. If the switch lever does release the switch button then continue turning the timing cam until the timing cam pin approaches the bottom of the next 'v' in the spokes of the top black timer wheel.

11. Notice the switch arms will move to depress both of the switches, stop at this point to have all time removed from the timer.



REMOVE COIN SLIDE - CS

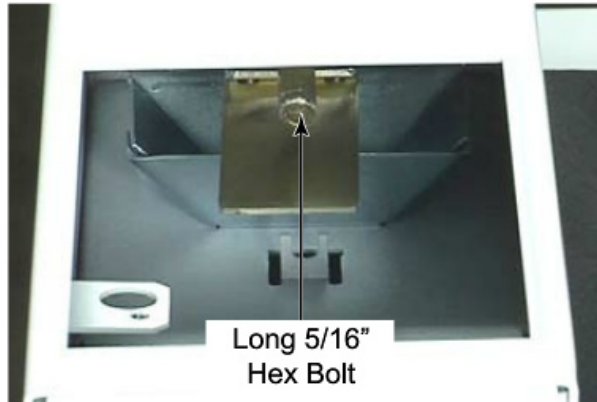
⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.



1. Remove the service access door on top of the metercase.
2. Remove the long 5/16" hexagonal coinslide mounting bolt from inside the metercase.




3. Lift the coin slide up and pull it out of the metercase.



4. The coin slide assembly may be installed very tight and can require some coaxing to get it to move upwards for removal. To loosen this fit there are 4 adjustment screws at the 4 corners behind the slide mounting plate. They can be accessed easily after the coin slide is removed.



REMOVE COIN FUNNEL - CS

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.



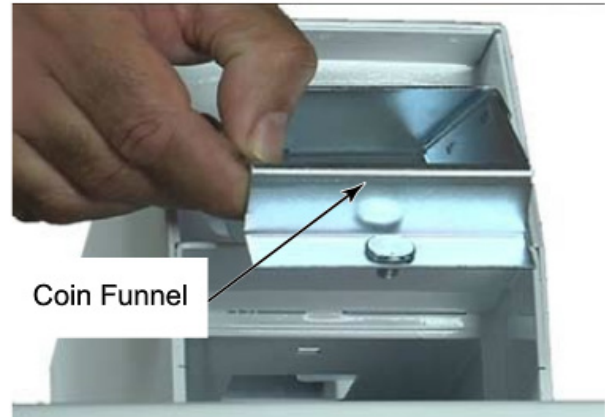
1. Remove the coin box.

2. Remove the 7/16" hex nut from the top of the coin vault area.




3. Remove the service access door on top of the metercase.

4. Lift the coin funnel out through the service access door on the top of the metercase.



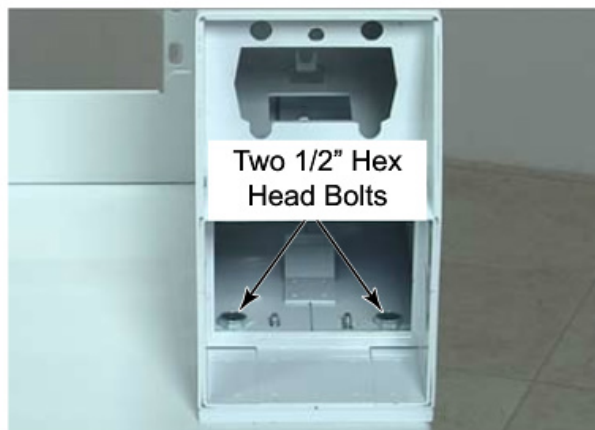
REMOVE METERCASE - CS/PD

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>



1. Remove the coin box.

2. Remove two 1/2" hex head bolts in the coin vault at the front of the metercase.



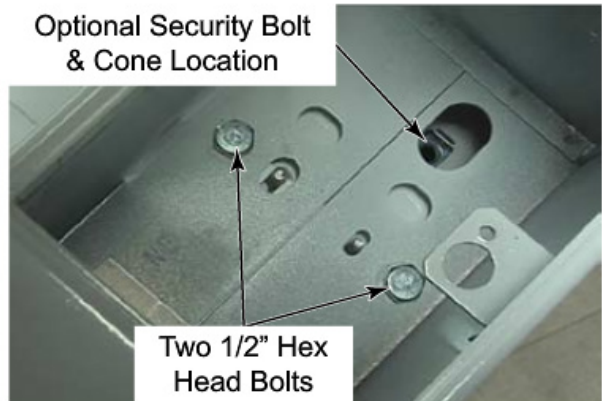
3. Remove the service access door on top of the metercase.

4. Remove the timer (See page 4-8).

5. Remove two 1/2" hex head bolts in the bottom of the service access area. (See photo at top of next column)

6. Remove the optional Security Bolt and cone if installed. [See page 4-14](#).

Optional Security Bolt & Cone Location

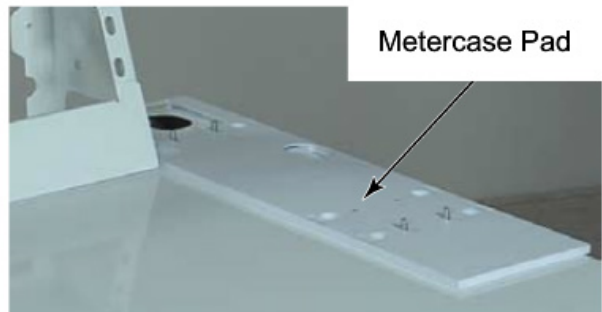


7. Remove two 5/16" hex head screws that secure the control cover to the metercase.



8. Lift the metercase off the top of the dryer.

9. Remove the metercase pad by lifting it off the top of the dryer.



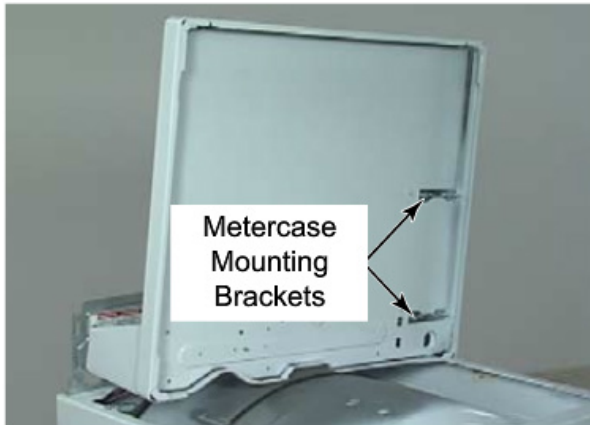
REMOVE METERCASE MOUNTING BRACKETS

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Remove the metercase (See page 4-12).
2. Remove top of dryer (See page 4-23).



3. Remove two 5/16" hex head screws in each bracket. Remove the bracket. These brackets are what the metercase bolts screw into.



REMOVE SERVICE ACCESS SWITCH - PD

⚠ WARNING




Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Remove the service access door from the top of the metercase.
2. Remove the 5/16" hex head screw from the bracket that the service access switch is mounted to.



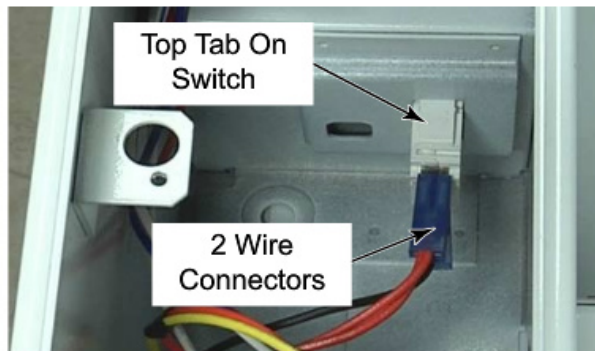
3. Disconnect the two wire connectors from the switch terminals.
4. To remove the service access switch from the mounting bracket, press the locking tabs on both ends of the switch and push the switch up out of the mounting bracket.

REMOVE COIN VAULT SWITCH - PD

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>




1. Remove the Coin box.
2. Remove the service access door from the top of the metercase.
3. Remove the two wire connectors from the switch terminals.



4. Press the tab on both ends of the switch and push the switch into the coin vault area to remove it.



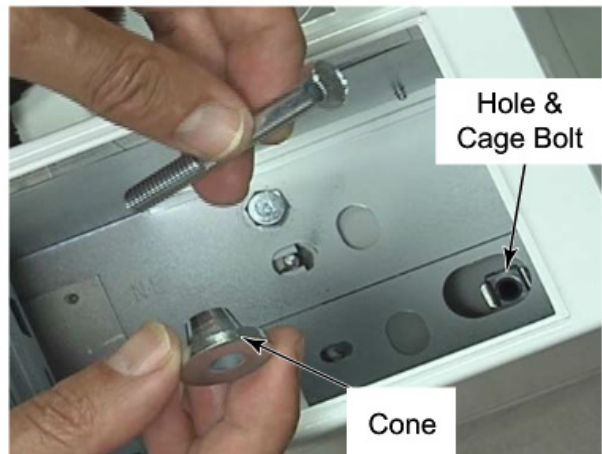
INSTALL SECURITY BOLT & CONE - CS/PD

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the service access door on top of the metercase.
2. Remove the timer [\(See page 4-8\)](#).




3. Place the cone, small side facing down, in the hole at the rear bottom of the metercase.



4. Screw the bolt through the cone into the cage bolt below. Hand tight is sufficient but can be tightened more if desired.

NOTE: This provides additional security by bolting the metercase and the top to the cabinet of the dryer. When this security bolt is installed it must be removed to remove the metercase or the top of the dryer.

REMOVE CONTROL COVER REAR PANEL - CS/PD

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

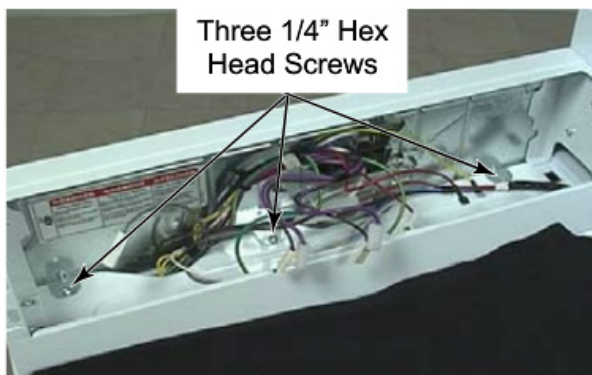
4. Pull the bottom edge out and down to release the top edge of the control rear panel from inside the control cover.



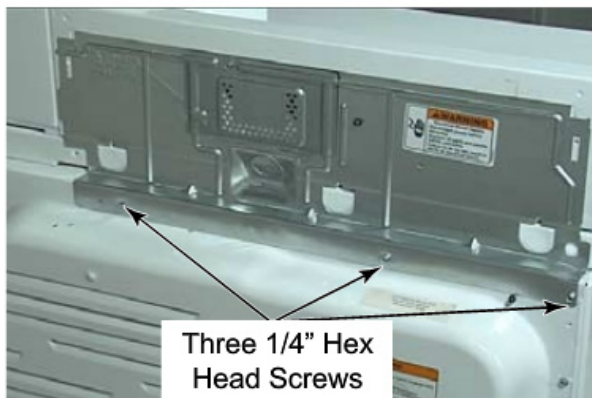
1. Open the control panel. (See page 4-6).




2. Remove three 1/4" hex head screws that secure the tabs of the rear panel to the dryer top, inside the console.




3. Remove three 1/4" hex head screws from the back of the dryer that secure the rear panel to the back of the dryer.



REMOVE COIN DROP - PD

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

OPEN CONTROL PANEL - MN

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel (See page 4-6).

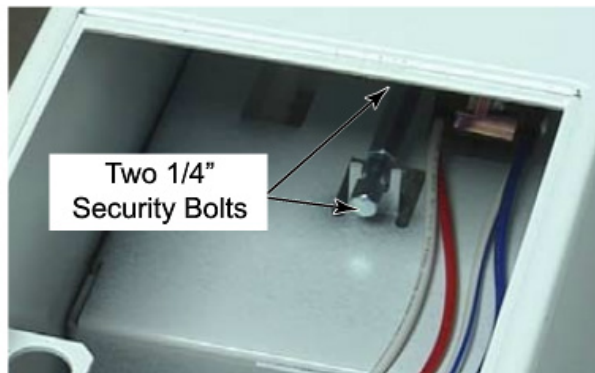


1. Remove the two top T-20 security screws on the control panel.



2. Remove the service access door from the top of the metercase.

3. Remove two 1/4" security bolts from inside the service access area.




2. To avoid damage, lay a towel, or another covering, on the dryer top and place the control panel, as well as removed hardware and tools, on the covering.

4. Disconnect the wire connector from the control board and slide the coin drop out the front of the metercase.



REMOVE FACIA - MN

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

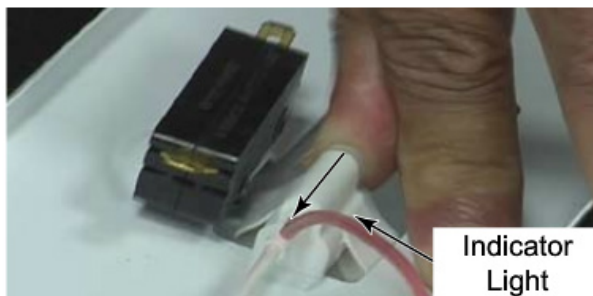
1. Open the control panel (See page 4-16).



2. Remove the remaining two T-20 security screws from the front of the facia.



3. Slide the indicator light off the indicator lens on the back side of the control panel. The indicator lens will slide out of the control panel when it is picked up.



4. Use a small flat blade screwdriver to pry off the cap of the timer knob.



5. Remove the 7/16 inch hex nut under the cap.




6. Remove the knob handle and the knob pointer from the timer shaft.

7. Pull the facia away from the front of the control panel.



REMOVE CONTROL PANEL - MN

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel (See page 4-16).



2. Disconnect two wire connectors for the LED indicator light.

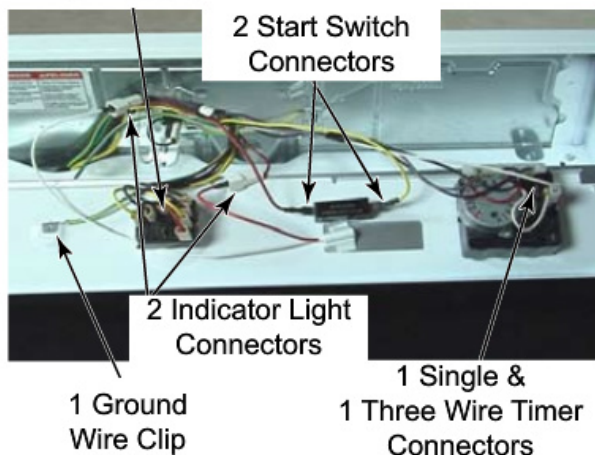
3. Disconnect two spade connectors from the start switch.

4. Disconnect seven spade connectors from the selector switch.


5. Disconnect one single spade connector and one three wire connector from the timer.

6. Disconnect one ground wire clip.

7 Selector Switch Connectors



REMOVE SELECTOR SWITCH - MN/CS

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the fascia (See page 4-17).



2. Disconnect seven spade connectors from the selector switch.

3. Remove the knob from the selector. Use a flat blade screwdriver, if needed.




4. Remove the two 5/16" hex head screws from the front of the control panel.



5. Remove the selector switch from behind the control panel.

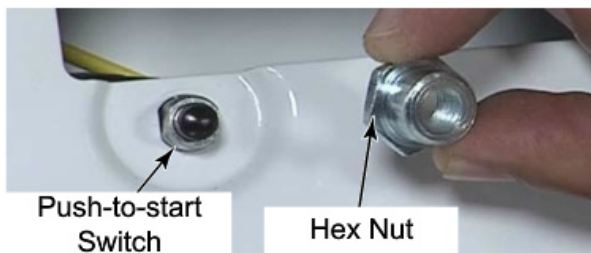
REMOVE PUSH TO START SWITCH - MN/CS

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the facia (See page 4-17).




2. Loosen the hex nut on the front of the control panel with a pair of pliers. Unscrew the nut from the switch. The hex nut part is positioned closest to the control panel when reinstalling it.



3. Remove the push-to-start switch from the back of the control panel.
4. Remove two wire connectors from the switch.
5. Remove the star washer between the push-to-start switch and the control panel.



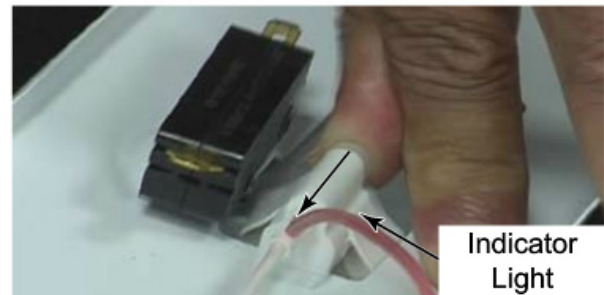
REMOVE INDICATOR LIGHT - MN/CS

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel (See page 4-16).




2. Slide the indicator light off the indicator lens on the back side of the control panel. The indicator lens will slide out of the control panel when it is picked up.



3. Disconnect two wire connectors to remove the indicator light.

REMOVE TIMER - MN

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel (See page 4-16).

2. Use a small flat blade screwdriver to pry off the cap of the timer knob.

3. Remove the 7/16 inch hex nut under the cap. (See page 4-17, left column)

4. Remove the knob handle and the knob pointer from the timer shaft.

5. Remove two 5/16" hex head screws from the front of the control panel.




6. Remove timer from behind control panel.

NOTE: Timer shaft may need to be rotated to allow the cross bar to pass through the hole in the control panel.

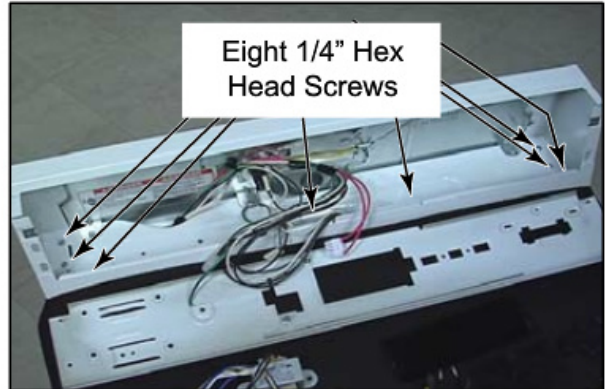
7. Disconnect the wire connectors from the back of the timer.

REMOVE CONTROL COVER - MN/PR

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel (See page 4-16).


2. Remove the eight 1/4 inch hex head screws that secure the Control cover to the top of the dryer. These screws are just sheet metal screws so do not over tighten them when reinstalling the control cover.



3. Lift the control cover off of the top of the dryer and pass the control panel through the control cover. Lay it on a covered surface.

NOTE: No components need to be removed from control panel to accomplish removal of the control cover.

REMOVE CONTROL COVER REAR PANEL - MN/PR

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel (See page 4-16).



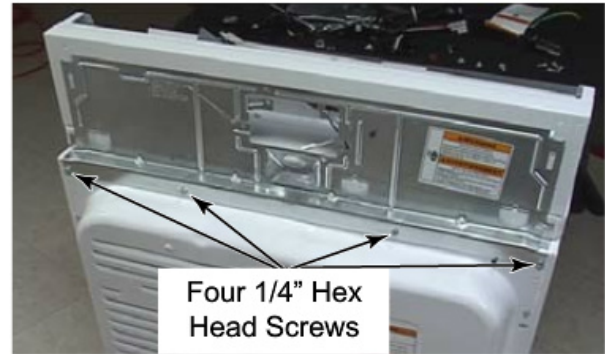
2. Remove three screws that secure the tabs of the rear panel to the dryer top inside the console.



3. Remove the strain relief that holds the wiring harness by squeezing the christmas tree clip on the back of the rear panel and pulling the clip forward into the console.



4. Remove four screws from the back of the dryer that secure the rear panel to the back of the dryer.



5. Pull the bottom edge out and down to release the top edge of the control rear panel from inside the control cover.

DISCONNECT DOOR SWITCH

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

REMOVE LOWER FRONT SERVICE PANEL

⚠ WARNING



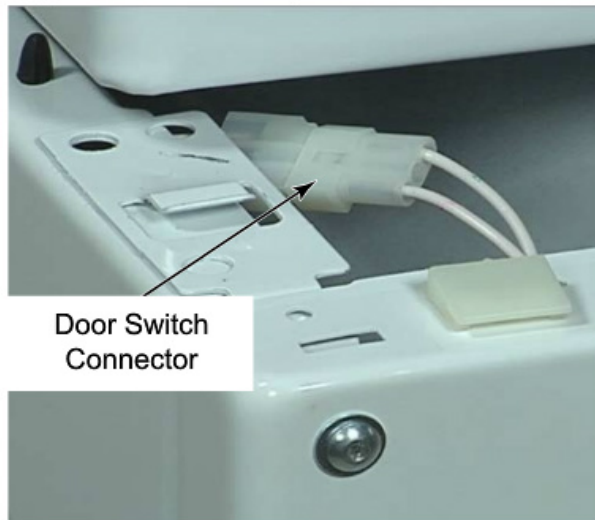
Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

1. Remove the top of the dryer

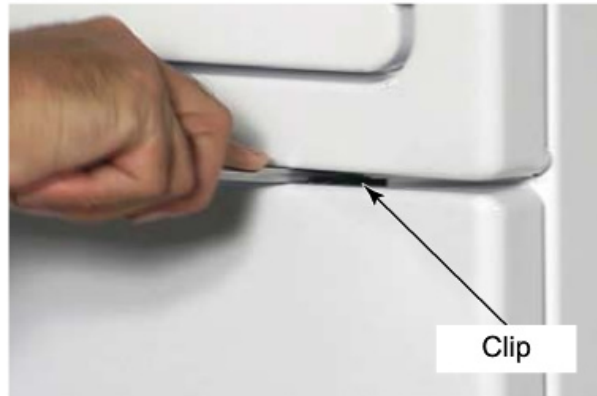
(See page 4-23)



2. The door switch connector is located on the left side just below the top. Use a flat blade screwdriver to release the locking tab and pull the connector apart.



1. Insert a stiff putty knife or a thin flat blade screwdriver in the space between the front panel and the toe panel.
2. Slide the tool until it contacts a clip, about 2 inches in from each corner.



3. Press the clip down to release
4. Repeat this procedure with the other clip.
5. Pull the panel forward and remove the panel.

REMOVE LINT FILTER HOUSING

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Open the dryer door and remove the lint filter.

2. Remove the lower front service panel (See page 4-22).

3. Remove four 1/4" hex head screws. The two screws going into the blower housing are brass and must be replaced in the same location they are removed from.



4. Pull the lint filter housing away from the dryer.

TECH TIP: Excess blower vibration may be reduced by loosening the top left brass screw in the lint filter housing up to two full turns. Ensure that the foam insulation blocks any gaps, add more foam insulation or aluminum duct tape to seal up any gaps.

REMOVE TOP OF DRYER

⚠ WARNING

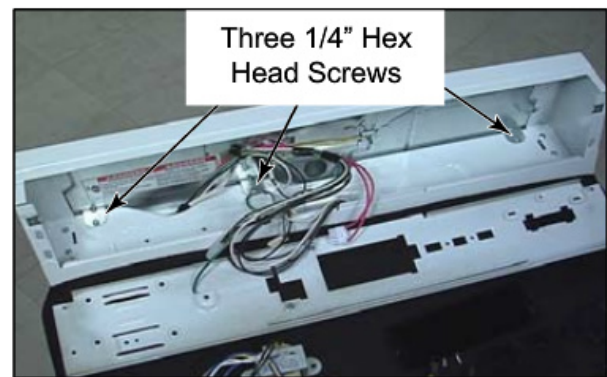


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Open the control panel (See page 4-16).

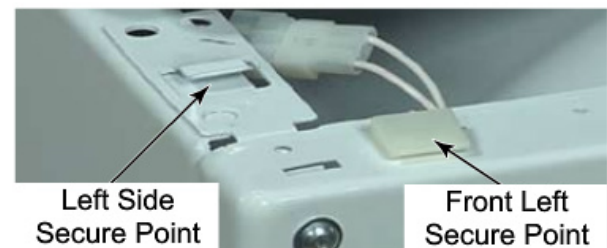


2. Remove three 1/4 inch hex head screws from the back edge of the dryer top that secure the top to the back of the dryer.




3. Lift up slightly on the rear of the top and slide the top forward to release four secure points, one in front on each side and one on the top edge at each end of the front panel. Lift the top off the dryer.

TECH TIP: If the secure points are loose it can cause excess vibration.

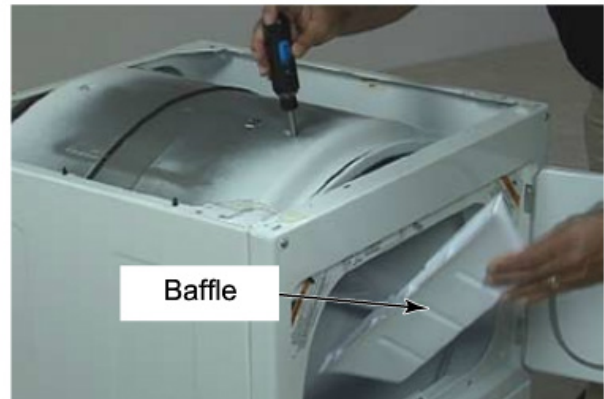


REMOVE A BAFFLE

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

4. Open the dryer door and hold the baffle with one hand while removing the third screw.

5. Remove the baffle from the dryer and replace if necessary.



1. Remove the dryer top (See page 4-23).




2. Remove two of the three 1/4" hex head screws that secure the baffle to the drum.



3. These screws have multiple thread depths that grab the plastic securely to help avoid the screws becoming loose from vibration.



