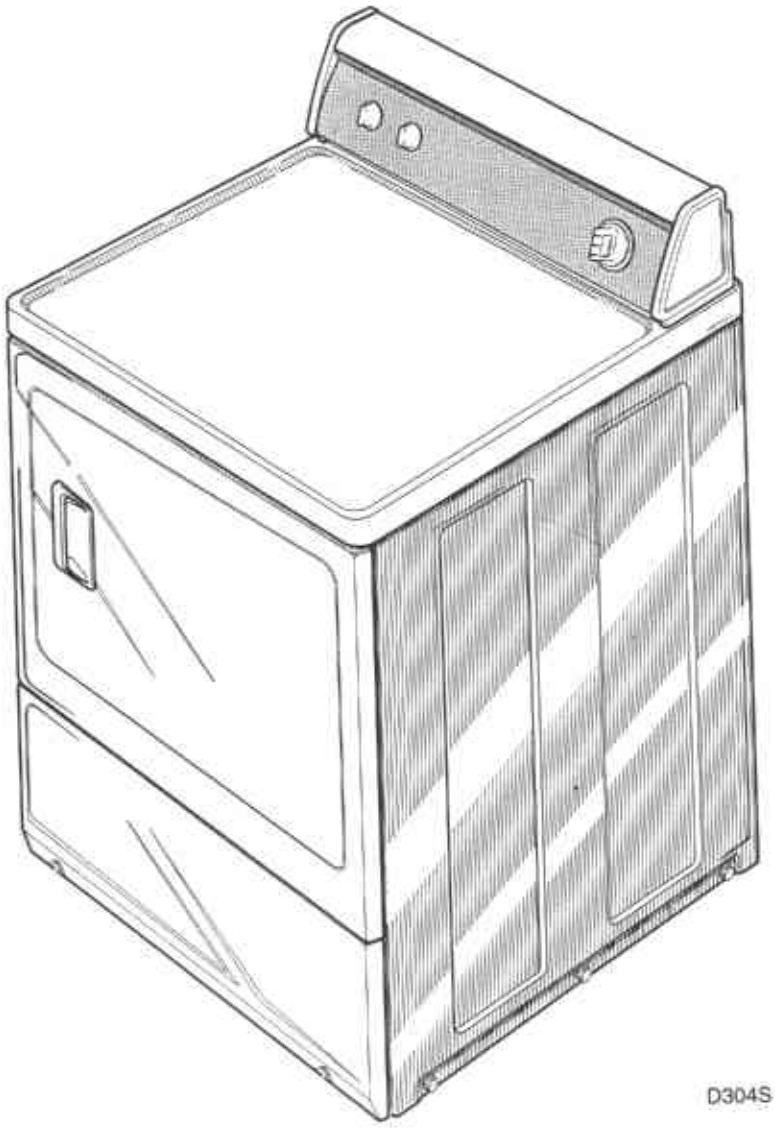
Models and manufacturing numbers in this manual

LES10AW	PLES10AW
LES19AW	PLES19AW
LES33AW	PLES33AW
LES34AW	PLES34AW
LGS10AW	PLGS10AW
LGS19AW	PLGS19AW
LGS33AW	PLGS33AW
LGS34AW	PLGS34AW

Master

Service

Manual for Home Laundry Dryers



D304S

504014R0

This manual is to be used by qualified appliance technicians only. Amana does not assume any responsibility for property damage or personal injury for improper service procedures done by an unqualified person.

Amana

RS3200004
Revision 0
(504014R0)
October 1997

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SECTION 1
Safety Information

Throughout this manual and on machine decals, you will find precautionary statements ("CAUTION", "WARNING", and "DANGER") followed by specific instructions. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

⚠ DANGER

Danger indicates the presence of a hazard that **will** cause **severe** personal injury, death, or substantial property damage if the danger is ignored.

⚠ WARNING

Warning indicates the presence of a hazard that **can** cause **severe** personal injury, death, or substantial property damage if the warning is ignored.

⚠ CAUTION

Caution indicates the presence of a hazard that **will** or **can** cause **minor** personal injury or property damage if the caution is ignored.

Additional precautionary statements ("IMPORTANT" and "NOTE") are followed by specific instructions.

IMPORTANT

The word "IMPORTANT" is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE

The word "NOTE" is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

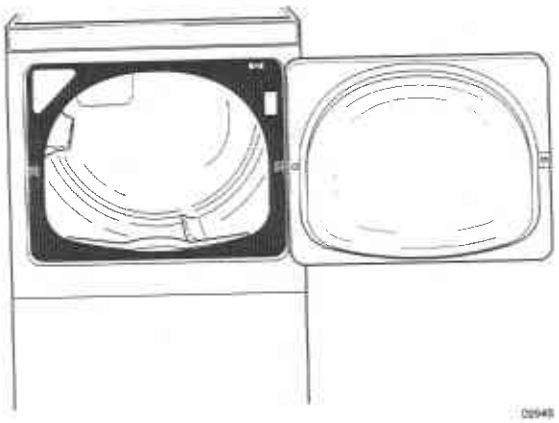
In the interest of safety, some general precautions relating to the operation of this machine follow.

⚠	**WARNING**
	• **Failure to install, maintain, and/or operate this product according to the manufacturer's instructions may result in conditions which can produce serious injury, death and/or property damage.** • **Do not repair or replace any part of the product or attempt any servicing unless specifically recommended or published in this Service Manual and that you understand and have the skills to carry out.** • **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the product is properly grounded and to reduce the risk of fire, electric shock, serious injury, or death.** W006

SECTION 2
Introduction

Nameplate Location

When calling or writing about your dryer, be sure to mention model, manufacturing and serial numbers. Model, manufacturing and serial numbers are located on nameplate. Nameplate is in one of the four corners of the door well. The door well is the shaded area shown.

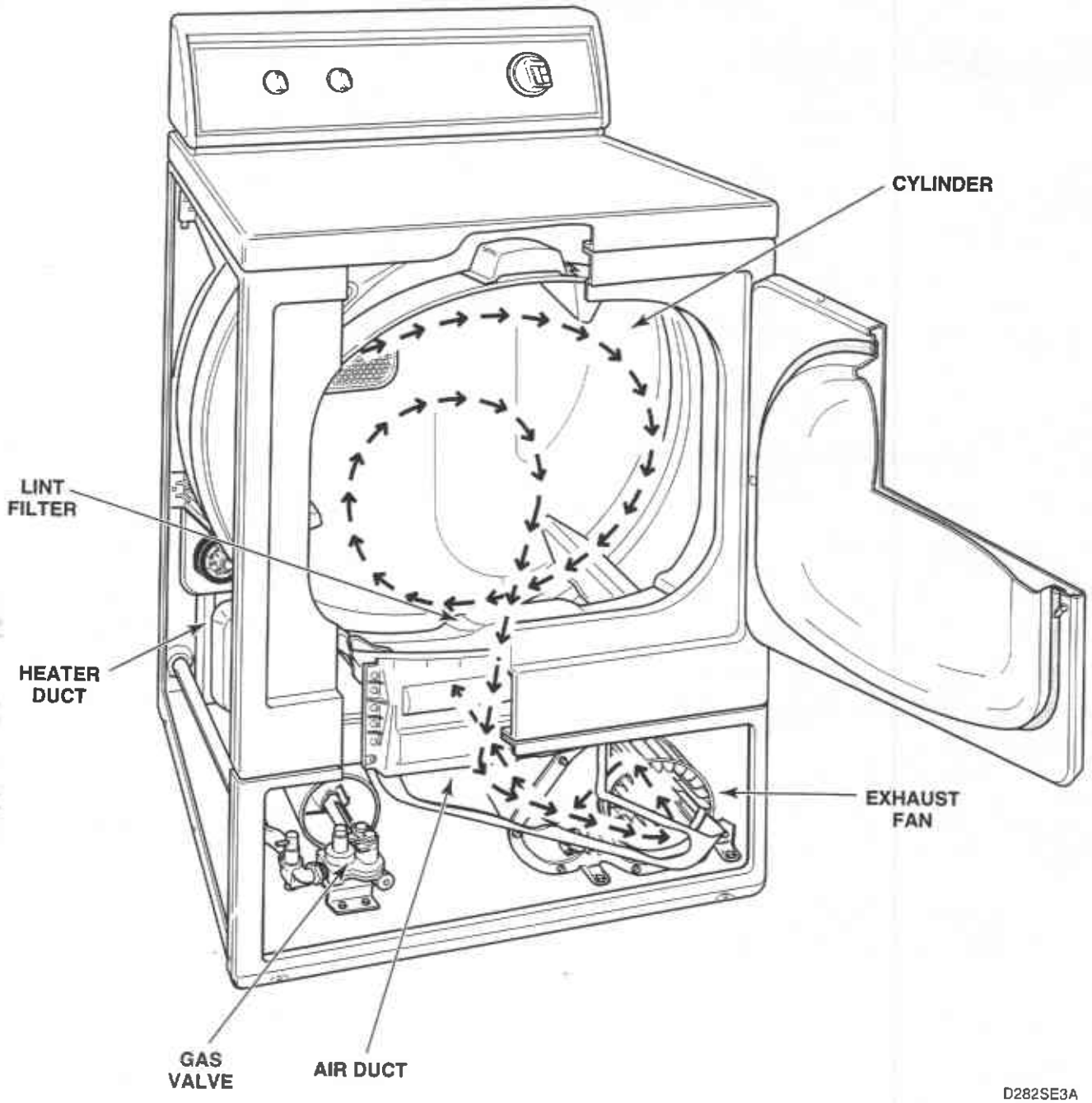


Model Identification

Information in this manual is applicable to these dryer models.

Model Number	Manufacturing Number	Electric Heat	Gas Heat	Timer Model	Electronic Model	Moisture Sensor	Cylinder Light	Cylinder Type
LES10AW	PLES10AW	X		X				Painted
LES19AW	PLES19AW	X		X				Painted
LES33AW	PLES33AW	X		X				Painted
LES34AW	PLES34AW	X		X			X	Painted
LGS10AW	PLGS10AW		X	X				Painted
LGS19AW	PLGS19AW		X	X				Painted
LGS33AW	PLGS33AW		X	X				Painted
LGS34AW	PLGS34AW		X	X			X	Painted

How Your Dryer Works



The dryer uses heated air to dry loads of laundry. When the motor is started, the exhaust fan pulls room temperature air in through louvers at the rear of the dryer and over the heat source (burner flame for gas and heating element for electric). The heated air moves through the air duct and into the cylinder, where it circulates through the wet load. The air then passes through the lint filter, exhaust fan, and is vented to the outdoors.

SECTION 3
Troubleshooting

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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IMPORTANT: Refer to appropriate Model Wiring Diagram for aid in testing dryer components.

1. MOTOR DOES NOT RUN

POSSIBLE CAUSE	TO CORRECT
Electrical power off, fuse blown, or power cord not plugged in.	• Check laundry room for blown or loose fuse(s), or open circuit breaker(s). The gas dryer itself does not have an electrical fuse. • Check both fuses on electric models.
Loading door not closed or inoperative door switch.	• Close door or test switch and replace if inoperative.
Timer improperly set.	• Reset timer, or try another cycle.
Inoperative timer.	• Test timer and replace if inoperative.
Motor starting functions inoperative. Doesn't start; or motor just hums.	• Refer to SECTION 7, paragraph 1 to check start switch and start windings.
Motor is dead, won't run.	• Refer to SECTION 7, paragraph 1 to check start switch, start windings, and main windings.
Motor overload protector has cycled.	• Wait two or three minutes for overload protector to reset. If protector cycles repeatedly, refer to SECTION 3, paragraph 2.
Motor centrifugal switch sticky or plugged with lint.	• Remove dust or lint and spray with "SLYDE," No. 131P4, to clean and lubricate.
Bind in motor bearing.	• Remove belts and determine if motor shaft will spin. • Replace motor if shaft is locked up.
Loose motor wire harness connection block.	• Firmly press connection block onto motor switch.
Broken, loose, or incorrect wiring.	• Refer to appropriate wiring diagram in SECTION 9.
Power cord is miswired.	• Refer to appropriate wiring diagram for the correct wiring. Refer to SECTION 9.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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2. UNIT STOPS IN CYCLE; QUITS AFTER A COUPLE LOADS; HAS A BURNING SMELL; CYCLES ON MOTOR THERMAL PROTECTOR

POSSIBLE CAUSE	TO CORRECT
Incorrect voltage.	• See nameplate in door well for correct voltage. • Refer to INSTALLATION INSTRUCTIONS (supplied with dryer) for electrical requirements.
Clothes load too large.	• Remove part of load. A normal washer load is a normal dryer load. Maximum load: dryer cylinder one half full of wet clothes.
Clothes cylinder is binding.	• Check cylinder for binding and "out of round" condition. • Check front and rear bulkheads for warping. • Check support rollers for binding. • Check cylinder seals and glides for wear or damage. • Check for clothes lodged between cylinder baffle and bulkhead.
Broken, loose or incorrect wiring.	• Refer to appropriate wiring diagram in SECTION 9.
Motor switch functions inoperative. Short in motor winding.	• Refer to SECTION 7, paragraph 1 to check switch and windings.

3. MOTOR RUNS BUT CYLINDER DOES NOT TURN

POSSIBLE CAUSE	TO CORRECT
Motor drive pulley loose.	• Tighten pulley.
Belt not installed on pulley.	• Install belt. Refer to SECTION 5, figure 15.
Broken cylinder belt.	• Replace belt.
Clothes cylinder is binding.	• Check cylinder for binding and "out of round" condition. • Check front and rear bulkheads for warping. • Check cylinder rollers for binding. • Check cylinder seals and glides for wear or damage.
Broken, weak or disconnected idler lever spring.	• Replace or reconnect spring. Refer to SECTION 5, figure 16.
Belt routed on wrong side of idler lever.	• Reroute belt. Refer to SECTION 5, figure 15.
Oil on cylinder.	• Wipe oil from cylinder.
Belt is "inside out."	• Reinstall belt with ribbed surface against cylinder.
Idler arm is binding.	• Add grease between idler arm and motor mount. • Replace idler arm and bolt if needed.
Dryer is overloaded.	• Load dryer half full of laundry.
Wrong motor.	• Refer to Parts manual for proper motor part number.
Wrong belt used on dryer.	• Check belt part number against correct part number in the Parts manual. • Replace belt if needed.
Bent idler arm.	• Replace idler arm.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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4. MOTOR DOES NOT STOP

POSSIBLE CAUSE	TO CORRECT
Incorrect wiring to motor switch.	• Refer to appropriate wiring diagram in SECTION 9.
Motor centrifugal switch sticky or plugged with lint.	• Remove dust or lint and spray with "SLYDE," No. 131P4, to clean and lubricate.
Inoperative door switch.	• Test switch and replace if inoperative.
*Inoperative timer – nonmetered models.	• Test timer and replace if inoperative.

* Mechanical Timer Models only

5. HEATING ASSEMBLY DOES NOT HEAT OR BURNER DOES NOT IGNITE

POSSIBLE CAUSE	TO CORRECT
Improper or inadequate exhaust system.	• See INSTALLATION INSTRUCTIONS (supplied with dryer) for exhaust requirements.
Use of plastic or thin foil exhaust duct.	• Replace with solid or rigid flexible metal exhaust duct.
Blown house fuse or tripped circuit breaker.	• Check fuses or circuit breakers. A 240 Volt dryer has two fuses. Make sure both fuses are good.
*Temperature selector switch set at FLUFF, or inoperative.	• Reset or test switch and replace if inoperative.
*Timer improperly set (set in a cool-down period, or a no heat cycle).	• Reset timer. Try another cycle.
Inoperative limit thermostat.	• Test thermostat and replace if inoperative.
Electric Models: Inoperative heater assembly.	• Test heater assembly and replace if cold Ohms do not read between 9 and 10.5 Ohms.
Gas Models: Insufficient gas supply.	• Check gas shut-off valve in dryer and main gas line valve. • Open partially closed gas shut-off valve, or correct low gas pressure.
Inoperative drive motor switch.	• Test switch and replace if inoperative.
Gas Models: Inoperative gas valve coils.	• Test coils and replace if inoperative. Refer to SECTION 7, paragraph 4.
Gas Models: Inoperative flame sensor.	• Test flame sensor and replace if inoperative. Refer to SECTION 7, paragraph 5.
Gas Models: Inoperative igniter.	• Test igniter and replace if inoperative. Refer to SECTION 7, paragraph 6.
Gas Models: Harness not properly connected to gas controls.	• Check harness connections to gas valve coils, sensor and main harness. • Reconnect as required.
Gas Models: Restricted gas flow in gas orifice.	• Clean out gas orifice.
Electric Models: Inoperative thermal fuse.	• Test thermal fuse and replace if inoperative.

* Mechanical Timer Models only

(CONTINUED)

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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5. HEATING ASSEMBLY DOES NOT HEAT OR BURNER DOES NOT IGNITE (cont.)

POSSIBLE CAUSE	TO CORRECT
*Inoperative cycling thermostat.	• Test thermostat and replace if inoperative.
*Inoperative timer.	• Test timer and replace if inoperative.
Broken, loose, or incorrect wiring.	• Refer to appropriate wiring diagram.

* Mechanical Timer Models only

6. IGNITER DOES NOT GLOW (Gas Supply Sufficient) (Gas Models)

POSSIBLE CAUSE	TO CORRECT
*No power to power leads on valve.	• Check timer, selector switch, thermostats, motor switch, and wiring.
Flame sensor failed with contacts open.	• Replace flame sensor.
Igniter broken or open.	• Replace igniter.

* Mechanical Timer Models only

7. BURNER IGNITES AND GOES OUT REPEATEDLY (Gas Models)

POSSIBLE CAUSE	TO CORRECT
Improper or inadequate exhaust system. Weather hood flapper restricted.	• See INSTALLATION INSTRUCTIONS (supplied with dryer) for exhaust requirements.
Burner heat not holding flame sensor contacts open.	• Replace flame sensor, or correct gas supply problem.
Insufficient gas supply.	• Check gas supply and pressure. • Make sure gas shut-off valve is turned on.
Cracked igniter.	• Replace igniter and bracket.
Inoperative or intermittent gas valve coils.	• Check and replace appropriate coil. Refer to SECTION 7, paragraph 4.

8. IGNITER GLOWS BUT BURNER DOES NOT IGNITE (Gas Models)

POSSIBLE CAUSE	TO CORRECT
Flame sensor failed in closed position.	• Replace flame sensor.
Open secondary coil or holding coil.	• Replace gas valve (in-warranty), or replace coils (out-of-warranty). Refer to SECTION 7, paragraph 4.
Insufficient gas supply.	• Check gas supply and pressure. • Make sure gas shut-off valve is turned on.
Igniter and bracket installed improperly on burner tube assembly.	• Loosen screw and properly position igniter and bracket on burner tube assembly.
Flame sensor installed improperly on burner housing.	• Loosen screw and properly position the flame sensor on the burner housing.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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9. HEATER ASSEMBLY OR BURNER SHUTS OFF PREMATURELY

POSSIBLE CAUSE	TO CORRECT
Improper or inadequate exhaust system. Weather hood flapper restricted.	• See INSTALLATION INSTRUCTIONS (supplied with dryer) for exhaust requirements.
Gas Models: Insufficient gas supply.	• Check main gas line shut-off valve. • Open partially closed gas shut-off valve, or correct low pressure.
Gas Models: Dryer not properly equipped for type of gas used.	• Refer to "Gas Burner Conversion Procedures" supplied in gas burner conversion kit.
Gas Models: Improperly adjusted burner flame.	• Adjust flame. Refer to SECTION 6, paragraph 2.
Cycling off on limit thermostat.	• Momentarily connect a jumper wire across thermostat terminals. If heater element heats or burner ignites when jumper wire is connected, refer to SECTION 3, paragraph 8.
Gas models: Flame sensor contact closing.	• Replace flame sensor or adjust burner flame. Refer to SECTION 6, paragraph 2.
*Inoperative cycling thermostat.	• Test thermostat and replace if inoperative.
*Inoperative timer.	• Test timer and replace if inoperative.
Broken, loose, or incorrect wiring.	• Refer to appropriate wiring diagram in SECTION 9.

* Mechanical Timer Models only

10. HEATER ASSEMBLY OR BURNER REPEATEDLY CYCLES OFF ON LIMIT THERMOSTAT

POSSIBLE CAUSE	TO CORRECT
External exhaust system longer or providing greater restriction than recommended.	• Refer to INSTALLATION INSTRUCTIONS (supplied with dryer) for exhaust system requirements.
Use of plastic or thin foil exhaust duct.	• Replace with solid or rigid flexible metal exhaust duct.
Clogged lint filter.	• Clean lint filter.
Lint in internal dryer ductwork.	• Disassemble dryer ductwork and clean.
Lint or other obstruction in external exhaust system.	• Disassemble and clean exhaust system.
Hinged damper on exhaust system weather hood not free to open.	• Free hinged damper or replace weather hood.
*Limit thermostat cycling at too low a temperature.	• Replace thermostat. Refer to SECTION 5, paragraph 21.
Air leak around loading door. (Door not sealing due to damaged seal or inoperative door catch.)	• Replace seal or catch.
Inoperative thermistor.	• Test thermistor and replace if inoperative.
Air leak at blower seal.	• Check and replace seal if necessary.
Air leak at cylinder seal(s).	• Check and replace seal(s) if necessary.

* Mechanical Timer Models only

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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11. HEATER ASSEMBLY OR BURNER DOES NOT SHUT OFF

POSSIBLE CAUSE	TO CORRECT
Improper motor switch. (Timer must be in a heat setting.)	• Test switch and replace if inoperative.
Motor does not stop.	• Refer to SECTION 3, paragraph 4.
Incorrect wiring.	• Refer to appropriate wiring diagram in SECTION 9.
Heater assembly shorted.	• Remove heater assembly and check for short.

12. CLOTHES DO NOT DRY

POSSIBLE CAUSE	TO CORRECT
Heater assembly does not heat or burner does not ignite.	• Refer to SECTION 3, paragraph 5.
Too much water in articles being dried.	• Remove excess water.
Clothes load too large.	• Remove part of load. A normal washer load is a normal dryer load. Maximum load: Dryer cylinder one half full of wet clothes.
Excessive lint on lint filter.	• Clean lint filter.
Load too small.	• Add one or two bath towels to load.
Automatic cycle.	• Adjust timer knob to More Dry setting.
Heat selector switch or timer set on FLUFF or inoperative.	• Reset switch or timer, or test and replace the switch or timer if inoperative.
Improper or inadequate exhaust system.	• See INSTALLATION INSTRUCTIONS (supplied with dryer) for exhaust requirements.
Heater assembly or burner shuts off prematurely.	• Refer to SECTION 3, paragraph 9.
Gas Models: Gas line pressure too high or too low.	• If Natural Gas line pressure to dryer exceeds 8 inch water column pressure, or is lower than 4 inch water column, ask Gas Company to correct.
Improper belt installation (low RPM).	• Check for proper installation. Refer to SECTION 5, paragraph 26.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

13. TIMER DOES NOT ADVANCE IN AUTOMATIC CYCLE (Mechanical Timer Models Only)

POSSIBLE CAUSE	TO CORRECT
Inoperative cycling thermostat.	• Test thermostat and replace if inoperative.
Inoperative resistor (Electric Models).	• Test resistor and replace if inoperative.
Heater assembly does not heat or burner does not ignite.	• Refer to SECTION 3, paragraph 5.
Heater assembly or burner cycles off prematurely.	• Refer to SECTION 3, paragraph 9.
Improper or inadequate exhaust system.	• Refer to INSTALLATION INSTRUCTIONS (supplied with dryer) for exhaust requirements.
Drying large load.	• Timer will not advance until the load is almost dry.
Broken, loose or incorrect wiring.	• Refer to appropriate wiring diagram in SECTION 9.
Timer motor is inoperative.	• Select a drying cycle and activate start switch. • Rotate timer knob until signal sounds. • Release timer knob. • Signal should stop within ten minutes. If not, replace timer. • Refer to SECTION 7, paragraph 10.
Inoperative seals (air leaks).	• Check and replace any inoperative seals in the following areas: 1. Seal between loading door and front panel. 2. Seal between front panel and front bulkhead. 3. Seal between blower cover and air duct. 4. Seal between cylinder and front or rear bulkhead. 5. Seal between upper and lower air ducts.

⚠ WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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14. CLOTHES ARE TOO HOT WHEN REMOVED FROM DRYER

POSSIBLE CAUSE	TO CORRECT
Improper or inadequate exhaust system.	• Refer to INSTALLATION INSTRUCTIONS (supplied with dryer) for exhaust requirements.
Clothes are removed from dryer before cycle has completed.	• Allow the dryer to complete the cycle through the cool-down to the OFF position.
Inoperative cycling thermostat. Inoperative thermostat heater on the DELICATE setting.	• Test cycling thermostat or thermostat heater and replace if inoperative.
Inoperative timer (not allowing cool-down).	• Test timer and replace if inoperative.
Inoperative seals (air leaks).	• Check and replace any inoperative seals in the following areas: 1. Seal between loading door and front panel. 2. Seal between front panel and front bulkhead. 3. Seal between blower cover and air duct. 4. Seal between cylinder and front or rear bulkhead. 5. Seal between upper and lower air ducts.

