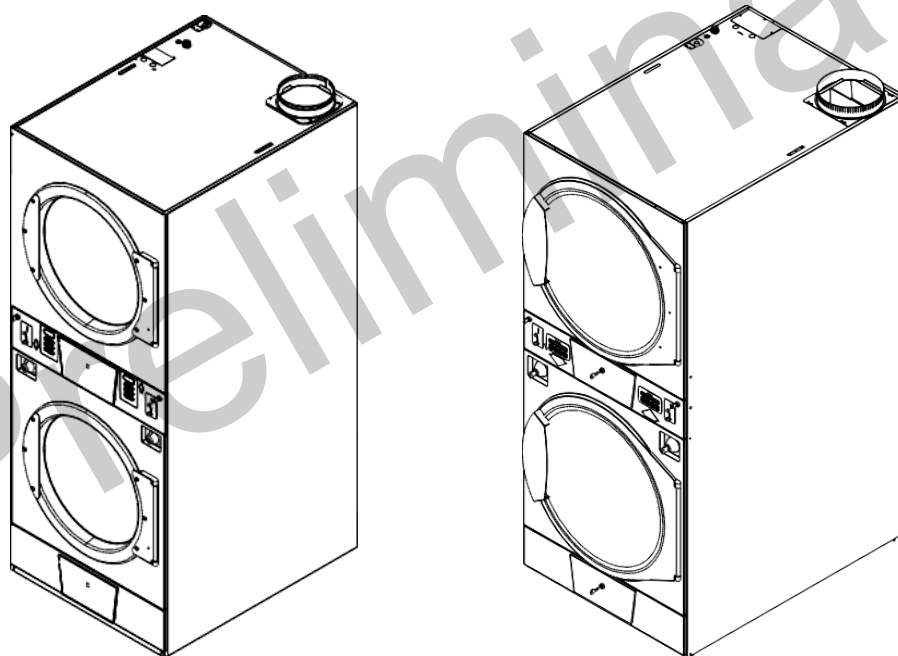




MLG36 MLG46

Installation/Operator Manual



RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

Dryer Safety

Your safety and the safety of others are very important.

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



This is the safety alert symbol.

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

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

These words mean:

! DANGER

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

! WARNING

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

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

- It is recommended that the owner post, in a prominent location, instructions for the customer's use in the event the customer smells gas. This information should be obtained from your gas supplier.
- Post the following warning in a prominent location.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

! WARNING:

FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death or property damage.

– Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

– WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Clear the room, building, or area of all occupants.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

WARNING: Gas leaks cannot always be detected by smell.

Gas suppliers recommend that you use a gas detector approved by UL or CSA.

For more information, contact your gas supplier.

If a gas leak is detected, follow the "What to do if you smell gas" instructions.

In the State of Massachusetts, the following installation instructions apply:

Installations and repairs must be performed by a qualified or licensed contractor, plumber, or gas fitter qualified or licensed by the State of Massachusetts.

Acceptable Shut-off Devices: Gas Cocks and Ball Valves installed for use shall be listed.

A flexible gas connector, when used, must not exceed 4 feet (121.9 cm).

IMPORTANT: The gas installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.

The dryer must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, Part 1, CSA C22.1.

Important Information

IMPORTANT: A means of restraint must be used to avoid straining of the gas supply when the dryer is moved.

An external means of power removal (disconnect device) must be provided by the installer.

The dryer must be used only for drying water washed fabrics.

The dryer must never be operated with any of the back guards or service panels removed.

The wiring diagram for the dryer is located behind the front control panel.

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

List of Acronyms

N.P.T.	National Pipe Thread
HVAC	Heating, Ventilating, and Air-Conditioning
in WC	Inches of Water Column
UL	Underwriters Laboratory
CSA	Canadian Standards Association
DSI	Direct Spark Ignition
L.E.D.	Light Emitting Diode

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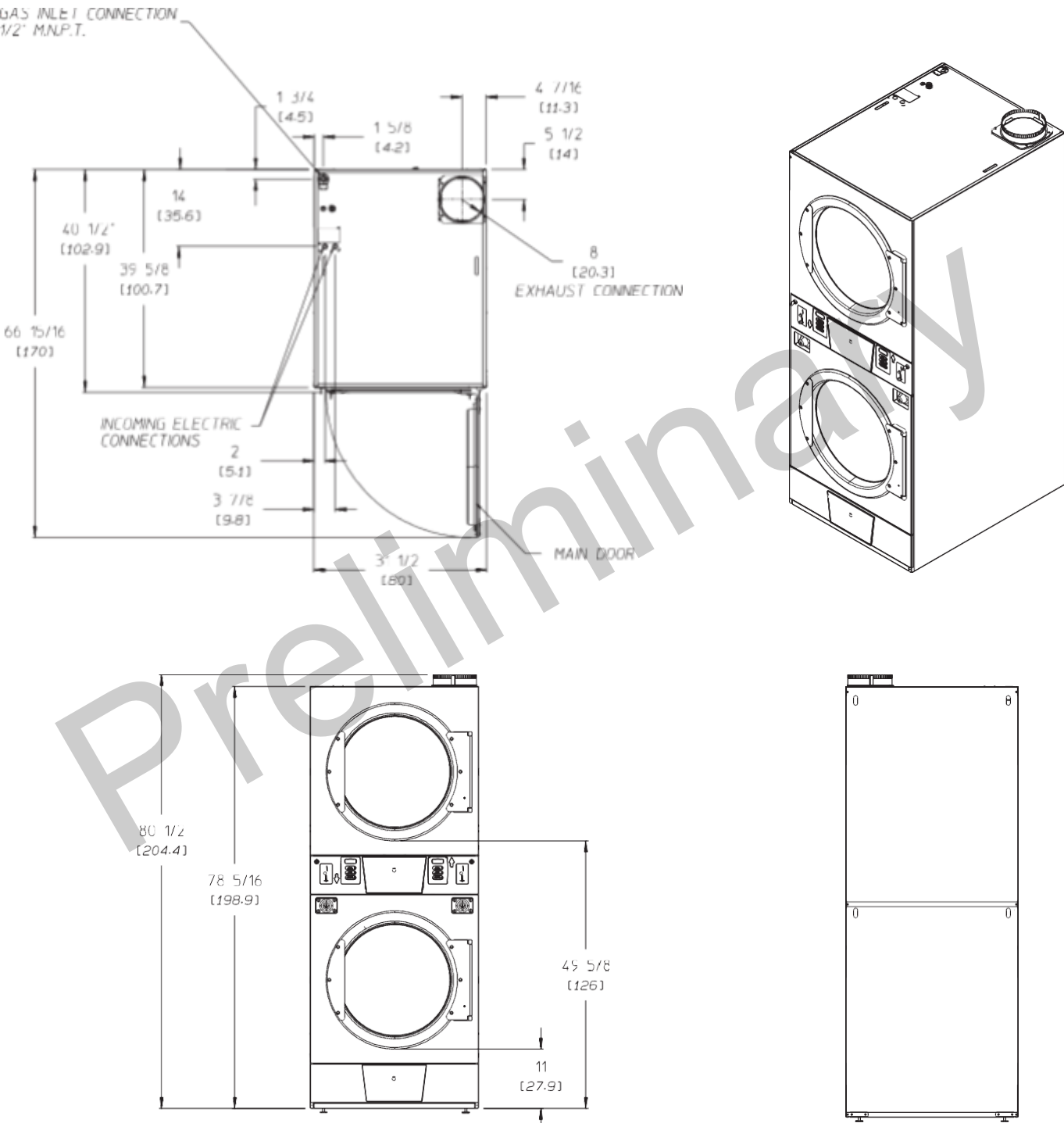
MLG36 Specifications

MAXIMUM CAPACITY (DRY WEIGHT)	30 lb	13.6 kg
TUMBLER DIAMETER	30"	76.20 cm
TUMBLER DEPTH	27"	68.5 cm
TUMBLER VOLUME	11 ft ³	311.5 L
TUMBLER/DRIVE MOTOR	1/4 hp	0.19 kW
BLOWER/FAN MOTOR	1/2 hp	0.37 kW
CABINET WIDTH	31 ¹ / ₂ "	80.0 cm
CABINET DEPTH	39 ⁵ / ₈ "	100.7 cm
CABINET HEIGHT	78 ⁵ / ₁₆ "	198.9 cm
DOOR OPENING (DIAMETER)	21 ¹ / ₂ "	54.6 cm
DOOR SILL HEIGHT	51 ³ / ₄ "/13 ¹ / ₈ "	131.4 cm/33.3 cm
DRYERS PER 20'/40' CONTAINER	14/28	
DRYERS PER 48'/53' TRUCK	36/42	
GAS	VOLTAGE AVAILABLE	120V 1ø 2w 60 Hz
	APPROXIMATE NET WEIGHT	520 lb 236 kg
	APPROXIMATE SHIPPING WEIGHT	550 lb 249 kg
	AIRFLOW	450 cfm 12.74 cmm
	HEAT INPUT	72,000 BTU/hr 18,144 kcal/hr
	EXHAUST CONNECTION (DIAMETER)	8" 20.3 cm
	INLET PIPE CONNECTION	1/2" N.P.T. (Male)

Shaded areas are stated in metric equivalents.