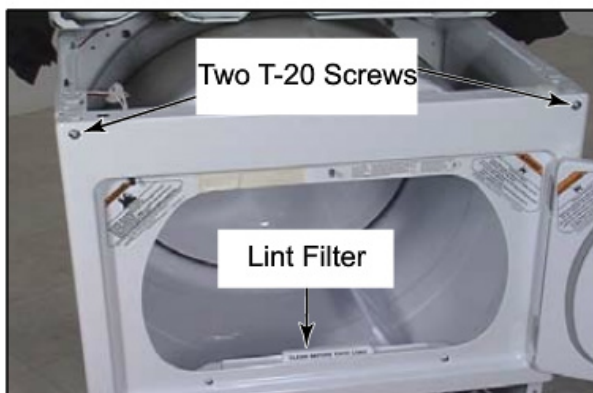
REMOVE DRYER FRONT PANEL

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>


6. Remove the two 1/4" hex head screws at the bottom right and left ends of the front panel that were hidden behind the lower front service panel.



1. Remove the dryer top (See page 4-23).
2. Disconnect the door switch (See page 4-22).
3. Remove the lower front service panel (See page 4-22).
4. Remove the lint filter housing (See page 4-23).
5. Remove the two T-20 security screws from the top front corners. Ensure that the washers are on the screws when replacing them to protect the finish of the dryer.



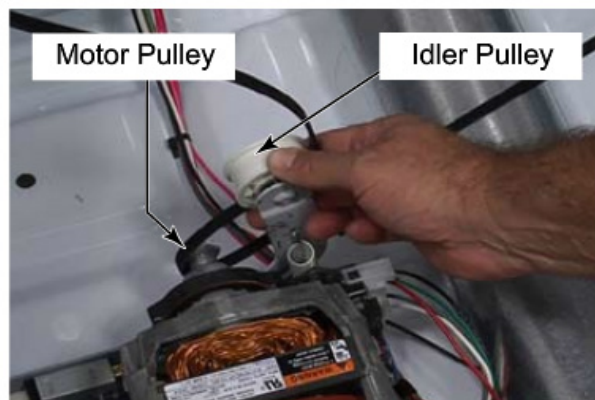
REMOVE DRYER DRUM

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Open the control panel (See page 4-16).
2. Remove the top of dryer (See page 4-23).
3. Disconnect door switch (See page 4-22).
4. Remove the lower front service panel (See page 4-22).
5. Remove the dryer front panel. (See page 4-25).



6. Reach in under the drum and lift the idler pulley to release tension on the belt.



7. Remove the belt from the idler pulley and then remove it from the motor pulley.

8. Remove the belt from the dryer. The belt is a five rib belt and not interchangeable with the household four rib belt. When reassembling the dryer ensure that the ribs of the belt are facing the drum.
9. The drum holes should be toward the front of the dryer for proper operation. If the drum is installed backward with the drum holes closer to the rear of the dryer then the belt will not ride on the correct part of the drum. The belt needs to ride in the recessed area of the drum commonly called the belly band.

NOTE: Depending on the age of the dryer it may or may not have clips in the drum holes.





10. Lower the dryer top to avoid having it fall.
11. Grasp the drum and pull it out of the cabinet.

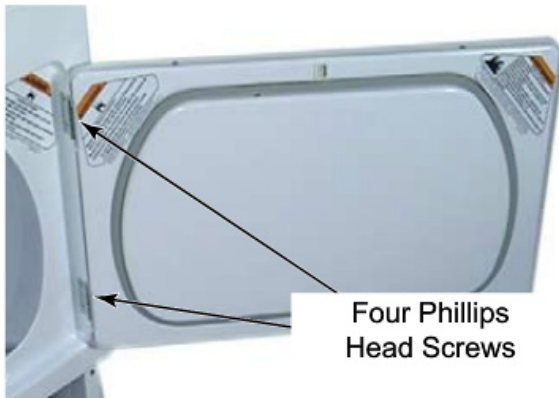


12. The front and rear drum seals are felt. They are glued into place. Watch for pins or other user items stuck in the felt when removing the drum.

REMOVE DRYER DOOR, HINGE & DOOR SEAL

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

-  1. Remove the bottom Phillips head screws from each hinge that secures the door to the front panel frame.




2. Loosen the top Phillips head screws from each hinge that secure the door to the front panel frame.

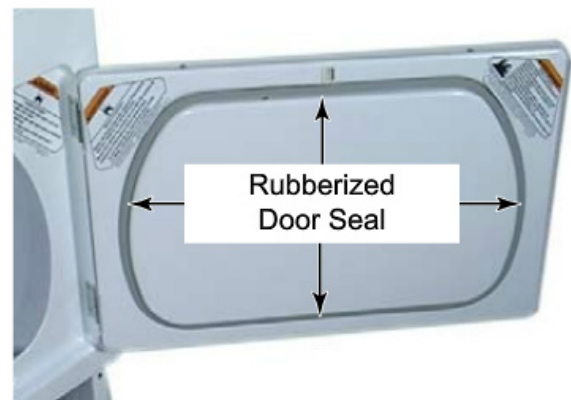
3. Lift the door and remove it from the dryer.

4. If the door has been reversed the snowman holes will be in the lower position and will require that the door be supported when the screws are loosened.




5. To remove a hinge, remove the remaining 2 Phillips head screws from each hinge.

-  6. The door of the dryer has a rubberized seal around the inside edge that seals around the opening of the dryer. The seal is glued into place. If it needs to be replaced then remove the old seal and glue a new seal into place.



REVERSING A DRYER DOOR

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>



1. Dryer models produced after January 1, 2009 should have reversible doors. To know if the doors are reversible, look for the white plastic blanks at the non-hinged side of the door as shown here.




2. To reverse the door, first remove the door from the dryer ([See page 4-27](#)).

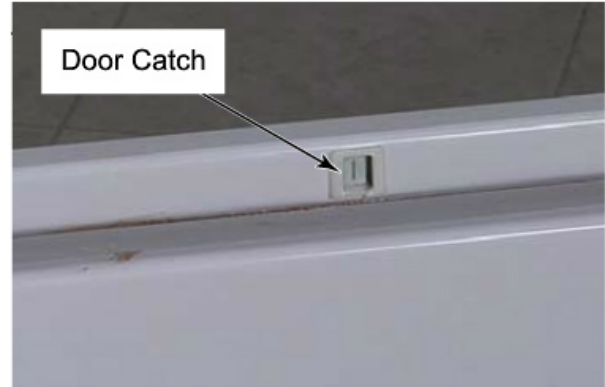


3. Disassemble the door ([See page 4-29](#)).
4. Rotate the front panel 180 degrees.
5. Reassemble the door with the hinges on the opposite end of the door.
6. Remove the two hinge hole covers from the front panel frame by removing two Phillips head screws from each cover (See photo left column).
7. Install these covers over the hinge holes on the opposite side of the front panel frame.
8. Reattach the door to the dryer with the door swing in the opposite direction.

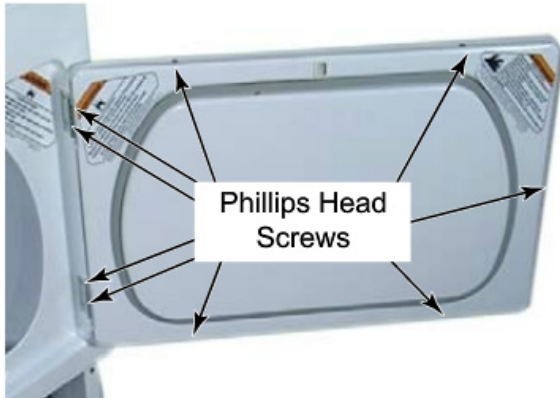
DOOR DISASSEMBLY, HANDLE, CATCH AND STRIKE REPLACEMENT

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

3. The door catch and door strike are press fitted into slots. Remove the catch by prying it out with a flat blade screwdriver and pressing the new one into place.



1. The door can be disassembled by removing the Phillips head screws around the edge of the door and separating the two halves of the door. There are two screws on top, one on the handle end, two on the bottom and the hinge screws on the hinge end.



2. The door handle can be replaced by separating the two halves of the dryer door and changing the handle.

REMOVE FILTER HOUSING AND OUTLET GRILL

⚠ WARNING



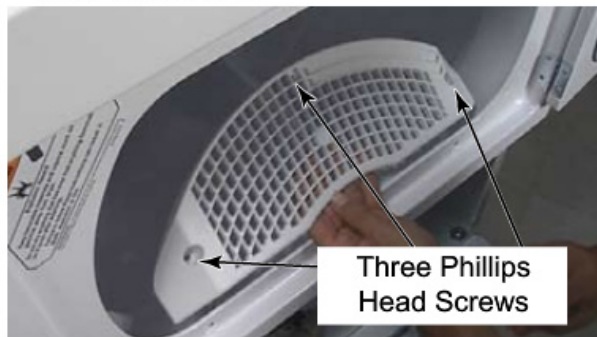
Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.



1. Open the dryer door and remove the lint filter.
2. Remove two Phillips head screws below the dryer door opening.



3. Remove three Phillips head screws from the inside of the dryer to remove the outlet grill. The middle lower screw is smaller than the other two screws.



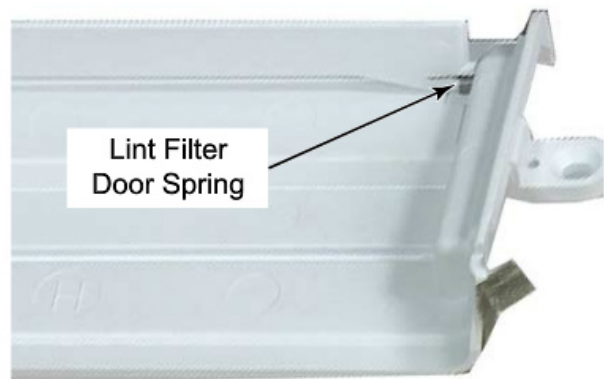
4. After removing the outlet grill the filter housing can be removed by pulling it out of the mounting slots in the front panel toward the inside of the dryer.




5. Separate the two halves of the outlet grill by pulling them apart.



6. The lint filter door has a spring on one end of the door that keeps it closed when filter is not in place.



REMOVE BLOWER WHEEL

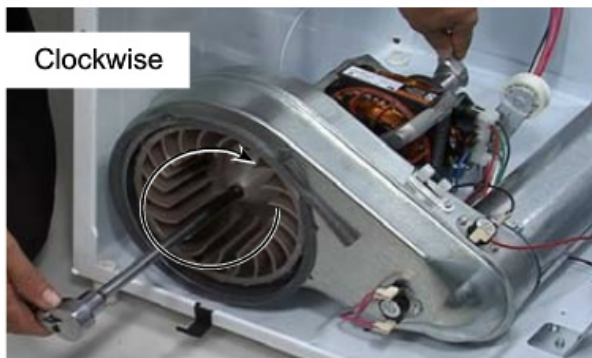
⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the dryer drum (See page 4-26).

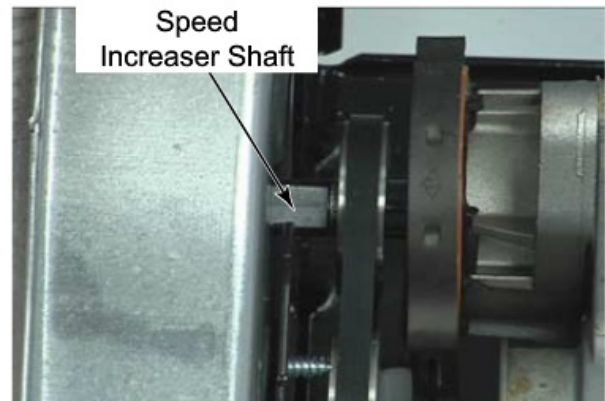


2. Placing a 7/8" wrench on the motor belt pulley.

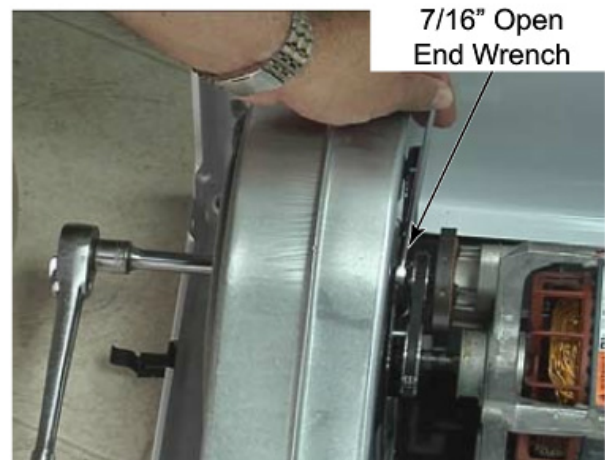
3. Use a 1/2" ratchet extension bar to turn the blower wheel clockwise to remove it. The blower wheel has arrows and words to show the correct direction to turn the wheel to remove or tighten it.




4. To remove the blower wheel when the speed increaser belt is broken, slipping or missing, a thin 7/16" open end wrench will be needed to secure the speed increaser shaft on its flat spot, in lieu of securing the motor pulley.




TECH TIP: When removing the blower wheel, move the 1/2 inch extension bar in a quick jerking motion rather than applying slow pressure, to help avoid rounding of the center hole of the blower wheel, which could stress and crack the blower wheel.

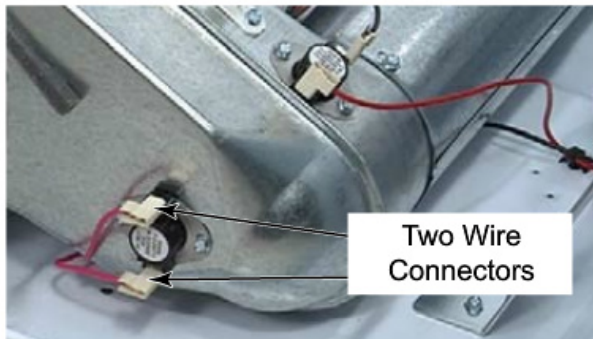


REMOVE LOW TEMP OPERATING THERMOSTAT

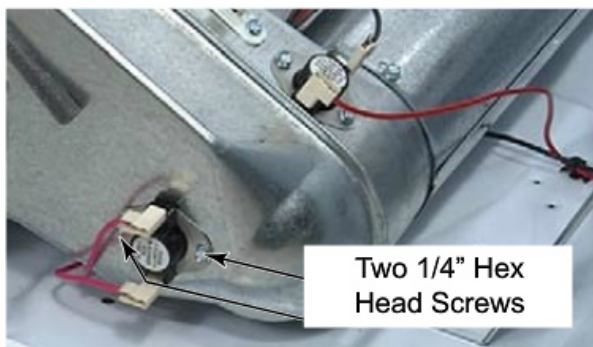
⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove lower front service panel
(See page 4-22).


-  2. Remove two wire connectors from the thermostat.




3. Remove two 1/4" hex head screws that secure the thermostat to the blower housing. These screws are very short so as not to protrude into the blower housing where they could catch lint.

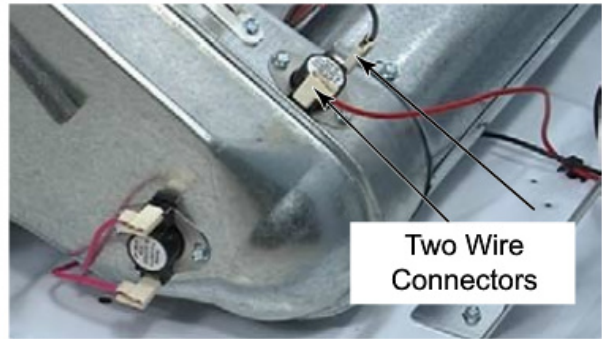


REMOVE HIGH TEMP OPERATING THERMOSTAT

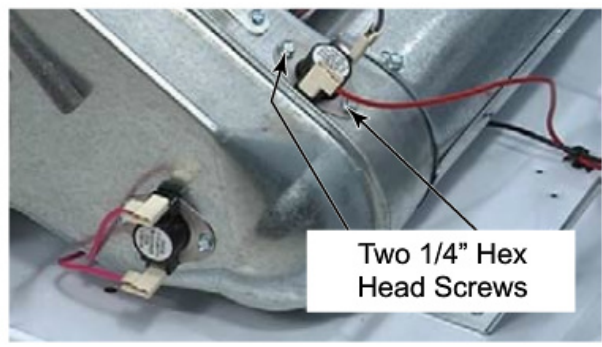
⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove lower front service panel
(See page 4-22).


-  2. Remove two wire connectors from the thermostat.



3. Remove two 1/4 inch hex head screws that secure the thermostat to the blower housing. These screws are very short so as not to protrude into the blower housing where they could catch lint.



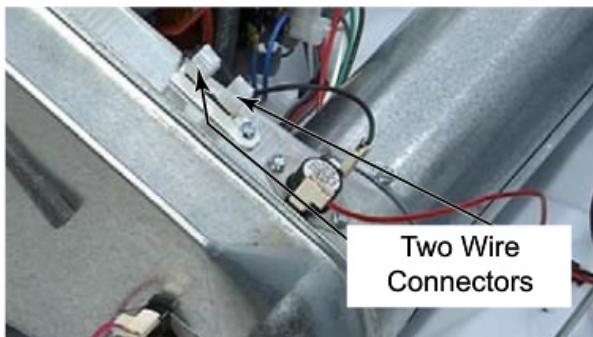
REMOVE THERMAL FUSE

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

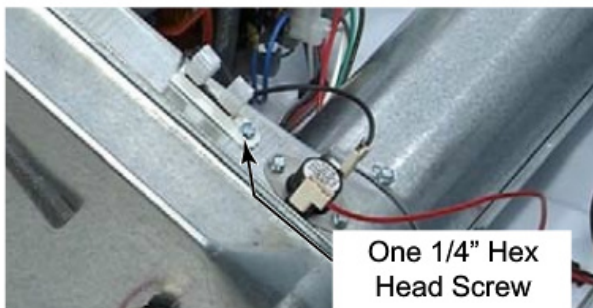
1. Remove lower front service panel
(See page 4-22).



2. Remove two wire connectors from the thermal fuse.





3. Remove one 1/4" hex head screw, lift and slide to release the hook from the other end that secure the thermal fuse to the blower housing.



NOTE: The thermal fuse is non resettable.

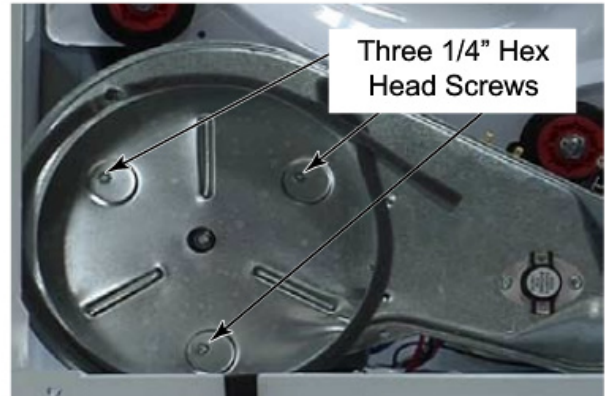
REMOVE BLOWER HOUSING

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the lower front service panel
(See page 4-22).
2. Open the dryer door and remove the lint filter.
3. Remove the lint filter housing
(See page 4-23).
4. Remove the blower wheel (See page 4-31).
5. Remove the wire connectors from the thermostats and thermal fuse.
(See pages 4-32).
-  6. Remove the short 1/4" hex head screw that secures the blower housing to the exhaust duct.



7. Remove three 1/4" hex head screws from inside the blower housing that secure it to the motor bracket.




TECH TIP: Excess vibration and noise can be caused by the blower housing coming in contact with the base of the dryer cabinet. Using an appliance dolly or hand truck on the motor side or front of the dryer during transportation or installation of an uncrated dryer can bend the dryer base enough to create this contact. To reduce excess vibration, reshape the base of the dryer with a hammer in the area that the blower housing is located and contacts or comes too close to the base.



TECH TIP: The back of the blower housing may contact the blower wheel causing it to drag if the blower housing has the tendency to “oil can” inward toward the blower wheel. To fix this situation, remove the blower housing. Use the handle of a hammer to tap the back of the blower housing outward so that when it is forced to oil can it will want to return to the outward position.



REMOVE EXHAUST DUCT

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

1. Remove the Lint Filter Housing

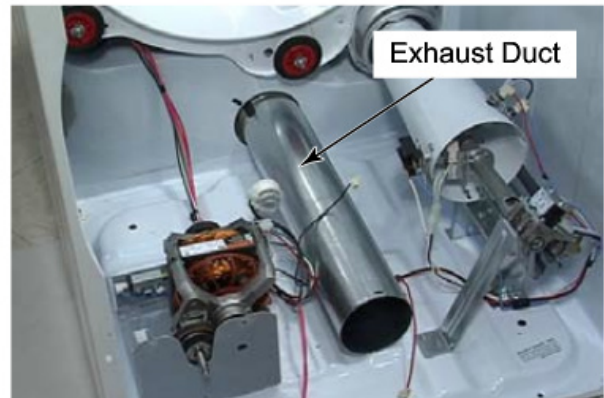
(See page 4-23).



2. Remove the 1/4 hex head screw on the front top of the duct



3. Push the duct towards the rear of the dryer and off the blower housing then lift the duct up and out.




4. To remove it from the rear of the dryer: remove the 1/4 hex head screw from the front top of the duct.
5. Push the duct towards the rear of the dryer off of the blower housing and out the rear of the dryer.

NOTE: Both procedures can be done with the drum and blower installed.

REMOVE DRYER MOTOR


⚠ WARNING

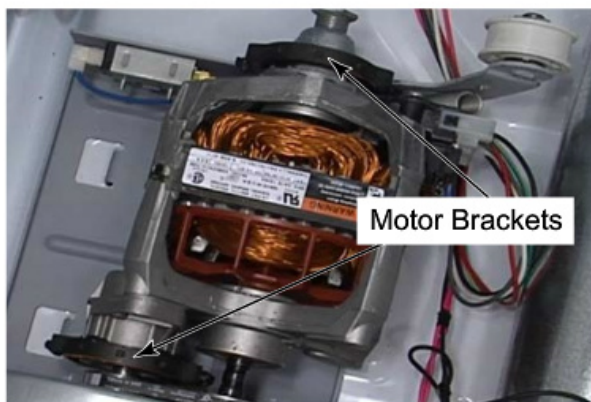


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Remove the dryer drum (See page 4-26).

2. Remove the blower wheel (See page 4-31).

 3. Remove the motor bracket clips by placing a nut driver on the end tip of the clip and pressing down and toward the motor until the clip pops off the hook of the bracket. Remove the clips.



4. Remove the motor wire harness by lifting the locking tab with a flat blade screwdriver and pulling the plug off of the motor connector.



5. Remove the two blue wires that go to the broken belt switch.



6. Lift the motor out of the cabinet with the speed increaser attached.



REMOVE BROKEN BELT SWITCH

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

1. Remove the dryer drum (See page 4-26).



2. Remove two Phillips head screws from the back of the motor bracket.



3. Remove the two wire connectors and remove the switch.



REMOVE IDLER PULLEY WHEEL

⚠ WARNING

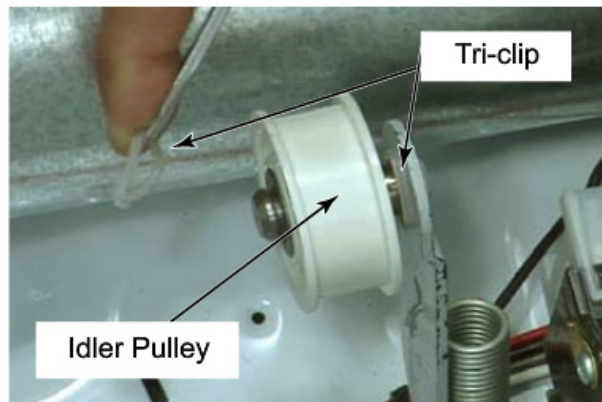


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

1. Remove the dryer drum (See page 4-26).



2. Gently pry the tri-clip off the idler pulley shaft




3. Slide the wheel off of the shaft.

NOTE: Do not lubricate the pulley or the shaft.

REMOVE MOTOR BRACKET

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

TECH TIP: To reduce excess vibration transferred from the motor bracket to the cabinet, place anti-vibration pads, if they are missing, under the motor bracket. Install two pads if possible, or if only one is available then center it below the bracket.

