

# INSTALL & USE GUIDE 2025

## CIRCUL-AIR TUMBLE DRYERS

120 V DRYERS, 1PH North America  
208 & 240 V DRYERS, 3PH North America

For models:

CACTD-25-35

CACTD-55-65

CACTD-75-85

CACTD-115-125

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## SAFETY



## WARNING

### **CONTACT CIRCUL-AIR BEFORE SERVICING THIS MACHINE. DISCONNECT POWER AND SHUT-OFF GAS VALVE TO TUMBLE DRYER BEFORE SERVICING TO PREVENT FIRE, EXPLOSION OR INJURY**

1. THIS MACHINE MUST HAVE PROPER VENTILATION IN PLACE BEFORE OPERATION. FAILURE TO DO SO CAN RESULT IN INJURY OR PROPERTY DAMAGE. DO NOT INSTALL OR STORE THE TUMBLE DRYER WHERE IT WILL BE EXPOSED TO WATER AND/OR WEATHER.
2. THIS MACHINE MUST BE PROPERLY WIRED TO LOCAL, STATE / PROVINCE OR FEDERAL CODE BY A COMPETENT ELECTRICIAN. A LOCAL, INDEPENDANT DISCONNECT PROPERLY SIZED FOR THE EQUIPMENT IS RECOMMENDED FOR SAFE OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN INJURY OR PROPERTY DAMAGE.
3. THIS MACHINE MUST HAVE PROPER GAS HOOK-UP TO LOCAL, STATE / PROVINCE OR FEDERAL CODE BY A COMPETENT GAS TECHNICIAN. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN INJURY OR PROPERTY DAMAGE.
4. NEVER DRY EQUIPMENT WHICH HAS FLAMMABLE MATERIALS (OILS, FUEL ETC) IN THIS DRYER. KEEP FLAMMABLE SUBSTANCES AND VAPOURS AWAY FROM THIS APPLIANCE.
5. DO NOT ALLOW CHILDREN TO OPERATE OR PLAY IN OR AROUND THIS MACHINE.
6. WHEN YOU PERCEIVE A GAS ODOR, IMMEDIATELY SHUT OFF THE GAS SUPPLY AND VENTILATE THE ROOM. DO NOT POWER ON ELECTRICAL APPLIANCES AND DO NOT PULL ELECTRICAL SWITCHES. DO NOT USE MATCHES OR LIGHTERS. CONTACT THE GAS COMPANY.
7. DO NOT OPERATE THE TUMBLE DRYER IF IT IS SMOKING, GRINDING OR HAS MISSING OR BROKEN PARTS OR REMOVED GUARDS OR PANELS. DO NOT TAMPER WITH THE CONTROLS OR BYPASS ANY SAFETY DEVICES. TUMBLE

DRYER WILL NOT OPERATE WITH THE LOADING DOOR OPEN. DO NOT BYPASS THE DOOR SAFETY SWITCH TO PERMIT THE TUMBLE DRYER TO OPERATE WITH THE DOOR OPEN. THE TUMBLE DRYER WILL STOP ROTATING WHEN THE DOOR IS OPENED. DO NOT USE THE TUMBLE DRYER IF IT DOES NOT STOP ROTATING WHEN THE DOOR IS OPENED OR STARTS TUMBLING WITHOUT PRESSING THE START MECHANISM. REMOVE THE TUMBLE DRYER FROM USE AND CALL FOR SERVICE. TUMBLE DRYER WILL NOT OPERATE WITH LINT PANEL OPEN. DO NOT BYPASS LINT PANEL DOOR SAFETY SWITCH TO PERMIT THE TUMBLE DRYER TO OPERATE WITH THE LINT PANEL DOOR OPEN. BE SURE TO EMPTY LINT PANEL BETWEEN USES.

8. USE TUMBLE DRYER ONLY FOR ITS INTENDED PURPOSE AND DRYING FABRICS. ALWAYS FOLLOW THE FABRIC CARE INSTRUCTIONS SUPPLIED BY THE TEXTILE MANUFACTURER.

***Instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Observe and be aware of other labels and precautions that are located on the machine. They are intended to provide instruction for safe use of the machine. Common sense, caution and care must be exercised when installing, maintaining, or operating the tumble dryer.***

# MACHINE SPECIFICATIONS:

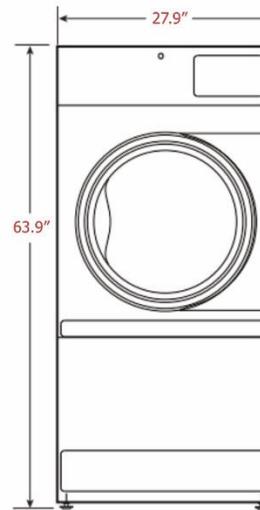
## CACTD-25-35 TURNOUT GEAR TUMBLE DRYER

ARCHITECTURAL/MECHANICAL  
PRODUCT SPECIFICATIONS

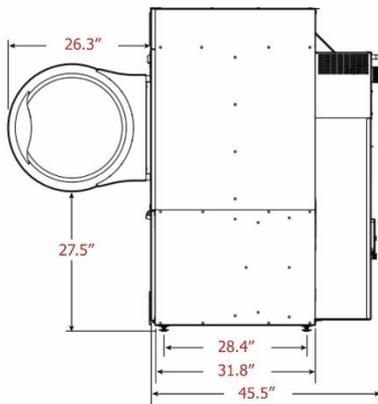
Capacity (lbs/pieces)	25/6 to 35/8
Door Diameter (in)	22.7
Door to Floor (in)	27.5
Drum Depth (in)	30
Drum Volume (ft <sup>3</sup> )	9.6
Electrical Configuration (v/phase/hz/wire/amp)	120/1/50-60/1W+N+G/15
Gas Connection (in)	½ NPT
Exhaust (in)	6
Max Airflow (cfm)	500
Dimensions (wxdxh in inches)	27.9x45.5x63.9
Weight (lbs)	340

\*\*Specifications are subject to change without notice or obligation. Contact Circul-Air Corp for dimensions not shown or for clarification.

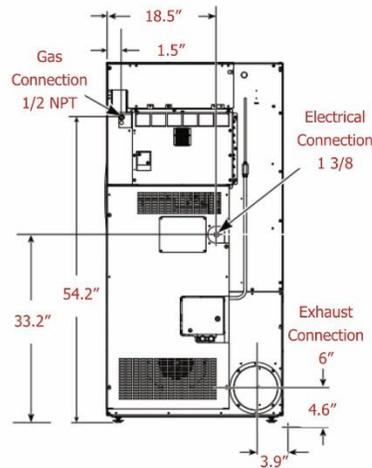
FRONT VIEW



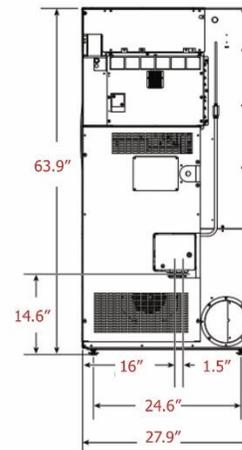
SIDE VIEW



BACK VIEW 1



BACK VIEW 2



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# CACTD-55-65

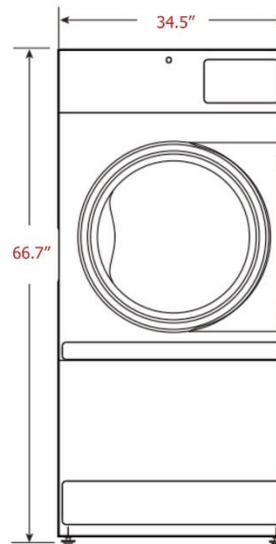
## TURNOUT GEAR TUMBLE DRYER

### ARCHITECTURAL/MECHANICAL PRODUCT SPECIFICATIONS

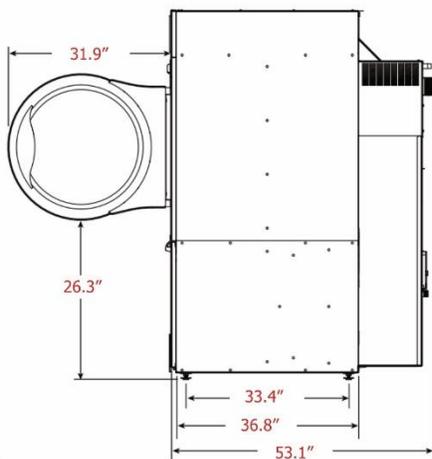
Capacity (lbs/pieces)	55/13 to 65/16
Door Diameter (in)	26.9
Door to Floor (in)	26.3
Drum Depth (in)	35
Drum Volume (ft <sup>3</sup> )	17.3
Electrical Configuration (v/phase/hz/wire/amp)	120/1/50-60/1W+N+G/15
Gas Inlet (in)	1/2 NPT
Exhaust (in)	8
Max Airflow (cfm)	700
Dimensions (wxdxh in inches)	34.5x53.1x66.7
Weight (lbs)	440

\*\*Specifications are subject to change without notice or obligation. Contact Circul-Air Corp for dimensions not shown or for clarification.

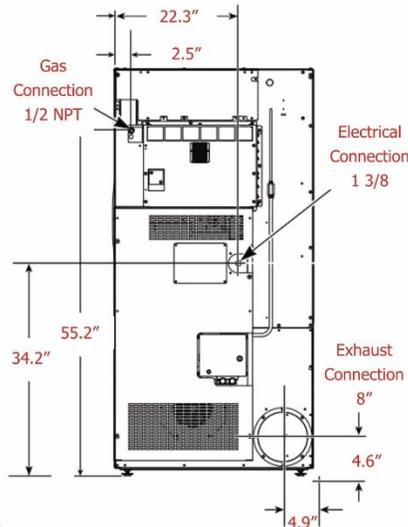
**FRONT VIEW**



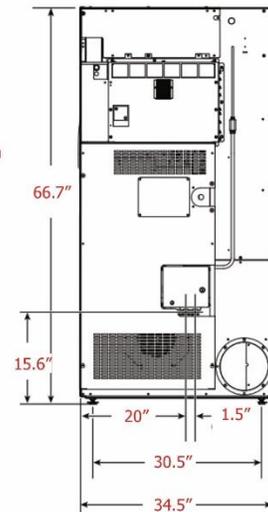
**SIDE VIEW**



**BACK VIEW 1**



**BACK VIEW 2**



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# CACTD-75-85

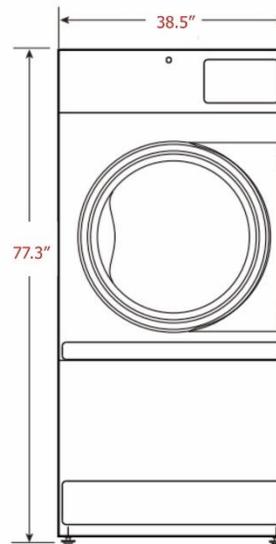
## TURNOUT GEAR TUMBLE DRYER

### ARCHITECTURAL/MECHANICAL PRODUCT SPECIFICATIONS

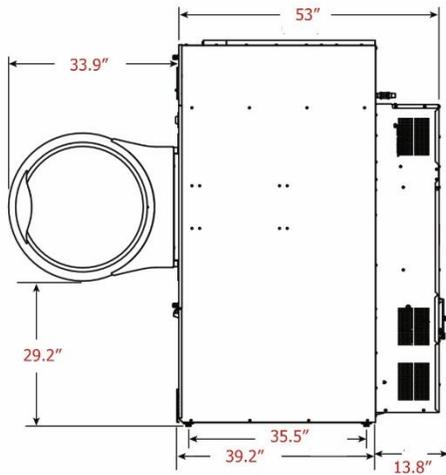
Capacity (lbs/pieces)	75/18 to 85/20
Door Diameter (in)	27
Door to Floor (in)	29.2
Drum Depth (in)	36
Drum Volume (ft <sup>3</sup> )	22.4
Electrical Configuration (v/phase/hz/wire/amp)	120/1/50-60/1W+N+G/15
Gas Inlet (in)	1/2 NPT
Exhaust	8
Max Airflow (cfm)	800
Dimensions (wxdxh in inches)	38.5x53x77.3
Weight (lbs)	730

\*\*Specifications are subject to change without notice or obligation. Contact Circul-Air Corp for dimensions not shown or for clarification.

