

Service Manual Dryers

Models:

DE09 / DG09 DE60FA / DG60FA



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1 INTRODUCTION

This service manual is designed to show all components and servicing of the DE/DG09 and DE/DG60FA Dryers.

These dryers are only sold in the USA and Canada.

1.1 Overview

These models are front-loading dryers, which run a semi analogue/electronic control system. All switching for the dryer is carried out by the timer, selector switches, thermostats and motor, but the auto-dry is controlled by the PCB assembly.

The motor is a single phase, single direction motor with a centrifugal start.

The electric models have a coil element design mounted to a cowl on the rear of the drum.

The gas models run a burner, from where the heat is ducted into the cowl. These can be run on natural gas or can be converted to LP gas.

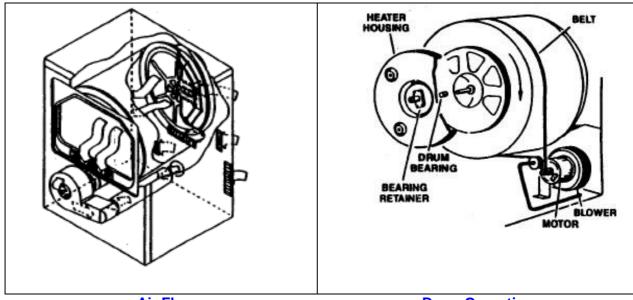
1.2 Air Flow

Air is pulled into the cabinet from the rear by the fan.

In gas models, air pulled through the burner assembly. The heated air then flows through the drum cowl and into the drum.

In electric models, the air pulled from the fan is blown into the elements in the cowl and is heated. It then flows into the drum.

Air from the drum is pulled through the clothes and into the lint filter. The air is then drawn into the fan and them blown out the exhaust system. The blower is mounted directly to the motor shaft.



Air Flow Drum Operation

2 INSTALLATION

2.1 Electric Model Installation

Installation instructions for your new

Electric Dryer

Before you begin - Read these instructions completely and carefully.

IMPORTANT - Save these instructions for local inspector's use.

IMPORTANT - OBSERVE ALL GOVERNING CODES AND ORDINANCES.

Note to Installer - Be sure to leave these instructions with the Consumer.

Note to Consumer - Keep these instructions with your Owner's Manual for future reference.



WARNING - POTENTIAL FIRE AND SHOCK HAZARD

- Use only rigid metal or flexible metal 4" diameter ductwork for exhausting to the outdoors. Never use plastic or other combustible ductwork.
- This appliance must be properly grounded and installed as described in these instructions.
- Do not install or store appliance in an area where it will be exposed to water/weather.
- The National Fuel Gas Code restricts installations of gas appliances in garages. They must be 18" off the ground and protected by a barrier from vehicles.

Important

- Exhausting the dryer to the outdoors is strongly recommended to prevent large amounts of moisture and lint from being blown into the room.
- Service information and wiring diagram located in control console.

Tools you will need

Slip joint pliers Screwdrivers 3/8" nut driver

Installation

Step 1

Remove and save literature and parts package

from dryer drum

Step 2

Lay carton corner posts or two 2"x4" boards on floor. Lay dryer on its back.

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Remove foam shipping pads by pulling at sides and breaking away from dryer legs. Be sure to remove all foam pieces from around legs.

Step 4

Stand dryer upright

Step 5

Move dryer to desired operating location.

Step 6

Adjust leveling legs to match washer height. Dryer must be level and rest firmly on all four leveling legs.

Step 7

Connect to power supply. (See ELECTRICAL CONNECTION INFORMATION section of this instruction.)

Step 8

Connect external exhaust or deflector. (See EXHAUST INFORMATION section of this instruction.)

Step 9

Check for proper operation.

Step 10

Place Owner's manual and installation instructions in a location where they may be found by the customer.

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Electrical Connection Information

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR PERSONAL INJURY.

- DO NOT USE AN EXTENSION CORD WITH THIS APPLIANCE.
- THIS APPLIANCE MUST BE PROPERLY GROUNDED.

Dryer must be electrically grounded in accordance with local codes and ordinances, or in the absence of local codes, in accordance with the NATIONAL ELECTRICAL CODE, ANSI/NFPA NO. 70.

Electrical requirements:

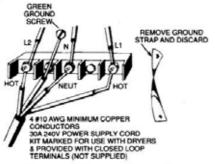
- This dryer must be connected to an individual branch circuit, protected by the required time-delay fuses or circuit breakers. 208V or 240V installation 30 amps.
- If the electric supply does not meet the above specifications, call a licensed electrician.

Grounding instructions

 This appliance must be connected to a grounded metal, permanent wiring system, or an equipmentgrounding conductor must be run with the circuit conductors and connected to the equipmentgrounding terminal or lead on the appliance.

Connecting Dryer Using 4-Wire Connection (Must Be Used For Mobile Home Installation)

NOTE: Effective January 1, 1996: The National Electric Code requires that new construction (not existing) utilize a 4 wire connection to an electric dryer.



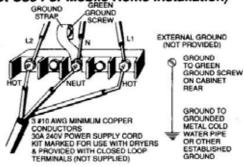
- 1. Remove the access plate near the cord set entry hole.
- Remove and discard ground strap and nut securing ground strap.
- 3. Bring power supply through cord set entry hole.

CAUTION: DO NOT REMOVE INNER NUTS ON TERMINAL BLOCK TO ASSEMBLE POWER SUPPLY.

- 4. Using second set of nuts supplied, connect power supply as follows:
 - A. 2 hot lines to outer studs (brass colored) of terminal blocks.
 - B. Neutral line to center stud (silver colored) of terminal block.
- Attach ground wire of the power supply to the green grounding screw above terminal block.
- Properly secure cord set or cable to the entry hole with U.L. recognized strain relief.
- 7. Replace access plate.
 - · Typical 30 amp receptacle



Connecting Dryer Using 3-Wire Connection (Do Not Use For Mobile Home Installation)



- Remove the access plate near the cord set entry hole.
- 2. Bring power supply through cord set entry hole.

CAUTION: DO NOT REMOVE INNER NUTS ON TERMINAL BLOCK TO ASSEMBLE POWER SUPPLY.

- Using second set of nuts supplied, connect power supply as follows:
 - A. 2 hot lines to outer studs (brass colored) of terminal blocks.
 - B. Neutral line to center stud (silver colored) of terminal block.
- Be sure ground strap is connected to neutral (center) terminal of block and to ground screw on block mounting bracket.
- Properly secure cord set or cable to the entry hole with U.L. recognized strain relief.
- Replace access plate.
 - · Typical 30 amp receptacle



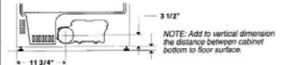
Exhaust information

WARNING: TO REDUCE THE RISK OF FIRE AND PERSONAL INJURY:

- Use only metal duct for exhausting dryer to outdoor.
- Do not terminate exhaust in a chimney, any gas vent, under an enclosed floor (crawi space), or into an attic. The accumulated lint could create a fire hazard.
- Provide an access for inspection and cleaning of the exhaust system, especially at turns. Inspect and clean at least once per year.
- Never terminate the exhaust into a common duct with a kitchen exhaust. A combination of lint and grease could create a fire hazard.
- Do not obstruct incoming or exhausted air.

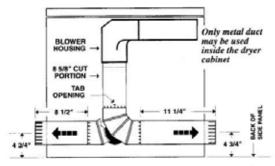
Rear Exhaust Location

This dryer comes ready for rear exhausting.



Steps to change Dryer to Side or Bottom Exhaust

- 1. Remove Access Panel.
- 2. Straighten up the tab inside the exhaust duct at the back of the appliance, then remove the internal duct connected to
- 3. Cut the duct as shown.
- Reconnect and secure the cut portion of the duct to the blower housing. Make sure that the tab portion is at the bottom of the duct.



NOTE: To secure the duct, insert the tab (located on the appliance base) in the opening and bend it.

- 5. Detach and remove the desired knockout.
- 6. Use standard metal elbow and duct to exhaust.
- 7. Cover the opening at the back with the plate provided on the back of the appliance.

Exhaust Length

The MAXIMUM ALLOWABLE length of the exhaust system depends upon the type of duct, number of turns, the type of exhaust hood (wall cap), and all conditions noted below. The maximum allowable length for both rigid and flexible metal duct is shown in the table below. More than two 90° turns are not recommended.

OR LECTRIC	RECOMMENDED MAXIMUM LENGTH Weather Hood Type			
DRYER	Recommended		Use only for short run installations	
	Ä		Ä	21/2"
No. of 90° elbows	Rigid	Flexible Metal	Rigid	Flexible Metal
0	90 Feet	55 Feet	60 Feet	45 Feet
1	60 Feet	40 Feet	45 Feet	30 Feet
2	45 Feet	30 Feet	35 Feet	20 Feet
3	35 Feet	20 Feet	25 Feet	15 Feet
4	25 Feet	15 Feet	15 Feet	10 Feet

^{*} Do not use non metallic flexible duct.

Hood or Wall Cap

- Terminate in a manner to prevent back drafts or entry of birds or other wildlife.
- Termination should present minimal resistance to the exhaust airflow and should require little or no maintenance to prevent clogging.
- Never install screen over exhaust duct.
- Wall caps must be installed at least 12" above ground level or any other obstruction with the opening pointed down.
- If roof vents or louvered plenums are used, they
 must be equivalent to a 4" dampered wall cap in
 regard to resistance to airflow, prevention of back
 drafts and maintenance required to prevent clogging.

Separation of Turns

For best performance, separate all turns by at least 4 ft. of straight duct, including distance between last turn and dampered wall cap.

Turns Other Than 90°

- · One turn of 45° or less may be ignored.
- Two 45° turns should be treated as one 90°.
- · Each turn over 45° should be treated as one 90°.

Sealing of Joints

- All joints should be tight to avoid leaks. The male end of each section of duct must point away from the dryer.
- Do not assemble the duct work with fasteners that extend into the duct. They will serve as a collection point for lint.
- Duct joints can be made air and moisture-tight by wrapping the overlapped joints with duct tape.

Exhaust Information (cont.)

Insulation

 Ductwork which runs through an unheated area or is near an air conditioning duct should be insulated to reduce condensation and lint build up.