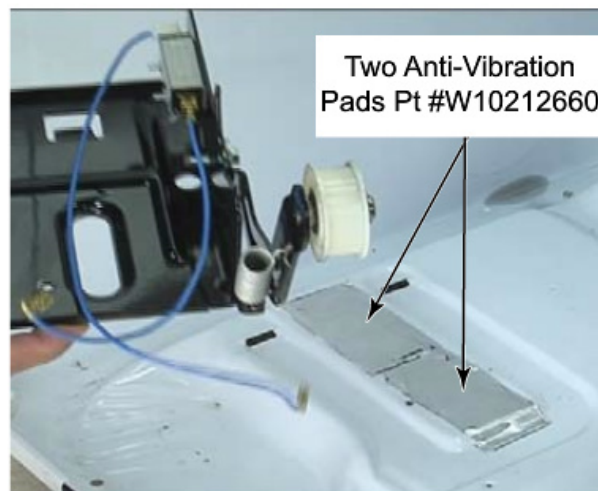
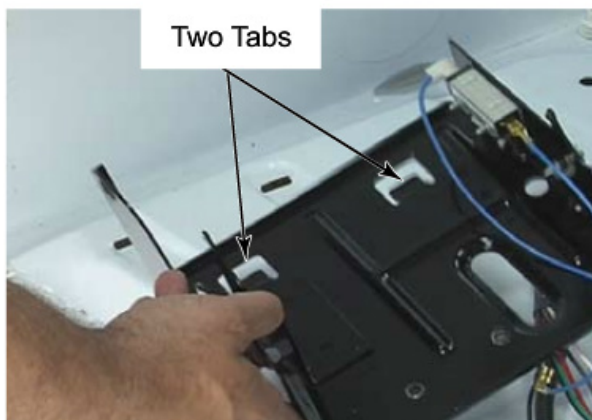
1. Remove the motor [\(See page 4-37\)](#).




2. Remove two 1/4" hex head screws that secure the bracket to the base of the dryer.



3. Lift the bracket to remove the two tabs that pass through the dryer base and remove the bracket from the dryer.



REMOVE DRUM REAR SUPPORT ROLLERS

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the dryer drum (See page 4-26).




2. Two rear support rollers are mounted to the bulkhead on shafts. Remove the tri-clip from the shaft.



3. Slide the support roller off of the shaft.
4. There is another tri-clip behind the roller for proper positioning of the roller. When replacing a roller, always replace both tri-clips to ensure that the roller will stay in position while running.

NOTE: Do not lubricate this wheel or shaft. Clean the shaft with fine steel wool to eliminate squeaks or replace worn roller supports.

REMOVE BULKHEAD

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the dryer drum (See page 4-26).



2. Remove seven 1/4 inch hex head screws that secure the bulkhead to the cabinet.



3. Pull the bulkhead out the front of the cabinet.
4. Turn the bulkhead over and set it on top of the cabinet.

REMOVE REAR SUPPORT ROLLER SHAFT

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Remove the dryer bulkhead
(See page 4-40).



2. The two rear support rollers spin on shafts that are secured on the back of the bulkhead with a 9/16 inch nut. Care needs to be taken when removing the support roller shaft, as gripping the shaft with a Vice Grip or pliers may damage the bearing surface and cause noisy rollers and premature failure of roller supports.



NOTE: To support the roller shaft while trying to remove the 9/16" shaft a Vice Grip needs to be used to hold the nipple on the front of the roller shaft.



REMOVE HEAT PLENUM

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Remove the dryer bulkhead
(See page 4-40).




2. Remove two 1/4 inch hex head screws that secure the heat plenum to the back of the bulkhead.



3. Lift the heat plenum off of the bulkhead.

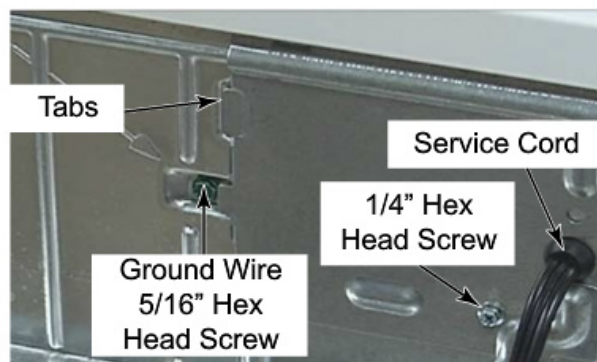
REMOVE SERVICE CORD - GAS MODELS

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

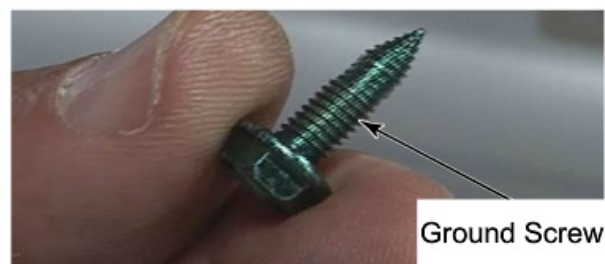
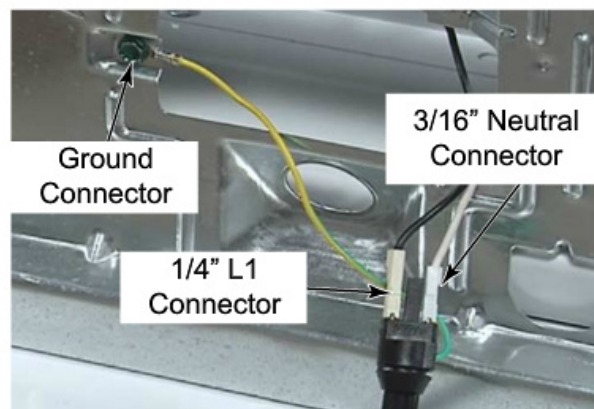
1. Remove the 1/4" hex head screw from the control cover rear panel.
2. Remove the service panel by sliding its tabs out from the left side.




3. Slide the service cord to the left to remove it from the slot.

4. Disconnect two connectors from the service cord. The neutral is a 3/16" terminal, and L1 is a 1/4" terminal.
5. Remove the 5/16" hex head screw that secures the ground wire to the rear panel.


NOTE: Ground screws are painted green and have machine screw threads to secure them tightly.



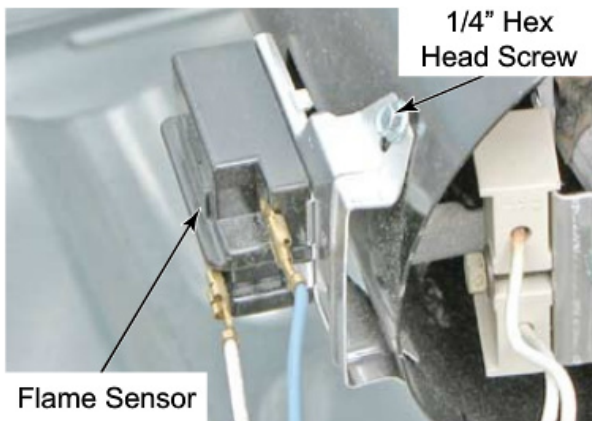
REMOVE FLAME SENSOR

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the lower front service panel (See page 4-22).


-  2. Remove the two wire connectors from the spade terminals.

NOTE: The spade connectors are on tight and pulling hard on the wire or the connector without care may pull the flame switch male terminal off the control and render the flame switch useless.




3. Remove the 1/4 inch hex head screw.
4. Rotate the flame sensor down to release the tab that secures the other side.

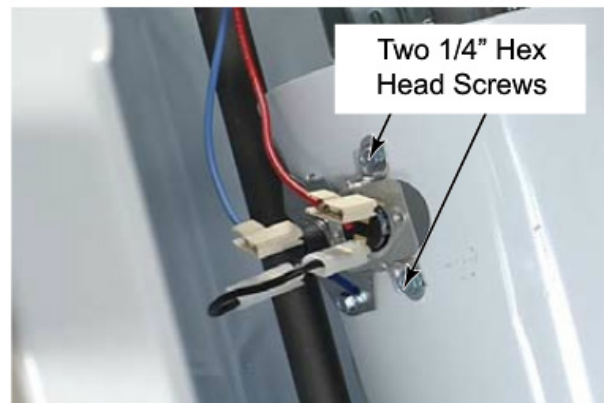
REMOVE HIGH TEMP THERMOSTAT

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>


1. Remove the lower front service panel (See page 4-22).

-  2. Remove the red and blue wire connectors.

3. Remove the jumper between the high temp thermostat and the high temp cutout.
4. Remove two 1/4 inch hex head screws and remove the high temp thermostat.
5. The high temp thermostat and the high temp cutout (See page 4-22) should be ordered and replaced as a set. The high temp thermostat is resetable and cycles to keep the temperature from getting too hot in the burner.



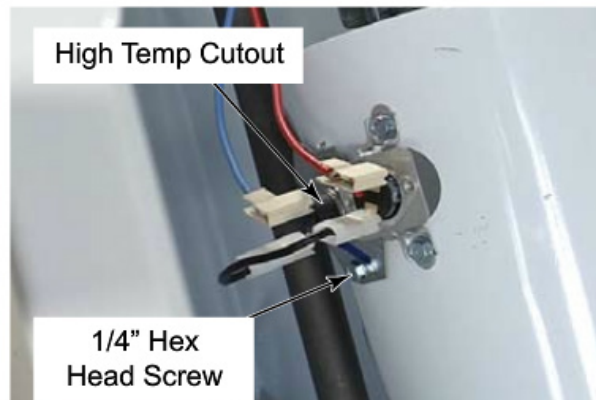
REMOVE HIGH TEMP CUTOUT

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>


1. Remove the lower front service panel
(See page 4-22).

2. Remove the jumper between the high temp thermostat and the high temp cutout.
3. Remove the blue wire connector from the spade terminal.
4. Remove the 1/4 inch hex head screw and lift to release the tab on the other side.

NOTE: The high temp cutout is non-resettable, it will disable the heat if it trips.

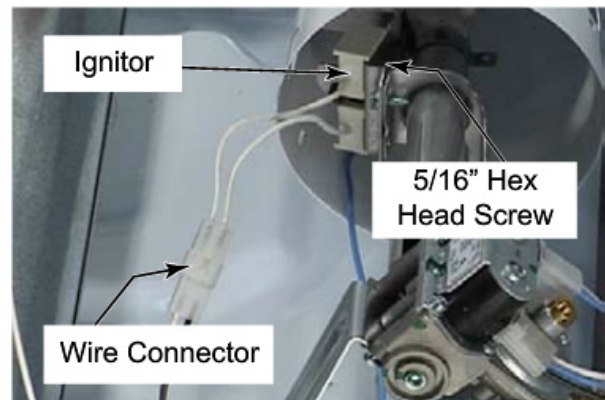


REMOVE IGNITOR

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the lower front service panel
(See page 4-22).

2. Disconnect the wire connector to the ignitor.
3. Hold on to the bracket and remove the 5/16 inch hex head screw to remove the bracket and ignitor.




4. Remove the ignitor from the bracket by removing the 5/16 inch hex head screw.

NOTE: Do not touch the dark ignitor end, the oil from skin will make a hot spot on the ignitor causing it to fail prematurely.

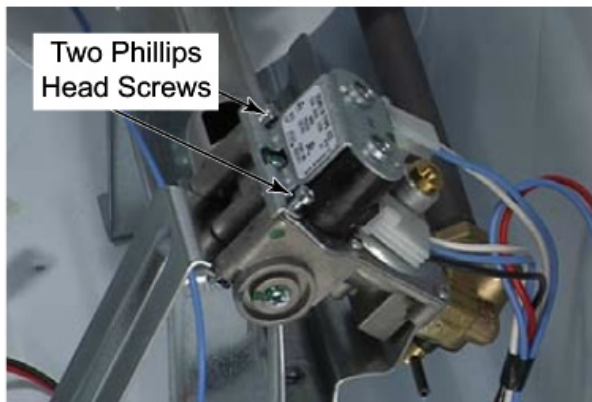
NOTE: Do not bump or tap the ignitor. It is made of carborundum, which is harder than steel but is extremely brittle.

REMOVE GAS VALVE COILS

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>


1. Remove the lower front service panel
(See page 4-22).

2. Remove the two Phillips head screws that secure the bracket.



3. Lift the bracket off the coils.
4. Lift the coils off the posts and disconnect the wire connector from each coil.

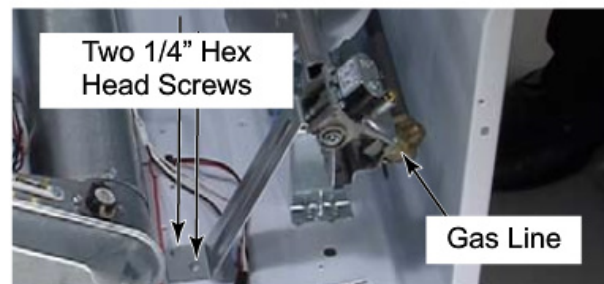
REMOVE GAS VALVE AND GAS VALVE BRACKET

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the lower front service panel
(See page 4-22).

2. Remove two 1/4 inch hex head screws that secure the brace to the bottom of the dryer. Lift the brace out of the dryer

3. Use an adjustable wrench to disconnect the gas line from the valve.



4. Remove two 1/4 inch hex head screws under the bracket that secures the gas valve bracket and remove it from the dryer.



REMOVE GAS VALVE FROM BRACKET

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

1. Remove the lower front service panel
(See page 4-22).

2. Remove the gas valve bracket
(See page 4-45).



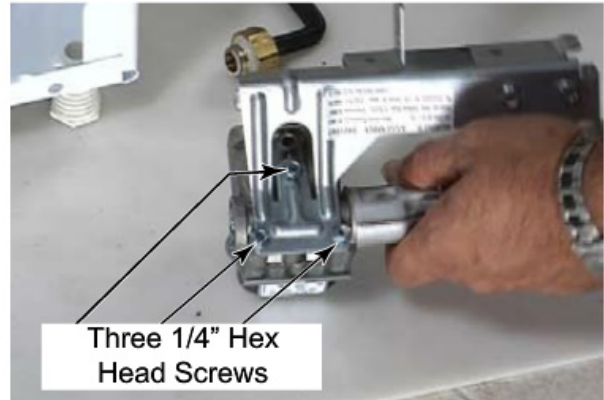
3. Insert a 3/8 inch Allen wrench into the gas valve fitting.



4. Turn the fitting counterclockwise to unscrew it from the gas valve.

NOTE: Use an appropriate sealant (rated for natural gas or LP depending on the fuel type used) during reassembly of this gas valve fitting.

5. Remove three 1/4 inch hex head screws from the bottom of the bracket.



6. Remove the gas valve body from the bracket.


7. Gas valve orifice is now accessible and can be removed with a 3/8" wrench.

NOTE: Do not use sealant on the threads of the orifice.



REMOVE ELECTRIC HEATING ELEMENT

⚠ WARNING



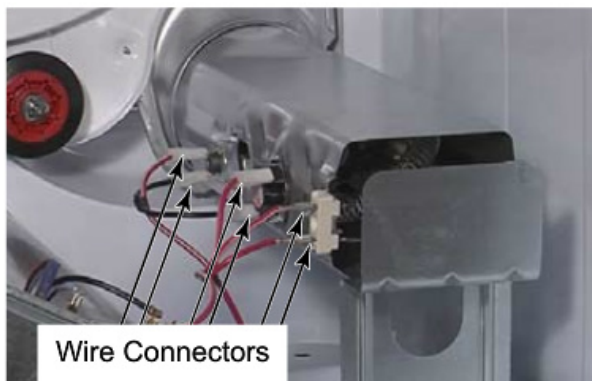
Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Remove the lower front service panel

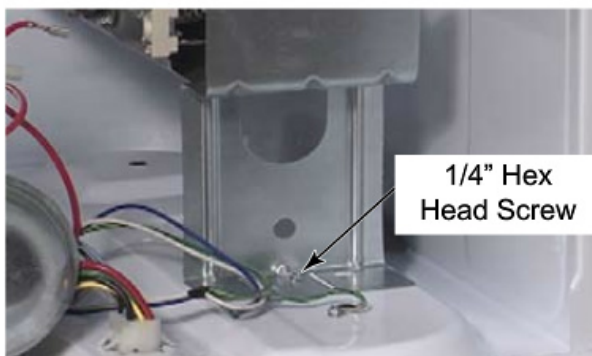
(See page 4-22).



2. Remove the six wire connectors from the high limit thermostats and from the heater coil.



3. Remove the 1/4 inch hex head screw that secures the bracket to the bottom of the dryer.




4. Lift the entire heater assembly to remove the lower edge from the heat plenum, then use slight downward pressure to release the locking tab at the top rear of the heater assembly.



5. Remove the assembly from the dryer.




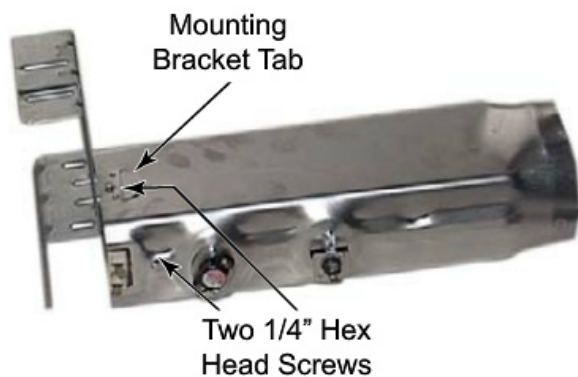
REMOVE THE HEATER COIL

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

1. If the element is serviceable, remove the electric heater assembly [\(See page 4-47\)](#).

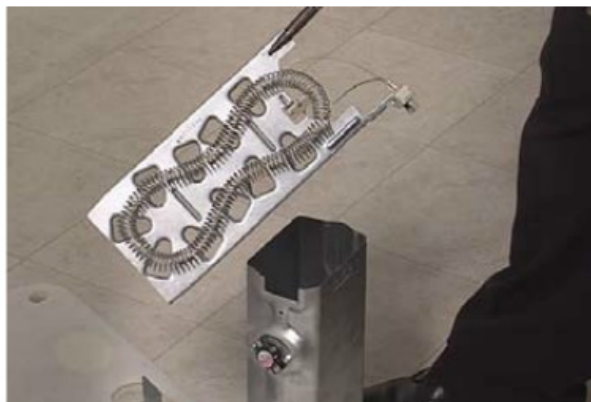
NOTE: Some models may have a serviceable electric coil element and others will be supplied as an assembly.

-  2. Remove two 1/4 inch hex head screws from the bottom and side of the housing.




3. Slide the mounting bracket tab out of the slit in the housing and remove it.

4. Use one pair of pliers to hold the housing and another pair of pliers to pull the heater coil up out of the housing.



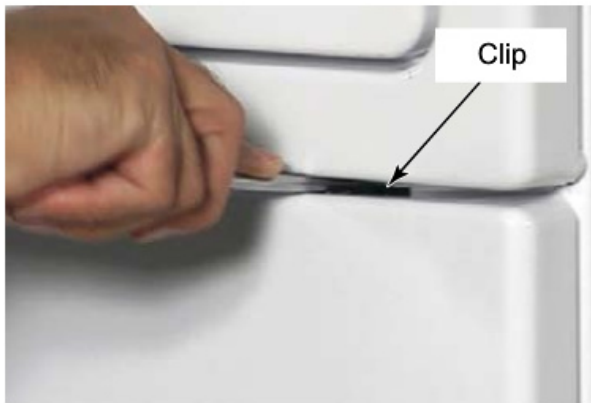
COMPONENT ACCESS - STACK DRYER

REMOVE SERVICE PANEL

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.



1. Insert a stiff putty knife or a thin flat blade screwdriver in the space between the front panel and the toe panel.
2. Slide the tool until it contacts a clip, about 2 inches in from each corner.




3. Press the clip down to release
4. Repeat this procedure with the other clip.

5. Pull the panel forward and remove the panel.



REMOVE HANDLE FROM STACK DRYER DOOR

⚠ WARNING

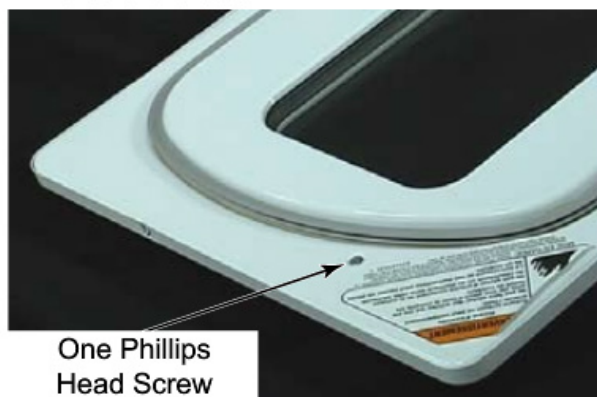


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

Non reversible door with glass



1. Remove the Phillips head screw from the inside of the door.



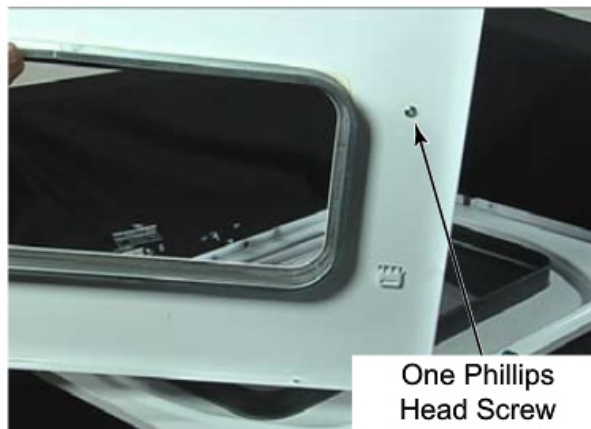
One Phillips Head Screw

2. Rotate the handle down to unhook the tab from the slot on the other end.



Reversible door with glass

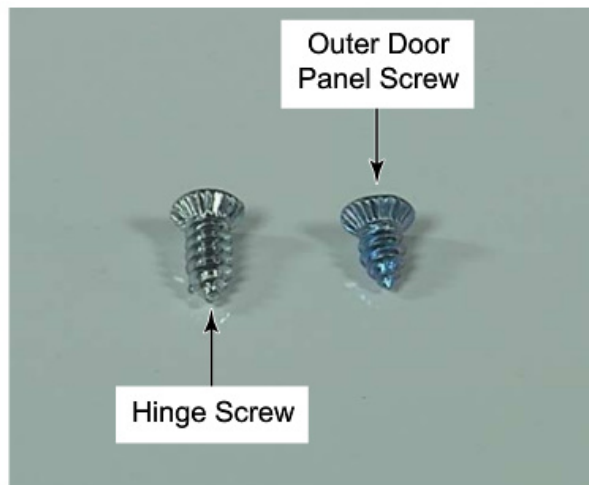
1. Remove the door from the dryer
(See page 4-27).
2. Remove the nine screws from around the edge of the door including the hinges.
3. Lift the front panel off the inside panel.
4. Remove the Phillips head screw from the inside of the front panel.




One Phillips Head Screw

5. Rotate the handle down to unhook the tab from the slot on the other end.

NOTE: The hinge screws are larger than the outer door panel screws from the edge of the door.



REVERSING A DOOR ON STACK DRYER

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

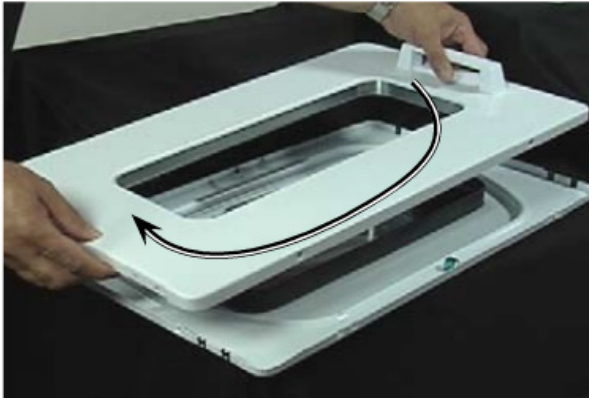
1. Remove the door from the dryer
(See page 4-27).



2. Remove the nine screws from around the edge of the door including the hinges.

3. Lift the front panel off the inside panel.

4. Rotate the front panel 180 degrees.



5. Reassemble the door with the hinges on the opposite end of the door.


6. Remove the two hinge hole covers from the front panel by removing two Phillips head screws from each cover.




7. Reinstall these two covers over the hinge holes on the opposite side of the front panel frame.

8. Reattach the door to the dryer with the door swing in the opposite direction.

REMOVE FACIA

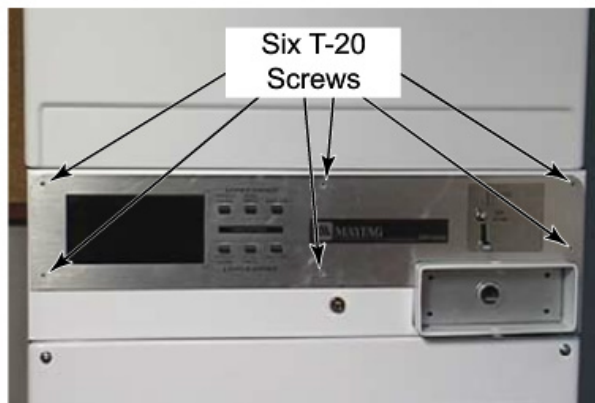
⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

DISCONNECT UPPER DRYER POWER SUPPLY

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>



1. Remove six T-20 screws from the front of the facia..



2. Pull the facia off the front of the dryer.

1. Remove the facia [\[See page 4-52\]](#).



2. Reach into the opening to the left of the coin drop and disconnect the 9 pin connector that supplies power and control to the upper dryer.