MLG36 Specifications

MLG36



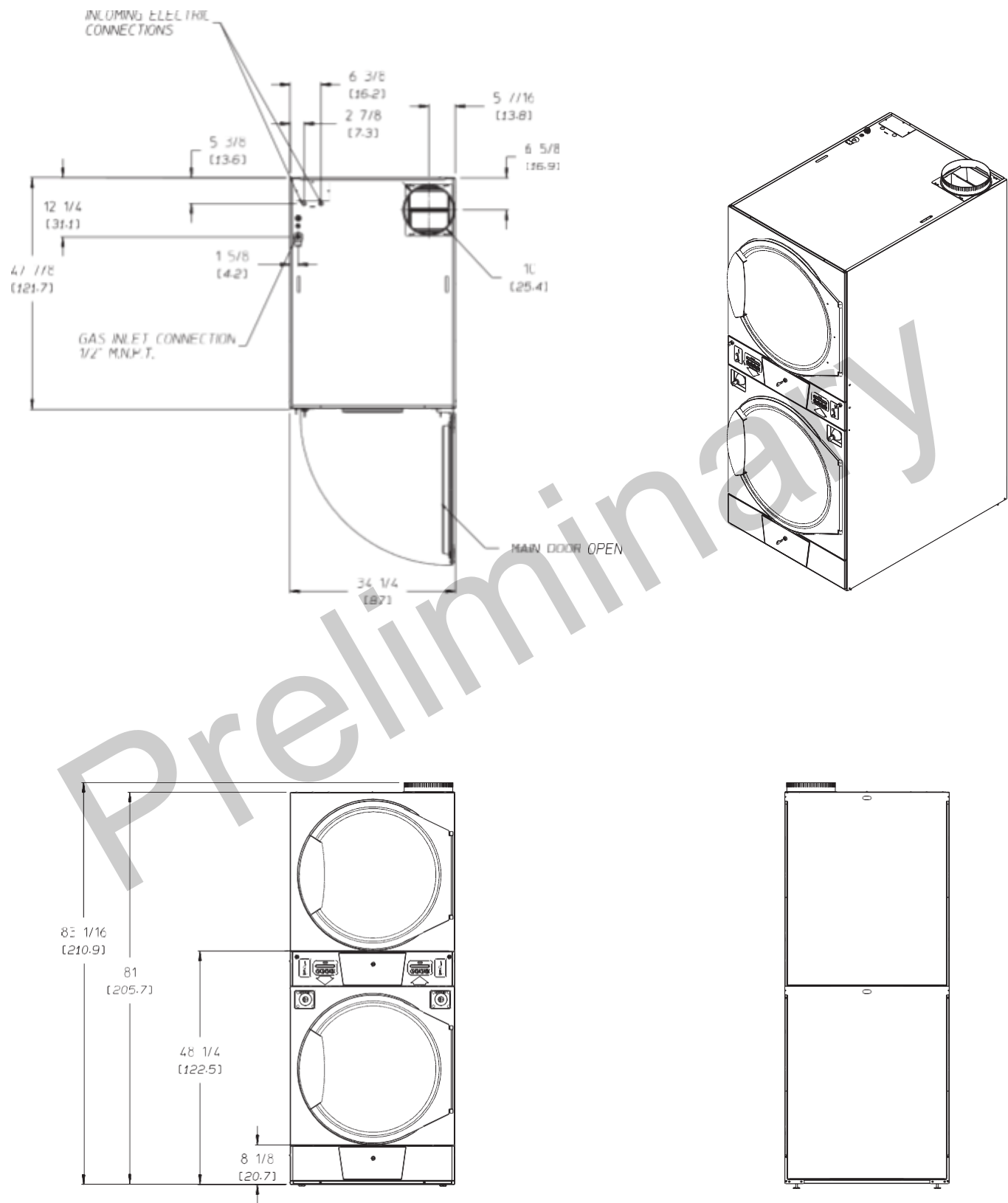
MLG46 Specifications

MAXIMUM CAPACITY (DRY WEIGHT)		45 lb	20.4 kg
TUMBLER DIAMETER		32 ³ / ₄ "	83.2 cm
TUMBLER DEPTH		30"	76.2 cm
TUMBLER VOLUME		14.6 ft ³	413.4 L
TUMBLER/DRIVE MOTOR		1/3 hp	0.25 kW
BLOWER/FAN MOTOR		1/2 hp	0.37 kW
CABINET WIDTH		34 ¹ / ₄ "	87.0 cm
CABINET DEPTH		47 ⁷ / ₈ "	121.7 cm
CABINET HEIGHT		81"	205.7 cm
DOOR OPENING (DIAMETER)		27"	68.58 cm
DOOR SILL HEIGHT		50.4" / 10.3	128 cm / 26.2 cm
DRYERS PER 20'/40' CONTAINER		10/21	
DRYERS PER 48'/53' TRUCK		25/28	
GAS	VOLTAGE AVAILABLE	120V 1ø 2w 60 Hz	
	APPROXIMATE NET WEIGHT	640 lb	290.0 kg
	APPROXIMATE SHIPPING WEIGHT	700 lb	318 kg
	AIRFLOW	525 cfm	14.9 cmm
	HEAT INPUT	81,000 BTU/hr	20,411 kcal/hr
	EXHAUST CONNECTION (DIAMETER)	10"	20.32 cm
	INLET PIPE CONNECTION	1/2" N.P.T. (male)	

Shaded areas are stated in metric equivalents.

MLG46 Specifications

MLG46



Installation Instructions

WARNING

Excessive Weight Hazard

Use two or more people and mechanical equipment to lift, move and install dryer.

Failure to do so can result in back or other injury.

Installation should be performed by qualified professional in accordance with local, state, and country codes. In the absence of such codes or ordinances the location must conform to applicable American National Standards: National Fuel Gas Code ANSI Z223.1/NFPA 54 and National Electric Code: ANSI/NFPA NO. 70 or in Canada, the installation must conform to applicable Canadian Standards: Natural Gas and Propane Installation Code CSA B149.1 and Canadian Electric Code CSA C22.1.

Tools Required

- Utility Knife to remove packaging.
- 1/2" Box wrench or 1/2" socket to remove pallet bolts.
- Pipe wrench for gas connections.
- TORX† T20 to remove back guard to access leveling feet.
- 1/4" socket or 1/4" open end wrench to adjust leveling feet.

Moving to Final Location

1. Move the dryer near the point of installation.
2. Use the Utility Knife to make a cut in the plastic film.
3. Remove all plastic wrap and corrugated shipping material.
4. Dispose of/recycle all packaging material.

Leveling Dryer

The dryer is equipped with 4 leveling legs, 1 at each corner of the base. For optimum performance the dryer should be level front-to-back and side-to-side.

Location Requirements

WARNING



Explosion Hazard

Keep flammable materials and vapors, such as gasoline, away from dryer.

Failure to do so can result in death, explosion, or fire.

IMPORTANT: The dryer must be installed on noncombustible floor only.

The dryer is for use in noncombustible locations.

Before installing the dryer, be sure the location conforms to local codes and ordinances. In the absence of such codes or ordinances the location must conform with National Fuel Gas Code ANSI Z223.1/NFPA 54, or in Canada, the installation must conform to applicable Canadian Standards: Natural Gas and Propane Installation Code CSA B149.1.