Parts Available from Local Service Organization

· Rigid Metal Duct Components

4" X 1' Duct

4" X 2' Duct

4" Elbow

4" Aluminum Hood

Exhaust Deflector

Flexible Metal Duct Components

Kit WX8X66 7' Aluminum duct, 4" hood and 2 clamps.

7' Aluminum Flexible Duct

4" Clamps (2)

4" Aluminum Hood

UL-Listed clothes dryer transition duct.

Inside Exhausting

NOTE: MOBILE HOME, BEDROOM, BATHROOM, ALCOVE OR CLOSET INSTALLATIONS MUST BE EXHAUSTED TO THE OUTDOORS.

OTHER INSTALLATION: If the installation makes it impossible to exhaust to the outdoors, a 4" exhaust deflector (WE25X28) must be installed. A clearance of 8" is required between rear of dryer and the wall, and deflector should be pointing up.

NOTE: EXHAUSTING TO THE OUTDOORS IS STRONGLY RECOMMENDED. EXHAUSTING INDOORS MAY CAUSE LINT ACCUMULATION, AND MOISTURE DAMAGE INCLUDING MOLD AND MILDEW.

Special Installation Requirements

Alcove or Closet Installation

- If your dryer is approved for installation in an alcove or closet it will be stated on a label on the dryer back.
- · The dryer must be exhausted to the outdoors.
- Minimum clearances between dryer cabinet and adjacent walls or other combustible surfaces are:

0" clearance either side

3" front and rear

- Minimum vertical space from floor to overhead cabinets, ceilings, etc. is 52".
- Closet doors must be louvered or otherwise ventilated and must contain at least 60 square inches open area equally distributed. If this closet contains both a washer and a dryer, doors must contain 120 square inches of open space equally distributed.

Mobile or Manufactured Home Installation

- Installation must conform to Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 32-80.
- The dryer must be exhausted to the outdoors with the termination securely fastened to the mobile home structure. (See EXHAUST INFORMATION section).
- The exhaust MUST NOT be terminated beneath the mobile home.
- · The exhaust material MUST BE METAL.
- For Electrical Connections see "CONNECTING DRYER USING 4-WIRE CONNECTIONS".

SERVICING: Consideration must be given to provide adequate clearances for

installation and servicing.

A CAUTION:

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation

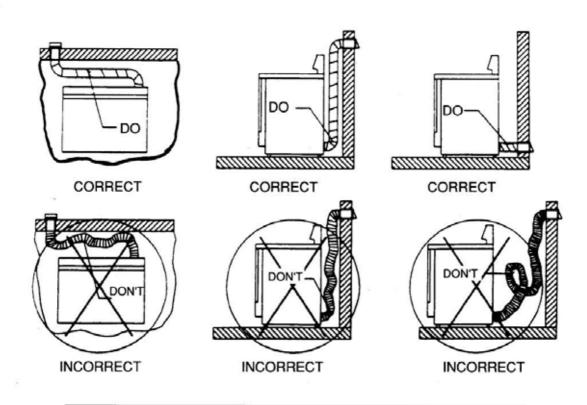
(verify proper operation after servicing/installation).

Additional Installation Instructions

If all rigid metal duct cannot be used, then flexible all metal venting can be used, but it will reduce the maximum recommended duct length. In special installations when it is impossible to make a connection with the above recommendations, then UL listed clothes dryer transition duct may be used as transition venting between the dryer and wall connection only. The use of this ducting will affect dry time.

If **flexible** transition duct is necessary, only UL listed duct identified for use with clothes dryers is approved. The following directions **must be followed**.

- Use the Shortest Length Possible.
- · Stretch the Duct to its Maximum Length.
- Do Not Crush or Collapse.
- Never Use Transition Duct Inside the Wall, or Inside the Dryer.
- Avoid Resting the Duct on Sharp Objects.
- Venting Must Conform to Local Building Codes.



NEVER USE PLASTIC OR OTHER COMBUSTIBLE DUCTWORK

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

2.2 Gas Model Installation



Installation instructions for your new

Gas Dryer

Before you begin - Read these instructions completely and carefully.

IMPORTANT - Save these instructions for local inspector's use.

IMPORTANT - OBSERVE ALL GOVERNING CODES AND ORDINANCES.

Note to Installer - Be sure to leave these instructions with the consumer.

Note to Consumer - Keep these instructions with your Owner's Manual for future reference.



WARNING - POTENTIAL FIRE AND SHOCK HAZARD

- Use only rigid metal or flexible metal 4" diameter ductwork for exhausting to the outdoors. Never use plastic or other combustible ductwork.
- This appliance must be properly grounded and installed as described in these instructions.
- Do not install or store appliance in an area where it will be exposed to water/weather.
- The National Fuel Gas Code restricts installations of gas appliances in garages. They must be 18" off the ground and protected by a barrier from vehicles.

Important

- This dryer must be exhausted to the outdoors.
- Service information and wiring diagram located in control console.

Tools you will need

Slip joint pliers Screwdriver

Installation

Step 1

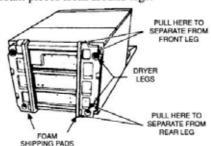
Remove and save literature and parts package from dryer drum.

Step 2

Lay carton corner post or two 2"x4" boards on the floor. Lay dryer on its back.

Step 3

Remove foam shipping pads by pulling at sides and breaking away from dryer legs. Be sure to remove all foam pieces from around legs.



Step 4 Stand dryer upright.

Step 5

Move dryer to desired operating location.

Step 6

Adjust leveling legs to match washer height. Dryer must be level and rest firmly on all four leveling legs.

Step 7

Connect gas supply. (See GAS CONNECTION INFORMATION section of this instruction.)

Step 8

Connect to power supply. (See ELECTRICAL CONNECTION INFORMATION section of this instruction.)

Step 9

Connect external exhaust . (See EXHAUST INFORMATION section of this instruction.)

Check for proper operation.

Step 10

Place Owner's Manual and Installation Instructions in a location where they may be found by the customer.

Electrical Connection Information

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK AND PERSONAL INJURY:

DO NOT USE AN EXTENSION CORD OR AN ADAPTER PLUG WITH THIS APPLIANCE.

DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE THIRD GROUND-ING PRONG FROM THE POWER CORD.

Dryer must be electrically grounded in accordance with local codes and ordinances, or in the absence of local codes, in accordance with the NATIONAL ELECTRICAL CODE, ANSI/NFPA NO. 70.

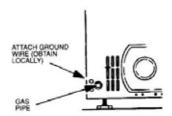
Electrical Requirements

 This appliance must be supplied with 120V, 60Hz, and connected to a properly grounded branch circuit, protected by a 15 or 20 amp circuit breaker or time-delay fuse. If the electric supply provided does not meet the above specifications, it is recommended that a licensed electrician install an approved outlet.

External Ground (if required)

An external ground wire, (not provided), which meets local codes, may be added by attaching to the green ground screw on the rear of the dryer, and to grounded metal cold water pipe or other established ground.





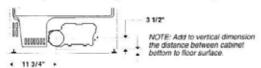
Exhaust information

WARNING: TO REDUCE THE RISK OF FIRE AND PERSONAL INJURY:

- · This dryer must be exhausted to the outdoors.
- Use only metal duct for exhausting dryer outdoors.
- Do not terminate exhaust in a chimney, any gas vent, under an enclosed floor (crawl space), or into an attic. The accumulated lint could create a fire hazard.
- Provide an access for inspection and cleaning of the exhaust system, especially at turns. Inspect and clean at least once per year.
- Never terminate the exhaust into a common duct with a kitchen exhaust. A combination of lint and grease could create a fire hazard.
- · Do not obstruct incoming or exhausted air.

Rear Exhaust Location

This dryer comes ready for rear exhausting.



Steps to change Dryer to Left Side or Bottom Exhaust

(NOTE: THE DRYER CANNOT BE EXHAUSTED THRU RIGHT SIDE OF DRYER)

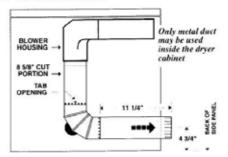
Remove Access Panel.



2. Straighten up the tab inside the exhaust duct at the back of the appliance, then remove the internal duct connected to



Reconnect and secure the cut portion of the duct to the blower housing. Make sure that the tab portion is at the bottom of the duct.



NOTE: To secure the duct, insert the tab (located on the appliance base) in the opening and bend it.

- 5. Detach and remove the desired knockout.
- 6. Use standard metal elbow and duct to exhaust.
- 7. Cover the opening at the back with the plate provided on the back of the appliance.

Exhaust Information (cont.)

Exhaust Length

The MAXIMUM ALLOWABLE length of the exhaust system depends upon the type of duct, number of turns, the type of exhaust hood (wall cap), and all conditions noted below. The maximum

allowable length for both rigid and flexible metal duct is shown in the table below.

	RECOMMENDED MAXIMUM LENGTH Weather Hood Type			
Recommended		Use only for short run installations		
Ä		A.	2 1/2"	
Rigid	Flexible Metal	Rigid	Flexible Metal	
45 Feet	30 Feet	30 Feet	15 Feet	
35 Feet	20 Feet	20 Feet	10 Feet	

10 Feet

10 Feet

25 Feet

15 Feet

Parts Available from Local Service Organization

• Rigid Metal Duct Components

No. of 90

elbows

0

2

3

- 4" X 1' Duct
- 4" X 2' Duct
- 4" Elbow
- 4" Aluminum Hood
- Flexible Metal Duct Components

Kit WX8X66 7' Aluminum Duct, 4" hood and two clamps.

- 7' Aluminum Flexible Duct
- 4" Clamps (2)
- 4" Aluminum Hood
- UL-Listed Clothes Dryer Transition Duct

Exhaust System Check List

HOOD or WALL CAP

- Terminate in a manner to prevent back drafts or entry of birds or other wildlife.
- Termination should present minimal resistance to the exhaust air flow and should require little or no maintenance to prevent clogging.
- · Never install screen over exhaust duct.
- Wall caps must be installed at least 12" above ground level or any other obstruction with the opening pointed down.
- If roof vents or louvered plenums are used, they
 must be equivalent to a 4" dampered wall cap in
 regard to resistance to air flow, prevention of back
 drafts and maintenance required to prevent clogging.

SEPARATION OF TURNS

For best performance, separate all turns by at least 4 ft. of straight duct, including distance between last turn and dampered wall cap.

