

This manual is intended for experienced service personnel. Servicing electrical circuits can be hazardous. Use all caution if "live" tests are performed. This manual should be used with the electrical-mechanical troubleshooting guide.

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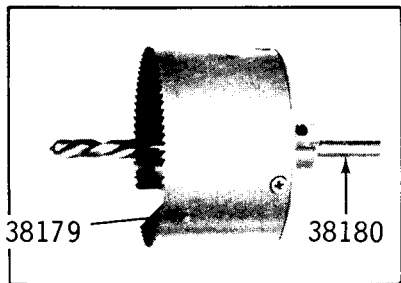
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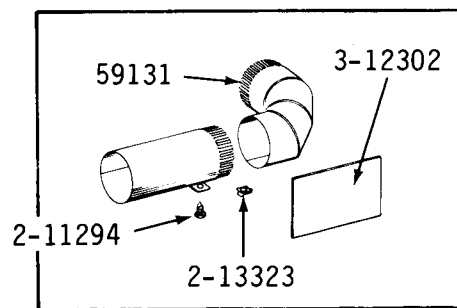
# INSTALLATION ACCESSORIES



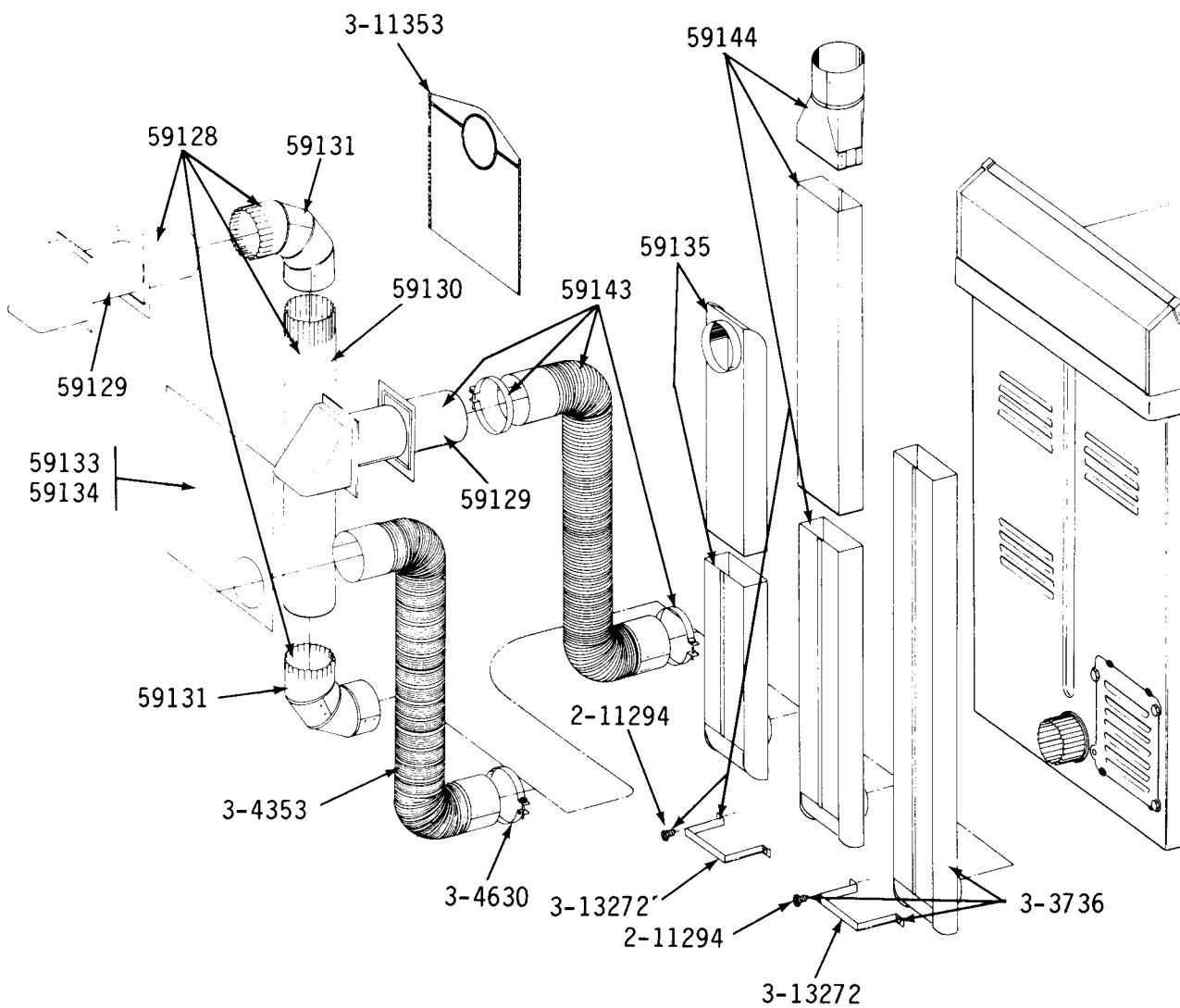
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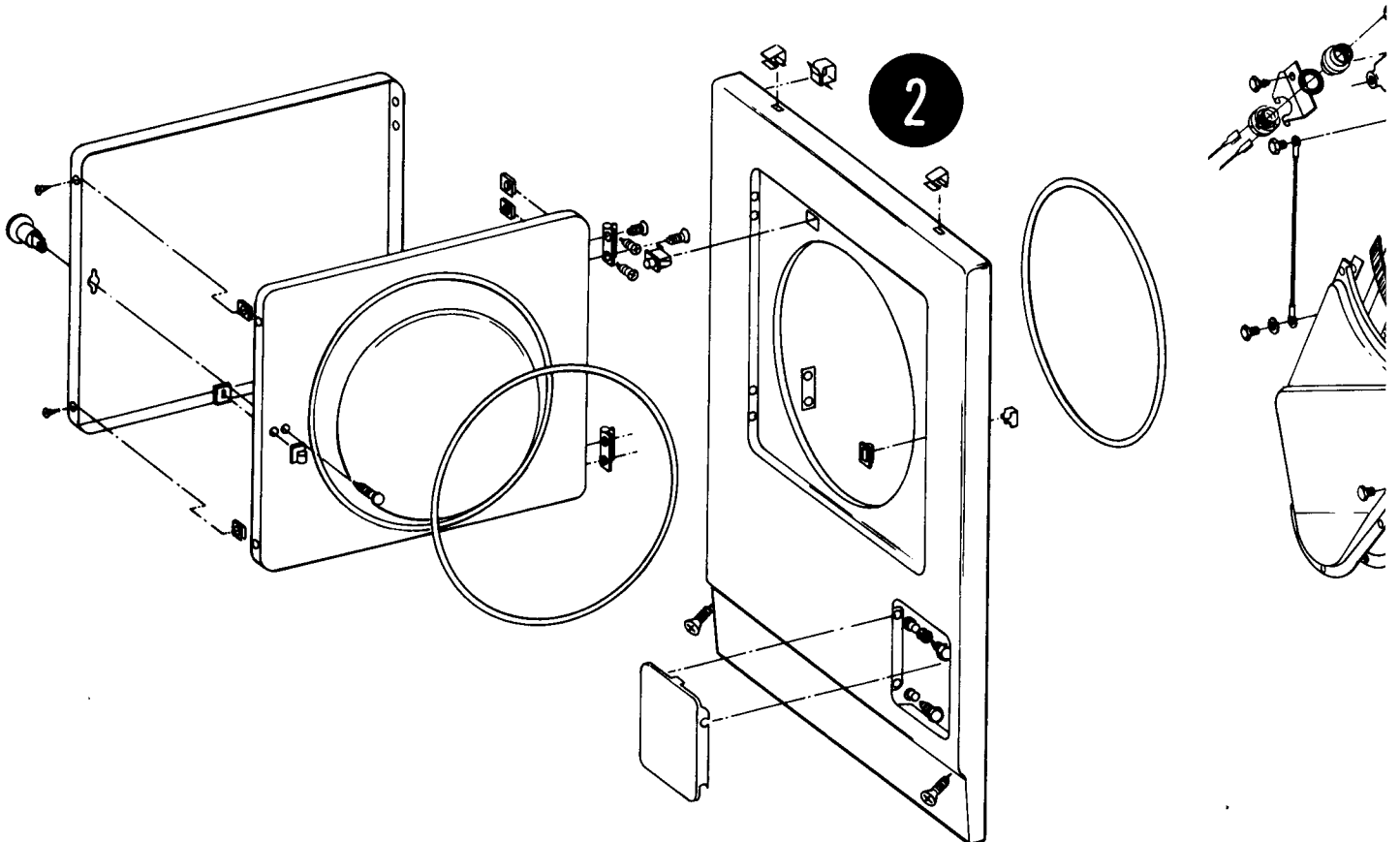
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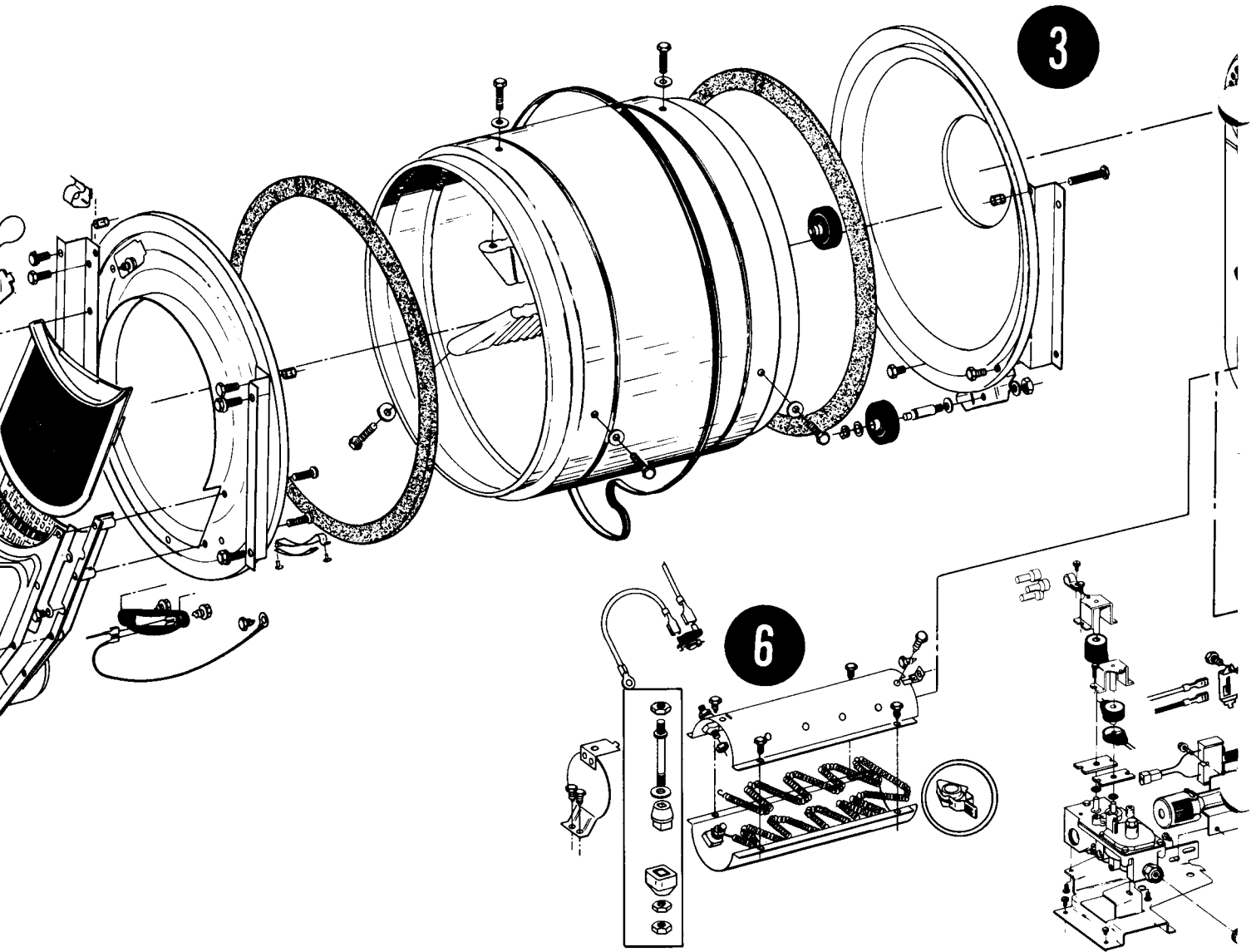
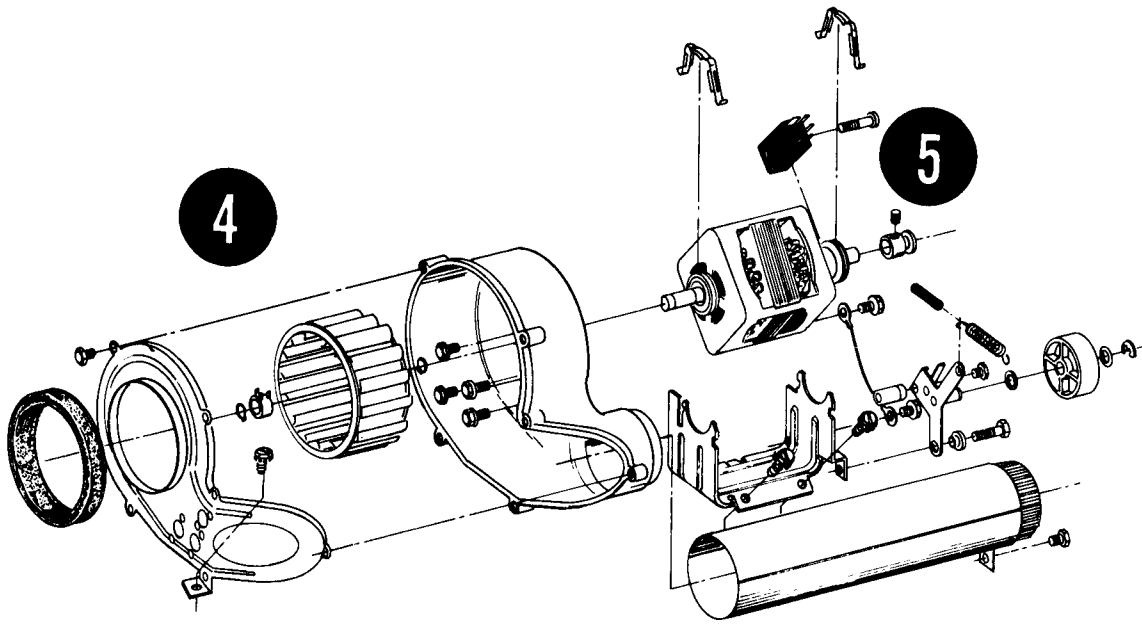