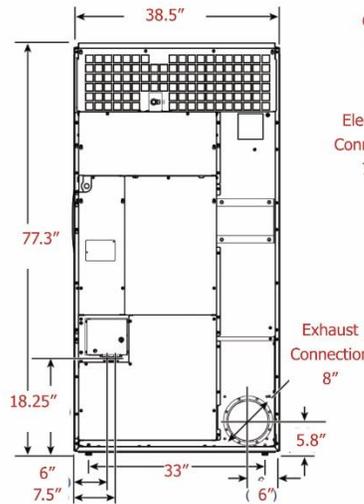
**FRONT VIEW**



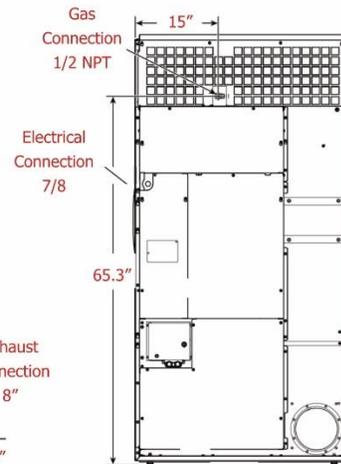
**SIDE VIEW**



**BACK VIEW 1**



**BACK VIEW 2**



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# CACTD-115-125

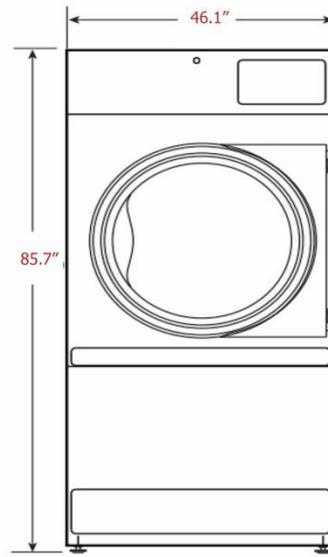
## TURNOUT GEAR TUMBLE DRYER

### ARCHITECTURAL/MECHANICAL PRODUCT SPECIFICATIONS

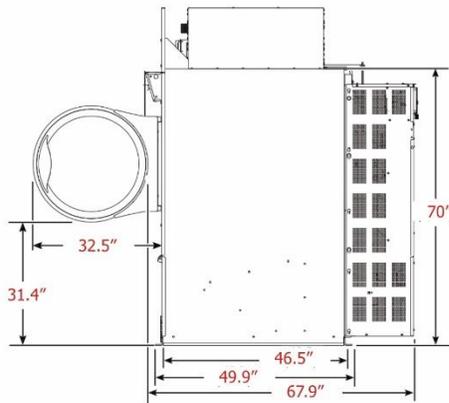
Capacity (lbs/pieces)	115/21 to 125/25
Door Diameter (in)	27
Door to Floor (in)	31.4
Drum Depth (in)	41
Drum Volume (ft <sup>3</sup> )	36.1
Electrical Configuration	208-240/3/50-60/3W+N+G/15
Gas Inlet (in)	1 NPT
Exhaust (in)	10
Max Airflow (cfm)	1400
Dimensions (wxdxh in inches)	46.1X67.9X85.7
Weight (lbs)	1250

\*\*Specifications are subject to change without notice or obligation. Contact Circul-Air Corp for dimensions not shown or for clarification.

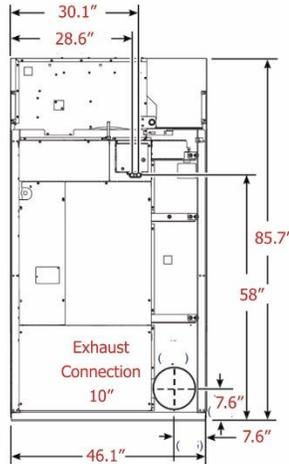
**FRONT VIEW**



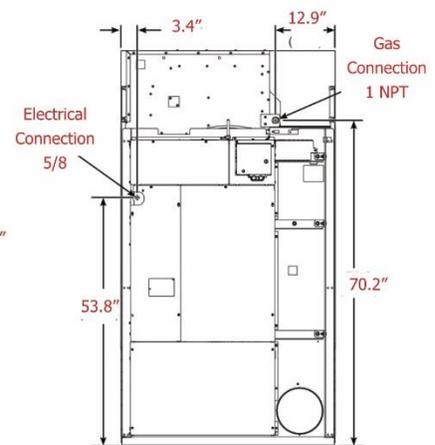
**SIDE VIEW**



**BACK VIEW 1**



**BACK VIEW 2**



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# INSTALLATION:

Installation must conform with local codes or, in the absence of local codes, with:

In the U.S.A., installation must conform to the latest edition of the American National Standard Z223.1/NFPA 54 “National Fuel Gas Code” and Standard ANSL/NFPA 70 “National Electric Code.”

In Canada, installation must comply with Standards CAN/CSA-B149.1 Natural Gas and Propane Installation Code and CSA C22.1, latest edition, Canadian Electric Code, Part I.

In Australia and New Zealand, installation must comply with the Gas Installations Standard AS/NZS 5601 Part 1: General Installations.

In Europe, before installation, check that the local distribution conditions, nature of gas and pressure, and the adjustment of the appliance are compatible.

This equipment has been designed and certified to comply with IEC/EN 60335 electrical safety standards for tumble dryers.



Read all instructions before using tumble dryer.

**IMPORTANT: If it is unavoidable that fabrics that contain vegetable or cooking oil or have been contaminated by hair care products be placed in a tumble dryer, they should first be washed in hot water with extra detergent. This will reduce, but not eliminate, the hazard.**

	<b>WARNING</b>
<p><b>FOR YOUR SAFETY, the information in this manual must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or death.</b></p>	
W033	

	<b>DANGER</b>
<p><b>Electric shock hazard will result in death or serious injury. Disconnect all electric power to appliance and accessories and wait five (5) minutes before servicing.</b></p>	
W925	

	<b>WARNING</b>
<ul style="list-style-type: none"> <li>• <b>Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.</b></li> <li>• <b>WHAT TO DO IF YOU SMELL GAS:</b> <ul style="list-style-type: none"> <li>• <b>Do not try to light any appliance.</b></li> <li>• <b>Do not touch any electrical switch; do not use any phone in your building.</b></li> <li>• <b>Clear the room, building or area of all occupants.</b></li> <li>• <b>Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.</b></li> <li>• <b>If you cannot reach your gas supplier, call the fire department.</b></li> </ul> </li> <li>• <b>Installation and service must be performed by a qualified installer, service agency or the gas supplier.</b></li> </ul>	
W052	

**IMPORTANT:** Information must be obtained from a local gas supplier on instructions to be followed if the user smells gas. These instructions must be posted in a prominent location. Step-by-step instructions of the above safety information must be posted in a prominent location near the tumble dryer for customer use.

**IMPORTANT:** Post the following statement 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.

**IMPORTANT:** The installer must fully test the tumble dryer after installation and demonstrate to the owner how to operate the machine.

**IMPORTANT:** The machine shall only be installed in a room separated from inhabited rooms, incorporating appropriate ventilation specified in the National Installation Regulations.

**IMPORTANT:** The tumble dryer is not to be used if industrial chemicals have been used for cleaning.

	<b>WARNING</b>
<p>To reduce the risk of electric shock, fire, explosion, serious injury or death:</p> <ul style="list-style-type: none"> <li>• Disconnect electric power to the tumble dryer before servicing.</li> <li>• Close gas shut-off valve to gas tumble dryer before servicing.</li> <li>• Close steam valve to steam tumble dryer before servicing.</li> <li>• Never start the tumble dryer with any guards/panels removed.</li> <li>• Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumble dryer is properly grounded.</li> </ul>	
W002R1	

	<b>WARNING</b>
<ul style="list-style-type: none"> <li>• Installation of unit must be performed by a qualified installer.</li> <li>• Install tumble dryer according to manufacturer's instructions and local codes.</li> <li>• <b>DO NOT</b> install a tumble dryer with flexible plastic venting materials. If flexible metal (foil type) duct is installed, it must be of a specific type identified by the appliance manufacturer as suitable for use with tumble dryer. Refer to section on connecting exhaust system. Flexible venting materials are known to collapse, be easily crushed, and trap lint. These conditions will obstruct tumble dryer airflow and increase the risk of fire.</li> </ul>	
W752R1	

	<b>CAUTION</b>
<p><b>TO AVOID THE RISK OF FIRE THIS DRYER MUST BE EXHAUSTED OUTDOORS.</b></p>	
W928	

	<b>WARNING</b>
<p>To reduce the risk of serious injury: Avoid contact with hot surfaces.</p>	
W927	

	<b>WARNING</b>
<p>Electrical shock hazard can cause death or serious injury. To reduce the risk of electric shock, disconnect all electric power to appliance and accessories before servicing.</p>	
W929	

	<b>WARNING</b>
<p>Moving parts hazard can cause serious injury. Disconnect electric power to unit before servicing. Unexpected start of machinery will occur if the units equipped with the extended tumble feature.</p>	
W937	

	<b>WARNING</b>
<p>Lint compartment must be cleaned daily</p> <p>To avoid the risk of fire:</p> <ul style="list-style-type: none"> <li>• Use for drying water washed fabrics only.</li> <li>• <b>DO NOT</b> dry articles containing foam rubber, plastic, or similarly textured rubber like materials.</li> <li>• <b>DO NOT</b> put articles soiled with cooking oil in dryer as cooking oil may not be removed during washing. Due to the remaining oil the fabric may catch on fire by itself.</li> <li>• <b>DO NOT</b> put articles soiled with flammable liquids or flammable cleaning solvents in dryer.</li> </ul>	
W930	

	<b>CAUTION</b>
<ul style="list-style-type: none"> <li>• Risk of fire, a clothes dryer produces combustible lint. Exhaust outdoors. Care should be taken to prevent the accumulation of lint around the exhaust opening and in the surrounding area.</li> <li>• <b>DO NOT</b> reach into the dryer until all moving parts have stopped.</li> <li>• <b>DO NOT</b> let children play on or in the dryer.</li> </ul>	
W931	

In Australia and New Zealand:

	<b>WARNING</b>
<ul style="list-style-type: none"><li>• <b>DO NOT</b> operate this appliance before reading the instruction booklet.</li><li>• <b>DO NOT</b> place articles on or against this appliance.</li><li>• <b>DO NOT</b> store chemicals or flammable materials or spray aerosols near this appliance.</li><li>• <b>DO NOT</b> operate with panels, covers or guards removed from this appliance.</li><li>• <b>DO NOT</b> load materials containing flammable solvents into this appliance.</li><li>• <b>If repeated ignition reset is required, the dryer should not be used and a service call booked.</b></li></ul>	
 <b>Risk of fire/flammable material.</b>	
<small>W026</small>	

The following information applies to the state of Massachusetts, USA.

- This appliance can only be installed by a Massachusetts licensed plumber or gas fitter.
- This appliance must be installed with a 36 inch [91 cm] long flexible gas connector.
- A “T-Handle” type gas shut-off valve must be installed in the gas supply line to this appliance.
- This appliance must not be installed in a bedroom or bathroom.

### Models with Wireless Board Installed

This device is granted for use in Mobile only configurations in which the antennas used for this transmitter must be installed to provide a separation distance of at least 20cm from all person and not be co-located with any other transmitters except in accordance with FCC and Industry Canada multi-transmitter product procedures.



# Safety Information

## Explanation of Safety Messages

Precautionary statements (“DANGER,” “WARNING,” and “CAUTION”), followed by specific instructions, are found in this manual and on machine decals. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

	<b>DANGER</b>
Indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.	

	<b>WARNING</b>
Indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.	

	<b>CAUTION</b>
Indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.	

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

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

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

## Important Safety Instructions

	<b>WARNING</b>
To reduce the risk of fire, electric shock, serious injury or death to persons when using your tumble dryer, follow these basic precautions.	
W776R1	

### Save These Instructions

- Read all instructions before using the tumble dryer.

- Install the tumble dryer according to the INSTALLATION instructions. Refer to the EARTHING (grounding) instructions for the proper earthing (grounding) of the tumble dryer. All connections for electrical power, earthing (grounding) and gas supply must comply with local codes and be made by licensed personnel when required. It is recommended that the machine be installed by qualified technicians.
- Do not install or store the tumble dryer where it will be exposed to water and/or weather. The tumble dryer cannot be used in a closed room where the air supply is insufficient. If necessary, ventilation grids must be installed in the doors or the windows.
- This tumble dryer must not be activated without lint screen filter.
- When you perceive a gas odor, immediately shut off the gas supply and ventilate the room. Do not power on electrical appliances and do not pull electrical switches. Do not use matches or lighters. Do not use a phone in the building. Warn the installer, and if so desired, the gas company, as soon as possible.
- To avoid fire and explosion, keep surrounding areas free of flammable and combustible products. Regularly clean the cylinder and exhaust tube should be cleaned periodically by competent maintenance personnel. Daily remove debris from lint screen filter and inside of filter compartment.
- Do not use or store flammable materials near this appliance.
- Do not place into tumble dryer articles that have been previously cleaned in, washed in, soaked in or spotted with gasoline or machine oils, vegetable or cooking oils, cleaning waxes or chemicals, dry-cleaning solvents, thinner or other flammable or explosive substances as they give off vapors that could ignite, explode or cause fabric to catch on fire by itself.
- Do not spray aerosols in the vicinity of this appliance while it is in operation.
- Items such as foam rubber (latex foam), shower caps, waterproof textiles, rubber backed articles and clothes or pillows filled with foam rubber pads should not be dried in the tumble dryer. Do not use the appliance to dry materials with a low melting temperature (PVC, rubber, etc.).
- Do not tumble fiberglass curtains and draperies unless the label says it can be done. If they are dried, wipe out the cylinder with a damp cloth to remove particles of fiberglass.
- Do not allow children to play on or in the dryer. Close supervision of children is necessary when the dryer is used near children. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. This is a safety rule for all appliances.
- Cleaning and user maintenance shall not be made by children without supervision.