REMOVING UPPER POCKET FROM STACK DRYER

⚠ WARNING

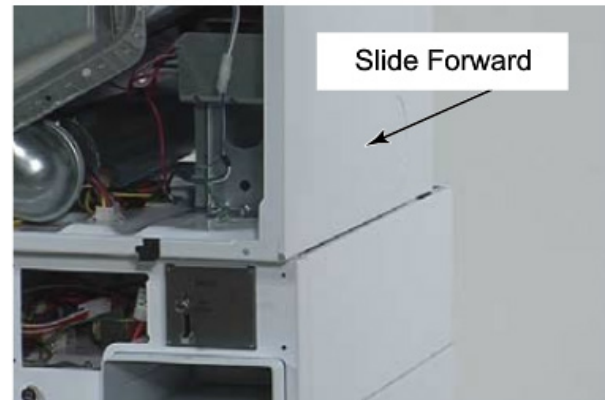


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. If working on a gas dryer: Turn off gas and disconnect the gas line from the upper dryer.
2. Remove the exhaust vent from the upper dryer.
3. Remove the service panel (See page 4-49).
4. Remove the fascia (See page 4-52).
5. Disconnect upper dryer power supply (See page 4-52).
6. Remove two T-40 screws and washers in the front two corners behind the service panel of the upper dryer.



7. Use tape or cardboard to protect the upper edge of the collar above the controls.
8. Slide the upper dryer forward allowing the upper dryer rear legs to come forward and be released from the securing clips of the collar assembly.



⚠ WARNING


Excessive Weight Hazard
Use two or more people to move and install dryer.
Failure to do so can result in back or other injury.

9. Removing the upper dryer requires two people. Lift the upper dryer off of the lower dryer and set it on the floor.



LOWER THE CONTROL BOARD & BRACKET

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before
operating.
Failure to do so can result in death or
electrical shock.

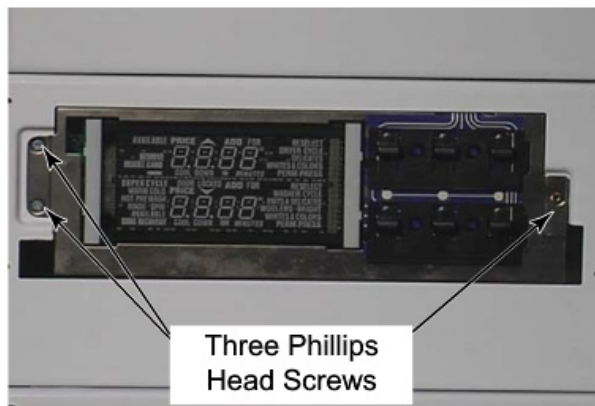
3. Rotate the bracket down and into the collar until it is in a horizontal position. In this position pull the bracket, control board and user interface forward and out of the collar.




1. Remove the fascia (See page 4-52).




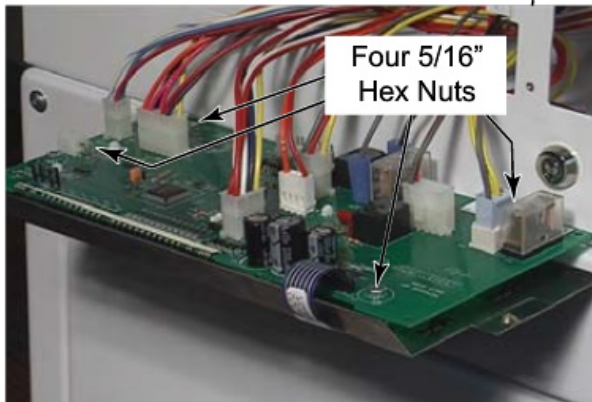
2. Remove three Phillips head screws that secure the bracket to the collar.



REMOVE CONTROL BOARD


⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the fascia (See page 4-52).
2. Lower the control board bracket (See page 4-54).
-  3. Remove all of the wire connectors to the board.
4. Disconnect the ribbon connector from the user interface.
5. Remove four 5/16 inch hex nuts that secure the Control board to the collar.




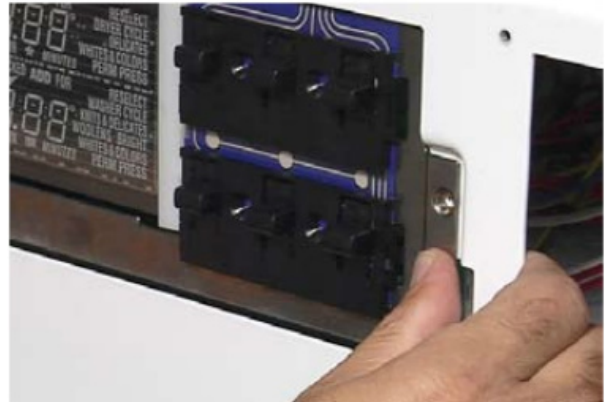
6. Remove control board from the bracket.

REMOVE USER INTERFACE BUTTONS

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the fascia (See page 4-52).


-  2. Reach inside the control panel and gently push the locking tab (see below) away from the center of the button assembly and then rotate the button assembly on the hinge tab. Remove the button assembly from the user interface switch assembly.




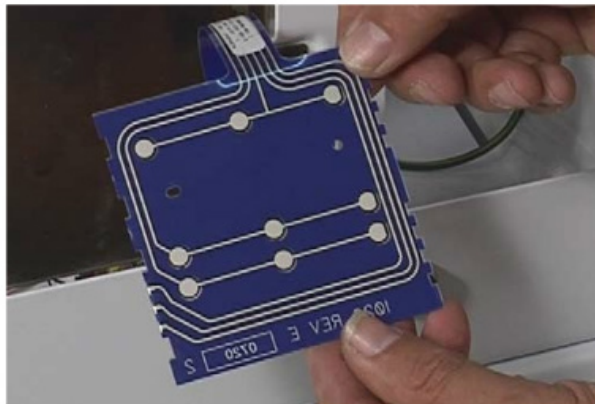
3. Repeat this procedure to remove the other set of buttons.




REMOVE USER INTERFACE MEMBRANE SWITCH


⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

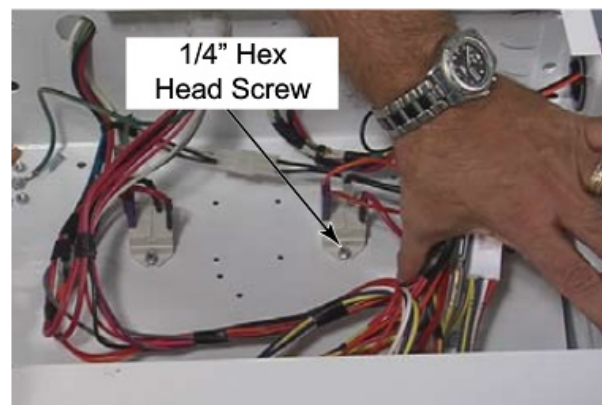
1. Remove the fascia [\(See page 4-52\)](#).
2. Remove the user interface buttons [\(See page 4-55\)](#).
-  3. Slide the ribbon connector out of the slot and remove the membrane.



REMOVE MOTOR RELAYS


⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Lower the control board bracket [\(See page 4-54\)](#).
-  2. The motor relays can be reached through the control panel openings. The motor relay on the left is for the lower dryer, the relay on the right is for the upper dryer.
3. To remove either relay, remove one 1/4 inch hex head screw and loosen the second screw that attaches the relay to the collar.



4. Slide the relay out from under the second screw and remove the wire connectors.
5. Remove the relay.

REMOVE TRANSFORMER

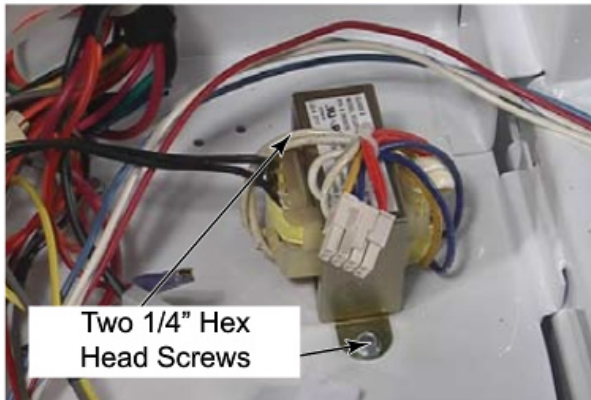
⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

1. Lower the control board bracket

(See page 4-54).

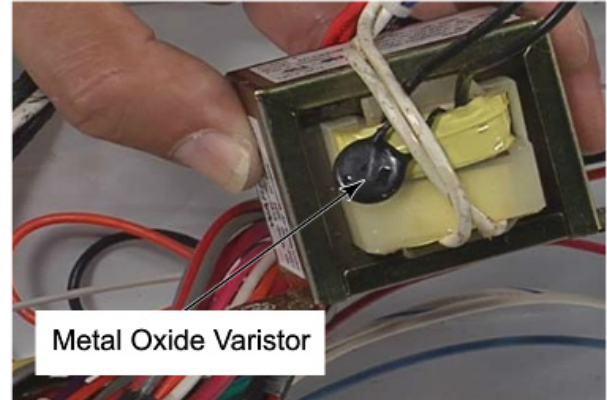


2. Press the locking tab and disconnect two wire connectors.




3. Remove two 1/4 inch hex head screws that secure the transformer to the collar.


NOTE: The transformer has a metal oxide varistor (MOV) which protects the transformer and the dryer from power surges.

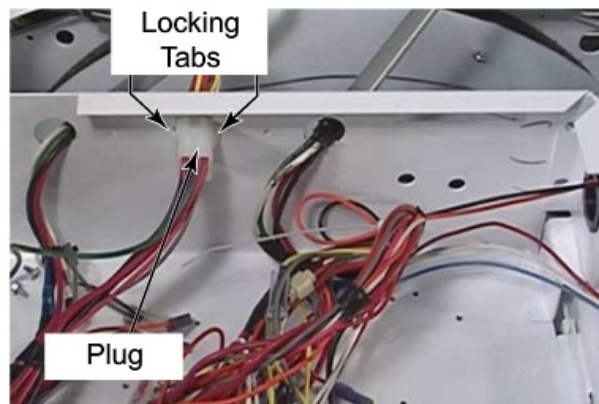


REMOVE POWER CONNECTOR TO LOWER DRYER

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

1. Remove the upper dryer. [\(See page 4-53\)](#).


-  2. Disconnect the power connector to the lower dryer by pulling the connector out of the plug on the rear wall of the collar, can also be accessed from the front opening in the control panel.




3. Remove the plug from the wall of the collar by pressing the locking tabs and pushing the connector through the hole in the collar.

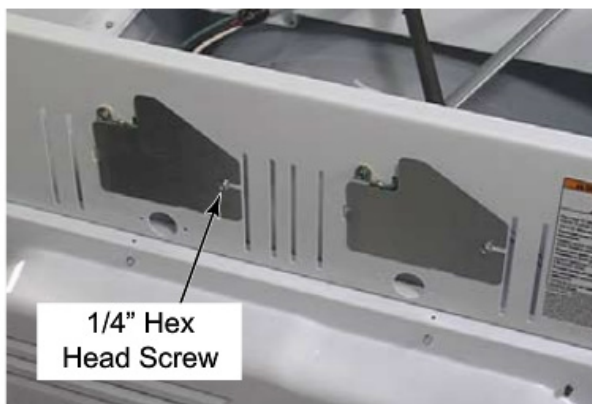
REMOVE POWER CORD WIRE COVERS ELECTRIC HEAT DRYERS

⚠ WARNING



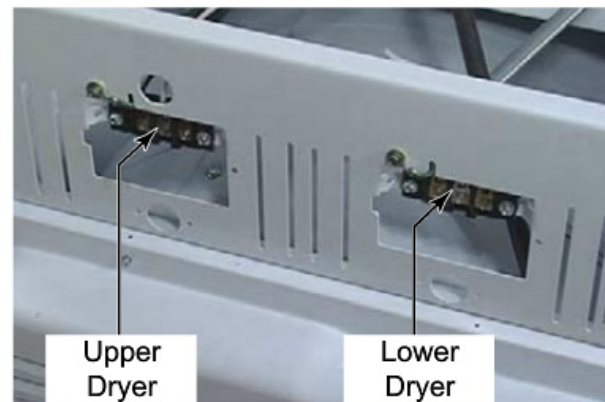
Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

-  1. Remove the 1/4 inch screw that secures the power cord wire cover to the back of the dryer.




2. Rotate the cover to remove the tab that secures the other side.
3. Repeat procedure for the other cover.

4. Looking from the rear of the dryer, the power terminal on the left is for the upper dryer, the one on the right is for the lower dryer. The hole below the cover is for the incoming power cord which should be secured with a strain relief.



REMOVE GROUND WIRES

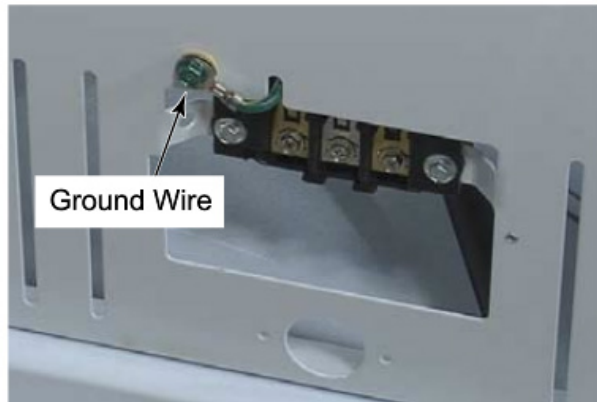
⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

1. Remove power cord wire covers


(See page 4-59).



2. Remove the 5/16 inch hex head screw that secures the ground wire to the back of the collar.



REMOVE TERMINAL BLOCK

⚠ WARNING

Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.

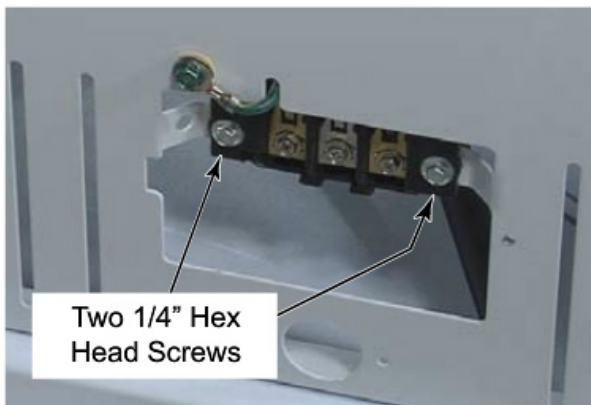
1. Remove power cord wire covers

(See page 4-59).

2. Remove the ground wires (See page 4-60).

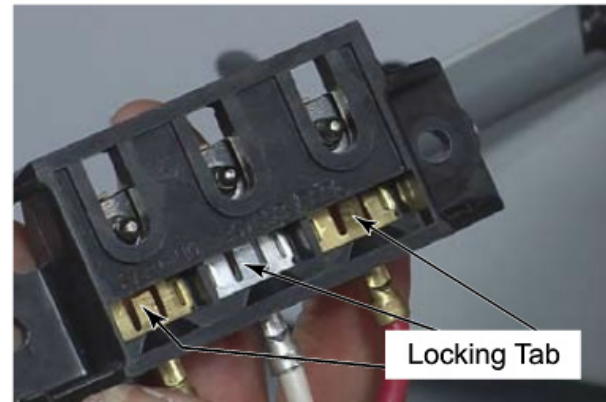


3. Remove two 1/4 inch hex head screws that secure each terminal block to the dryer.




4. Remove the terminal block.

5. Use a flat blade screwdriver to straighten the locking tab from the back side of the terminal block.



6. Slide the wire connectors down in the terminal block to remove them.

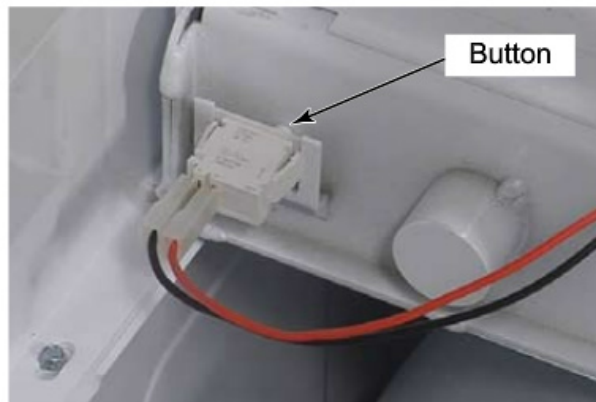
REMOVE THE COIN VAULT SWITCH

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>


1. Remove the upper dryer. [\(See page 4-53\)](#).

2. Remove the coin box, reach into the coin vault cavity and fully press on the button at the rear of the cavity.

3. While pressing the button in as far as possible, slide the switch body up out of the slots on the back of the coin vault compartment.

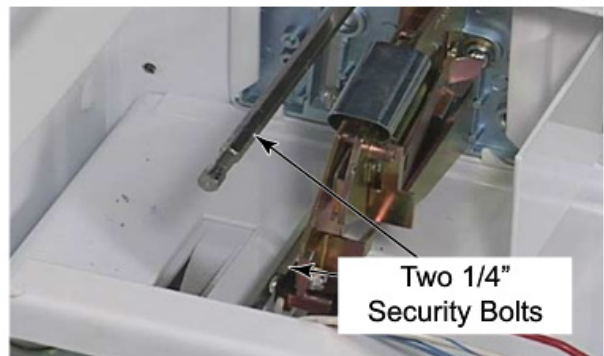


REMOVE THE COIN DROP

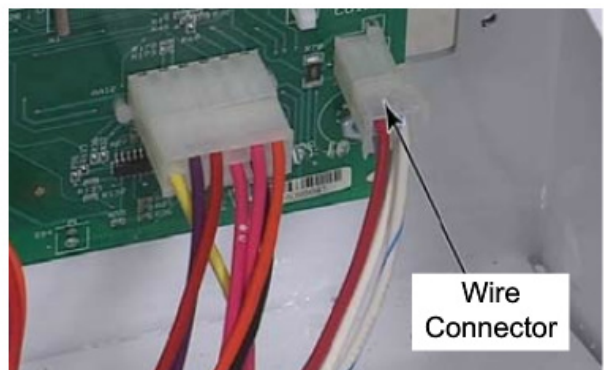
⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the fascia [\(See page 4-52\)](#).

2. Remove two 1/4 inch security bolts from inside the collar.




3. Disconnect the wire connector from the control board.




4. Slide the Coin drop out of the collar.

REMOVE OPTICS FROM COIN DROP


⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the coin drop [\(See page 4-62\)](#).


-  2. Remove the Phillips head screw securing the optics to the coin drop.

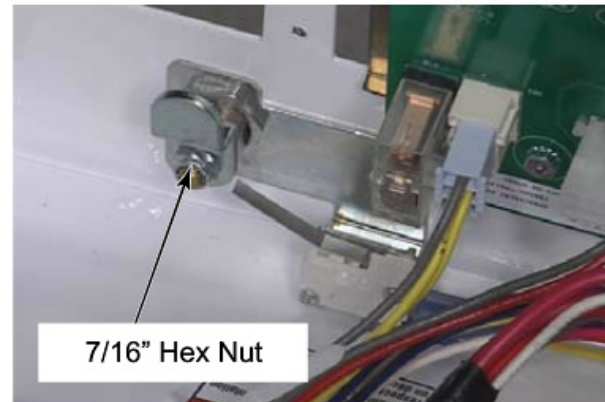


REMOVE SERVICE PROGRAMMING SWITCH

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the facia [\(See page 4-52\)](#).

-  2. Remove the 7/16" hex nut that secures the cam on the shaft.




3. Remove the retainer nut that secures the bracket to the collar.

4. Push the lock out of the front of the dryer.

5. Remove the service switch and bracket.

6. Disconnect two wire connectors.

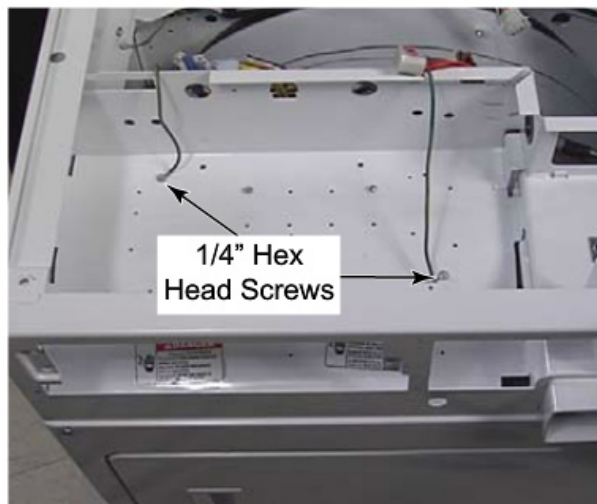
REMOVE GROUND WIRES INSIDE COLLAR

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>


1. Remove the upper dryer [\(See page 4-53\)](#).



2. Remove the 1/4" hex head screw that secures each ground wire to the collar.



REMOVE COIN VAULT

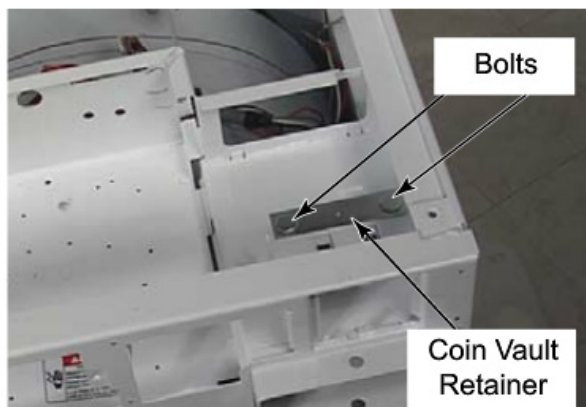
⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the upper dryer [\(See page 4-53\)](#).

2. Remove the coin vault switch [\(See page 4-62\)](#).




3. Remove the two 9/16" nuts from the inside of the coin vault.



4. Lift off the coin vault retainer.

5. Slide the coin vault box back and remove it from inside the collar.

REMOVE THE COLLAR


⚠ WARNING

<p style="text-align: center;">Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. Remove the upper dryer (See page 4-53).
2. Remove the control board bracket. (See page 4-55).
3. Disconnect all connectors from control board.
4. Remove motor relays. (See page 4-56).
5. Remove transformer. (See page 4-57).
6. Remove power connector to lower dryer. (See page 4-58).
7. Remove the terminal blocks (See page 4-61).
8. Remove power leads from the terminal blocks. (See page 4-61).
9. Pass the power leads through the holes in the collar into the back part of the dryer and lay them on the dryer drum.
10. Remove the coin vault switch. (See page 4-62).
11. Remove the coin drop. (See page 4-62).

12. Remove the service switch assembly. (See page 4-63).

13. Remove the ground wires from the collar.

14. Remove the coin vault. (See page 4-64).

 15. Remove four 1/4 inch hex head screws that secure the collar to the lower dryer



16. Remove two 1/2 inch hex head bolts that secure the collar to the lower dryer. The screws go from the lower dryer up into the collar.

17. Lift the collar off of the lower dryer.



LOWER DRYER DOOR SWITCH CONNECTOR

⚠ WARNING

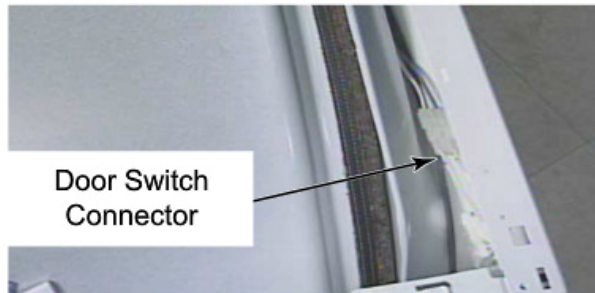


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

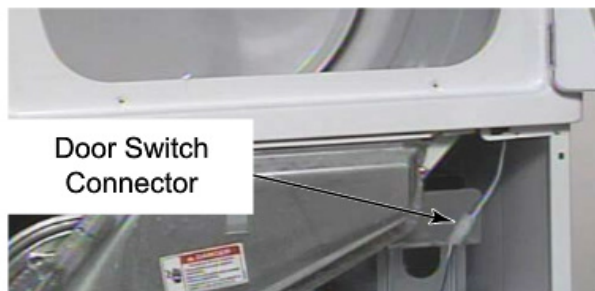
1. Remove the Collar (See page 4-65).



2. The door switch connector is located on the left side just below the collar. Use a flat blade screwdriver to release the locking tab and pull the connector apart.



NOTE: The door switch wires are routed over the top of the door frame and can be accessed from the front with the lower service panel removed. This allows the front panel of the lower dryer to be removed without first disconnecting the door switch connector below the collar.



REMOVE UPPER DRYER TOP

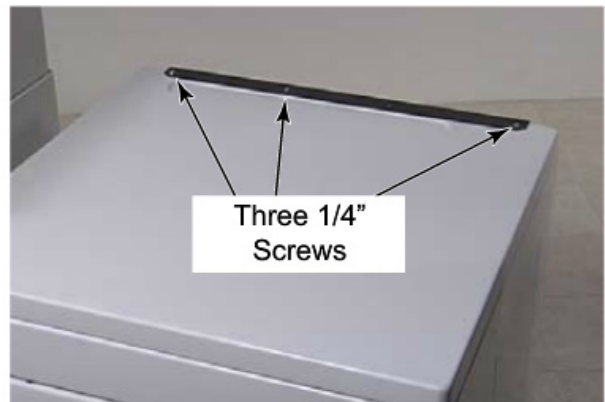
⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.