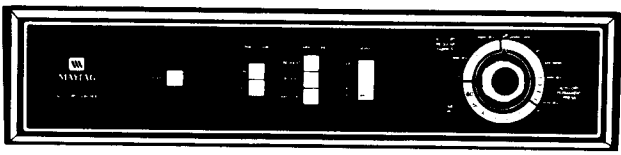
38179 Blade for saw  
38180 Replacement drill  
38766 Hole saw with drill  
38767 Extension for saw  
59128 Vent kit - standard 4" (10.16cm) kit contains three 59130 4" x 24" (10.16cm x 60.96cm) aluminum pipes, two 59131 4" (10.16cm) aluminum elbows and one 59129 4" (10.16cm) vent hood  
59129 Vent hood - 4" (10.16cm) wide-mouth  
59130 Aluminum pipe - 4" x 24" (10.16cm x 60.96cm)  
59131 Aluminum elbow - 4" (10.16cm)  
59133 Aluminum window plate - 12" x 18" (30.48cm x 45.72cm)  
59134 Aluminum window plate - 15" x 20" (38.10cm x 50.80cm)  
59135 Vent duct assembly - 18" (45.72cm) to 30" (76.20cm) long  
59143 Flexible aluminum vent kit - includes one 4" (10.16cm) vent hood, two 4" (10.16cm) clamps and one 4" (10.16cm) dia. x 8' (2.44m) flexible vent duct  
59144 Rectangular vent kit with round adapter  
2-11294 Screw - for exhaust duct kit  
                  - for exhaust deflector kit  
2-13323 Fastener for exhaust duct kit  
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3-4353 Flexible aluminum vent duct - 4" x 32" (10.16cm x 81.28cm) length stretches to 8' (2.44m)  
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3-4652 Exhaust duct kit for side and bottom venting  
3-11353 Dacron lint bag  
3-12302 Insulation for exhaust duct kit  
3-13272 Bracket for exhaust deflector



