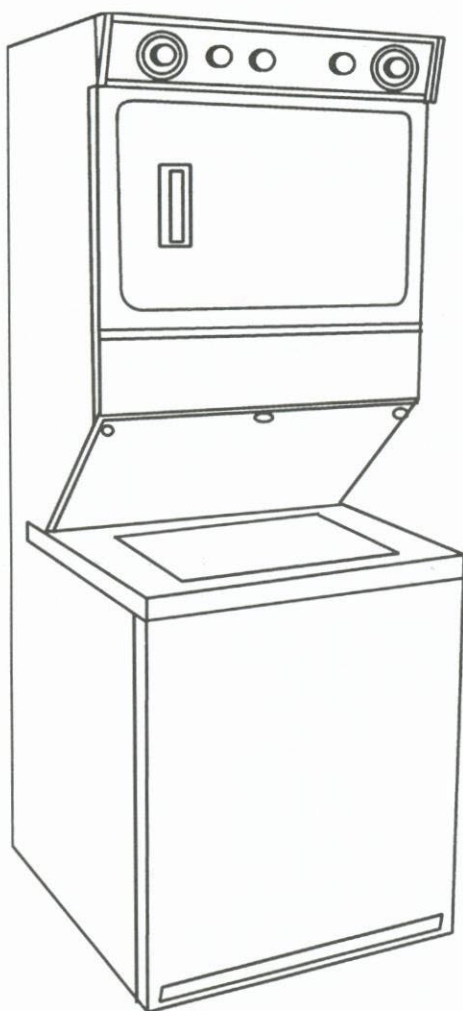




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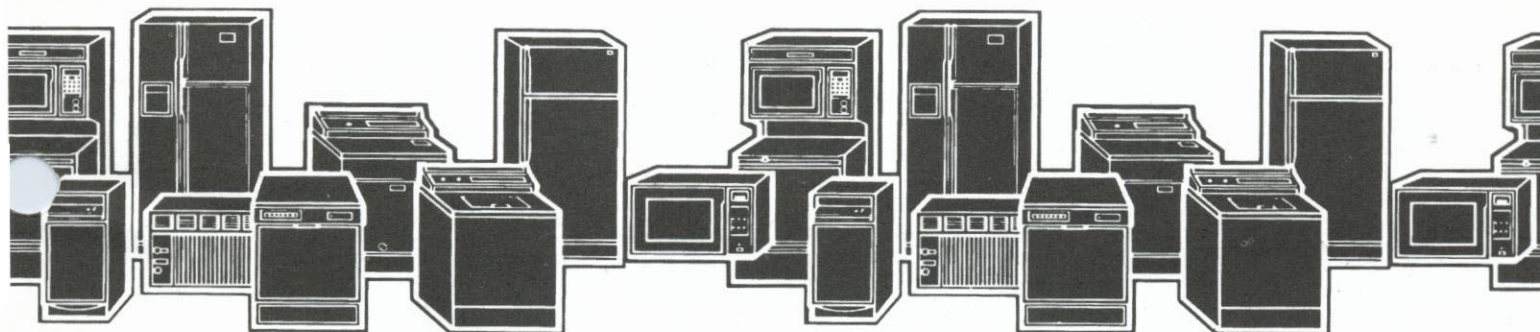
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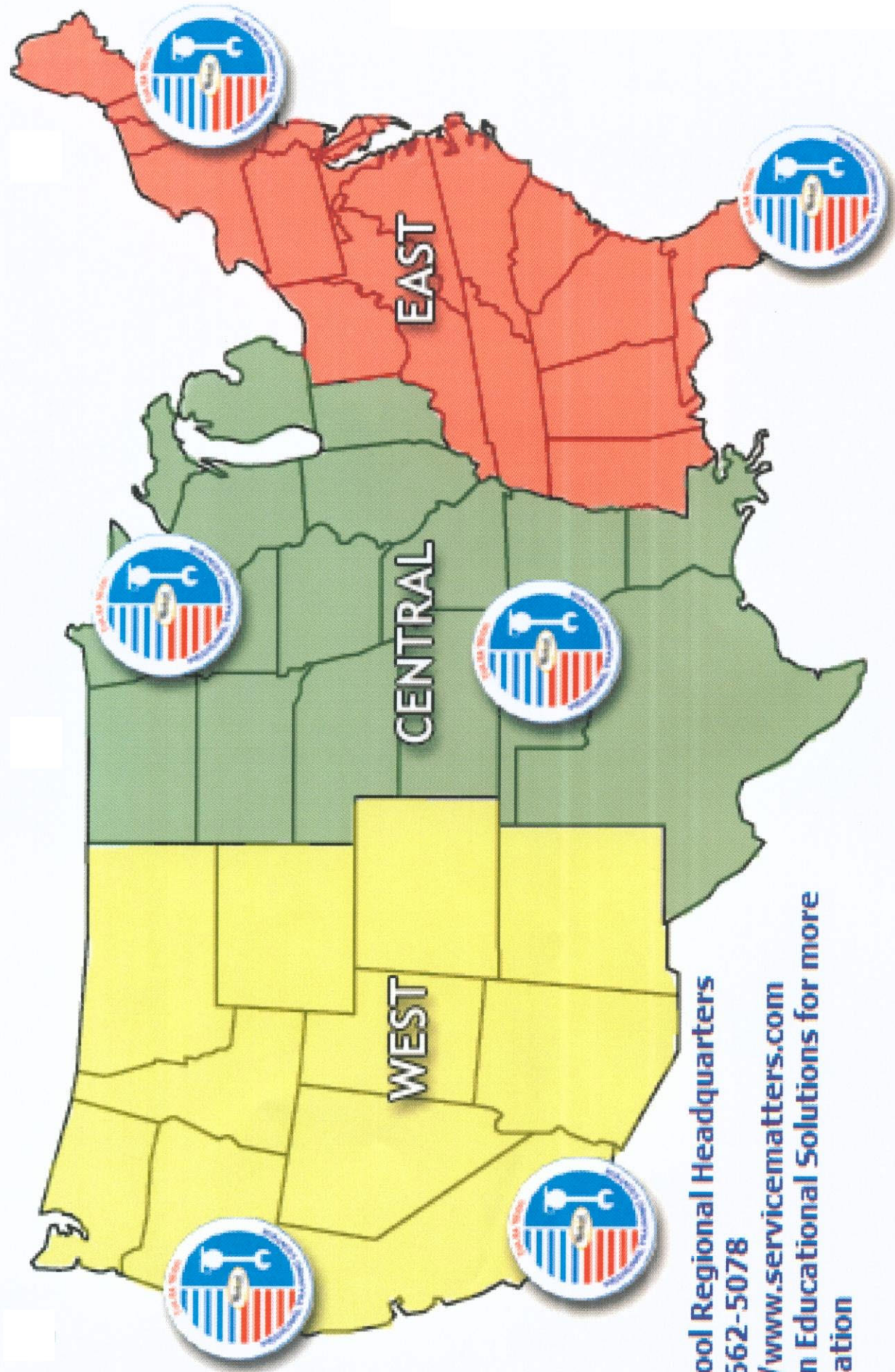


Large-Capacity Thin Twin Laundry System

Part No.
4314124 Rev. A

Washers, Dishwashers, Built-In Ovens and Surface Units, Ranges, Microwave Ovens, Trash Compactors, Room Air Conditioners, Dehumidifiers, Automatic Washers, Clothes Dryers, Freezers, Refrigerators





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INTRODUCTION

This Job Aid, "*LARGE-CAPACITY THIN TWIN LAUNDRY SYSTEM*," (Part No. 4314124 Rev. A) provides specific information for the installation, service and repair of the large-capacity Thin Twin Laundry system containing both an automatic washer and clothes dryer in one cabinet.

"*LARGE-CAPACITY THIN TWIN LAUNDRY SYSTEM*" has been compiled to provide the most recent information on design, features, troubleshooting, service and repair procedures. This Job Aid is intended as a teaching tool and should not be used to replace any Service Manuals, Use and Care Guides or Tech sheets provided with specific models of the Large-Capacity Thin Twin Laundry System.

GOALS AND OBJECTIVES

The goal of this Job Aid is to provide detailed information that will enable the service technician to properly diagnose malfunctions and repair the Large-Capacity Thin Twin Laundry System.

The objectives of this Job Aid are to enable the service technician to:

- Understand proper safety precautions
- Successfully install the appliance
- Successfully troubleshoot and diagnose malfunctions
- Successfully perform necessary repairs
- Successfully return the appliance to proper operational status.



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SAFETY

WARNING



ELECTRIC SHOCK HAZARD

Disconnect the electrical power before servicing any components .
Failure to do so can result in death or electrical shock.

WARNING



PERSONAL INJURY HAZARD

This unit has several sharp edges in areas where you will be working to remove components for service. Wear protective gloves where sharp edges are present.

WARNING



INJURY HAZARD

More than one person is required to lift, tilt or move the washer/dryer because of its weight and size

Failure to follow this instruction may result in injury

ELECTRICAL REQUIREMENTS FOR GAS DRYER UNITS

A 120 volt, 60 Hz, AC only 15 or 20 Ampere fused electrical supply is required. A time-delay fuse or circuit breaker is recommended. It is recommended that a separate circuit serving only this appliance be provided.

Recommended Grounding Method

Electrical ground is required on this appliance.

**DO NOT, UNDER ANY CIRCUMSTANCES,
REMOVE THE POWER SUPPLY CORD GROUND
PRONG.**

For your personal safety, this appliance must be grounded. This appliance is equipped with a power supply cord having a 3-prong grounding plug. (Fig. 1) To minimize possible shock hazard, the cord must be plugged into a mating 3-prong grounding type wall receptacle, grounded in accordance with the National Electrical Code, ANSI/NFPA 70-1987 or the latest code and local ordinances. If a mating wall receptacle is not available, it is the personal responsibility and obligation of the customer to have a properly grounded 3-prong wall receptacle installed by a qualified electrician.

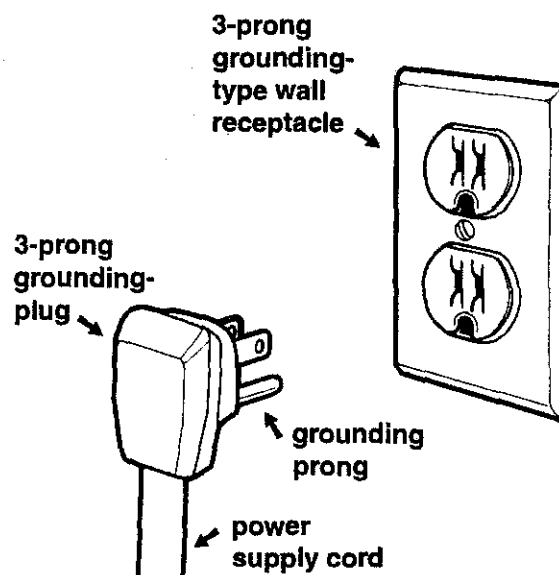


Fig. 1

ELECTRICAL REQUIREMENTS FOR ELECTRIC DRYER UNITS

- A. A three-wire (Fig. 2) or four-wire (Fig. 3), single phase, 120/240 volt, 60 Hz, AC only electrical supply is required on a separate 30-ampere circuit, fused on both sides of the line. A time-delay fuse or circuit breaker is recommended.
- B. Most local codes permit the use of flexible, 30-amp rated, power supply cord (pigtail). The power cord must be plugged into a mating 30-amp receptacle (NEMA type 10-30R). A U.L.- listed strain relief must be installed where the power cord enters the dryer.
- C. **THE DRYER MUST BE CONNECTED WITH 10-GAUGE MINIMUM COPPER WIRE ONLY.** Do Not use aluminum wire which could cause a fire.
- D. The power supply cord (pigtail) can be removed and the appliance can be connected directly to an individual 30-ampere fuse circuit breaker box through flexible armored or nonmetallic sheathed, 10-gauge minimum copper cable. It is the personal responsibility and obligation of the customer to contact a qualified electrician to assure that the electrical installation is adequate and is in conformance with National Electrical Code ANSI/NFPA 70-1987 (or the latest edition) and local codes and ordinances.