TURNS OTHER THAN 90°

- One turn of 45° or less may be ignored.
- Two 45° turns should be treated as one 90°.
- Each turn over 45° should be treated as one 90°.

SEALING OF JOINTS

- All joints should be tight to avoid leaks. The male end of each section of duct must point away from the dryer.
- Do not assemble the duct work with fasteners that extend into the duct. They will serve as a collection point for lint.
- Duct joints can be made air and moisture-tight by wrapping the overlapped joints with duct tape.

INSULATION

Duct work which runs through an unheated area or is near an air conditioning duct, should be insulated to reduce condensation and lint build up.

^{*} Do not use non metallic flexible duct.

Gas Connection Information

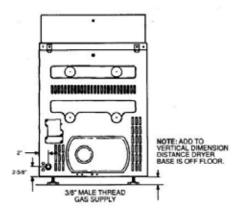
Installation must conform with local codes and ordinances, or in their absence the NATIONAL FUEL GAS CODE, ANSI Z223.1.

Gas Valve and Burner

This gas dryer is equipped with a Valve & Burner Assembly for use only with natural gas. Using a separate conversion kit, your local Service organization can convert this dryer for use with gases listed on the rating plate. ALL CONVERSIONS MUST BE MADE BY PROPERLY TRAINED AND QUALIFIED PERSONNEL AND IN ACCORDANCE WITH LOCAL CODES AND ORDINANCE REQUIREMENTS.

Gas Supply

- Supply line is to be 1/2" rigid pipe, (3/8" copper tubing may be used if the dryer is operated on Liquefied Petroleum gas), and equipped with an accessible shutoff within 6 feet of, and in the same room with the dryer.
 Increase pipe size for runs longer than 20 feet.
- Dryer Gas Supply Location.



- Pipe dope must be resistant to the action of L.P. gases and applied sparingly to all male threads.
- If local codes permit, it is recommended the dryer be connected to the gas supply with a flexible metal connector.

WARNING: Never reuse old flexible connectors. The use of old flexible connectors can cause gas leaks and personal injury. Always use NEW flexible connectors when installing a gas appliance.

- A 1/8" National Pipe Taper thread plugged tapping, accessible for test gauge connection, must be installed immediately upstream of the gas supply connection to the dryer. Contact your local gas utility should you have questions on the installation of the plugged tapping.
- Protection of Dryer During Pressure Test:
- When test pressure is in excess of 1/2 PSIG (3.45kPa), disconnect dryer from gas supply line prior to test.
- When test pressure is equal to or less than 1/2 PSIG (3.45kPa), close the shutoff valve upstream of the dryer, prior to test.
- After gas supply is connected to dryer, open external shutoff valve.

Leak Test

Check all connections for leaks with soapy solution or equivalent. Leak test solutions must not contain ammonia which could cause damage to brass fittings or pipe. CAUTION: NEVER USE AN OPEN FLAME TO TEST FOR GAS LEAKS.

Special Installation Requirements

Alcove or Closet Installation

- If your dryer is approved for installation in an alcove or closet it will be stated on a label on the dryer back.
- The dryer MUST be exhausted to the outdoors. See EXHAUST INFORMATION section.
- Minimum clearances between dryer cabinet and adjacent walls or other surfaces are:

0" either side

3" front and rear

- Minimum vertical space from floor to overhead cabinets, ceilings, etc. is 52".
- Closet doors must be louvered or otherwise ventilated and must contain a minimum of 60 sq. in. of open area equally distributed. If this closet contains both a washer and a dryer, doors must contain a minimum of 120 sq. in. of open area equally distributed.
- The closet should be vented to the outdoors to prevent gas pocketing in case of a gas leak in the supply line.
- No other fuel-burning appliance shall be installed in the same closet with the dryer.

Bathroom or Bedroom Installation

- The dryer MUST be exhausted to the outdoors.
 See EXHAUST INFORMATION section.
- The installation must conform with the local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.

Minimum Clearances other than Alcove or Closet Installations

· Minimum clearances to combustible surfaces:

0" clearance both sides and 1" rear.

Mobile or Manufactured Home Installation

- Installation must conform to the MANUFACTURED HOME CONSTRUCTION & SAFETY STANDARD, TITLE 24 CFR, PART 32-80, or when such standard is not applicable, with AMERICAN NATIONAL STANDARD FOR MOBILE HOMES, ANSI/NFPA NO. 501B.
- The dryer must be exhausted to the outdoors with the termination securely fastened to the mobile home structure. (See EXHAUST INFORMATION section.)
- The exhaust MUST NOT be terminated beneath a mobile or manufactured home.
- The exhaust duct material MUST BE METAL.
- KIT 14-D3A6-33 MUST be used to attach dryer securely to the structure.

SERVICING: Consideration must be given to provide adequate clearances for installation and servicing.

A CAUTION:

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation (verify proper operation after

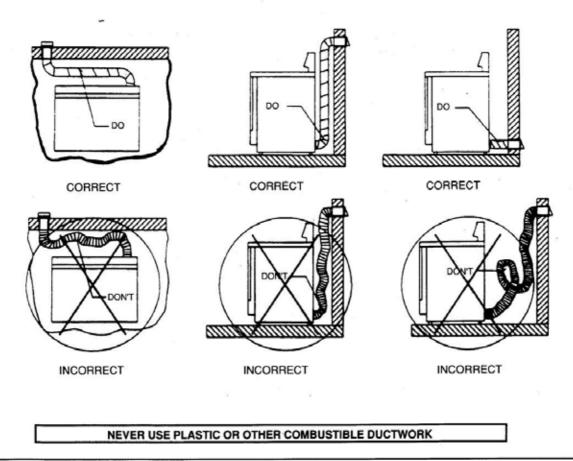
servicing/installation).

Additional Installation Instructions

If all rigid metal duct cannot be used, then flexible all metal venting can be used, but it will reduce the maximum recommended duct length. In special installations when it is impossible to make a connection with the above recommendations, then UL listed clothes dryer transition duct may be used as transition venting between the dryer and wall connection only. The use of this ducting will affect dry time.

If **flexible** transition duct is necessary, only UL listed duct identified for use with clothes dryers is approved. The following directions **must be followed.**

- · Use the Shortest Length Possible.
- · Stretch the Duct to its Maximum Length.
- · Do Not Crush or Collapse.
- Never Use Transition Duct Inside the Wall, or Inside the Dryer.
- Avoid Resting the Duct on Sharp Objects.
- Venting Must Conform to Local Building Codes.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

3 SPECIFICATIONS

3.1 DE09 and DE60FA Specifications

Model Naming Convention DE60FA DE Dryer Electric 60	Model Naming Convention DE09	DE Dryer Electric	
60 6 CU FT F Front Loader A Auto Timer			
F	Model Naming Convention DE60FA		
A Auto Timer			
Colour			
Capacity Feat Source Electric			
Electric			
Electronic + Timer			
Drum Material Stainless Steel Dimensions Height 40" Width 27" Depth 27" Depth 127" Depth to door open 51 ¾" Supply Voltage 120 + 240v 120 + 208V Wattage With 240 V Supply 5600w With 208 V Supply 4400w With 208 V Supply 24amps With 208 V Supply 24amps With 208 V Supply 22amps Drum Rotation Anti-clockwise only Drum Speed 47-51 RPM Door Hinging R/hand from factory but reversible Exhaust Duct Diameter 4"-100MM Thermostat Temps +/- 5° Open Closed Drum Outlet 135F/57C 125F/52C Control Inlet 131F/157C 250F/121C Safety 210F/99C 180F/82C Hi Limit 315F/157C 250F/121C Safety 210F/99C 180F/82C Number of elements 2 Element Type Wire Coil Element Voltage 208/240 Volts Element resistance 19.2Ω Each Motor Power ¼ HP 186w Max Motor Amperage 4.8 amps			
Dimensions Height 40" Width 27" Depth 27" Depth 127" Depth to door open 51 ¾" Supply Voltage 120 + 240v 120 + 240v 120 + 208V Wattage With 240 V Supply 5600w With 208 V Supply 4400w Amperage With 240 V Supply 24amps With 208 V Supply 22amps Drum Rotation Anti-clockwise only Drum Speed Drum Speed 47-51 RPM Door Hinging R/hand from factory but reversible Exhaust Duct Diameter 4"-100MM Thermostat Temps +/- 5° Open Closed Drum Outlet 135F/57C 125F/52C Control Inlet 210F/99C 180F/82C Hi Limit 315F/157C 250F/121C Safety 210F/99C 180F/82C Number of elements 2 Element Type Wire Coil Element Voltage 208/240 Volts Element resistance 19.2Ω Each Motor Power ¼ HP 186w Max Motor Amperage 4.8 amps			
Width 27" Depth 27" Depth to door open 51 3/4"			
Depth 27" Depth to door open 51 ¾"	Dimensions		
Depth to door open 51 ¾"			
Supply Voltage			
120 + 208V			
Wattage With 240 V Supply 4400w Amperage With 240 V Supply 24amps With 208 V Supply 22amps Drum Rotation Anti-clockwise only 22amps Drum Speed 47-51 RPM Door Hinging R/hand from factory but reversible Exhaust Duct Diameter 4"-100MM Thermostat Temps +/- 5° Open Closed Drum Outlet 135F/57C 125F/52C Control Inlet 210F/99C 180F/82C Hi Limit 315F/157C 250F/121C Safety 210F/99C 180F/82C Number of elements 2 Element Type Wire Coil Element Voltage 208/240 Volts Element resistance 19.2Ω Each Motor Power ½ HP 186w Max Motor Amperage 4.8 amps	Supply Voltage		
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Door HingingR/hand from factory but reversibleExhaust Duct Diameter4"-100MMThermostat Temps +/- 5°Open ClosedDrum Outlet135F/57C 125F/52CControl Inlet210F/99C 180F/82CHi Limit315F/157C 250F/121CSafety210F/99C 180F/82CNumber of elements2Element TypeWire CoilElement Voltage208/240 VoltsElement resistance19.2Ω EachMotor Power¼ HP 186wMax Motor Amperage4.8 amps			
Exhaust Duct Diameter 4"-100MM Thermostat Temps +/- 5° Open Closed Drum Outlet 135F/57C 125F/52C Control Inlet 210F/99C 180F/82C Hi Limit 315F/157C 250F/121C Safety 210F/99C 180F/82C Number of elements 2 Element Type Wire Coil Element Voltage 208/240 Volts Element resistance 19.2Ω Each Motor Power ½ HP 186w Max Motor Amperage 4.8 amps		47-51 RPM	
Thermostat Temps +/- 5° Open Closed		R/hand from factory but reversible	
Drum Outlet 135F/57C 125F/52C Control Inlet 210F/99C 180F/82C Hi Limit 315F/157C 250F/121C Safety 210F/99C 180F/82C Number of elements 2 Element Type Wire Coil Element Voltage 208/240 Volts Element resistance 19.2Ω Each Motor Power ½ HP 186w Max Motor Amperage 4.8 amps	Exhaust Duct Diameter	4"-100MM	
Control Inlet 210F/99C 180F/82C Hi Limit 315F/157C 250F/121C Safety 210F/99C 180F/82C Number of elements 2 Element Type Wire Coil Element Voltage 208/240 Volts Element resistance 19.2Ω Each Motor Power ½ HP 186w Max Motor Amperage 4.8 amps	Thermostat Temps +/- 5°		
Hi Limit 315F/157C 250F/121C Safety 210F/99C 180F/82C Number of elements 2 Element Type Wire Coil Element Voltage 208/240 Volts Element resistance 19.2Ω Each Motor Power ½ HP 186w Max Motor Amperage 4.8 amps	Drum Outlet	135F/57C 125F/52C	
Safety 210F/99C 180F/82C Number of elements 2 Element Type Wire Coil Element Voltage 208/240 Volts Element resistance 19.2Ω Each Motor Power ½ HP 186w Max Motor Amperage 4.8 amps	Control Inlet	210F/99C 180F/82C	
Number of elements 2 Element Type Wire Coil Element Voltage 208/240 Volts Element resistance 19.2Ω Each Motor Power ½ HP 186w Max Motor Amperage 4.8 amps	Hi Limit	315F/157C 250F/121C	
Element TypeWire CoilElement Voltage208/240 VoltsElement resistance19.2Ω EachMotor Power¼ HP 186wMax Motor Amperage4.8 amps		210F/99C 180F/82C	
Element Voltage208/240 VoltsElement resistance19.2Ω EachMotor Power½ HP 186wMax Motor Amperage4.8 amps			
Element resistance19.2Ω EachMotor Power½ HP 186wMax Motor Amperage4.8 amps			
Motor Power¼ HP 186wMax Motor Amperage4.8 amps	Element Voltage	208/240 Volts	
Max Motor Amperage 4.8 amps	Element resistance 19.2Ω Each		
	Motor Power		
Motor Voltage 110-120 Volts	Max Motor Amperage		
	Motor Voltage	110-120 Volts	