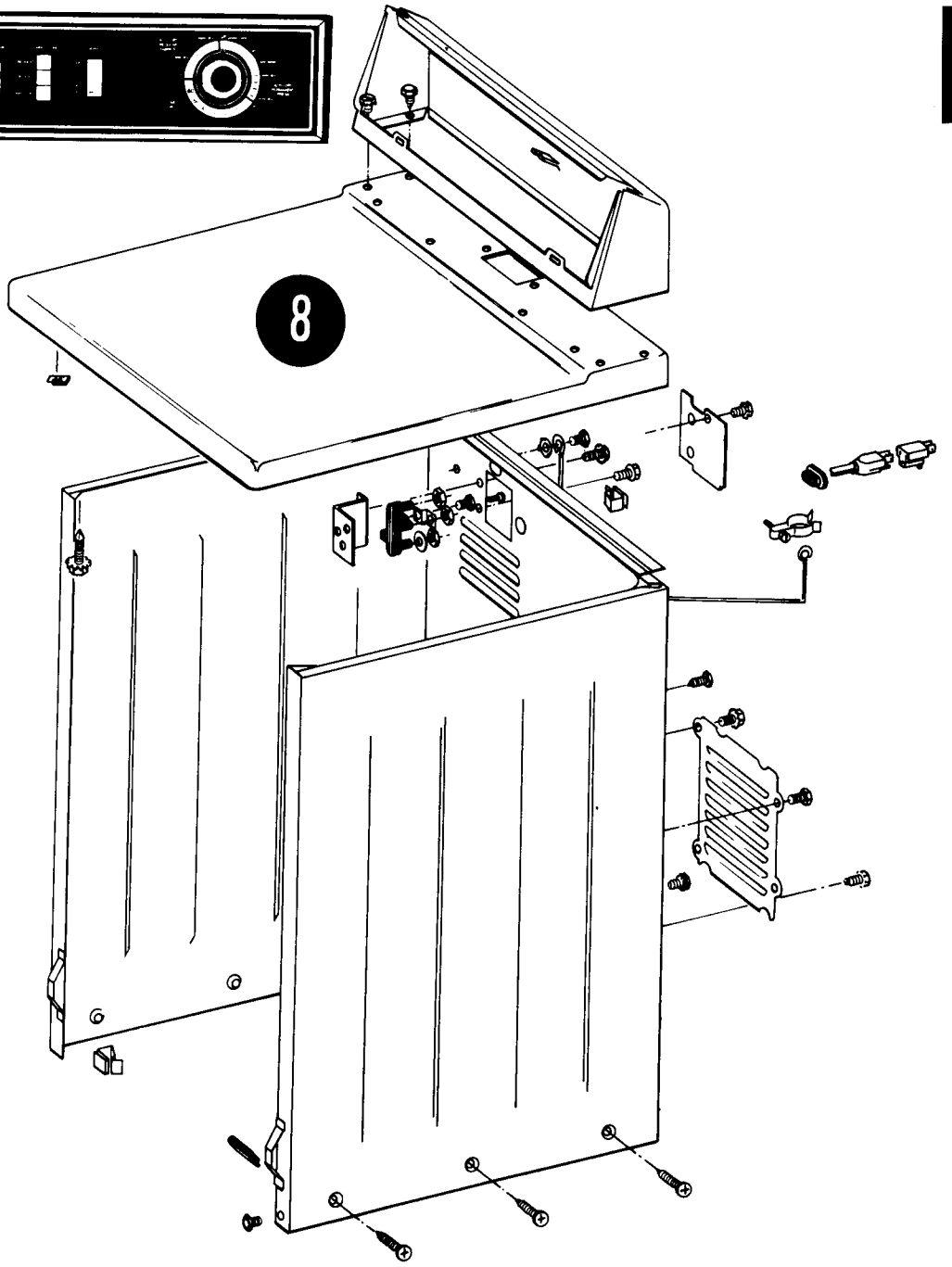
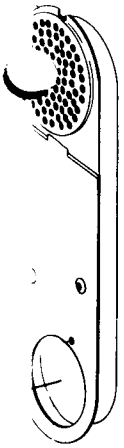
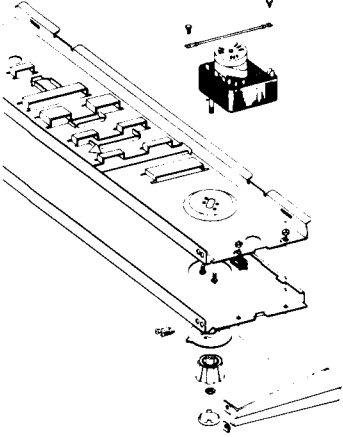
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- 2 Front Panel and Door**
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- 4 Blower, Regulating and Cool Down Thermostats**
- 5 Drive Motor and Idler**
- 6 Heating Element**
- 7 Gas Valve**
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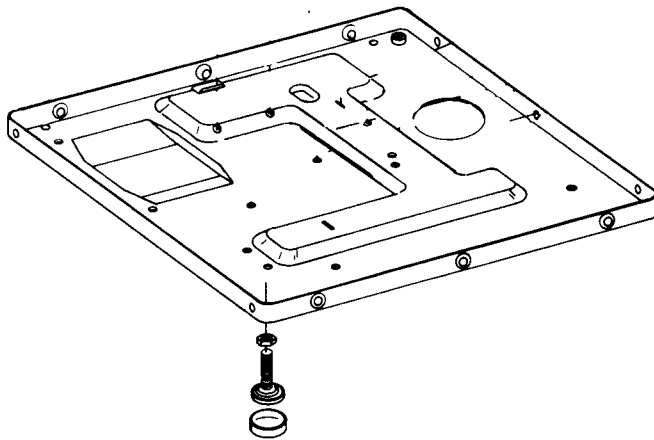
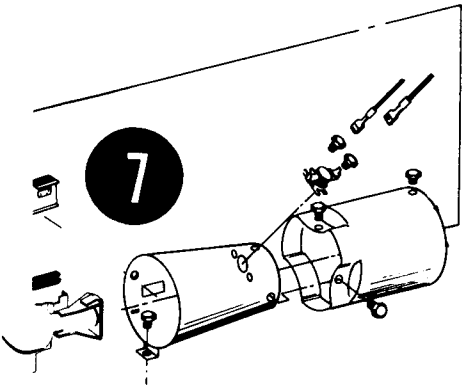


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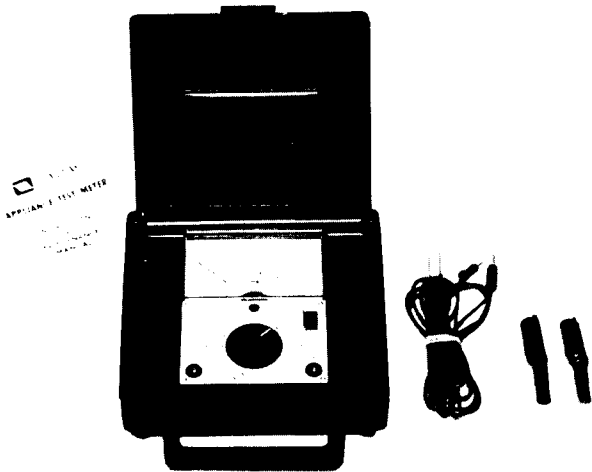




# Section 1

## Electrical Test Equipment

### (38559) MAYTAG APPLIANCE TEST METER



The Maytag appliance test meter is most effective when used to detect open or closed circuits in an electrical component. This method of testing is often referred to as "continuity testing" and is the easiest means of checking a part.

A continuity check can be safely made only after the unit being checked has been disconnected from its electrical supply and after you have removed wires from the terminals of the part being tested. Following manual activation of the part (if required) and after the meter has been set on an ohms scale, the probes of the test meter are placed on the respective terminals. Needle movement to the "0" end of the scale would indicate continuity through the part. No needle movement would indicate no continuity and a probable inoperative part.

In general, when checking for continuity, needle deflection indicates a closed circuit and no needle deflection would indicate an open circuit.