SECTION 4
Grounding

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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1. **GROUND WIRES FROM TERMINAL BLOCK TO REAR BULKHEAD AND FROM REAR BULKHEAD TO CONTROL HOUSING (Electric Models Only – Figure 4-1).**

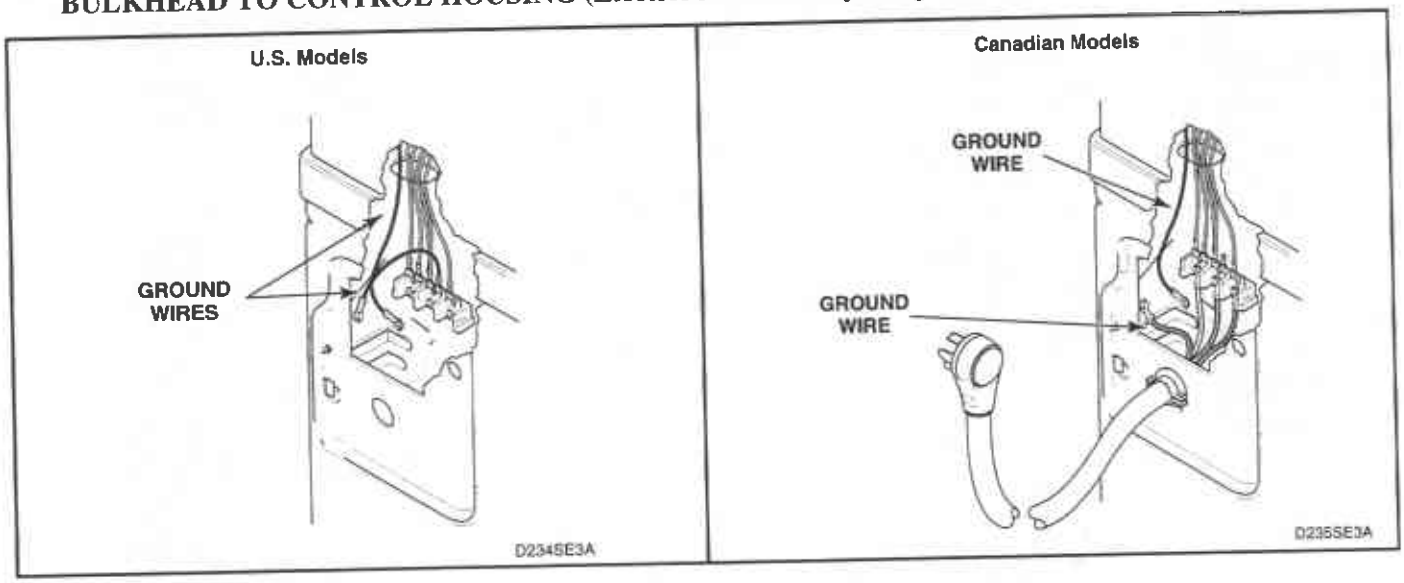

Figure 4-1

2. **GROUND WIRES FROM POWER CORD TO REAR BULKHEAD AND FROM REAR BULKHEAD TO CONTROL HOUSING. CHECK WALL RECEPTACLE POLARITY (Gas Models Only – Figure 4-2).**

   NOTE: A qualified electrician should check the polarity of the wall receptacle. If a voltage reading is measured other than that illustrated, the qualified electrician should correct the problem.

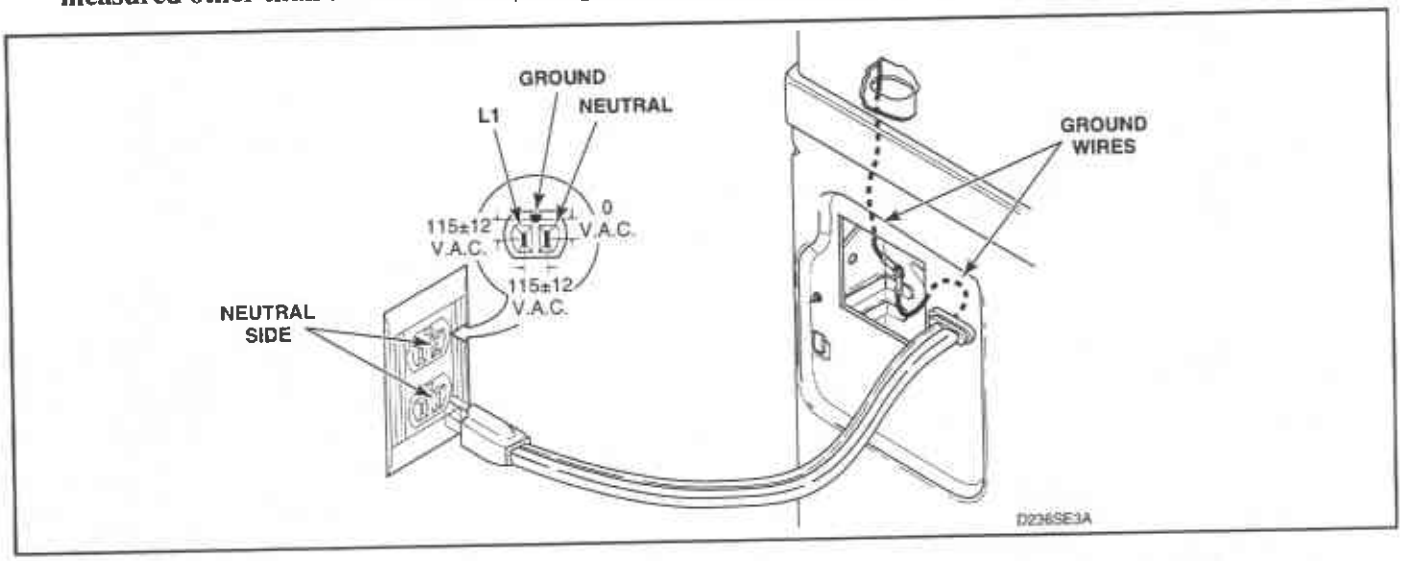

Figure 4-2

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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3. **GROUND WIRES FROM REAR BULKHEAD TO TIMER MOUNTING BRACKET AND TO DRYER CABINET TOP. GROUND WIRES FROM TIMER MOUNTING BRACKET TO GRAPHIC PANEL (Mechanical Timer Models Only – Figure 4-3).**

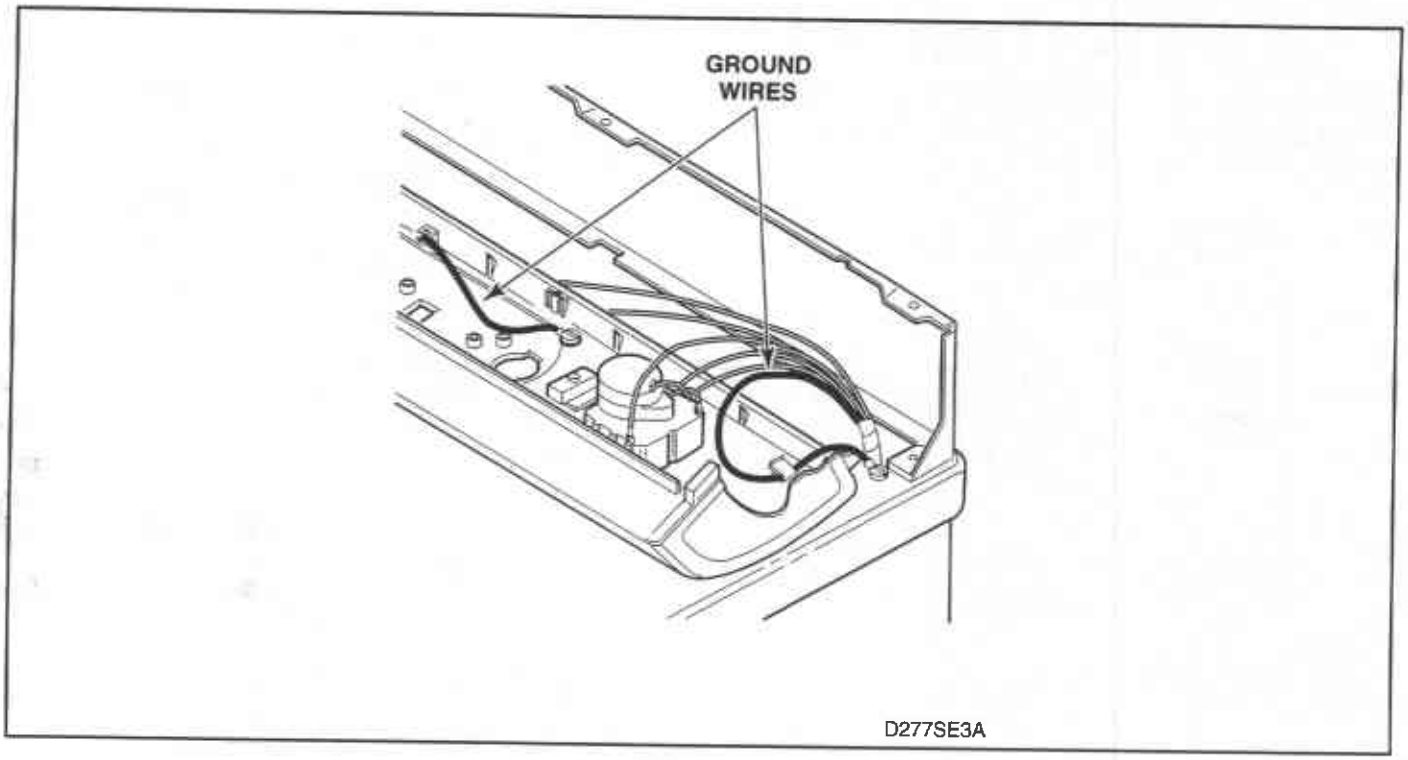

Figure 4-3

SECTION 5
Service Procedures

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

IMPORTANT: When reference to direction (right or left) is made in this manual, it is from the operator's position facing the front of the dryer.

1. **CONTROL HOOD ASSEMBLY (Figures 5-1 and 5-2)**
   a. Remove three screws holding control hood assembly to control hood rear panel.
   b. Rotate assembly forward to access inner wiring.
   c. Disconnect wiring from inner components and carefully remove components from control hood assembly.

NOTE: Refer to appropriate wiring diagram when rewiring component parts.

   d. Rotate control hood assembly forward and lift to free assembly from hold-down clips.

2. **CONTROL HOOD END CAPS (Figures 5-1 and 5-2)**
   a. Remove three screws holding control hood assembly to control hood rear panel.
   b. Rotate assembly forward to access inner wiring.
   c. Disconnect wiring from inner components and carefully remove components from control hood assembly.

NOTE: Refer to appropriate wiring diagram when rewiring component parts.

   d. Remove two screws holding end cap to end of support control panel.
   e. Carefully pry end cap from support control panel.

NOTE: To re-assemble, reverse the steps.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

3. GRAPHICS PANEL (Figures 5-1 and 5-2)

a. Remove three screws holding control hood assembly to control hood rear panel.
b. Rotate assembly forward to access inner wiring.
c. Disconnect wiring from inner components and carefully remove components from control hood assembly.

NOTE: Refer to appropriate wiring diagram when rewiring component parts.

d. Remove three screws holding top cover to support control panel. Rotate top cover forward.
e. Carefully remove two switch knobs and timer knob by pulling forward.
f. Remove screws holding end caps to support control panel and pry off caps.
g. With graphic panel facing forward, rotate control hood assembly forward to access tabs holding graphic panel.
h. Bend graphic panel tabs until straight and pull panel away from control mounting plate.

NOTE: To re-assemble, reverse the steps.

4. TIMER (Figures 5-1 and 5-2)

a. Remove the three screws holding the control assembly to the control hood rear panel.
b. Rotate assembly forward to access inner wiring.
c. Disconnect wiring from inner components and carefully remove components from control hood assembly.

NOTE: Refer to appropriate wiring diagram when rewiring component parts.

d. Remove two screws holding timer to support control panel.
e. Remove knob.

5. FABRIC SELECTOR SWITCH (Figure 5-2)

a. Remove three screws holding control hood assembly to control hood rear panel.
b. Rotate assembly forward to access inner wiring.
c. Disconnect wiring from inner components and carefully remove components from control hood assembly.

NOTE: Refer to appropriate wiring diagram when rewiring component parts.

d. Carefully lift locking tab holding fabric selector switch to support control panel.
e. With locking tab lifted, rotate fabric selector switch counterclockwise 1/4 turn and remove switch out rear of control mounting plate.

6. SIGNAL CONTROL (Figure 5-2)

a. Remove three screws holding control hood assembly to control hood rear panel.
b. Rotate assembly forward to access inner wiring.
c. Disconnect wires to the signal control.

NOTE: Refer to appropriate wiring diagram when rewiring component parts.

d. Remove signal control knob from graphic panel.
e. Remove two screws holding the signal control to the support control panel.
f. Carefully remove signal control.

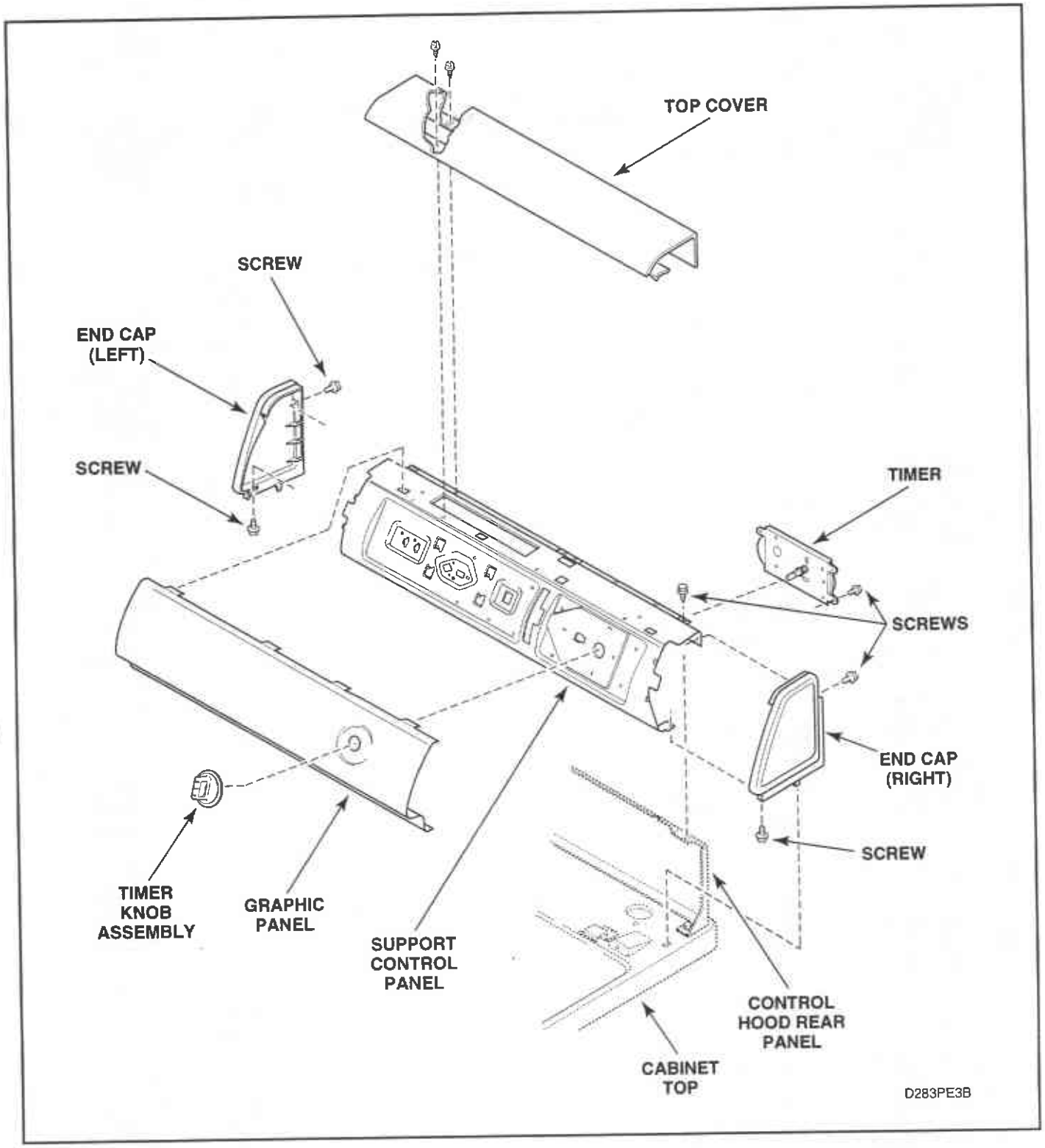

Figure 5-1

GRAPHIC PANEL, CONTROL HOOD AND CONTROLS

(Models LES10A*, LGS10A*)

***Add letter to designate color. L – Almond W – White**

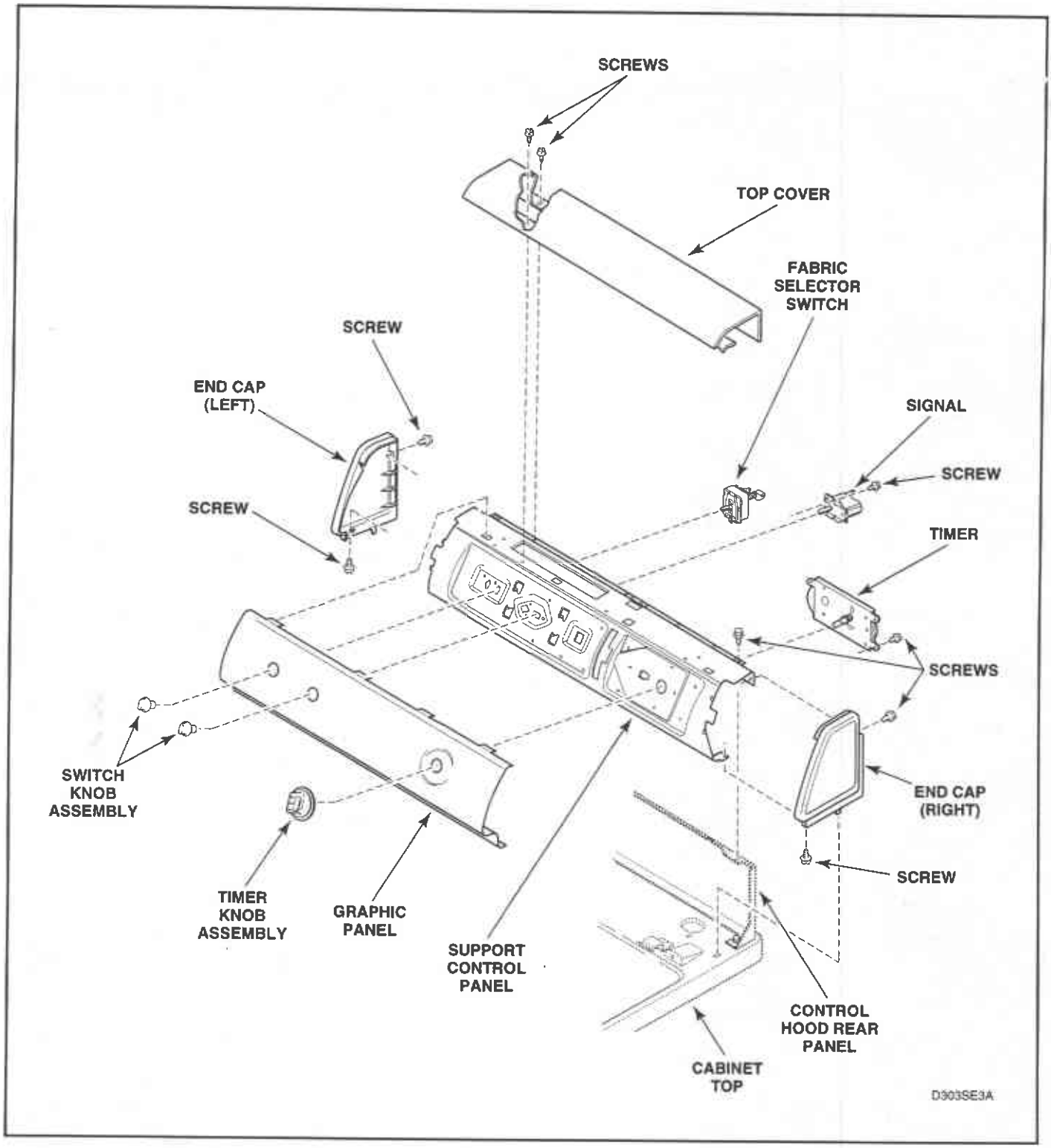

Figure 5-2

GRAPHIC PANEL, CONTROL HOOD AND CONTROLS

(Models LES19A*, LES33A*, LES34A*, LGS19A*, LGS33A* and LGS34A*)

***Add letter to designate color. L – Almond W – White**

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

7. **LINT FILTER (Figure 5-3)**

   a. Open loading door.

   b. Lift lint filter out of air duct, paying close attention to orientation.

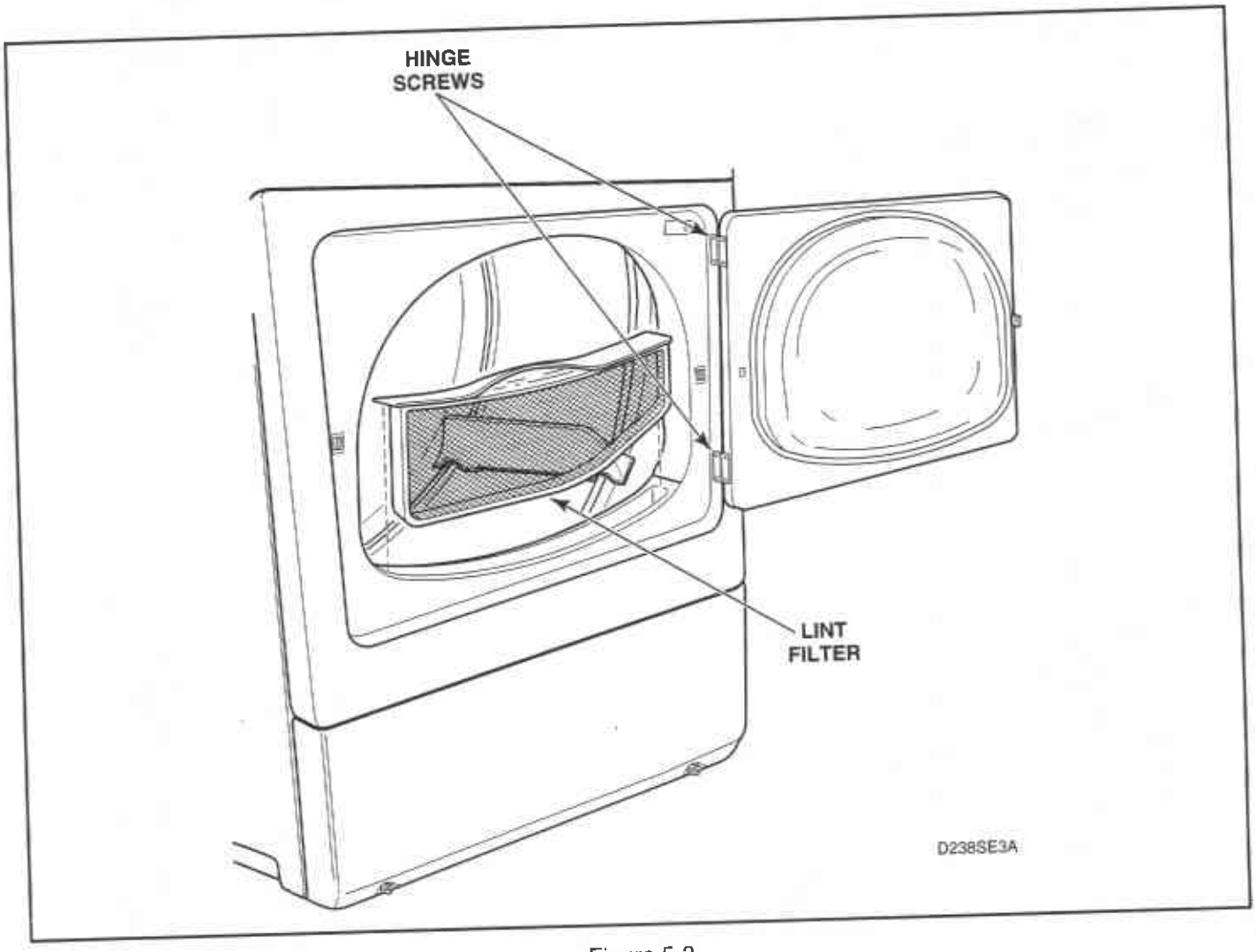

Figure 5-3

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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8. INNER AND OUTER DOOR PANELS AND DOOR PULL

a. Remove four screws holding door assembly to hinges. See figure 5-3.
b. Carefully remove door pull. See figure 5-4.
c. Remove remaining screws around the door perimeter and separate panels. See figure 5-4.

NOTE: All screws are interchangeable.

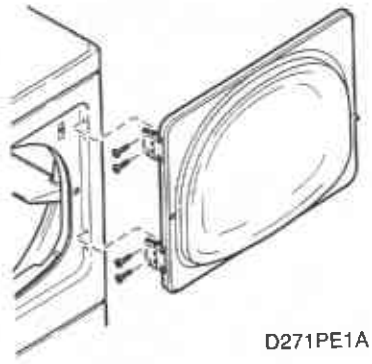
9. LOADING DOOR AND DOOR HINGE

a. Open loading door.
b. Remove screws holding loading door to hinges. See figure 5-3.

Reversing Door Procedure

The door on this dryer is completely reversible. To reverse door proceed as follows:

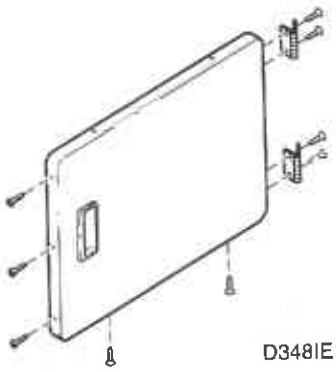
1



D271PE1A

Remove four hinge attaching screws.

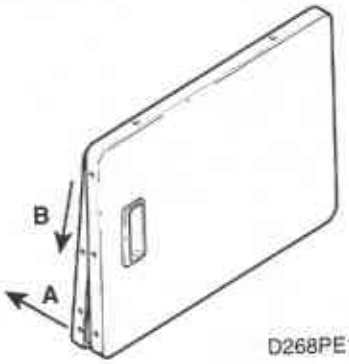
2



D348IE1A

Remove all nine screws.

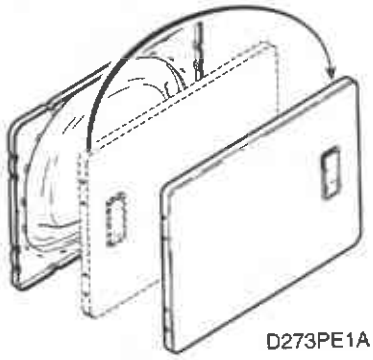
3



D268PE1A

Pull bottom of door liner out, then pull down, removing door liner from door panel.

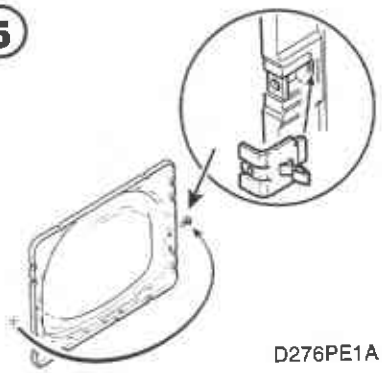
4



D273PE1A

Rotate door panel 180 degrees as shown.

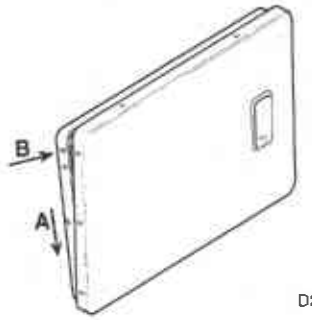
5



D276PE1A

Remove door strike from door liner and reinstall on opposite side.