The operation of this dryer may affect the operation of other types of gas dryers, which take their air for safe combustion from the same room. If in doubt, consult the dryer manufacturer(s).

The dryer must be installed on a sound level floor capable of supporting its weight. Carpeting must be removed from the floor area that the dryer is to rest on.

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

Provisions for adequate air supply must be provided as noted in this manual (refer to Fresh Air Supply Requirements section).

Clearance provisions must be made from combustible construction as noted in this manual (refer to Dryer Enclosure Requirements section).

Provisions must be made for adequate clearances for servicing and for operation as noted in this manual (refer to Dryer Enclosure Requirements section).

The dryer must be installed with a proper exhaust duct connection to the outside as noted in this manual (refer to Exhaust Requirements section).

The dryer must be located in an area where correct exhaust venting can be achieved as noted in this manual (refer to Exhaust Requirements section).

IMPORTANT: The dryer should be located where a minimum amount of exhaust ducting will be necessary.

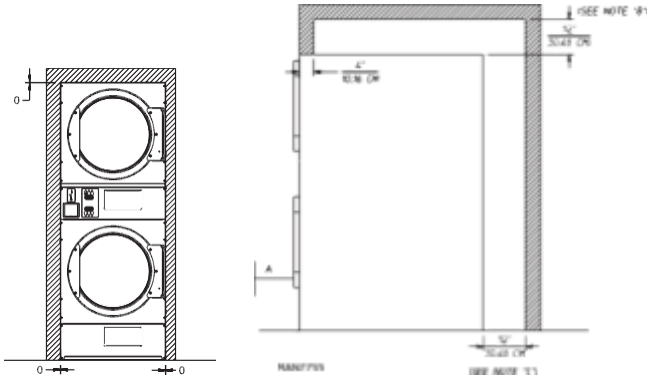
The dryer must be installed with adequate clearance for air openings into the combustion chamber.

IMPORTANT: The dryer must be installed in a location/environment, which the ambient temperature remains between 40°F (4.44°C) and 130°F (54.44°C).

†TORX is a trademark of Acument Intellectual Properties, LLC.

Dryer Enclosure Requirements

Bulkheads and partitions should be made of noncombustible material.



- A. The requirement to allow the loading door to open completely for the MLG36 is 30" (76.2 cm), MLG46 is 34" (86.4 cm).
- B. Dryer should be positioned a minimum of 12" (30.5 cm) away from the nearest obstruction. 24" (61.0 cm) is recommended for ease of installation, maintenance, and service. A minimum overhead clearance of 12" (30.5 cm) is required. 18" (45.7 cm) is recommended. The maximum thickness of any bulkhead or partition above the header is 4" (10.2 cm).

Fresh Air Supply Requirements

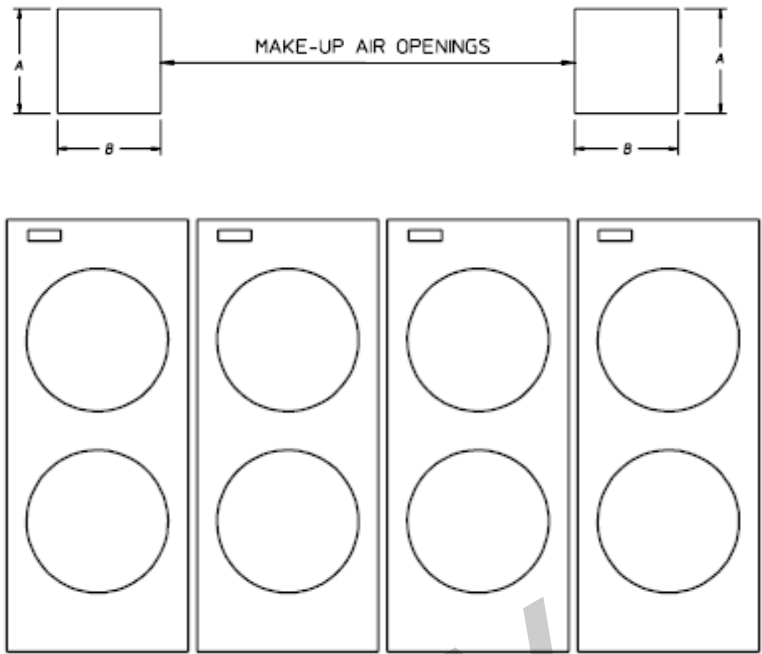
When the dryer is operating, it draws in room air, heats it, passes this air through the tumbler, and exhausts it out of the building. Therefore, the room air must be continually replenished from the outdoors. If the make-up air is inadequate, drying time and drying efficiency will be adversely affected. Ignition problems and sail switch "fluttering" problems may result, as well as premature motor failure from overheating. The dryer must be installed with provisions for adequate combustion and make-up air supply.

Air supply (make-up air) must be given careful consideration to ensure proper performance of each dryer. Fresh air ventilation openings shall not be blocked and/or sealed. As a general rule, an unrestricted air entrance from the outdoors of 144 in² (929.03 cm²) for each MLG36, and 162 in² (1045 cm²) for each MLG46. (Based on 1 in² [6.5 cm²] per 1,000 BTU [252 kcal].)

It is not necessary to have a separate make-up air opening for each dryer. Common make-up air openings are acceptable. However, they must be set up in such a manner that the make-up air is distributed equally to all the dryers.

To compensate for the use of registers or louvers used over the openings, this area must be increased by approximately 33%. Make-up air openings should not be located in an area directly near where exhaust vents exit the building.

Allowances must be made for remote or constricting passageways or where dryers are located at high altitudes or predominantly low pressure areas.



EXAMPLE: For a bank of four MLG36 dryers, two unrestricted openings measuring 12" by 24" (30.5 cm by 61 cm) are acceptable.

To compensate for the use of registers or louvers used over the openings, this area must be increased by approximately 33%. Make-up air openings should not be located in an area directly near where exhaust vents exit the building.

IMPORTANT: Make-up air must be free of dry cleaning solvent fumes. Make-up air that is contaminated by dry cleaning solvent fumes will result in irreparable damage to the motors and other dryer components.

NOTE: Component failure due to dry cleaning solvent fumes will void the warranty.

Exhaust Requirements

Exhaust ductwork should be designed and installed by a qualified professional. Improperly sized ductwork will create excessive back pressure, which results in slow drying, increased use of energy, and shutdown of the burner by the airflow (sail) switch, burner hi-limits, or lint chamber hi-limit protector thermostat. The dryer must be installed with a proper exhaust duct connection to the outside.

As per the National Fuel Gas Code, "Exhaust ducts for type 2 clothes dryers shall be constructed of sheet metal or other noncombustible material. Such ducts shall be equivalent in strength and corrosion resistance to ducts made of galvanized sheet steel not less than 26 gauge (0.0195" [0.50 mm]) thick."

The ductwork should be laid out in such a way that the ductwork travels as directly as possible to the outdoors with as few turns as possible. There should be a minimum 6" (15.2 cm) clearance between the back guard and the first bend in the ductwork for ease of servicing. Single or independent dryer venting is recommended. It is suggested that the use of 90° turns be avoided; use 30° and/or 45° bends instead. The radius of the elbows should preferably be 1 1/2 times the diameter of the duct. All ductwork should be smooth inside with no projections from sheet metal screws or other obstructions, which will collect lint.

WARNING



Fire Hazard

Use a heavy metal vent.

Do not use a plastic vent.

Do not use a metal foil vent.

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

When adding ducts, overlap the duct being connected.

All ductwork joints must be taped to prevent moisture and lint from escaping into the building. Inspection doors should be installed at strategic points in the exhaust ductwork for periodic inspection and cleaning of lint from the ductwork.

IMPORTANT: Exhaust back pressure measured by a manometer/magnehelic in the exhaust duct must be no less than 0 and must not exceed 0.6" WC (1.5 mb).

NOTE: It is recommended that exhaust or booster fans not be used in the exhaust ductwork system except where necessary to maintain exhaust back pressure (in the exhaust duct) between zero and 0.6" WC (1.5 mb). Where employed, booster fans must not activate the dryer airflow proving switch (sail switch) when the dryer is not in operation.

When the exhaust ductwork passes through a wall, ceiling, or roof made of combustible materials, the opening must be 2" (5.1 cm) larger than the duct (all the way around). The duct must be centered within this opening.