### OHMS (RESISTANCE MEASUREMENTS)

When checking resistance be certain the unit is disconnected from its power supply. Failure to do so will result in meter damage when performing checks. For accurate readings, wires should be disconnected from both sides of the component.

#### SET METER FOR USE AS FOLLOWS:

1. Calibrate meter by touching test probes together and turning adjusting dial until meter reads "0" on green scale. Recheck calibration whenever scale is changed. (Replace battery if dial will not bring meter reading to "0".)
2. Select the scale most easily read and place test probes on respective terminals. When checking a switch the reading would normally be either open or closed. A reading of 70 on the R x 10 scale would for example be 700 ohms resistance.

The following chart shows typical resistance values for some of the components found on Maytag dryers.

**Heating Element** 10.23 ohms

#### Gas Valve

Disconnect radiant sensor and igniter wires. Measure across igniter wires or igniter plug from valve to get a resistance value of 425-450 ohms.

Measure across sensor wires to get a resistance of 450-475 ohms.

#### Drive Motor

Red terminal to Gray terminal 1.5 ohms



In order to measure the individual windings the red and gray wires will have to be pulled off of the start switch.

Run winding only	2.25 ohms
Start winding only	3 ohms

### Glow Bar Igniter

Because of the make-up of the igniter, the resistance will vary over a rather wide range. Values from 180 ohms to 400 ohms would be typical with an igniter at room temperature.

### Shut-Off Solenoid — Electronic Control Models

50 ohms — 55 ohms

These resistances are not meant to be used as the exact values to determine whether a component is good or bad. They are provided so that you may have an idea of the resistance that you can see in testing components on Maytag dryers.

## VOLTAGE CHECKS

For the most part these checks will consist of taking readings at the wall receptacle in order to determine the availability of voltage to the product. Voltage checks on individual components of a product are not recommended due to the possibility of electrical shock. Component part testing is best accomplished through continuity checks with a 38559 Maytag appliance test meter.

NOTE: Use of the meter on voltage higher than indicated range may cause permanent damage to the meter. To prevent damage first select highest range and then lower for readings which fall within the lower scale.

### SET UP METER FOR USE AS FOLLOWS:

1. Turn selector knob to desired meter function and appropriate range.
2. Plug black lead into socket marked - (black).
3. Plug red lead into socket marked + (red).
4. Place test leads into receptacle in order to determine voltage available.

## TEMPERATURE READINGS RANGE (50°F. TO 300°F.)

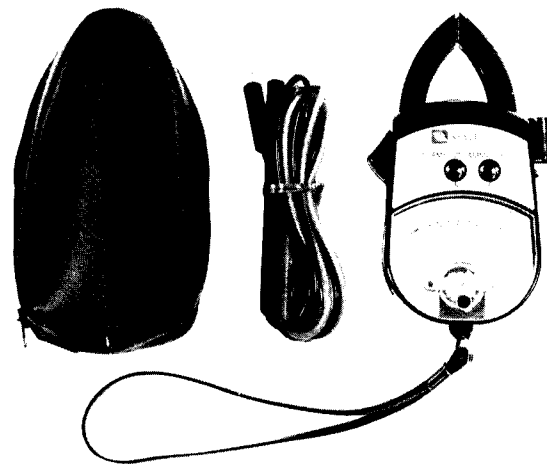
Dryer — Air temperature readings can be taken at the lint filter by removing the filter and placing the

accessory temperature probe (Part No. 38562) directly in the lint filter opening. Cycling of the thermostats can actually be observed as can the temperature of the exhausted air.

### SET UP METER FOR USE AS FOLLOWS:

1. Turn selector knob to TEMP.
2. Insert black negative lead of temperature probe into socket marked - (black).
3. Insert red positive lead of temperature probe into socket marked + (red).
4. To calibrate meter, touch black plug from red positive lead to black negative lead and turn calibration dial until needle aligns with CAL.
5. Probe is ready to use — read blue scale on meter face marked TEMP.

## (38186) Clamp-On-Ammeter



Each circuit in an appliance has a "normal" current draw which is an indication of the performance of that circuit. Current draw levels less than or more than normal give clues to malfunctions. The clamp-on ammeter measures these currents without breaking the circuit by measuring the strength of the magnetic field developed around each conductor. Current is read by separating the conductors and clamping the jaws of the ammeter around each conductor on which current is to be read. Low amperage readings indicate problems such as damaged heating elements, excess belt slippage, etc. High amperage readings indicate the unit being tested is operating under an increased mechanical or electri-

cal load. Worn parts or low voltage will show up as low amperage readings.

NOTE: Overloads on a circuit breaker or fuse can be traced to the product being tested or the circuit breaker (or fuse) by checking the product's current draw. If the amperage reading is less than the breaker reading, the breaker or fuse box is at fault.

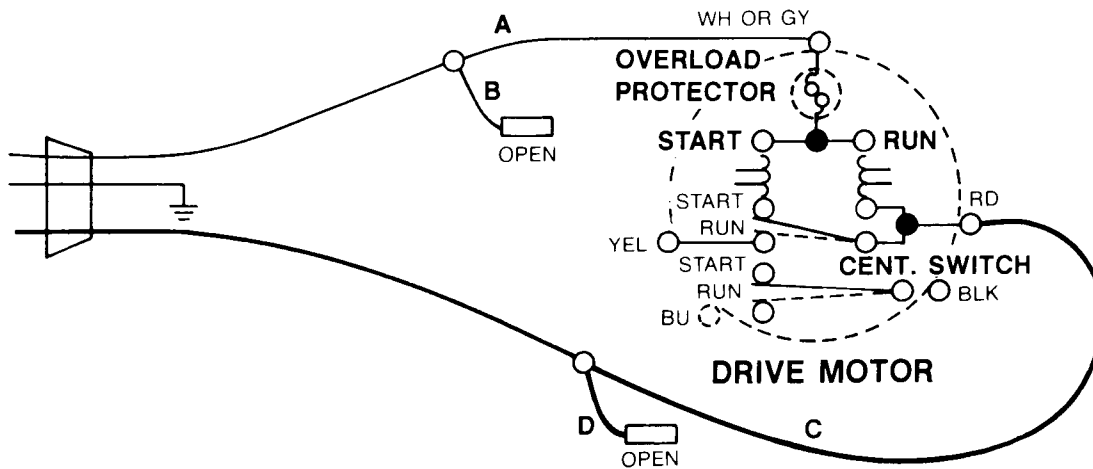
## USE OF AMMETER ON DRYER

There are two currents of concern to us in an electric dryer; the heating element current and the drive motor current. These currents can be measured by use of a "split line cord" extension for the dryer cord or by attaching the ammeter to the respective power line wires at the dryer terminal block. Current measured should be 21 amps on the heating element side of the line, 24 amps on the drive motor side of the line and 4 amps on the center or neutral line.