3.2 DG09 and DG60FA Specifications

Model Naming Convention DG09	DG Dryer Gas		
M	09 Iteration		
Model Naming Convention DE60FA	DG Dryer Gas		
	60 6 CU FT		
	F Front Loader		
	A Auto Timer		
Colour	White		
Capacity	6 cu ft		
Heat Source	Gas		
Control Type	Electronic + Timer		
Drum Material	Stainless Steel		
Dimensions	Height 40"		
	Width 27"		
	Depth 27"		
	Depth to door open 51 3/4"		
Supply Voltage 120 Volts			
Amperage	7 Amps		
Drum Rotation	Anti-clockwise only		
Drum Speed	47-51 RPM		
Door Hinging	R/hand from factory but reversible		
Exhaust Duct Diameter	4"-100MM		
Thermostat Temps +/- 5°	Open Closed		
Drum Outlet	135F/57C 125F/52C		
Control Inlet	210F/99C 180F/82C		
Safety	300F/149C 260F/127C		
Burner Heat	22000 BTU		
Coil Voltage	110/120 Volts		
Motor Power	½ HP 186w		
Max Motor Amperage	4.8 amps		
Motor Voltage	110-120 Volts		

3.3 Serial Plate Location

The serial Plate is located inside the door opening on the bottom right side. There is a secondary sticker on the rear of the dryer.





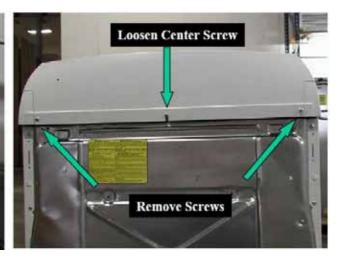


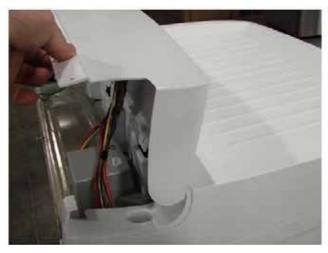
Secondary Sticker

4 COMPONENT SERVICING

4.1 Top Disassembly

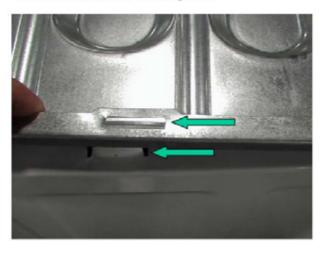






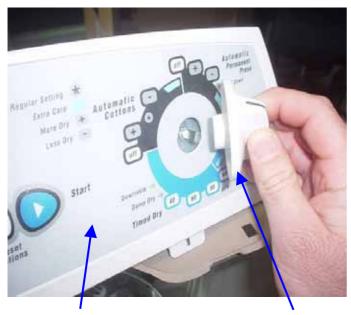


Note: when reinstalling Heat Shield, align Slots on heat shield with tabs on side panels



Heat Shield Must lay flat prior to reinstalling Top Deck





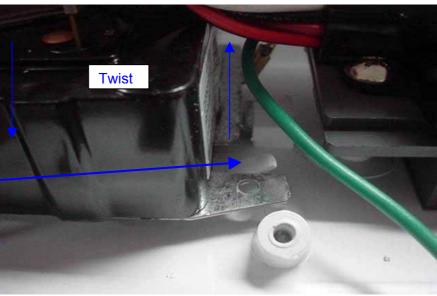
4.1.1 Timer Replacement

- Open the control box.
- Pull off the control knob.
- Remove the cover screw and unclip the timer cover.



Cover Clips -

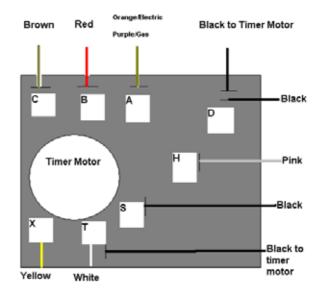
Press down the location tab and twist the timer anticlockwise to release it from the console.



Location Tab

Replace the wires from the old timer to the new timer wire for wire. If you think you have made a mistake fitting the wires, see the diagram below for the wiring locations on the timer.

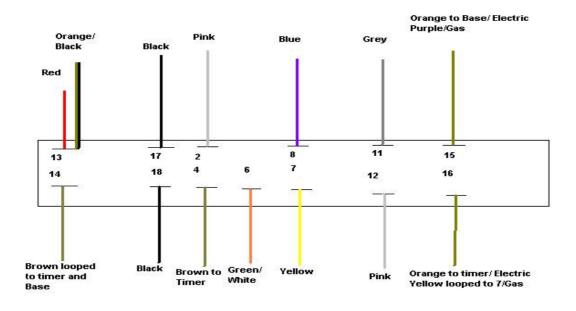
Reassembly is the reverse procedure.



4.1.2 Selector Switch Replacement

- Open the console.
- Undo the selector switch screws and remove switch assembly.
- Unclip the cover from the selector switch.
- Swap the wires from the old switch to the new switch, wire for wire.
- If you think you may have made a mistake fitting the wires, check against the diagram below.

Reassembly is the reverse procedure.



4.1.3 Auto Dry PCB Replacement

- Open the console.
- Unscrew and remove the PCB cover.
- Disconnect the PCB connector.
- Unclip PCB from its holding clips.

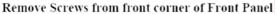
Reassembly is the reverse procedure

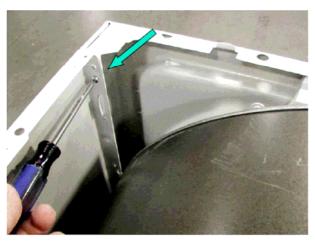


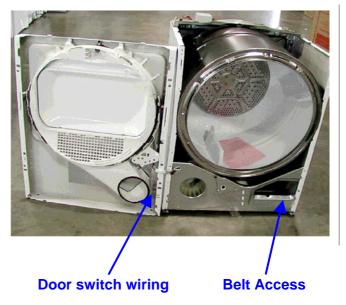


4.2 Drum Removal

- · Undo the console.
- · Remove the top deck.
- Remove the heat shield.
- · Remove the front panel and disconnect the door switch wiring.







- Disconnect the belt from the motor. This can be done 2 ways:
- Remove the outlet duct from the back of the dryer, reach in through the duct hole in the back panel and disconnect the belt off the motor pulley.
- Reach in through the hole in the front brace under the drum and run the belt off the motor pulley.
- Pull the drum forward to disconnect the rear drum sleeve from cowl.
- Slide the drum out the front of the cabinet.

4.2.1 Drum Rear Sleeve And Shaft Replacement

- · Remove the drum.
- Remove the o-ring from bearing shaft.
- Remove the sleeve.

 Remove the three securing screws from inside the drum to remove the shaft and deflector.

Reassembly is the reverse procedure.

O-ring

Sleeve

Deflector



4.2.2 Drum Baffle Replacement

- · Remove the drum.
- Remove the screws for the baffle and remove the baffle.

Reassembly is the reverse procedure

4.2.3 Front Bearing Assembly and Front Panel Component Replacement



- Remove the front panel from the cabinet.
- Remove the light globe.
- Unclip the top of the bearing holder from the top of the front panel.
- Pull the holder away from the panel and pull upward to remove the holder.
- To remove the slides, pull out the unclipped side and then unclip the other side.
- To remove the drum felt, unhook the right side and pull out. The new felt is just pushed into place and hooked to the right.
- To remove the light socket, disconnect the terminals off the light switch and sensor plug, and then unscrew the socket.
- To remove the light switch, disconnect the terminals, keeping note of the positions, and unclip the switch.

Reassembly is the reverse procedure.