The ductwork for this dryer must be suitable for the appliance category in accordance with national installation regulations of the country of destination.

Outside Ductwork Protection

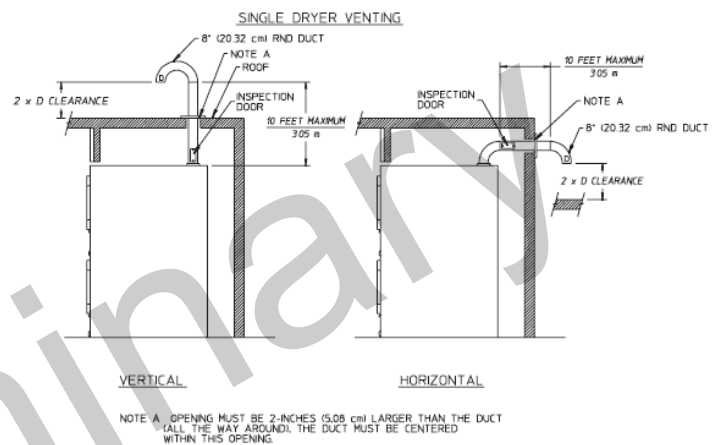
To protect the outside end of the horizontal ductwork from the weather, a 90° elbow bent downward should be installed where the exhaust exits the building. If the ductwork travels vertically up through the roof, it should be protected from the weather by using a 180° turn to point the opening downward. In either case, allow at least twice the diameter of the duct between the duct opening and the nearest obstruction (refer to the diagram).

IMPORTANT: Do not use screens, louvers, or caps on the outside opening of the exhaust ductwork.

Single Dryer Venting (MLG36, 8" duct)

IMPORTANT: For the MLG36, a minimum exhaust duct size of 8" (20.3 cm) must be used.

For a 8" (20.3 cm) horizontal run where a maximum of two elbows are used, the ductwork from the dryer outlet must not exceed 10 ft (3.0 m). Refer to the following illustration.



MLG36 ONLY

NOTE 1: When passing through combustible material the opening must be 2" (5.1 cm) larger than the duct (all the way around). The duct must be centered within this opening.

NOTE 2: Distance should be 2 times the diameter of the duct to the nearest obstruction.

If the length of the duct run or quantity of elbows used exceeds the above noted specifications, the cross-sectional area of the ductwork may need to be increased.

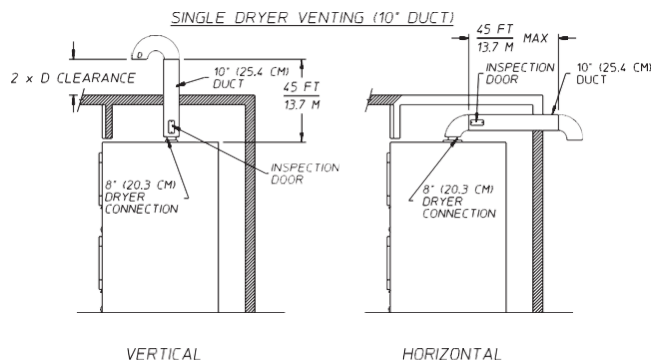
IMPORTANT: For extended ductwork runs, the cross section area of the ductwork can only be increased to an extent. When the ductwork approaches the maximum limits noted in this manual, a professional HVAC firm should be consulted for proper venting information.

Single Dryer Venting (MLG36, 10" duct)

IMPORTANT: For the MLG-30x2, a minimum exhaust duct size of 10" (25.4 cm) must be used.

For a 10" (25.4 cm) horizontal run where a maximum of one elbow is used, the ductwork from the dryer outlet must not exceed 45 ft (13.7 m). Refer to the following illustration.

MLG36 ONLY



NOTE 1: When passing through combustible material the opening must be 2" (5.1 cm) larger than the duct (all the way around). The duct must be centered within this opening.

NOTE 2: Distance should be 2 times the diameter of the duct to the nearest obstruction.

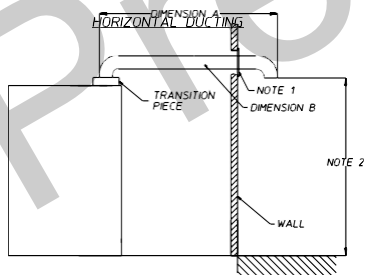
If the length of the duct run or quantity of elbows used exceeds the above noted specifications, the cross-sectional area of the ductwork may need to be increased.

IMPORTANT: For extended ductwork runs, the cross section area of the ductwork can only be increased to an extent. When the ductwork approaches the maximum limits noted in this manual, a professional HVAC firm should be consulted for proper venting information.

Single Dryer Venting (MLG46, 10" duct)

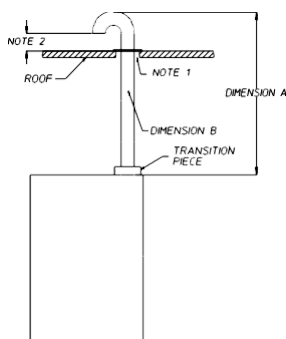
IMPORTANT: A minimum exhaust duct size of 10" (25.4 cm) must be used.

For a 10" (25.4 cm) horizontal or vertical run where a maximum of two elbows are used, the ductwork from the dryer outlet must not exceed 60 ft (18.3 m). Refer to the following illustration.



A = 60 ft (18.3 m)
B = 10" (25.4 cm)

VERTICAL DUCTING



NOTE 1: When passing through combustible material the opening must be 2" (5.1 cm) larger than the duct (all the way around). The duct must be centered within this opening.

NOTE 2: Distance should be 2 times the diameter of the duct to the nearest obstruction.

If the length of the duct run or quantity of elbows used exceeds the above noted specifications, the cross-sectional area of the ductwork may need to be increased.

IMPORTANT: For extended ductwork runs, the cross section area of the ductwork can only be increased to an extent. When the ductwork approaches the maximum limits noted in this manual, a professional HVAC firm should be consulted for proper venting information.

Multiple Dryer (Common) Venting

If it is not feasible to provide separate exhaust ducts for each dryer, ducts from individual dryers may be channeled into a "common main duct." The individual ducts should enter the bottom or side of the main duct at an angle not more than 45° in the direction of airflow. The main duct should be tapered, with the diameter increasing before each individual duct is added.

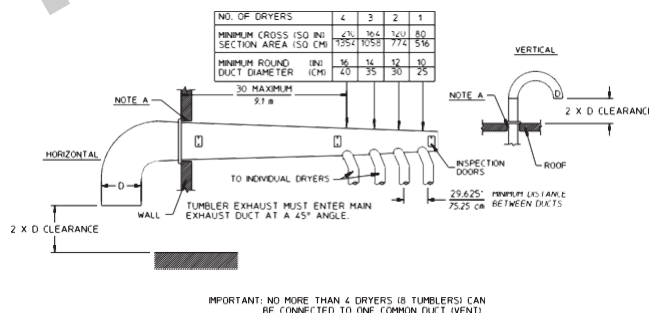
IMPORTANT: No more than four dryers should be connected to one main common duct.

The main duct may be any shape provided that the minimum cross-sectional area is maintained. The illustration below shows the minimum cross-sectional area for multiple dryer venting.

These figures must be increased if the main duct run from the last dryer to where it exhausts to the outdoors is unusually long MLG36 over 30' [9.1 m], MLG46 over 35' [10.7 m] or has numerous elbows (more than one) in it.

FORMULAS TO CALCULATE DUCTING CROSS SECTION AREAS				
CROSS SECTION AREA OF A ROUND DUCT = $0.785 \times D^2$ WHERE D = DIAMETER OF THE DUCT				
CROSS SECTION AREA OF A RECTANGULAR DUCT = $W \times H$ WHERE W = WIDTH AND H = HEIGHT				

MLG36 (10" DUCT)



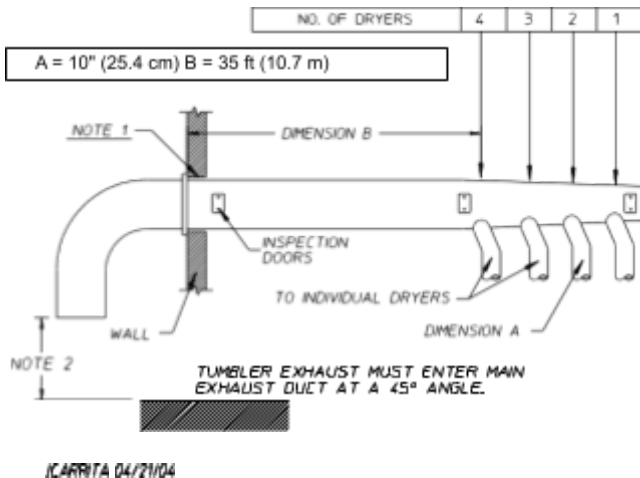
IMPORTANT: NO MORE THAN 4 DRYERS (8 TUMBLERS) CAN BE CONNECTED TO ONE COMMON DUCT (VENT).

FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA				
CROSS SECTIONAL AREA OF A ROUND DUCT = $0.785 (19.635 \text{ mm}) \times D^2$ WHERE D = DIAMETER OF THE DUCT.				
CROSS SECTIONAL AREA OF A RECTANGULAR DUCT = $W \times H$ WHERE W = WIDTH AND H = HEIGHT.				

NOTE A: OPENING MUST BE 2-INCHES (5.08 CM) LARGER THAN THE DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

MLG46 (10" DUCT)

NUMBER OF DRYERS		4	3	2	1
MINIMUM CROSS-SECTIONAL AREA	SQ IN	254	200	155	80
	SQ CM	1638	1290	999	516
MINIMUM ROUND DUCT DIAMETER	IN	18	16	14	10
	CM	45.72	40.64	35.56	25.4



NOTE 1: When passing through combustible material the opening must be 2" (5.1 cm) larger than the duct (all the way around). The duct must be centered within this opening.

NOTE 2: Distance should be 2 times the diameter of the duct to the nearest obstruction.

If the length of the duct run or quantity of elbows used exceeds the above noted specifications, the cross-sectional area of the ductwork may need to be increased.

IMPORTANT: For extended ductwork runs, the cross section area of the ductwork can only be increased to an extent. When the ductwork approaches the maximum limits noted in this manual, a professional HVAC firm should be consulted for proper venting information.

Electrical Information

Electrical Requirements

All electrical connections must be made by a properly licensed and competent electrician. This is to ensure that the electrical installation is adequate and conforms to local, state, and national regulations or codes of the country of destination. In the absence of such codes, all electrical connections, materials, and workmanship must conform to the applicable requirements of the National Electric Code ANSI/NFPA 70, or in Canada, Canadian Electric Code CSA C22.1.

IMPORTANT: Failure to comply with these codes or ordinances, and/or the requirements stipulated in this manual can result in personal injury or component failure.

NOTE: Component failure due to improper installation will void the warranty.

Each dryer should be connected to an independently protected branch circuit. The dryer must be connected with copper wire only. Do not use aluminum wire. The copper conductor wire/cable must be of proper ampacity and insulation in accordance with electric codes for making all service connections.

NOTE: The use of aluminum wire will void the warranty.

An individual ground circuit must be provided to each dryer, do not daisy chain.

Component failure due to improper voltage application will void the warranty.

The manufacturer reserves the right to make changes in specifications at any time without notice or obligation.

IMPORTANT: A separate protected circuit must be provided to each dryer.

It is necessary to have a power disconnect for each dryer. These disconnects must be located within 30 ft (9 m) of the dryer.

The dryer must be connected to the electric supply shown on the data label.

Electrical Service Specifications

MLG36

ELECTRICAL SERVICE SPECIFICATIONS					
IMPORTANT: 208 VAC AND 230/240 VAC ARE NOT THE SAME. When ordering, specify exact voltage.					
NOTES: A. When fuses are used they must be dual element, time delay, current limiting, class RK1 or RK5 ONLY. Calculate/determine correct fuse value, by applying either local and/or National Electrical Codes to listed appliance amp draw data. B. Circuit breakers are thermal-magnetic (industrial) motor curve type ONLY. For others, calculate/verify correct breaker size according to appliance amp draw rating and type of breaker used.					
SERVICE VOLTAGE	PHASE	WIRE SERVICE	APPROX. AMP DRAW 60 Hz	CIRCUIT BREAKER	MIN WIRE GAUGE
(PER POCKET)					
120	1Ø	2	7.3	15	14
200	1Ø	2	6.4	15	14
208	1Ø	2	6	15	14
220	1Ø	2	5.4	15	14
230	1Ø	2	5	15	14
240	1Ø	2	4.8	15	14
(PER DRYER)					
120	1Ø	2	14.6	20	12
200	1Ø	2	12.8	20	12
208	1Ø	2	12	15	14
220	1Ø	2	10.8	15	14
230	1Ø	2	10	15	14
240	1Ø	2	9.6	15	14

MLG46

SERVICE VOLTAGE	PHASE	WIRE SERVICE	APPROX. AMP DRAW	CIRCUIT BREAKER	MIN WIRE GAUGE
			60 Hz		
(PER POCKET)					
120	1Ø	2	7.8	15	14
208	1Ø	2	5	15	14
220	1Ø	2	5	15	14
230	1Ø	2	5	15	14
240	1Ø	2	5	15	14
(PER DRYER)					
120	1Ø	2	15.6	20	12
208	1Ø	2	40	15	14
220	1Ø	2	40	15	14
230	1Ø	2	40	15	14
240	1Ø	2	40	15	14

Grounding

A ground (earth) connection must be provided and installed in accordance with local, state, and national regulations or codes of the country of destination. In the absence of these codes, grounding must conform to applicable requirements of the National Electric Code ANSI/NFPA 70, or in Canada, Canadian Electric Code CSA C22.1. The ground connection may be to a proven earth ground at the location service panel.

Electrical Connections

A wiring diagram is located behind the control panel for connection data.

If local codes permit, power to the dryer can be made by the use of a flexible UL listed power cord/pigtail (wire size must conform to rating of dryer), or the dryer can be hard wired directly to the service breaker panel. In both cases, a strain relief must be installed where the wiring enters the dryer.



WARNING



Fire Hazard

Use appropriate gauge of copper wire (See chart in "Electrical Requirements" section).

Use a UL listed strain relief.

Disconnect power before making electrical connections.

Electrically ground appliance per installation instructions.

Securely tighten all connections.

Failure to do so can result in death, fire, or electrical shock.

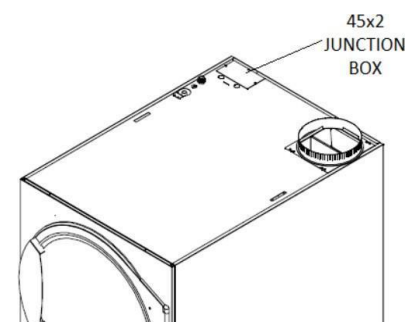
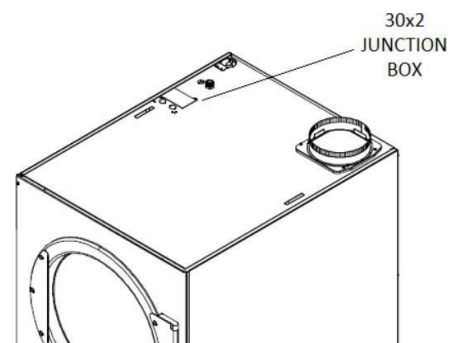
Single-Phase (1Ø) Gas Wiring Connections/Hookup