### (38183) Motor Test Cord



The motor test cord may be used to electrically check operation of the drive motor while still installed in the unit. Testing of the motor in this



manner determines whether or not it will run independently of other electrical components.

Two test leads are required to check operation of the drive motor. To check the motor for running, hook up test cord as shown.

Location of terminals on motor may vary from drawing.

## CHECKING HEAT CONTACTS MOTOR CENTRIFUGAL SWITCH

1. Disconnect dryer power source.
2. Gain access to motor and remove blue and black leads from motor switch.
3. Use either of the following test methods using appropriate caution.

### A. Live test — use caution

1. Using a 2-1110 wiring coupler, connect blue and black wires removed from motor switch.
2. Reconnect dryer to power and set for heat cycle.
3. Start dryer, if heat is produced, replace motor switch on motor. If no heat, continue additional circuit checks.

### B. Continuity Check

(Insulate wires removed from motor switch.)

1. Using clip adapters supplied with the Maytag Appliance Test Meter, attach meter probes to the blue and black motor switch terminals.
2. Arrange probe leads away from any moving parts and set meter on RX1 range.
3. Reconnect dryer to power source and start dryer, continuity on meter indicates good switch. No continuity, replace motor switch or motor.
4. Open door to stop dryer. When motor stops, motor switch contacts must open, if not replace switch or motor.



# Section 2

# Electrical-Mechanical Troubleshooting

## WILL NOT RUN

### Dryer won't start or run.

All wires are hooked up to their corresponding terminals. \_\_\_\_\_ Dryer is plugged in. \_\_\_\_\_ Blown fuse or circuit breaker.

Door switch. \_\_\_\_\_ Push-to-start switch. \_\_\_\_\_ Timer. \_\_\_\_\_ Start control switch.  
Time and auto dry models. Time and auto dry models. Electronic control models.

Cool down thermostat \_\_\_\_\_ Drive motor.  
D712 only.

### Drive motor runs — drum won't turn.

Belt off or broken. \_\_\_\_\_ Motor pulley loose or off. \_\_\_\_\_ Idler tension spring. \_\_\_\_\_ Idler pulley.

### Dryer runs a few minutes and then stops — Motor overload protector opens.

Lint build-up around drive motor. \_\_\_\_\_ Low voltage. \_\_\_\_\_ Blower impeller blocked. \_\_\_\_\_ Drive motor.

### Check cool down thermostat — D712.

## Dryer blows fuses or trips circuit breaker.

### ELECTRIC MODELS

The amperage readings are at 240 volts. One line will be 24 amps and the other line will be 21 amps. The neutral line will be at 4.5 amps. If you have the above amperage readings, the problem is not the dryer. Check the fuse box, circuit breaker or house wiring.

Shorted heating element.

Incorrect wiring or a wire shorting to ground.

### GAS MODELS

During ignition the dryer will draw 7 amps. With the burner on, the dryer will draw 4.5 amps. If the dryer is drawing the above amperage and the fuse blows, the problem is not the dryer. Check the fuse box, circuit breaker or house wiring.

Igniter.

Drive motor.

# WILL NOT DRY

## Dryer won't heat (motor runs).

### ELECTRIC MODELS

Blown fuse or tripped circuit breaker.

Open heating element.

Hi-limit thermostat.

Regulating thermostat. \_\_\_\_\_ Temperature selector switch.

Drive motor start switch

### GAS MODELS

Gas available.

Igniter.

Radiant sensor.

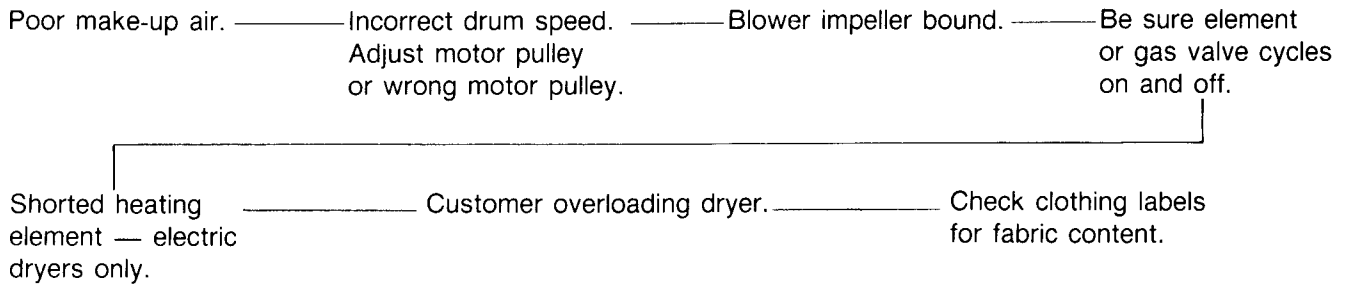
Gas valve.

Timer auto dry and time models.

Cycle selector switch D608, D808, D710.