4.3 Cowl Replacement and Components

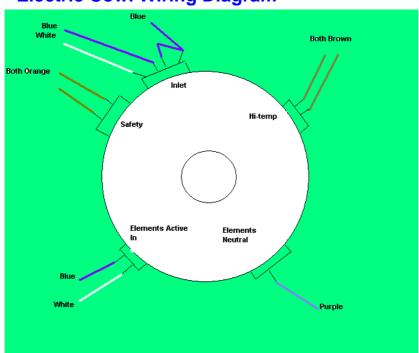
4.3.1 Electric Model Cowl



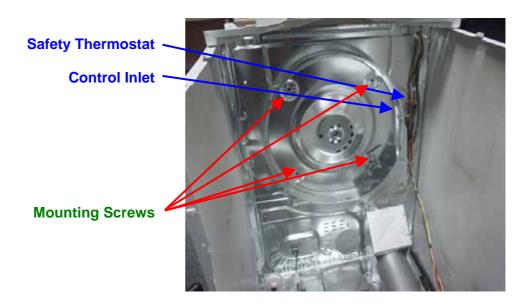
- Remove the drum
- To remove the thermostats, remove the thermostat screws and unclip the thermostat from the cowl.
- When replacing any thermostat, always replace wires in the same position as the original thermostat. If you think it is wired incorrectly, see the cowl wiring diagram.
- Remove the element wires from the bottom of the cowl, keeping note of their position. When refitting, if you think it is wired incorrectly, see the cowl wiring diagram.
- Undo the 4 mounting screws and remove the cowl from the rear panel.
- Undo the four screws that retain the drum-bearing retainer to remove the retainer.

Reassembly is the reverse procedure.

4.3.2 Electric Cowl Wiring Diagram



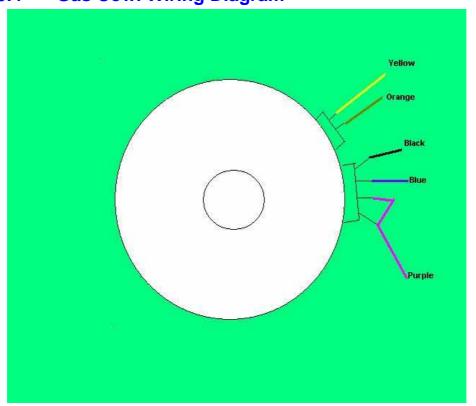
4.3.3 Gas Model Cowl



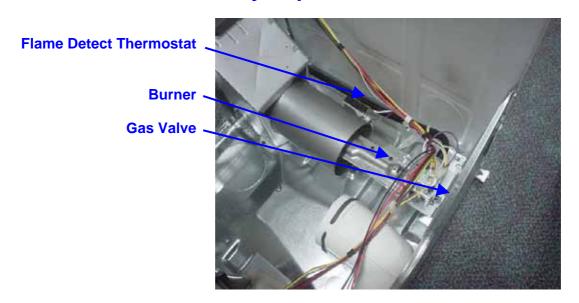
- · Remove the drum.
- To remove the safety thermostat, remove the thermostat screws and unclip the thermostat from the cowl. To remove the control inlet thermostat, lever the leg of the thermostat towards the centre with a flat screwdriver, then remove.
- When replacing any thermostat, always replace wires in the same position as the original thermostat. If you think it is wired incorrectly, see the cowl wiring diagram.
- Undo the 4 mounting screws and remove the cowl from the rear panel.
- Undo the four screws that retain the drum-bearing retainer to remove the retainer.

Reassembly is the reverse procedure.

4.3.4 Gas Cowl Wiring Diagram



4.4 Gas Valve Assembly Replacement



- Disconnect the power and gas supply.
- Remove the drum assembly.
- Disconnect the wiring harnesses from the gas coils.
- Unscrew the bracket for the supply pipe from the back panel.
- Unscrew the valve bracket and feed the entire gas burner and valve assembly out through the opening in the front cabinet bracket.
- Remove the two screws securing the burner to the valve bracket.
- Remove the two screws securing the valve to the valve bracket.
- Remove the two screws securing the coils to the valve.

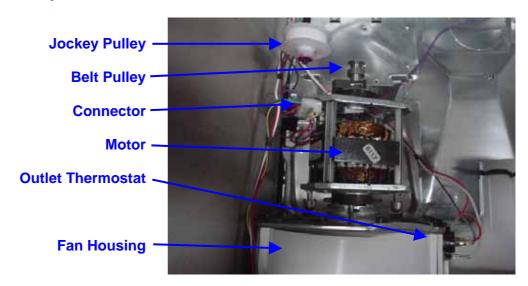
Reassembly is the reverse procedure.

4.4.1 Flame Detect Thermostat Replacement

- Disconnect the power supply.
- Remove the drum assembly.
- Unscrew and remove the burner.
- Disconnect the wires to the flame thermostat.
- Undo the 2 screws securing the combustion chamber.
- Turn the chamber to the left; undo the screws holding the thermostat and remove.

Reassembly is the reverse procedure.

4.5 Motor, Outlet Thermostat, Jockey Pulley and Belt Switch Replacement



- Disconnect the power supply.
- Remove the drum assembly.
- Remove the outlet screw securing the outlet thermostat. The thermostat can then be removed from the fan housing. Replace the wires in the same order.



- Remove the connector from the motor.
- Remove the two screws that secure the motor bracket to the base at the rear of the motor.
- Remove the two long black screws that secure the fan housing to the front bracket of the cabinet.
- Slide the motor and bracket assembly towards the rear of the cabinet.
- Remove the jockey pulley and arm assembly.
- Disconnect the wires to the belt switch.
- Disconnect the mains harness connector at the rear of the motor and feed out from under the motor.
- Feed the door and sensor harness through the cabinet bracket and out from under the motor.
- Remove the motor and bracket assembly from the cabinet.
- Remove the fan from the motor.
- Remove the screw from the front motor clamp.
- Remove the spring clip holding the back of the motor to the bracket.
- Remove the motor from the bracket.

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- The belt switch is mounted to the left side of the motor bracket and can be removed by removing its securing screws.
- Once the motor and bracket are removed from the cabinet, the fan housing can be unscrewed and removed.

Reassembly is the reverse procedure

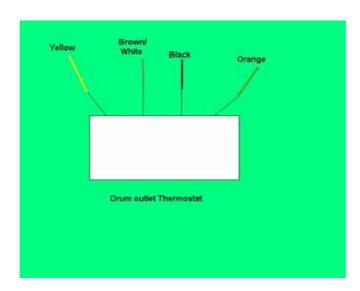
4.5.1 Motor and Outlet Thermostat Wiring Diagrams

Motor Connector

M2	M1	M6	M4	M5	Ground
Black	Brown/	Pink	Brown/	Red	Green
	Yellow		Yellow		

Motor Direct Connector

Black	Orange	Pink
-------	--------	------



4.6 Power Supply Connections

4.6.1 Electric Terminal Block

- Disconnect the power supply to the Dryer.
- Undo the nuts holding the mains cables to the terminal block and remove the wires.
- Undo the nuts holding the dryer supply cables keeping note of their positions.
- Remove the screws securing the terminal block and remove the block.

Reassembly is the reverse procedure. Make sure the wiring is re-installed correctly or major damage may be caused to the dryer. Refer to the installation instructions (Section 2).

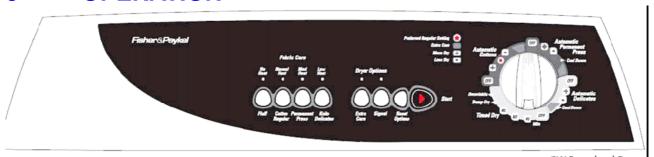
4.6.2 Gas and Electric Model Cable

(Electric cable supplied in Canada Only)

- Disconnect the power supply to the Dryer.
- Remove the power plug.
- Either remove the exhaust duct or remove the drum to access the cord connections.
- Disconnect the terminals or connector from the cable.
- Push the cable bush through the cabinet and remove the cable.

Reassembly is the reverse procedure.

5 OPERATION



5.1 Operating Instructions - Control Panel

Automatic Drying Cycles

(Cycle automatically senses dryness)

There are two automatic dryness levels: MORE DRY (+) and LESS DRY (-).

These two settings dry the clothes to different degrees depending on the level of dryness desired.

Automatic Permanent Press – For synthetic blends.

Select MORE DRY (+) for heavier fabrics, LESS DRY (-) for light fabrics.

Automatic Permanent Press – For lingerie and special care fabrics.

Select MORE DRY (+) for larger fabrics, LESS DRY (-) for smaller fabrics.

Automatic Cottons – For cottons and most linens.

For most loads select the preferred Regular Setting marked with an *. Set towards **MORE DRY (+)** for heavier fabrics, **LESS DRY (-)** for lighter fabrics.

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Fabric Care Settings

FLUFF – For items requiring drying without heat. Perfect for airing clothes or to freshen up garments that have been packed in a suitcase or drawer.

COTTON REGULAR – For drying general cottons such as sheets, sweats and knits. This cycle uses high heat to dry clothes quickly. Suitable for garments labelled "tumble dry".

PERMANENT PRESS – For drying lightweight fabrics. A medium heat is used to reduce wrinkles. Ideal for lightweight cottons, casuals and items labelled "tumble dry with a medium heat". This cycle automatically selects the DEWRINKLE option to reduce wrinkles.

KNITS DELICATES – For heat sensitive items, this cycle uses a low heat. Use this setting when care labels recommend low heat settings or for garments with a synthetic fibre content, where overheating could cause damage to fibres.

Timed Dry Cycles

(Cycles run for a selected time.)

The dryer has three timed cycles. These cycles have set drying times of either 40, 60 or 80 minutes and include a DAMP DRY and DEWRINKLE function. If selected, the dryer will dry for the specified period of time.

TIMED DRY – Set the cycle selector at the desired drying time.

DAMP DRY – To leave items partially dry, set the cycle selector on DAMP DRY setting.

DEWRINKLE – For removing wrinkles from items that are clean and dry or that are slightly damp. Set the cycle selector on to DEWRINKLE setting.

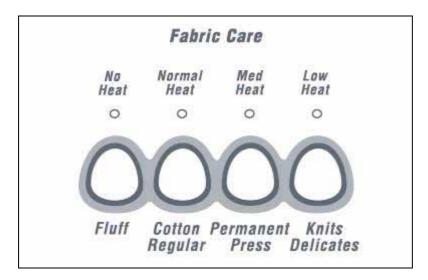
Note:

Drying times will vary according to the type of heat used (electrical or natural gas), size of load, types of fabrics, wetness of clothes and condition of exhaust ducts.