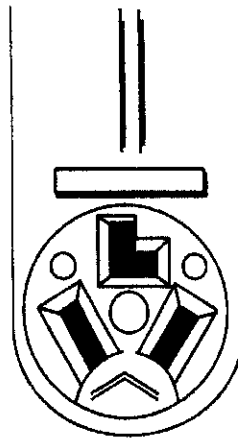


Fig. 2

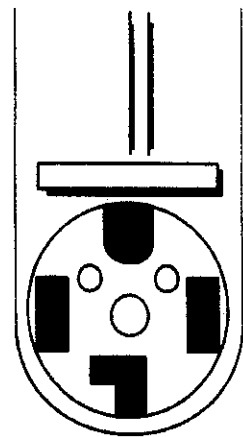


Fig. 3

Important: Allow slack in the line between the wall and the appliance so that it can be moved if servicing is ever necessary.

A U.L.-listed strain relief must be provided at each end of the power supply cable (at the appliance and at the junction box). Wire sizes (10-gauge **COPPER WIRE ONLY**) and connections must conform with the 30-ampere circuit rating.

- E. For mobile home installation, the three-wire power supply cord must be removed and the appliance wiring must be revised. The appliance frame must not be connected to the neutral terminal, but must be connected to the grounding wire (green) of the power supply cord. See Alternate electrical connection - mobile home installation, for detailed instructions.

If a four-wire receptacle of NEMA type 14-30R is available, a matching power supply cord (pigtail) must be used. This cord contains No. 10-gauge copper conductors with spade or ring terminals on the dryer end and terminating in a NEMA type 14-30P plug on supply end. The fourth (grounding) must be identified by a green cover and the neutral conductor by a white cover. Cord should be at least three feet long. The four-wire power supply cord and strain relief are not provided with the dryer.

WARNING



Fire Hazard

Do Not use nonmetal, flexible duct. Do Not use metal duct smaller than four inches in diameter. Do Not use exhaust hoods with magnetic latches. Improper air supply for exhausting may result in a fire. Check that the exhaust system is not longer than specified. Exhaust systems longer than specified will:

- Accumulate lint
- Shorten the life of the product
- Reduce performance and result in longer drying times and increased energy usage.

Failure to follow these specifications may result in a fire.

Do Not exhaust dryer into a chimney, furnace cold air duct, attic or crawl space, or any other duct used for venting. Clean the exhaust system every other year. Do Not install flexible duct under wall, ceiling or floor materials. Accumulated lint could result in a fire or cause moisture damage.

WARNING



Fire Hazard

Connect dryer to a regulated gas supply. L.P. gas supply must not exceed a pressure of 13" water column. This must be checked by a qualified person before installing the dryer. Use new, flexible tubing. Old tubing may leak. All connections must be wrench-tightened. Do Not check for gas leaks using an open flame. Failure to follow these instructions could result in a fire or explosion.

WARNING



Potential Fire Hazard

The dryer must be exhausted outside. If dryer is installed in a closet, the dryer **MUST** be exhausted outside. Failure to do so increases the risk of fire.

SECTION ONE

INSTALLATION CONSIDERATIONS



WARNING

INJURY HAZARD

More than one person is required to lift, tilt or move the washer/dryer because of its weight and size

Failure to follow this instruction may result in injury

REMOVING THE LAUNDRY SYSTEM FROM THE CARTON

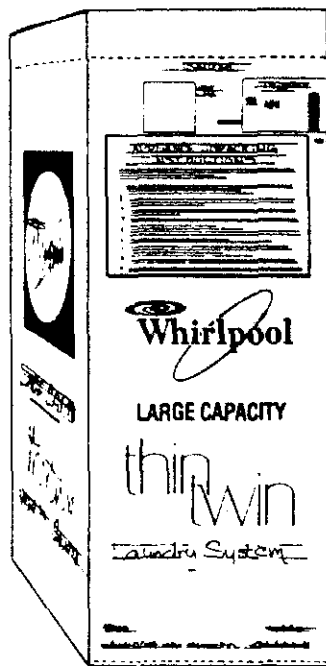


Fig. 1

1. Cut along the dotted line around the top and bottom of the carton. (Fig. 1)
2. Remove the carton top.
3. Carefully lay the unit on its side and remove the bottom of the carton.
4. Stand the unit upright and cut down each corner of the carton.

NOTE: Do not remove the inside corner posts before cutting down the corners. Doing so may cause damage to the painted surface of the unit.

5. Remove the carton sides.
6. Remove the inner corner posts and foam supports and dispose of properly.

NOTE: Dispose of all carton material properly.

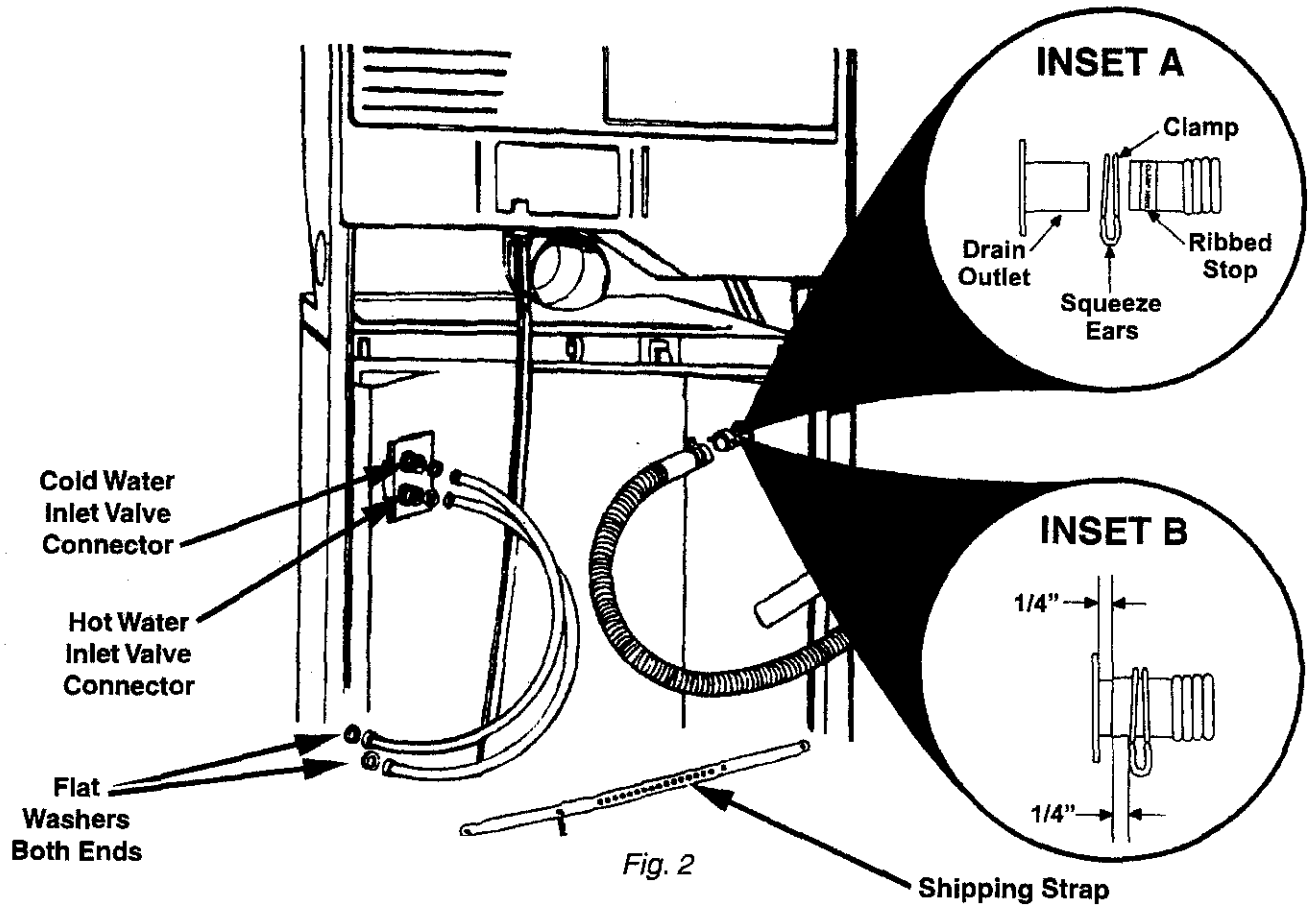
7. Remove the hoses, clamps, washers and installation instructions from inside the washer basket.

INSTALLING THE LAUNDRY SYSTEM

NOTE: Read and follow the Installation Instructions carefully.

1. Remove the yellow rip cord from the rear of the washer. Be sure two (2) cotter pins come out with the rip cord. (Fig. 2, page 2) Save this strap for use later.
2. Use the new hoses supplied with the laundry system. Insert a flat washer into each end of both hoses. (Fig. 2, page 2)
3. Attach one hose to the bottom (hot water) inlet valve connector first. Then, attach the other hose to the top (cold water) inlet valve connector. Hand tighten both connections. Finish tightening with a pair of pliers, an additional 2/3 turn. (Fig. 2, page 2)

4. Wet the inside of the drain hose with water. **DO NOT USE ANY OTHER LUBRICANT.**
5. Squeeze the ears of the drain hose clamp with a pair of pliers and place the clamp over the end of the drain hose. (*Fig. 2 - Inset A*)
6. While holding the clamp open, work the end of the drain hose onto the drain connector.
7. Position the clamp over the drain hose area marked "clamp." Release the clamp. Clamp should be $\frac{1}{4}$ " from the end of the hose. (*Fig. 2 - Inset B*)



8. Open the yellow clamp by squeezing the ears together and slide it over the "hook" end of the drain hose to secure the rigid and corrugated sections together. (*Fig. 3*)

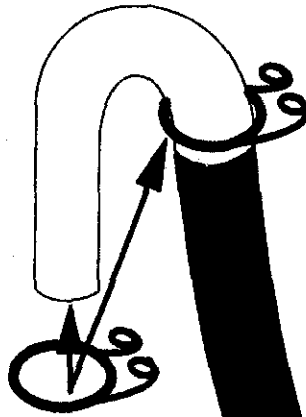


Fig. 3

13. Move the washer to its permanent location.
14. Tilt the washer forward off the floor and set back down to adjust the rear self-leveling legs.
15. Check the washer for level, both side-to-side and front-to-back. Adjust the front legs as necessary. Tighten the locking nuts to the base of the washer with a wrench. If the nuts are not tightened, the washer may vibrate excessively.
16. Run water through both faucets to get rid of particles in the water lines.
17. Attach the hoses to the water faucets. The bottom hose should be connected to the hot water supply and the top hose should be connected to the cold water supply.
18. Cut the shipping strap at the words "CUT HERE" and slide it off the power supply plug.
(Fig. 14)

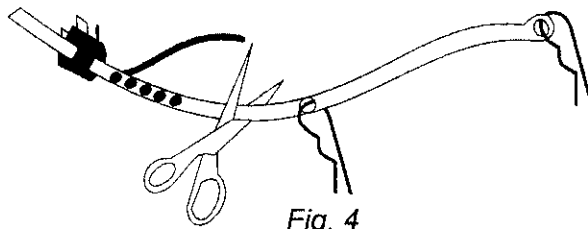


Fig. 4

19. The hook-end of the drain hose can be installed into a stand pipe (Fig. 5, A & B) or laundry tub, (Fig. 5, C) and secured with the shipping strap as shown.

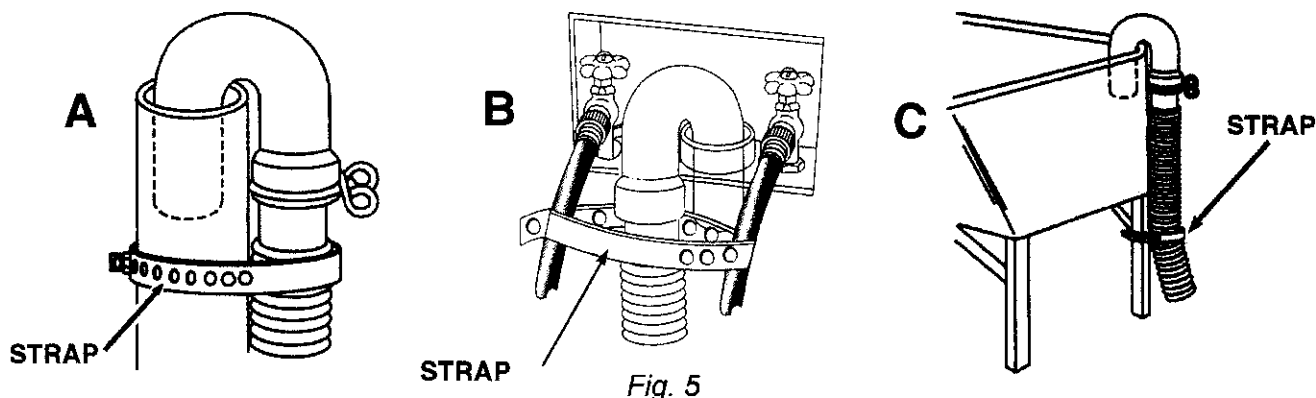


Fig. 5

Exhaust Requirements

The dryer comes with a rear deflector vent to exhaust the dryer straight out the rear. This vent can be connected to an exhaust system that goes up, down, left or right. All ducting systems should end in an exhaust hood to prevent back draft.