1. Remove three 1/4 inch screws on the top back edge of the dryer.



2. Slide the top toward the front of the dryer and lift it off of the dryer.

REMOVE FRONT PANEL OF STACK DRYER

⚠ WARNING

<p>Electrical Shock Hazard Disconnect power before servicing. Replace all parts and panels before operating. Failure to do so can result in death or electrical shock.</p>

1. To remove the front panel of either the upper or lower dryer, remove the service panel (See page 4-49).



2. Open the dryer door and remove the lint filter.

3. Disconnect the door switch connector behind the service panel.

4. Remove two 1/4 inch hex head screws from the bottom corners of the front panel that were hidden behind the service panel.



5. Remove two T-20 security screws from the front top corners of the front panel. The washers on these screws must be reinstalled to help protect the finish of the dryer.



6. Remove the blower housing


7. Pull the front panel off the front of the dryer. The front panel rests on the clips at the top corners and will release when the front panel is pulled forward.



NOTE: Resistance to pulling forward may be due to front drum support rollers that ride in the channel of the drum. Slight manipulation of the front panel or lifting of the dryer drum may be required to dislodge the front support rollers from the channel in the drum.

— NOTES —

COMPONENT TESTING

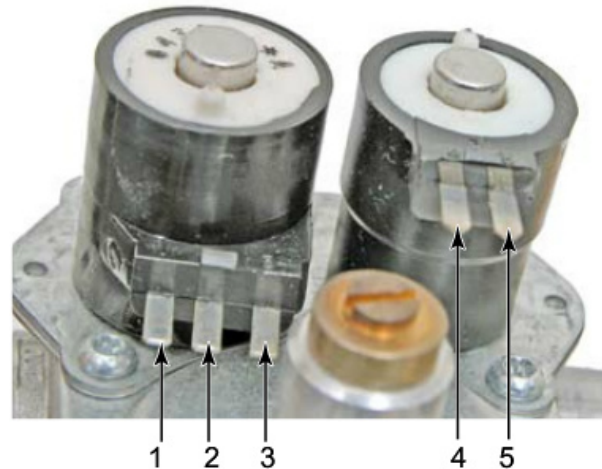
	<p style="text-align: center;">⚠ WARNING</p> <p style="text-align: center;">Electrical Shock Hazard</p> <p>Disconnect power before servicing.</p> <p>Replace all parts and panels before operating.</p> <p>Failure to do so can result in death or electrical shock.</p>
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GAS VALVE COILS

The gas valve is actually a regulator and 2 valves in 1. One valve is in series with the other.

The first valve has a split coil and requires both coils to lift the armature, but only 1 coil to hold it open. The second or secondary coil requires only 1 coil.


1. Unplug dryer or disconnect power.
2. Turn off gas supply to dryer.
3. Remove the gas burner assembly
(See page 4-45)
4. Disconnect the wire connectors from the coil terminals.
5. Set the ohmmeter to the R X 100 scale.
Set digital ohmmeters to lowest scale.



6. Touch the ohmmeter test leads to the indicated coil terminals. The meter should indicate as follows:

Pins 1 & 2 = 1300 to 1400 Ω
 Pins 1 & 3 = 500 to 600 Ω
 Pins 4 & 5 = 1200 to 1300 Ω

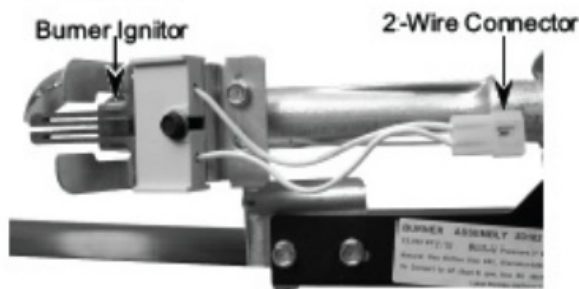
NOTE: Black and oily soot on the interior drum and bulkhead surfaces probably indicate that the regulator is not set-up for the proper gas type.

	⚠ WARNING
	<p style="text-align: center;">Electrical Shock Hazard</p> <p>Disconnect power before servicing.</p> <p>Replace all parts and panels before operating.</p> <p>Failure to do so can result in death or electrical shock.</p>

BURNER IGNITOR

When the dryer control calls for heat, line voltage is applied to the ignitor. The ignitor will heat up quickly and glow as it reaches approximately 2200°F in about 30 seconds. Gas contacting the ignitor at this temperature will ignite immediately.

1. Unplug dryer or disconnect power.
2. Turn off gas supply to dryer.
3. Remove the gas burner ignitor
(See page 4-44).
4. Disconnect the ignitor wire connectors from the main harness connector.
5. Set the ohmmeter to the R X 1 scale.
Set digital ohmmeter to lowest scale.
6. Touch the ohmmeter test leads to the 2-wire connector pins. The meter should indicate between 50 and 250 Ω at room temperature.



MANOMETERS


Insufficient gas flow can cause problems. Therefore, checking the gas pressure at the time service calls are performed may avoid a return call.

Gas pressure can be checked with an instrument called a "manometer." This device can detect a "low" LP tank, restricted gas flow, bad gas valve, a malfunctioning pressure regulator, too many gas dryers operating off of a small supply line, or an improperly converted dryer from Natural to LP gas.

Other types of manometers exist; however, the type of manometer we will discuss in this manual is a water tube with a glass tube inserted into it. Water is added to the outer tube and it rises within the inner tube to equalize and seek its own level, the same method is used in both arms of a "U" shaped tube Manometer.

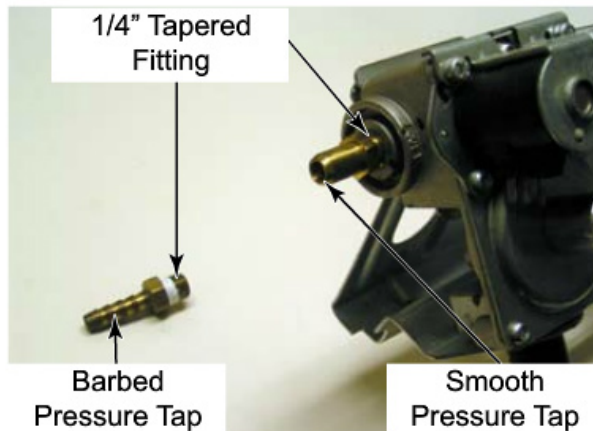
A flexible rubber hose is connected to the upper, open end of the manometer and to the gas source. Gas pressure is exerted on one of the water columns, pushing it down. The water level then rises in the other column. The pressure is then read on the manometer as the water column pushes downward.

The water column (W.C.) for a Maytag dryer is 3.5" W.C. For Natural gas and 11" W.C. for LP gas.

	<p style="text-align: center;">⚠ WARNING</p> <p style="text-align: center;">Electrical Shock Hazard</p> <p>Disconnect power before servicing.</p> <p>Replace all parts and panels before operating.</p> <p>Failure to do so can result in death or electrical shock.</p>
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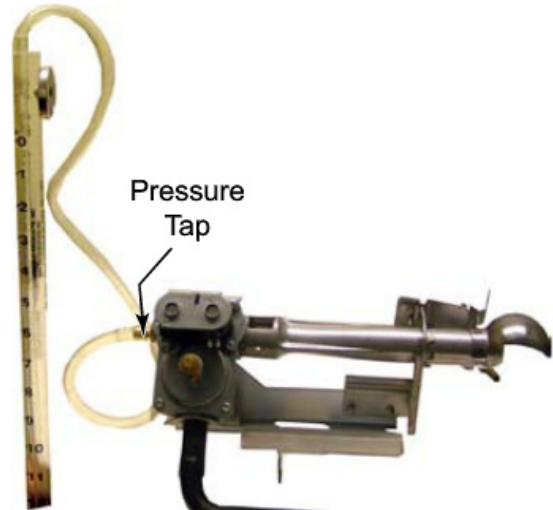
How to Use:

1. Disconnect power supply to dryer.
2. Remove front panel.
3. Shut off the gas to the dryer.
4. Install a 1/4" tapered fitting at the gas valve pressure tap. Use thread seal tape or compound on fitting.




5. Fill the manometer tube with water until each side equalizes at "0" water column.
6. Push the end of the manometer hose onto the pressure tap located on the gas valve.
7. Connect hose to one end of the manometer.

8. Turn on the gas and reconnect dryer to power. Run the dryer in a heat cycle. Read the manometer with the burner ON, (check for gas leaks).
9. When the gas is on, the amount of water column present is equal to the total amount of deflection shown in the manometer.



Once the test is completed, ensure the tapered fitting is removed from the gas valve and the plug is repositioned into the gas valve and resealed with pipe seal. Check for gas leaks again with a soap or bubble solution. **DO NOT USE OPEN FLAME TO CHECK FOR GAS LEAKS.**

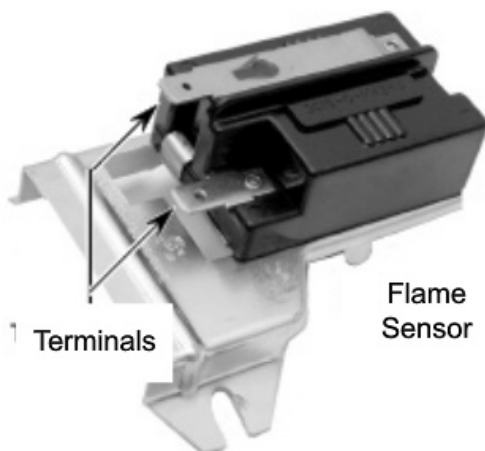
IF HIGH WATER COLUMN PRESSURE IS DETECTED: the gas flame can damage the flame spreader on the burner. (This can be caused by the wrong orifice, improper air mixture or high gas pressure. If pressure is higher than expected, contact the local gas utilities company to check the outside regulator.

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FLAME SENSOR

1. Unplug dryer or disconnect power.
2. Turn off gas supply to dryer.
3. Remove the flame sensor [\(See page 4-43\)](#).
4. Disconnect the wire connectors from the flame sensor terminals.
5. Set the ohmmeter to the R X 1 scale.
Set digital ohmmeters to lowest scale.
6. Touch the ohmmeter test leads to the flame sensor terminals. The meter should indicate a closed circuit (0 Ω) when cold.

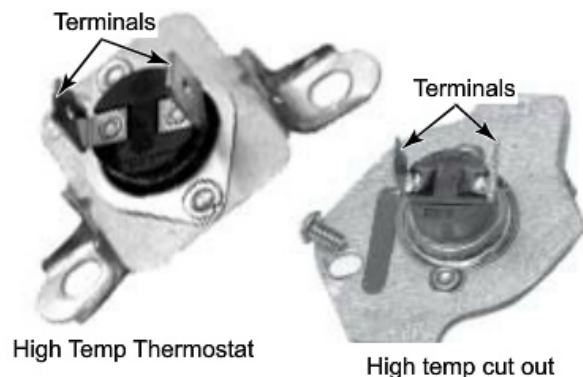
NOTE: If the ignitor stays on longer than 40 seconds, replace the Radiant Sensor.




HIGH TEMP THERMOSTAT & HIGH TEMP CUTOUT (GAS DRYERS ONLY)

The high temp cutout is a non-resettable device. The cutout temperature is 178° C (352° F).

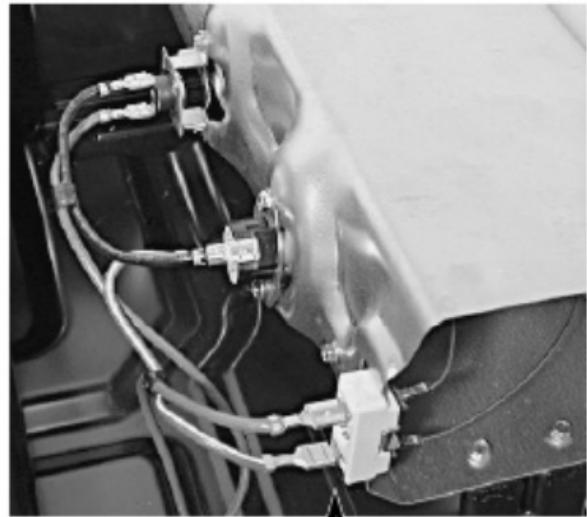
1. Unplug dryer or disconnect power.
2. Turn off gas supply to dryer.
3. Remove the High temp thermostat [\(See page 4-43\)](#) or high temp cutout [\(See page 4-44\)](#).
4. Disconnect the wire connectors from the High temp thermostat and high temp cutout terminals.
5. Set the ohmmeter to the R X 1 scale.
Set digital ohmmeters to lowest scale.
6. Touch the ohmmeter test leads to the High temp thermostat or high temp cutout terminals. The meter should indicate a closed circuit (0 Ω).



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HEATING ELEMENT (ELECTRIC DRYERS ONLY)

1. Unplug dryer or disconnect power.
2. Remove the electric heating element.
[\(See page 4-47\).](#)
3. Disconnect the wire connectors from the heater terminal block
4. Set the ohmmeter to the R X 1 scale.
Set digital ohmmeters to lowest scale.
5. Touch the ohmmeter test leads to the terminals on the heater terminal block. The meter should indicate between 7 and 12 Ω .
6. Touch an ohmmeter test lead to an element terminal block connection, and the other test lead to the heater housing case. The reading should be an open circuit (infinite Ω). A resistance reading indicates a shorted coil.




Heater Coil Terminal Block

For US models: The heater element on electric dryers is designed to provide 5600 watts when operated on 240 volts.

For Canadian models: The heater element on electric dryers is designed to provide 5250 watts when operated on 240 volts.

Service kits are available to operate electric heat dryers on 208 volts.

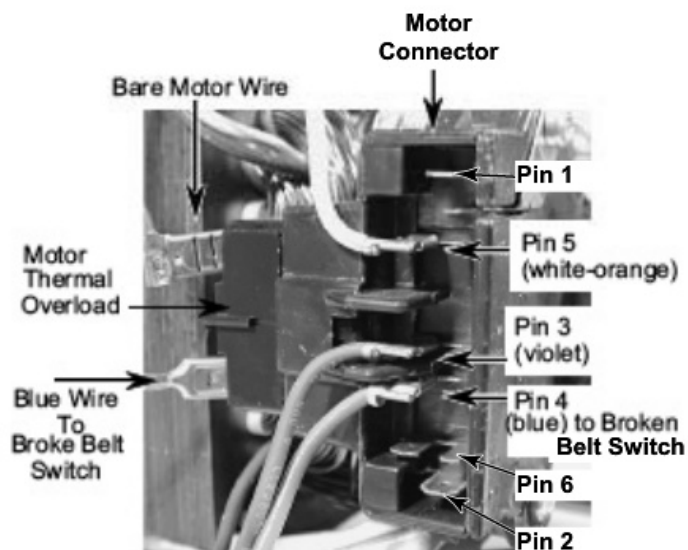
	⚠ WARNING
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DRIVE MOTOR

The motor features a leadless motor connection, comprised of a quick connector wire harness which connects directly to the motor. A motor test cord may be used to electrically check operation of the various electrical components without removing them from the dryer. Testing in this manner 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.

1. Unplug dryer or disconnect power.
2. Turn off gas supply to dryer.
3. The connector has two locking tabs securing the connector to the motor switch. Press on both locking tabs to release the connector from the motor switch.
4. With the wire harness removed, press inward on the brown actuator disc in the motor. The start and run winding can now be checked for proper ohms.

5. Set the ohmmeter to the R X 1 scale.
Set digital ohmmeters to lowest scale.
6. Run winding test: Touch one ohmmeter test lead to the bare motor wire connector, and the other test lead to connector pin 5 (white-orange wire). The meter should indicated between 2.0 and 2.5 Ω (run winding).
7. Start winding test: Touch one ohmmeter test lead to the bare motor wire connector, and the other test lead to connector pin 3 (violet wire). The meter should indicate between 2.75 and 3.5 Ω (start winding).
8. If either resistance is much larger than 4 Ω , replace the motor.

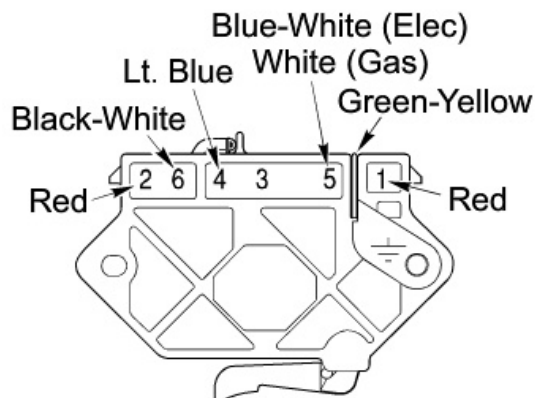
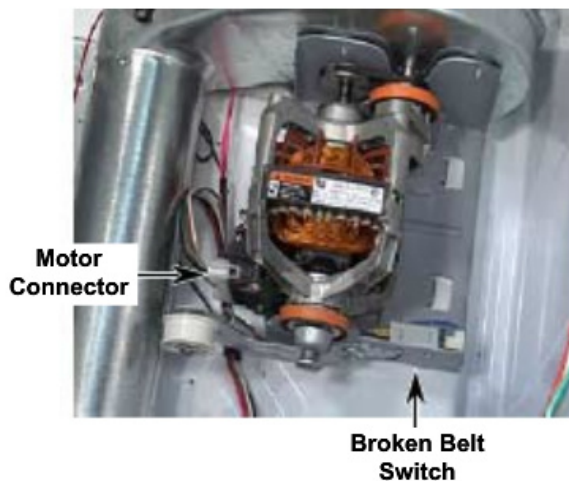


	⚠ WARNING
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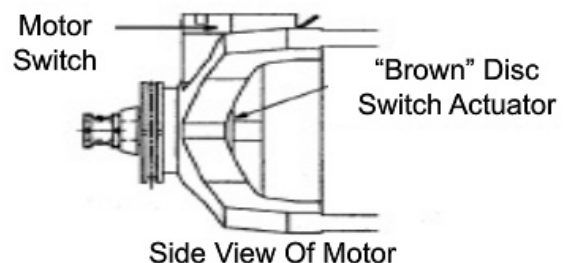
CENTRIFUGAL SWITCH


If the resistances at the motor are correct, check for a failed broken belt switch. Continuity test should show complete circuit (0 Ω).

If the broken belt switch is okay, do same test for motor thermal overload.



1. Unplug dryer or disconnect power.
 2. Turn off gas supply to dryer.
 3. Press on both locking tabs to release the connector from the motor switch.
 4. Set the ohmmeter to the R X 1 scale. Set digital ohmmeters to lowest scale.
 5. Touch one meter test lead to pin 1 and the other test lead to pin 2 (See page 5-6)
 6. Depress the brown disc located behind the motor switch on the motor shaft.
- NOTE:** 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 in toward the windings, the actuator arm of the centrifugal switch will be relaxed. This allows the contacts to close, completing the heater circuit.
7. If no continuity is found when the disc is depressed, change the centrifugal switch.



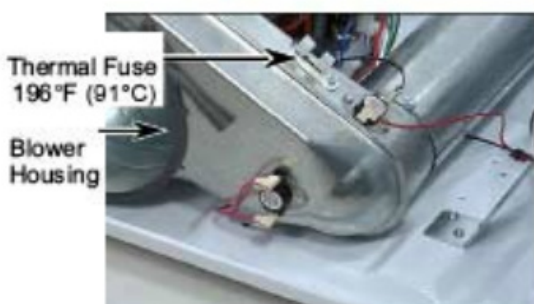
	⚠ WARNING
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THERMAL FUSE

1. Unplug dryer or disconnect power.
2. Turn off gas supply to dryer.
3. Disconnect the wires from the thermal fuse.
4. Remove the thermal fuse [\(See page 4-33\)](#).
5. Set the ohmmeter to the R X 1 scale.
Set digital ohmmeters to lowest scale.
6. Touch one ohmmeter test lead to the thermal fuse terminals. The meter should indicate continuity (0 Ω). If the meter indicates an open circuit (infinite Ω), replace the thermal fuse.

The thermal fuse is wired in series with the drive motor. If the thermal fuse opens, 196°F (91°C), power to the motor is turned off. The centrifugal switch on the motor opens the gas valve coil circuit or electric element circuit.

Once the thermal fuse has opened, it will not reset, and must be replaced. Check for a failed operating thermostat, a shorted heater element or blocked exhaust.



	⚠ WARNING
	Electrical Shock Hazard
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	Replace all parts and panels before operating.
	Failure to do so can result in death or electrical shock.

OPERATING THERMOSTATS

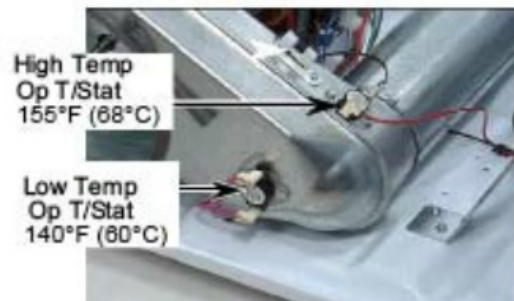
See page 4-32 for the procedure for servicing the Low Temperature Operating Thermostat.

See page 4-32 for the procedure for servicing the High Temperature Operating Thermostat.

The operating thermostats monitor the exhaust temperature. Changes in the exhaust temperature cause the operating thermostat to turn on and off maintaining the selected temperature.


1. Ensure that the dryer is empty and that the lint screen is clean.
2. Close the dryer door and turn the dryer on.
3. The operating thermostats should cycle off between 150° F and 155° F. If the operating thermostat is open below this temperature, replace the thermostat. If the operating thermostat does not open at the described temperature, replace the thermostat.

4. Hold a thermometer capable of reading from 90° to 180° F (32° C to 82° C) in the center of the exhaust outlet. Measure the exhaust temperatures with the heater on and off. The correct exhaust cut-off temperatures for the various settings are shown in the following illustration.



5. If the exhaust temperature is not reached, replace the operating thermostat.

EXHAUST TEMPERATURES		
FABRIC SETTING	HEAT TURNS OFF*	HEAT TURNS ON
Whites And Colors	155° ± 5°F (68° ± 3°C)	10-15° F (6-8° C) Below the heat turn off temperature
Perm. Press	155° ± 5°F (68° ± 3°C)	
Delicates	140° ± 5°F (60° ± 3°C)	

	⚠ WARNING
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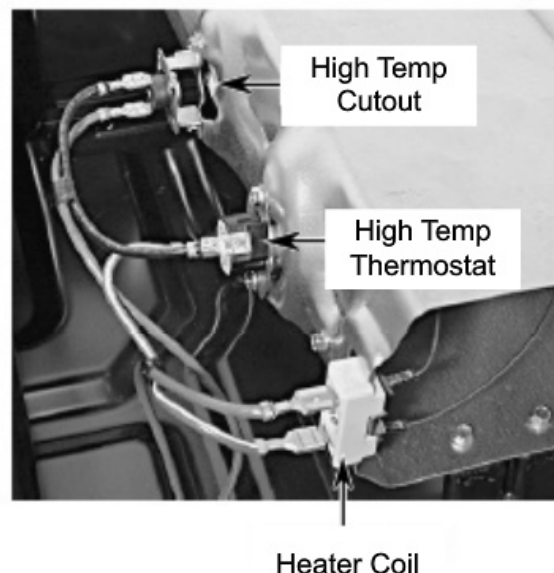
HIGH TEMP CUTOUT (ELECTRIC DRYERS ONLY)

See [page 4-47](#) for the procedure for accessing the Electric Heating Element.


The high temp cutout is a non resettable device. The cutout temperature is 352° F (178° C).

If the dryer does not heat and there is 240 VAC to the dryer, perform the following test.

1. Unplug dryer or disconnect power.
2. Disconnect the wires from the high temp cutout.
3. Set the ohmmeter to the R X 1 scale.
Set digital ohmmeters to lowest scale.
4. Touch the ohmmeter test leads to the high temp cutout terminals. The meter should indicate continuity (0 Ω). If the meter indicates an open circuit (infinite Ω), replace both the high temp cutout and the high temp thermostat. In addition, check for a failed heater element, or a blocked, or improper exhaust system.

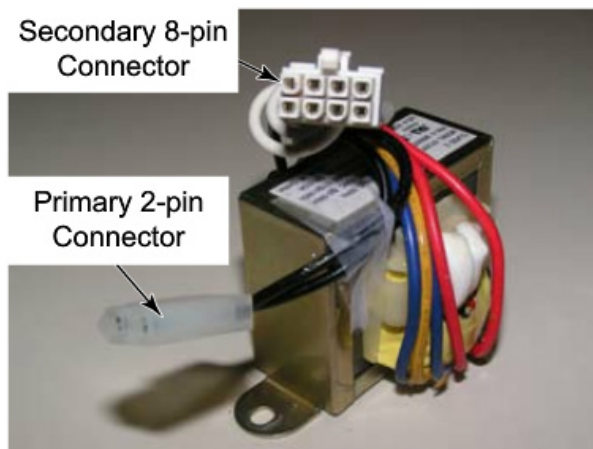


NOTE: Dryers that have poor ventilation and exhibit higher than normal venting back-pressure, can begin cycling the heater with the High Temp Thermostat rather than the Operating Thermostat. When this occurs poor drying or long dry times are usually the result.