5.2 Using the Dryer

Selecting a Cycle

The dryer has a number of FABRIC CARE CYCLES that can be used to dry different types of garments:



Select an automatic or timed cycle. See the below cycle descriptions.

Select a drying cycle that matches the type of load being dried. Different fabrics have different drying requirements, so it is important to choose the cycle that best describes the load. If the load contains mainly delicate items, it is best you select the **KNITS DELICATES** cycle.

If unsure of the temperature to select for a load, it is best to select a lower heat rather than a higher heat, e.g. the **KNITS DELICATES** or **PERMANENT PRESS** cycle instead of the **COTTON REGULAR** cycle.

Always follow manufacturer's care label instructions when drying.

EXTRA CARE

Minimizes the likelihood of wrinkles forming in clothes if you are not able to unload the dryer straight away.

Selecting the Dryness Level

The desired dryness level can be altered. There are two dryness levels to choose between:

MORE DRY (+) LESS DRY (-)

Refer to page 29 for dryness level descriptions.

At the end of the cycle, if the clothes are still damp or are too dry, next time just adjust the dryness level on the timer to meet your personal preferences.

Selecting the Drying Process

There are two ways in which your dryer is able to dry clothes - by using the automatic drying cycles or by using Timed Dry.

AUTOMATIC DRYING

When automatic drying is selected, the dryer automatically senses the dryness level of the load and turns off when the clothes are dry. The dryer's internal computer measures the moisture content of the load using metal sensing bars, and together with a temperature sensor determine when the clothes have reached the selected dryness level (Refer to above - Selecting the Dryness Level).

For optimum clothes care, match the cycle to the load. Automatic drying often provides the best results and leads to lower energy costs than Timed Dry.

As automatic drying cycles rely on items of the load contacting sensors, it will not work when the drying rack accessory is used.

TIMED DRY

There are three timed cycles. There is a choice of 40, 60 and 80 minutes. A cool down period of 10 minutes is included in the three cycles.

To select a timed cycle, set the cycle selector at the desired drying time you want the dryer to run for. Throughout the cycle, the cycle selector will rotate towards the end of the cycle.

During Timed Dry, the dryer does not sense when the clothes are dry. This may cause overdrying. We recommend that you dry the clothes for a slightly shorter time than you think they need, or check on them regularly (to avoid over-drying).

Beginning The Drying Cycle

Once you have chosen all your desired settings, close the dryer door and press **START** (located on the right-hand side of the control panel).

Opening the door during the operation will stop the dryer.

To restart the dryer, close the door and press **START** to complete the cycle.

Stopping The Dryer

The dryer can be stopped during any stage of the drying process, to allow you to check on the load or add/remove clothes. To do this, open the dryer door. There will be a slight delay as the drum slows down and stops.

Note:

If the cycle is interrupted before it progresses into cool down, parts of the drum may be hot. To start the dryer again, press **START**.

Changing Cycles During Operation

If you wish to change the drying cycle you have chosen after the machine has already begun drying, press your new cycle selection on the control panel.

Fabric Softener Sheets

If you wish to use fabric softener sheets, you must ensure that they are labelled "dryer safe". Always follow the instructions on the packaging. Do not place them in a dryer with warm clothes, as there is a chance the fabric softener may stain clothes. Only use a softener sheet once, then discard it.

Beeps

At the end of the cycle, the dryer will beep to let you know that the load is finished. The drum will automatically come to rest, allowing you to open the door and remove the load.

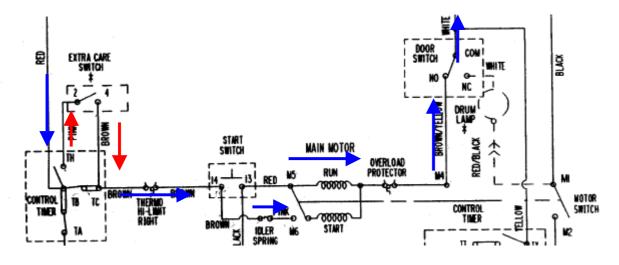
5.3 Operational Control Sequence

5.3.1 Motor Operation

The motor runs on the 120v circuit of the dryer. Power is supplied into the TB connection on the timer. Power for the motor is fed first from the TC terminal on normal operation and from the TH terminal on Extra Care. If on Extra Care, power is fed from TH on the timer, into terminal 2 on the selector, out of terminal 4 and back to TC on the timer.

From the timer, power is switched through the hi-limit thermostat and to the start switch, which is selector terminals 14 to 13. Power is then fed through both the start and run windings on the motor. The centrifugal switch then disengages the start winding once the motor has started.

In the motors neutral circuit there is an internal overload. The neutral circuit then runs through the door switch and to the mains terminal block.



5.3.2 Timer Operation

The timer runs in 2 ways, Automatic and Timed Dry.

In automatic, the timer only advances when the PCB powers the timer motor.

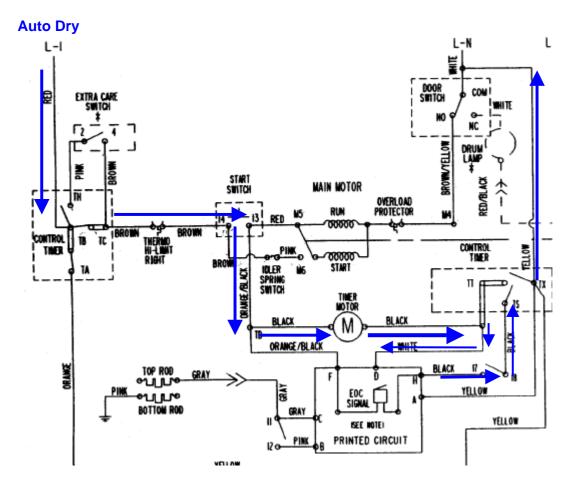
Power is supplied into the TB connection on the timer. Power for the motor is fed first from the TC terminal on normal operation and from the TH terminal on Extra Care. If on Extra Care, power is fed from TH on the timer, into terminal 2 on the selector, out of terminal 4 and back to TC on the timer.

From the timer, power is switched through the hi-limit thermostat and to the start switch, which is selector terminals 14 to 13.

Power is then supplied from the start switch, which powers back from the motor feed, then goes through the timer motor to the T terminal on the timer. The neutral for the timer motor then feeds to the white wire to the PCB.

From the PCB, neutral is fed back to the S terminal on the timer then back to the mains terminal block.

The PCB measures moisture across the sensing bars on the front duct assembly. As the clothes slide past the bars, the PCB reads for a current across the bars. When the clothes are dry the current ceases so the PCB advances the timer.

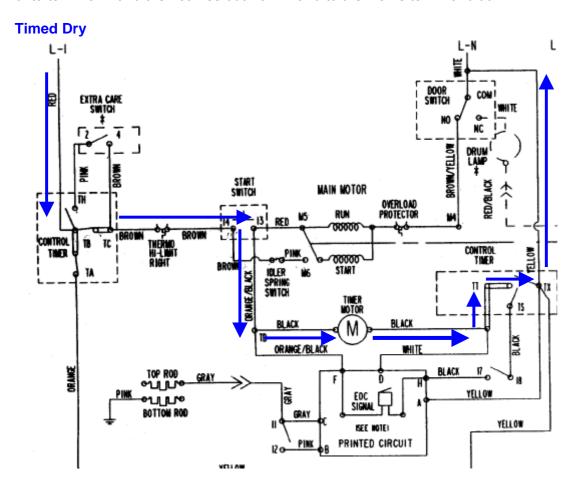




Sensing Bars

There should only be a minimum of 1Mohm across the bars when dry. The resistance should lower when moisture tracks across the bars. To test the bars, check their resistance dry, then wet your finger and place it across the bars and check for a change in resistance.

In Timed Dry, the timer motor is run direct through the timer. The neutral of the timer motor runs onto terminal T and then comes out from X and to the mains terminal block.

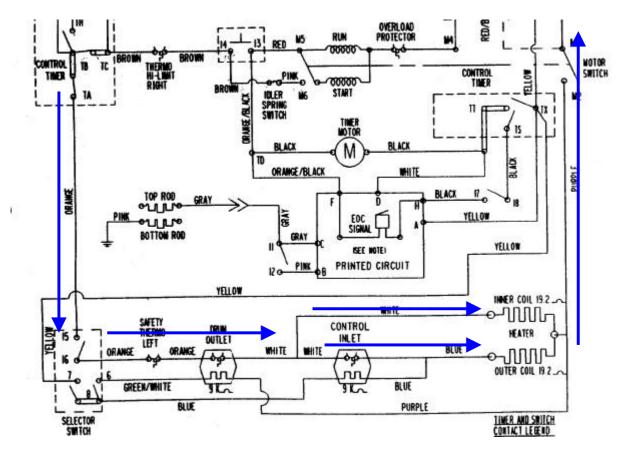


5.3.3 Element Operation (Electric Models)

The element circuit has three thermostats and has a motor switch to stop the heating if the motor should fail.

Power is supplied to the element circuit from terminal A. From the timer, power is supplied to terminal 15 on the selector switch and then out of terminal 16. From the selector, power is sent through the safety thermostat to the drum outlet thermostat.

After the outlet thermostat, power is split with one feed straight to one element and the other feed to the control inlet thermostat. After the control inlet thermostat, power is then fed to the other element. The neutral for the elements is then wired through the motor switch and to the L2 connection on the mains terminal block.



5.3.4 Thermostat Operation (Electric Model)

There are three thermostats that control the temperature of the dryer and a hi-limit thermostat that will shut the dryer down if it overheats.

The hi-limit thermostat is mounted on the heater cowl and is in circuit with the motor. If it shuts down, the motor stops. There is a switch on the motor, which cut the neutral to the element when the motor stops, so when the hi-limit trips, all dryer functions cease to operate.

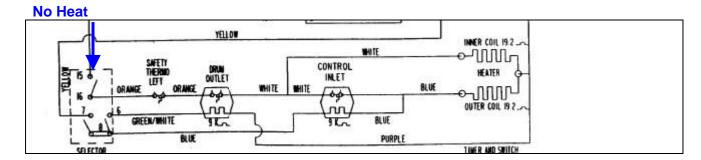
The heating elements are controlled by the safety, inlet and outlet thermostats.