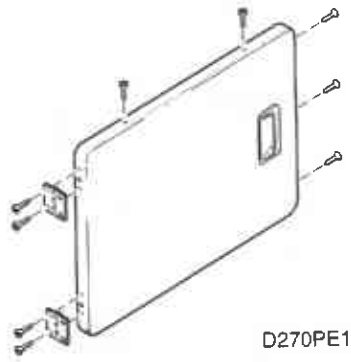
6



D269PE1C

Insert liner under flange on bottom of door, then push top of door liner into place.

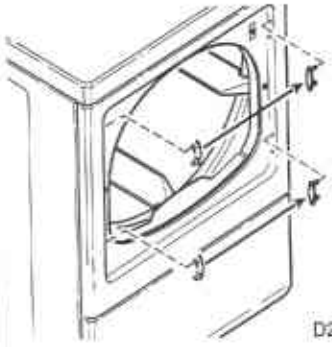
7



D270PE1A

Reinstall nine screws removed in Step 2.

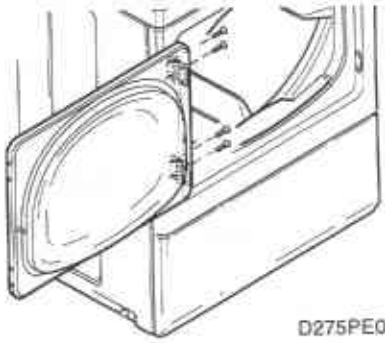
8



D274PE0A

Using a screwdriver, remove two door plugs, and reinstall on opposite side of door opening.

9



D275PE0A

Reinstall four hinge attaching screws removed in Step 1.

Figure 5-4

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

10. DOOR STRIKE (Figure 5-5)

a. Open loading door.
b. Remove screw holding door strike and bracket to loading door and remove strike and bracket.

NOTE: You may have to loosen the two screws on end of door to allow for striker and bracket removal.

11. DOOR SEAL (Figure 5-5)

a. Open loading door.
b. Grasp either end of door seal at bottom of door and remove seal from tabs on inner door panel by gently pulling on the seal. See figure 5-5.

NOTE: When replacing seal, be sure seal is not stretched or distorted. The groove in the seal should be installed on each tab of the inner door panel, as in figure 5-5. The split in the seal should be at the bottom of the door.

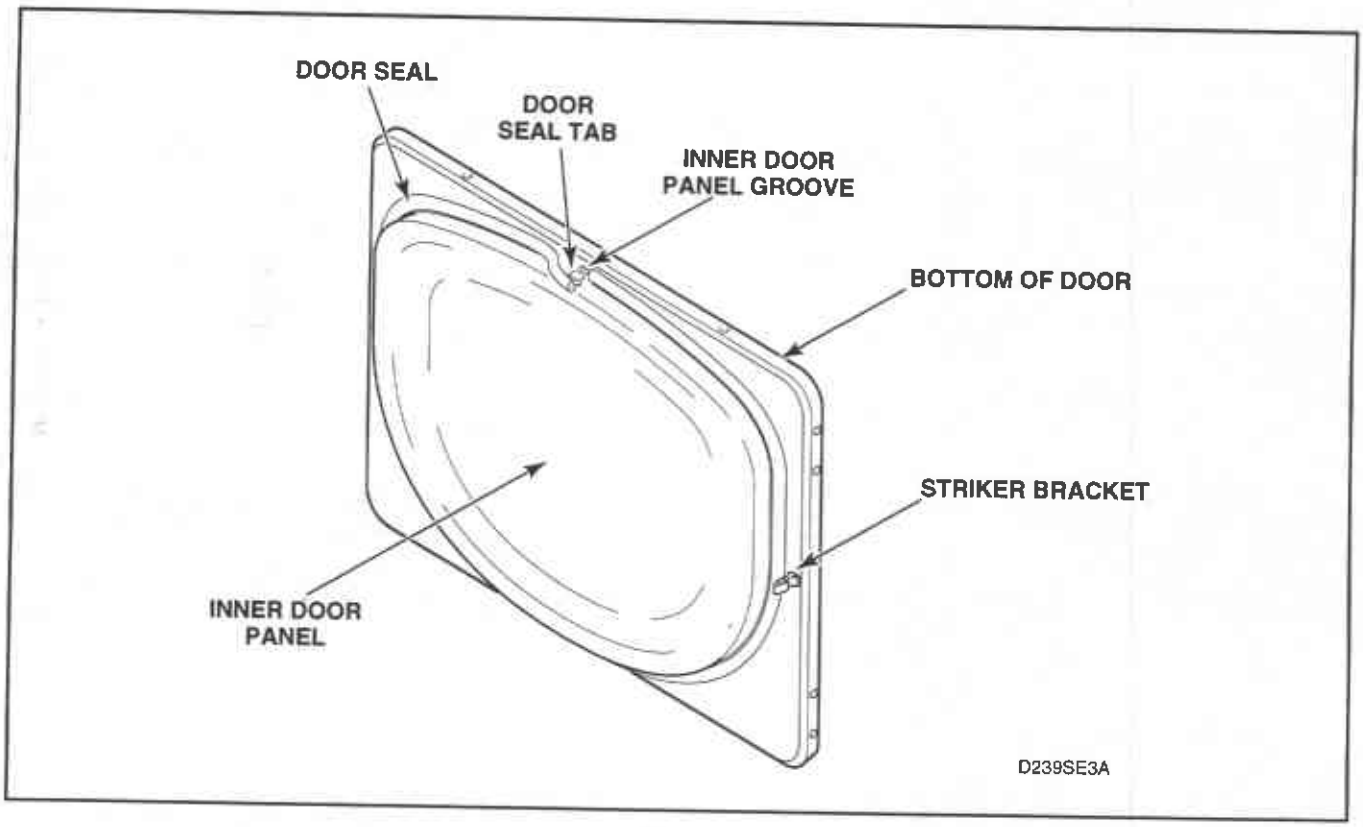


Figure 5-5

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

12. FRONT PANEL AND PANEL SEAL (Figure 5-7)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Remove two screws holding bottom tabs on front panel to dryer side panels. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.
d. Disconnect wires from door switch.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Remove front panel seal from flange around inside of door opening.

NOTE: Be sure seal is properly positioned when installing on front panel.

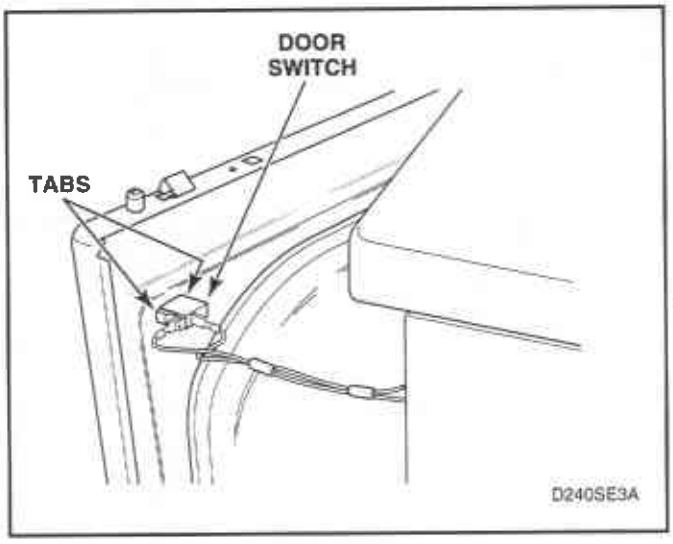


Figure 5-6

13. DOOR SWITCH (Figure 5-7)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Remove two screws holding tabs on front panel to dryer side panels. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.
d. Disconnect wires from door switch.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Depress tabs on top and bottom of switch and push out of front panel.

14. DOOR CATCH (Figure 5-7)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Remove two screws holding bottom tabs on front panel to dryer side panels. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.
d. Disconnect wires from door switch.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Depress tabs on top and bottom of catch and push out of front panel.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

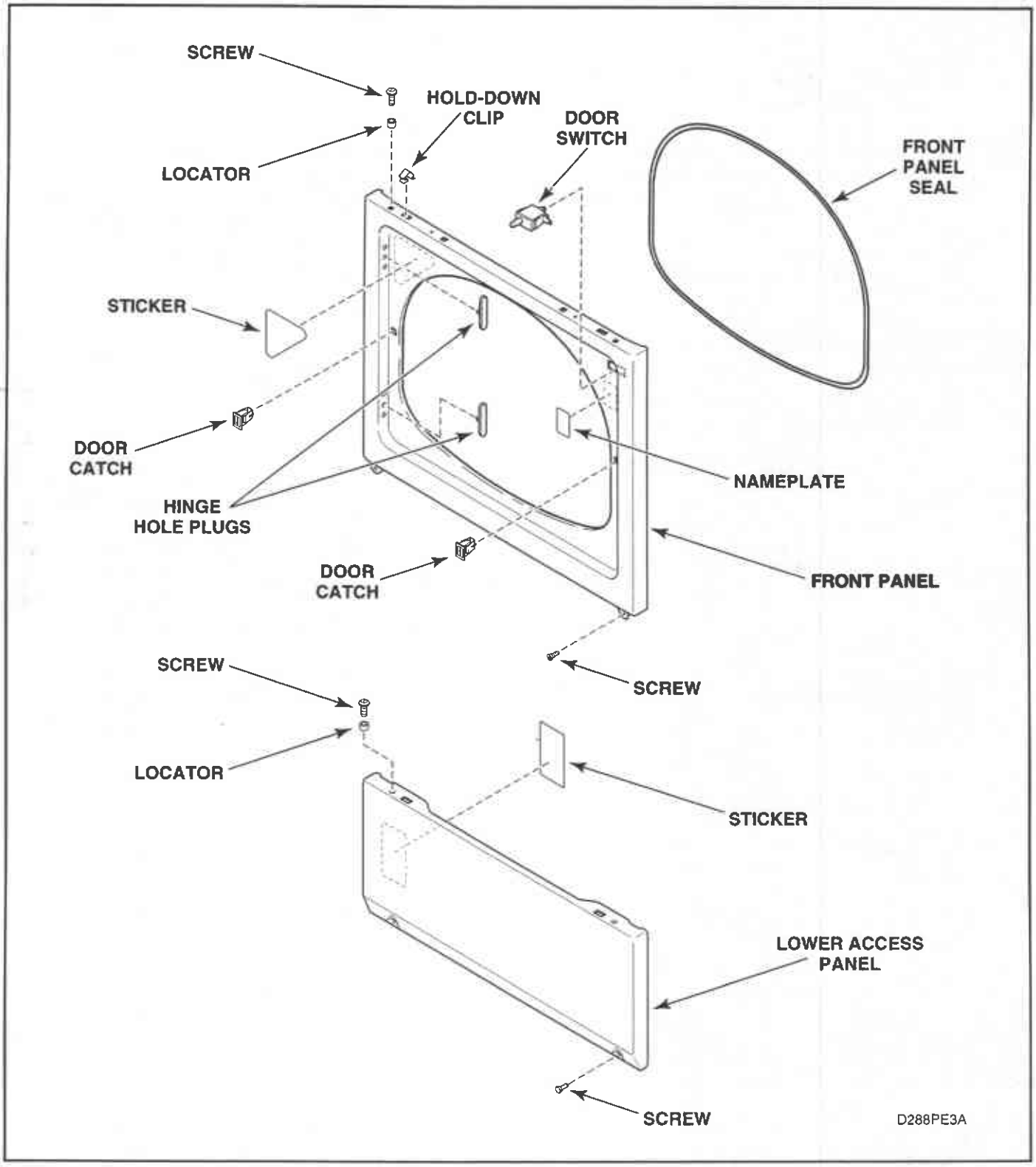


Figure 5-7

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

15. DOOR HINGE (Figure 5-8)

a. Open loading door and, while supporting door, remove four screws holding door assembly to hinges.

b. Remove four screws holding hinges to front panel.

16. HOLD-DOWN CLIPS AND LOCATORS (Figure 5-7)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel.

b. Gently lower the access panel to disengage locators from bottom edge of front panel.

c. Remove two screws holding bottom tabs on front panel to dryer side panels. Swing bottom edge of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.

d. Disconnect wires from door switch.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Compress hold-down clips and remove from top of access panel or front panel.

f. Remove four screws holding four locators to access panel or front panel.

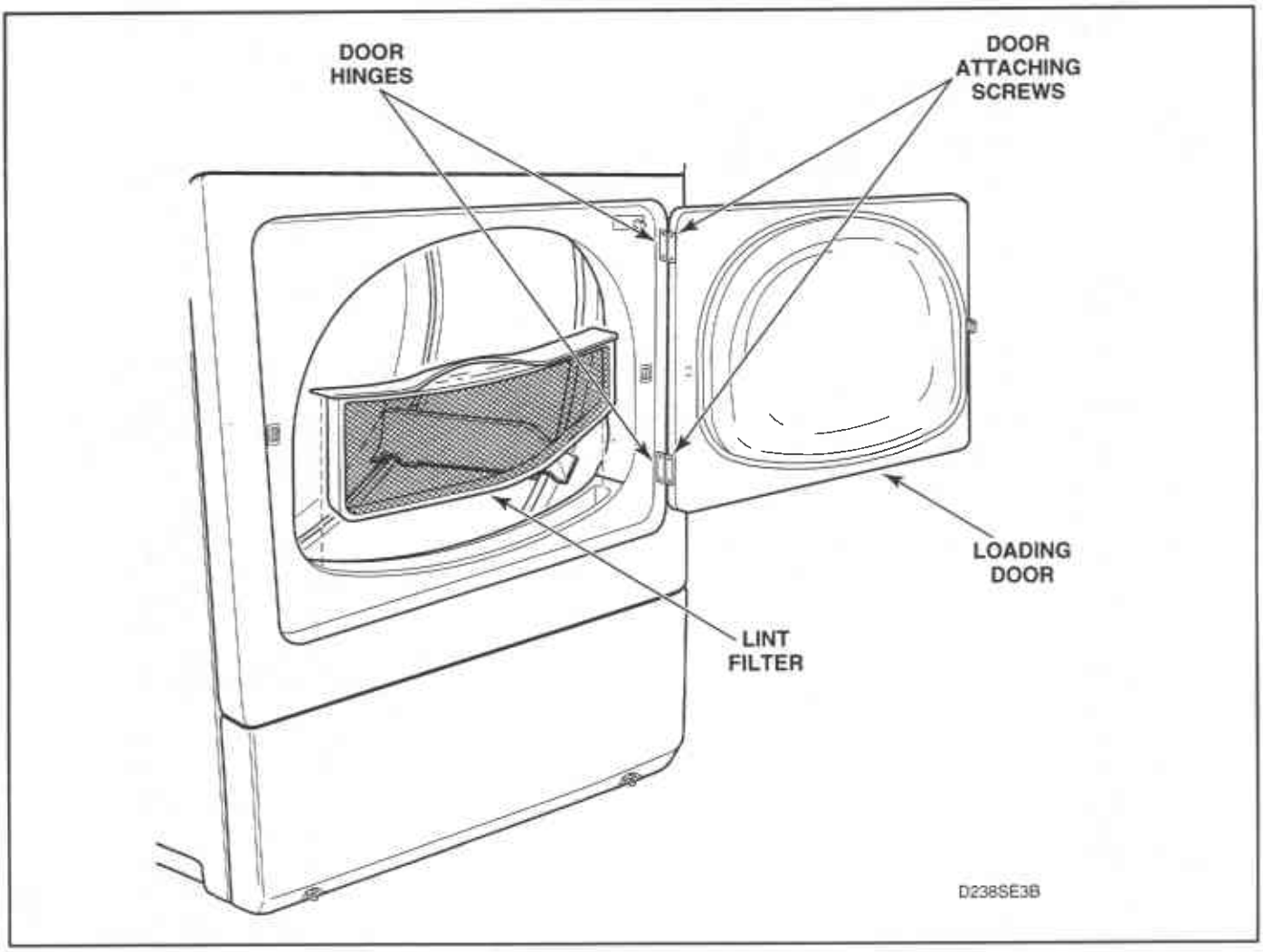


Figure 5-8

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

17. BURNER SYSTEM COMPONENTS (Gas Models)

a. **Complete Gas Valve Assembly.**

1. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
2. Gently lower the access panel to disengage locators from bottom edge of front panel.
3. Close main gas shut-off valve, disconnect igniter wires at disconnect blocks, sensor wires from flame sensor terminals, and wires from gas valve coils at the quick disconnect blocks. See figure 5-9.
4. Disconnect gas shut-off valve from gas valve at the union nut. See figure 5-9.
5. Remove three screws holding valve and mounting bracket to base. See figure 5-9.
6. Lift gas valve and mounting bracket from base. See figure 5-9.

NOTE: The holding and booster coil, and secondary coil can be replaced individually.

b. **Burner Tube, Igniter and Bracket**

NOTE: Burner tube and igniter can be removed without removing gas valve and bracket.

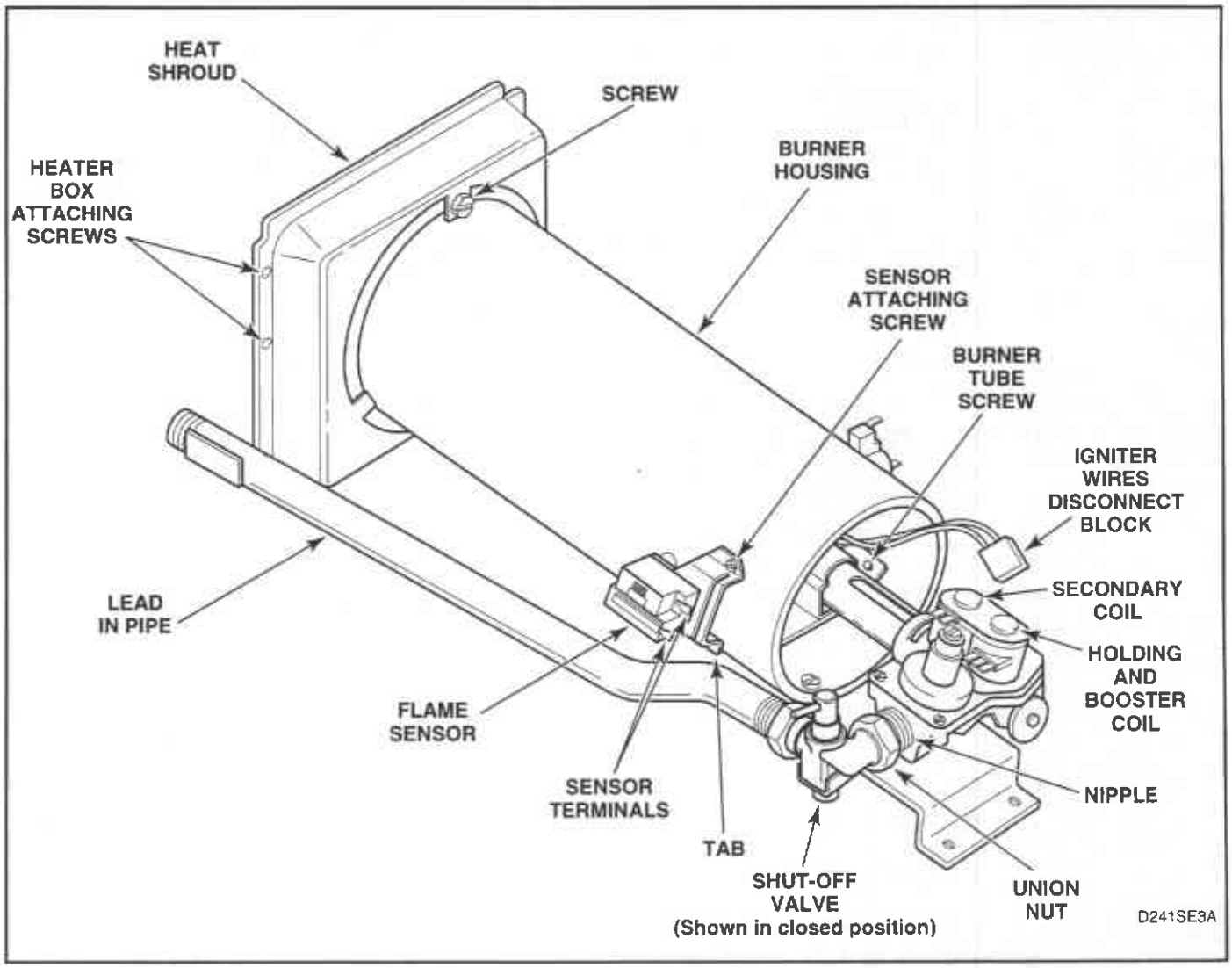


Figure 5-9

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

1. Remove one screw from right side of burner housing holding burner tube in place. See figure 5-11.
2. Gently move burner tube toward rear of dryer to disengage tab from slot on left side of burner housing. See figure 5-9.
3. Carefully rotate burner tube and igniter **counterclockwise** so tab is at 8 o'clock position.
4. Move air shutter end of burner tube slightly to right and CAREFULLY remove burner tube and igniter assembly out through front of dryer.
5. Remove screw holding igniter and bracket to burner tube and remove igniter and bracket. See figure 5-10.

IMPORTANT: Use care while removing igniter to avoid damaging or breaking it. The igniter is very fragile.

IMPORTANT: Handle igniter by grasping the white ceramic portion of bracket only. DO NOT handle silicon carbide portion of igniter with hands or allow any oil, grease or other foreign material to contaminate it. Oil, grease and other impurities or hairline cracks will cause the igniter to burn out.

c. **Flame Sensor**

1. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
2. Gently lower the access panel to disengage locators from bottom edge of front panel.
3. Remove wires from sensor terminals. See figure 5-9.
4. Remove screw holding sensor to burner housing. See figure 5-9.

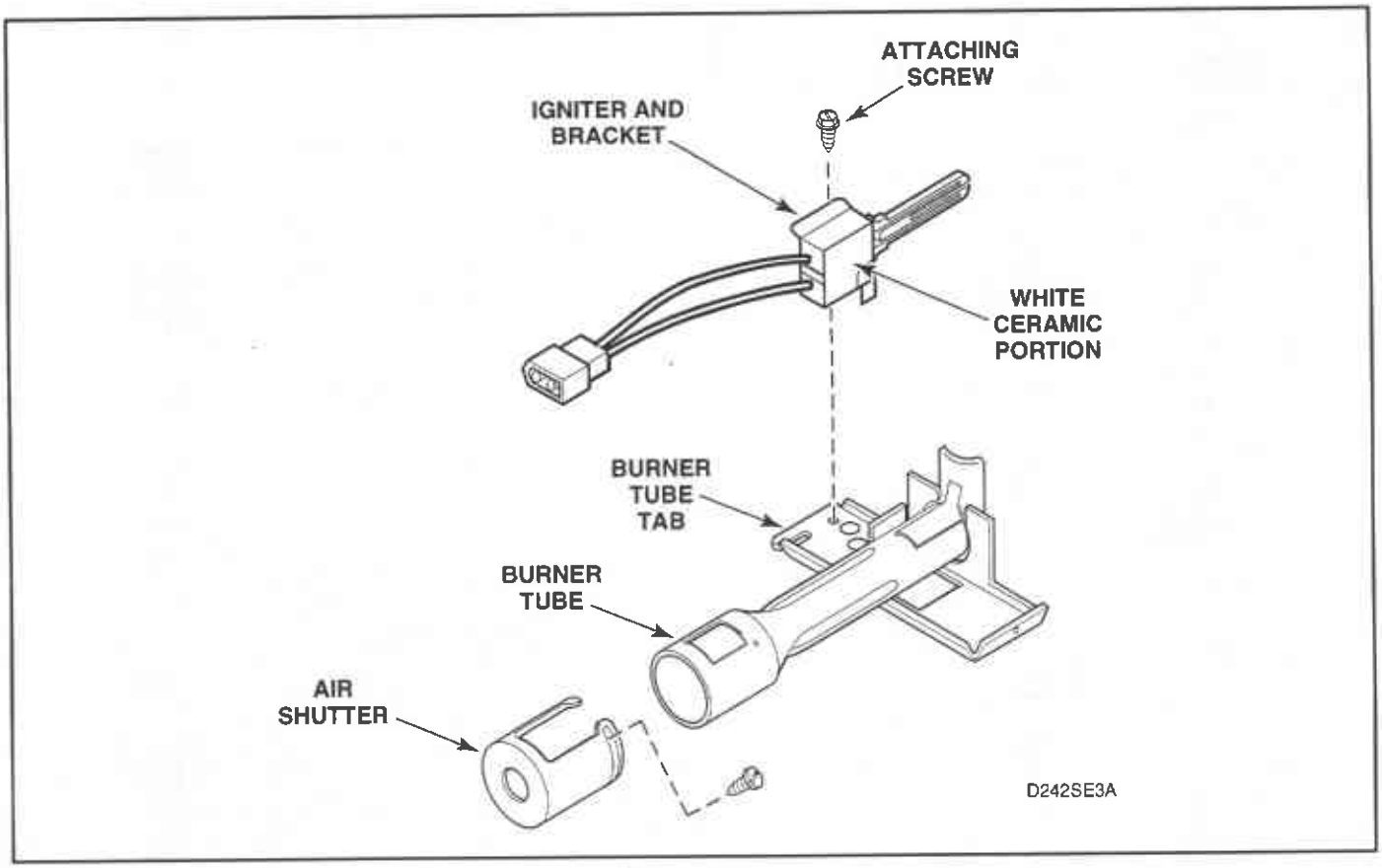


Figure 5-10

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

18. BURNER HOUSING AND HEAT SHROUD (Gas Models)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Disconnect igniter wires at disconnect blocks, sensor wires from flame sensor terminals, and wires from gas valve coils at the quick disconnect blocks. See figure 5-9.
d. Remove screw from right side of burner housing, while holding burner tube in place. See figure 5-11.
e. Gently move burner tube toward rear of dryer to disengage tab from slot on left side of burner housing. See figure 5-9.
f. Carefully rotate burner tube and igniter **counterclockwise** so tab is at 8 o'clock position.
g. Move air shutter end of burner tube slightly to the right and CAREFULLY remove burner tube and igniter assembly out through front of dryer.

IMPORTANT: The igniter is very fragile. Be careful not to damage it during removal.

h. Remove screw holding burner housing to heat shroud. See figure 5-9.
i. Remove screw holding front of burner housing to dryer base and remove housing out through front of dryer. See figure 5-11.
j. Remove two screws holding shroud to heater box and take shroud out through front of dryer.

19. LIMIT THERMOSTAT (Gas Models)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Disconnect wires and remove screws attaching limit thermostat to burner housing or element plate. See figure 5-11.

20. HEATING ELEMENT (Electric Models)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Remove two screws holding element and plate to heater box and pull element down and away from heater box. See figure 5-11.
d. Disconnect wires from element and plate. See figure 5-11.
e. Remove screws holding element and plate. See figure 5-11.