- Children less than three years should be kept away unless continuously supervised.
- Do not reach into the tumble dryer if the cylinder is revolving.
- Use tumble dryer only for its intended purpose, drying fabrics. Always follow the fabric care instructions supplied by the textile manufacturer and only use the dryer to dry textiles that have been washed in water. Only insert spin-dried linen in the dryer to avoid damage to dryer.
- Always read and follow manufacturer's instructions on packages of laundry and cleaning aids. Follow all warnings or precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times (preferably in a locked cabinet).
- Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- Remove laundry immediately after tumble dryer stops.
- DO NOT operate the tumble dryer if it is smoking, grinding or has missing or broken parts or removed guards or panels. DO NOT tamper with the controls or bypass any safety devices.
- Tumble dryer will not operate with the loading door open. DO NOT bypass the door safety switch to permit the tumble dryer to operate with the door open. The tumble dryer will stop rotating when the door is opened. Do not use the tumble dryer if it does not stop rotating when the door is opened or starts tumbling without pressing the START mechanism. Remove the tumble dryer from use and call for service.
- Tumble dryer will not operate with lint panel open. DO NOT bypass lint panel door safety switch to permit the tumble dryer to operate with the lint panel door open.
- Do not alter this tumble dryer from factory construction except as otherwise described in the technical instructions.
- Always clean the lint filter daily. Keep area around the exhaust opening and adjacent surrounding area free from the accumulation of lint, dust and dirt. The interior of the tumble dryer and the exhaust duct should be cleaned periodically by qualified service personnel.
- Solvent vapors from dry-cleaning machines create acids when drawn through the heater of the drying unit. These acids are corrosive to the tumble dryer as well as the laundry load being dried. Be sure make-up air is free of solvent vapors.
- At the end of each working day, close off all main supplies of gas, steam and electricity.

**IMPORTANT: For fire suppression equipped tumble dryers, electricity and water should NOT be turned off.**

- Do not repair or replace any part of the tumble dryer, or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out. ALWAYS disconnect and lockout the electrical power to the tumble dryer before servicing. Disconnect power by shutting off appropriate breaker or fuse.

- Activation of the emergency stop switch stops all tumble dryer control circuit functions, but DOES NOT remove all electrical power from tumble dryer.
- Exhaust ductwork should be examined and cleaned annually after installation.
- Before the tumble dryer is removed from service or discarded, remove the door to the drying compartment and the door to the lint compartment.
- Failure to install, maintain, and/or operate this tumble dryer according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.

**NOTE: The WARNINGS and IMPORTANT SAFETY INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Observe and be aware of other labels and precautions that are located on the machine. They are intended to provide instruction for safe use of the machine. Common sense, caution and care must be exercised when installing, maintaining, or operating the tumble dryer.**

Always contact your dealer, distributor, service agent or the manufacturer about any problems or conditions you do not understand.

# Installation

## Pre-Installation Inspection

Upon delivery, visually inspect the crate, carton and parts for any visible shipping damage. If the crate, carton, or cover is damaged or signs of possible damage are evident, have the carrier note the condition on the shipping papers before the shipping receipt is signed, or advise the carrier of the condition as soon as it is discovered.

Remove the crate and protective cover as soon as possible and check the items listed on the packing list. Advise the carrier of any damaged or missing articles as soon as possible. A written claim should be filed with the carrier immediately if articles are damaged or missing.

**IMPORTANT: Remove the yellow shipping wire tie securing the airflow switch.**

**IMPORTANT: Warranty is void unless tumble dryer is installed according to instructions in this manual. Installation should comply with minimum specifications and requirements detailed in this manual and applicable local gas fitting regulations, municipal building codes, water supply regulations, electrical wiring regulations, and any other relevant statutory regulations. Due to varied requirements, applicable local codes should be thoroughly understood and all pre-installation work arranged for accordingly.**

Materials Required (Obtain Locally)	
All Models	Fused disconnect switch or circuit breaker on 1 Phase models. Circuit breaker on 3 Phase models.
Gas Models	One gas shut-off valve for gas service line to each tumble dryer.

*Table continues...*

Materials Required (Obtain Locally)	
Steam Models	One steam shut-off valve for steam service line to be connected upstream of solenoid steam valve.  Two steam shut-off valves for each condensate return line.  Flexible steam hoses with a 125 psig [pounds per square inch gauge] [862 kPa] working pressure for connecting steam coils. Refer to <i>Figure 22</i> for sizing and connection configurations.  Two steam traps for steam coil outlets to condensate return line.  Optional – Two vacuum breakers for condensate return lines.

**IMPORTANT: 3 Phase Only – Each tumble dryer must be connected to its own individual branch circuit breaker, not fuses, to avoid the possibility of “single phasing” and causing premature failure of the motor(s).**

## Location Requirements

The tumble dryer must be installed on a level floor. Floor covering materials such as carpeting or tile should be removed.

To assure compliance, consult local building code requirements. The tumble dryer must not be installed or stored in area where it will be exposed to water and/or weather.

**IMPORTANT: DO NOT block the airflow at the rear of the tumble dryer with laundry or other articles. Doing so would prevent adequate air supply to the combustion chamber of the tumble dryer.**

A typical tumble dryer enclosure is shown in *Figure 2*.

**IMPORTANT: Install tumble dryers with sufficient clearance for servicing and operation, refer to *Figure 2*.**

**IMPORTANT: The dryer must not be installed behind a lockable door, a sliding door or a door with a hinge on the opposite side to that of the tumble dryer, in such a way that a full opening of the tumble dryer door is restricted.**

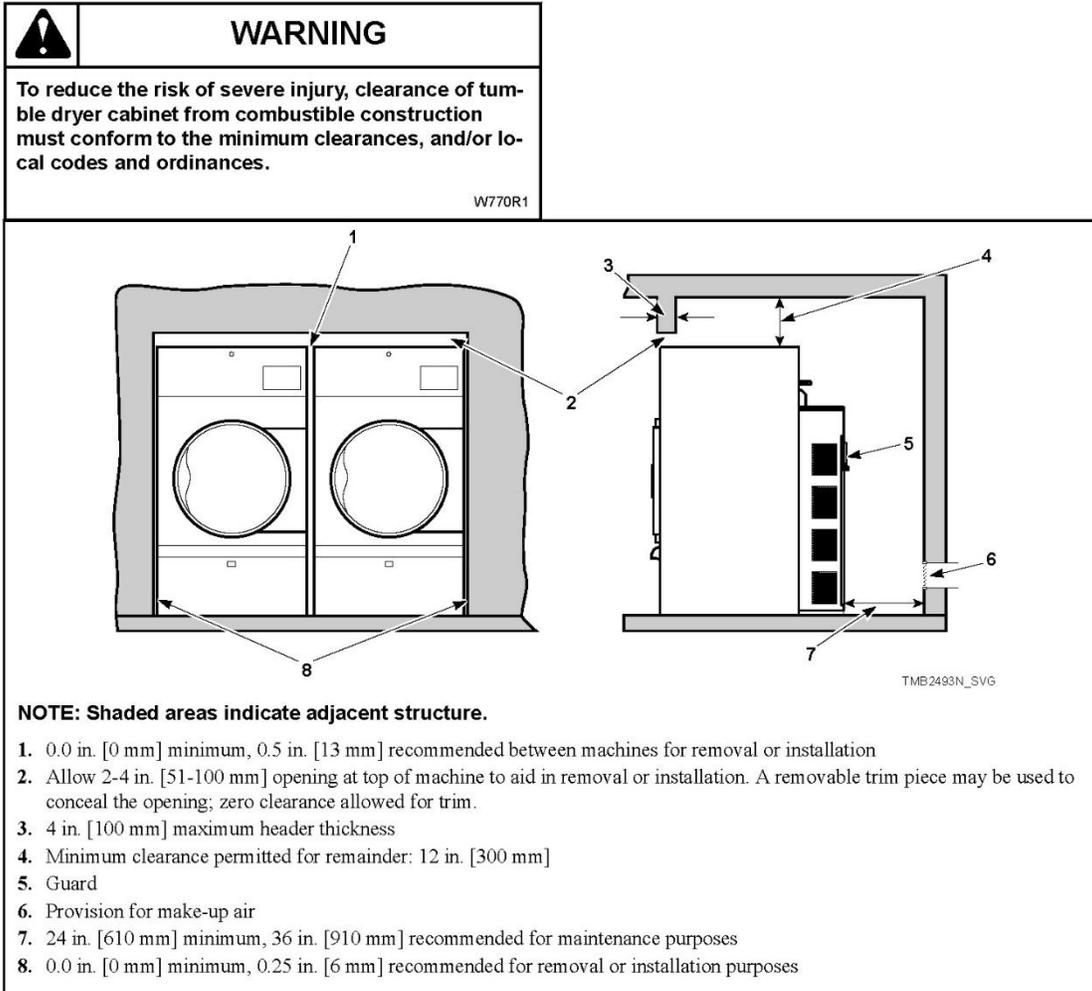


Figure 2

### Position and Level the Tumble Dryer

1. Remove lint panel door, and unscrew the four shipping bolts (one at each corner).
2. Remove tumble dryer from pallet.  
**NOTE: DO NOT discard shipping bolts, they are used as machine leveling legs.**
3. Remove four nuts from the literature package, and screw one fully on to each leveling leg.
4. Screw the four leveling legs (bolts) back into the level adjusting fittings from the bottom.

5. Slide tumble dryer to its permanent location. Adjust the leveling legs until the unit is level, or no more than 0.13 inch [3.3 mm] higher in the front. Refer to *Figure 3*. Tumble dryer must not rock. Lock leveling legs with nuts previously installed.

**NOTE: The front of the tumble dryer should be slightly higher than the rear (approximately 0.13 inch [3.3 mm]). This will prevent the clothes, while tumbling, from wearing on the door glass gasket.**

**IMPORTANT: Keep tumble dryer as close to floor as possible. The unit must rest firmly on floor so weight of tumble dryer is evenly distributed.**

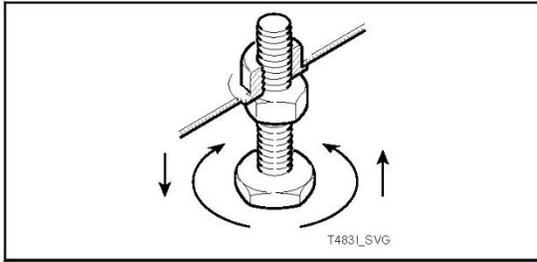


Figure 3

## Fire Suppression System (Optional Equipment)

	<b>WARNING</b>
<p><b>ELECTRICAL SHOCK HAZARD.</b> Electrical shock can result in death or serious injury. If the water dispensing system is activated, do not attempt to operate the tumble dryer. If the water dispensing system is activated, have the tumble dryer inspected by a qualified agency before operating the tumble dryer.</p>	
W879R1	

**IMPORTANT:** Main supplies of electricity and water to the tumble dryer should remain on at all times for the fire suppression system to work.

### Check Local Codes and Permits

Call your local water company or the proper municipal authority for information regarding local codes.

**IMPORTANT:** It is your responsibility to have ALL plumbing connections made by a qualified professional to assure that the plumbing is adequate and conforms to local, state, and federal regulations or codes.

**IMPORTANT:** It is the installation or owner's responsibility to confirm that the necessary or required water, water pressure, pipe size, or connections are provided. Manufacturer assumes no responsibility if the fire suppression system is not connected, installed, or maintained properly.

### Water Requirements

**IMPORTANT:** Water must be supplied to the fire suppression system, or the fire suppression system will not operate as intended.

To ensure the fire suppression system operates properly:

- Water supply requirements: 3/4 inch hose connections providing 15 gpm [57 lpm] minimum flow; Water pressure 20 psi [138 kPa] minimum, 120 psi [827 kPa] maximum; water tem-

perature 40°F [4.5°C] minimum, 120°F [49°C] maximum must be maintained at all times.

- Electric power to the tumble dryer must be provided at all times.
- Perform preventative maintenance checks every month. Refer to Operation/Maintenance Manual.

**NOTE:** Water pressure under 20 psi [138 kPa] will cause low flow at water solenoid valve.

If the rear of the tumble dryer or the water supply is located in an area where it will be exposed to cold/freezing temperatures, provisions must be made to protect these water lines from freezing.

**IMPORTANT:** Temperature of the water supply must be kept between 40°F and 120°F [4.5°C and 49°C]. If water in the supply line or water solenoid valve freezes, the fire suppression system will not operate.