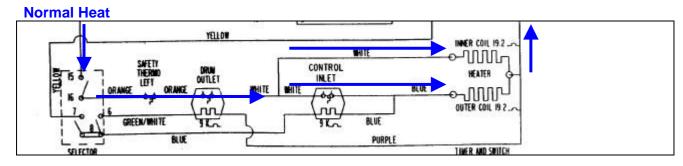
When the selector is set on No Heat/Fluff, no power is supplied from terminal 16 so there is no element operation.

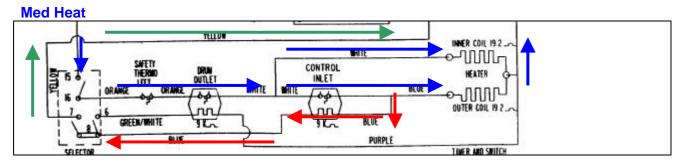
When the selector is set on Normal Heat/Cotton Regular, power is supplied only through the direct element circuit (as shown in Section 5.3.3). Temperature is controlled by the safety thermostat, which is located on the heater cowl.

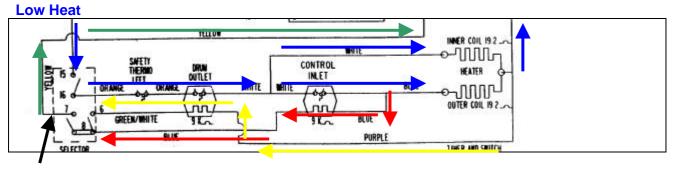
When the selector is set on Med Heat/ Permanent Press, power runs through two circuits. Power is supplied off terminal 16 to the element circuit. Power is also switched onto the control circuit for control inlet thermostat. The control circuit for the control inlet thermostat has an active supply from the L1 circuit for the element. The neutral of the control circuit is switched between terminals 8 and 7 (terminal 7 is the common neutral connection on the selector switch). The thermostat will not operate unless there is power through the resistor in the thermostat. The resistor has a resistance of 9 Kohms. This thermostat only switches one element.

When the selector is set on Low Heat/Knits Delicates, the element circuit and the control circuits for the inlet and exhaust thermostats is used. Terminal 7 on the selector is the common neutral connection and the exhaust thermostat is switched to it on terminal 6. The active supply for the exhaust thermostat control is from the L2 line. The resistor has a resistance of 9 Kohms. See the diagrams on the next page.









Common Neutral for both Thermostats

Blue = Element Circuit

Red = Control Inlet Thermostat Resistor Circuit
Yellow = Drum Inlet Thermostat Resistor Circuit

Green = Thermostat Neutral Circuit

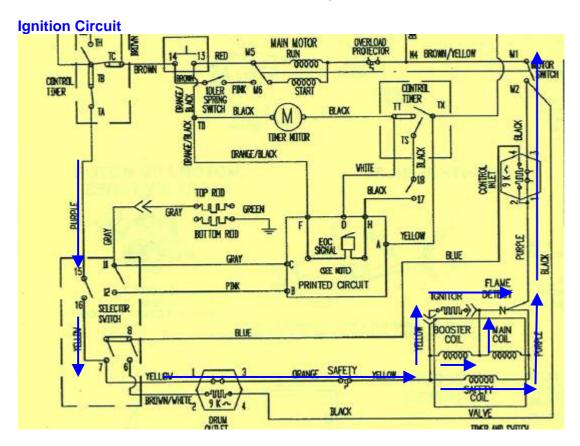
5.3.5 Gas Valve & Ignitor Circuit Operation (Gas Models)

The gas valve system has 2 coils, a booster coil and a main coil, which are operated by thermostats, and a safety coil. There are three thermostats that operate the temperature control of the gas valve. There is also a flame detector that operates the coils and the ignitor.

Power is supplied from terminal A on the timer to terminal 15 on the selector. The circuit is switched to terminal 16 and then looped to terminal 7. From the selector, power feeds through the drum outlet thermostat and then the safety thermostat to the gas valve assembly.

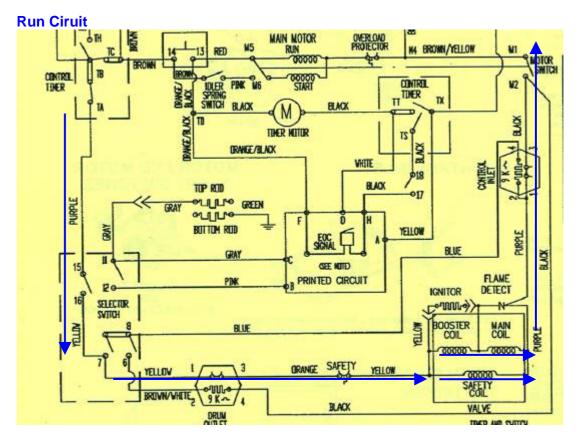
The gas valve assembly operates in two modes, ignition and run. The safety coil is energised during both modes.

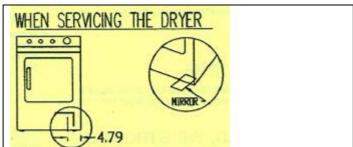
When in ignition, the flame detect thermostat is closed. Power feeds through the booster coil and the ignitor because these are in parallel circuit, causing ignition. When the flame has heated the flame detect thermostat, it opens and the valve goes into run mode.



When the flame detect thermostat opens, the booster coil and the main coil are in series circuit, so power is dropped in the booster and is activated in the main. The ignitor is also dropped in voltage, so stops igniting.

The neutral circuit runs through the inlet thermostat, through the motor switch and back to the main neutral connection.





The ignitor functioning and the flame can be seen through a viewer hole located in the base of the dryer. Use a mirror as shown in these figures.

5.3.6 Thermostat Operation (Gas Model)

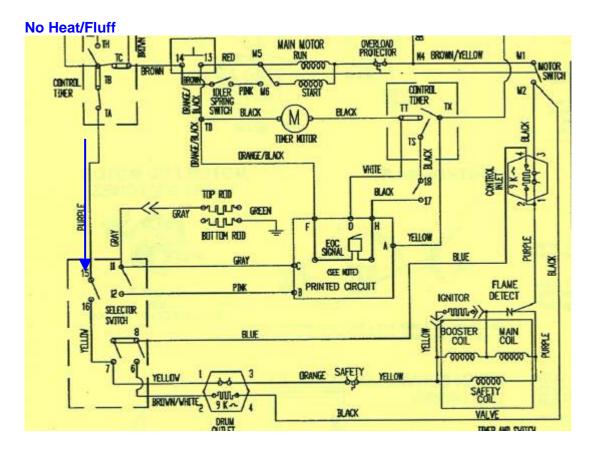
There are three thermostats in the gas valve circuit for temperature control, the safety, control inlet and drum outlet.

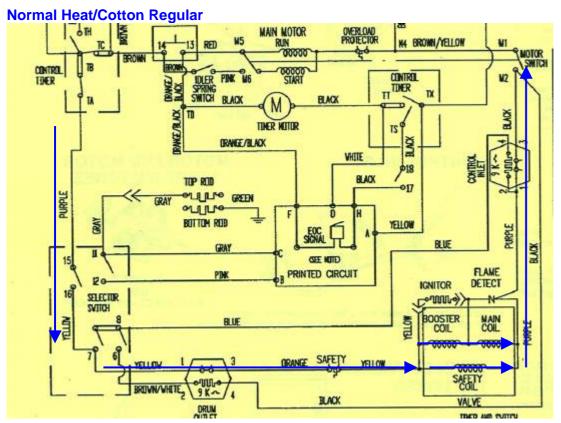
When the selector is set on No Heat/Fluff, power is supplied to terminal 16 but terminates, so there is no gas valve operation.

When the selector is set on Normal Heat/Cotton Regular, power is fed through the gas valve circuit only so the safety thermostat controls temperature.

When the selector is set on Med Heat/ Permanent Press, power is fed through the gas valve circuit but also from terminal 8 through the control inlet resistor circuit.

When the selector is set on Low Heat/ Knits Delicates, power is fed through the gas valve circuit, from terminal 8 through the control inlet resistor circuit, and terminal 6 through the drum outlet resistor circuit.





Med Heat/Permanent Press MAIN MOTOR RUN OVERLOAD PROTECTOR OTH NA BROWN/YELLOW MOTOR SWITCH CONTROL TENER IDLER PINK M6 SPRING SWITCH BLACK CONTROL TIMER M PAWE/RUCK SAX. TD TIMER MOTOR TS BLACK DRANGE/BLACK VHITE **18** BLACK TOP ROD -017 PURPLE OLIUL GEEN ON The BUTTOM ROD GRAY YELLOW PURPLE (SEE MITE) 15 PRINTED CIRCUIT Re IGNITOR DETECT SELECTOR County) POLITAS BOOSTER BLUE DRANGE SAFETY o IIII BLACK VALVE DRUM TIMED AND CUTTON

Low Heat/ Knits Delicates MAIN MOTOR OVERLOAD PROTECTOR RUN N4 BROWN/YELLOW MOTOR CONTROL TIMER IDLER PINK M6 SPRING SWITCH BLACK CONTROL W2 TT TIMER BLACK M RWEFRICK TUNER NOTOR 12 DRANGE/BLACK VHITE p18 BLACK TOP ROD -017 PURPLE OFFICE CREEN online-BUTTOM RUD S YELLOW PURPLE GRAY CEE NUTE FLAME DETECT PRINTED CIRCUIT IGNITOR SELECTUR Lounna) SALICH BOOSTER MAIN COIL SAFETY SAFETY 9 K~ BLACK VALVE DRUM THEN HE SETTE