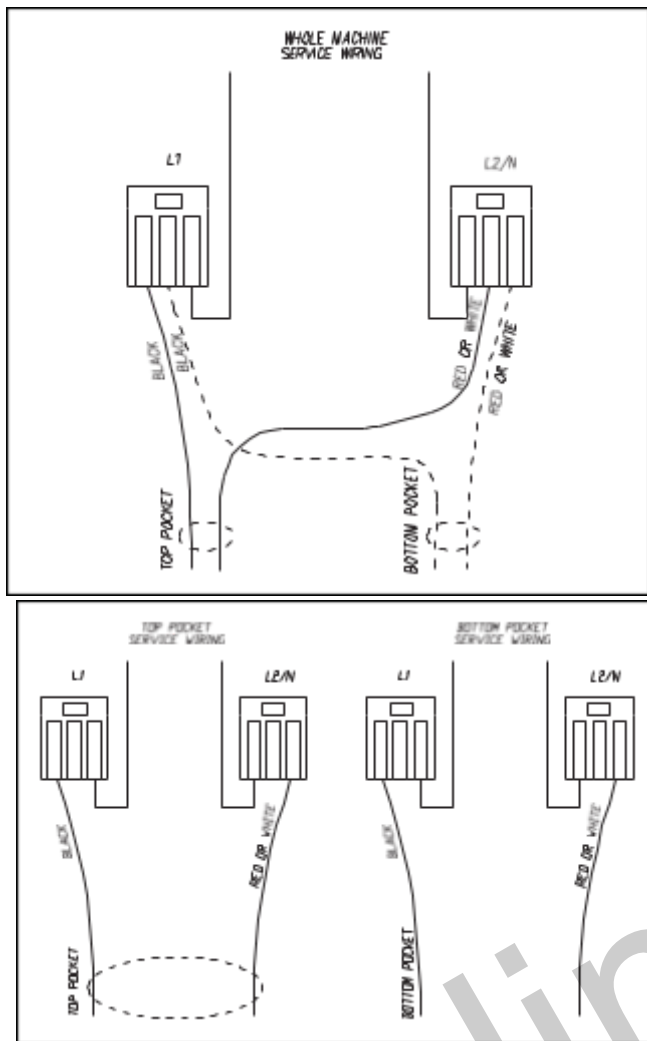
The electrical input connections on all single-phase (1Ø) gas dryers are made into the junction box located at the top left side area of the dryer.

Electrical Connections Leads		
Black + Positive (L1)	White - Neutral (N)	Green Ground (GND)

A ground lug and lever nuts will be supplied in the electrical box to make the hot, neutral, and ground connections to the machine.

IMPORTANT: A strain relief must be used where the input wiring enters the electric box.





Gas Information

⚠ WARNING



Explosion Hazard

Use a new CSA International approved gas supply line.

Install a shut-off valve.

Securely tighten all gas connections.

If connected to propane, have a qualified person make sure gas pressure does not exceed 14" (36 cm) water column.

Examples of a qualified person include:

licensed heating personnel,
authorized gas company personnel, and
authorized service personnel.

Failure to do so can result in death, explosion, or fire.

The dryer must be connected to the type of heat/gas indicated on the rating plate and pressure must be confirmed. If this information does not agree with the type of gas available, do

not operate the dryer. Contact the reseller who sold the dryer or contact the manufacturer.

It is your responsibility to have all plumbing connections, materials, and workmanship conform to local and state regulations or codes of the country of destination. In the absence of such codes, all plumbing connections, materials, and workmanship must conform to the applicable local requirements. In the USA this is the National Fuel Gas Code ANSI Z223.1/NFPA 54, or in Canada, Natural Gas and Propane Installation Code CSA B149.1.

It is important that gas pressure regulators meet applicable pressure requirements, and that gas meters be rated for the total amount of all the dryer BTU being supplied.

For ease of service, the individual gas supply line of each dryer must have its own manual shutoff valve.

The dryer must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure test of the gas supply system at test pressures equal to or less than 1/2 psig (35 mb).

The dryer and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (35 mb).

Failure to isolate or disconnect the dryer from supply as noted can cause irreparable damage to the gas valve, voiding the warranty.

NOTE: Undersized gas piping will result in ignition problems, slow drying, increased use of energy.

The input ratings shown on the rating plate are for elevations up to 2,000 ft (610 m), unless elevation requirements of over 2,000 ft (610 m) were specified at the time the dryer order was placed with the factory. The adjustment or conversion of dryers in the field for elevations over 2,000 ft (610 m) is made by changing each burner orifice. If this conversion is necessary, contact the reseller who sold the dryer or contact the manufacturer.

IMPORTANT: If connection to this appliance is made with a flexible hose, it must be suitable for the appliance category in accordance with national installation regulations of the country of destination, and if in doubt the installer must contact the supplier. The manufacturer of this appliance does not recommend the use of flexible gas supply line/hose. An external gas supply shutoff must be provided.

Pipe joint compounds that resist the action of natural, propane, and butane gases must be used on all tapered thread connections.

In the U.S.A.: An individual manual shutoff valve must be installed within 6 ft (1.8 m) of the dryer in accordance with the National Fuel Gas Code, ANSI Z223.1.

In Canada: An individual manual shutoff valve must be installed in accordance with the B149.1, Natural Gas and Propane Installation Code. It is recommended that an individual manual shutoff valve be installed within 6 ft (1.8 m) of the dryer.

Heat Input/Gas Consumption/Orifice (Injector) Data

GAS SPECIFICATIONS									
Model	Gas Type	Nominal Heating Value	Supply Pressure	Gross Heat Input		Orifice Size**		Orifice (Injector) Quantity	Burner Pressure
		BTU/ft ³	in WC	BTU/hr	kW	DMS	mm		in WC
MLG36	Natural	1,000	7.0-10.5	72,000	21.1	20	4.089	1	3.5
	*Propane	2,500	11.0-13.0	72,000	21.1	41	2.438	1	10.5
MLG46	Natural	1,000	7.0-10.5	81,000	23.7	38	2.578	1	3.5
	*Propane	2,500	11.0-13.0	81,000	23.7	1/16"(0.625")	1.587	1	10.5

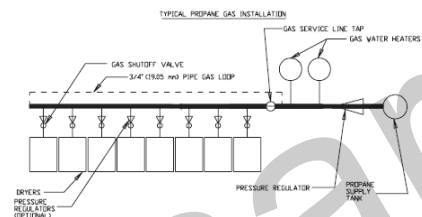
Shaded areas are stated in metric equivalents

*Gas valve's internal regulator disabled.

**Consult factory for elevations over 2,000 ft (610 m) for correct orifice size.

Piping/Connections

TYPICAL PROPANE GAS INSTALLATION



MLG36	MLG46
1/2"	1/2"

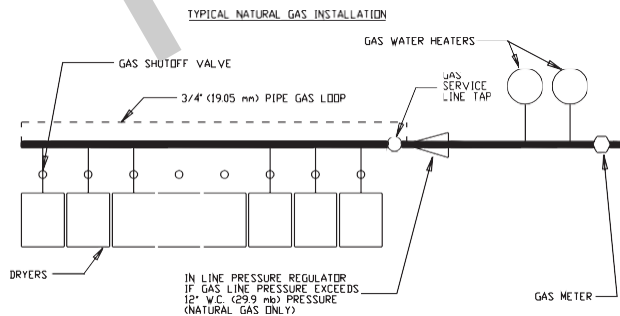
All connections are N.P.T. (Male)

There should be a minimum 6" (15.2 cm) clearance between the back guard and the first bend in the gas piping for ease of servicing. It is recommended that a gas shutoff valve be provided to the gas supply line of each dryer for ease in servicing.

The size of the main gas supply line (header) will vary depending on the distance this line travels from the gas meter or, in the case of propane gas, the supply tank, other gas-operated appliances on the same line, etc. Specific information regarding supply line size should be determined by the gas supplier.

NOTE: Undersized gas supply piping can create a low or inconsistent pressure, which will result in erratic operation of the burner ignition system.

TYPICAL NATURAL GAS INSTALLATION



Consistent gas pressure is essential at all gas connections. It is recommended that a 3/4" (19.0 mm) pipe gas loop be installed in the supply line servicing a bank of dryers. An in-line pressure regulator must be installed in the gas supply line (header) if the (natural) gas pressure exceeds 10.5" WC (26.15 mb) pressure.

A minimum 1/8" N.P.T. plugged tap, accessible for a pressure gauge connection, must be installed in the main gas supply line immediately upstream of the dryer.

Test all connections for leaks by brushing on a soapy water solution (liquid detergent works well).

Gas Pressure Test Procedure



1. Disconnect power to the dryer.
2. Turn off gas supply using the shutoff valve that supplies the dryer.
3. Locate the output pressure tap screw on the gas valve and unscrew 4 to 5 full turn.
4. Connect the airtight hose to pressure tap post. (Airtight hose will attach between pressure tap post and manometer.)
5. Connect opposite end of hose to manometer.
6. Turn on gas supply using the shutoff valve that supplies the dryer and reconnect the power.
7. Start the dryer in Heat Mode and wait for ignition.
8. Record the manometer reading. Check the reading against the Burner Pressure column in the Gas Specification chart on page 19. Measured value should be within 0.30" W.C. (0.75 mb) of that value. If not, see the next section on Gas Pressure Adjustment.
9. Once test is complete, disconnect power to the dryer.
10. Turn off gas supply using the shutoff valve that supplies the dryer.
11. Disconnect manometer.
12. Remove hose from pressure tap post. Tighten screw inside the pressure tap or install plug.