NOTE: When reassembling, be sure all wire connectors are tight on element terminals, thermal fuse and limit thermostat.

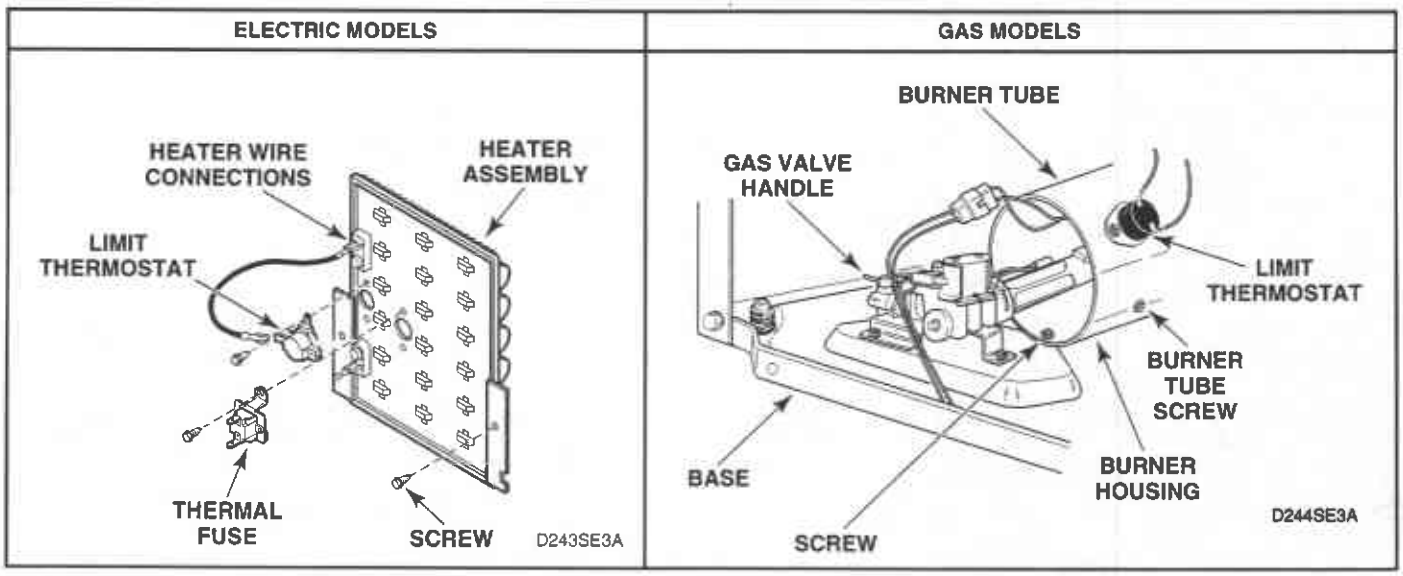


Figure 5-11

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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21. THERMISTOR OR THERMOSTAT AND HEATER

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Disconnect wires and remove thermostat attaching screws, thermostat and heater. See figure 5-12.

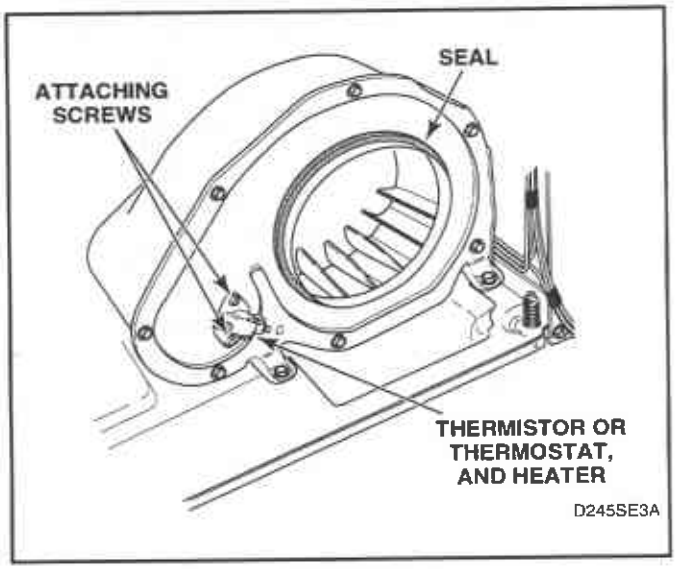


Figure 5-12

22. FRONT AIR DUCT

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Open loading door, remove lint filter screws and lift filter out of bulkhead. See figure 5-3.

IMPORTANT: When installing lint filter, be sure to install the filter with the word "FRONT" facing the front of the dryer. If filter is installed backwards, lint will accumulate in exhaust system, which can adversely affect dryer performance.

d. Remove two screws holding duct to front bulkhead and remove air duct. See figure 5-13.

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

IMPORTANT: When reassembling, be sure felt seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

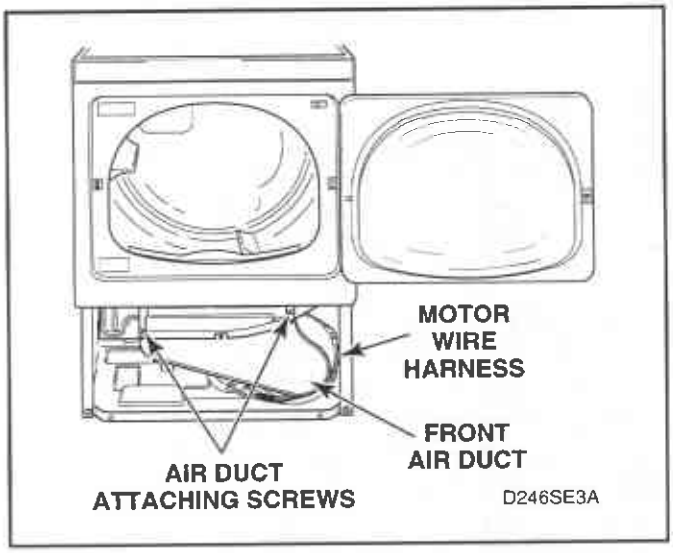


Figure 5-13

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

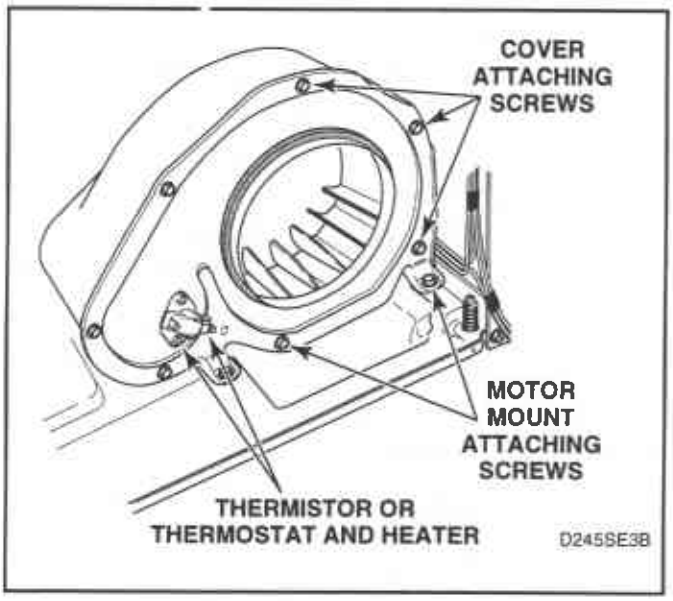


Figure 5-14

23. MOTOR AND EXHAUST ASSEMBLY

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Open loading door and lift filter out of bulkhead. See figure 5-3.
d. Remove screws holding air duct to front bulkhead and remove air duct. See figure 5-13.

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

IMPORTANT: When reassembling, be sure seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

e. Disconnect wires from thermostat/thermistor and heater. See figure 5-11.

NOTE: Refer to appropriate wiring diagram when rewiring thermostat and heater.

f. Remove cylinder belt from idler and motor pulleys. See figure 5-15.
g. Disengage motor wire harness terminal block from motor switch by pressing in on the movable locking tabs (located on each end of the terminal block) and pulling away from motor. See figures 5-16 and 5-18.
h. Remove two screws holding motor mounting bracket to dryer base. See figure 5-14.

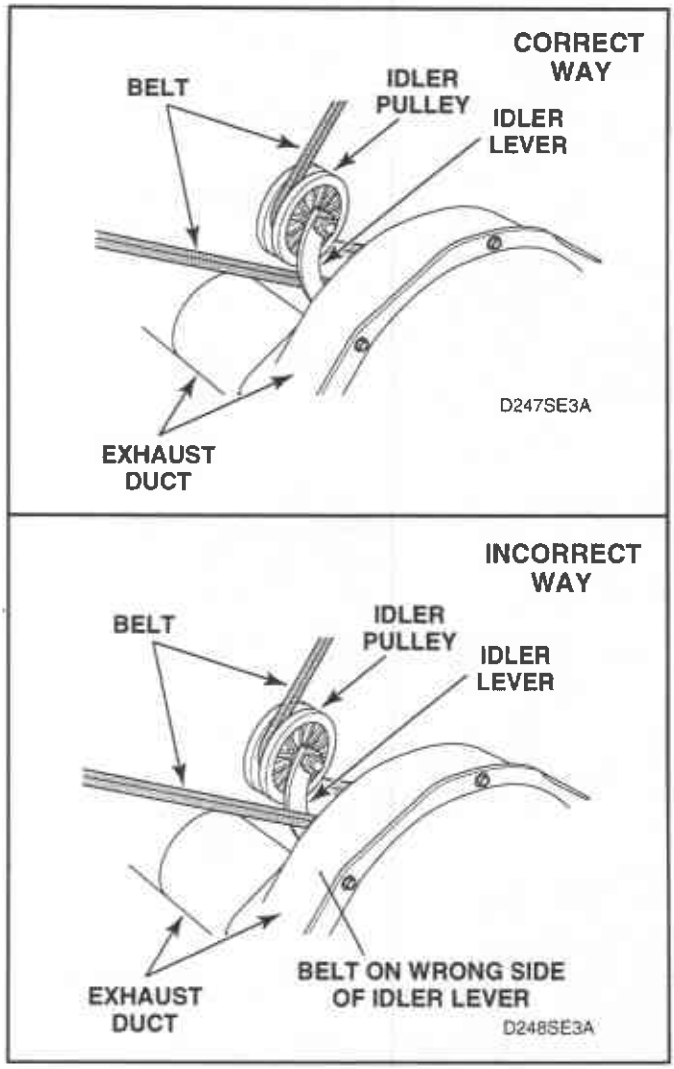


Figure 5-15

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

IMPORTANT: When reassembling, be sure seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

IMPORTANT: When reinstalling motor and exhaust assembly, be sure wire harness on right side is clipped to motor mounting bracket and is routed along dryer base (between motor mounting bracket and right side of cabinet). See figure 5-13. Tab on rear of motor mounting bracket must be slid into slot in dryer base. Be sure the belt has been installed on the correct side of the idler lever. See figure 5-15.

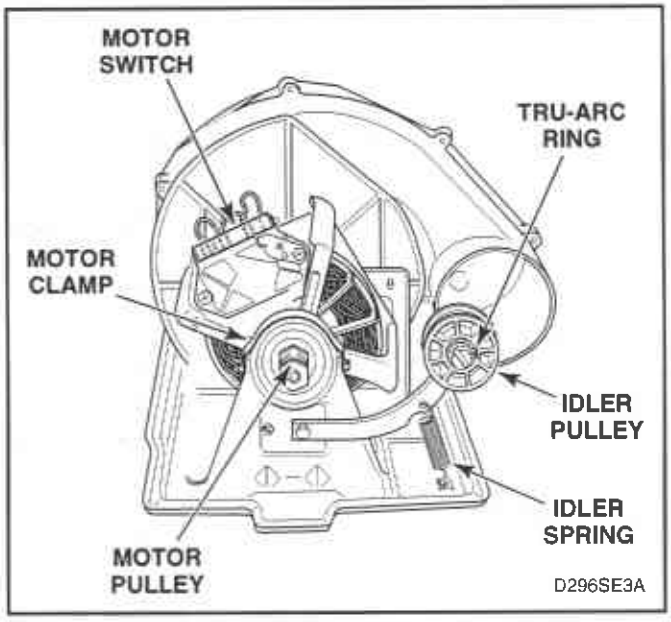


Figure 5-16

i. Pull assembly forward and disengage the middle exhaust duct.

j. Rotate the assembly 90° **counterclockwise** and slide out of machine.

k. **Motor pulley and idler pulley assemblies**
See figure 5-16 for motor and idler pulley removal.

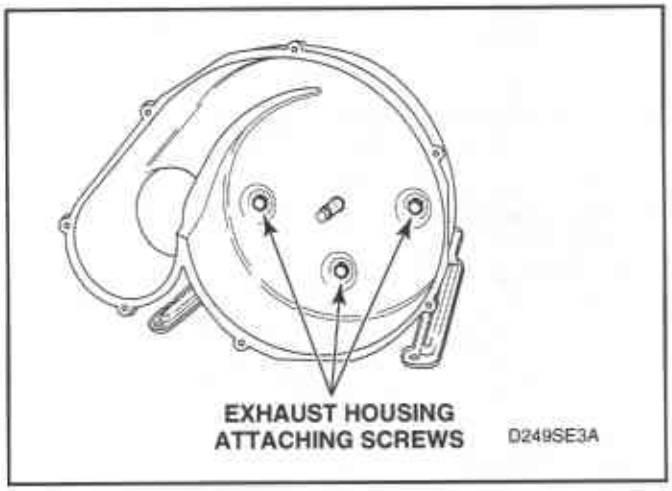


Figure 5-17

NOTE: When repairing or replacing the idler arm, it is important to make sure the idler arm moves freely. To ensure that the idler arm can move freely, proceed as follows:

1. Unhook idler spring.
2. Lift idler arm approximately 3 inches and release. If idler arm does not fall back to the base of the motor mount, then idler arm bolt is too tight.
3. Loosen idler arm bolt 1/4 turn.
4. Add grease between idler arm and motor mount.

l. **Impeller and housing**

1. Remove screws holding cover to housing. See figure 5-14.
2. Hold motor pulley securely and unthread impeller from motor shaft (right hand thread). Use a 7/8 inch, 6 point socket to aid in the removal of the impeller.
3. Remove three screws holding the exhaust housing to the motor mounting bracket. See figure 5-17.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

m. **Motor**

1. Disengage motor wire harness terminal block from the motor by pressing in on the movable locking tabs (located on each side of the terminal block) and pulling away from motor. See figures 5-18 and 5-19.

IMPORTANT: To avoid an open circuit, DO NOT pull on the terminal block wires when removing blocks from motor as this could damage the wires or terminal crimping.

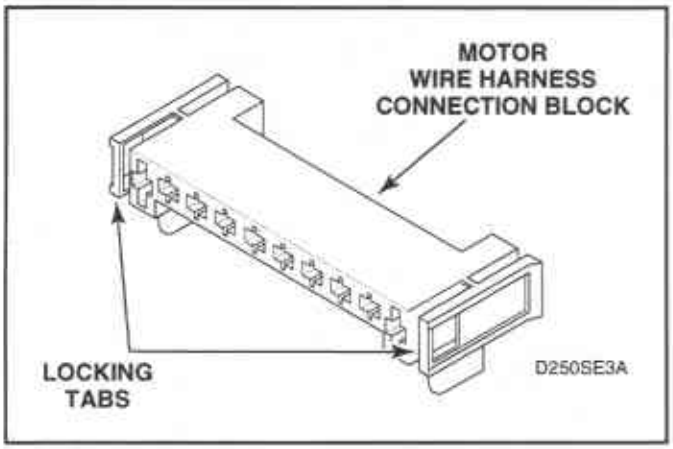


Figure 5-18

Before attaching wire harness terminal block to motor, be sure all the male terminals on motor are straight and are capable of accepting the terminals from the wire harness terminal block.

2. Disconnect ground wire from motor. See figure 5-16.
3. Pry two motor clamps off motor mounting bracket with screwdriver. See figure 5-16, then lift motor out of mounting bracket.

NOTE: When replacing motor, motor switch should be at 10 o'clock position. The positioning tab on the motor should be engaged with the anti-rotating notch in the motor bracket.

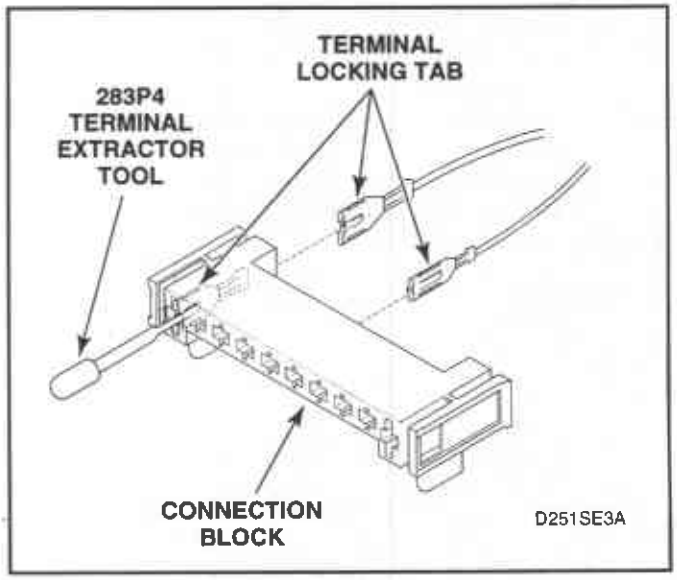


Figure 5-19

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

24. CABINET TOP

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.

b. Gently lower the access panel to disengage locators from bottom edge of front panel.

c. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.

d. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Remove two cabinet top hold-down screws. See figure 5-20.

f. Lift cabinet top to a vertical position by hinging it on the rear top hinges. See figure 5-20.

NOTE: Cabinet top may be raised and hinged on the rear hold-down hinges or supported against wall behind dryer while servicing.

g. Carefully withdraw wire harness through hole in cabinet top and lift the top off the top hinges. See figure 5-20.

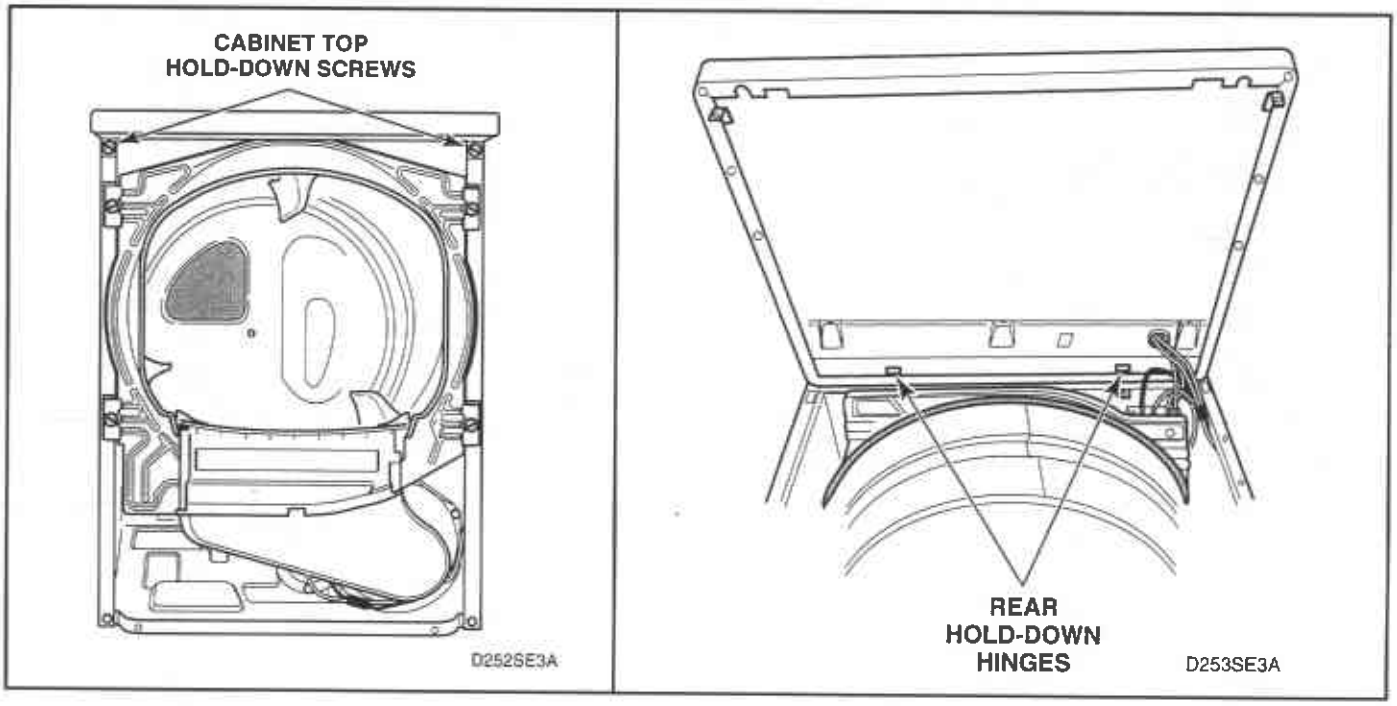


Figure 5-20

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

25. CYLINDER LIGHT (Figure 5-21)

a. Open loading door and remove screw holding lens to the front bulkhead.

b. Turn the bulb counterclockwise and twist out of light receptacle.

26. CYLINDER LIGHT RECEPTACLE (Figure 5-21)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.

b. Gently lower the access panel to disengage locators from bottom edge of front panel.

c. Disconnect wires from door switch. See figure 5-6.

d. Open loading door and remove screw holding lens to the front bulkhead. See figure 5-21.

e. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.

f. Disconnect wires from light receptacle terminals.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

g. Unsnap and lift light receptacle out of front bulkhead.

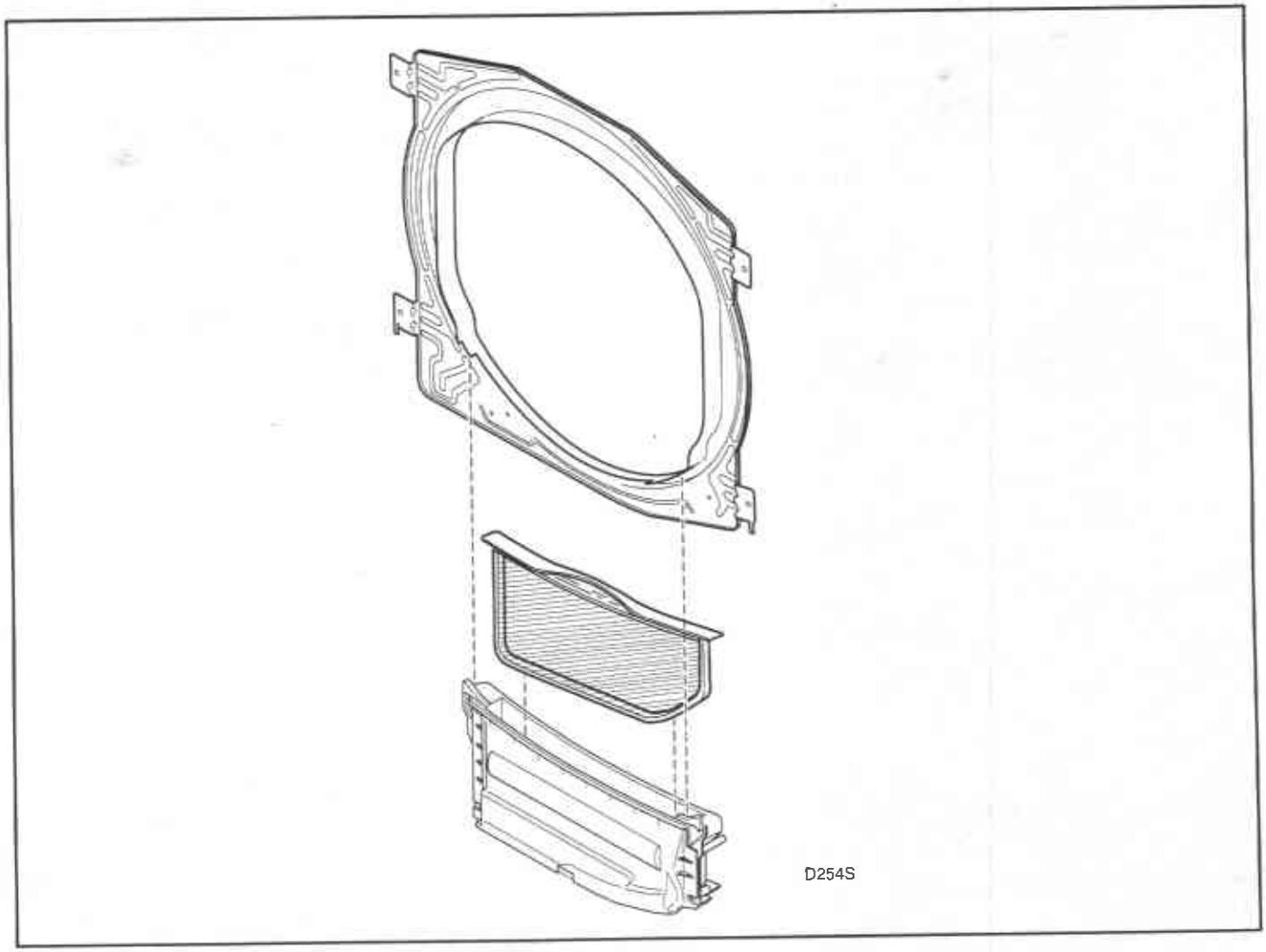


Figure 5-21

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

27. FRONT BULKHEAD ASSEMBLY

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.
d. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Disconnect wires to cylinder light housing (if applicable).

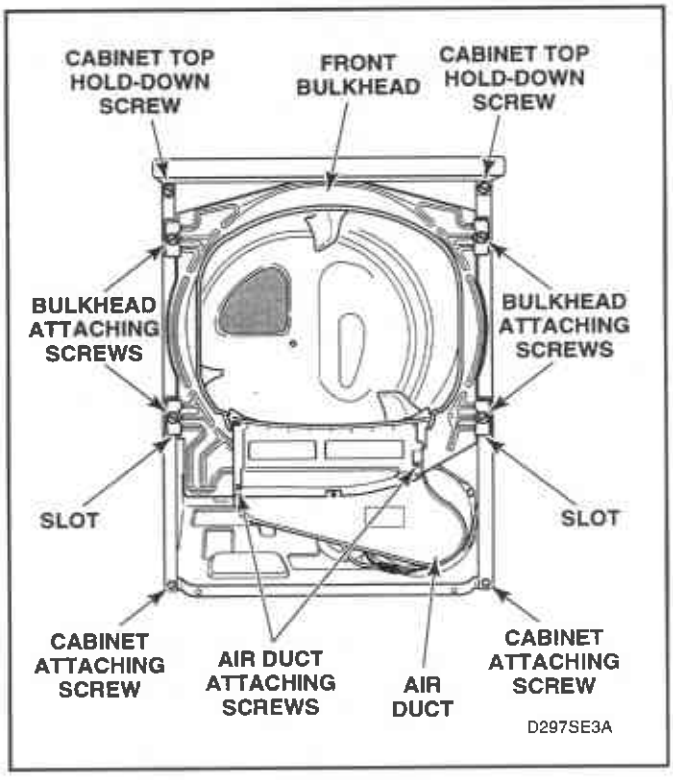


Figure 5-22

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

f. Disengage belt from motor and idler pulleys. See figure 5-15.
g. Remove four screws holding bulkhead to front flange of cabinet and lift complete bulkhead assembly out of slots in cabinet. See figure 5-22.