**IMPORTANT:** If temperature sensors inside the tumble dryer register a temperature below 40°F [4.5°C], the fire suppression system control will lock out. This feature protects against operation of the tumble dryer with a possible frozen water supply. Only when the temperature sensors register a temperature 40°F [4.5°C] or above will the machine reset for operation.

For installations where the tumble dryer must operate below 40°F [4.5°C], a cold weather fire suppression system relocation kit (part no. 44340301) is available. Refer to the instructions provided in the kit for proper installation.

**IMPORTANT:** Flexible supply line/coupling must be used. Solenoid valve failure due to hard plumbing connections will void the warranty. It is recommended that a filter or strainer be installed in the water supply line.

### Water Connections

	<b>WARNING</b>
<p>Electrical shock hazard. Can cause death or serious injury. If the water dispensing system is activated do not attempt to operate the dryer. If the water dispensing system is activated have the dryer inspected by a qualified agency before operating the dryer.</p> <ul style="list-style-type: none"> <li>• <b>CALL THE FIRE DEPARTMENT.</b></li> <li>• <b>DO NOT</b> disconnect electric power to the dryer.</li> <li>• <b>DO NOT</b> disconnect water to the dryer.</li> <li>• <b>DO NOT</b> touch the dryer.</li> </ul>	
W832	

Connect tumble dryer to a backflow preventer (vacuum breaker) before connecting to the public water main in all countries where local regulations require specific water approval certificates.

Two hoses and a Y-connector are provided with the tumble dryer to allow for connection of water supply to tumble dryer. DO NOT reuse old hose sets. The water connections are made to the water solenoid valve, located on the rear of the tumble dryer. The Y-connector provides a single female hose connection (Standard US 3/4-11 1/2 NH thread). Refer to *Figure 4* and *Figure 5*.

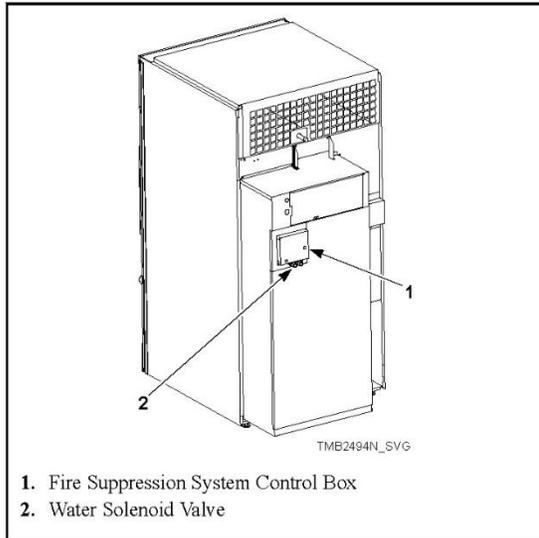


Figure 4

To connect the two hoses (supplied with tumble dryer), insert rubber washers (from literature pack) in water inlet hose couplings. Refer to *Figure 5*.

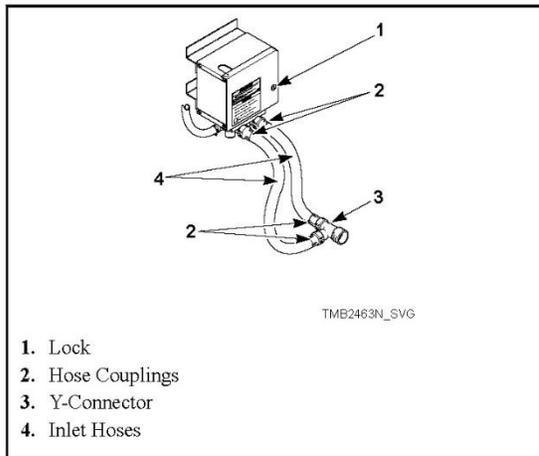


Figure 5

Connect inlet hoses to water supply. Flush the lines for approximately two minutes to remove any foreign materials that could clog the screens in the water mixing valve. This is especially important when installing a tumble dryer in a newly constructed or renovated building. Then connect the hoses to the Y-connector; connect the Y-connector to the connections at the rear of the tumble dryer.

**IMPORTANT:** Thread hose couplings onto valve connections finger tight, then turn 1/4 turn with pliers. Do not cross thread or overtighten couplings.

**IMPORTANT:** Hoses and other natural rubber parts deteriorate after extended use. Hoses may develop cracks, blisters or material wear from the temperature and constant high pressure they are subjected to. All hoses should be checked on a yearly basis for any visible signs of deterioration. Any hose showing the signs of deterioration listed above should be replaced immediately. All hoses should be replaced every five years.

**NOTE:** Longer inlet hoses are available (as optional equipment at extra cost) if the hoses supplied with the tumble dryer are not long enough for installation. Order hoses as follows:

Part No. 20617 Inlet hose 8.0 feet [2.4 m]

Part No. 20618 Inlet hose 10 feet [3.0 m]

**Electrical Requirements**

	<b>WARNING</b>
<b>Electrical power must be provided to tumble dryer at all times. The fire suppression system will be inoperative if the main electrical power supply is disconnected.</b>	
W690R1	

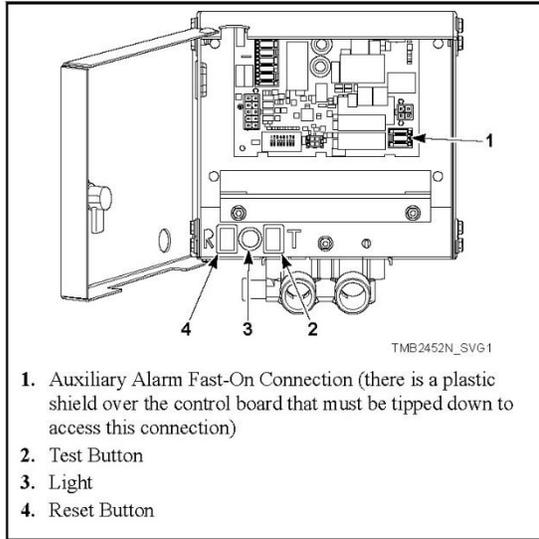
No independent external power source or supply connection is necessary. Power to operate the fire suppression system is from the tumble dryer main power supply.

**Auxiliary Alarm**

The fire suppression system provides an auxiliary output contact when the system is activated. During tumble dryer installation, you have the option to connect a separate alarm system to this auxiliary output. Potential uses of the auxiliary output include, but are not limited to: (1) sounds an alarm, (2) activates a building sprinkler system, (3) notifies a fire department, etc. Use of the auxiliary output is not required for the fire suppression system to operate, but may be used for additional protection.

The connection to the auxiliary output is made through the H-4 header connection inside the fire suppression control box. Refer to *Figure 6*. The relay is rated for 5 Amp, 250VAC max.

**NOTE:** The auxiliary output is activated during fire suppression system maintenance test sequence. Consider this fact prior to your system test every month. (Example: If the external system uses the auxiliary output to call the fire department, inform the fire department before and after the fire suppression system maintenance test. If the external system uses the auxiliary output to activate a building sprinkler, disconnect auxiliary output prior to test.)



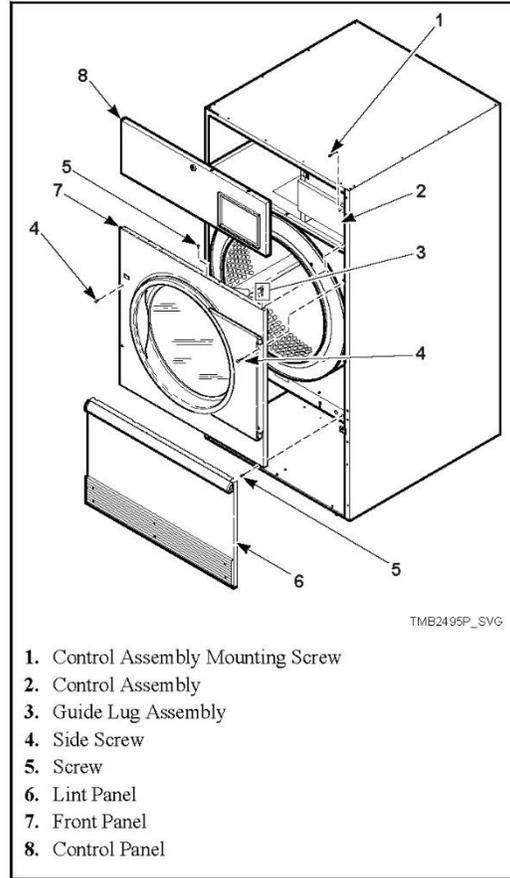
1. Auxiliary Alarm Fast-On Connection (there is a plastic shield over the control board that must be tipped down to access this connection)
2. Test Button
3. Light
4. Reset Button

Figure 6

## To Reverse the Loading Door

1. Disconnect power supply to tumble dryer.
2. Unlock and remove control panel. Remove two control assembly mounting screws from right side. Swing open control to access upper flange right guide lug assembly. Refer to *Figure 7*.
3. Remove lint panel.

**IMPORTANT:** Support door and hinge assembly securely to prevent it from dropping once side screws are removed from door hinge lug.



1. Control Assembly Mounting Screw
2. Control Assembly
3. Guide Lug Assembly
4. Side Screw
5. Screw
6. Lint Panel
7. Front Panel
8. Control Panel

Figure 7

4. Remove four front panel screws. Refer to *Figure 7*. Keep door hinge cams in place on door hinge lug. Pull lug and door assembly off as one piece. Refer to *Figure 8*.
5. Remove remaining front panel screws. Refer to *Figure 7*. Disconnect door switch harness from switch. Take off front panel. Refer to *Figure 8*.
6. Exchange switch and plug locations. Depress tabs with an adjustable pliers to remove plug and switch from front panel. Reinstall switch, orienting button toward center of machine. Reinstall plug in switch's previous location. Refer to *Figure 8*.

**IMPORTANT:** Door switch must be oriented correctly in front panel receiving hole or tumble dryer will not operate.

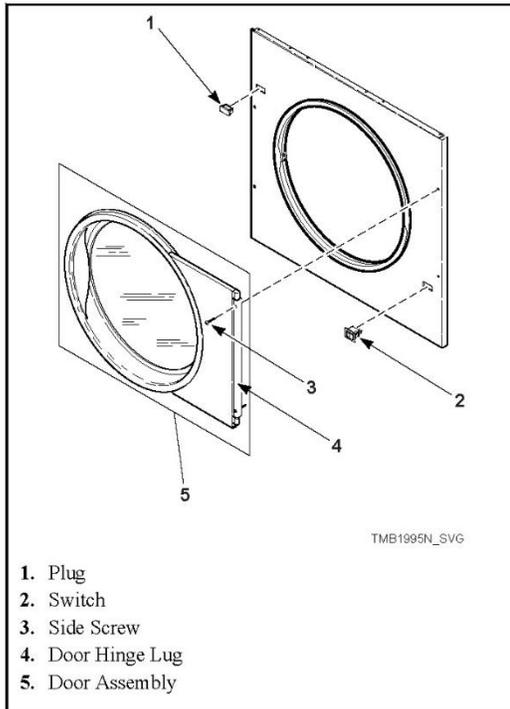


Figure 8

7. Cut wire ties to remove door switch harness bundle. Be careful not to damage harness wires. Refer to *Figure 9*.
8. Reroute door switch harness up through the hole in the right side of the top panel. Use the panel cutout opening to then put harness down through the hole in the left side of the top panel and into the upper left corner of the cylinder enclosure.

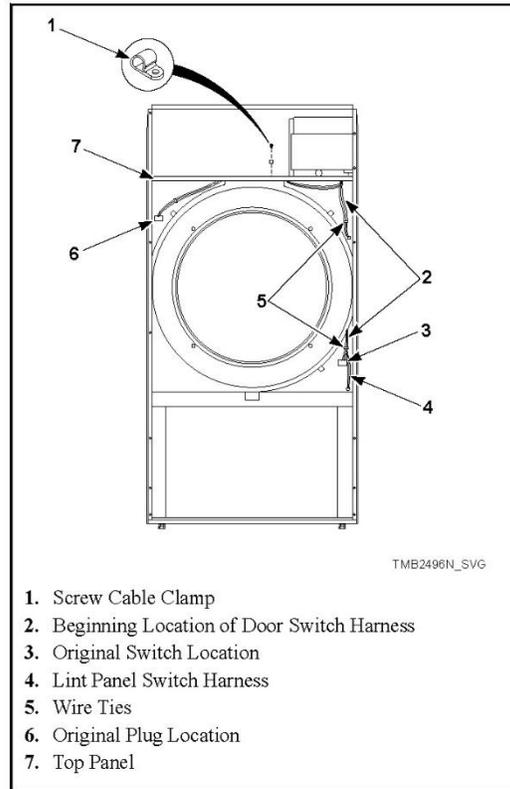


Figure 9

9. Place front panel on machine, loosely attach four bottom screws. Connect door switch harness to switch in new location. Install door assembly and four front panel side screws loosely. Refer to *Figure 10*.
10. Check lint panel fit, adjusting front panel up or down as required. Tighten four front panel side screws to maintain position of front panel for proper lint panel clearance.
11. Remove lint panel. Fully tighten bottom screws on front panel.
12. Reinstall top screws and guide lugs.
13. Adjust door catch if necessary to allow 8 – 15 pounds [35.6N – 66.7N] pull at center of handle.
14. Reinstall control assembly using mounting screws.
15. Reinstall control panel and lint panel.