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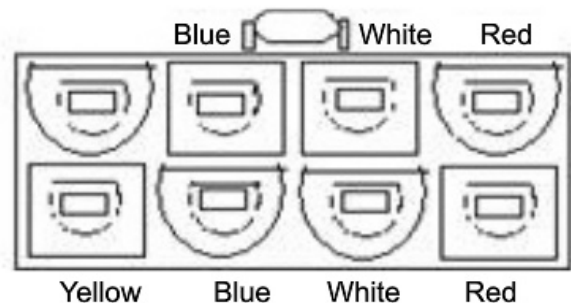
TRANSFORMER

1. Unplug dryer or disconnect power.
2. Turn off gas supply to dryer.
3. Remove the transformer (See page 4-5).
For stack models (See page 4-57).




4. Set the ohmmeter to the R X 1 scale.
Set digital ohmmeters to lowest scale.
5. Touch the meter test leads to the following terminals in transformer secondary 8-pin connector (shown below).

Red to Red = 28.5vac and 11 Ω .
 White to White = 22.5vac and 1.6 Ω .
 Blue to Blue = 5vac and 0.3 Ω .
 Yellow to Blue = 2.5vac and 0.1 Ω .



6. Touch the meter test leads to the following terminals in transformer primary 2-pin connector.

Black to Black = 120vac and 29 Ω .

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USER INTERFACE MEMBRANE SWITCH

1. Unplug dryer or disconnect power.
2. Turn off gas supply to dryer.
3. Remove the user interface membrane switch (See page 4-4).
For stack models (See page 4-56).
4. Set the ohmmeter to the R X 1 scale.
Set digital ohmmeters to lowest scale.

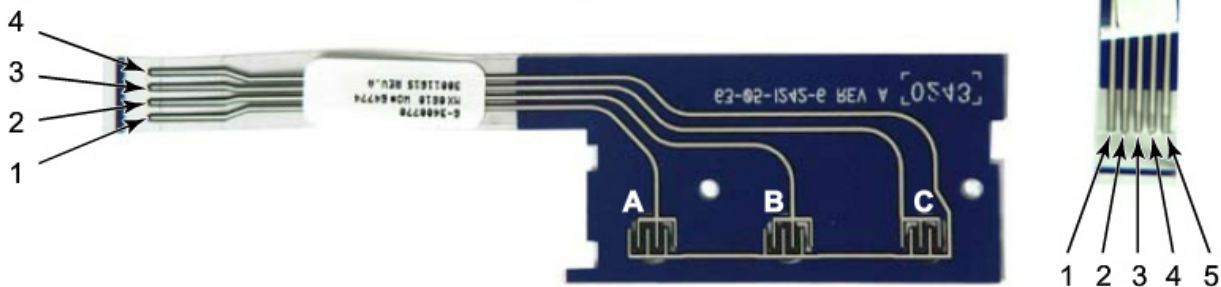
6 button user interface membrane switch


Contact	Contact	Button
4	5	A
2	5	B
3	5	C
4	1	D
2	1	E
3	1	F

5. Touch the ohmmeter test leads to the contacts listed. Press the button listed for each pair of contacts. The meter should indicate continuity (0 Ω). If the meter indicates an open circuit (infinite Ω), replace the membrane switch.

3 button user interface membrane switch

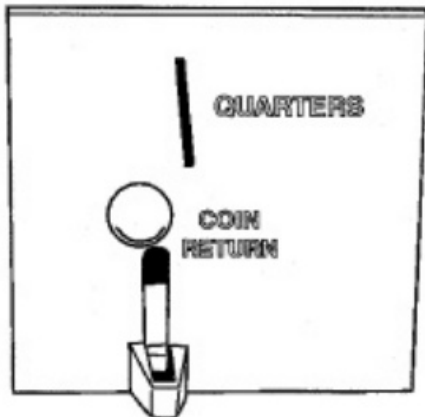
Contact	Contact	Button
1	4	A
2	4	B
3	4	C



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COIN DROP ACCEPTOR

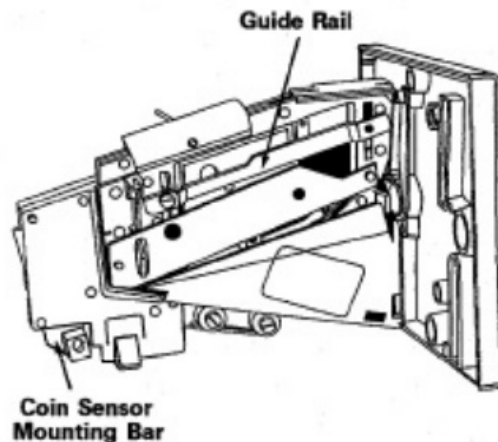
The coin drop acceptor is used only in the PD model dryers. This is a mechanical coin drop assembly with a coin sensor attached. In normal use, occasional cleaning in hot water is all that is needed to maintain reliable operation of the coin drop acceptor. The coin drop does not need to be oiled, as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



The coin drop assembly checks the diameter, thickness and magnetic properties of the coin.

There is a coin return button that can be pressed if the coin jams in the coin acceptor. 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 the coin) which is located at the base of the 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 specific time period for a coin to pass the coin sensor. If the coin fails to pass through at a certain speed, the microprocessor may assume the dryer is being tampered with or it is a non-valid coin. The dryer will then go into a standby mode and will not accept coins. The coin sensor is set in position at the time of manufacturing for the proper reading of coins.



A guide rail on the left plate of the coin drop assembly is adjustable (both at the front and rear) to accept proper diameter coins, yet reject oversized coins. Adjust the front and rear pins in the guide rail to just miss the quarter and tighten the front guide rail screws.

— NOTES —

DIAGNOSIS & TROUBLESHOOTING

⚠ WARNING



Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter

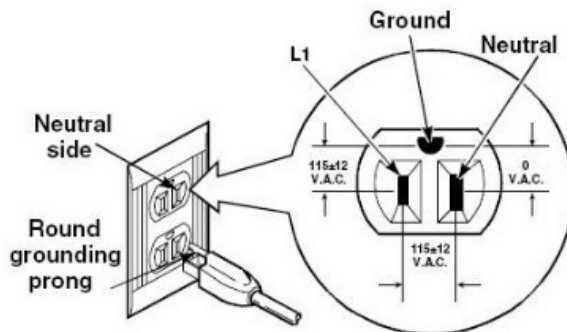
Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

PROPER GROUNDING AND POLARIZATION OF 120 VOLT WALL OUTLETS

All appliances have a three-prong power cord and **MUST** be connected to a properly polarized AND grounded wall outlet.

This information was written for those who do not understand grounding and polarization of a wall outlet. A 120 volt wall outlet must always be wired as shown below.




DIAGNOSTIC CODES

If the set-up mode is entered and one of the following has occurred, the appropriate diagnostic code will be in the display.

SINGLE DRYERS	
CODE	EXPLANATION
<i>d 1</i>	Dryer door sense error on control board or due to power line interference (cycles and price display disabled until diagnostic code is manually cleared).
<i>d 4</i>	Dryer motor control circuit error (cycles and customer display disabled until diagnostic code is manually cleared).
<i>d 5</i>	Blocked coin 1 or coin drop control circuit failure (coin recognition and customer display disabled while blockage persists).
<i>d 9</i>	Voltage detected below 90 VAC for 8 seconds.
<i>d 12</i>	Motor sense error on control board or due to power line interference (cycles and customer display disabled until diagnostic code is manually cleared).
<i>d 13</i>	Blocked coin 2 or coin drop control circuit failure (coin recognition and price display disabled while blockage persists).
<i>d 16</i>	Not receiving communications from installed debit card reader in Enhanced (Generation 2) Debit mode.
STACKED DRYERS	
<i>d 1</i>	Upper dryer door sense error on control board or due to power line interference (upper dryer cycles and upper dryer display disabled until diagnostic code is manually cleared).
<i>d 4</i>	Lower dryer motor control circuit error (lower dryer cycles and lower display disabled until diagnostic code is manually cleared).
<i>d 5</i>	Blocked coin 1 or coin drop control circuit failure (coin recognition and price display disabled while blockage persists).
<i>d 9</i>	Voltage detected below 90 VAC for 8 seconds.
<i>d 12</i>	Lower dryer motor sense circuit error on control board or due to power line interference (lower dryer cycles and lower dryer display disabled until diagnostic code is manually cleared).
<i>d 13</i>	Blocked coin 2 or coin drop control circuit failure (coin recognition and price display disabled while blockage persists).
<i>d 14</i>	Upper dryer motor sense circuit error on control board or due to power line interference (upper dryer cycles and upper dryer display disabled until diagnostic code is manually cleared).
<i>d 16</i>	Not receiving communications from installed debit card reader in Enhanced (Generation 2) Debit mode.
<i>d 17</i>	Lower dryer door sense error on control board or due to power line interference (lower dryer cycles and lower dryer display disabled until diagnostic code is manually cleared).
<i>d 20</i>	Upper dryer motor control circuit error (upper dryer cycles and upper dryer display disabled until diagnostic code is manually cleared).


TROUBLESHOOTING GUIDE

	⚠ WARNING
<p style="text-align: center;">Electrical Shock Hazard</p> <p>Disconnect power before servicing.</p> <p>Replace all parts and panels before operating.</p> <p>Failure to do so can result in death or electrical shock.</p>	

PROBLEM	POSSIBLE CAUSE / TEST
NOTE: Possible Cause/Tests MUST be performed in the sequence shown for each problem.	
WON'T POWER UP. (No display)	1. Supply connections. See TEST #1. 2. Check harness connections. 3. Console electronics and housing assembly. See TEST #5. 4. Check for loose connections at Transformer.
WON'T START CYCLE WHEN CYCLE BUTTON IS PRESSED.	1. If Select Cycle is flashing, ensure the door is completely shut, and press and hold down a Cycle button for about 1 second. 2. See TEST #2. 3. See TEST #6.
WON'T SHUT OFF WHEN EXPECTED.	1. PD / PR Models: Console electronics and housing assembly. See TEST #5. 2. CS Models: Timer cam not pressed on to timer body tight, missing timer cam lug, excess cycles accumulated on timer, timer motor or gear box stuck or broken timer. 3. MN Models: Timer stuck or damaged.
CONTROL WON'T ACCEPT SELECTIONS.	Keypad Assembly. See TEST #5.
WON'T HEAT.	1. Heater. See TEST #3. 2. Check harness connections. 3. Check installation.

TROUBLESHOOTING TESTS

⚠ WARNING



Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

NOTE: These checks are done with the dryer unplugged or disconnected from power.

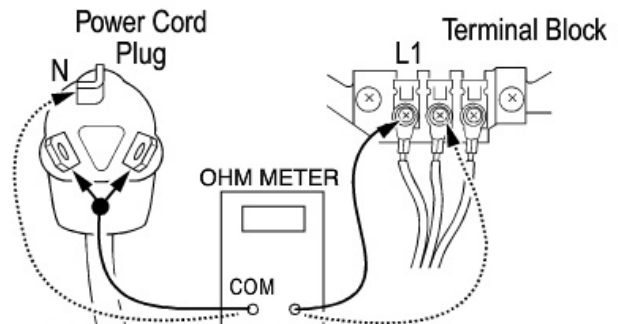
TEST #1 Supply Connections

This test assumes that proper voltage is present at the outlet, and visual inspection indicates that the power cord is securely fastened to the terminal block (electric dryer) or wire harness connection (gas dryer).

ELECTRIC DRYER

1. Unplug dryer or disconnect power.
2. Remove the cover plate from the upper right corner of the back of the dryer. (See photo page 6-4).
3. With an ohmmeter, check for continuity between the neutral (N) terminal of the plug and the center contact on the terminal block. See illustration above.
 - If there is no continuity, ensure that the white wire is at the center position on the terminal block. If not correct the wiring. If it is, then replace the power cord and test the dryer.
 - If wired correctly and there is continuity, go to step 4.

4. In a similar way, check which terminal of the plug is connected to the left-most contact on the terminal block and make a note of it. This will be L1 (black wire) in the wiring diagram.



- When this is found, go to step 5.
 - If neither of the plug terminals have continuity with the left-most contact of the terminal block, replace the power cord and test the dryer.
5. Access the machine control electronics without disconnecting any wiring to the dryer control board.
 6. With an ohmmeter, check for continuity between the L1 terminal of the plug (found in step 4) and black wire on the dryer control transformer.
 - If there is continuity, go to step 7.
 - If there is no continuity, check that wires on the terminal block are mechanically secure. If not, tighten securely, if this cannot be accomplished, replace the terminal block assembly. If secured tightly, replace the main wire harness and test the dryer.
 7. Check for continuity between the neutral (N) terminal of the plug and white wire on the dryer control transformer.
 - If there is continuity, go to step 8.
 - If there is no continuity and the mechanical connections of the wire are secure, replace the main wire harness.

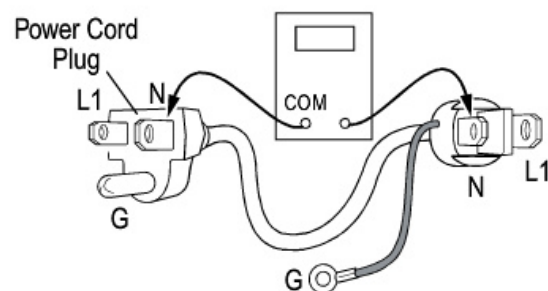
8. Visually check that the transformer is connected to the control board at AA6 and no wires are loose in the connector.
9. If both steps 8 & 9 pass, then reinstall the console electronics, console assembly, and all parts and panels before operating.
10. Plug in dryer or reconnect power.
11. Perform the Diagnostic Test to verify repair.
12. If display segment still does not light, the dryer control board has failed:
 - Unplug dryer or disconnect power.
 - Replace the dryer control board.
 - Reinstall all parts and panels before operating.
 - Plug in dryer or reconnect power.
 - Perform diagnostic test to verify repair.

GAS DRYER

1. Unplug dryer or disconnect power.
2. Remove the cover plate from the upper right corner of the back of the dryer.



3. Check that the power cord is firmly connected to the dryer's wire harness. Check continuity from each plug end to the wire harness connector just inside the cover plate. Check black to short plug end and white to long plug end as well as green to round plug end (See page 6-1).
4. Access dryer control electronics without disconnecting any wiring to the dryer control board.
5. With an ohmmeter, check for continuity between the neutral (N) terminal of the plug and white wire (N) of the harness connector. The left-hand side of the illustration below shows the position of the neutral terminal (N) on the power cord plug.
 - If there is continuity, go to step 6.
 - If there is no continuity, or an open circuit (infinite Ω) is found, replace the power cord. Otherwise, go to step 6.



6. In a similar way, check the continuity between the L1 terminal of the plug and black wire at the harness connection.
 - If there is continuity, go to step 8.
 - If there is no continuity, check the continuity of the power cord in a similar way to that illustrated in step 5, but for power cord's L1 wire.
 - If an open circuit (infinite Ω) is found, replace the power cord. Otherwise, go to step 7.
7. Replace the main harness.
8. Visually check that the transformer is connected to the UIC at AA6 and no wires are loose in the connector.
9. Visually check that the P2 connector is inserted all the way into the dryer CCU control board.
10. Visually check that all UIC connections are tight and all wires secured into connectors.
11. If all of the visual checks pass, reinstall the console electronics, housing assembly, and all parts and panels before operating.
12. Plug in dryer or reconnect power.
13. Perform the Diagnostic Test to verify repair.
14. If indicators do not light, the dryer UIC electronics has failed:
 - Unplug dryer or disconnect power.
 - Replace the dryer UIC.
 - Reinstall all the parts and panels before operating.
 - Plug in dryer or reconnect power.
 - Perform Diagnostic Test to verify repair.

TEST #2 Motor Circuit Test

This test will check the wiring to the motor and the motor itself. The following items are part of this motor system:

Part of Motor System	Electric Dryer	Gas Dryer
Harness / connection	yes	yes
Thermal fuse	yes	no
Belt / belt switch	yes	yes
Drive motor	yes	yes
Centrifugal switch	yes	yes
Door switch	yes	yes
Machine control electronics. See ESD information.	yes	yes

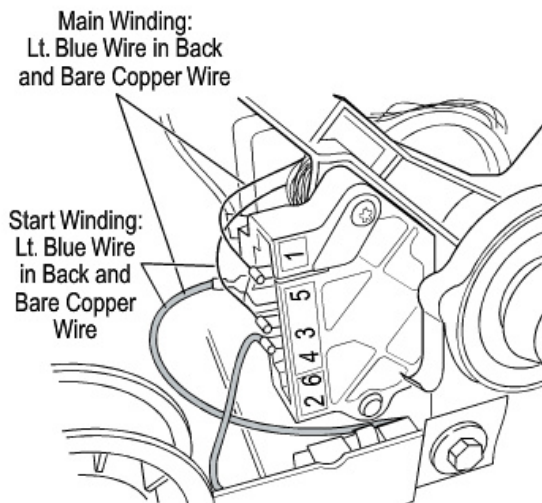
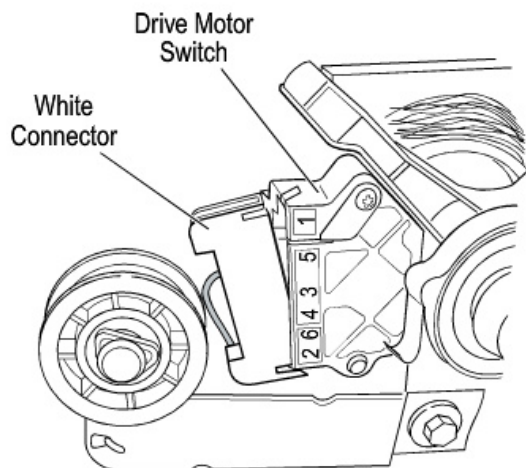
1. Unplug dryer or disconnect power.

ELECTRIC DRYERS ONLY: Check the thermal fuse. See TEST #3a.

ALL DRYERS: Continue with step 4 below to test the remaining components in the motor circuit.

Continued on next page:

2. Check the belt switch, and drive motor. Remove the drum belt from the spring loaded idler pulley.
3. Remove the white connector from the drive motor switch (see illustration below).



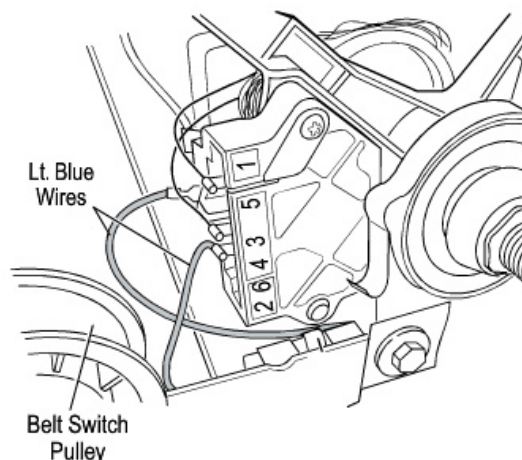
4. Check for the resistance values of the motor's Main and Start winding coils as shown below.

NOTE: Main and Start winding coils must be checked at the motor.

Winding	Resistance (Ω)	Contact Points of Measurement
MAIN	2.4 - 3.6 Ω	Lt. blue wire in back at pin 4 and bare copper wire on pin 5 of black drive motor switch.
START	2.4 - 3.8 Ω	Lt. blue wire in back at pin 4 and bare copper wire on pin 3 of black drive motor switch.

- If the resistance at the motor is correct, there is an open circuit (infinite Ω) between the motor and machine control electronics. Check for failed belt switch.

5. Check the belt switch by measuring resistance between the two light blue wires, as shown below, while pushing up the belt switch pulley.



- If the resistance reading goes from infinity to a few ohms as pulley arm closes the switch, belt switch is OK. If not, replace the belt switch.
- If belt switch is OK and there is still an open circuit (infinite Ω), check and repair the wiring harness.
- If the Start winding is in question and the resistance is much greater than 4 Ω , replace the motor.

6. Door Switch problems can be uncovered in the Door Switch Diagnostic Test; however, if this was not done, the following can be done without applying power to the dryer. Connect an ohmmeter across neutral, white or any bare ground connection and the red connector on terminal #8 of the AA7 connector on the control board.

- With the door properly closed, the ohmmeter should indicate a Closed circuit (0–2 Ω).
- If not, replace the door switch assembly.

TEST #3 Heater Test

This test is performed when either of the following situations occur:

- Dryer does not heat
- Heat will not shut off

This test checks the components making up the heating circuit. The following items are part of this system:

Part of Heating system	Electric Dryer	Gas Dryer
Harness / connection	yes	yes
Heater relay	yes	yes
High temp cutout	yes	yes
Thermal fuse	no	yes
High temp thermostat	yes	yes
Heat element assembly	yes	no
Gas burner assembly	no	yes
Centrifugal switch	yes	yes
Exhaust thermistor	yes	yes
Machine control electronics. See ESD information.	yes	yes
Console electronics and housing assembly	yes	yes
Gas supply	no	yes

Dryer does not heat:

ELECTRIC DRYER:

1. Unplug dryer or disconnect power.
2. Remove the service panel to access the thermal components.
3. Using an ohmmeter and referring to the wiring diagram, measure the resistance from the violet wire at the thermal cutoff to the red wire at the heater.
 - If the resistance is about 10 Ω , go to step 5.
 - If an open circuit (infinite Ω) is detected, go to step 4.
4. Visually Check the wire connections to the high temp cutout, high temp thermostat, and heater. If connections look good, check for continuity across each of these components. Replace the heater if it is electrically open. Replace both the high temp cutout and high temp thermostat if either one is electrically open.
5. If no open circuit (infinite Ω) is detected, measure resistance at the orange wires located on the Heater Relay Coil. When checking the relay coil first pull the orange wires off the relay. Using an ohm meter check for continuity.
 - If the circuit shows open, replace the relay.
 - If coil shows continuity replace the dryer control board.
 - If the resistance is less than 1k Ω , replace the operating thermistor.

GAS DRYER:

1. Unplug dryer or disconnect power.
2. Locate the red wire at the gas valve and the black wire on the thermal fuse that is coming from the control board (not the black wire that is going to the operating t/stat), remove this black wire on the thermal fuse and check resistance from the bare terminal on the thermal fuse to the red wire at the gas valve. If there is continuity then skip to step 8.
3. Remove the service panel to access the thermal components.
4. Perform TEST #3a. If the thermal fuse is OK, go to step 5.
5. Check both operating t/stats by removing one of the wires on the terminals and checking for continuity across both terminals of each operating t/stat. If an open circuit is detected, replace that t/stat.
6. Perform TEST #3b. If the high temp cutout is OK, go to step 7.
7. Locate the high temp thermostat. Measure the continuity through it by touching the meter probes on the red wire and the blue wire.
 - If there is an open circuit (infinite Ω), replace the high temp thermostat and high temp cutout as a set.
 - Otherwise, go to step 8.
8. Perform TEST #3c (Gas Valve Test). If this is OK, replace the dryer control board.

Dryer will not shut off:

1. Unplug dryer or disconnect power.
2. Check for excess cycles loaded on the timer by rotating the timing gear. Both timer arms need to move when the timer clicks in order to be clear of cycles. See page 4-8
3. Access the dryer mechanical timer, and measure the voltage at the timer motor.
 - If there is 120 volts at the timer motor, check the timer motor terminals.
 - Timer motor terminals OK, replace the timer.

TEST #3a Thermal Fuse Test

ELECTRIC DRYER: The thermal fuse is wired in series with the dryer drive motor.

GAS DRYER: The thermal fuse is wired in series with the dryer gas valve.

ALL DRYERS:

1. Unplug dryer or disconnect power.
2. Access the thermal fuse.
3. Disconnect wires from thermal fuse. Using an ohmmeter, check continuity across the thermal fuse.
 - If the ohmmeter indicates an open circuit (infinite Ω), replace the failed thermal fuse.

TEST #3b High Temp Cutout Test

If the dryer does not produce heat, check the status of the high temp cutout.

1. Unplug dryer or disconnect power.
2. Access the high temp cutout.
3. Using an ohmmeter, check the continuity across the high temp cutout.
 - If the ohmmeter indicates an open circuit (infinite Ω), replace the failed high temp cutout and high temp thermostat. In addition, check for blocked or improper exhaust system, or failed heat element (electric dryer).

TEST #3c Gas Valve Test

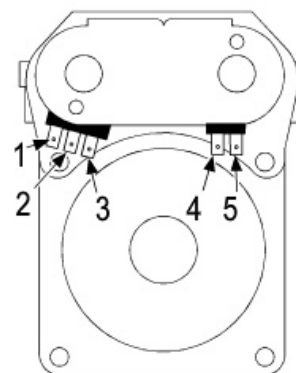
1. Unplug dryer or disconnect power.
2. Access the gas valve.

Use an ohmmeter to determine if a gas valve coil has failed. Remove harness plugs. Measure resistance across terminals. Readings should match those shown in the following chart. If not, replace coil.

Terminals	Resistance
1 to 2	1365 $\Omega \pm 25$
1 to 3	560 $\Omega \pm 25$
4 to 5	1220 $\Omega \pm 50$

IMPORTANT:

Ensure all harness wires are looped back through the strain relief after checking or replacing coils.