To convert the dryer to exhaust left, right, up or down, Exhaust Kit, Part No. 279823 **MUST** be used. Follow the instructions in the kit to avoid operational and personal hazard.

! WARNING

Electrical Shock Hazard

Disconnect power before servicing.
Failure to do so could result in serious injury or death.

! WARNING

Personal Injury Hazard

Wear gloves and long sleeves to protect hands and arms from sharp edges that might be present.
Failure to do so could result in personal injury.

Preparing the Laundry System for Exhausting Left or Right

1. Remove left or right side panel knockout by drilling four (4) $\frac{1}{4}$ " holes at the drill locations (dimples) shown and knock out plug. (Fig. 6) Use a file and remove the small burrs in the hole created after the knockout is removed.

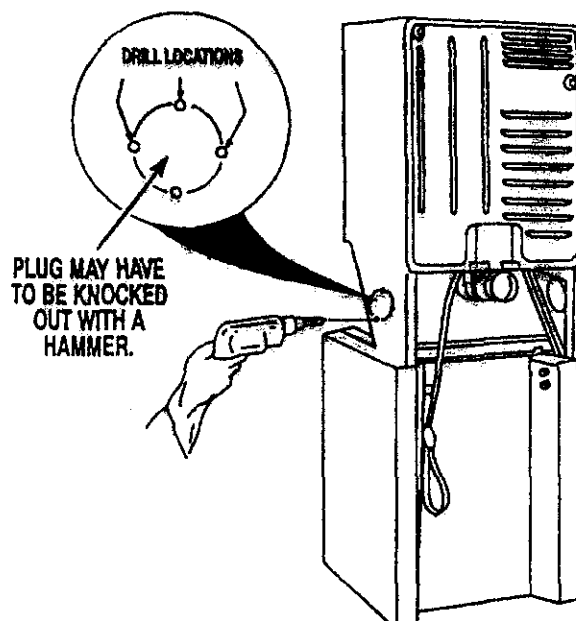


Fig. 6

2. Remove the two (2) $\frac{5}{16}$ -inch screws securing the exhaust pipe bracket to the laundry system. Remove the factory installed exhaust pipe from the blower housing collar. Save the exhaust pipe bracket and screws for use later. (Fig. 7)

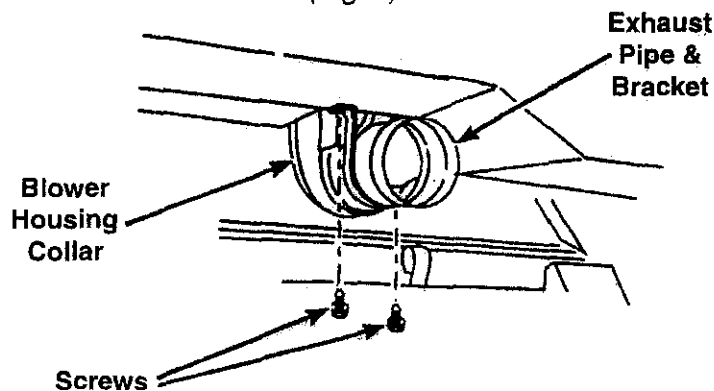


Fig. 7

3. Install the new flex pipe assembly to the blower housing collar using the bracket and screws removed in step 2. Make sure the legs are in the upright position. Secure the assembly with duct tape. Place the clip on the end of the flex pipe. (Fig. 8)

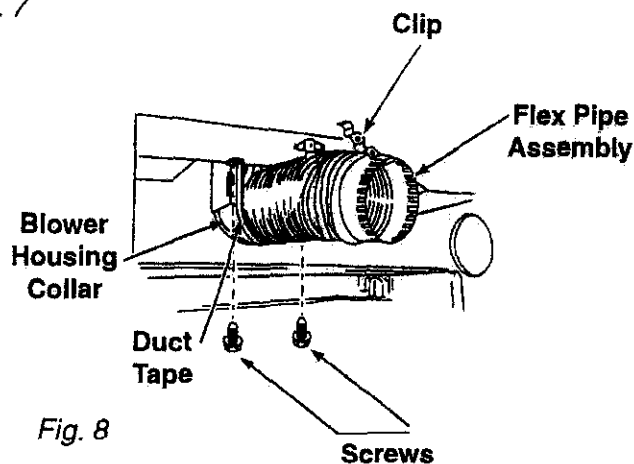


Fig. 8

4. Preform the flex pipe to the left or right. Pull the flexpipe through the knockout opening until the clip "snaps" into place. (Fig. 9)

NOTE: The flex pipe may also be used to exhaust down or straight out the back. In these cases, the clip is not needed.

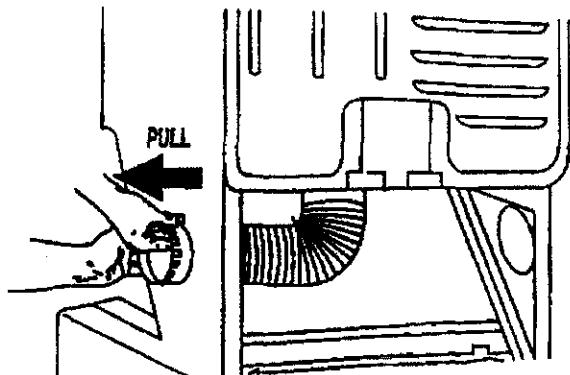
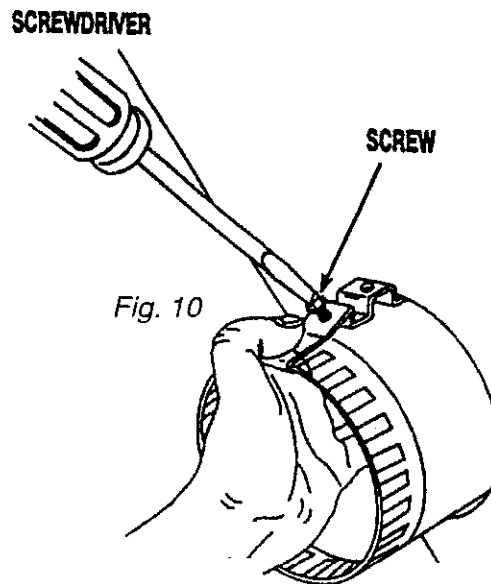


Fig. 9

5. Maintain the position of the clip with one hand and secure the screw with the other hand. Make sure the screw is snug against the flex pipe, but do not break through. (Fig. 10)



6. Tape all of the connections with duct tape, then proceed with the installation.

NOTE: When changing vent directions, use plugs to cover the panel exhaust holes.

692790 - White Plug
692791 - Almond Plug

--NOTES --

SECTION TWO

COMPONENT ACCESS

WARNING



Electrical Shock Hazard

Disconnect electric power from appliance before servicing.
Replace all panels before operating.

Failure to do so could result in death or electrical shock.

Washer Access

Front Panel Removal

1. Remove the Transition Panel by removing the three (3) retaining screws. Tip the panel down and lift it out. (Fig. 11)

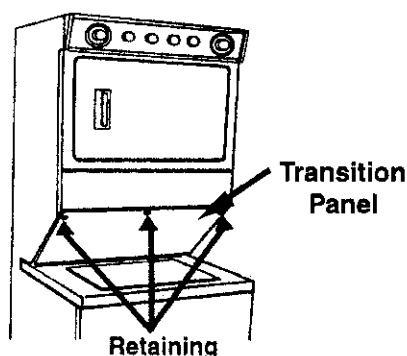


Fig. 11

2. Release the two washer top retaining clips and slide the washer top forward off the unit. (Fig. 12)

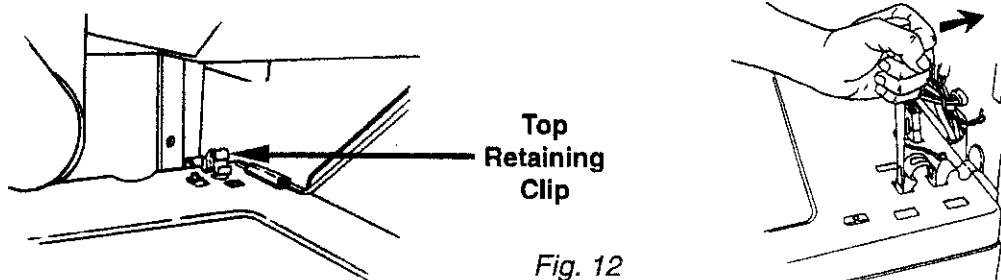


Fig. 12

3. Remove the two (2) Washer Front Panel retaining 5/16" screws. Then remove the Front Panel Brace and remove the Front Panel. (Fig. 13)

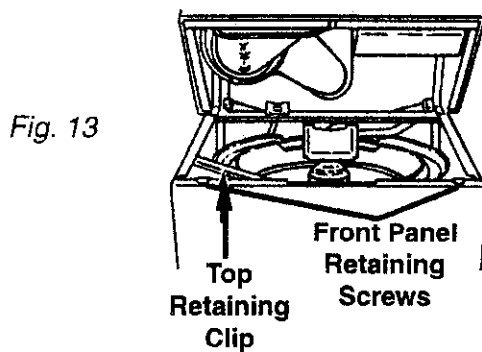
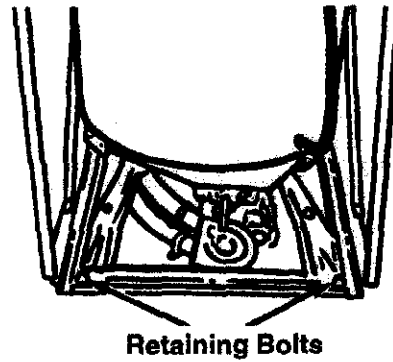


Fig. 13

Washer Mechanism Removal

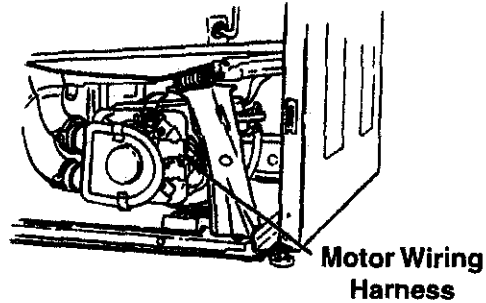
1. Remove the two (2) ½" washer retaining bolts. (Fig. 14)

Fig. 14



2. Remove the Motor Wiring and Wiring Harness Clip. (Fig. 15)

Fig. 15



3. Remove the Drain Hose from the retainer (Fig. 16)

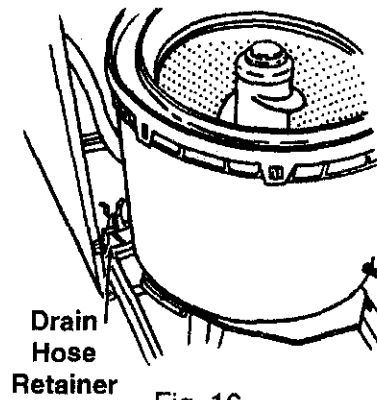


Fig. 16

4. Remove the Pressure Hose. (Fig. 17)

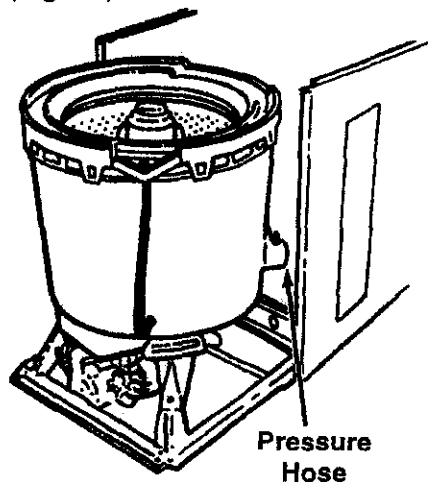




Fig. 17

5. Lift and pull the washer assembly forward out of the cabinet. From this position it is possible to service all the washer components, which are similar to those used in other Whirlpool direct drive washers.
6. When reinstalling the washer mechanism, it is important to insure that the base restraints are properly positioned and that the wiring harness, drain hose, vacuum break, and pressure hose are properly installed and positioned.