**IMPORTANT: Restore power to tumble dryer and test for proper operation of loading door switch. Refer to *Loading Door Switch* section for adjustment procedure. Tumble dryer should not start with door open; an operating tumble dryer should stop when door is opened.**

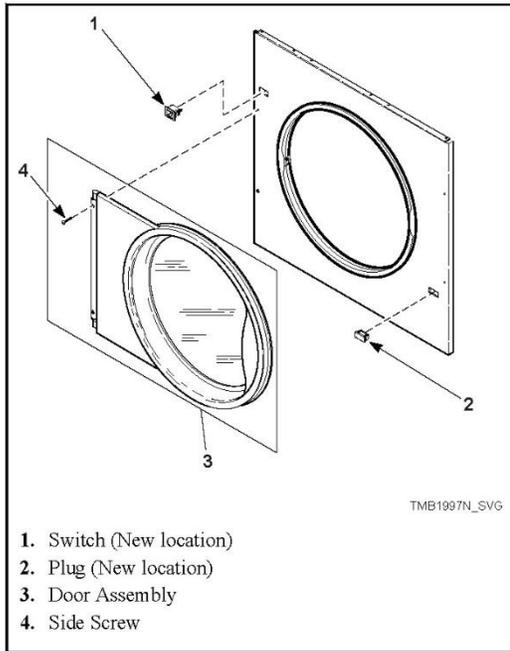


Figure 10

**NOTE: If machine is converted back to right hand hinge operation, the door switch harness must be rerouted.**

### Before Placing Tumble Dryer into Service

1. Ensure all panels and guards are in place.
2. Remove and discard wire tie from the airflow switch so it can swing freely.
3. Pull out emergency stop button, if applicable.
4. Turn on electrical supply to tumble dryer.
5. Open the supply valve for gas or steam heated tumble dryers.
6. After performing the previous checks, start the tumble dryer by pressing START. (Refer to the Operating section for detailed instructions.) Release the start button and open the loading door. The cylinder should stop rotating within seven seconds after the door is opened a maximum of 0.79 inches [20 mm]. If it does not, adjust the loading door switch. Refer to Adjustments section.
7. **Gas Tumble Dryers:** Start the tumble dryer and check the burner flame. Adjust the air inlet shutter as required. Refer to Adjustments section.

**IMPORTANT:** The electronic ignition system will attempt to light the gas by sparking for the “trial for ignition” period. If gas does not ignite within this period, the ignition control will go into a safety lockout and the valve will no longer open until the control is reset. On CSA models, the electronic ignition system is automatically reset. On AGA and IEC models the electronic ignition system must be manually reset. The control will pause the cycle and indicate that the ignition control needs to be reset. To reset the ignition control, press start key on the control while the access panel is open. The control will then prompt for the start key to be pressed again to restart the cycle. On all models, ignition lockout may occur due to air in the gas line or the gas shut-off valve being in the OFF position. If the air is bled out of the gas line, the gas shut-off valve is in the ON position, the gas service is properly connected and the tumble dryer continues to have heater errors and/or prompts for the ignition control to be reset, remove the tumble dryer from service.

8. Load the cylinder with a full load of clean rags and run to remove oil or dirt from cylinder.
9. Check the airflow switch operation by opening the lint panel; be sure to remove shipping wire tie from airflow switch prior to operation. Temporarily tape down the lint panel safety switch located behind the upper left corner of the lint panel. The heating systems should shut off when the lint panel is opened a maximum of 1.5 inches [38 mm].

The airflow switch operation may be affected by shipping wire tie still in place, lack of make-up air, or an obstruction in the exhaust duct. These should be checked. If there is a problem, contact an authorized service person.

**IMPORTANT: Remove tape from the lint panel safety switch before proceeding to the next step.**

	<b>WARNING</b>
<b>Do not operate tumble dryer if airflow switch is faulty. An explosive gas mixture could collect in tumble dryer if airflow switch does not operate properly.</b>	
W407R1	

10. Clean cylinder by running a load of wet rags on one maximum heat cycle.

<b>Models</b>	<b>Prepurge Time (seconds)</b>	<b>Interpurge Time (seconds)</b>	<b>Trial for Ignition (seconds)</b>	<b>Reset Lockout Condition By:</b>
CSA	1	23	10 (attempts to ignite 3 times)	Automatically resets.
AGA and IEC	23	23	10	Press start key with access panel open.

If the tumble dryer does not meet ANY of the listed requirements, remove tumble dryer from use. Refer to *Removing Tumble Dryer from Service* section.

#### **Required for IEC Models Only**

Once tumble dryer is installed, please be sure to complete the following items:

- Review and verify machine operation with customer.
- Leave all literature and a signed Declaration of Conformity with customer.
- Review tumble dryer warranty information with customer.
- Apply cautionary stickers in language appropriate to country of sale. Market language label kits have been provided in the literature packet located in the cylinder. Position appropriate market language labels on the tumble dryer in the following regions prior to placing tumble dryer into service, if applicable:
  - On front panel at the periphery of cylinder access opening
  - On electrical box cover(s) (electric heat models have two electrical box covers)
  - On rear panel
  - On front panel near emergency stop button (fire suppression system equipped models only)
  - On fire suppression control box (fire suppression system equipped models only)

# Exhaust Requirements

## Exhaust Requirements

	<b>CAUTION</b>
<p><b>Risk of fire. A clothes dryer produces combustible lint. Exhaust outdoors. Consult technical instructions for detailed exhaust specifications.</b></p>	
W933	

	<b>WARNING</b>
<p><b>To reduce the risk of fire, DO NOT use plastic or thin foil ducting to exhaust the tumble dryer.</b></p>	
W773R1	

	<b>WARNING</b>
<p><b>To reduce the risk of fire and accumulation of combustible gases, DO NOT exhaust tumble dryer air into a window well, gas vent, chimney or enclosed, unventilated area such as an attic wall, ceiling, crawl space under a building, or concealed space of a building.</b></p>	
W058R1	

## Layout

Whenever possible, install tumble dryers along an outside wall where duct length can be kept to a minimum, and make-up air can be easily accessed. Construction must not block the airflow at the rear of the tumble dryer. Doing so would prevent adequate air supply to the tumble dryer combustion chamber.

## Make-Up Air

A tumble dryer is forced air exhausted and requires provisions for make-up air to replace air exhausted by tumble dryer.

**IMPORTANT: Do not obstruct flow of combustion and ventilation air.**

<b>Required Make-Up Air Opening (to the outside) for Each Tumble Dryer</b>	
Model	Opening, in. <sup>2</sup> [cm <sup>2</sup> ]
050 Series	144 [930]
Classic 075 Series	195 [1,260]
Eco 075 Series	170 [1,095]
F75 Series	250 [1,610]

Make-up air openings with louvers will restrict airflow. The opening must be increased to compensate for area taken up and restrictions created by louvers. Contact the louver manufacturer for the exact specifications.

Make-up air openings in rooms containing tumble dryer(s) and/or gas fired hot water heater or other gravity vented appliances must be increased sufficiently to prevent downdrafts in any of the vents when all tumble dryers are in operation. Do not locate gravity vented appliances between tumble dryer(s) and make-up air openings. If it is necessary to duct make-up air to tumble dryer(s), increase area of duct work by 25% to compensate for restrictions in air movement.

## Venting

	<b>WARNING</b>
<p><b>To reduce the risk of fire due to increased static pressure, we do not recommend installation of in-line secondary lint filters or lint collectors. If secondary systems are mandated, frequently clean the system to assure safe operation.</b></p>	
W749	

**IMPORTANT: Installing in-line filters or lint collectors will cause increased static pressure. Failure to maintain the secondary lint system will decrease tumble dryer efficiency and may void machine warranty.**

For maximum efficiency and minimum lint accumulation, tumble dryer air must be exhausted to the outdoors by the shortest possible route.

Proper sized exhaust ducts are essential for proper operation. All elbows should be sweep type. Exhaust ducts must be assembled so the interior surfaces are smooth, so the joints do not permit the accumulation of lint. DO NOT use plastic, thin foil or Type B flexible ducts - rigid metal ducts are recommended. Use exhaust ducts made of sheet metal or other noncombustible material. DO NOT use sheet metal screws or fasteners on exhaust pipe joints which extend into the duct and catch lint. Use of duct tape or pop-rivets on all seams and joints is recommended, if allowed by local codes.

Verify that old ducts are thoroughly cleaned out before installing new tumble dryer(s).

	<b>WARNING</b>
<b>Improperly sized or assembled ductwork causes excess back pressure which results in slow drying, lint collecting in the duct, lint blowing back into the room, and increased fire hazard.</b>	
W355	

**NOTE: Exhaust ducts must be constructed of sheet metal or other noncombustible material. Such ducts must be equivalent in strength and corrosion resistance to ducts made of galvanized sheet steel not less than 0.02 inches [0.50 mm] thick.**

Where the exhaust duct pierces a combustible wall or ceiling, the opening must be sized per local codes. The space around the duct may be sealed with noncombustible material. Refer to *Figure 12*.

**IMPORTANT: For best performance provide an individual exhaust duct for each tumble dryer. Do not install a gas water heater in a room containing tumble dryers. It is better to have the water heater in a separate room with a separate air inlet.**

**NOTE: Proper venting will ensure that any condensate is subsequently re-evaporated and discharged.**

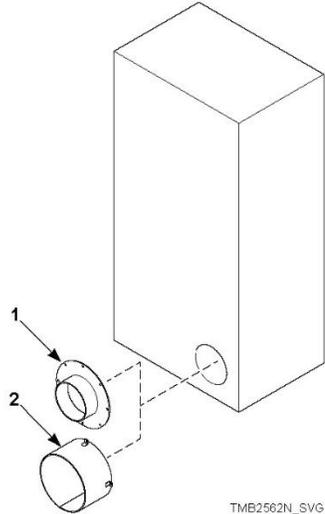
<p><b>NOTE: On IEC approved tumble dryers where it may be required, an exhaust adapter is available to convert to female outlet. Contact local distributor or manufacturer.</b></p>  <p style="text-align: right;">TMB2582N_SVG</p> <ol style="list-style-type: none"><li>1. Not Applicable</li><li>2. 50, 75, F75 Models</li></ol>
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Figure 11

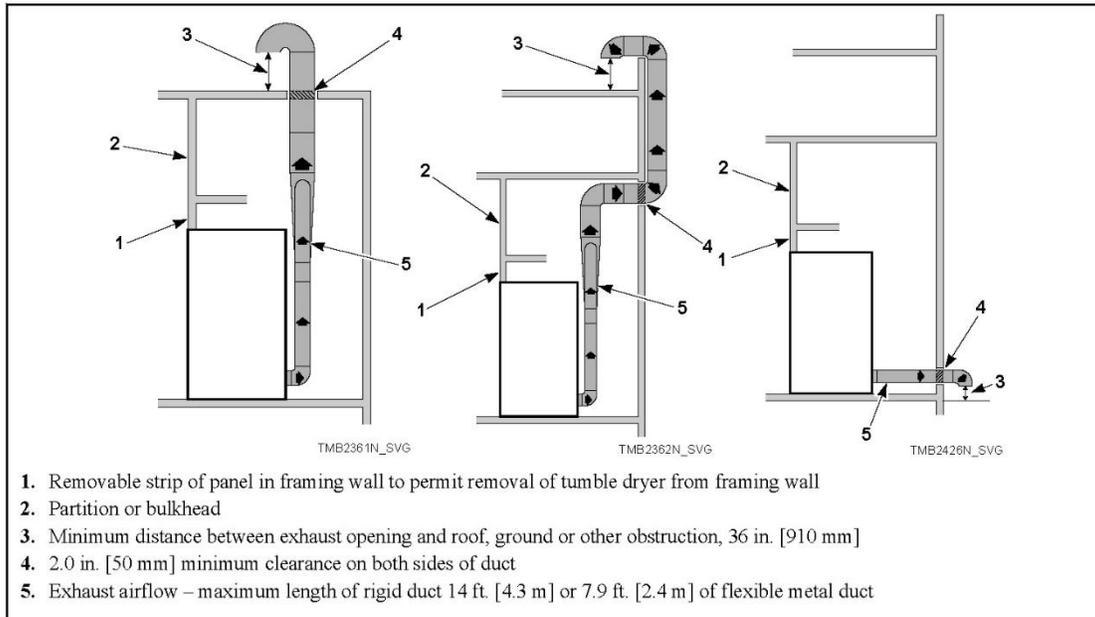


Figure 12

**NOTE: Do not install wire mesh or screen in exhaust duct opening to avoid lint build-up or impacting proper discharge of air from tumble dryers.**

**NOTE: Where exhaust duct pierces a combustible wall or ceiling, the opening must be sized per local codes.**

**NOTE: Inside of duct must be smooth. Do not use sheet metal screws to join sections.**

**NOTE: Locate exhaust far enough away from make-up air location to prevent re-introduction.**

Consult your local building code for regulations which may also apply.