IMPORTANT: When reassembling, be sure seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

h. Cylinder Glides and Glide Bracket (See figure 5-23.)
   1. Unsnap glide from each glide bracket.
   2. Remove rivets holding glide bracket to front bulkhead.

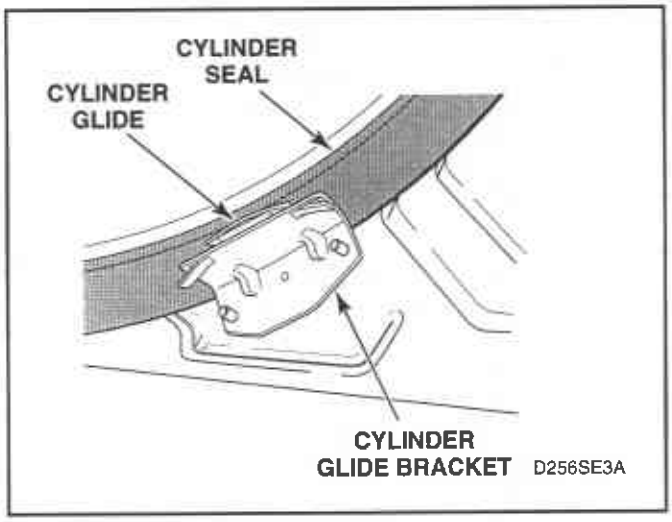


Figure 5-23

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

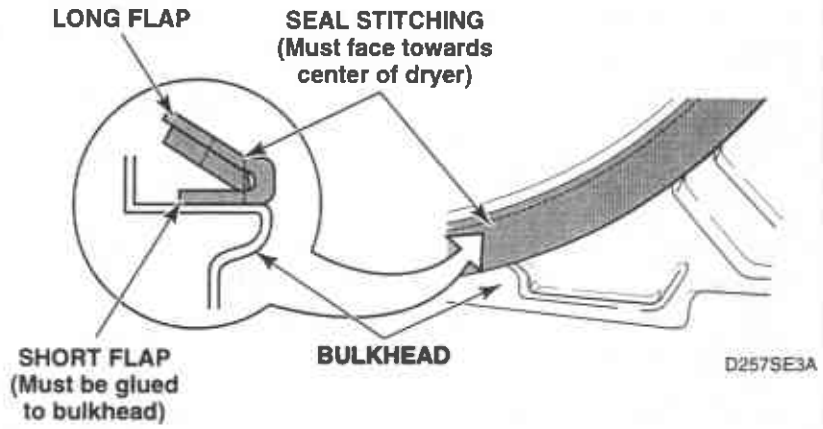


Figure 5-24

i. Front Cylinder Seal (Figure 5-24)
When installing the cylinder seal, it is important to remember these two important steps:

1. The stitching on the seal must face towards the dryer center.
2. The short flap must be glued to the bulkhead and the long flap left loose.

IMPORTANT: The replacement seal can be adhered to the bulkhead using No. 22506P Sealant. This is accomplished by applying a bead of sealant around the entire flanged area where the seal contacts the bulkhead.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

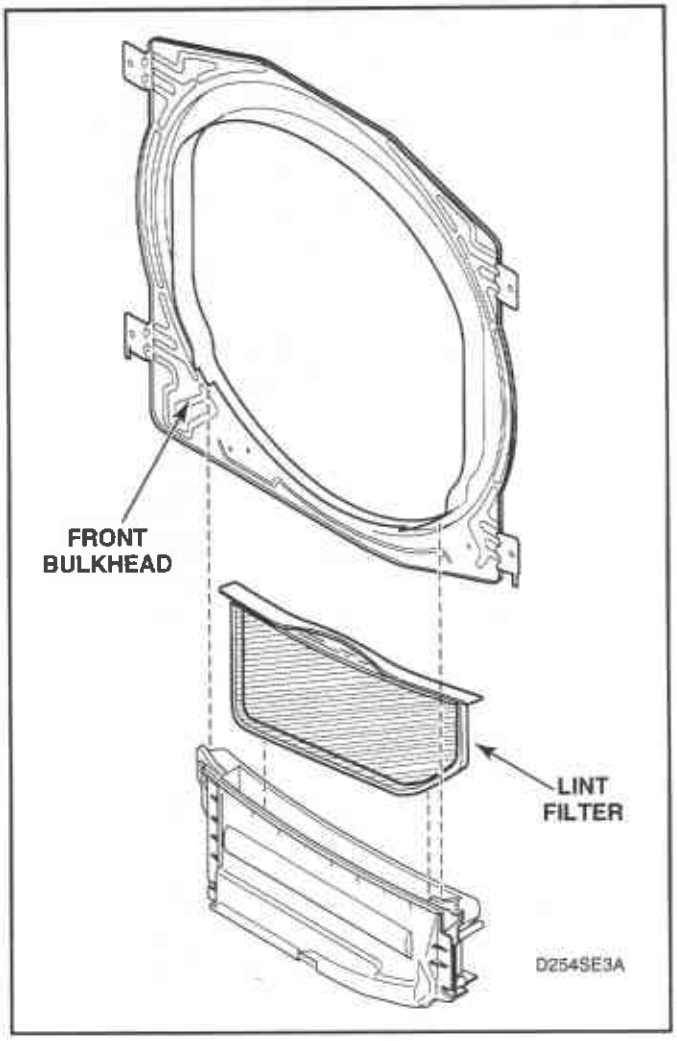


Figure 5-25

28. CYLINDER BELT

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.

b. Gently lower the access panel to disengage locators from bottom edge of front panel.

c. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.

d. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Disengage belt from motor and idler pulleys. See figure 5-15.

f. Remove four screws holding bulkhead to front flange of cabinet. Then, lift complete bulkhead assembly out of slots in cabinet. See figure 5-22.

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

IMPORTANT: When reassembling, be sure seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

g. While supporting cylinder, carefully remove belt from cylinder.

NOTE: Be sure belt is properly installed on motor and idler pulleys, and is on the correct side of the idler lever. See figure 5-15. Belt must be positioned around cylinder between center and rear baffle screws with the ribbed surface against the cylinder. After installing belt, manually rotate cylinder counterclockwise to check that belt is properly aligned.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

29. CYLINDER ASSEMBLY

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.
d. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Disengage belt from motor and idler pulleys. See figure 5-15.

NOTE: When reinstalling belt, be sure belt is properly installed on motor and idler pulleys, and is on the correct side of the idler lever. See figure 5-15. Belt must be positioned around cylinder between center and rear baffle screws with the ribbed surface against the cylinder. After installing belt, manually rotate cylinder counterclockwise to check that belt is properly aligned.

f. Remove four screws holding bulkhead to front flange of cabinet. Then lift complete bulkhead assembly out of slots in cabinet. See figure 5-22.

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

W005

IMPORTANT: When reassembling, be sure seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

g. Loosen two cabinet top hold-down screws. See figure 5-22.
h. Manually rotate cylinder until one of the baffles is at the 6 o'clock position and carefully remove cylinder out through front of dryer.
i. Baffles – Remove screws holding baffles to cylinder. See figure 5-26.

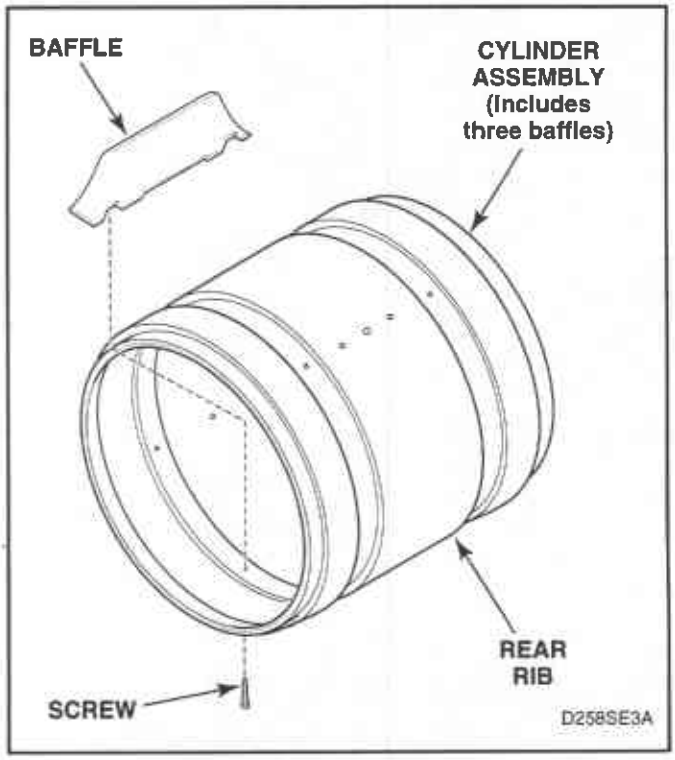


Figure 5-26

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

30. REAR SEAL

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.

b. Gently lower the access panel to disengage locators from bottom edge of front panel.

c. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.

d. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Remove two cabinet top hold-down screws. See figure 5-20.

f. Lift cabinet top to a vertical position by hinging it on the rear hold-down hinges. See figure 5-20.

NOTE: Cabinet top may be raised and hinged on the rear hold-down hinges, or supported against a wall behind the dryer.

g. Disengage belt from motor and idler pulleys. See figure 5-16.

NOTE: When reinstalling belt, be sure belt is properly installed on motor and idler pulleys and is on the correct side of the idler lever. See figure 5-15. Belt must be positioned between center and rear baffle screws with the ribbed surface against the cylinder. After installing belt, manually rotate cylinder counterclockwise to check that belt is properly aligned.

h. Remove four screws holding bulkhead to front flange of cabinet. Then, lift complete bulkhead assembly out of slots in cabinet. See figure 5-22.

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

W005

IMPORTANT: When reassembling, be sure seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

i. Manually rotate cylinder until one of the baffles is at the 6 o'clock position and carefully remove cylinder out through front of dryer.

j. Pull rear cylinder seal from flanged edge of bulkhead. See figure 5-27.

NOTE: When installing the cylinder seal, it is important to remember these two important steps:

(1) The stitching on the seal must face towards the dryer center. See figure 5-24.

(2) The short flap, shown in figure 5-24, must be glued to the bulkhead and the long flap left loose.

IMPORTANT: The seal can be adhered to the bulkhead using replacement sealant No. 22506P. This is accomplished by applying a bead of sealant around the entire flanged area where the seal contacts the bulkhead.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

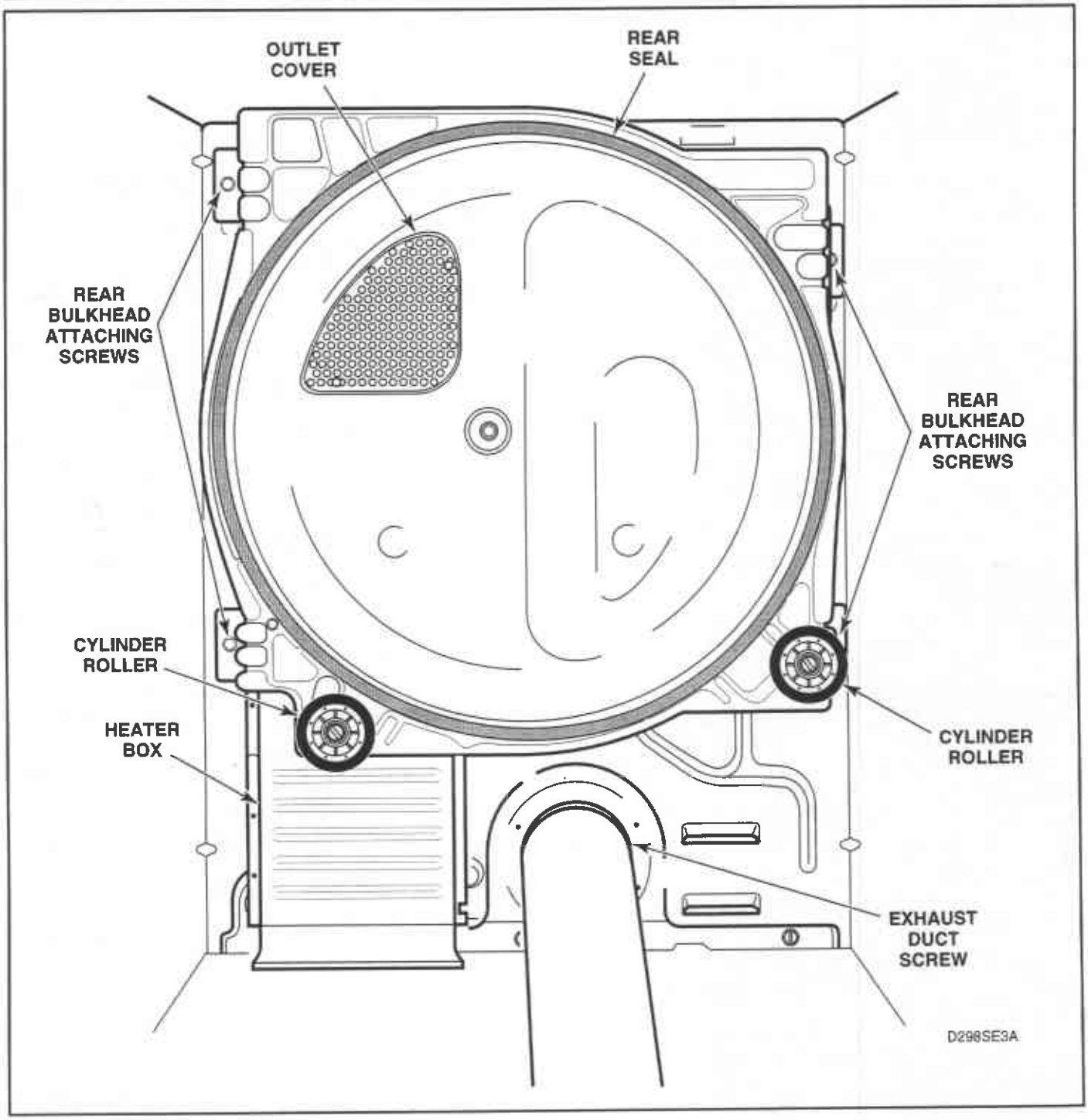


Figure 5-27

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

31. CYLINDER ROLLERS

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.
d. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Disengage belt from motor and idler pulleys. See figure 5-15.
f. Remove four screws holding bulkhead to front flange of cabinet. Then lift complete bulkhead assembly out of slots in cabinet. See figure 5-22.

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

W005

IMPORTANT: When reassembling, be sure seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

g. Pull cylinder forward allowing rear of cylinder to drop down exposing rollers. See figure 5-28.
h. See figure 5-28 for removal of roller from bulkhead.

NOTE: When replacing the cylinder roller, it is important that cylinder roller is installed with the flanged surface of the roller bearing facing towards the front of the dryer.

32. OUTLET COVER

NOTE: Outlet Cover is not removable from the Heater Box Assembly that originally came with the dryer. It is only removable from the replacement Heater Box Assembly, Part No. 503607P.

a. Open door and remove two screws (if present) holding outlet cover to rear bulkhead. See figure 5-27.

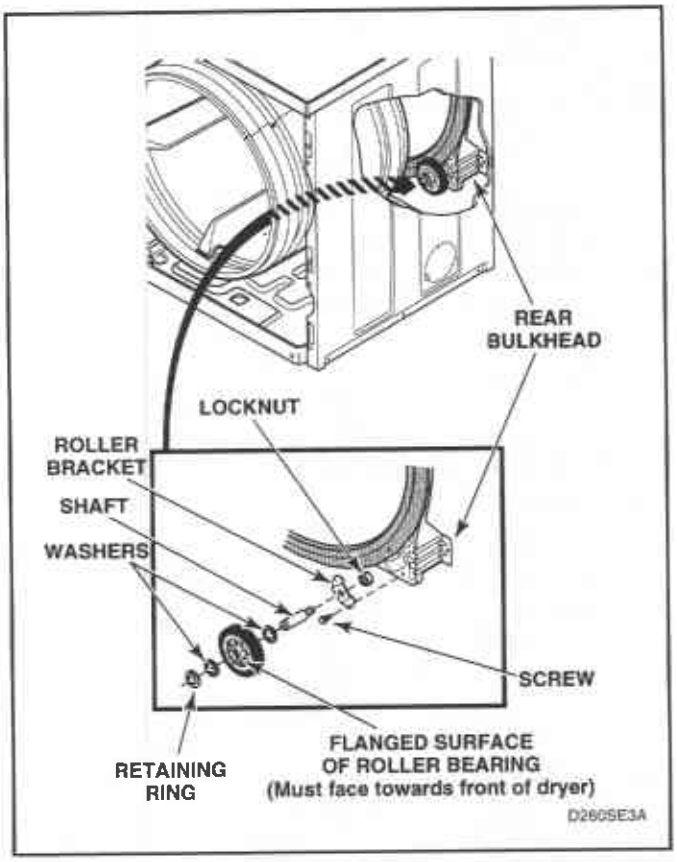


Figure 5-28

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

33. REAR BULKHEAD AND HEATER BOX

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Remove two screws from bottom tabs on front panel. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.
d. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

e. Disengage belt from motor and idler pulleys. See figure 5-15.

NOTE: When reinstalling belt, be sure belt is properly installed on motor and idler pulleys and is on the correct side of the idler lever. See figure 5-15. Belt must be positioned around cylinder between center and rear baffle screws with the ribbed surface against the cylinder. After installing belt, manually rotate cylinder counterclockwise to check that belt is properly aligned.

f. Remove four screws holding bulkhead to front flange of cabinet. Then lift complete bulkhead assembly out of slots in cabinet. See figure 5-22.

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

W005

IMPORTANT: When reassembling, be sure seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

g. Loosen two cabinet top hold-down screws. See figure 5-20.
h. Manually rotate cylinder until one of the baffles is at the 6 o'clock position and carefully remove cylinder out through front of dryer.
i. **Gas Models:**
   1. Disconnect igniter wires at disconnect blocks, sensor wires from flame sensor terminals, and wires from gas valve coils at the quick disconnect blocks. See figure 5-9.
   2. Remove burner tube attaching screw from right side of burner housing, while holding burner tube in place. See figure 5-11.
   3. Gently move burner tube toward rear of dryer to disengage tab from slot on left side of burner housing. See figure 5-10.
   4. Carefully rotate burner tube and igniter **counterclockwise** so tab is at the 8 o'clock position.
   5. Move air shutter end of burner tube slightly to right and CAREFULLY remove burner tube and igniter assembly out through front of dryer. See figure 5-10.

IMPORTANT: The igniter is very fragile. Be careful not to damage it during removal.

   6. Remove screw holding burner housing to heat shroud. See figure 5-9.
   7. Remove screw holding front of burner housing to dryer base and remove housing out through front of dryer. See figure 5-11.
   8. Remove four screws holding shroud to heater box, and remove shroud out through front of dryer. See figure 5-9.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

j. **Electric Models:**
Remove two screws holding element and plate to heater box, then pull element down and away from heater box. See figure 5-11.

k. While supporting bulkhead, remove the four screws holding rear bulkhead to dryer cabinet, then lift complete assembly out of dryer. See figure 5-27.

l. To remove heater box from rear bulkhead. See figure 5-29.

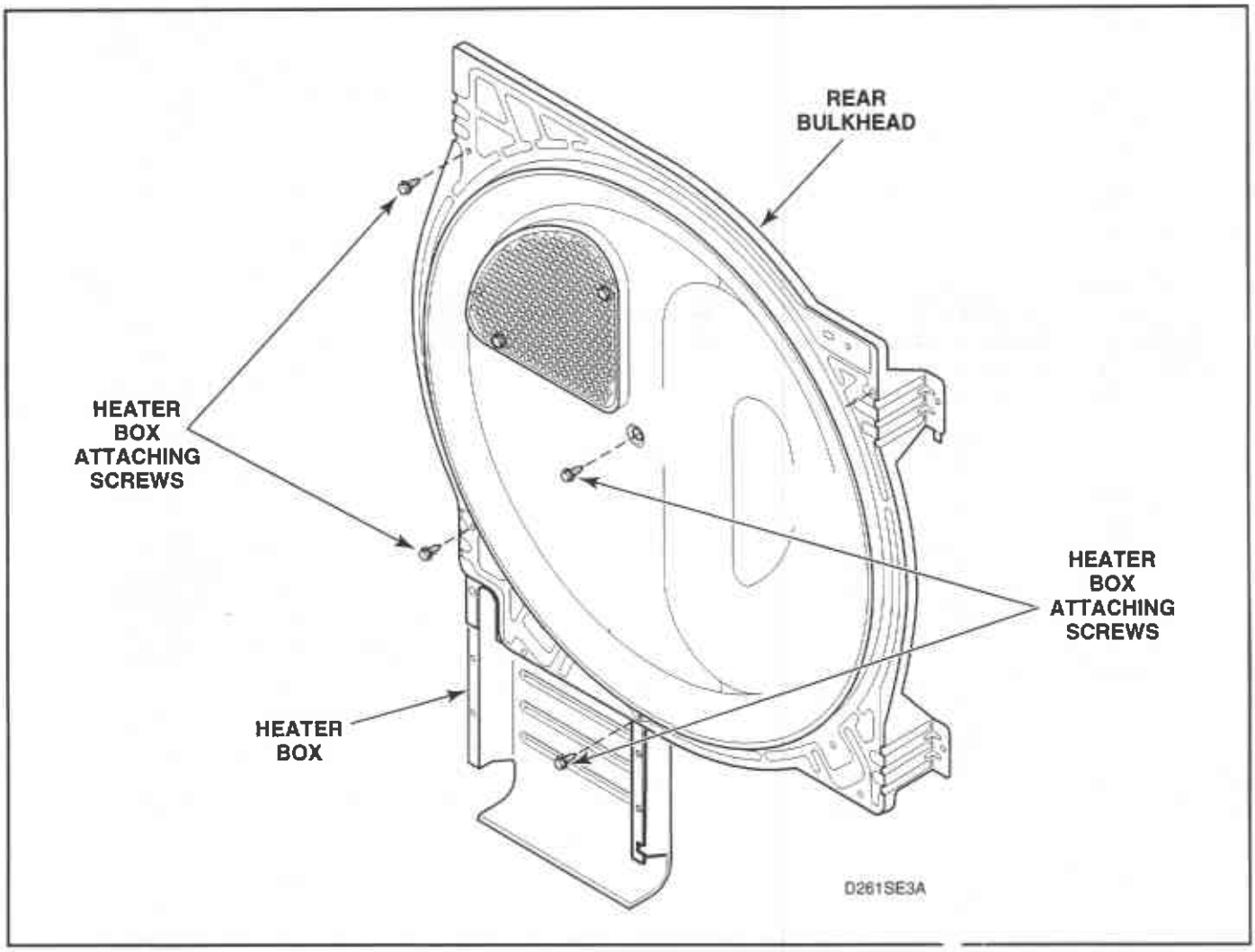


Figure 5-29

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

34. TERMINAL BLOCK OR POWER CORD

a. **Terminal Block:**

1. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.
2. Gently lower the access panel to disengage locators from bottom edge of front panel.
3. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.
4. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

5. Remove two cabinet hold-down screws. See figure 5-20.
6. Lift cabinet top to a vertical position by hinging it on the rear hold-down brackets. See figure 5-20.

NOTE: When servicing, cabinet top may be raised and hinged on the rear hold-down brackets, or supported against wall behind the dryer.

7. Remove all wires from terminal block. (Refer to appropriate wiring diagram when rewiring terminal block).
8. Remove screw holding terminal block to rear bulkhead. See figure 5-30.

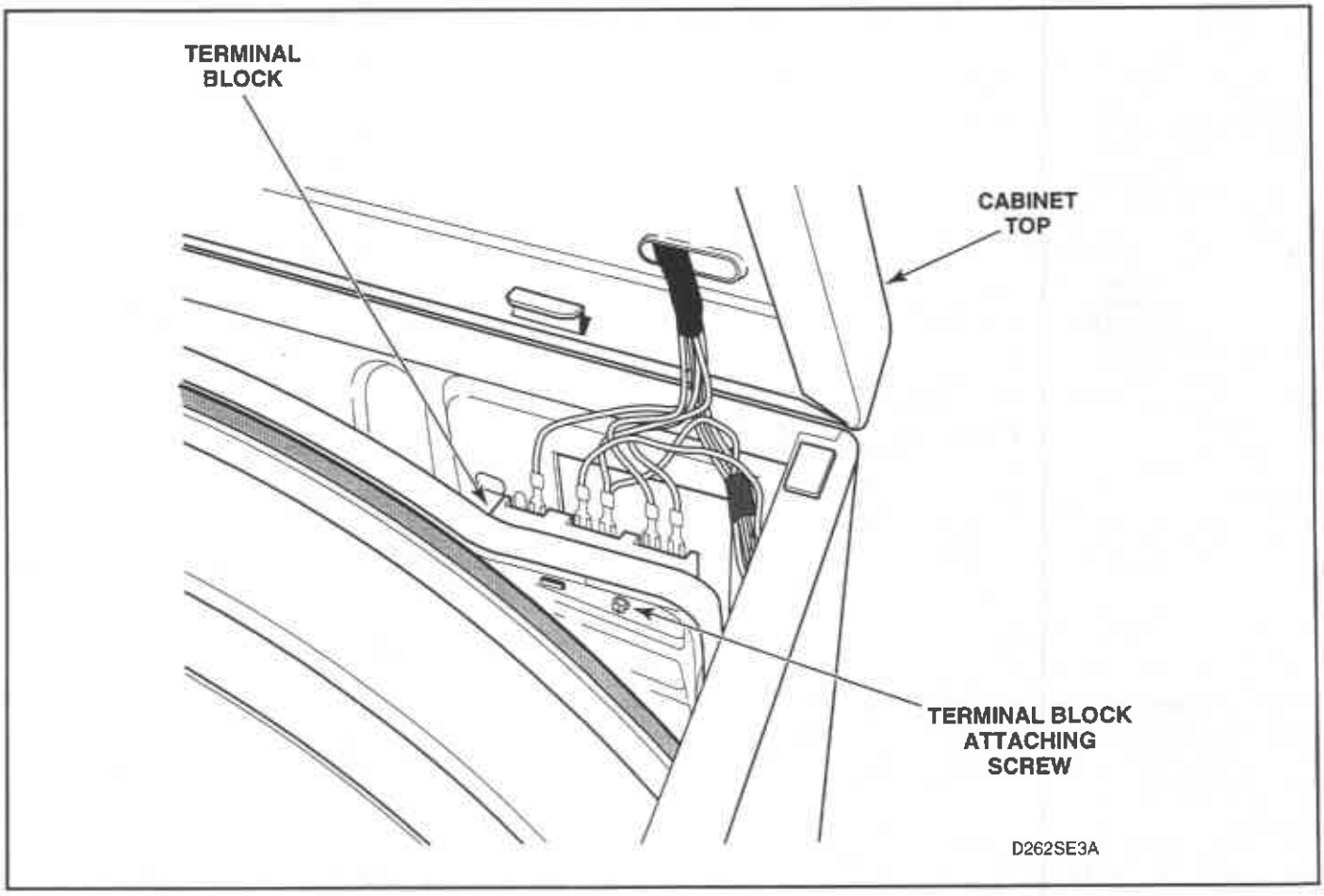


Figure 5-30

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

b. **Power Cord:**

1. Remove access plate on rear of cabinet.
2. Remove strain relief.
3. Remove screw holding power cord ground wire to rear bulkhead. See figure 5-31.