Dryer Access

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

Control Panel Access

1. Remove the three (3) screws that hold the Control Panel in place. (Fig. 18)
2. Remove the transition panel by removing the three (3) retaining screws. (Fig. 18)
The wiring diagram is located on the back side of the transition panel

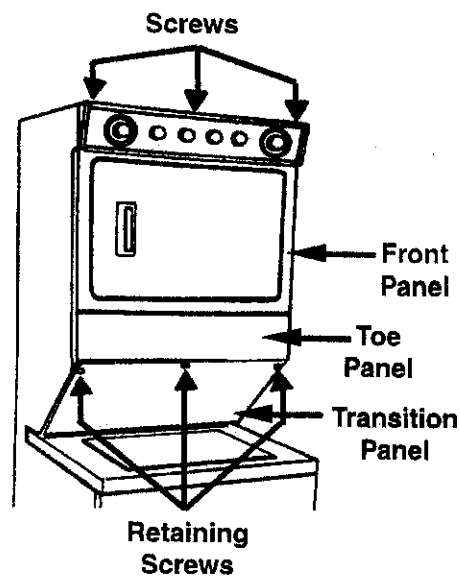
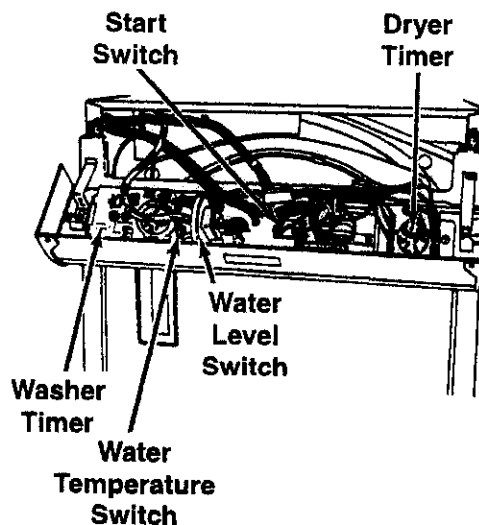


Fig. 18

3. Lift the console up and flip it forward, being careful not to damage the knobs or the dryer front panel. (Fig. 19)

Fig. 19



Dryer Toe Panel Access

1. Remove the Transition Panel by removing the three (3) retaining screws.
2. Using a putty knife, release the two (2) retaining clips and remove the toe panel. (Fig. 20)

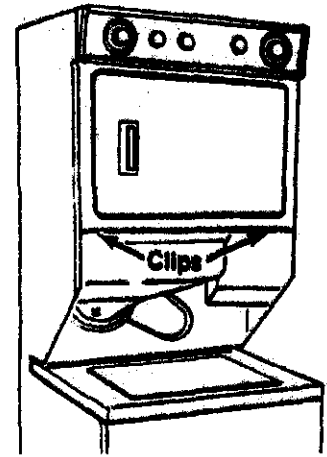


Fig. 20

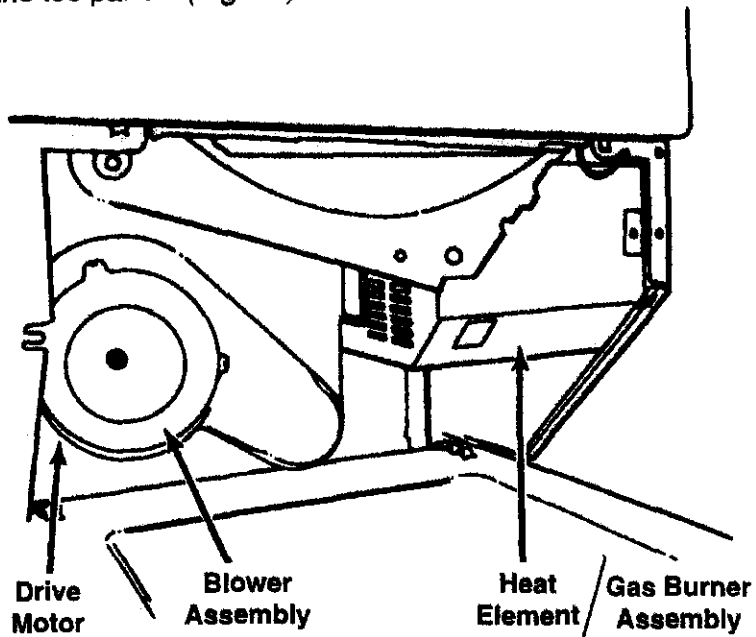


Fig. 21

Door Front Panel Access

1. Remove the transition panel and the Toe Panel.
2. Flip down the Control Panel. (Fig. 22)
3. Disconnect the Door Switch Wires.
4. Remove the Control Panel from the Front Panel and set it on top of the unit. (Fig. 23)

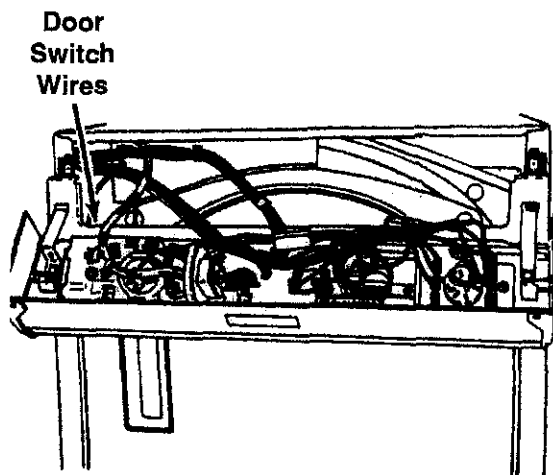


Fig. 22

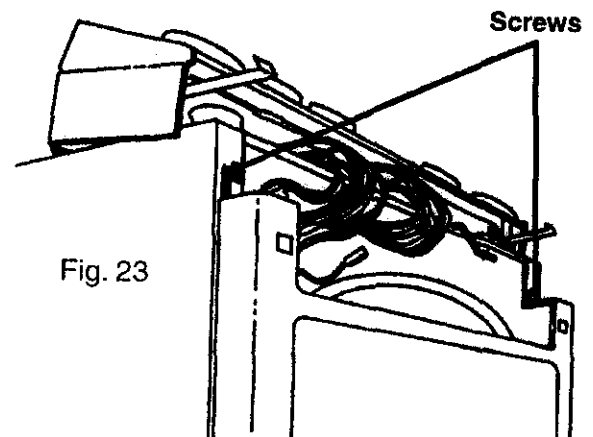


Fig. 23

5. Remove the top two (2) retaining screws.
6. Remove the bottom two (2) screws.
7. Remove the Lint Screen.
8. Remove the three (3) Dryer Lint Duct assembly retaining screws and remove the assembly. (Fig. 24)
9. Remove the four (4) heater element shield screws. (Fig. 24)
10. The Dryer Front Panel can now be removed.

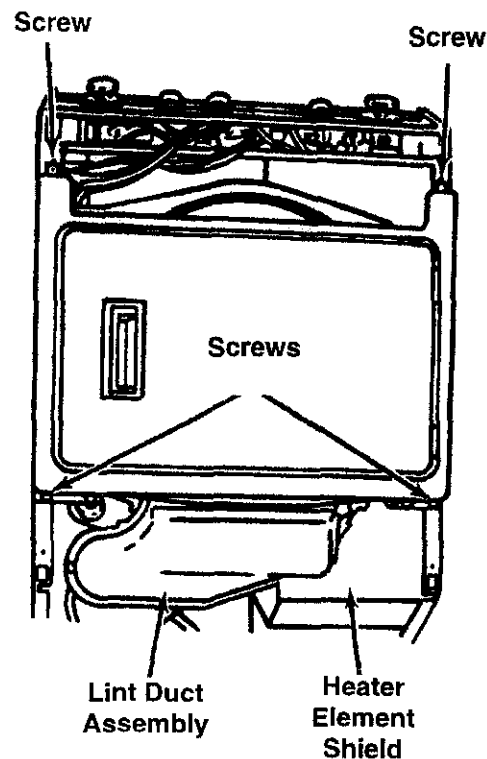


Fig. 24

Dryer Drive Motor Access

1. Remove the Toe Panel.
2. Remove the Dryer Lint Screen.
3. Remove the Dryer Lint Duct Assembly.
4. Remove the Blower Assembly, Transition Duct and Blower Plate by removing the retaining screws. (Fig. 25)
5. Using a ratchet and extension to hold the drive motor shaft stationary, remove the Blower Wheel.

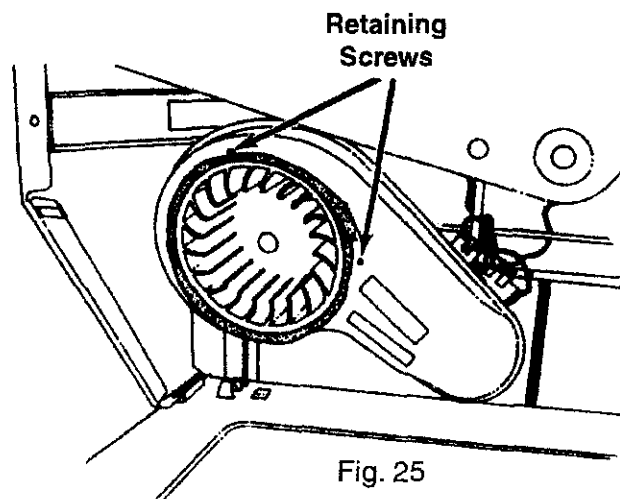


Fig. 25

NOTE: The Blower is reverse threaded and is removed by turning it clockwise.

6. Remove the Blower Housing.
7. Remove the Drive Belt.
8. Remove the Motor Wiring. (Fig. 26)
9. Remove the wiring to the broken belt switch.
10. Remove four (4) motor bracket retaining screws and remove the motor.

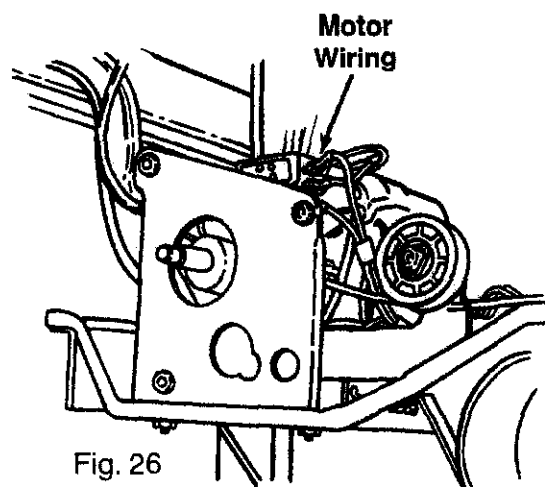


Fig. 26

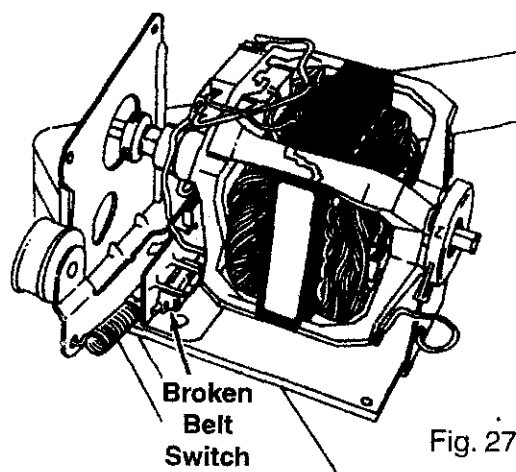


Fig. 27

NOTE: This dryer has a broken belt switch which interrupts power to the drive motor when the drive belt breaks. (Fig. 27)

Dryer Heater Element Access

1. Remove the Dryer Toe Panel.
2. Remove the Lint Screen and the Lint Duct Assembly and Transition Duct.
3. Remove the Heater Element Shield screws and remove the shield.
4. Remove the one (1) Heater Element retaining screw to remove the Heater Element. (Fig. 28)

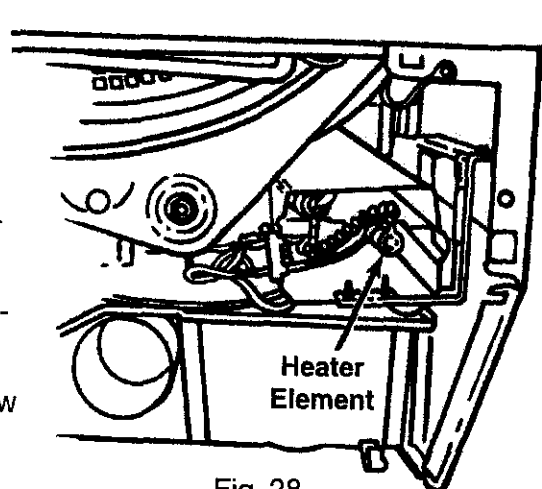
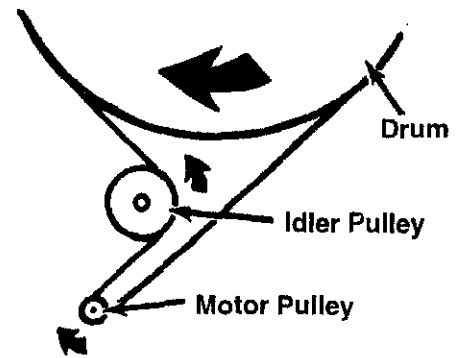


Fig. 28

Dryer Belt Replacement

1. Remove the Dryer Toe Panel.
2. Remove the Lint Filter and the Lint Duct Assembly.
3. Remove the Blower Assembly.
4. Remove the Dryer Front Panel.
5. A new Drive Belt can now be looped over the Dryer Drum. (*Fig. 27*)
6. Loop the Drive Belt over the Drive Motor Pulley. (*Fig. 29*)
7. Pull the Tension Pulley up and place the belt on it so that the belt is tight when the pulley is released.