### Individual Venting

For maximum efficiency and performance, it is preferred to exhaust tumble dryer(s) individually to the outdoors.

**IMPORTANT: At no point may the cross sectional area of installed venting be less than the cross sectional area of the exhaust outlet of the tumble dryer.**

The exhaust duct must be designed so the static back pressure measured 12 inches [305 mm] from the exhaust outlet does not exceed the maximum allowable pressure specified in the Specifications and Dimensions Table or on the installation sticker on the rear of the tumble dryer.

**NOTE: Static back pressure must be measured with the tumble dryer running.**

The maximum allowable length venting is 14 feet [4.3 m] and two 90° elbows or equivalent. If the equivalent length of a duct required for an installation exceeds the maximum allowable equivalent length, the diameter of a round duct must be increased by 10% for each additional 20 feet [6.1 m]. Cross section area of a rectangular duct must be increased by 20% for each additional 20 feet [6.1 m]. Refer to *Table 7* to determine equivalent venting.

Duct Diameter	Equivalent Length of Rigid Straight Duct
8 in. [203 mm]	One 90° elbow = 9.3 ft. [2.8 m]
10 in. [254 mm]	One 90° elbow = 11.6 ft. [3.5 m]
12 in. [305 mm]	One 90° elbow = 14 ft. [4.3 m]
14 in. [356 mm]	One 90° elbow = 16 ft. [4.9 m]

Table 7 continues...

Duct Diameter	Equivalent Length of Rigid Straight Duct
16 in. [406 mm]	One 90° elbow = 18.7 ft. [5.7 m]
18 in. [457 mm]	One 90° elbow = 21 ft. [6.4 m]
Equivalent Length (meter) = 1.17 x Duct Diameter (mm)	

Table 7

Example: A 12 inch [305 mm] diameter duct's equivalent length of 14 feet [4.3 m] of duct and two 90° elbows is:

Equivalent Length

= 14 ft. [4.3 m] + (2) 90° elbows

= 14 ft. [4.3 m] + 14 ft. [4.3 m] + 14 ft. [4.3 m]

= 42 ft. [12.8 m]

With the tumble dryer in operation, airflow at any point in the duct should be at least 1200 feet/min. [366 m/min.] to ensure that lint remains airborne. If 1200 feet/min. [366 m/min.] cannot be maintained, schedule monthly inspections and cleaning of the ductwork.

**NOTE: The maximum length of a flexible metal duct must not exceed 7.9 ft. [2.4 m] as required to meet UL2158, clause 7.3.2A.**

#### Manifold Venting

While it is preferable to exhaust tumble dryers individually to the outdoors, a main collector duct may be used if it is sized according to *Figure 14* and *Figure 15*. This illustration indicates minimum diameters, and should be increased if the collector length

exceeds 14 feet [4.3 m] and two 90° elbows. The diameter of a round duct must be increased by 10% for each additional 20 feet [6.1 m]. Cross sectional area of a rectangular or square duct must be increased 20% for each additional 20 feet [6.1 m]. Refer to *Table 8* to determine equivalent ducting sizing. The collector duct may be rectangular or square in cross section, as long as the area is not reduced. Provisions **MUST** be made for lint removal and cleaning of the collector duct.

The vent collector system must be designed so the static back pressure measured 12 inches [305 mm] from the exhaust outlet does not exceed the maximum allowable pressure specified in the Specifications and Dimensions Table or on the installation sticker on the rear of tumble dryer. Static back pressure must be measured with all tumble dryers vented into the collector operating.

**NOTE: Never connect a tumble dryer duct at a 90° angle to the collector duct. Refer to *Figure 13*. Doing so will cause excessive back pressure, resulting in poor performance. Never connect two tumble dryer exhaust ducts directly across from each other at the point of entry to the collector duct.**

With the tumble dryer in operation, airflow at any point in the duct should be at least 1200 feet/min. [366 m/min.] to ensure that lint remains airborne. If 1200 feet/min. [366 m/min.] cannot be maintained, schedule monthly inspections and cleaning of the ductwork.

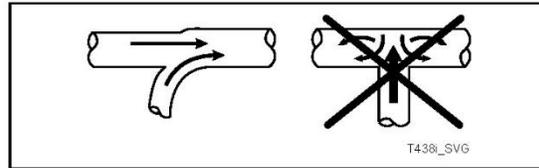


Figure 13

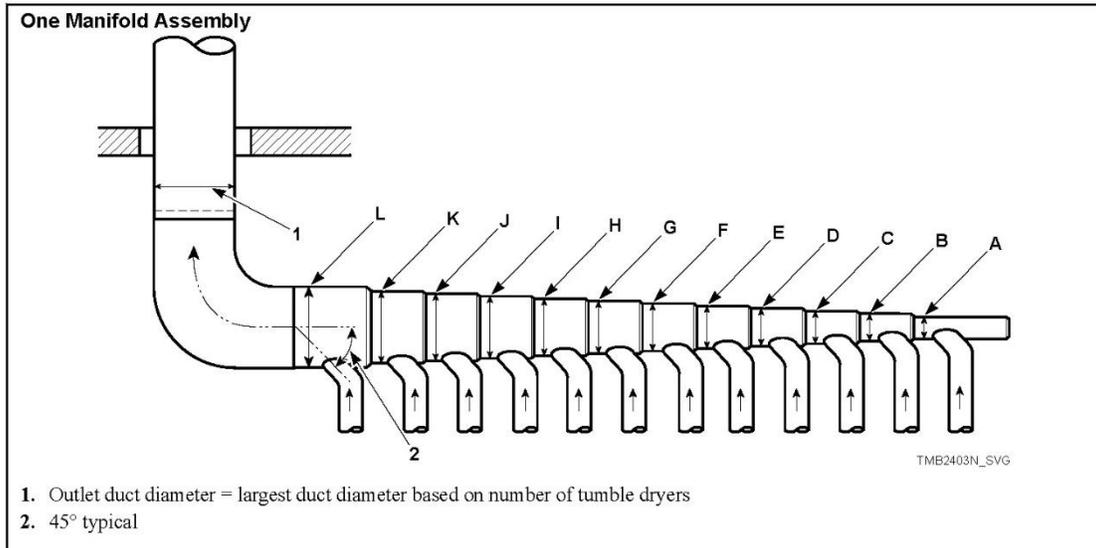


Figure 14

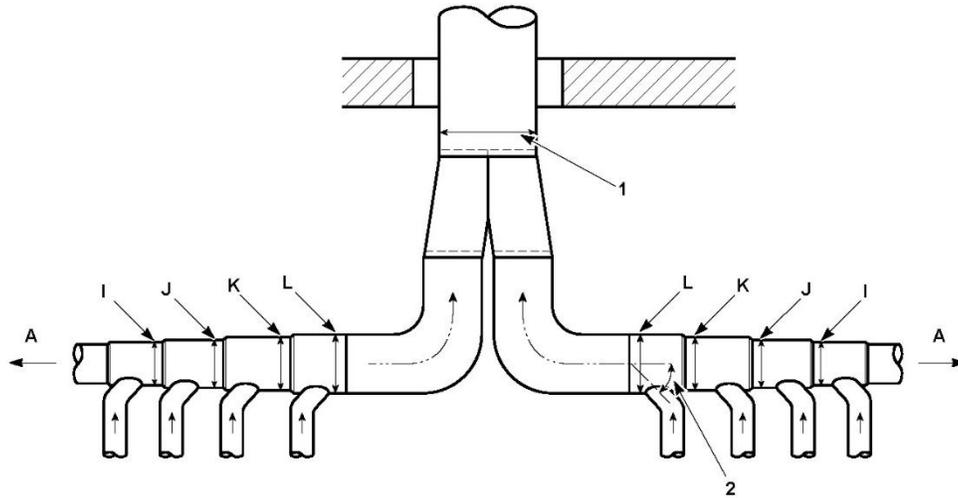
Duct Station	050/075	F75
A	8 in. [203 mm]	10 in. [254 mm]
B	12 in. [305 mm]	15 in. [381 mm]
C	15 in. [381 mm]	18 in. [457 mm]
D	17 in. [432 mm]	21 in. [533 mm]
E	19 in. [483 mm]	24 in. [610 mm]
F	21 in. [533 mm]	26 in. [660 mm]
G	23 in. [584 mm]	28 in. [711 mm]
H	25 in. [635 mm]	30 in. [762 mm]
I	26 in. [660 mm]	32 in. [813 mm]
J	27 in. [686 mm]	33 in. [838 mm]
K	29 in. [737 mm]	35 in. [889 mm]
L	30 in. [762 mm]	36 in. [914 mm]

Table 8

**NOTE:** Table 8 represents tumble dryers with the same vent size. If multiple vent sizes are used, consult a local HVAC specialist.

**NOTE:** Duct clean-out recommended every 6 feet [0.18 m].

**Two Manifold Assemblies**



TMB2018N\_SVG

1. Outlet duct diameter = combined largest duct diameter of both sides
2. 45° typical

Figure 15

Refer to *Table 8* for measurements for each manifold.

# Gas Requirements

## Gas Requirements

	<b>CAUTION</b>
<ul style="list-style-type: none"> <li>• Thoroughly test all piping for leaks before operating. All fittings and piping must be tight and supported against breakage and vibration.</li> <li>• Turn off primary gas line shut off cock when not in use (overnight, weekends, holidays, etc.).</li> </ul>	
W934	

	<b>WARNING</b>
<p>To reduce the risk of fire or explosion, <b>DO NOT CONNECT THE GAS LINE TO THE TUMBLE DRYER IF THE GAS SERVICE IS NOT THE SAME AS THAT SPECIFIED ON THE TUMBLE DRYER SERIAL PLATE!</b> It will first be necessary to convert the gas burner orifice and gas valve. Appropriate conversion kits are available.</p>	
W060R1	

	<b>WARNING</b>
<p>To reduce the risk of gas leaks, fire or explosion, use a new flexible stainless steel connector.</p>	
W774	

**IMPORTANT:** Any product revisions or conversions must be made by the Manufacturer's Authorized Dealers, Distributors or local service personnel.

**IMPORTANT:** The tumble dryer must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system. Gas supply pressure must never exceed 1/2 PSI [3.5 mbar] during leak testing. Gas supply must provide 6.5+/-1.5 inches [16.32+/-3.7 mbar] with all gas appliances firing.

**NOTE:** For gas valves with a manual shut-off switch on the gas valve, the shut-off switch does not protect the valve from this pressure test. Use the individual manual shut-off valve from the gas supply piping system to protect the gas valve.

**IMPORTANT:** The installation must comply with local codes or, in the absence of local codes:

- with the latest edition of the "National Fuel Gas Code," ANSI Z223.1/NFPA 54 in the U.S.A.
- with CAN/CSA-B149.1 Natural Gas and Propane Installation Code in Canada
- In Australia and New Zealand, installation must comply with the Gas Installations Standard AS/NZS 5601 Part 1: General Installations.
- In the EU, installation must comply with the installation regulations of the country of destination.

**IMPORTANT:** For Australian models, do not remove the gas type label on the rear of the unit.

Obtain specific gas service pipe size from the gas supplier. Refer to *Table 10* and *Table 11* for general pipe size.

The following must be furnished and installed by the customer for the gas service line to each tumble dryer. Refer to *Figure 16*.

- Sediment traps
- Shut-off valves
- Supply pressure taps (1/8 NPT minimum) (refer to *Figure 16*)
- Union at gas supply connection (listed to ANSI Z21.24 and CSA 6.10)

It is important that equal pressure be maintained at all tumble dryer gas connections. This can be done by installing a 1 inch pipe gas loop to maintain equal pressure at all gas connections. Refer to *Figure 20*.

	<b>WARNING</b>
<p>To reduce the risk of fire or explosion, if the tumble dryer is to be connected to Liquefied Petroleum (L.P.) gas, a vent to the outdoors must be provided in the room where the tumble dryer is installed.</p>	
W062R1	

Before installation, check that the local distribution conditions, nature of gas and pressure, and the adjustment of the appliance are compatible.

NATURAL GAS supply pressures with all gas appliances running (tumble dryers, water heaters, space heaters, furnace, etc.):

	<b>CSA Models</b>	<b>AGA Models</b>	<b>CE Models</b>
Maximum	10.5 in. w.c.	2.61 kPa	Refer to <i>Table 9</i>
Recommended	6.5 in. w.c.	1.62 kPa	
Minimum	5 in. w.c.	1.13 kPa	

An in-line pressure regulator may be required if the line pressure exceeds 10.5 water column inches [26.1 mbar, 2.61 kPa] with all gas appliances running.