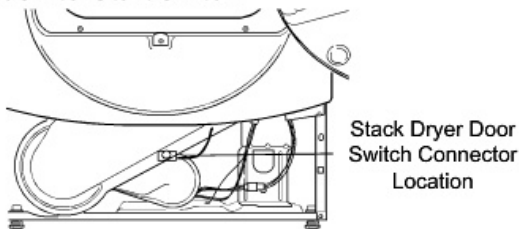


TEST #4 Door Switch Test

Activate Diagnostic Test Mode, and perform a Door Switch Test. Functionality can be verified by the appearance of a degree symbol above a digit each time door is closed, but goes away when the door is opened again.

If the Door Switch Test does not reveal the degree symbol (small circle above the digit) in the display when the door is closed:

- Unplug dryer or disconnect power.
- Check that the wires between the door switch and dryer control are connected. On electronically controlled dryers: control board connector AA7 (pin #8) to neutral are the door switch connections. CS and MN Models need to be checked at the door switch connector, or from neutral to the Push-to-Start switch.



- If the connections are OK, replace the door switch assembly and retest.
- If wire and door switch assembly have been replaced and dryer still does not start, replace the control board.

TEST #5 Exhaust Temperature Test:

1. Hold a thermometer capable of reading from 90° to 180° F (32° to 82° C) in the center of the exhaust outlet. The correct exhaust temperatures are as follows:

EXHAUST TEMPERATURES		
FABRIC SETTING	HEAT TURNS OFF*	HEAT TURNS ON
Whites And Colors	155° ± 5°F (68° ± 3°C)	10-15° F (6-8° C) Below the heat turn off temperature
Perm. Press	155° ± 5°F (68° ± 3°C)	
Delicates	140° ± 5°F (60° ± 3°C)	

* The measured overshoot using the thermometer in the exhaust outlet can be 30°F (17°C) higher.

2. If the exhaust temperature is not within specified limits, unplug dryer or disconnect power. See dryer does not heat page 6-8.
 - If thermostats check OK look for exhaust restrictions.

TROUBLESHOOTING DRYER OPERATION

Dryer will not run

- Is there anything in the display lit?

If not, check incoming voltage and transformer connections.

- Has a household fuse blown, or has a circuit breaker tripped?

There may be 2 fuses or circuit breakers for an electric dryer. Check that both fuses are intact and tight, or that both circuit breakers have not tripped. Replace the fuse or reset the circuit breaker. If the problem continues, call an electrician.

- Was a regular fuse used?

Use a time-delay fuse.

- Is the correct power supply available?

Electric dryers require a 240-volt power supply, delivering 30 amps of current.

- Is the dryer door firmly closed?

- Listen for the door switch(es)?
If they can't be heard, replace the switch(es).

- Was the cycle button pressed firmly?

No heat

- Has a household fuse blown, or has a circuit breaker tripped?

The drum may be turning, but there may not be heat. Electric dryers may use two fuses or circuit breakers. Replace blown fuse(s) or reset the circuit breaker(s). If the problem continues, call an electrician.

- Is voltage supplied to heat element?

- Is the shut-off valve open on the gas supply line? Also check shut-off valve on right side of gas burner.

- Is correct gas pressure supplied?

- Has the dryer been sitting unused for a long while?

Check the gas valve orifice for a blockage.

Dryer displaying code message

- A blank screen when power is applied may indicate a failure mode, enter diagnostics mode to get the code displayed then check the diagnostic codes table.

- Cannot enter diagnostic mode or display shows no failure code, check for 120vac at transformer primary.

Primary voltage good, check secondary voltage.

- Check for 22.5vac at the transformer secondary or on the control board at the AA6 connector.

Voltage not present, replace transformer.

Voltage present, replace control board.

Unusual sounds

- Has the dryer had a period of non-use?

If the dryer hasn't been used for a while, there may be a thumping sound during the first few minutes of operation. The same thumping sound can be caused by a drum installed backwards.

- Is a coin, button or paper clip caught between the drum and front or rear of the dryer?

Check the front and rear edges of the drum for small objects.

- Is it a gas dryer?

The gas valve clicking is a normal operating sound.

- Are the 4 legs installed, and is the dryer level front to back and side to side?

The dryer may vibrate if not properly installed. See installation instructions.

Excessive vibration can also be due to missing vibration pad under the motor bracket. see page 4-39.

- Is the clothing knotted or balled up?

When balled up, the load will bounce, causing the dryer to vibrate. Separate the load items and restart the dryer.

- Is the noise from the blower?

Lint balls in the blower wheel causes noise.

- Is the vent connected to the dryer?

Dryer makes more noise with the vent off.

Display flashes in user mode

- Ensure coin box is inserted all the way and locked in place.

- Check physical position of vault switch.

If position is correct check switch wiring and harness connections.

If wiring checks OK, check AA1 connector on control board.

- Unplug dryer and AA1 connector from control board, check continuity between the black and orange wires in the connector.

Continuity not found, recheck the wire harness and connectors from AA1 connector to vault switch. Replace the switch wire harness if no problem can be found and the switch checks out fine.

Continuity is good reinstall the AA1 connector and check operation. If display is still flashing, replace the control board.

Dryer reverts to default options

- Set-up the desired options and save the settings. Unplug the dryer for 15 seconds. Reapply power to dryer, if operator desired options revert to factory defaults, replace control board.

TROUBLESHOOTING DRYER RESULTS

Clothes are not drying satisfactorily, drying times too long, or load is too hot

- **Is the lint screen clogged with lint?**

Lint screen should be cleaned before each load.

- **Is the exhaust vent of outside exhaust hood clogged with lint, restricting air movement?**

Run the dryer for 5 - 10 minutes. Feel under the outside exhaust hood to check for air movement. If there is no air movement, clean exhaust system of lint or replace exhaust vent with rigid metal or flexible metal vent. See venting requirements.

- **Are fabric softener sheets blocking the grille?**

Use only one fabric softener sheet, and use it only once.

- **Is the exhaust vent the correct length?**

Check that the exhaust vent is not too long or has too many turns. Long venting will increase drying times. Back pressure measured at the exhaust outlet of the dryer should be less than 1" but more than 0" water column. See venting requirements.

- **Is the exhaust vent diameter the correct size?**

Use 4 inch (10.2 cm) diameter vent material.

- **Is the dryer located in a room with temperatures below 45°F (7°C)?**

Proper operation of dryer Cycles requires

supply air temperatures above 45°F (7°C).

- **Is the dryer located in a closet?**

Closet doors must have ventilation openings at the top and bottom of the door. The front of the dryer requires a minimum of 1" (2.54 cm) of airspace, and, for most installations, the rear of the dryer requires 5" (12.7 cm).

- **Has the correct cycle been selected?**

Select the right cycle for the types of garments being dried.

- **Is the load too large and heavy to dry quickly?**

Separate the load to tumble freely.

Check washer for proper spin speeds and moisture extraction.

- **If operating this electric dryer on 208v**

The 208 volt heater element kit should be installed, otherwise the dryer will lose about 25% efficiency.

USA part #W10206352A (5100 watts),

Canada part #W10206351A (4100 watts).

Lint on load

- **Is the lint screen clogged?**

Clean lint screen. Check for air movement.

Check for proper detergent use in washer.

Stains on load or drum

- **Was dryer fabric softener properly used?**

Add dryer fabric softener sheets at the beginning of the cycle. Fabric softener sheets added to a partially dried load can stain garments.

Drum stains are caused by dyes in clothing (usually blue jeans). This will not transfer to other clothing.

Black oily soot on the drum and clothes can be caused by a dryer not set-up properly to burn LP gas.

Loads are wrinkled

- **Was the load removed from dryer at the end of the cycle?**

- **Was the dryer overloaded?**

Dry smaller loads that can tumble freely.

- **Check for proper cool down period at cycle end.**

Hot clothes left to sit will set wrinkles more easily.

Odors

- **Was there painting, staining or varnishing being done in the area where the dryer is located?**

If so, ventilate the area. When the odors or fumes are gone from the area, rewash and dry the clothing.

- **Is the dryer being used for the first time?**

The new electric heating element may have an odor. The odor will be gone after the first cycle.

DRYER DIAGNOSTIC MODE

This mode is entered by depressing DELICATES for one second while in set-up code 6 (or while dAS displays if operating with Maytag Data Acquisition setup) or with a diagnostic code present. Diagnostic codes are cleared on entry and all display segments should flash. If a diagnostic code persists, it must be corrected before the diagnostic cycle may be executed.

All Single Load Models:

With all segments flashing, the diagnostic cycle is started by depressing the PERM. PRESS button. The cycle consists of 7 minutes of heat and 1 minute of cool down.

The WHITES AND COLORS button will increment the diagnostic cycle minutes up to 99, then roll over to 2 minutes. The DELICATES button will cancel this cycle and exit the diagnostic mode.

Stacked Models Only:

There are 2 procedures to initiate cycle activity from diagnostic mode for these models:

1. Upper Dryer Field Diagnostic Cycle – With the entire display flashing, the cycle is started by pressing the UPPER DRYER PERM. PRESS button. The cycle consists of 7 minutes of heat and 1 minute of cool down. The UPPER DRYER WHITES AND COLORS button will increment the diagnostic cycle minutes up to 99, then roll over to 2 minutes. Pressing the LOWER DRYER DELICATES button will cancel this cycle and exit the diagnostic mode.
2. Lower Dryer Field Diagnostic Cycle – With entire display flashing, the cycle is started by pressing the LOWER DRYER PERM. PRESS button. The cycle consists of 7 minutes of heat and 1 minute of cool down. The LOWER DRYER WHITES AND COLORS button will increment the diagnostic cycle minutes up to 99, then roll over to 2 minutes. Pressing the LOWER DRYER DELICATES button will cancel this cycle and exit the diagnostic mode.

DRYER HELP MODE

Dryer help mode is entered by pressing the WHITES AND COLORS button while in special pricing option step 2.XX (or while dAS displays if operating with Maytag Data Acquisition setup). In help mode, the software revision is displayed in the digits. Press the WHITES AND COLORS button at any time to exit help mode.

In help mode, other display symbols and elements are mapped to reflect the state of various inputs and outputs as follows:

SINGLE LOAD DRYERS ONLY:

* low voltage present (below about 90 VAC)
 circle above digit door closed
 &. 60°C (140°F) thermostat closed
 OR. motor sensed running
 AIR. heater/gas valve relay on
 FLUFF motor relay on

STACKED MODELS ONLY:

Upper Dryer Only – Upper Half of Display

* low voltage present (below about 90 VAC)
 ▲ upper dryer motor sensed running
 circle beside digit upper dryer door closed
 COOL upper dryer 60°C (140°F) thermostat closed
 OR. upper dryer heater relay on
 &. upper dryer motor relay on

Lower Dryer Only – Lower Half of Display

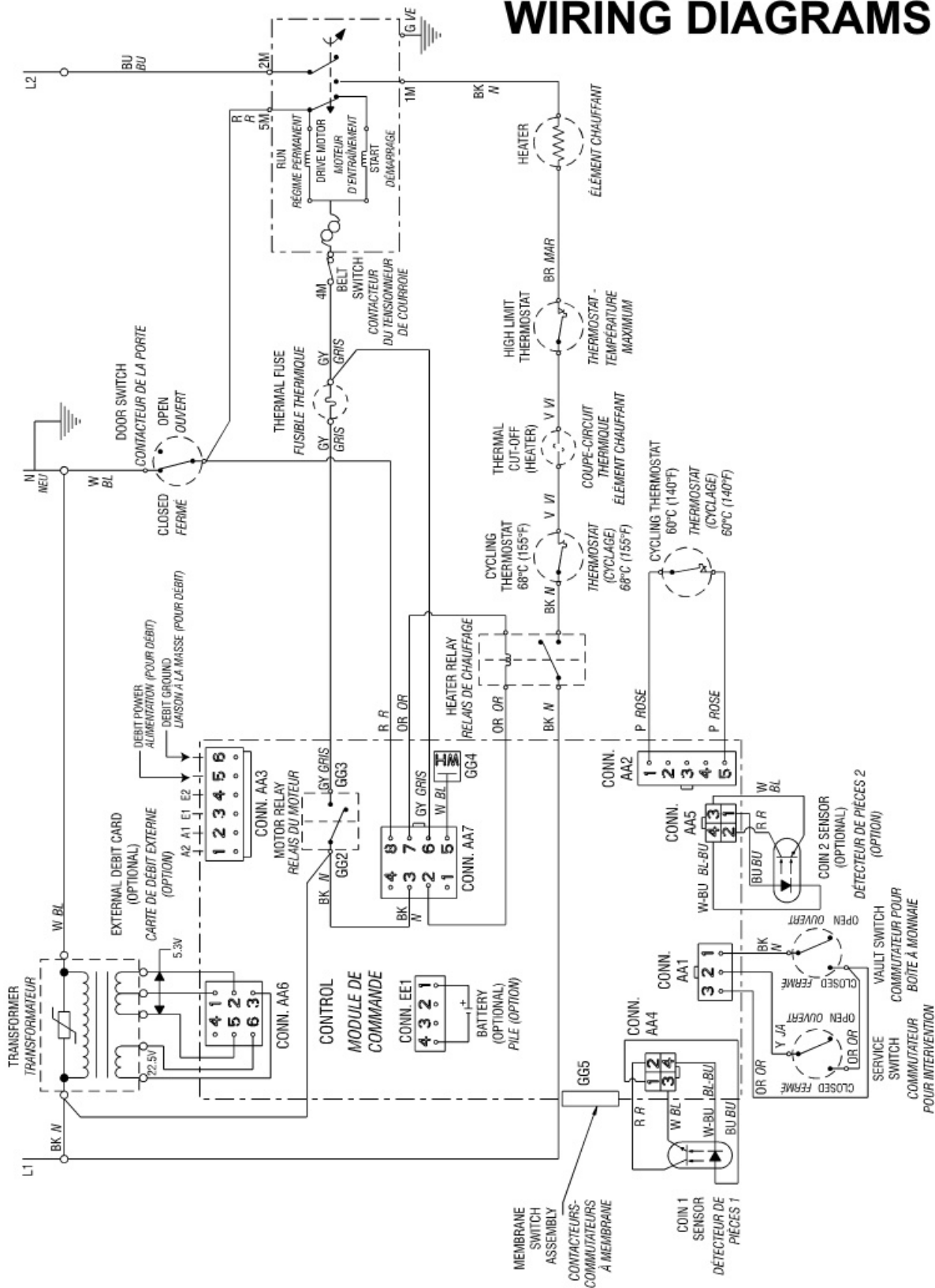
▼ lower dryer motor sensed running
 circle beside digit lower dryer door closed
 COOL lower dryer 60°C (140°F) thermostat closed
 OR. lower dryer heater relay on
 &. lower dryer motor relay on

Help Codes

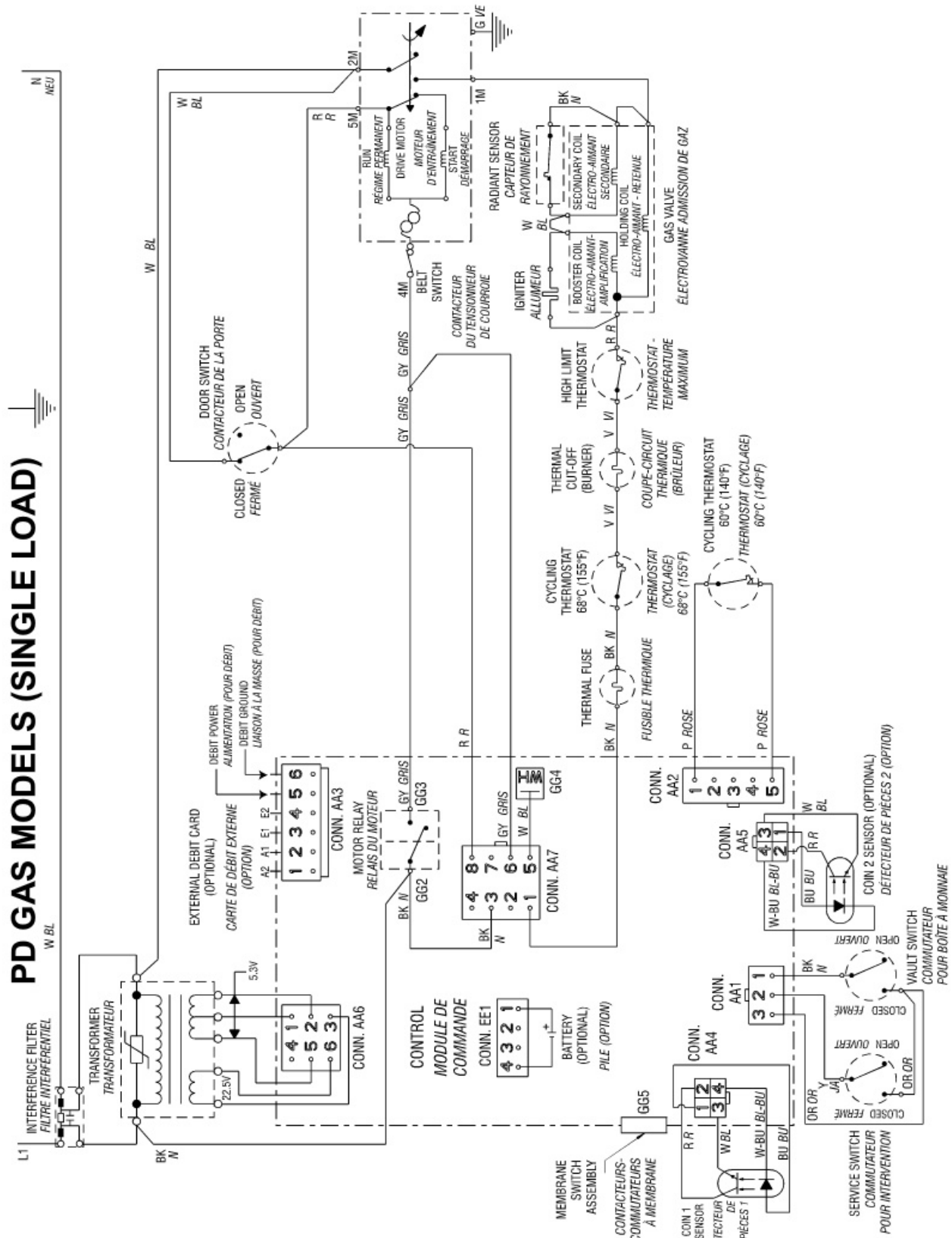
Help Code	Description
71	Generation 2 debit card cycle polling message out of sequence
74	Generation 2 debit card remaining balance message out of sequence
75	Generation 2 debit card new card balance message out of sequence
88	Invalid messaging state found in da communications comm_suprv () routine

— NOTES —

PD ELECTRIC MODELS (SINGLE LOAD)



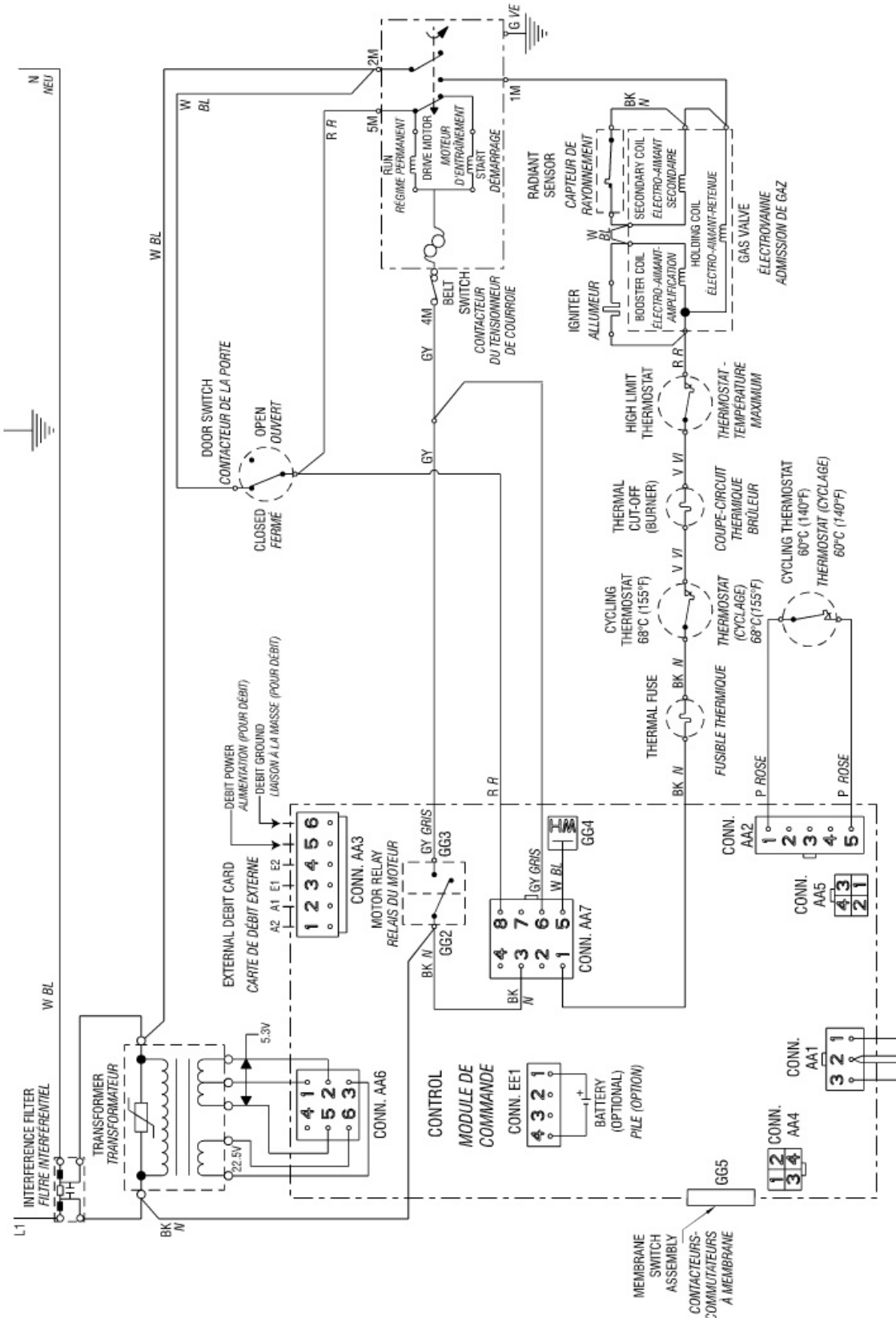
7-1



7-3



PR GAS MODELS (SINGLE LOAD)



7-4

CANADIAN CS MODELS

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING US PATENTS:

4663200, 4700495, 4754556, 4849285, 4865366, 4899464, 4908999, 4889347, 5066050, 5560120, 5809828, 6020698, 6047486, 6199300, 6446357, D314261, D314262, D457991, D457992

MANUFACTURADO BAJO UNA O MAS DE LAS SIGUIENTES PATENTES MEXICANAS:

189136

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING CANADIAN PATENTS:

FABRIQUE SOUS UN OU PLUSIEURS DES BREVETS CANADIENS SUIVANTS:

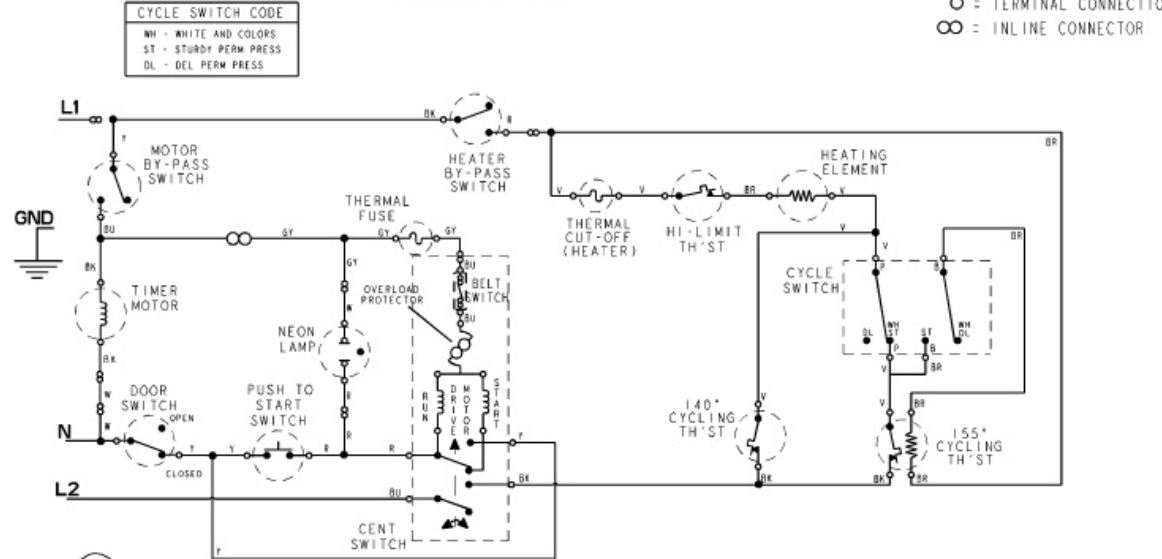
1273387, 1315539, 2016304

PART NO	REV	CANADIAN MODEL
W10163148	E	MDE17CSAZW

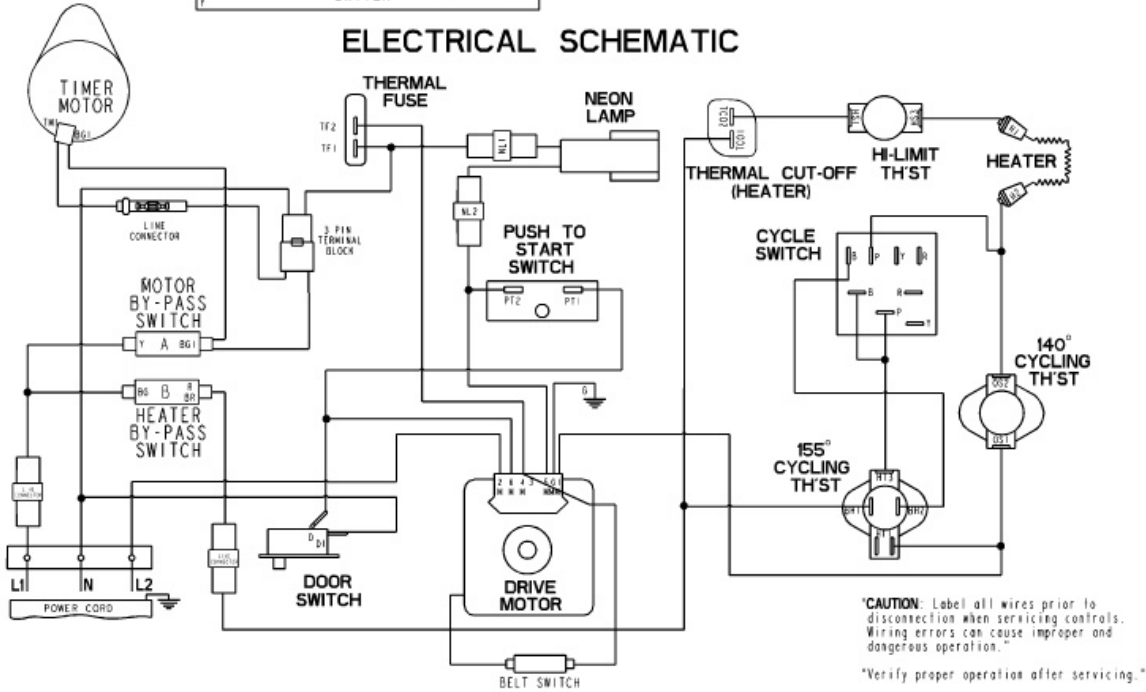
● = HARNESS CONNECTION

○ = TERMINAL CONNECTION

∞ = INLINE CONNECTOR



ELECTRICAL SCHEMATIC



ELECTRICAL WIRING DIAGRAM

CS MODELS

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING US PATENTS:

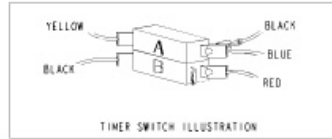
4669290, 4700495, 4754556, 4840285, 4865366, 4891464,
4908999, 4989347, 5066050, 5560120, 5809828, 6020698,
6047486, 6199300, 6446357, 6314261, 6314262, 6457991,
6457992

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING CANADIAN PATENTS:
FABRIQUE SOUS UN OU PLUSIEURS DES BREVETS CANADIENS SUIVANTS:

1273387, 1315539, 2016304

MANUFACTURADO BAJO UNA O MAS DE LAS SIGUIENTES PATENTES MEXICANAS:

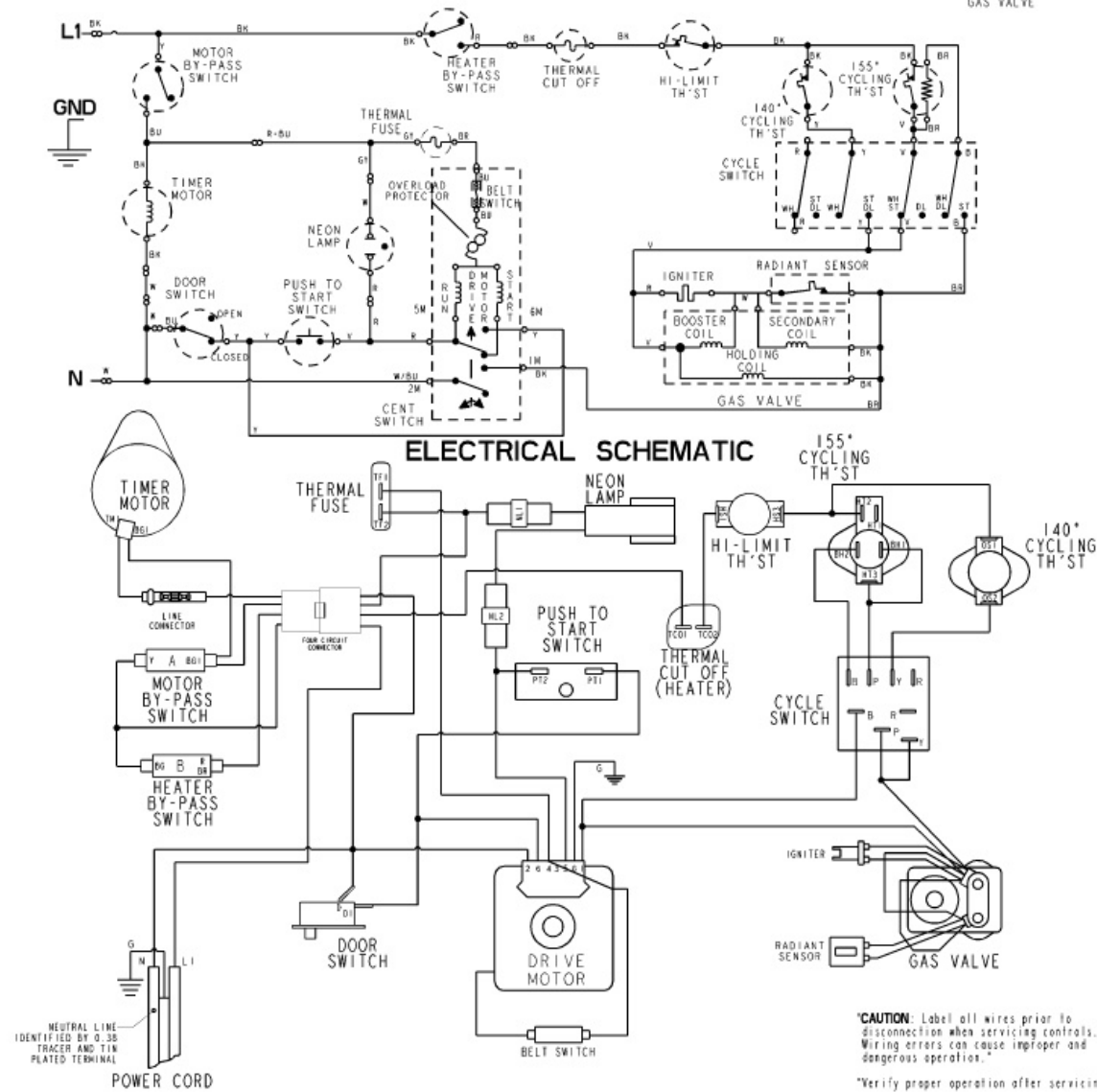
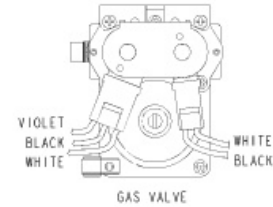
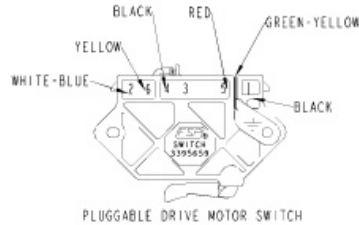
189136



PART NO	REV	MODEL
W10167622	D	MDG17CSAWW

- = HARNESS CONNECTION
- = TERMINAL CONNECTION
- ∞ = INLINE CONNECTOR

CYCLE SWITCH CODE	
WH	WHITE AND COLORS
ST	STURDY PERM PRESS
DL	DEL PERM PRESS



MN MODELS

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING US PATENTS:

4669200, 4700195, 4751556, 4840285, 4865366, 4899464,
4908959, 4983347, 5066050, 5560120, 5803828, 6020486,
6047486, 6199309, 6446357, D314261, D314262, D457991,
D457992

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING CANADIAN PATENTS:
FABRIQUE SOUS UN OU PLUSIEURS DES BREVETS CANADIENS SUIVANTS:

1273387, 1315539, 2016304

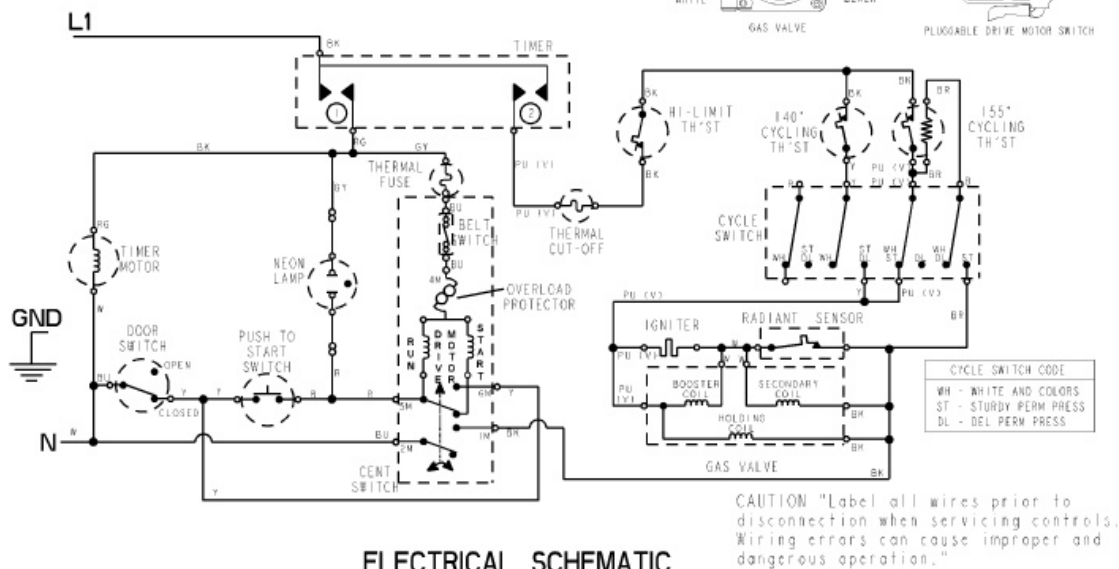
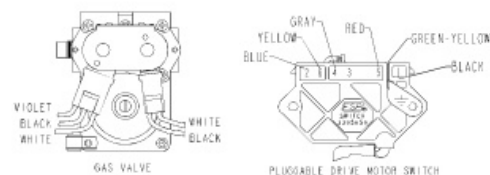
MANUFACTURADO BAJO UNA O MAS DE LAS SIGUIENTES PATENTES MEXICANAS:

189136

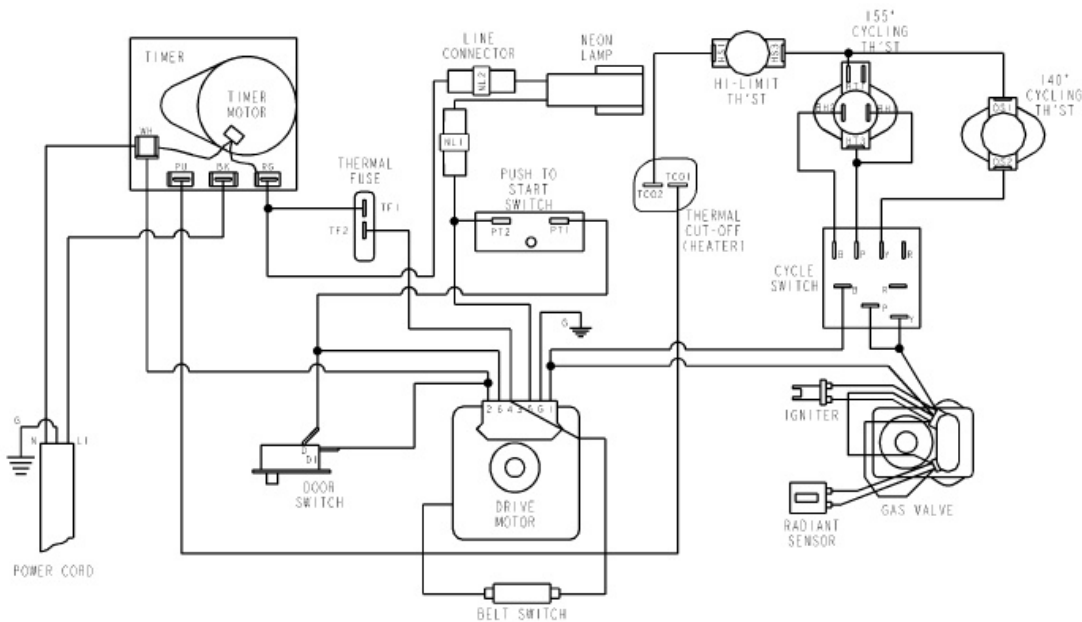
PART NO	REV	MODEL
W10167625	B	MDG17MNAWW

- = HARNESS CONNECTION
- = TERMINAL CONNECTION
- ∞ = INLINE CONNECTOR

TIMER INFORMATION		
LOAD	CIRCUIT	FUNCTION
○	DR-M	MOTOR
○	DR-HV	HEATER



ELECTRICAL SCHEMATIC

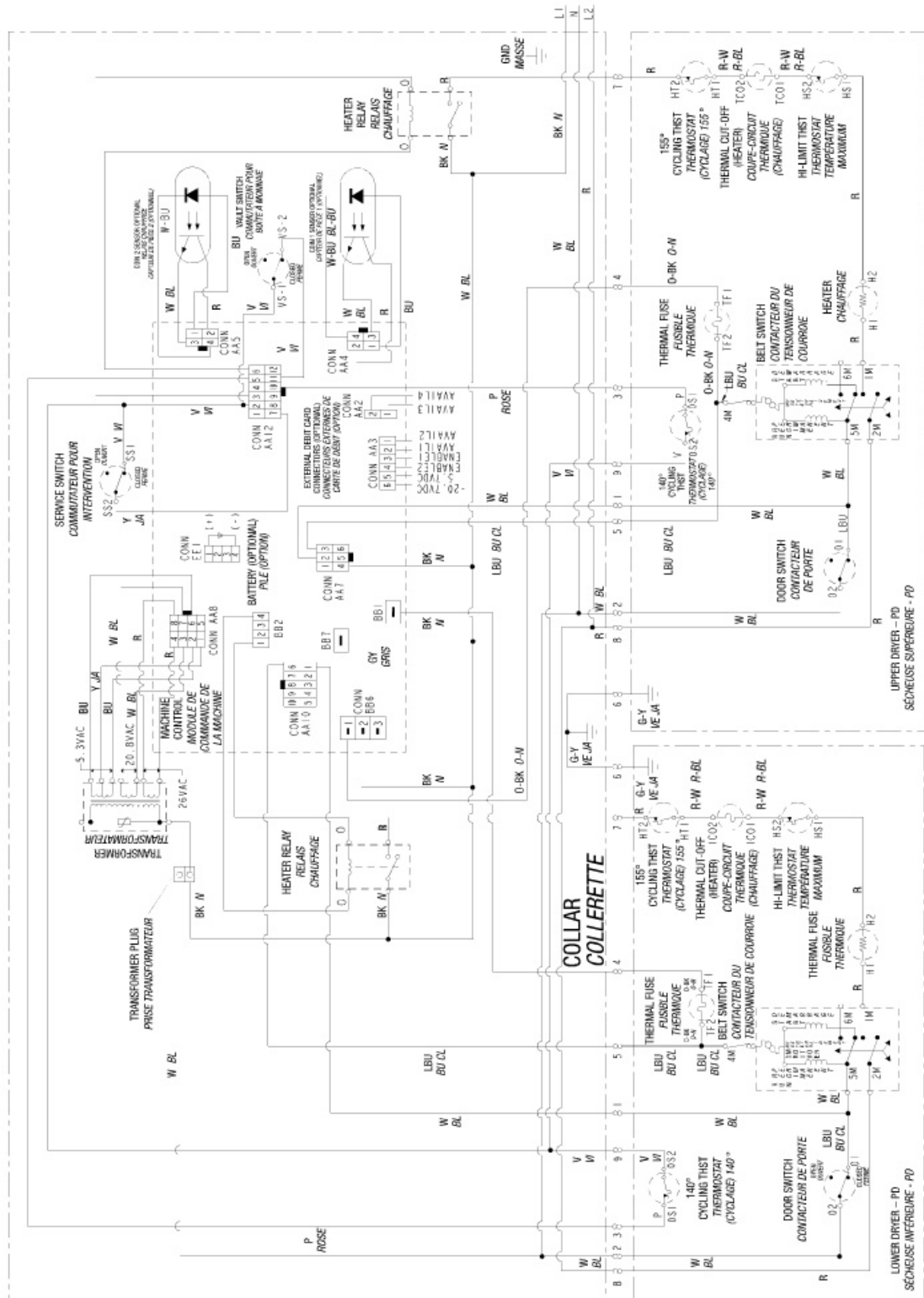


7-7

7-8



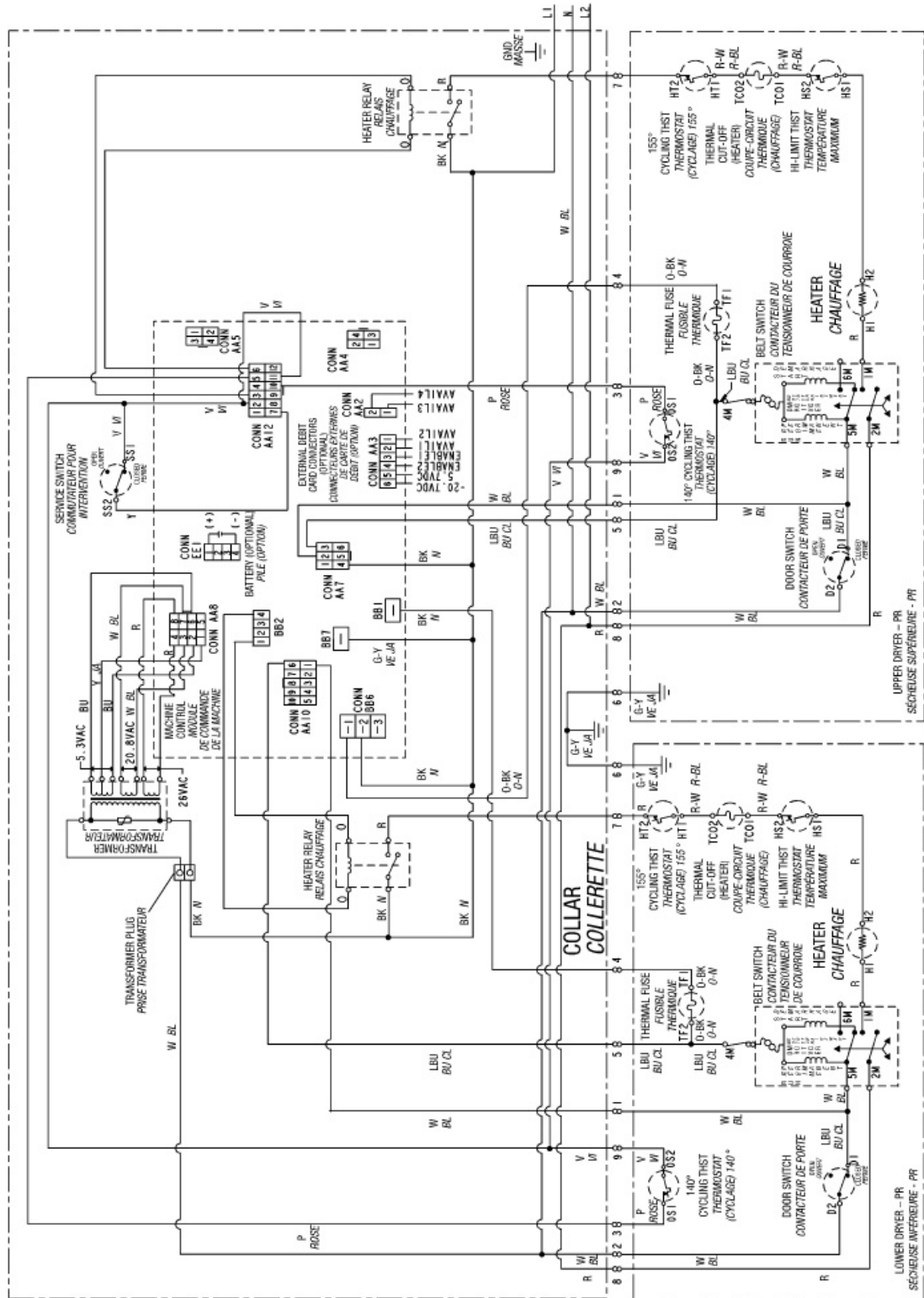
PD ELECTRIC MODELS (CANADIAN STACK LOAD)



[illegible]

WARNING - DISCONNECT FROM ELECTRICAL SUPPLY BEFORE SERVICING UNIT.
AVERTISSEMENT - DÉCONNECTER DE L'ALIMENTATION ÉLECTRIQUE AVANT D'INTERVENIR SUR L'APPAREIL

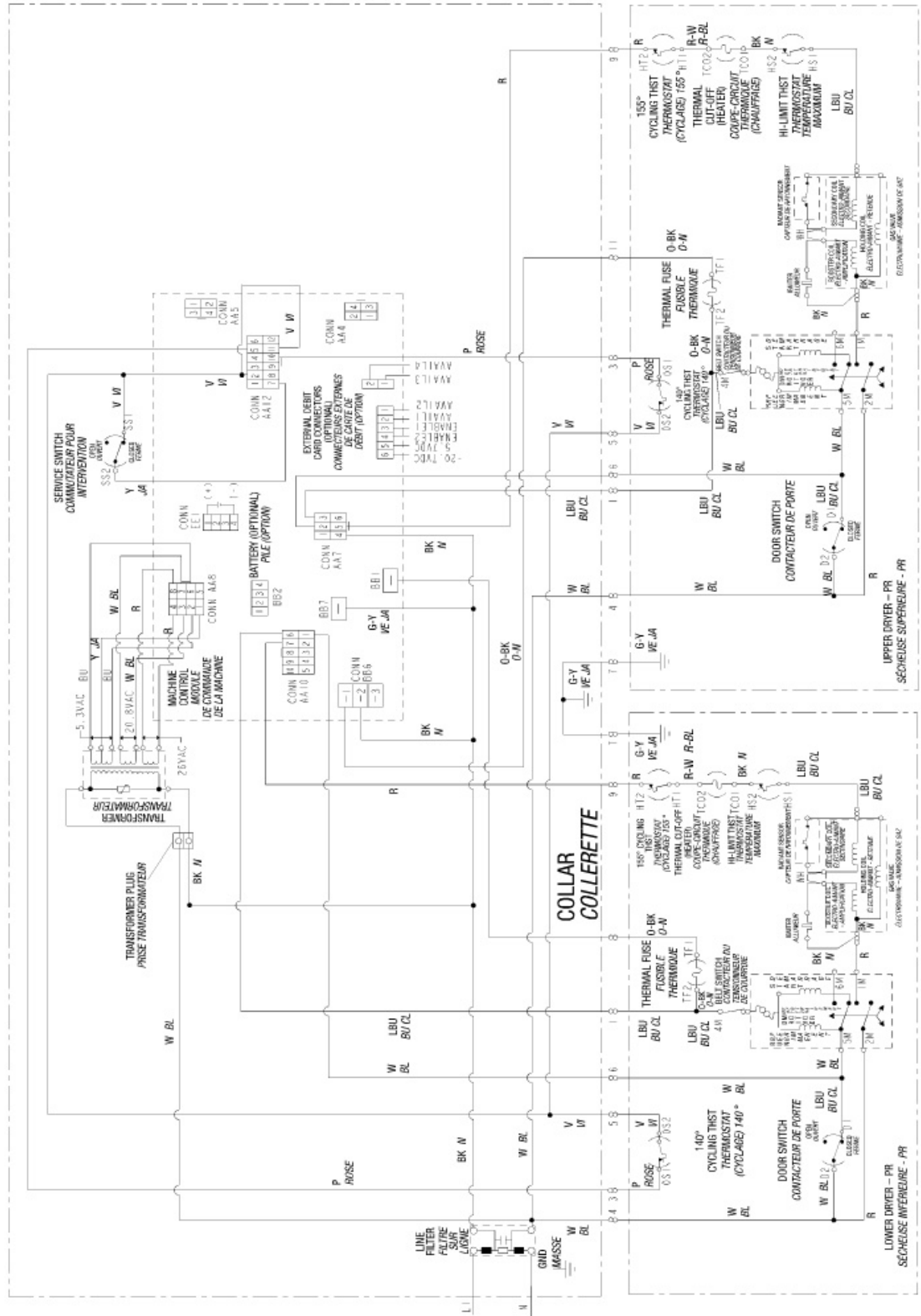
PR ELECTRIC MODELS (CANADIAN STACK LOAD)



7-12



PR GAS MODELS (US STACK LOAD)



WARNING - DISCONNECT FROM ELECTRICAL SUPPLY BEFORE SERVICING UNIT.
AVERTISSEMENT - DÉCONNECTER DE L'ALIMENTATION ÉLECTRIQUE AVANT D'INTERVENIR SUR L'APPAREIL.