**Belt Routing Diagram
Viewed From Front**

 **Direction Part Turns**

Fig. 29

--NOTES --

SECTION THREE

TROUBLESHOOTING and DIAGNOSIS

DRYER TROUBLESHOOTING GUIDE

CONDITION	POSSIBLE CAUSE	SOLUTION
Dryer will not run.	No power to unit. Door switch not making. Thermal fuse open. Broken belt or belt switch. Timer Motor Push-to-start switch	Check voltage supply. Check door switch wiring and continuity. Check fuse continuity. Check for broken belt or check belt switch for continuity. Check timer contacts for continuity. Check voltage to motor, contacts 4 & 5, (120VAC). Check motor windings for continuity, (2-4 ohms). Check PTS contacts NO to CO, while pushing start switch.
No heat in dryer.	Improper voltage supply. Heater Element Gas Burner Thermostat Thermal cut-off, Hi-limit Thermostat Motor centrifugal switch	Check for 240VAC. (electric dryer) Check heater continuity, (8-12 ohms). Check for voltage (120VAC) to burner assembly. Check ignitor continuity. Check for gas supply. Check flame switch continuity, (0 ohms when cold). Check gas valve solenoids for continuity. Check thermostat for continuity. Check for continuity. Manually close centrifugal switch contacts, check for continuity, (1M-2M ohms).
Drum will not rotate.	Broken belt Broken belt switch Idler pulley binding.	Check belt. Check for continuity. Check for proper operation of idler pulley.
Not heating enough.	Blocked air flow Thermostat cycling too low.	Check lint filter, blower housing, internal and external ducting and exhaust hood. Check exhaust temperatures for proper cycling.
Temperature too hot.	Thermostat heater open	Check heater for continuity, (3200-4000 ohms). Check selector and wiring for continuity.
Auto cycle timer won't advance.	Timer Resistor Timer contact TM to OR	Check timer motor continuity, (4000-6000 ohms). Check resistor for 4000 to 5000 ohms. Check for continuity.

TROUBLESHOOTING and DIAGNOSIS

WASHER TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	ACTION
1. MOTOR WILL NOT RUN NOTE: In diagnosing this problem, start the washer. If the motor runs in either agitate or drain, the motor is OK.	No/low voltage to machine	Check supply voltage (100-130 volts)
	Thermal overload tripped	Check Overload
	Timer switches	Check continuity
	Poor connection on timer	Secure terminal
	Motor centrifugal switch	Check continuity
	Motor disconnect block loose	Secure disconnect block
	Motor	Check windings
	Wiring harness	Check continuity
	Incorrect harness wiring	Check harness connections
	Water level switch	Check continuity
	Pump jammed	Replace pump
	Gearcase jammed	Replace gearcase
	Lid open in spin cycle	Close lid
2. NO AGITATE OR SPIN BUT MOTOR RUNS	Broken motor coupler	Replace coupler
	Internal gearcase problem	Replace gearcase
3. WATER WILL NOT ENTER MACHINE.	Water turned off at supply	Check faucet - turn on
	No/low voltage to machine	Check supply voltage (100-130 volts)
	Water temperature switch	Check continuity
	Timer switches	Check continuity
	Wiring harness.	Check continuity of wiring
	Poor connection at water inlet valve solenoid	Secure terminal
	Water level switch	Check continuity V to P
	Incorrect harness wiring	Check harness connections
	Water level switch out of calibration	Replace switch
4. WATER LEVEL TOO LOW.	Customer misunderstanding of correct water level	Check water level per specification sheet
5. MACHINE WILL NOT AGITATE.	Wiring harness	Check continuity
	Motor	See problem 1
	Stripped agitator spline	Replace agitator
	Damaged agitate cam	Replace gearcase
	Damaged agitate gear	Replace gearcase
	Broken agitator shaft	Replace gearcase
6. INTERMITTENT AGITATE.	Pause in timer	Normal condition
	Damaged agitate cam	Replace gearcase
	Agitate gear clutch teeth worn or broken	Replace gearcase

PROBLEM	POSSIBLE CAUSE	ACTION
7. KNOCK DURING AGITATE.	Agitator splines worn	Replace agitator
	Excessive clearance on pinion thrust or main drive gear	Replace gearcase
8. TRIES TO AGITATE DURING SPIN.	Shift actuator or cam damaged	Replace gearcase
9. WATER DOES NOT DRAIN FROM MACHINE.	Clogged drain	Remove obstruction
	Pump	Replace pump
	Drain hose kinked	Relocate hose to prevent kink
10. SLOW OR NO SPIN. NOTE: In diagnosing this problem, start the washer in spin and see if the clutch drum spins. If it spins, the problem is <i>not inside the gearcase</i> . If the clutch drum does not spin, all or some of the problem is inside the gearcase.	Lid open	Close lid
	Lid switch defective	Check continuity
	Lid switch disconnect plug open	Check plug engagement
	Wiring harness	Check continuity
	Timer switches	Check continuity
	Motor	See problem 1
	Cam driver broken	Replace driver
	Weak clutch spring	Replace spring
	Spin tube	Check bearings and replace
	Clothes between basket and tub	Remove
	Worn Clutch Lining	Replace clutch
11. MACHINE WILL NOT SPRAY RINSE.	Water inlet valve	Check voltage
	Water temp. switch (if used)	Check continuity
	Timer switches	Check continuity
	Wiring harness	Check continuity
12. EXCESSIVE VIBRATION OR MACHINE WALKS.	Not level	Level
	Front leveling leg locknuts not tight	Secure locknut against frame after leveling
	Weak floor	Advise customer
	Unbalanced load	Redistribute load
	Shipping pins not removed	Remove pins
	Rear leveling legs stuck	Loosen
	Suspension plate sticky	Replace plate
	Suspension plate damaged or worn	Replace plate
	Suspension pads damaged or worn	Replace pads
	Tub support friction area sticky	Replace tub support
	Tub support damaged or worn	Replace tub support
	Suspension springs missing Broken or not connected	Replace or reconnect springs
	Basket ballast missing	Replace basket balance ring
	Base bent/out of square	Replace base

PROBLEM	POSSIBLE CAUSE	ACTION
13. CLOTHING DAMAGE	Excessive use of bleach	Instruct customer
	Overloading of machine	Instruct customer
	Foreign objects	Remove
	Water level too low	Increase water level
	Agitates during spin	See problem 8
	Agitator surface rough	Replace agitator
	Basket surface rough	Replace basket
14. GEARCASE LEAKS OIL	Leak at agitator shaft	Replace seal
	Leak at cover seal	Reseal
	Too much oil in gearcase	Use only 13-15 ounces in gearcase
	Defective cover	Replace cover
15. WATER LEAKS	Use of low water level with high agitation	Advise customer to use higher water level
	Leaking components	Repair or replace
16. BRAKE SQUEAL	Contaminated linings	Replace brake shoe assembly

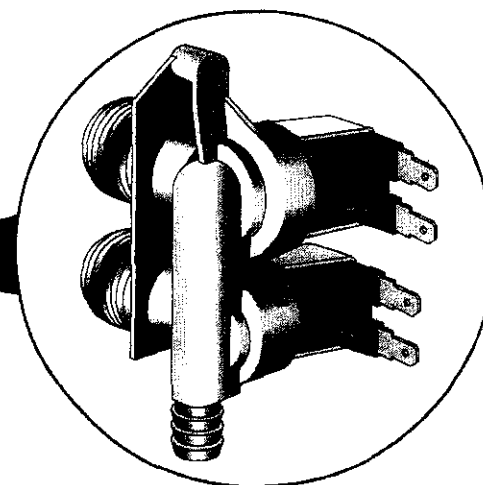
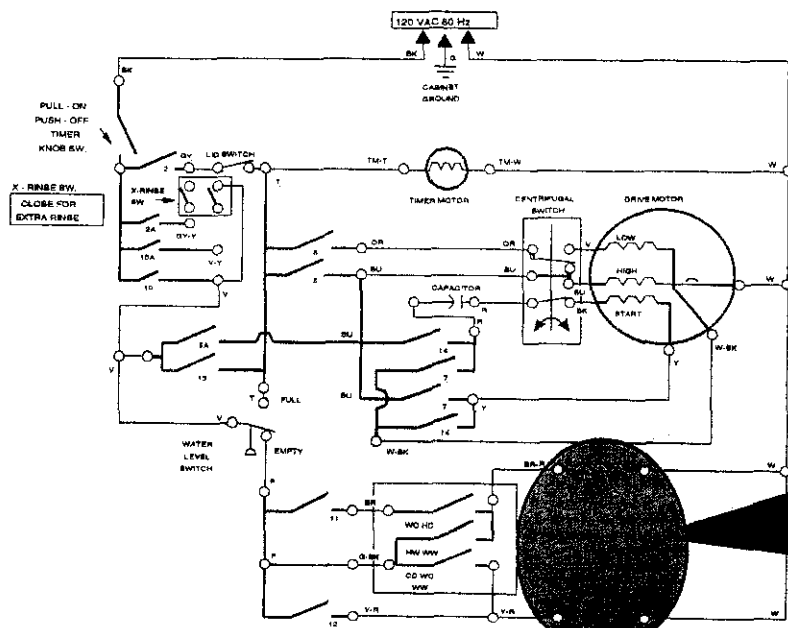
COMPONENT TESTING

NOTE: Refer to the wiring diagram for the specific model being serviced. The wiring diagram can be found behind the transition panel.

WATER INLET VALVE

To test the water inlet valve, remove the wiring harness connectors from each solenoid.

Set the meter on the R X 100 scale and attach the meter probes to the terminals on each solenoid. The meter should show between 200 and 900 ohms resistance.



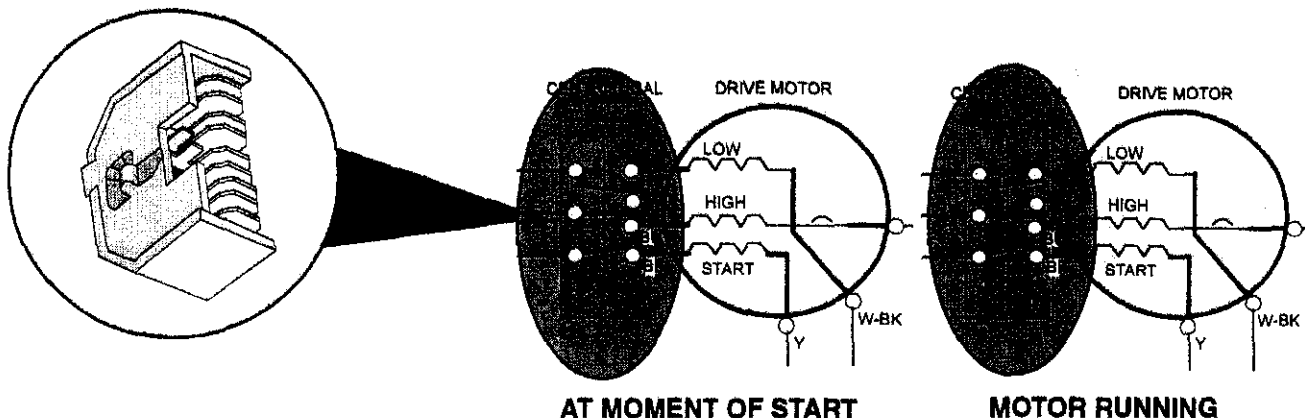
CENTRIFUGAL SWITCH

To test the centrifugal switch, remove the pump and disconnect the motor harness block from the centrifugal switch.