PROPANE/LIQUID PETROLEUM GAS (L.P.G.) supply pressures with all gas appliances running (tumble dryers, water heaters, space heaters, furnace, etc.):

	<b>CSA Models</b>	<b>AGA Models</b>	<b>CE Models</b>
Maximum	13 in. w.c.	3.23 kPa	Refer to <i>Table 9</i>
Recommended	11 in. w.c.	2.74 kPa	
Minimum	10 in. w.c.	2.49 kPa	

Gas Category	Country	Gas	Category	Supply Pressure (mbar)			Manifold Pressure (mbar)
				nominal	minimum	maximum	
II <sub>2H3B/P</sub>	BG, CY, CZ, DK, EE, FI, HR, LT, NO, SE, SI SK	G20	2H	20	17	25	8.0
		G30/31	3B/P (30)	30 (28-30)	25	35	*
II <sub>2H3B/P</sub>	HU	G20	2H	25	18	33	8.0
		G30/31	3B/P	50	42.5	57.5	27.5
II <sub>2H3B/P</sub>	AT, CH	G20	2H	20	17	25	8.0
		G30/31	3B/P	50	42.5	57.5	27.5
II <sub>2H3+</sub>	CH, ES, GB, GR, IE, IT, TR	G20	2H	20	17	25	8.0
		G30	3+ (28-30/37) Butane	30 (28-30)	25	35	*
		G31	3+ (28-30/37) Propane	37	25	45	*
II <sub>2E3B/P</sub>	PL	G20	2E	20	17	25	8.0
		G30	3B/P	30 (28-30)	25	35	*
II <sub>2E3B/P</sub>	LU	G20	2E	20	17	25	8.0
		G30/31	3B/P	50	42.5	57.5	27.5
II <sub>2E3B/P</sub> II <sub>2E(LL)3B/P</sub>	DE	G20	2E(LL)/2E	20	17	25	8.0
		G25	2E(LL)	20	17	25	12.0
		G30/31	3B/P	50	42.5	57.5	27.5
II <sub>2E(r)3+</sub>	FR	G20	2E(r)	20	17	25	8.0
		G25	2E(r)	20	17	25	12.0
		G30	3+ (30/37) Butane	30 (28-30)	25	35	*
		G31	3+ (30/37) Propane	37	25	45	*
II <sub>2L3B/P</sub>	NL	G25	2L	25	20	30	12.0
		G30	3B/P	30 (28-30)	25	35	*

Table 9 continues...

Gas Category	Country	Gas	Category	Supply Pressure (mbar)			Manifold Pressure (mbar)
				nominal	minimum	maximum	
II <sub>2L3B/P</sub>	RO	G25	2L	20	17	25	12.0
		G30	3B/P	30 (28-30)	25	35	*
I <sub>3B/P</sub>	IS, MT	G30	3B/P	30 (28-30)	25	35	*
I <sub>2E(R)</sub>	BE	G20	2E(R) 20/25	20	17	25	8.0
		G25	2E(R) 20/25	20	17	25	12.0
I <sub>3+</sub>	BE	G30	3+ (28-30/37) Butane	30 (28-30)	25	35	*
		G31	3+ (28-30/37) Propane	37	25	45	*

\* Appliance regulator out of action

Table 9

Check manifold pressure. It is important that gas be supplied to the tumble dryer in accordance with the requirements on the serial plate. Refer to table below and *Figure 1*. If the manifold pressure required adjustment, refer to *How to Adjust Gas Valve Governor/Regulator*.

	CSA Models	AGA Models	CE Models
Natural Gas	3.5 in. w.c.	0.87 kPa	Refer to <i>Table 9</i>
Propane/ L.P.G.	10.5 in. w.c.	2.61 kPa	

The connection of gas supply to the appliance shall be made with a flexible hose suitable for the appliance category in accordance with national installation regulations of the country of destination. If in doubt, the installer shall contact the supplier.

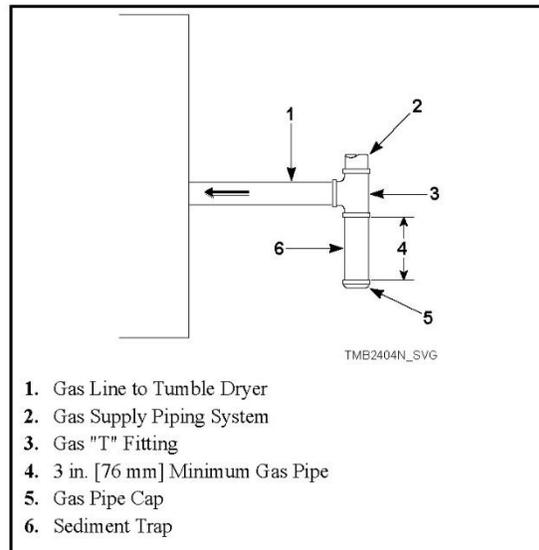


Figure 16

## How to Change Burner Orifice Size

1. Disconnect electrical power from tumble dryer. Close gas shut-off valve to tumble dryer. Refer to *Figure 17*.

	<b>WARNING</b>
<p><b>When converting the tumble dryer to a different gas or pressure, first verify that the supply inlet pressure is equipped with a pressure regulator (located ahead of the tumble dryer) that will maintain the gas supply at the inlet pressure specified.</b></p>	
W430R1	

2. Remove orifice holder. Unscrew orifice holder nut near gas valve. Remove the burner orifice(s) from orifice holder. Refer to *Figure 18*.
3. Install the new, correct burner orifice(s). Refer to *Figure 19* and *Table 9*. Torque each to 9 – 10 Nm. Use Loctite 565 or equivalent pipe thread sealer.
4. Reinstall orifice holder assembly to gas valve, making certain burner orifice(s) are in line with burner tube opening. Refer to *Figure 19*.
5. Commission tumble dryer for use.

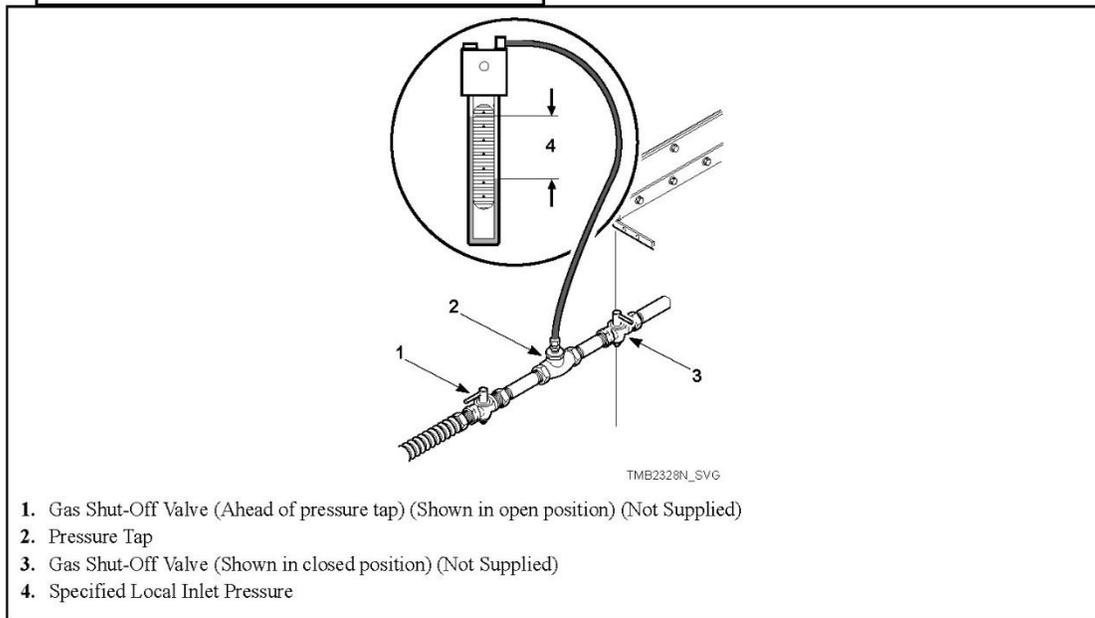


Figure 17

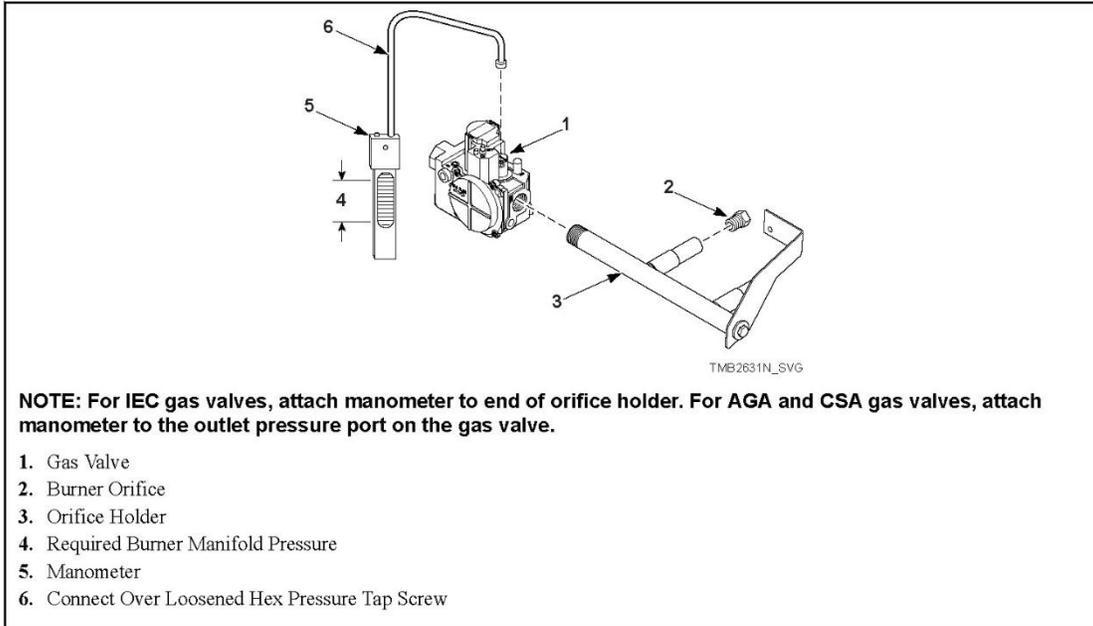


Figure 18

### How to Adjust Gas Valve Governor/Regulator

1. Check gas burner orifice (manifold) pressure as follows. Refer to *Figure 18*.
2. Remove screw plug from pressure tap.
3. Connect a “U”-tube manometer (or similar pressure gauge) to the burner orifice (manifold) pressure tap.
4. Start tumble dryer and note pressure once flame is burning. Remove regulator cap and adjust regulator screw until the burner orifice pressure per applicable table is achieved. Replace regulator cap. Refer to *Figure 18*.
5. Commission tumble dryer for use.

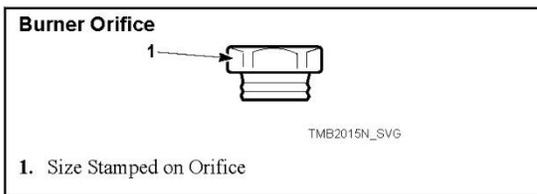


Figure 19

## Installing CE Gas Tumble Dryer

This information is to be used when installing gas tumble dryers in countries and/or on gases different than the machine's factory configuration. Tumble Dryers are supplied from the factory for operation with natural gas categories 2H, 2E, 2L, 2E(LL), 2E(r), 2E(R) or unregulated L.P.G. categories 3 B/P, 3+. To install tumble dryers for regulated LPG category 3B/P requires a conversion kit.

Tumble dryers are built in two different configurations:

- Natural Gas – regulated/governor
- Liquefied Petroleum Gas (L.P.G.) – not regulated/no governor

For converting models from Natural Gas to L.P.G., order the appropriate kit listed in *Gas Requirements* section.

Serial plates supplied from the factory are configured for:

- Natural Gas, standard rate
  - AT/BG/CH/CY/CZ/DK/EE/FI/HR/LT/NO/SE/SI/SK: II<sub>2H3B/P</sub>
  - CH/ES/GB/GR/IE/IT/TR: II<sub>2H3+</sub>
  - DE/LU/PL: II<sub>2E3B/P</sub>
- Natural Gas, Eco rate
  - AT/BG/CH/CY/CZ/DK/EE/ES/FI/GB/GR/HR/IE/IT/LT/NO/SE/SI/SK/TR: I<sub>2H</sub>
  - DE/LU/PL: I<sub>2E</sub>
- L.P.G.
  - BE/CH/ES/FR/GB/GR/IE/IT/TR: I<sub>3+</sub>

These instructions pertain to the situations when the country of use or gas supply is different than that on the serial plate. When installing in a different country, peel off the appropriate country sticker (included in literature packet with tumble dryer) and apply it to the serial plate over the existing country information. Adjust manifold pressure as applicable, per *Table 9*.