Gas Pressure Adjustment



IMPORTANT: When converting from one gas to another with a regulated gas conversion kit, the following procedures must be performed.

1. Disconnect electrical power to the dryer.
2. Turn off gas supply using the shutoff valve that supplies the dryer.
3. Remove the regulator cap with a screwdriver to gain access gas valve's internal regulator adjusting screw.
4. Use a small flat blade screwdriver to turn the plastic adjustment screw in the valve. Turn the screw clockwise to raise pressure and counterclockwise to lower pressure.

NOTE: Outlet pressure is measured with the burner in operation for all burner adjustment conditions. Therefore, once the necessary adjustments have been made, the dryer must be operated in a heating cycle to verify that the pressure is correct.

5. Turn on gas supply using the shutoff valve that supplies the dryer and reconnect the power.
6. Run the dryer and check the outlet pressure. Compare the reading to the value shown in Burner Pressure column of the Gas Specification chart on page 15. Measured value should be within 0.30" W.C. (0.75 mb) of that value. If the pressure is not correct, disconnect the power to the dryer and repeat steps 1 to 4. Do this as many times as necessary to achieve the correct burner pressure.
7. Once the adjustment of the valve is complete, the regulator cap must be replaced and sealed with, for example, paint to prevent tampering by the user.

LEAK CHECK

1. Be sure the gas supply is turned on.
2. Turn on dryer.
3. Brush or spray an approved noncorrosive leak-detection solution onto all connections and inspect for leaks indicated by growing bubbles.
4. If dryer was moved during testing, use the same method to check for leaks in the flexible gas supply line and fittings between the dryer and the gas supply pipe.
5. If any bubbles are present, turn off gas supply, tighten the leaking connection and retest for leaks.

Preparation for Operation/ Start-Up

The following items should be checked before attempting to operate the dryer:

- Read all "CAUTION," "WARNING," "IMPORTANT," and "INSTRUCTION" labels attached to the dryer. Read all instructions before using the dryer.
- Check incoming supply voltage to be sure that it is the same as indicated on the data label.
- Check to ensure that the dryer is connected to the type of heat/gas indicated on the dryer data label.
- Be sure that all gas shutoff valves are in the open position.
- Be sure all back panels (guards) and electric box covers are in place.
- Be sure the service doors are closed and securely in place.
- Be sure the lint door/drawer is securely in place.
- Rotate the tumbler (drum) by hand to be sure it moves freely.
- Check bolts, nuts, screws, terminals, and fittings for tightness and security.
- Check that the vent is connected to the dryer and is exhausted to the outdoors.

Preoperational Test

All dryers are thoroughly tested and inspected before leaving the factory. However, a preoperational test should be performed before the dryer is publicly used. It is possible that adjustments have changed in transit or due to marginal location (installation) conditions.

Turn on electric power to the dryer.

Refer to the Operating Instructions for starting your particular model dryer.

Open all shutoff valves.

When a gas dryer is first started (during initial start-up), it has a tendency not to ignite on the first ignition attempt. This is because the gas supply piping is filled with air, so it may take a few minutes for the air to be purged from the lines.

NOTE: During the purging period, check to be sure that all gas shutoff valves are open.

A gas pressure test should be taken at the gas valve pressure tap of each dryer to ensure that the water column pressure is correct and consistent. See the "Gas Pressure Test Procedure" section for instructions.

NOTE: Water column pressure requirements (measured at the pressure tap of the gas valve body) must be verified.

IMPORTANT: In most cases there is no regulator provided in a propane dryer. The water column pressure must be regulated at the source (propane tank), or an external regulator must be added to each dryer.

Tumbler Coating

The tumbler is treated with a protective coating. We suggest dampening old garments or cloth material with a solution of water and nonflammable mild detergent and tumbling them in the tumbler to remove this coating.

Dryer should be operated through one complete cycle to ensure that no further adjustments are necessary and that all components are functioning properly.

Microprocessor Programs/Selections

Each microprocessor controller (computer) has been preprogrammed by the factory with the most commonly used parameter (program) selections. If computer program changes are required, refer to the programming sections at the back of this manual.

Operating Instructions

⚠ WARNING



Explosion Hazard

Keep flammable materials and vapors, such as gasoline, away from dryer.

Do not dry anything that has ever had anything flammable on it (even after washing).

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

⚠ WARNING



Fire Hazard

No washer can completely remove oil.

Do not dry anything that has ever had any type of oil on it (including cooking oils).

Do not dry items containing foam, rubber, or plastic in this dryer.

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

IMPORTANT: For more detailed information regarding the microprocessor controller (computer), refer to the microprocessor programming sections at the back of this manual.

Coin Models

Microprocessor Controller (Computer)

When the microprocessor controller (computer) is in the ready state, the L.C.D. screen will display "READY" followed by the amount to start.

Insert coin(s). Once the correct "Amount to Start" has been inserted, the L.C.D. will display "SELECT TEMPERATURE".

Select temperature by pressing "HI", "MED", or "LO". The cycle will start and the L.C.D. will display the Dry Cycle selected and the remaining time.

The dryer will continue through the drying and cooling cycles, until the vended time has expired.

NOTE: To stop the dryer, open the main door. Continuation of the cycle will resume only after the door has been closed and any of the three temperature selection buttons is pressed.

Upon completion of the drying and cooling cycles, the tone (buzzer) will sound and the dryer will go into the Anti-Wrinkle Mode, if active, for up to 99 minutes, or until the main door or lint drawer has been opened.

IMPORTANT: For more detailed information regarding the microprocessor controller (computer) on your dryer, refer to the microprocessor user's manual included with the dryer.

Shutdown Instructions

If the dryer is to be shutdown (taken out of service) for a period of time, the following must be performed:

Disconnect power to the dryer either at the external disconnect switch or the circuit breaker.

Disconnect the gas supply: close external gas shutoff valve. Also close two internal gas shutoff valves.

If the dryer is to be removed from service or discarded, before doing so remove the door to the drying compartment.

Service/Parts Information

Service

Service must be performed by a qualified trained technician.

If service is required, contact the reseller from whom the equipment was purchased. If the reseller cannot be contacted or is unknown, contact the Service Department for a reseller in your area.

NOTE: When contacting the Service Department, be sure to give them the correct model number and serial number so that your inquiry is handled in an expeditious manner.

Parts

Purchase replacement parts from the reseller from whom you bought the equipment. If the reseller cannot be contacted, or if the contact is unknown, contact the Parts Department at **1-800-662-3587** for a reseller in your area.

NOTE: When ordering replacement parts from the reseller or the manufacturer, be sure to give them the correct model number and serial number so that your parts order can be processed in an expeditious manner.

Routine Maintenance



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

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

A program should be established for the inspection and cleaning of lint in the burner area, exhaust ductwork, and area around the back of the dryer. The frequency of inspection and cleaning can best be determined from experience at each location.

Exhaust duct outlet should be checked periodically for blockages, and if any found, removed.

Cleaning

A program and/or schedule should be established for periodic inspection, cleaning, and removal of lint from various areas of the dryer, as well as throughout the ductwork system. The frequency of cleaning can best be determined from experience at each location. Maximum operating efficiency is dependent upon proper airflow. The accumulation of lint can restrict this airflow.

NOTE: Suggested time intervals shown are for average usage, which is considered 6 to 8 operational (running) hours per day.

IMPORTANT: Be sure to reinstall all parts removed during cleaning.

Every 6 months, inspect the exhaust ducting and remove any lint buildup.

Suggested Cleaning Schedule Every Third or Fourth Load

Clean the lint drawer screen every third or fourth load. A clogged lint screen will cause poor dryer performance. Inspect the lint screen and replace if torn.

NOTE: The frequency of cleaning the lint screen can best be determined from experience at each location.

Weekly

Clean lint accumulation from the lint chamber, thermostat and microprocessor temperature sensor area. The thermostat and microprocessor temperature sensor area is located in the ductwork just above the lint screen. All of these areas are accessed by opening the lint drawer.