Remove the switch from the motor, and remove the internal motor wires from the centrifugal switch.

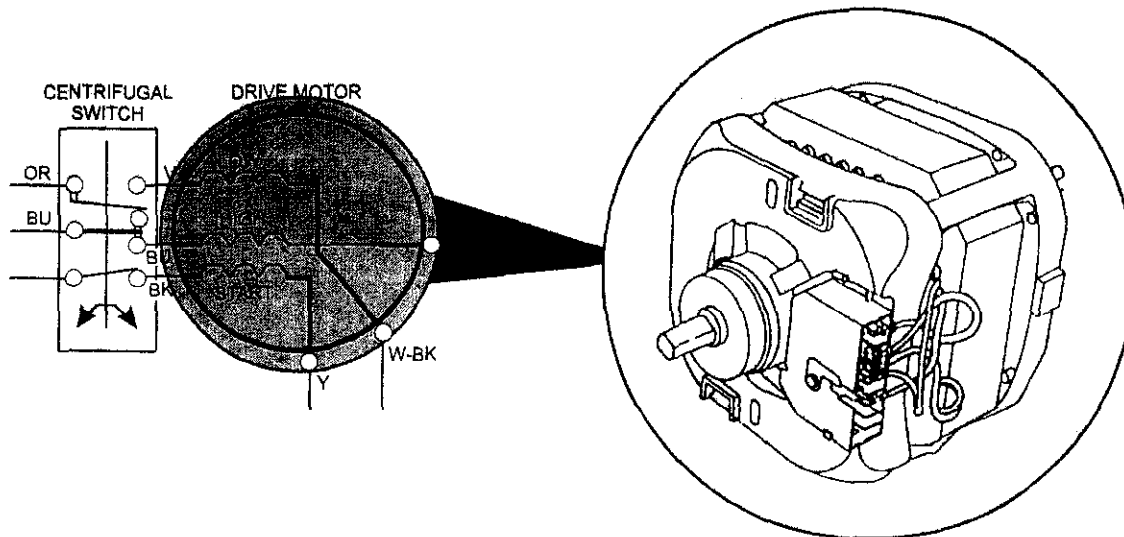
Set the meter on the R X 1 scale and test the switch in the "start" position by pushing up on the switch actuator. Continuity should be present between the red and black terminals and between the orange and blue terminals. No continuity should be present between orange and violet.

Test the switch in the "run" position by releasing the actuator. Between the orange and violet terminal, continuity should be present. Between the red and black terminals no continuity should be present.



WASHER DRIVE MOTOR

To check out the motor, first remove the motor harness from the centrifugal switch. Then, set the meter on the R X 1 scale and check the start winding for continuity by testing between the black and yellow wires. A resistance reading between four and seven ohms should be present.



Check the high-speed windings by testing between the blue and white wires. A resistance reading between 3/4 ohm and 2 ohms should be present.

Check the low-speed winding by testing between the violet and the white wire. A resistance reading between 1 1/2 and 3 ohms should be present.

Check the overload by testing between the white and white-black wires. There should be 0 ohms resistance.

START CAPACITOR

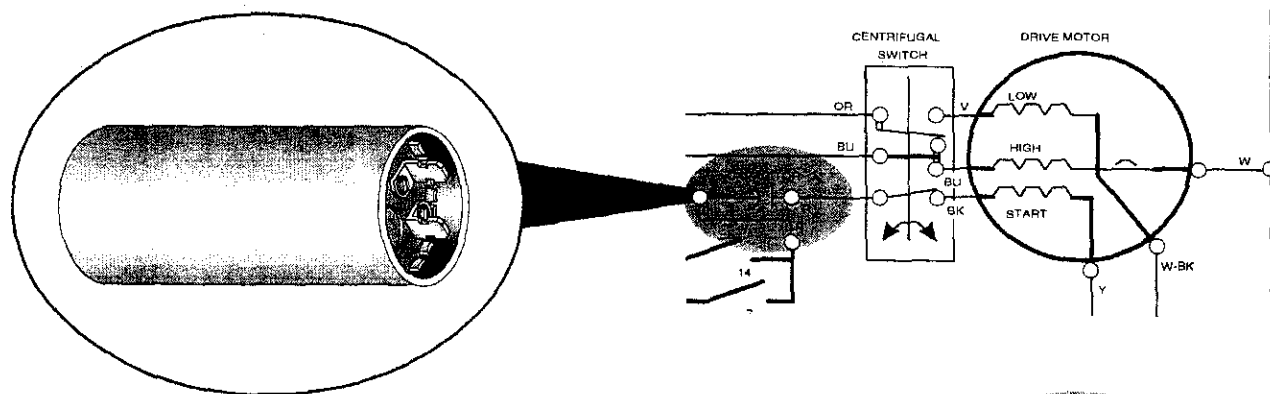
To test the start capacitor, remove the wires from the capacitor leads.

Discharge the capacitor using an insulated screwdriver.

With the meter on the R X 100 scale, place the meter leads on the capacitor leads.

The meter needle should deflect toward "0" and then reverse toward infinite resistance if the capacitor is good.

If there is no needle deflection, the capacitor is "open".



WATER TEMPERATURE SWITCH

To test the water temperature switch, set the water temperature switch to warm wash/cold rinse.

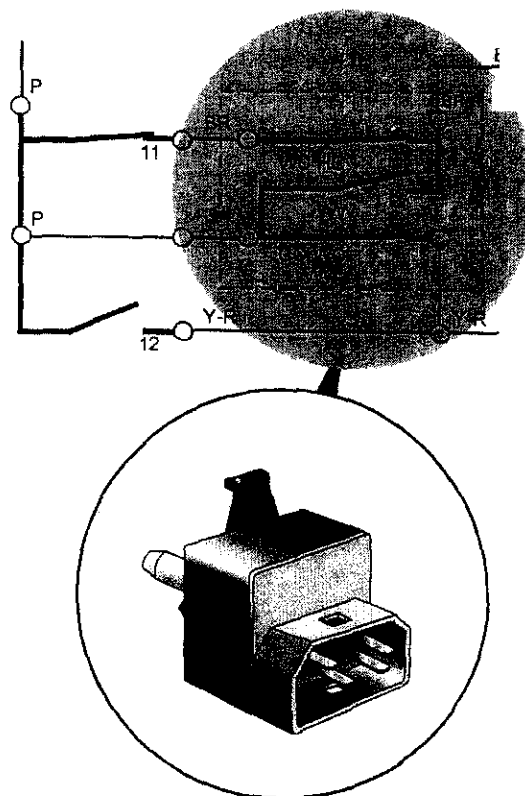
Remove the brown-red wire and the yellow-red wire from the switch.

Test between the brown-red terminal and brown terminal for continuity.

Test between the pink and yellow-red terminals for continuity.

Set the water temperature switch to warm wash/warm rinse.

Test between pink and brown-red for continuity.

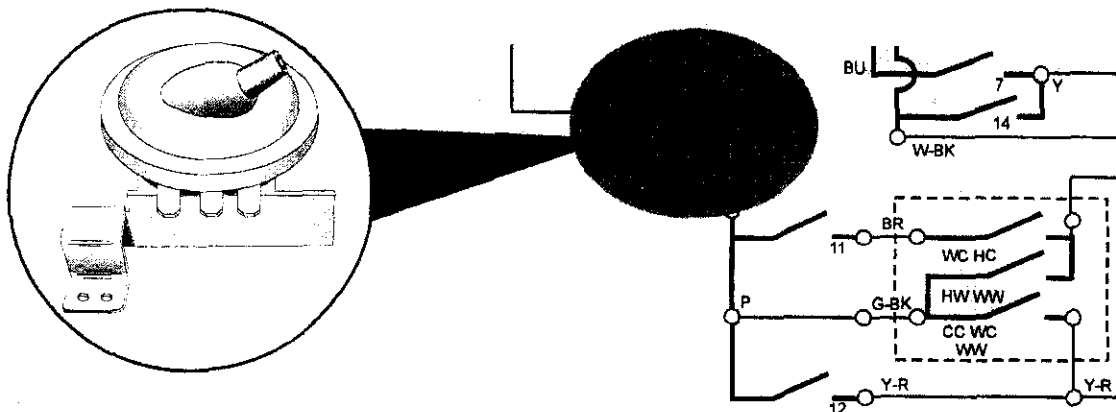


WATER LEVEL SWITCH

To test the water level switch, remove the wires from the water level switch.

With the tub empty, there should be continuity from violet to pink and no continuity between violet and tan.

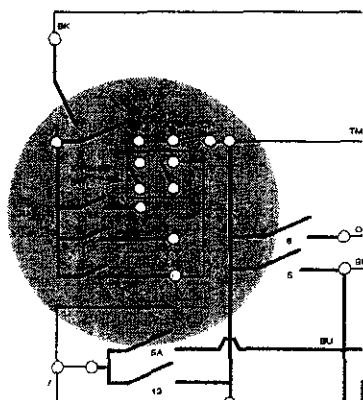
With the tub full, there should be continuity from violet to tan and no continuity from violet to pink.



WASHER TIMER

To test the timer contacts, select the contacts to be tested; in this case, contact 10.

Using the cycle sequence chart as a reference, turn the timer to the position where the contacts will be closed.



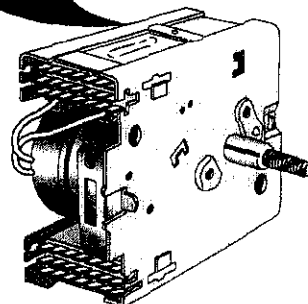
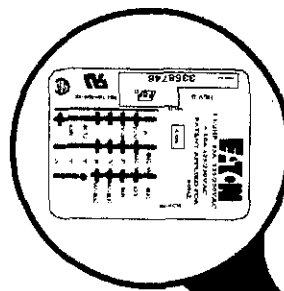
2	0
Y	B
2A	10
BYPASS - X.R.	LS
BK-W	BK-W
GY	W
TERM	SW FUNCTION
2	
4	
6	

MACHINE FUNCTION		
FILL - AGITATE	WASH HI	SUPER WASH
1/2 TUB DRAIN	DRAIN HI	
AGITATE HI	FILL	

There should be continuity between the contacts.

Turn the timer to a position where the contacts are open.

There should be no continuity between the contacts.



DRYER TIMER

To test the timer contacts, select the contacts to be tested; in this case, TM-OR.