## Improper Drying — Clothes Wrinkled — Harsh — Taking too long

Lint filter is clean. — Restriction in exhaust. — Exhaust hood door stuck. — Exhaust too long. —

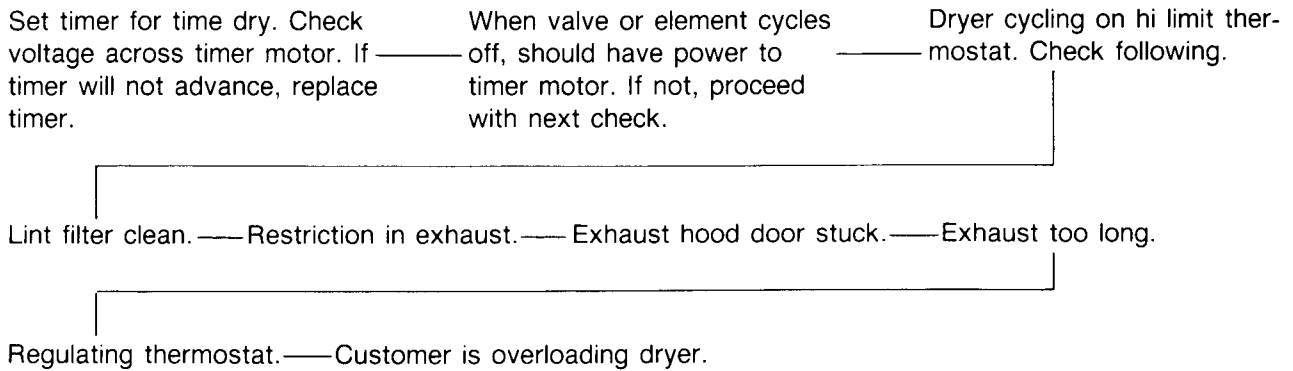


# WILL NOT SHUT OFF

## Time Dry Models

Timer motor — Timer

## Auto Dry Models



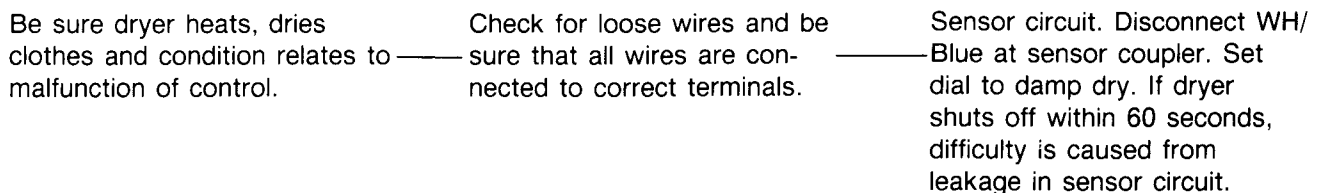
## WON'T SHUT OFF ON AIR FLUFF. — D510

Dryer will shut off on air fluff only when the timer is set to Time Dry.

## ELECTRONIC CONTROL MODELS D608, D710, D712, D808, D810

### DRYER WON'T SHUT OFF. "SOLENOID NEVER ENERGIZES."

#### D608, D808



Shut-off solenoid. Unplug dryer and check for continuity between the two solenoid terminals.

Cycle selector switch. See Electrical Section for switch tests.

Edgeboard connector with capacitor. Set dryer to regular cycle and start unit. While dryer is operating observe neon bulb. If neon bulb flickers, replace edgeboard connector with capacitor.

Electronic control board.

### D710, D712, and D810 Dryers, Permanent Press and Regular.

Be sure dryer heats, dries clothes and condition relates to malfunction of control.

Electronic control board. Insert 38204 electronic control test board. Start dryer. If dryer shuts off in approximately 10 seconds, replace electronic control board.

Edgeboard connector with capacitor. Start dryer. While dryer is operating observe neon lamp. If neon bulb flickers, replace edgeboard connector with capacitor.

Sensor Circuit. Disconnect White/Blue wire at coupler and start dryer on regular setting. If dryer shuts off in 12 to 15 minutes on dry or 18 to 22 minutes on 'more dry', difficulty is caused from leakage to ground in sensor circuit.

Shut-off solenoid. Unplug dryer and check for continuity between the two solenoid terminals.

Start control switch. With dryer unplugged and dial set on regular, depress push-to-start button. Check for continuity on the start control switch between terminals White/Red to Orange on D710 dryers. On D810 dryers, check for continuity between terminals White/Red to Orange/Black on start control switch and on D712, between White/Red 31 and Yellow 35. No continuity, replace start control switch.

Dryness control switch. Check for continuity between dryness control switch terminals. With normal dry button depressed, you should have continuity.

### DRYER WON'T SHUT OFF "SOLENOID ENERGIZES". — D608, D710, D712, D808, D810.

(Except when permanent press with adjustable press care is selected on models D712-D810)

#### D608, D808

Check to be sure selector switch tab is not broken off. If tab is broken, replace selector switch. After replacing selector switch, check for bent solenoid bracket. If bracket is bent, bend bracket slightly upward.

#### D710, D712, D810

Check to be sure start control switch tab is not broken. If start control switch tab is broken, replace start control switch. After replacing start control switch, check for bent solenoid bracket. Bend bracket up if bent.

Shut-off linkage. Check for off or broken shut-off solenoid linkage.

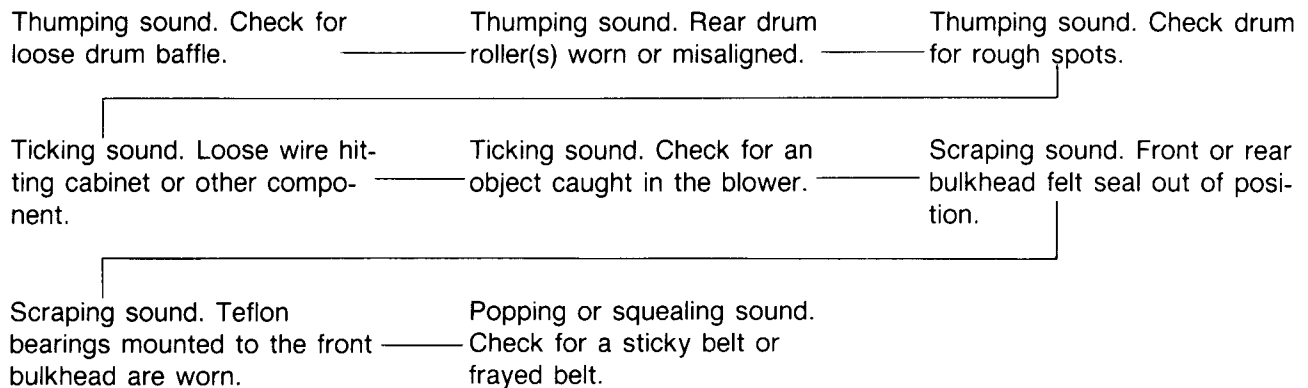
Bent solenoid bracket. If heat stays on, check for bent solenoid bracket.

Cool-down thermostat.