90 Days

Remove lint from around the tumbler, drive motor, and surrounding areas. The drive motor is reached through an access cover in the back of the dryer. For proper operation, be sure to replace the access cover.

Remove lint from the gas valve burner area with a dusting brush or vacuum cleaner attachment.

Clean any lint accumulation in and around both the drive motor casing openings.

NOTE: To prevent damage, avoid cleaning and/or touching ignitor/flame-probe assembly.

Every Six Months

Inspect and remove lint accumulation in customer furnished exhaust ductwork system and from dryer's internal exhaust ducting.

Do not obstruct the flow of combustion and ventilation air. Check customer furnished back draft dampers in the exhaust ductwork. Inspect and remove any lint accumulation, which can cause the damper to bind or stick.

A back draft damper that is sticking partially closed can result in slow drying and shutdown of heat circuit safety switches or thermostats.

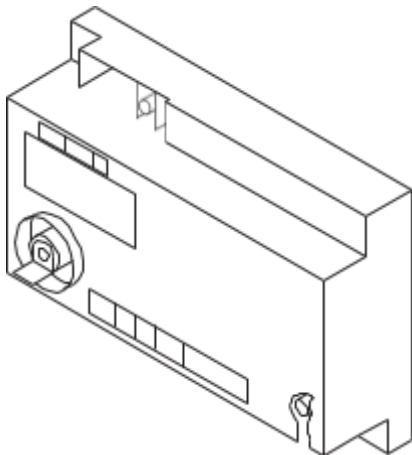
When cleaning the dryer cabinet(s), avoid using harsh abrasives. A product intended for the cleaning of appliances is recommended.

7 Days After Installation and Every 12 Months Thereafter

Inspect bolts, nuts, screws, setscrews, grounding connections and nonpermanent gas connections (unions, shutoff valves, and orifices). The belt should be examined. A cracked or seriously frayed belt should be replaced. Complete an operational check of controls and valves. Complete an operational check of all safety devices (lint drawer switch, door switches, sail switch, and hi-limit thermostats).

Adjustments

DSI Module



Theory of Operation: Start the drying cycle. When the gas burner ignites within the chosen trial for ignition time (8-seconds), the flame sensor detects gas burner flame and signals the DSI module to keep the gas valve open as long as there is a call for heat. The DSI module will “LOCKOUT” if the gas burner flame is not sensed at the end of the trial for ignition period. The trial for ignition period will be repeated for a total of three retries/trials (the initial try and two more retries/trials). If the flame is not sensed at the end of the third retry/trial (inter-purge period of 30 seconds), the DSI module will “LOCKOUT” (a red L.E.D. diagnostic indicator will flash). An unlit red L.E.D. diagnostic indicator indicates normal operation. A lit green L.E.D. diagnostic indicator indicates the dryer controller is calling for heat and that all interlocks have been satisfied.

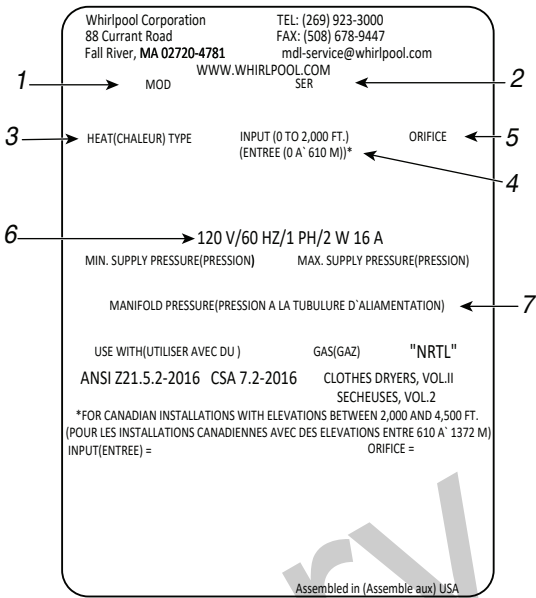
Manual Reset Hi-Limit Instructions

This dryer was manufactured with one hi-limit manual thermostat on the burner. The burner hi-limit thermostat is located in the front center of the dryer behind the control door.

To reset the burner high limit, disconnect the power, open the control door and support it with the prop rod. Remove the two screws that secure the left side of the burner heat deflector. Swing the heat deflector to the right and out of the way to gain access to the thermostat. Push the red button in the center to reset. Replace the heat deflector. Close the control door. Restore the power.

Data Label Information

Standard Label



When contacting ADC, the information on the data label is required to ensure proper service/parts assistance. The data label is located on the upper left side panel of the dryer, behind the control panel.

1. **Model Number** – This describes the style of dryer and type of heat (gas, electric, or steam).
2. **Serial Number** – Allows the manufacturer to gather information on your particular dryer.
3. **Type of Heat** – This describes the type of heat for your particular dryer, gas (either natural gas or propane gas).
4. **Heat Input (For Gas Dryers)** – This describes the heat input in British thermal units per hour (BTU/hr) or kilowatts (kW).
5. **Orifice Size (For Gas Dryers)** – Gives the number drill size used.
6. **Electric Service** – This describes the voltage and current rating for a particular model.
7. **Gas Manifold Pressure (For Gas Dryers)** – This describes the manifold pressure taken at the gas valve tap.

Coin Programming

Enter the programming mode by placing the switch on the Phase 7 board in the up position while no cycle is in progress. "Program Mode" will then be displayed.

Navigating Within The Programming Mode: "Med" key to enter a program location.

"Hi-Temp" / "Lo-Temp" keys increase / decrease program location.

"PAUSE" key rejects entry and moves to next program location.

Changing A Parameter Value:

With parameter value displayed pressing "Lo Temp" or "High Temp" changes the parameter value.

"Med" key must be pressed to accept a new parameter.



Typical Programming Example

Change a single coin acceptor from factory setting to yield 20 minutes for \$0.50, \$0.50 as the minimum amount to start, and no differential in regard to temperature key selection.

Settings: Time for Amt to Start (PL03, PL04, PL05) 20
Left Coin Denomination (PL06) \$ 0.25
Amount to Start (PL06) \$ 0.50

Clearing Coin Credit

With no cycle in progress and program switch down, hold "PAUSE" while pressing HI three times, LO twice, and MED once. "Clear Credit?" will appear. Press any key to complete.

Accessing and Clearing Coin Vault Total

Enter program mode by switching program switch (up) while no cycle is in progress.

Press HI – "Coin Vault total is \$XXX" will appear.

Press HI – "Clear Coin Vault Total?" will appear.

Press MED to clear this amount or PAUSE to leave as is.

Hot Keys

In the Coin Mode Hot Keys are enabled while in a cycle by placing the program switch in the up position.

In Free Mode Hot Keys are always enabled.

HI – Remaining credit – coin mode/remaining time – free mode.

MED – Temps – Exhaust/left, S.A.F.E./right, Axial/middle (Axial dryer).

LO – Tumbler RPM.

S.A.F.E. TEST: Switch to program mode. Press and hold the "PAUSE" key until prompted to press MED to open the water.

L.C.D. Operating Messages

When display reads "Out of Order" pressing LO displays one of the messages listed below:

MODEL FAULT – Wrong model selected at PL01/3rd position.

SAIL SWITCH CLOSED FAULT – Sail switch closed before starting.

SAIL SWITCH OPEN FAULT – Sail switch failed to close after starting.

BURNER HI-LIMIT FAULT – Oven thermostat switch has opened.

EXHAUST HI-LIMIT FAULT – Tumbler thermostat switch has opened.

BURNER CONTROL FAULT – No gas valve signal – Bad DSI unit.

IGNITION FAULT – No flame ignition detected thru all retries.

FLAME FAULT – Flame detected at ignition but failed later.

CLEAN LINT – Due to failure to clean out lint.

CHECK CONTROL BOARD FUSE #2 – Fuse 2 on Phase 7 board is open.

EXHAUST / AXIAL PROBE FAULT – Indicated probe has failed. ROTATION SENSOR FAULT – Rotation sensor or tumbler drive has failed.

EXHAUST HI-TEMP FAULT – Overheating condition has occurred.

BURNER PURGE FAULT – Gas return signal before heat output. When display reads "Out of Order" pressing and holding the "PAUSE" key for 3 seconds clears the out of order message provided the out of order condition has been corrected.