NOTE: Reinstall screw and ground wires into same hole in bulkhead when reinstalling power cord.

4. Disconnect molex plug and remove power cord from rear of dryer cabinet.

NOTE: A qualified electrician should check the polarity of the wall receptacle. If a voltage reading is measured other than that illustrated, the qualified electrician should correct the problem.

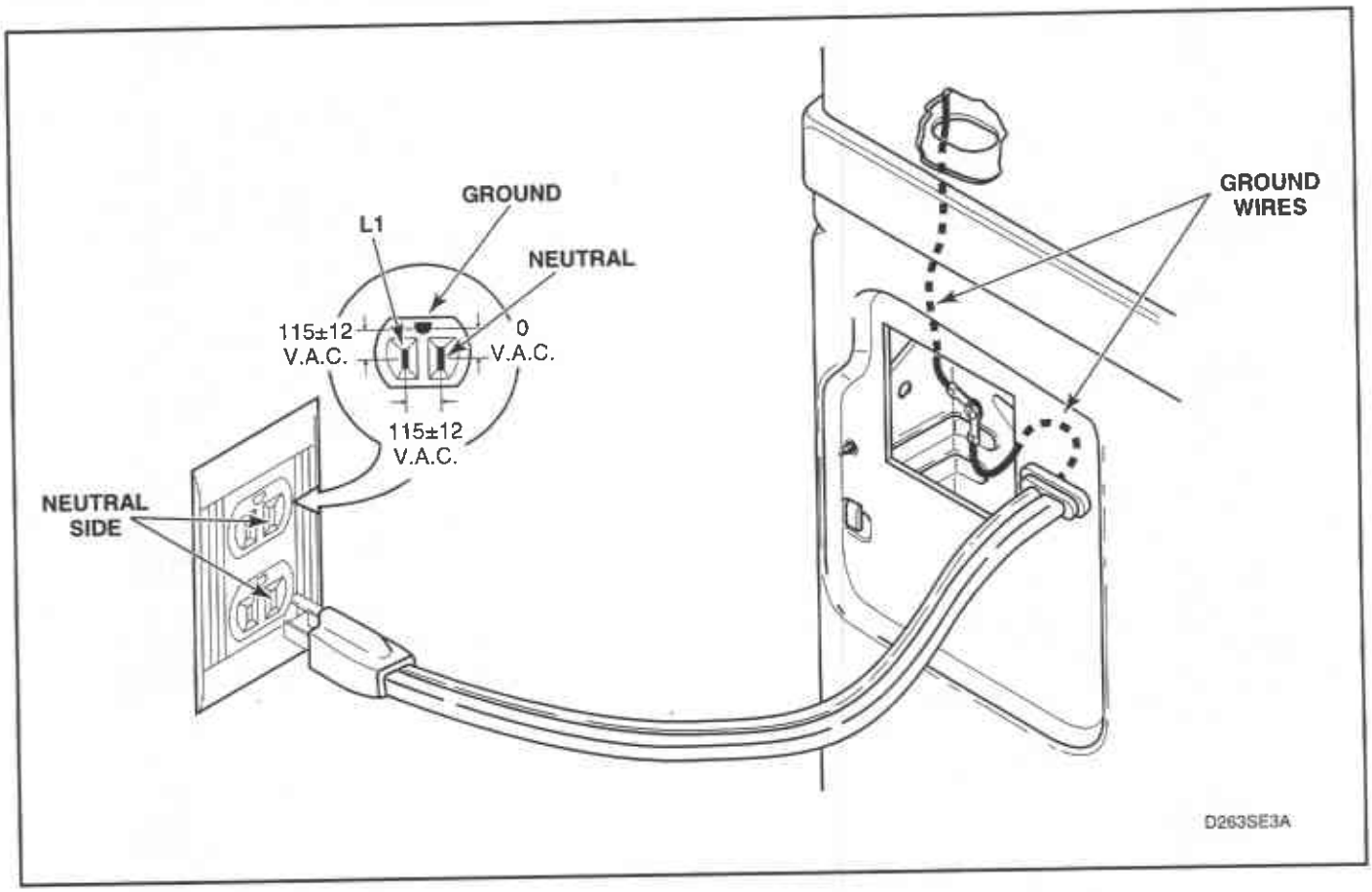


Figure 5-31

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

35. TERMINAL BLOCK TERMINALS

Remove terminals from the plastic connector block using No. 283P4 Terminal Extractor Tool as follows:

a. Insert the tool into the plastic connector block on the back of the terminal being removed. See figure 5-19.

b. Apply tool pressure to compress the terminal locking tab on terminal and force the terminal out back side of plastic connector block. See figure 5-19.

To install terminal in plastic connector block, insert terminal (with wire securely crimped in place) into back side of plastic connector block. Push terminal into plastic connector block until locking tab on terminal spreads and holds terminal in place.

36. CABINET

a. Remove the three screws holding the control assembly to the control hood rear panel. See figures 5-1 or 5-2.

b. Rotate the assembly forward to access inner wiring.

c. Disconnect wiring from inner components and carefully remove components from control hood assembly.

NOTE: Refer to appropriate wiring diagram when rewiring component parts.

d. Rotate control hood assembly forward and lift to free assembly from hold-down clips.

e. Remove two screws from bottom edge of lower front access panel. See figure 5-7.

f. Swing bottom of panel away from dryer to disengage hold-down clips and locators from bottom edge of front panel.

g. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.

h. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

i. Remove two cabinet top hold-down screws. See figure 5-20.

j. Lift cabinet top to a vertical position by hinging it on the rear hold-down brackets. See figure 5-20.

NOTE: Cabinet top may be raised and hinged on the rear hold-down hinges or supported against wall behind dryer while servicing.

k. Carefully withdraw wire harness through hole in cabinet top and lift the top off the hold-down hinges with timer case attached. See figure 5-20.

l. Disengage belt from motor and idler pulleys. See figure 5-15.

NOTE: When reinstalling belt, be sure belt is properly installed on motor and idler pulleys and is on the correct side of the idler lever. See figure 5-15. Belt must be positioned around cylinder between center and rear baffle screws with the ribbed surface against the cylinder. After installing belt, manually rotate cylinder counterclockwise to check that belt is properly aligned.

m. Remove four screws holding bulkhead to front flange of cabinet and lift complete bulkhead assembly out of slots in cabinet. See figure 5-22.

n. Manually rotate cylinder until one of the baffles is at the 6 o'clock position and carefully remove cylinder out through front of dryer.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

o. **Gas Models:**
   1. Disconnect igniter wires at disconnect blocks, sensor wires from flame sensor terminals, and wires from gas valve coils at the quick disconnect blocks. See figure 5-9.
   2. Remove screw from right side of burner housing holding burner tube in place. See figure 5-11.
   3. Gently move burner tube toward rear of dryer to disengage tab from slot on left side of burner housing. See figure 5-9.
   4. Carefully rotate burner tube and igniter **counterclockwise** so tab is at the 8 o'clock position.
   5. Move air shutter end of burner tube slightly to right and CAREFULLY remove burner tube and igniter assembly out through front of dryer.

IMPORTANT: The igniter is very fragile. Be careful not to damage it during removal.

   6. Remove screw holding burner housing to heat shroud. See figure 5-9.
   7. Remove screw holding front of burner housing to dryer base and remove housing out through front of dryer. See figure 5-9.
   8. Remove four screws holding shroud to heater box. Remove shroud out through front of dryer. See figure 5-9.

p. **Electric Models:**
Remove two screws holding element and plate to heater box, then pull element down and away from heater box. See figure 5-11.

q. Remove screw holding heat shield to dryer base. See figure 5-27.

r. While supporting bulkhead, remove screws holding bulkhead to rear of dryer cabinet, and remove assembly out of dryer. See figure 5-27.

s. Remove screw holding exhaust duct to dryer cabinet and pull duct out of cabinet. See figure 5-27.

t. Remove two screws from each rear cabinet top hold-down bracket. See figure 5-22.

u. Remove screw holding access plate and remove plate.

v. Remove wire harness clips.

w. Remove locators and screws.

x. Remove two screws from front edge at each side of cabinet. See figure 5-22. Then remove remaining screws from around bottom of cabinet and lift cabinet off base.

37. BASE

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.

b. Gently lower the access panel to disengage locators from bottom edge of front panel.

c. Remove two screws holding bottom tabs on front panel to dryer side panels. See figure 5-7. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.

d. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate wiring diagram when rewiring switch.

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

W005

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

e. **Gas Models:**
   1. Disconnect igniter wires at disconnect blocks, sensor wires from flame sensor terminals, and wires from gas valve coils at the quick disconnect blocks. See figure 5-9.
   2. Close main gas shut-off valve.
   3. Disconnect gas line to dryer.
   4. Remove three screws holding gas valve bracket to base and remove valve with attached lead-in pipe. See figure 5-9.
   5. Remove screw holding burner tube in place from right side of burner housing. See figure 5-11.
   6. Gently move burner tube toward rear of dryer to disengage tab from slot on left side of burner housing. See figure 5-9.
   7. Carefully rotate burner tube and igniter counterclockwise so tab is at the 8 o'clock position, and CAREFULLY remove burner tube and igniter assembly out through front of dryer.

IMPORTANT: The igniter is very fragile. Be careful not to damage it during removal.

   8. Remove screw holding front of burner housing to dryer base. See figure 5-11.
   9. Remove four screws holding shroud to heater box and remove shroud and burner housing out through front of dryer. See figure 5-9.

f. **Electric Models:**
   1. Remove two screws holding element and plate to heater box, then pull element down and away from heater box. See figure 5-11.
   2. Disconnect wire harness from limit thermostat, thermal fuse and/or heating element. See figure 5-11.

g. Remove screw holding heat shield to dryer base. See figure 5-29.

h. Remove lint filter screws and lint filter. See figure 5-3.

i. Remove screws holding air duct to front bulkhead and remove air duct. See figure 5-13.

IMPORTANT: When reassembling, be sure seal on exhaust fan cover makes airtight seal on flange of duct. See figure 5-12. If the seal is installed improperly, the airflow through the exhaust system will be restricted which can adversely affect dryer performance.

j. Disconnect wires from thermostat and heater. See figure 5-14.

NOTE: Refer to appropriate wiring diagram when rewiring thermostat and heater.

k. Remove cylinder belt from idler and motor pulleys. See figure 5-15.

l. Remove two screws holding motor mounting bracket to dryer base. Then pull complete assembly forward to disengage middle exhaust duct.

m. Rotate the assembly **counterclockwise** 90° and slide out front of machine.

n. Disconnect wires from motor switch and remove harness clip from motor bracket. See figure 5-16. Then, set motor and exhaust assembly off to the side.

o. Remove screw holding bracket on exhaust duct to rear of cabinet and pull duct out of cabinet. See figure 5-27.

IMPORTANT: When reinstalling motor and exhaust assembly, be sure wire harness on right side is clipped to motor mounting bracket and is routed along dryer base (between motor mounting bracket and right side of cabinet). See figure 5-13. Tab on rear of motor mounting bracket must be slid into slot in dryer base. Be sure the belt has been installed on the correct side of the idler lever. See figure 5-15.

p. Remove two screws from front edge at each side of cabinet. See figure 5-22. Then remove remaining screws from around bottom of cabinet and lift cabinet off base.

q. Remove leveling legs from base and reinstall on new base. See figure 6-1.

SECTION 6
Adjustments

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

1. LEVELING LEGS (Figure 6-1)

NOTE: Dryer should be installed on a solid and level floor.

a. Place dryer in position, adjusting the legs until dryer is level.

WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

NOTE: Legs can be adjusted outside the dryer by using a 1-1/4 inch size wrench, or from inside the dryer (with lower front access panel removed) by using a 1/4 inch drive ratchet with extension.

b. Keep dryer as close to the floor as possible. All four legs must rest firmly on the floor so weight of the dryer is evenly distributed. The dryer MUST NOT rock.

IMPORTANT: DO NOT move the dryer at any time unless the dryer is completely assembled. DO NOT slide the dryer across the floor once the leveling legs have been extended as the legs and base could become damaged.

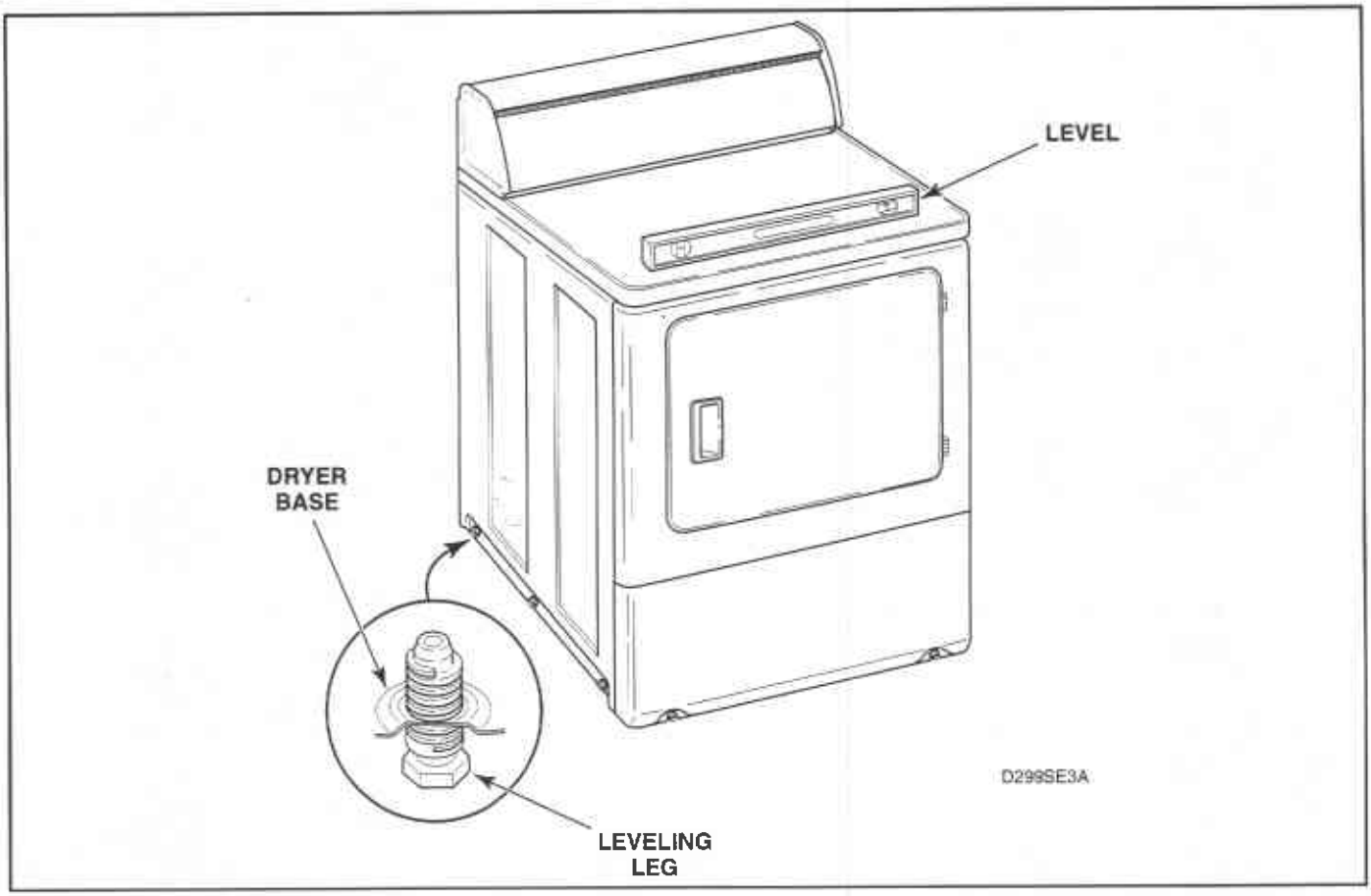


Figure 6-1

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded**

W001

2. BURNER FLAME (Gas Models)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 5-7.

b. Gently lower the access panel to disengage locators from bottom edge of front panel.

c. Set timer at "60" minutes.

d. Close the loading door. Start the dryer in a heat setting (refer to Operating Instructions supplied with the dryer). The dryer will start, the igniter will glow red, and the main burner will ignite.

e. Allow the dryer to operate for approximately five minutes, then loosen the air shutter lockscrew. See figure 6-2.

f. Turn the air shutter to the left to get a luminous yellow tipped flame, then turn it back slowly to the right to obtain a steady blue flame.

g. After proper flame is obtained, tighten air shutter lockscrew securely. See figure 6-2.

h. Reinstall lower front access panel and screws.

WARNING

To reduce the risk of fire or serious injury, the access door must be in place during normal operation.

After the dryer has operated for approximately three minutes, exhaust air or exhaust pipe should be warm.

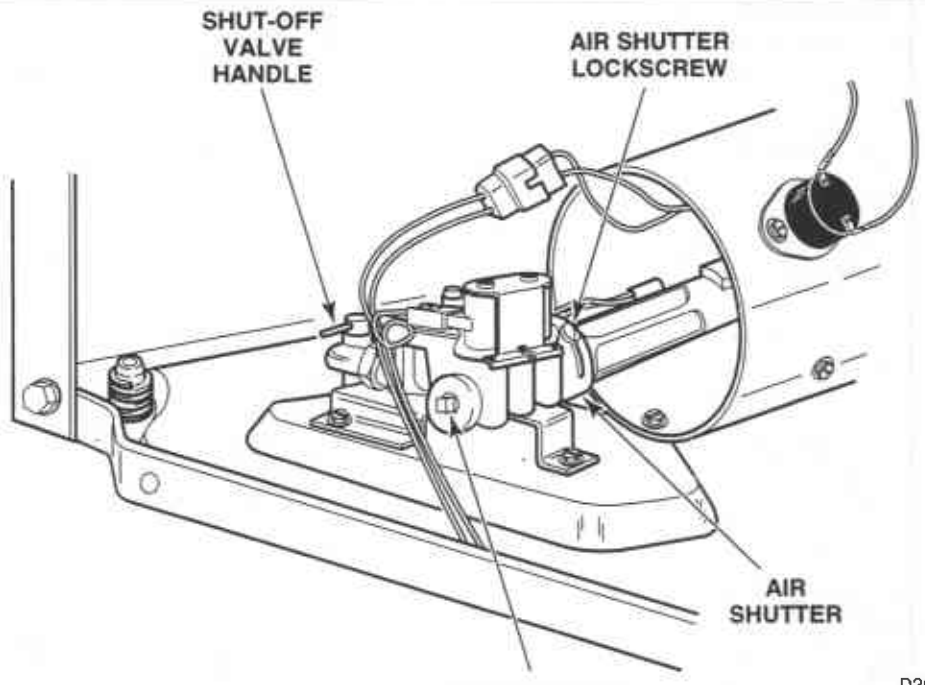


Figure 6-2

SECTION 7
Test Procedures

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

IMPORTANT: Electrical test procedures in this service manual are performed by using a Volt-Ohm meter. Tests can also be performed using a multi-meter or any other electrical testing equipment with which the service person is familiar.

1. **DRIVE MOTOR (Figure 7-1)**
   a. Remove motor and exhaust assembly. Refer to Section 5, paragraph 24.
   b. Disconnect motor wire harness at motor disconnect block.

NOTE: Refer to appropriate wiring diagram when rewiring motor switch.

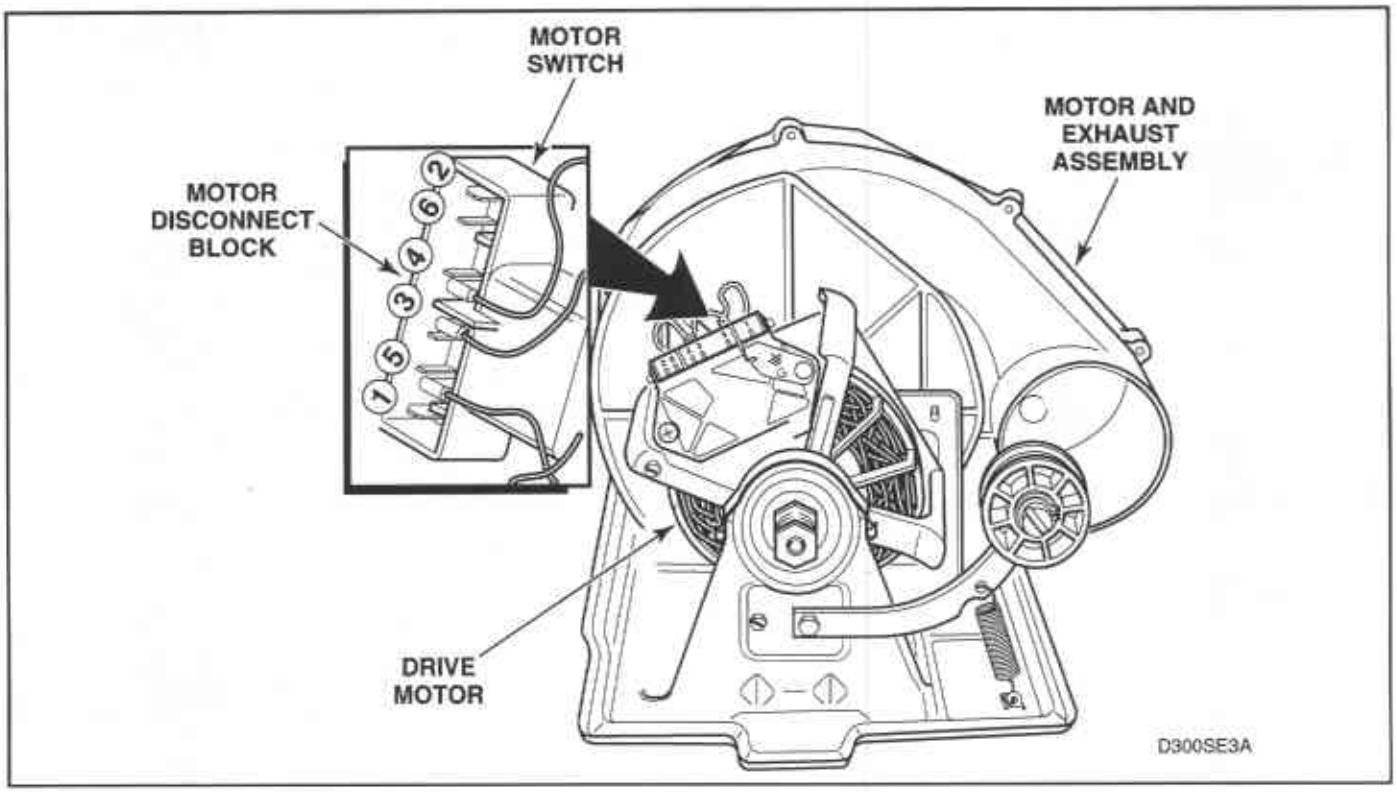


Figure 7-1

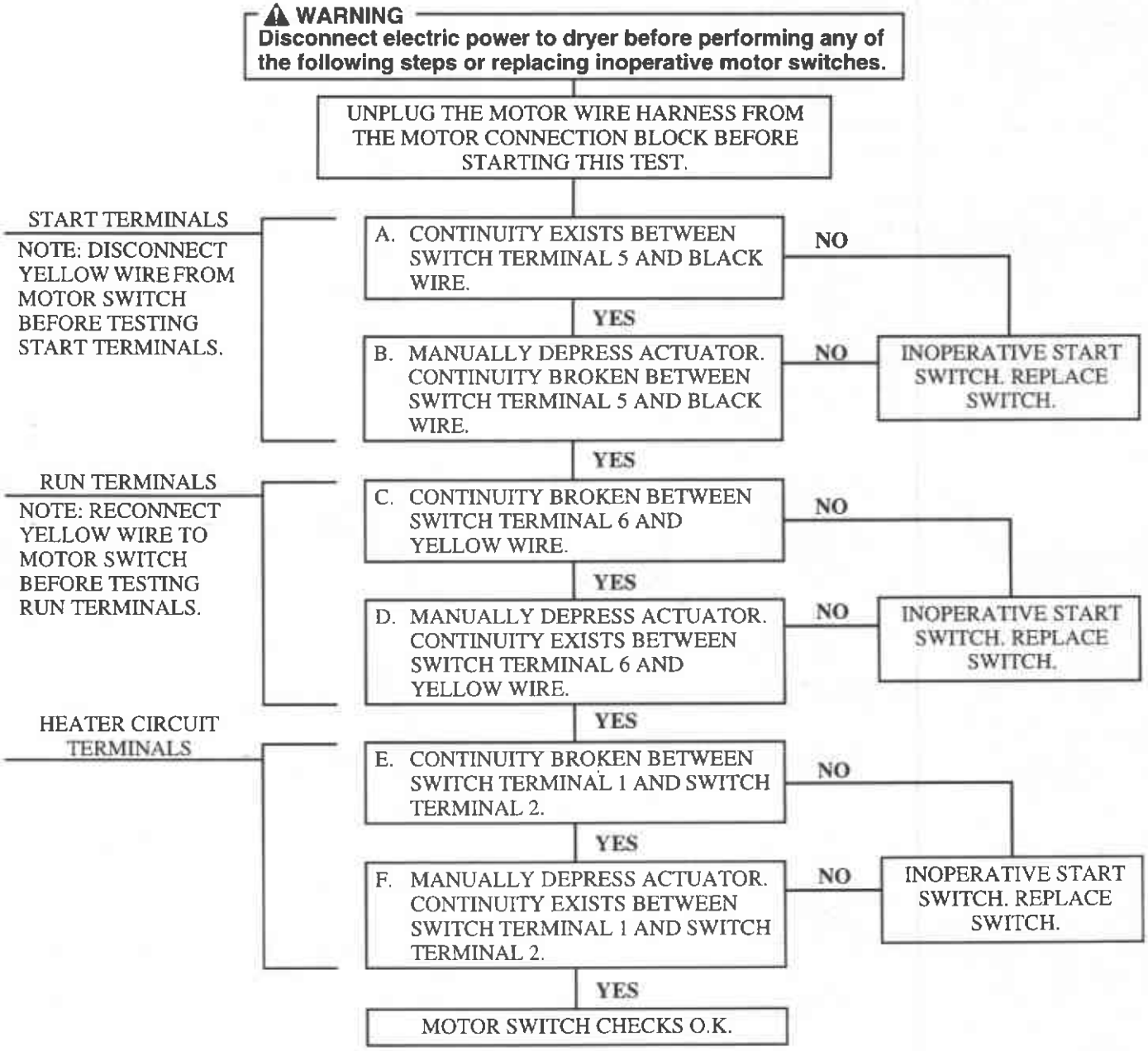
WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

c. **Motor Switch** (Refer to SECTION 6.)