Using the cycle sequence chart as a reference, turn the timer to the position where the contacts will be closed. (AUTO HI HEAT)

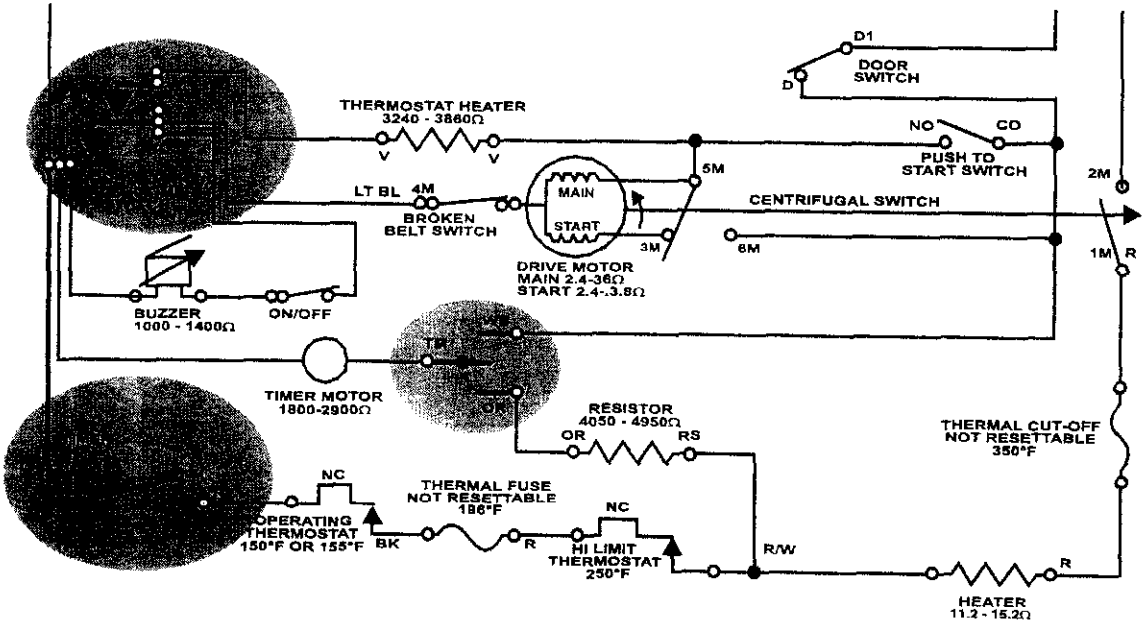
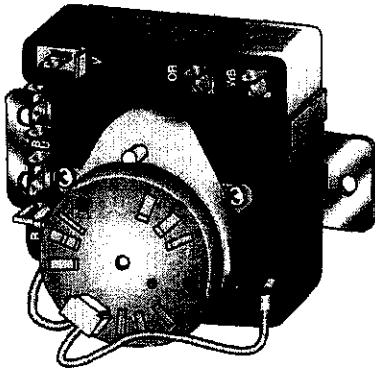
ELECTRIC AND GAS DRYER TIMER SCHEDULE						
SWITCH	CYCLE					
	CLOSED	AUTO-HI HEAT	AUTO-LO HEAT	AIR	OFF	TIMED-HI
TM - WB						
TM - BU						
BK-BU-V						
BK-BU						
BK-R						

EITHER NOT BOTH
 DOESN'T MATTER
 CLOSED
 OPEN

There should be continuity between the contacts.

Turn the timer to a position where the contacts are open. (TIMED-HI)

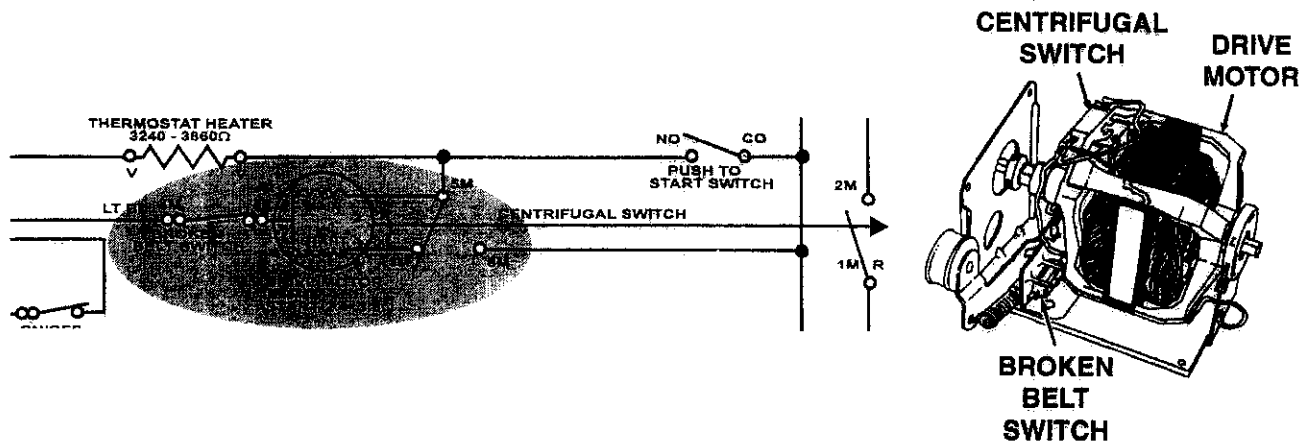
There should be no continuity between the contacts.



DRYER MOTOR and BROKEN BELT SWITCH

To check out the motor, first remove the motor harness from the centrifugal switch. Then, set the meter on the R X 1 scale and check the start winding for continuity . A resistance reading between two (2) and four (4) ohms should be present.

The broken belt switch is attached to the dryer drive motor bracket. To check the broken belt switch, set the meter scale to Rx1 and place the probes on the switch terminals. Move the belt pulley up and down to actuate the switch. The meter should show continuity (0 resistance) when the pulley is pulled up and an open circuit (infinite resistance) when the pulley is pushed down.

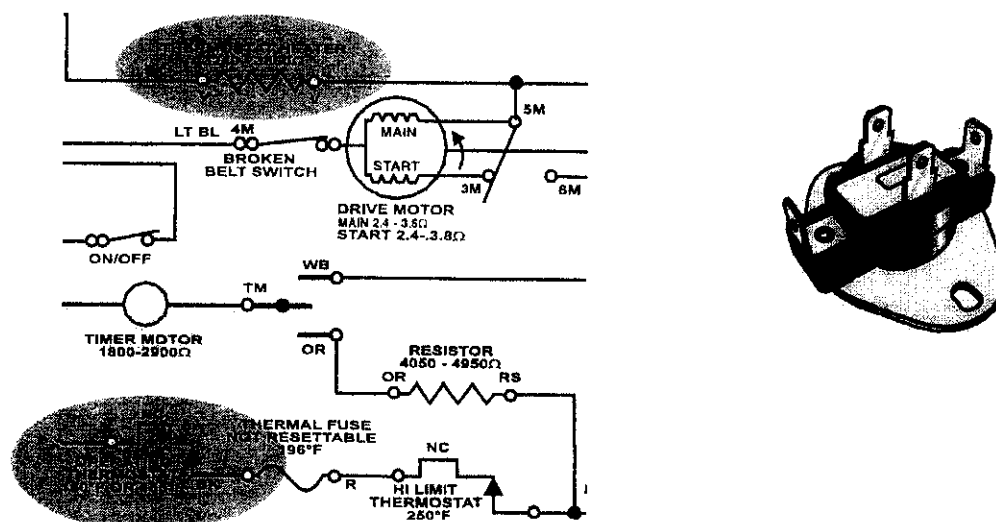


OPERATING THERMOSTAT and THERMOSTAT HEATER

The operating thermostat and thermostat heater assembly is located on the blower housing.

To test the operating thermostat at room temperature, set the resistance scale to Rx1 and place the probes on the terminals with the red and black wires. The meter should read continuity, (0) ohms resistance. This is because this thermostat is normally closed and will open at temperatures above 150° F.

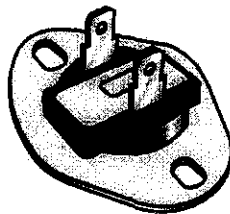
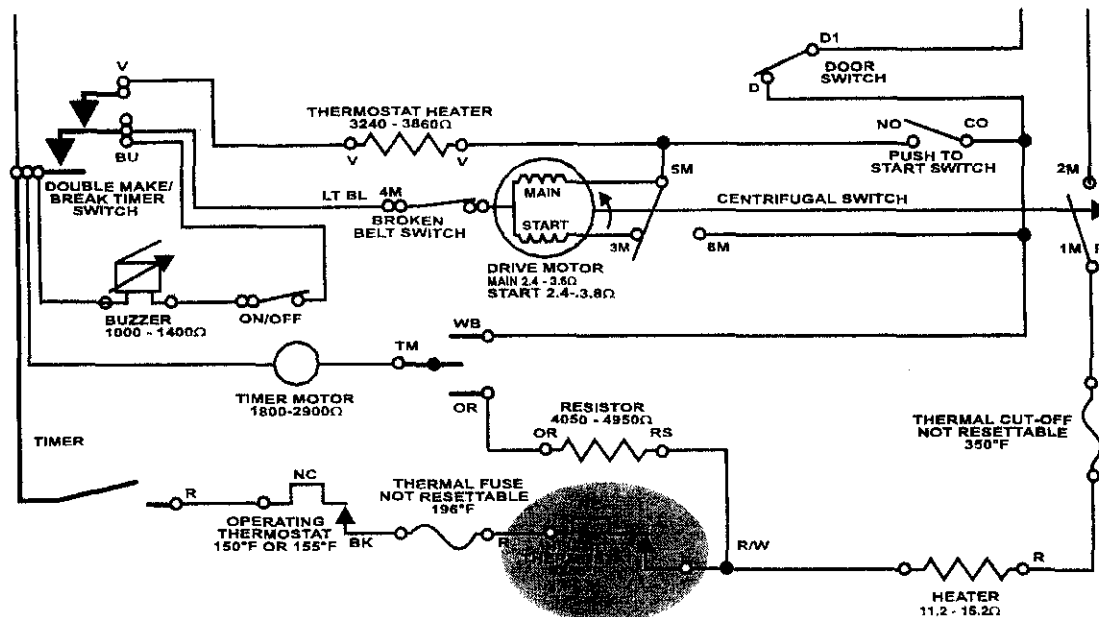
To test the thermostat heater, remove the two (2) violet wires from the heater terminals. Set the scale to Rx100 and place the probes on the terminals. The meter should read approximately 3500 ohms.



HI-LIMIT THERMOSTAT

The hi-limit thermostat is located on the side of the heater element (gas burner) housing.

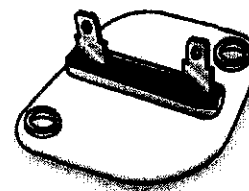
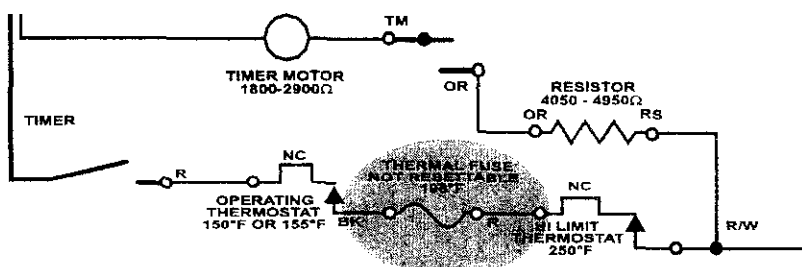
To test the hi-limit thermostat at room temperature, set the resistance scale to Rx1 and place the probes on the terminals with the red and red/white wires. The meter should read continuity, (0) ohms resistance. This is because this thermostat is normally closed and will open at temperatures above 250° F.



THERMAL FUSE

The thermal fuse is located on the blower housing.

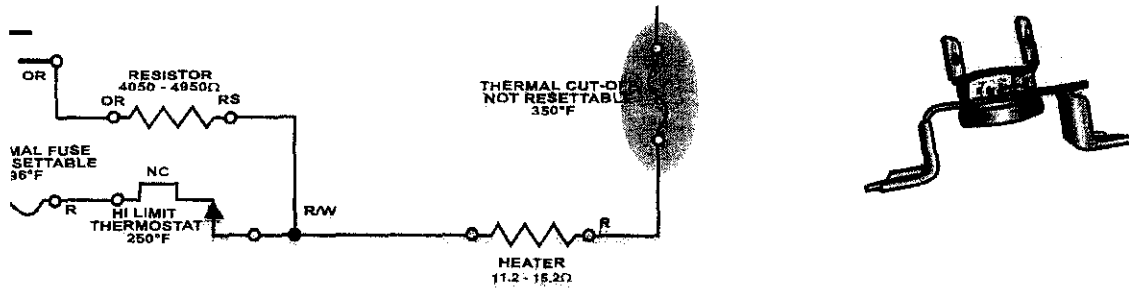
To test the thermal fuse, set the resistance scale to Rx1 and place the probes on the terminals with the black and red wires. The meter should read continuity, (0) ohms resistance. This is because this thermal fuse is normally closed and will open at temperatures above 196° F. If the thermal fuse is open (infinite resistance) it must be replaced.