Blue = **Control Inlet Circuit** Red

Coil Circuit

Green = **Drum Outlet Circuit**

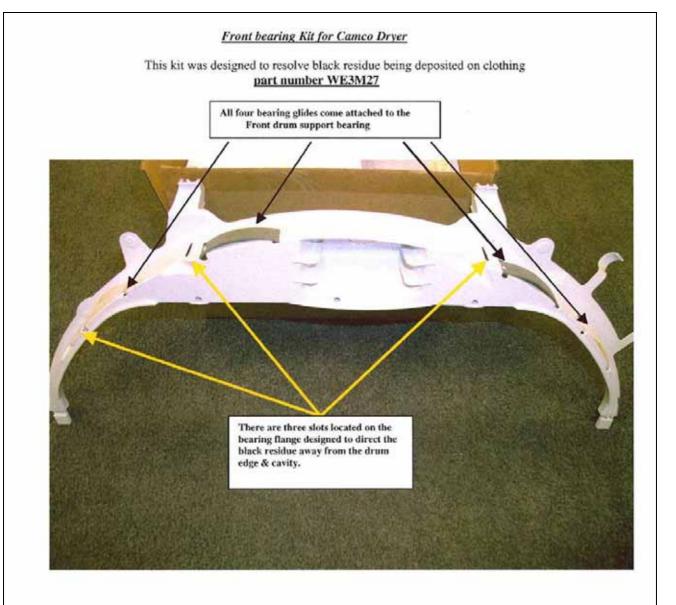
6 FAULT FINDING

6.1 Fault Finding

Fault	Cause	Repair						
No operation.	No power to unit.	Resupply power to the unit.						
	No power at terminal C on timer.	Replace timer.						
	Hi-limit thermostat open circuit (electric only).	Replace hi- limit thermostat & check for possible overheating issues (see overheating).						
	Start button not operating.	Replace selector switch assembly.						
	Idler switch open circuit.	Check belt condition & replace if necessary. Check idler arm or pulley & replace if necessary. Check idler switch operation and replace if necessary.						
	Motor seized or open circuit.	Check motor spins freely and check windings. Replace if necessary.						
	Door switch open circuit.	Replace door switch.						
No heat.	Selector set on No Heat/Fluff.	Reset selector.						
	No power to terminal A on the timer.	Replace the timer.						
	No motor operation.	See No Operation section.						
	No Power from Terminal 16 on the selector.	Replace the selector.						
	The safety, inlet, or drum outlet thermostat failure.	Check thermostats for continuity and resistance of the resistors. Replace if necessary.						
	The elements are open circuit (electric model only).	Replace elements.						
	No gas valve operation (gas model only).	Check flame failure operation. Check gas coil continuity. Change gas valve assembly.						
	Open circuit motor switch.	Replace the motor.						

Fault	Cause	Repair
Long dry times.	Low heat.	Check operation of elements. Check thermostat operation. Check all electrical connections in the element circuit.
	Air flow restriction.	 Check filter cleaned and filter mesh not clogged. Check installation and flow through the household exhaust ducting. Check fan is properly secured to motor shaft. Check fan cowl and internal ducting for a restriction.
	PCB not reading sensing bars.	Check behind sensing bars for lint build up. Check sensing bars are clean of detergent or any residues. Replace PCB.
	Timer jamming.	Check power is supplied to the timer motor (terminals D and T on the timer). Replace the timer.
	Slow motor operation.	Check motor is getting full power. Replace the motor.
	Worn drum felt.	Replace drum felt.
Noisy operation	Worn drum rear bearing.	Remove drum and replace rear sleeve. (Do not lubricate.)
	Idler pulley noisy.	Check pulley is lubricated. If worn replace the idler pulley.
	Loose or damaged fan.	Re-secure fan to shaft or replace fan. Check motor bearings for excessive wear.
	Worn front bearing slides.	Relace front bearings. Check drum has not rubbed or damaged any other components.

Fault	Fault Cause Repair				
Black marks on clothes.	 Reaction with front bearings. 	See technical bulletin below.			



Before installing this kit please be sure all black residue has been wiped from all areas around the drum and bearing using Isopropyl alcohol (rubbing alcohol) and the drum head has been cleaned thoroughly as well. If the kit is installed and the problem returns follow the same cleaning instructions except the tech will need to replace the drum as well as order a set of glides using the white color glides Part # WEIM504 from the kit and put them in place of the dark colored glides, ie: they will now have two sets of white glides on the front bearing rather than one set white and one set dark. This should eliminate this from reoccurring.

It is highly suggested that the Felt Drum seal Part# WE9M15 is also replaced at the same time

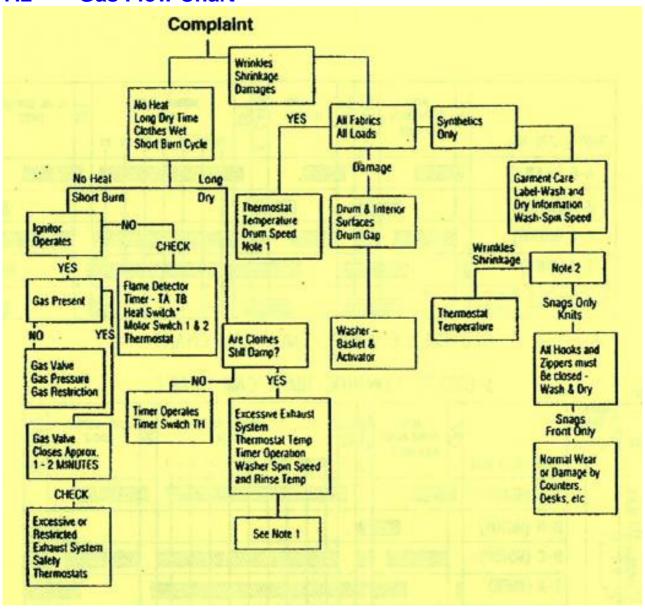
Note: Drum felt is now supplied with this kit.

7 FLOW CHARTS

7.1 Electric Flow Chart



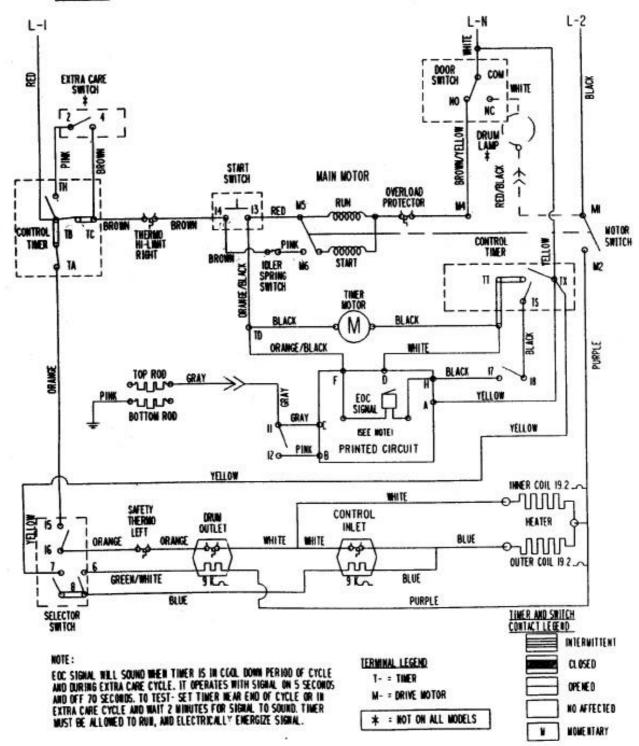
7.2 Gas Flow Chart



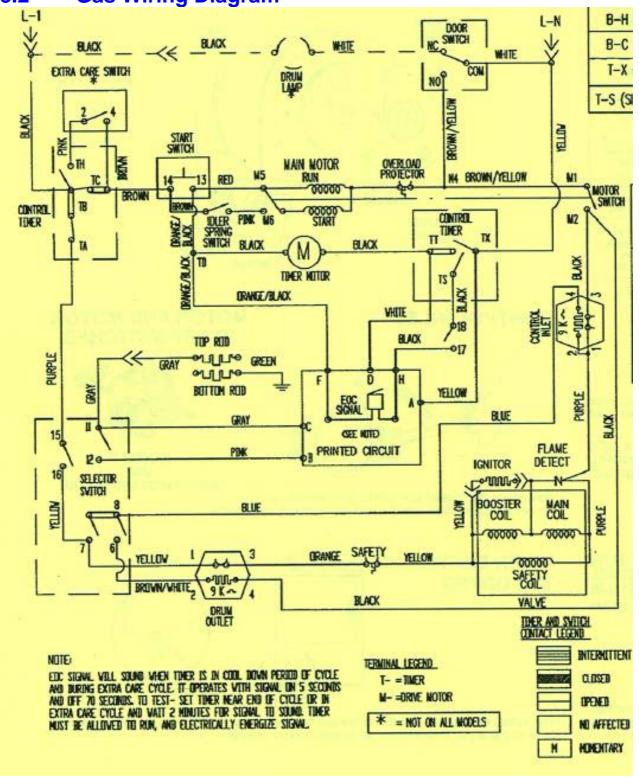
8 WIRING DIAGRAMS

8.1 Electric Wiring Diagram

SCHEMATIC



8.2 Gas Wiring Diagram



9 **SEQUENCE CHARTS**

9.1 Electric Timer Sequence

360° = 270 MIN.	OFF	AUTO PERMA PRESS POLY-MINTS	X. CARE	OFF	AUTO DEL CATES	X. CARE	OFF	HORMAL TIMED CYCLE 70 60 50 40 30 20 10				OFF	AUTO. COTTON CYCLE	X. CARE				
A-B (HEATER)	Ø	umm.		0	//////		0	1	7/4	///	////		777	V///	9	0	WWW.	
B-H (MOTOR)	Γ	W	7//		VIIII	2											V////	7
B-C (MOTOR)		uuuuun.	777			77		74		///	///	///	777	V///	7/	1		777
T-X (TIMER)	2	VIIII	7///	10	WIII	1/2	1	2	72	11/4	77	77	77	7/		9	VIIII	VIII
T-S (SIGNAL) * ISEE	1	E		•			•											

4 CYCLES CONTROL TIMER CAM CHART

9.2 Gas Timer Sequence

NORMAL TIMED CYCLE O 60 50 40 30 20 10	X. CARE
	VIIIIVIA
ununun antari di	773 777
	CHART

9.3 Electric Selector Sequence

9.4 Gas Selector Sequence

	CONTACTS											
	6-8	7-8	15-16	2-4	18-17	13-14	¥ 11-12					
COTTON			7507		9							
PERMA PRESS	-						100.00					
KONTS-DELICATE	20000		207				MONT.					
FLUFF				100			SEC.5					
EXTRA-CARE												
END/CYCLE					No.							
RESET												
PUSH/START						M						