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

d. **Motor Windings** (Refer to SECTION 6.)

⚠ WARNING
Disconnect electric power to dryer before performing any of the following steps or replacing inoperative motor switches.

START WINDING

G. 1 – 2 OHMS BETWEEN BLACK WIRE AND ORANGE WIRE.

NO → INOPERATIVE START WINDING. REPLACE MOTOR.

YES

RUN MAIN WINDING

H. 1 – 2 OHMS BETWEEN YELLOW WIRE AND ORANGE WIRE.

NO → INOPERATIVE RUN MAIN WINDING. REPLACE MOTOR.

YES

PROTECTOR

I. CONTINUITY EXISTS BETWEEN ORANGE WIRE AND BROWN WIRE.

NO → INOPERATIVE RUN MAIN WINDING. REPLACE MOTOR.

YES

ALL MOTOR WINDINGS CHECK O.K.

e. **Internal Wiring of Dryer Motor**

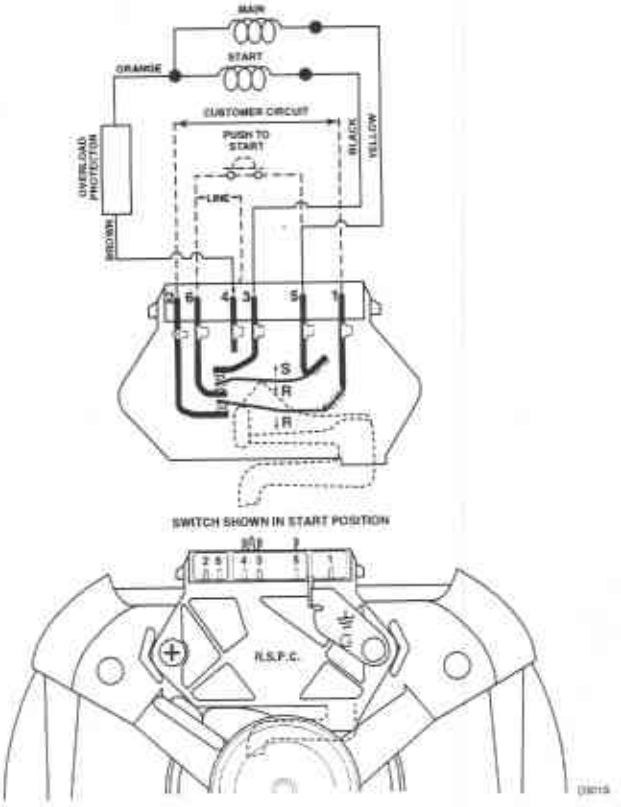


Figure 7-2

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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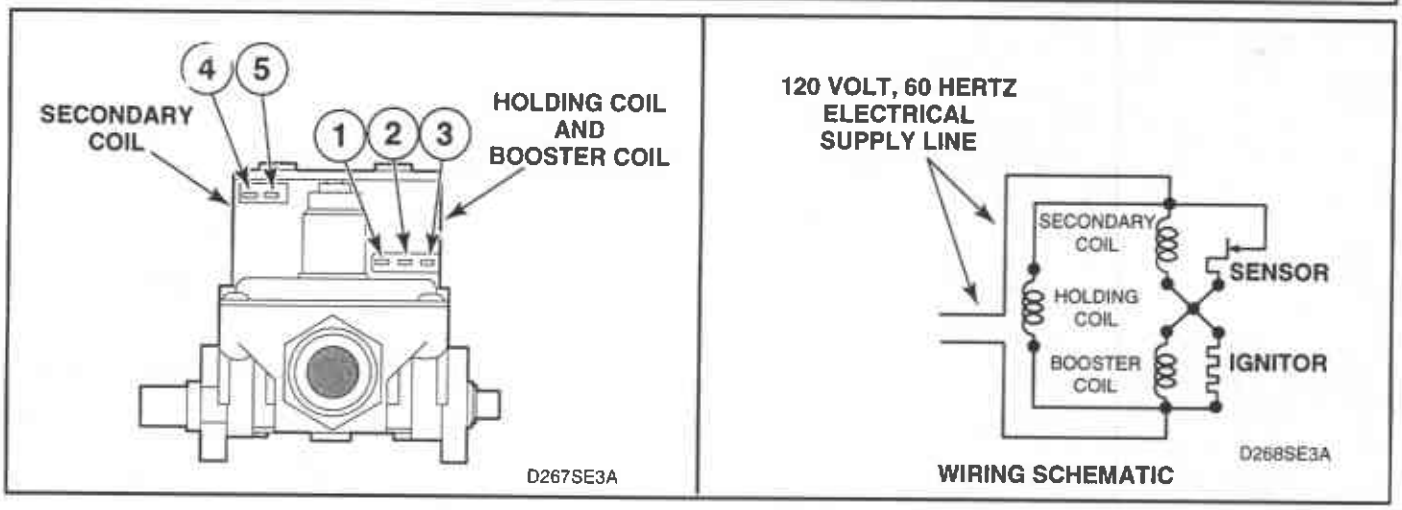

Figure 7-3

2. BURNER SYSTEM OPERATION (Figure 7-3)

Components

This burner has four basic components: A silicon carbide (glow bar) igniter, burner tube, flame sensor, and a two-stage gas valve consisting of a split-coil valve and a secondary coil valve. The split-coil valve is opened when the dryer thermostat calls for heat, while the secondary valve does not open until the igniter has attained ignition temperature.

Pre-Ignition Circuits

When the dryer thermostat calls for heat, circuits are completed through the holding coil, flame sensor, booster coil and igniter. Both coils must be energized to open split-coil valve. Once opened, the holding coil can hold the valve open without assistance from the booster coil. The current travels around the secondary coil by the flame sensor, passing through the igniter causing it to get hot.

Burner Circuit

In approximately 30 seconds, the igniter attains ignition temperature and the flame sensor (located on burner housing beside the igniter) contacts open. A circuit is then completed through the secondary valve coil, opening the valve and allowing gas to flow. Ignition is made and the heat from the burner flame causes the flame sensor contacts to open.

IGNITION SYSTEM FEATURES (Figure 7-3)

MOMENTARY POWER INTERRUPTION: Upon resumption of power, flame sensor contacts will still be open, permitting secondary valve to open. However, with the secondary coil in the circuit, the booster coil cannot draw enough current to open the split-coil valve. When flame sensor contacts do reclose, the secondary valve will close, and the burner system will be in the normal pre-ignition circuit.

FLAME FAILURE: In case of flame failure, the flame sensor contacts will reclose in about 45 seconds. This will close the secondary valve and the burner system will be in the normal pre-ignition circuit.

IGNITION FAILURE: If flame is not established as flame sensor contacts open, secondary valve will remain open until flame sensor contacts reclose. Flame sensor will continue to recycle the igniter and secondary valve (about once per minute) until ignition is made or dryer is turned off.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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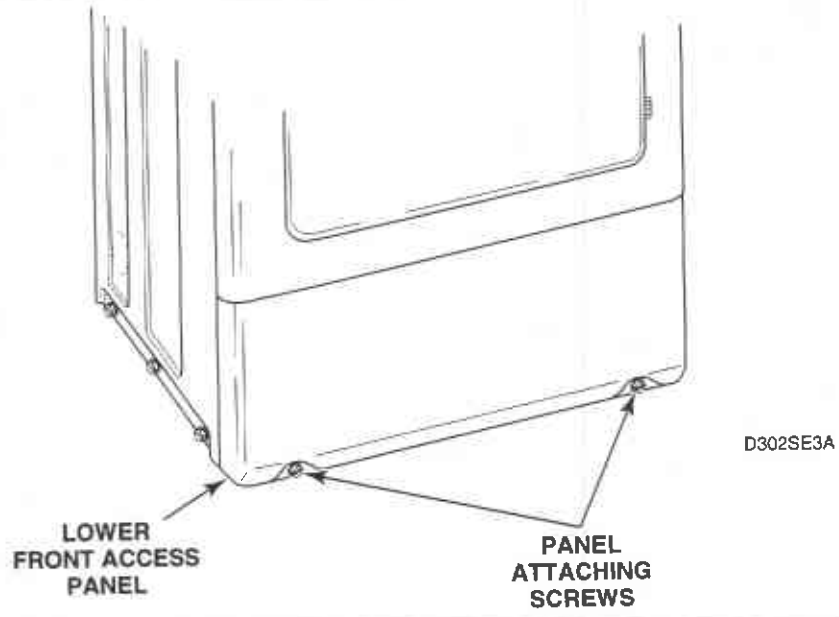


Figure 7-4

3. ELECTRICAL CIRCUIT TO IGNITION SYSTEM

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 7-4.

b. Gently lower the access panel to disengage locators from bottom edge of front panel.

c. Close main gas shut-off valve.

d. Remove valve wire harness disconnect block from the holding and booster coil. See figure 7-5.

e. Plug dryer power cord into wall receptacle, and start the dryer in a heat setting (refer to the Operating Instructions supplied with dryer).

f. Set test meter to read AC voltage and apply meter probes into terminals on the dryer harness plug that would correspond to terminals 1 and 2 on the coil. See figure 7-3. Meter should register line voltage in all Fabric settings, except FLUFF which should read "zero" VAC.

g. If meter does not read line voltage in step "f", check motor switch, thermostats, fabric switch, or timer.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

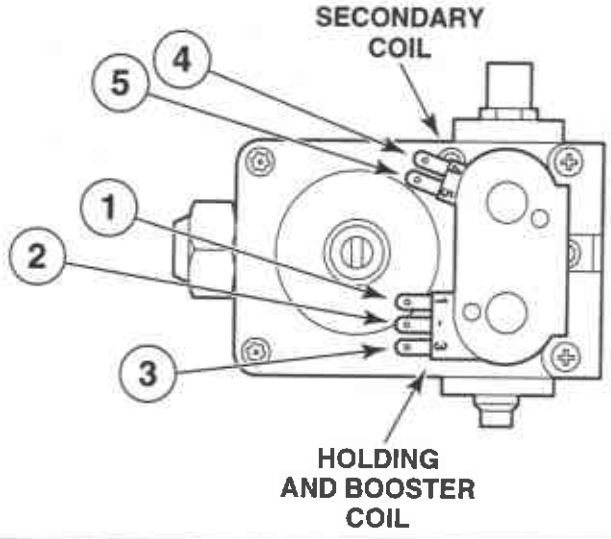


Figure 7-5

4. GAS VALVE COILS

WARNING

To reduce the risk of fire, explosion and electric shock, close the valve in the gas supply line to the gas dryer and disconnect the electrical power unless gas or power supplies are required to perform test procedure.

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 7-4.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Close main gas shut-off valve.
d. Remove disconnect blocks from gas valve coils.
e. Set test meter to read Ohms and put meter probes to terminals as in figure 7-5, and in the following chart.

COIL TOLERANCE READINGS

Holding Coil Terminals 1 & 2	1365 ± 25 Ohms
Booster Coil Terminals 1 & 3	560 ± 25 Ohms
Secondary Coil Terminals 4 & 5	1220 ± 50 Ohms

NOTE: If meter registers any other readings than those listed above, the respective coil(s) should be replaced.

5. SENSOR

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 7-4.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Close main gas shut-off valve.
d. Remove wires from sensor terminals. See figure 5-9.
e. Set test meter to read Ohms, put meter probes on sensor terminals. Meter should read "zero" Ohms. If meter registers an Ohm reading of any amount, replace sensor.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

6. IGNITER

Gas dryers are manufactured with an igniter.

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Disconnect igniter wires at disconnect block.
d. Set test meter to read Ohms and put meter probes on terminals of igniter wires.
e. **Norton Igniter –** meter should read between 45 – 200 Ohms. See figure 7-6.

If meter does not read appropriate Ohms, then replace the igniter.

IMPORTANT: Always examine all wires, terminals and connectors to be sure wiring is proper before replacing any components.

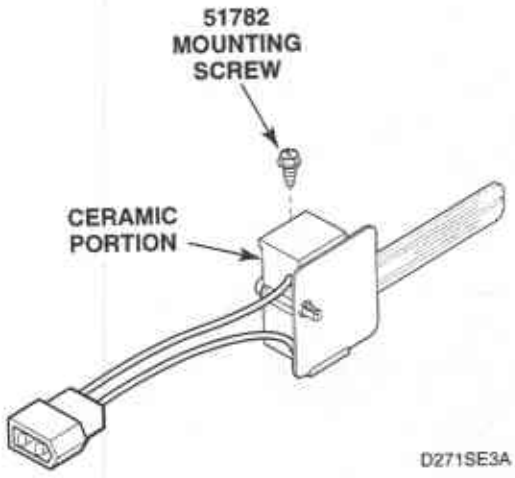
NOTE: Test procedures of Section 7 paragraph 4, 5, and 6 can be performed on a workbench if gas valve, igniter, burner tube and burner housing have been removed from dryer.

7. TEMPERATURE SWITCH

a. Remove three screws holding the control assembly to the control hood rear panel and cabinet top. See figure 5-2.
b. Disconnect wires from temperature switch.
c. Set the meter to read Ohms and apply the meter probes to the switch terminals.
   1. **Three Position Heat Switch** – Follow the appropriate wiring diagram for your model dryer. See SECTION 9 of this manual.

NOTE: Refer to proper model wiring diagram when reconnecting wires.

FABRIC SELECTOR SWITCH – 3 Position			
	L1-1	L1-2	L1-3
Perm. Press and Regular	–	X	–
Delicate	X	X	–
Fluff	–	–	X
X indicates closed			



NORTON IGNITER AND BRACKET ASSEMBLY

Figure 7-6

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

8. DOOR SWITCH

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 7-4.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Disconnect wires from door switch. See figure 5-6.

NOTE: Refer to appropriate model wiring diagram when rewiring switch.

d. Set meter to read Ohms and apply meter probes on switch terminals 1 and 3 with door closed. You should get "zero" reading.
e. Apply probes to terminals 1 and 2 with door closed. The meter should read "no reading".
f. Open door. Meter should read "zero".

9. SIGNAL CONTROL

a. Remove the three screws holding the control assembly to the control hood rear panel. See figure 5-2.
b. Disconnect wires from signal control.
c. Set meter to read Ohms and apply meter probes to terminals of signal control. Meter should read approximately 1,000 Ohms at all times.

10. TIMER ADVANCE and TIMER CONTACT POINTS (Figure 7-7)

This test will determine if the timer advances. If the timer advances then it does not need to be replaced.

Advance Test:

For models which produce an audible signal (a buzzing sound):

1. Select a cycle and activate dryer start switch.
2. Rotate timer knob to a position where the signal will activate, then release timer knob.
3. If timer is advancing, signal will end in less than 10 minutes.
4. If signal continues to sound for more than 10 minutes, replace timer.

For models which do not produce an audible signal:

1. Rotate timer knob to the 10 minute mark.
2. If timer is advancing, dryer will cycle into the cool down period and then to OFF position.

NOTE: If timer does not advance, see Section 5 paragraph 5 for timer replacement.

To check timer contact points proceed as follows:

a. Remove the three screws holding the control assembly to the control hood rear panel. See figures 5-1 or 5-2.
b. Disconnect wires from timer.

NOTE: Refer to appropriate model wiring diagram when rewiring timer.

c. Set test meter to read Ohms and apply meter probes to terminals. See figure 7-7.
d. Starting with timer knob indicator in OFF position at top of timer, slowly turn timer knob clockwise until indicator is again pointing toward OFF position at top of timer. Meter should register "zero" reading when circuit being tested is completed by timer. Refer to figure 7-7 for Timer Cycle Chart showing when circuit is made.

Timer Motor Resistance Check

120V 60 Hz. motor resistance should be 2,460 – 3,100 Ohms.

Timer Resistor Resistance Check (Electric Models)

4.7K 10W resistor resistance should be 4,465 – 4,935 Ohms.

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

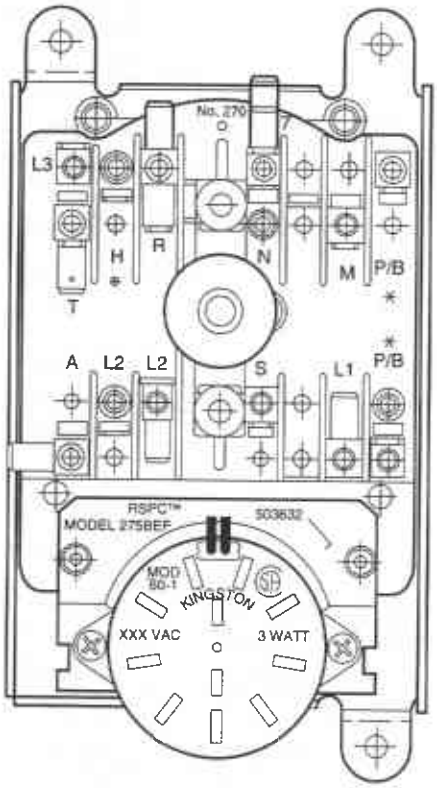
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

CIRCUIT TO BE TESTED	TIMER No. 503767	TIMER No. 503873	TIMER No. 503912	TIMER No. 504178	TIMER No. 504179	TIMER No. 504546
Timer Motor	L2 and T	L2 and T	L2 and T	N and T	N and T	N and T
Signal Control	–	P/B and P/B	P/B and P/B	–	P/B and P/B	P/B and P/B
Motor	L1 and M	L1 and M	L1 and M	L1 and M	L1 and M	L1 and M
Heat	L2 and H	L2 and H	L2 and H	L2 and H	L2 and H	L2 and H
Push-to-Start	M and S	M and S	M and S	M and S	M and S	M and S

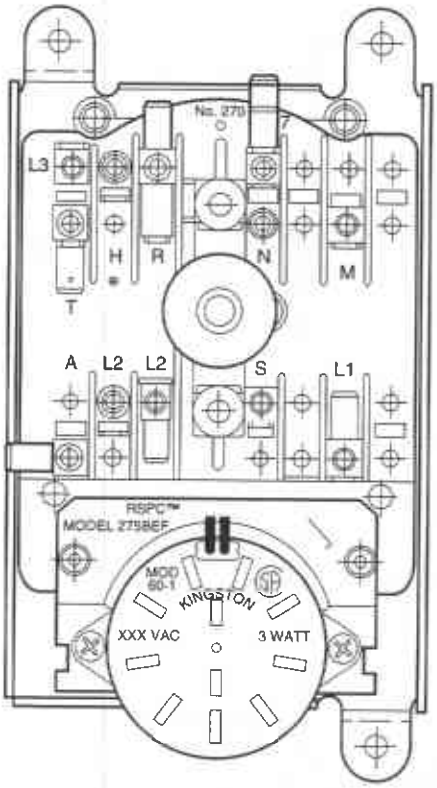
TIMERS

503912† 503873†
504546 504179



D291S

503767†
504178



D293S

†These timers have 4.7K 10W resistor connected between terminals "A" and "R".

Figure 7-7

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:
- **Disconnect electric power to the dryer before servicing.**
- **Close gas shut-off valve to gas dryer before servicing.**
- **Never start the dryer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001

11. CYCLING OR LIMIT THERMOSTAT

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 7-4.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Label and disconnect wires from thermostat. See figure 5-11 or 5-12.

NOTE: Refer to appropriate model wiring diagram when rewiring thermostat.

Cycling Thermostat (S.P.S.T. – 2 Terminals) or Limit Thermostat

1. Set meter to read Ohms.
2. Apply meter probes to the thermostat terminals.
3. Meter should read "zero".

Cycling Thermostat (S.P.D.T. – 3 Terminals)

1. Set meter to read Ohms.
2. Apply meter probes to terminals 1 and 3. Meter should read "zero".
3. Remove screws holding thermostat to exhaust fan cover.
4. Heat thermostat with a small flame until a distinct "click" is heard, then immediately apply meter probes to terminals 1 and 2. Meter should read "zero".

12. THERMOSTAT HEATER

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 7-4.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Label and disconnect wires from thermostat/ heater. See figure 5-12.

NOTE: Refer to appropriate wiring diagram when rewiring thermostat heater.

d. Set meter to read Ohms. Apply meter probes to the thermostat heater terminals. Meter should read as follows: (Cold Ohms)

120 Volt 60 Hz. 2400 ± 240 Ohms.

13. THERMAL FUSE (Electric Models)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 7-4.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Label and disconnect wires from thermal fuse. See figure 5-11.

NOTE: Refer to appropriate model wiring diagram when rewiring thermal fuse.

d. Set multimeter to read Ohms on the X1 scale. Apply meter probes to the thermal fuse terminals. Multimeter should read 0 Ohms. If the meter does not show any reading (infinite Ohms), then the fuse is open. If the fuse is open, then replace BOTH the thermal fuse and the limit thermostat.

14. HEATER ASSEMBLY (Electric Models)

a. While supporting the lower access panel, remove two screws from bottom edge of lower access panel. See figure 7-4.
b. Gently lower the access panel to disengage locators from bottom edge of front panel.
c. Disconnect wires from heater assembly. See figure 5-11.

NOTE: Refer to appropriate wiring diagram when rewiring heater assembly.

d. Set meter to read Ohms. Apply meter probes to the heater wire terminals. Meter should read as follows: (Cold Ohms). See figure 5-11.

Element Color Code	Voltage/Hz.	Resistance Reading
Red	240 V 60 Hz.	10.39 ± .31 Ohms Cold
White	208 V 60 Hz.	8.2 ± .5 Ohms Cold

SECTION 8
Internal Wiring Of Dryer Motor Switch

WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the washer before servicing.**
- **Never start the washer with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer is properly grounded.**

W001

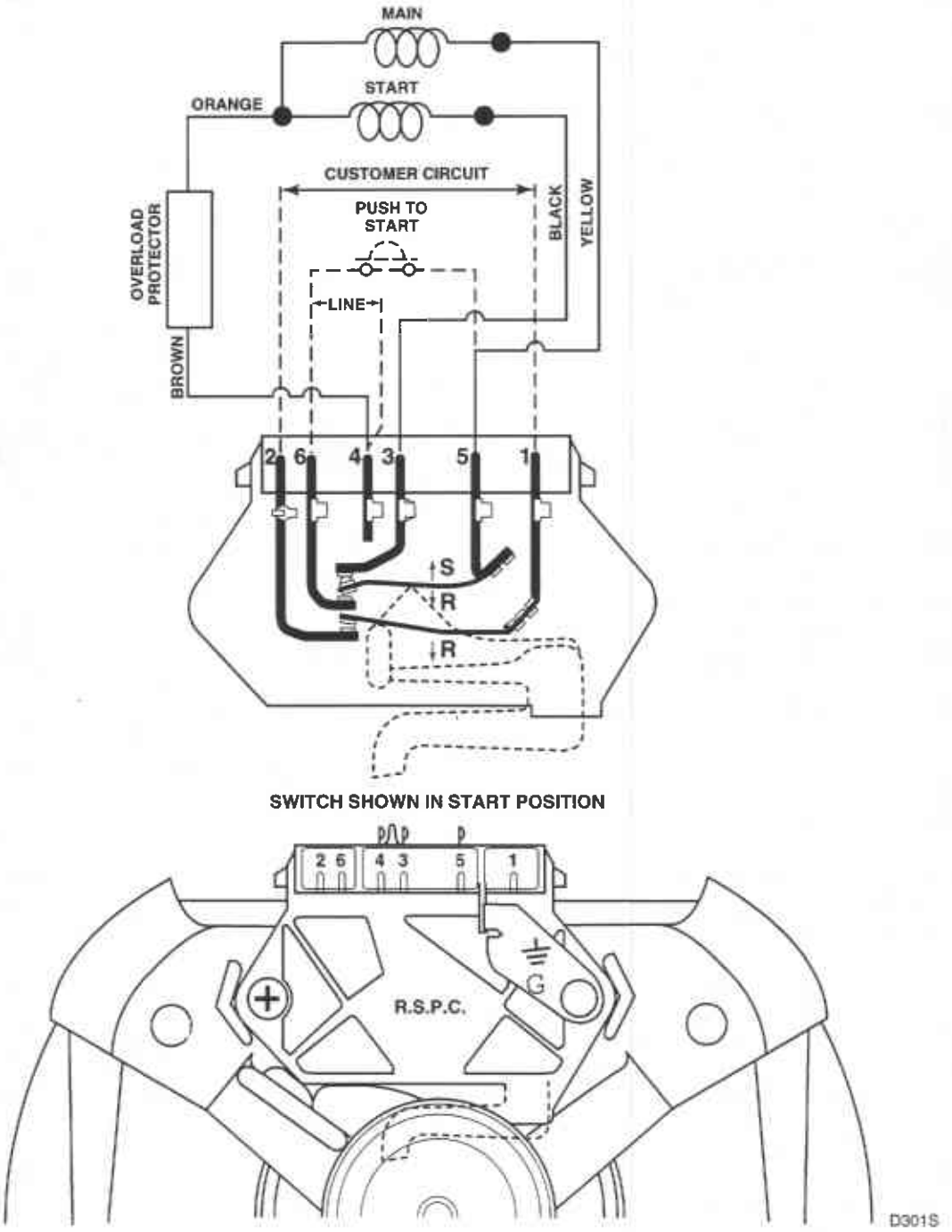


Figure 8-1

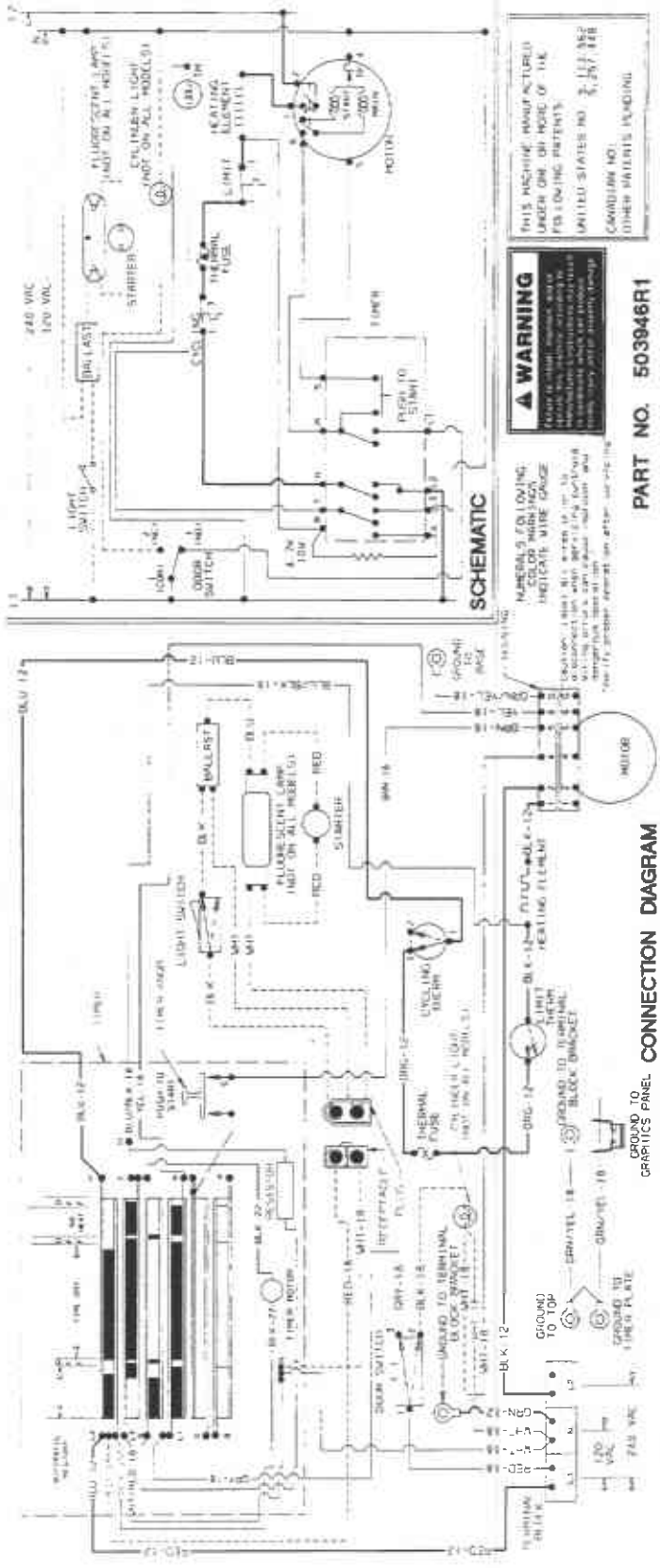
Notes

SECTION 9
Wiring Diagrams

WARNING

Failure to install, maintain, and/or operate this machine according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.