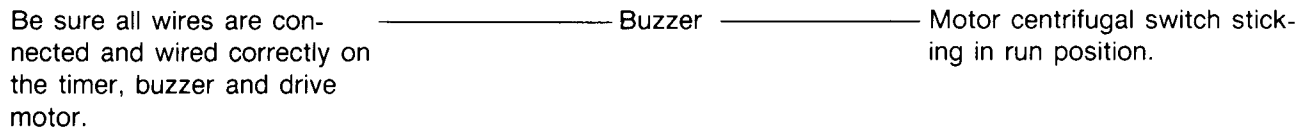
Selector or start control switch. Check switch per schematic of dryer being serviced.

# MISCELLANEOUS

## Dryer noisy.



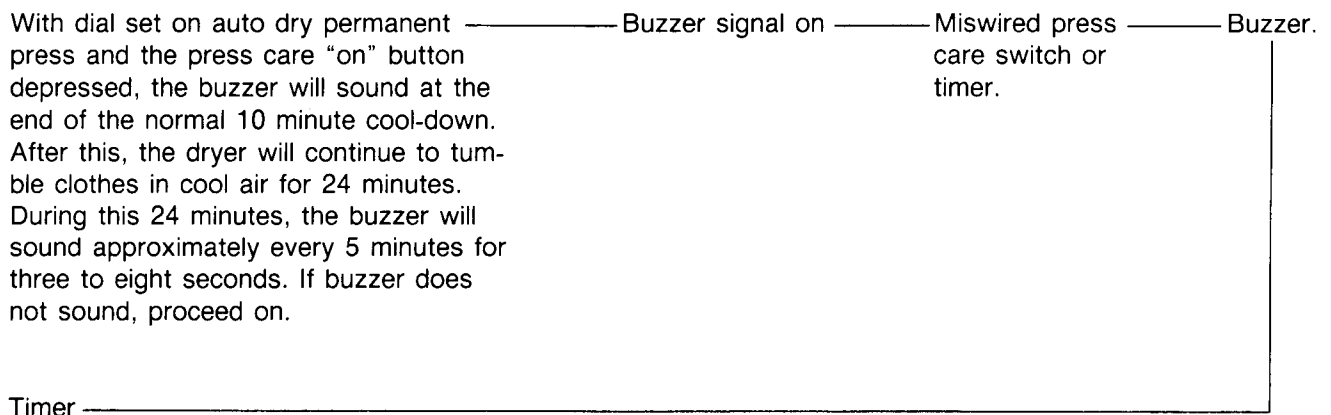
## Buzzer will not buzz at end of cycle. (Auto dry Models)



## Buzzer stays on too long or goes off too quickly. (Auto dry Models)

Length of time the buzzer stays on is dependent upon the time it takes the motor to slow down, allowing the motor switch to reset. The normal time increment is between 2 and 3 seconds.

## Buzzer will not buzz during Press Care Setting (D610-D612 Dryers).



## Buzzer will not periodically buzz during permanent press cool down (D512) \_\_\_\_\_ Timer

# MISCELLANEOUS Pertaining to Electronic Control Dryers

## Dryer shuts off before clothes are dry.

Dryer should be externally grounded. \_\_\_\_\_ Sensor circuit open. \_\_\_\_\_ Broken ground strap.

Loose wire connections or incorrect wiring. \_\_\_\_\_ Capacitor & edgeboard connector assembly. \_\_\_\_\_ Electronic control board.

## Timer will not advance during permanent press with Adjustable Press Care (D712 and D810).

Shut off solenoid must energize before timer will advance. \_\_\_\_\_ Check for incorrect wiring or wire off. \_\_\_\_\_ Timer motor.

Timer. Check for continuity between timer terminals black and pink/black on D810 and on D712 between black and yellow. \_\_\_\_\_ Start control switch. Check for continuity between start control switch terminals pink/black and red/black on D810 and D712.

## Time will not advance during Time Dry (D712)

Timer-check for continuity between black and pink. \_\_\_\_\_ Timer motor.

## Repeating chime does not ring — Permanent Press Cycle.

Dryer must proceed to "cool-down" before repeating chime will ring. Repeat chime switch must be "on".

Cycle selector switch with dial set on Permanent Press. Check for continuity between pink to red/black on D710 dryers cycle selector switch. On D608 and D808 check for continuity on switch between gray and blue. When making this check on D608 and D808 dryers, the selector switch should be in the off position.

Start control switch. Check for continuity between terminals pink/black and red/black on D710 dryers. On D712 and D810 dryers, check between blue and white/brown on the start control switch with the switch in the off position.

Timer D810. Check for continuity between orange and brown timer terminals. On D712 check for continuity between brown and white/brown.

If problem is not found in above checks, replace electronic control board.



## Repeating chime does not sound during Permanent Press with Adjustable Press Care Setting (D712 and D810 dryers).

The chime will sound during this setting every 8 minutes until the last 2-3 minutes. During the last 2-3 minutes, the chime will sound every 30 seconds until completion of the cycle.

Chime switch (D810) only. Be sure switch is on. With switch on, no continuity between terminals.

Start control switch. After solenoid energizes unplug dryer and check for continuity between pink to white/blue and pink/black to red/black on start control.

Timer. With Press care selection made, check for continuity between timer terminals white/blue to brown on both the D712 and D810. On D712, also check from black to yellow and on the D810 check from black to pink-black.

If problem is not located in above checks, replace electronic control board.

## Chime not loud enough.

Check to be sure chime actuator assembly is not broken or loose.

Assuming everything is all right, the sound level of the chime cannot be changed.

## Clothes not dry enough.

Be sure dryer is operating efficiently and controls are working properly.

Without a load of clothes in the dryer and the normal dryness selected, the dryer will shut off in approximately 14 minutes. With extra dryness selected, the dryer will shut off in approximately 22 minutes. If the dryer does not shut off according to the times listed, proceed on.

Temperature and dryness switch. On D608 and D808 dryers check for continuity between Gray 3 and Yellow 6 on temperature and dryness switch. On normal dryness there will be continuity and on extra dryness there will not be continuity.

Dryness switch on the D710, D712 and D810 dryers. Check for continuity between the two switch terminals. On normal dry you will receive continuity and an extra dry you will not.

If dryer is operating as intended and customer prefers clothes drier, advise customer on aspects of electronic control dryers and how they dry the clothes to a certain dryness level.



# Section 3

## Service Procedures

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