THERMAL CUT-OFF (Electric Models Only)

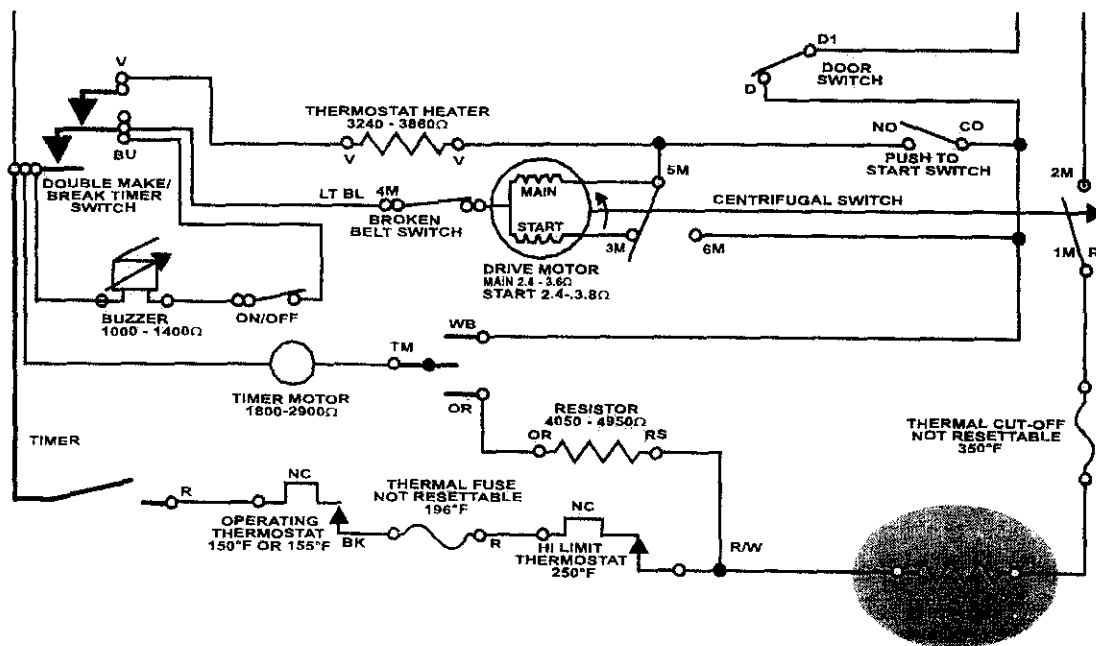
The thermal cut-off is located on the side of the heater element housing.

To test the thermal cut-off, set the resistance scale to Rx1 and place the probes on the terminals with the red wires. The meter should read continuity, (0) ohms resistance. This is because this thermal cut-off is normally closed and will open at temperatures above 350° F. If the thermal cut-off is open (infinite resistance) it must be replaced.



ELECTRIC HEATING ELEMENT

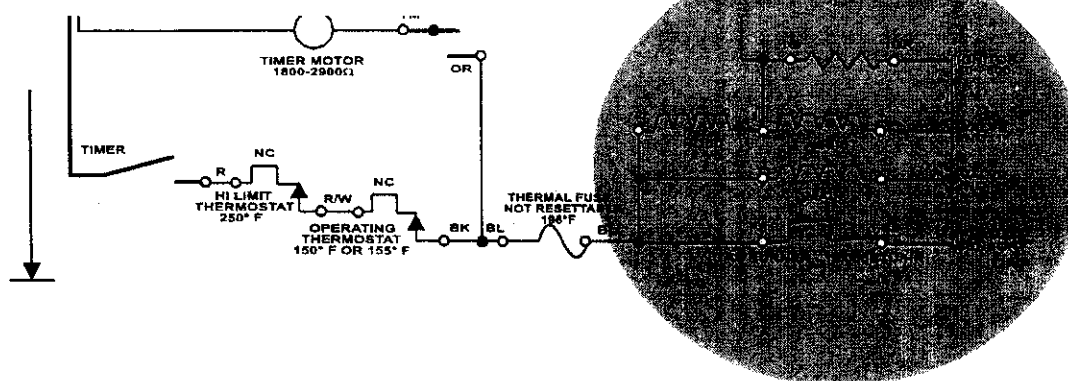
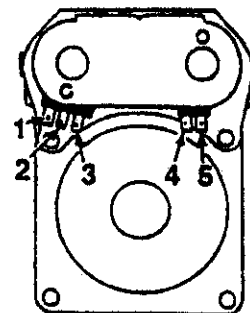
To test the electric heating element, set the resistance scale to Rx1 and place the probes on the terminals with the red/white and red wires. The meter should read between eleven and 16 ohms resistance.



GAS BURNER

Remove the harness plug from the gas valve terminals and measure the resistance across the terminals indicated in the following chart.

TERMINALS	RESISTANCE
1 to 2	$1365\Omega \pm 25$
1 to 3	$5600\Omega \pm 25$
4 to 5	$1220\Omega \pm 50$



SECTION FOUR

TECHNICAL TIPS TIMER SCHEDULES

WASHER

TIMER SCHED

CAM	14	12	10	8	6	4	2	0						
SW.	T B	T B	5H 5	T B	T B	T B	T B	T B						
INDEX ANGLE	FILL	SPRAY	LO MOTOR	1/2 TUB DRAIN	HI MOTOR	SPIN	AGITATE	AGITATE	SPIN	WASH	RINSE	BYPASS	FILL	SOAK FILL
7														
7														
7														
7														
6														
6														
7														
7.5														
6														
7.5														
5														
7.5														
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7														
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5														
4.75														
4.75														
7														
5.5														
7.5														
6														
7														
7														

120 SECONDS PER STEP

TERM.	SW	FUNCTION	
2		FILL-AGITATE HI	FILL & WASH
4		FILL-AGITATE HI	FILL & WASH
6			
8		FILL-AGITATE LO	
10		DRY AGITATE LO	
12		FILL-AGITATE HI	FILL & RINSE
14		SPRAY	DRAIN HI
16			SPIN HI
18		OFF	
20		FILL-AGITATE HI	FILL & WASH
22		FILL-AGITATE LO	
24		1/2 TUB DRAIN HI	COOL DOWN
26		FILL-AGITATE LO	
28		FILL-AGITATE HI	FILL & RINSE
30		SPRAY	DRAIN HI
32			SPIN LO
34		FILL-AGITATE LO	FILL & WASH
36			DRAIN HI
38		FILL-AGITATE LO	SPIN LO
40		SPRAY	FILL & RINSE
42			DRAIN HI
44		FILL-AGITATE HI	FILL & WASH
46		FILL	FILL & SOAK
48			
50			
52		FILL-AGITATE HI	FILL & WASH
54			DRAIN HI
			SPIN HI
		OFF	

REGULAR / HEAVY

PERMANENT PRESS

DELICATE

SOAK

INDICATES MOTOR OFF

⊗ TIMER SWITCH MAY BE OPEN OR CLOSED

WIRING DIAGRAM LEGEND	
	TIMER SWITCH
	SUB-INTERVAL SWITCH
	INT. COMP. CONNECTION
	HARNES WIRING
	TERMINAL CONNECTION

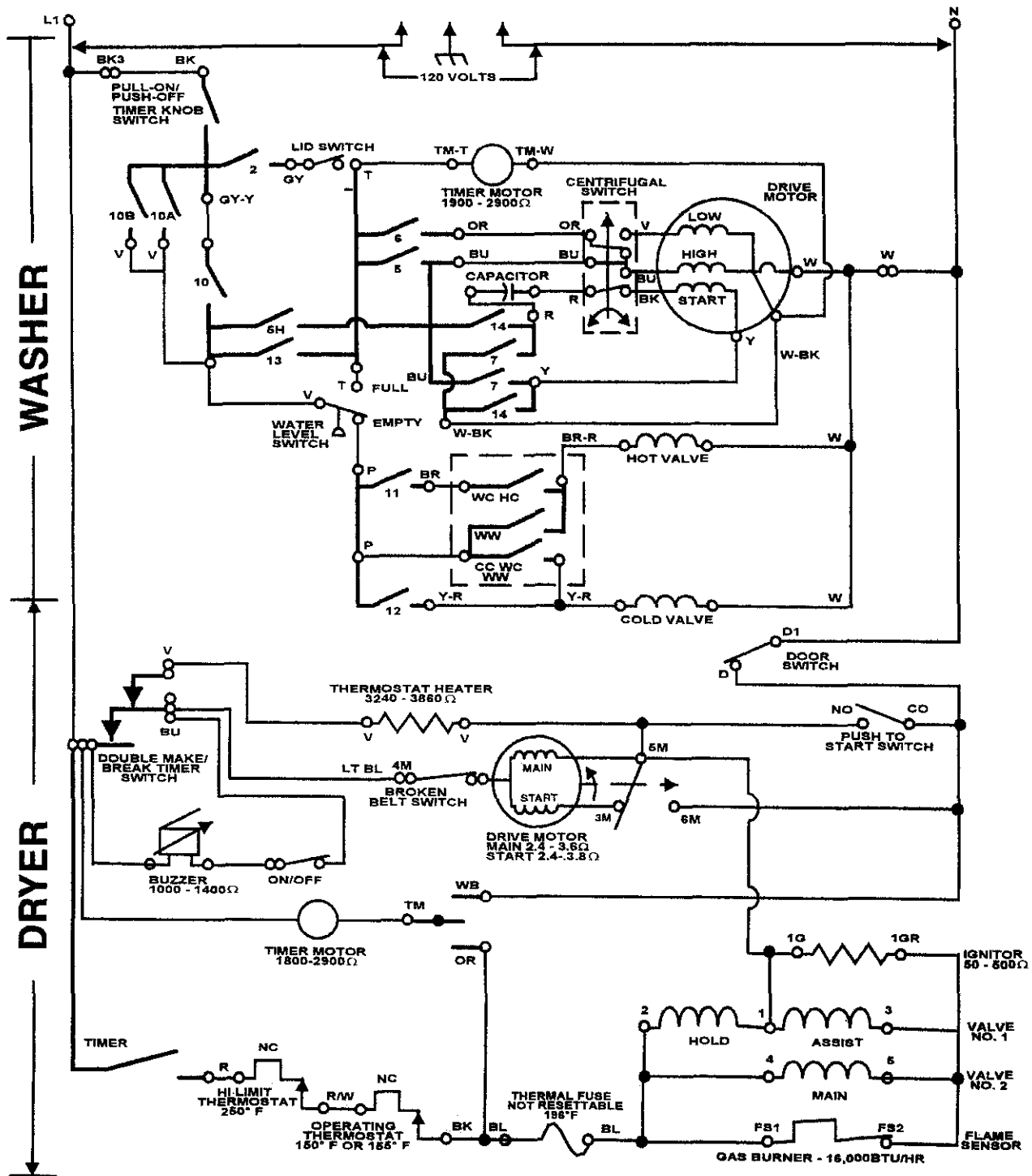
DRYER

ELECTRIC AND GAS DRYER TIMER SCHEDULE						
SWITCH	CYCLE					
	AUTO-HI HEAT	AUTO-LO HEAT	AIR	OFF	TIMED-HI	TIMED-LO
TM-WB						
TM-OR						
BK-BU-V						
BK-BU						
BK-R						

EITHER NOT BOTH
 DOESN'T MATTER
 CLOSED
 OPEN

[illegible]

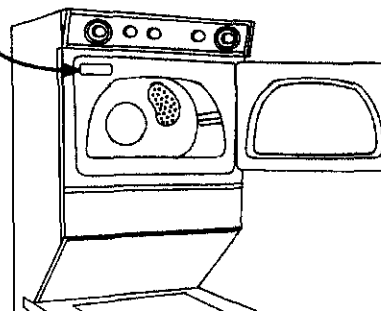
Wiring Diagram - Gas Dryer Models



MODEL/SERIAL NUMBER PLATE LOCATION

The model/serial number plate for the Whirlpool Thin Twin Laundry System is located in the dryer door opening.

Model/Serial
Number
Plate



MODEL/SERIAL NUMBER DESIGNATIONS

Model Number	L	T	E	6	2	3	4	D	Q	0
Marketing Channel (if present)										
Product Group L = Laundry, Domestic										
T = Thin Twin										
E = Electric Thin Twin G = Gas Thin Twin										
Cycles - Domestic (6) = 6 cycles										
2 = A/W Speeds										
3 = Temperatures - Domestic										
4 = Large Capacity										
Year of Introduction										
Color Q = White on White Z = Almond on Almond										
Engineering Changes (Numeric)										

The serial number for the Whirlpool brand Thin Twin contains the following designations:

Serial Number	M	G	03	100003
Manufacture Location M = Marion				
Year of Manufacture				
Week of Manufacture				
Product Serial Number				

FOR TECHNICAL ASSISTANCE ON WHIRLPOOL LAUNDRY SYSTEMS
WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 800-253-2870

Have your store number ready to identify you as an Authorized Servicer

-- NOTES --

-- NOTES --



Making your world a little easier.

Washers, Dishwashers, Built-In Ovens and Surface Units, Ranges, Microwave Ovens, Trash Compactors, Room Air Conditioners, Dehumidifiers, Automatic Washers, Clothes Dryers, Freezers, Refrigerator-Freezers