W030



WARNING

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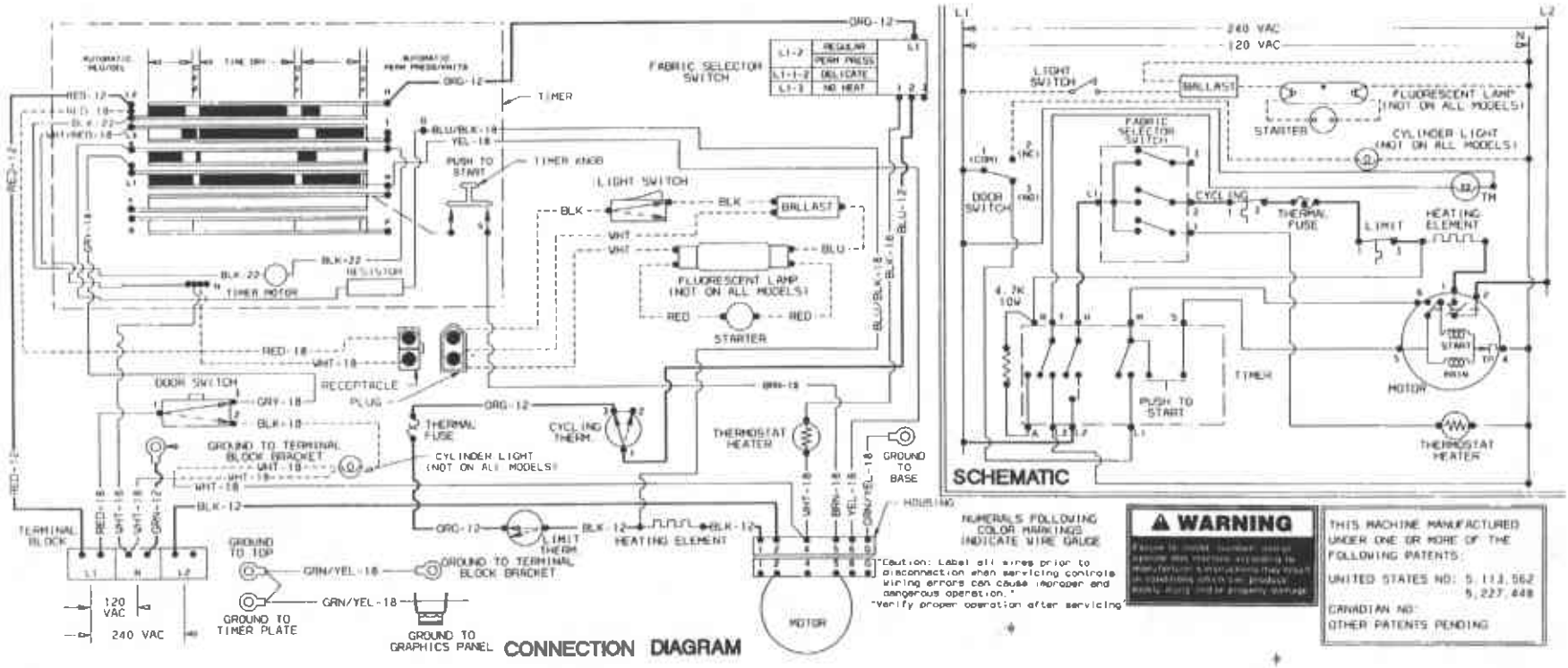
W030



WARNING

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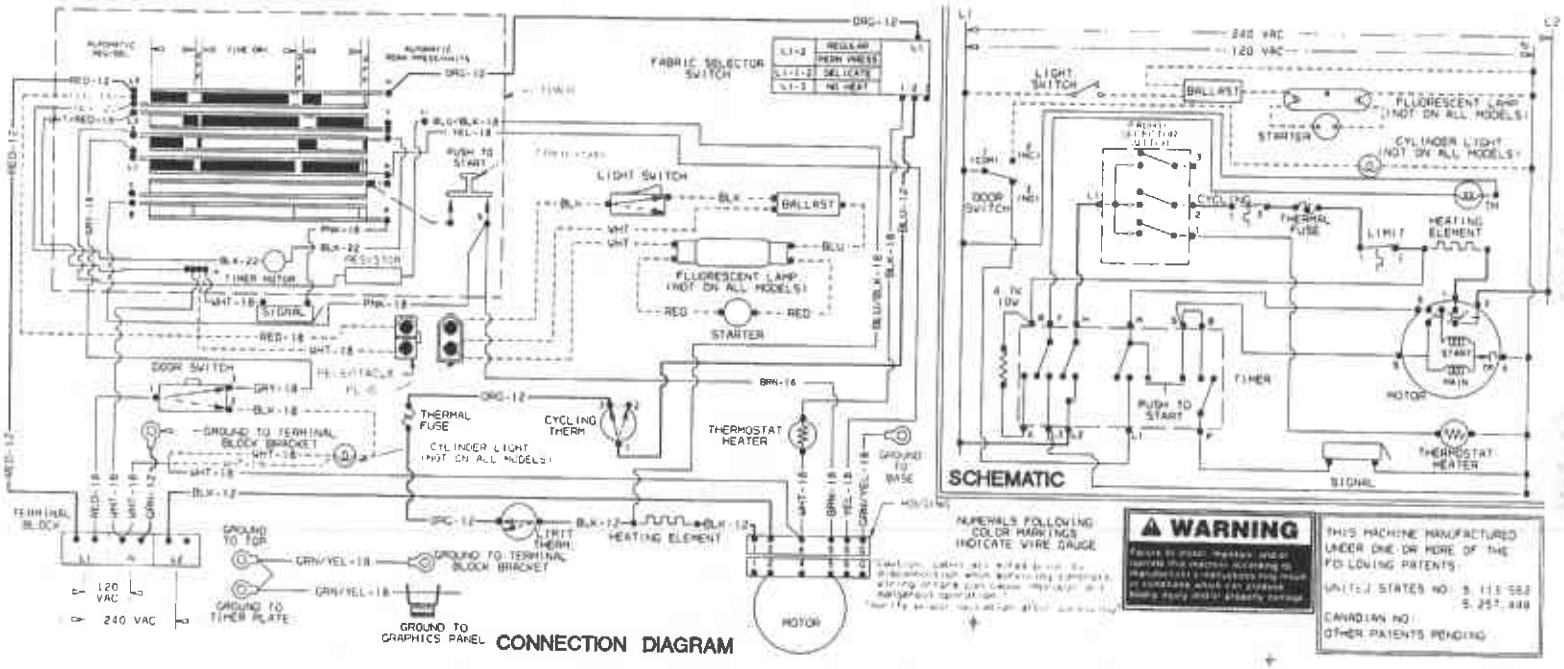
W030



WARNING

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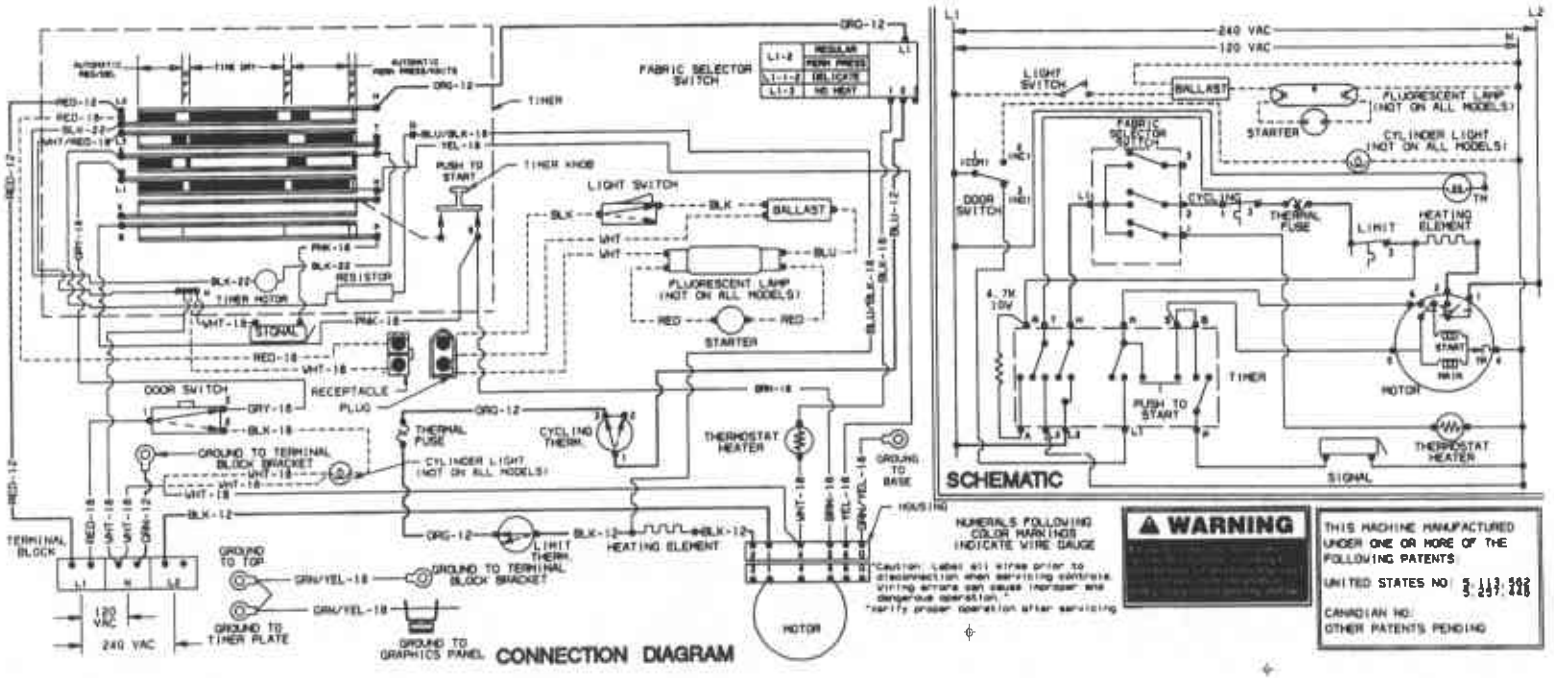
W030



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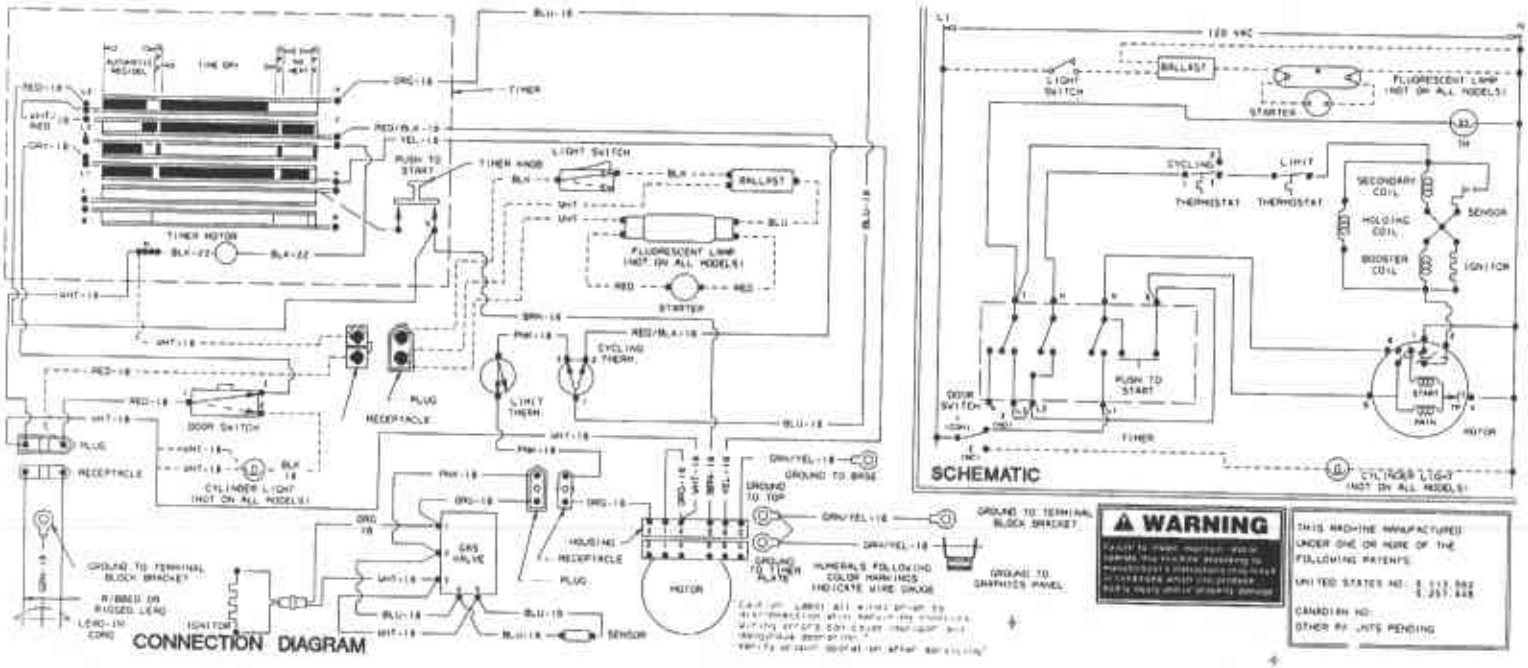

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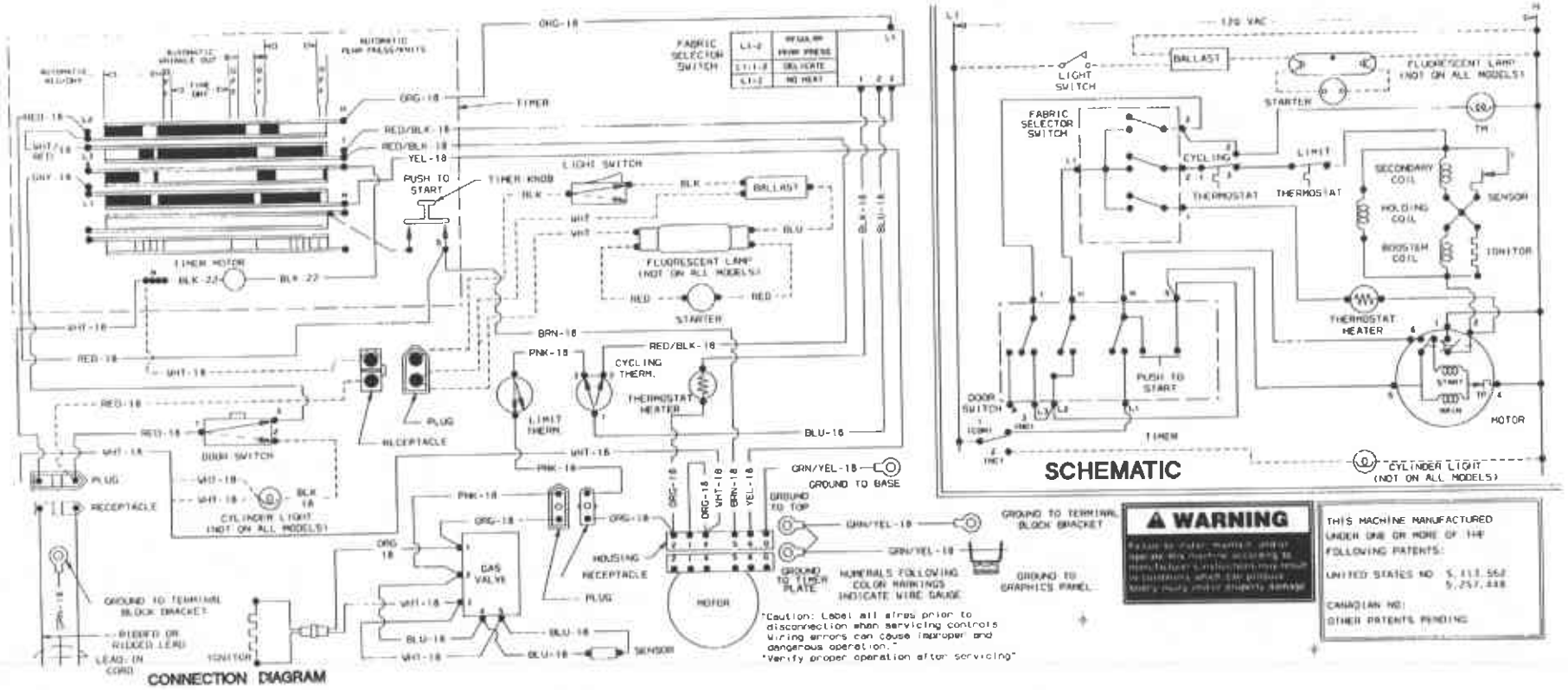
W030



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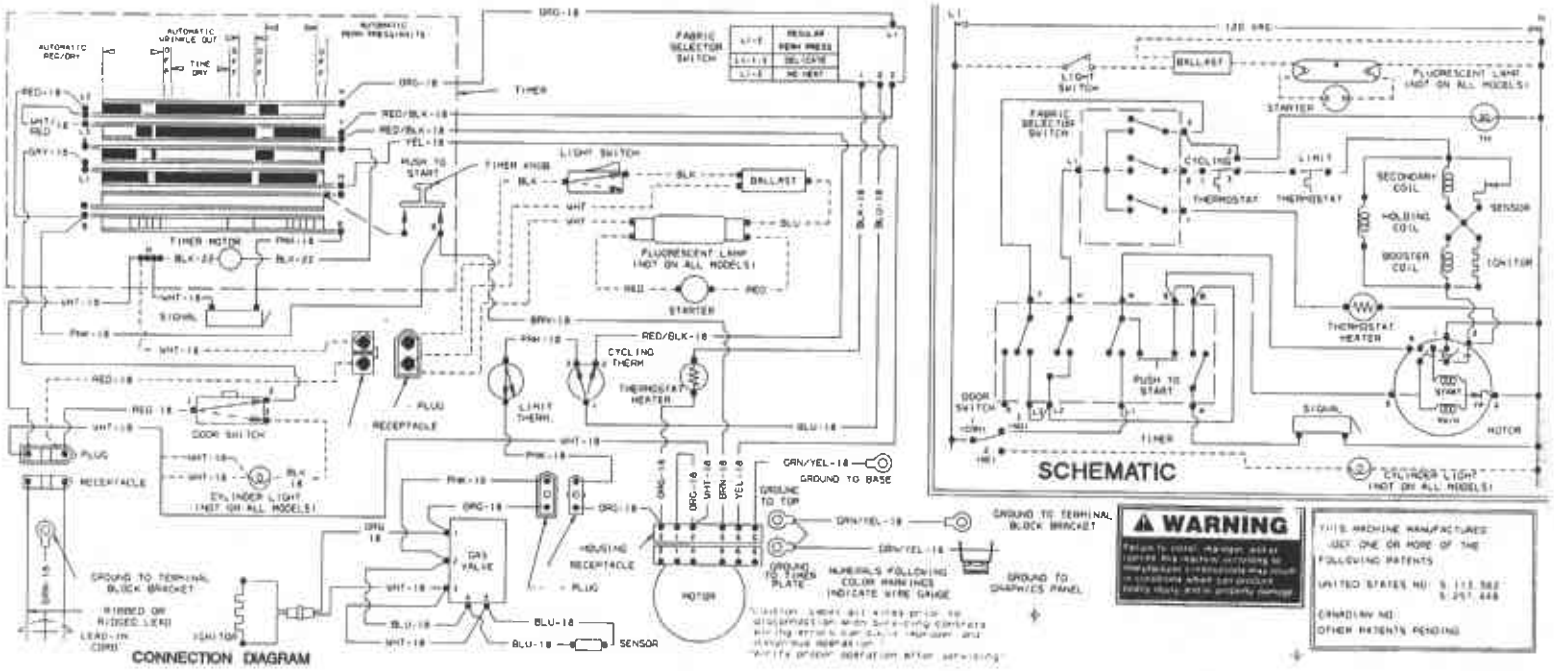

WARNING

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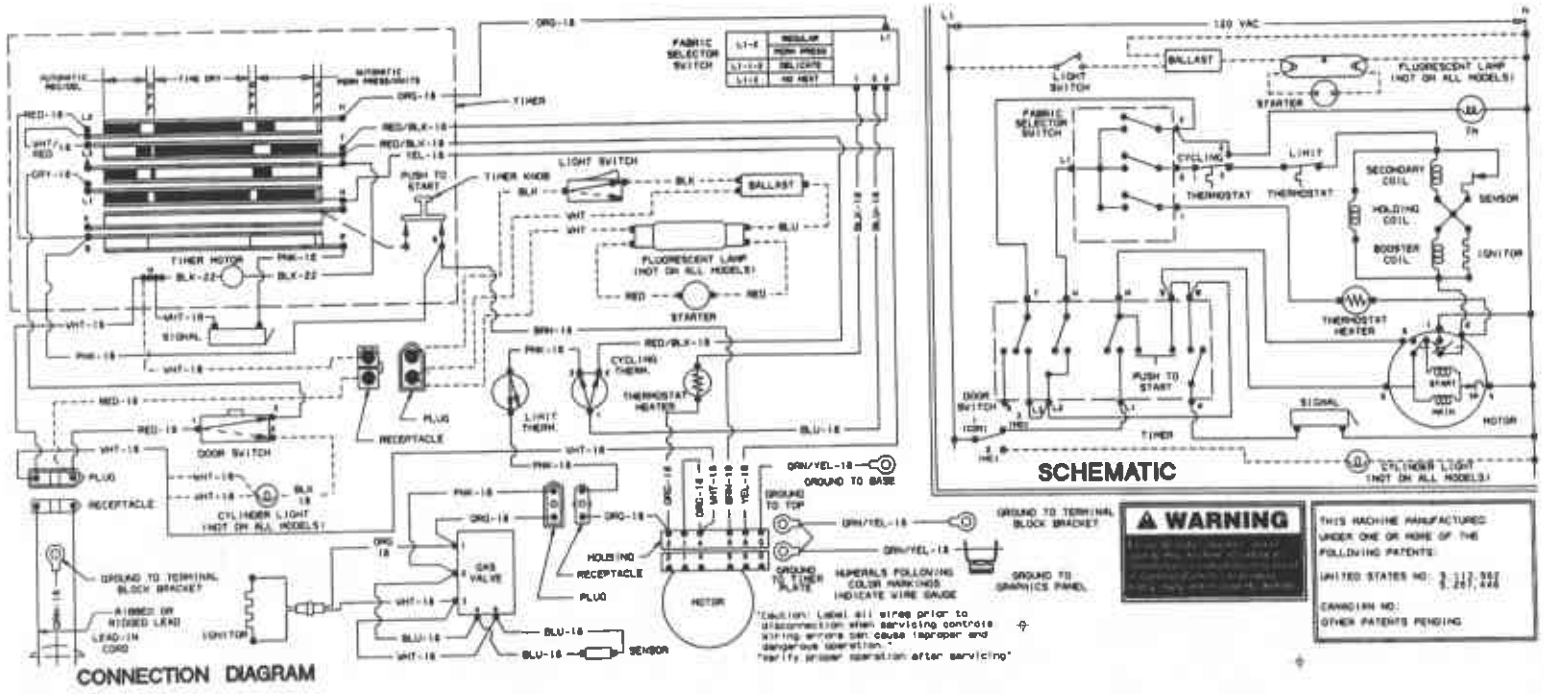
W030