Units installed in France (FR) require a gas connection adapter having ISO228 (BSPP, G) parallel threads and a sealing washer. The adapter must have a sufficient flat area to seat the sealing washer.

## Adjusting Manifold Pressure for Natural Gas G20 or G25

1. If country/gas category designation required is not listed on the serial plate, affix the appropriate country/gas category label supplied over the main serial plate designations.
2. Verify gas supply pressure and adjust as necessary. Refer to *Figure 1*.
3. Verify manifold pressure. Refer to *How to Adjust Gas Valve Governor/Regulator* and adjust as necessary.

## Adjusting Supply Pressure for L.P.G. G30 or G31

1. If country/gas category designation required is not listed on the serial plate, affix the appropriate country/gas category label over the main serial plate designations.
2. Verify gas supply pressure and adjustment as necessary. Refer to *Figure 1*.

## Converting From Natural Gas to L.P.G. or From Unregulated L.P.G. to Regulated L.P.G.

1. Refer to table below to determine conversion kit part number required.
2. Follow instructions supplied in conversion kit.

	CSA and AGA Models	CE Models
050 Series	44328801	44330301
075 Series	44328802	44330302
F75 Series	44328805	Not Applicable

CE GASES refer to *Installing CE Gas Tumble Dryer* section.

## Start-Up Procedure

Turn on gas and check all pipe connections (internal and external) for gas leaks with a non-corrosive leak detection fluid. Purge air in gas service line by operating the tumble dryers in the drying mode. If burner does not light and unit goes into lockout, press start key on the control while the access panel is open. The control will then prompt for the start key to be pressed again to re-start the cycle. Repeat these steps until burner ignites. Use pipe compound, resistant to actions of L.P. gas, on all pipe threads.

	<b>WARNING</b>
<p><b>Check all pipe connections, internal and external, for gas leaks using a non-corrosive leak detection fluid. To reduce the risk of explosion or fire, DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS! Gas connections should be checked daily for leakage.</b></p>	
W924	

## Gas Supply Pipe Sizing and Looping

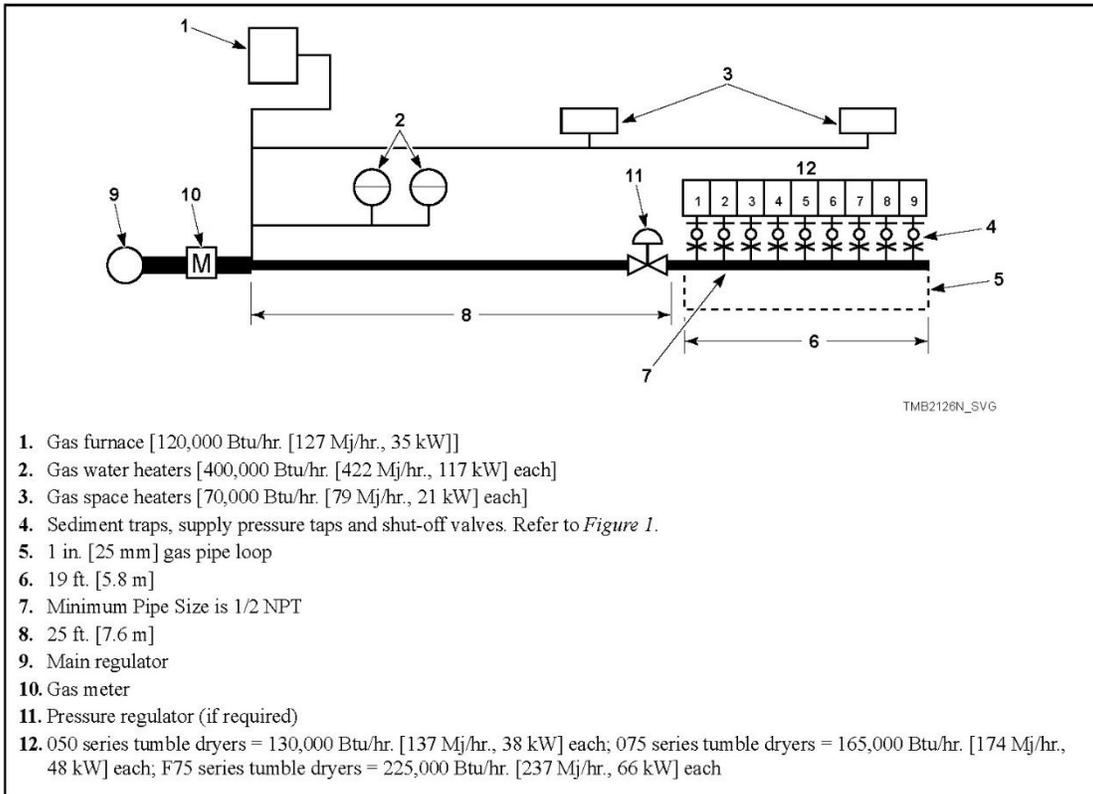


Figure 20

### SAMPLE CALCULATIONS:

Equivalent length = Total length of main gas supply pipe to the far end of the tumble dryers.  
 = 25 ft. + 19 ft. [7.6 m + 5.8 m] gas supply pipe  
 = 44 ft. [13.4 m] Total Gas Line

Total Btu/hr. = The sum of the Btu/hr. of all 050 series tumble dryers being fed by the main gas supply pipe.  
 = 9 x 130,000 [137, 38]  
 = 1,170,000 Btu/hr. [1,234 MJ/hr., 343 kW]

Using *Table 10*, the main supply pipe diameter should be 2 NPT.

**IMPORTANT: Gas loop piping must be installed as illustrated to equalize gas pressure for all tumble dryers connected to single gas service. Other gas using appliances should be connected upstream from loop.**

**Low Pressure Gas Pipe Sizes**

**NOTE: Sizing calculations based on National Fuel Gas Code.**

<b>Gas Pipe Size Required for 1000 BTU Natural Gas (Standard Conditions) at Upstream Pressure— 7.0 ± 1.5 inches water column pressure [17.4 ± 4.0 mbar, 1.74 ± 0.37 kPa]</b>						
<b>Gas Appli- ances Total BTU/hr.</b>	<b>Equivalent Length</b>					
	<b>25 feet [7.6 m]</b>	<b>50 feet [15.2 m]</b>	<b>75 feet [22.9 m]</b>	<b>100 feet [30 m]</b>	<b>125 feet [38 m]</b>	<b>150 feet [46 m]</b>
	<b>Based on 0.3 inches Water Column Pressure Drop for Length Given Sizes shown in Gas Pipe Nominal Size (NPT)</b>					
100,000	3/4	3/4	3/4	1	1	1
120,000	3/4	3/4	1	1	1	1
140,000	3/4	1	1	1	1	1
160,000	3/4	1	1	1	1-1/4	1-1/4
180,000	3/4	1	1	1-1/4	1-1/4	1-1/4
200,000	1	1	1	1-1/4	1-1/4	1-1/4
300,000	1	1-1/4	1-1/4	1-1/4	1-1/2	1-1/2
400,000	1-1/4	1-1/4	1-1/2	1-1/2	1-1/2	1-1/2
500,000	1-1/4	1-1/2	1-1/2	1-1/2	1-1/2	2
600,000	1-1/4	1-1/2	1-1/2	2	2	2
700,000	1-1/2	1-1/2	2	2	2	2
800,000	1-1/2	1-1/2	2	2	2	2
900,000	1-1/2	2	2	2	2	2-1/2
1,000,000	1-1/2	2	2	2	2-1/2	2-1/2
1,100,000	1-1/2	2	2	2	2-1/2	2-1/2
1,200,000	1-1/2	2	2	2-1/2	2-1/2	2-1/2
1,300,000	2	2	2-1/2	2-1/2	2-1/2	2-1/2
1,400,000	2	2	2-1/2	2-1/2	2-1/2	2-1/2
1,500,000	2	2	2-1/2	2-1/2	2-1/2	2-1/2
1,600,000	2	2	2-1/2	2-1/2	2-1/2	3

Table 10 continues...

<b>Gas Pipe Size Required for 1000 BTU Natural Gas (Standard Conditions) at Upstream Pressure— 7.0 ± 1.5 inches water column pressure [17.4 ± 4.0 mbar, 1.74 ± 0.37 kPa]</b>						
<b>Gas Appliances Total BTU/hr.</b>	<b>Equivalent Length</b>					
	<b>25 feet [7.6 m]</b>	<b>50 feet [15.2 m]</b>	<b>75 feet [22.9 m]</b>	<b>100 feet [30 m]</b>	<b>125 feet [38 m]</b>	<b>150 feet [46 m]</b>
	<b>Based on 0.3 inches Water Column Pressure Drop for Length Given Sizes shown in Gas Pipe Nominal Size (NPT)</b>					
1,700,000	2	2-1/2	2-1/2	2-1/2	3	3
1,800,000	2	2-1/2	2-1/2	2-1/2	3	3
1,900,000	2	2-1/2	2-1/2	3	3	3
2,000,000	2	2-1/2	2-1/2	3	3	3
2,200,000	2	2-1/2	3	3	3	3
2,400,000	2-1/2	2-1/2	3	3	3	3-1/2
2,600,000	2-1/2	2-1/2	3	3	3-1/2	3-1/2
2,800,000	2-1/2	3	3	3	3-1/2	3-1/2
3,000,000	2-1/2	3	3	3-1/2	3-1/2	3-1/2
For L.P. Gas, correct the total Btu/hr by multiplying it by 0.6. The answer is the equivalent Btu on the above chart.						

Table 10

**High Pressure Gas Pipe Sizes**

**NOTE:** Sizing calculations based on National Fuel Gas Code. **IMPORTANT:** A high pressure regulator is required at each machine.

<b>Gas Pipe Size Required for 1000 BTU Natural Gas (Standard Conditions) at Upstream Pressure — 2.0 ± 0.4 PSI [138 ± 28 mbar, 13.7 ± 2.7 kPa]</b>						
<b>Gas Appliances Total BTU/hr.</b>	<b>Equivalent Length</b>					
	<b>25 feet [7.6 m]</b>	<b>50 feet [15.2 m]</b>	<b>75 feet [22.9 m]</b>	<b>100 feet [30 m]</b>	<b>125 feet [38 m]</b>	<b>150 feet [46 m]</b>
	<b>Based on 1 PSI Pressure Drop for Length Given Sizes shown in Gas Pipe Nominal Size (NPT)</b>					
100,000	1/2	1/2	1/2	1/2	1/2	1/2
120,000	1/2	1/2	1/2	1/2	1/2	1/2
140,000	1/2	1/2	1/2	1/2	1/2	1/2
160,000	1/2	1/2	1/2	1/2	1/2	1/2
180,000	1/2	1/2	1/2	1/2	1/2	1/2
200,000	1/2	1/2	1/2	1/2	1/2	1/2
300,000	1/2	1/2	1/2	1/2	1/2	3/4
400,000	1/2	1/2	1/2	1/2	1/2	3/4
500,000	1/2	1/2	1/2	3/4	3/4	3/4
600,000	1/2	1/2	3/4	3/4	3/4	3/4
700,000	1/2	3/4	3/4	3/4	3/4	1
800,000	1/2	3/4	3/4	3/4	3/4	1
900,000	1/2	3/4	3/4	3/4	3/4	1
1,000,000	3/4	3/4	3/4	3/4	1	1
1,100,000	3/4	3/4	3/4	3/4	1	1
1,200,000	3/4	3/4	3/4	1	1	1
1,300,000	3/4	3/4	3/4	1	1	1-1/4
1,400,000	3/4	3/4	1	1	1	1-1/2
1,500,000	3/4	3/4	1	1	1	1-1/4
1,600,000	3/4	3/4	1	1	1	1-1/4

Table 11 continues...

<b>Gas Pipe Size Required for 1000 BTU Natural Gas (Standard Conditions) at Upstream Pressure — 2.0 ± 0.4 PSI [138 ± 28 mbar, 13.7 ± 2.7 kPa]</b>						
<b>Gas Appliances Total BTU/hr.</b>	<b>Equivalent Length</b>					
	<b>25 feet [7.6 m]</b>	<b>50 feet [15.2 m]</b>	<b>75 feet [22.9 m]</b>	<b>100 feet [30 m]</b>	<b>125 feet [38 m]</b>	<b>150 feet [46 m]</b>
	<b>Based on 1 PSI Pressure Drop for Length Given Sizes shown in Gas Pipe Nominal Size (NPT)</b>					
1,700,000	3/4	1	1	1	1	1-1/4
1,800,000	3/4	1	1	1	1	1-1/4
1,900,000	3/4	1	1	1	1	1-1/4
2,000,000	3/4	1	1	1	1-1/4	1-1/4
2,200,000	3/4	1	1	1-1/4	1-1/4	1-1/4
2,400,000	1	1	1	1-1/4	1-1/4	1-1/2
2,600,000	1	1	1-1/4	1-1/4	1-1/4	1-1/2
2,800,000	1	1	1-1/4	1-1/4	1-1/4	1-1/2
3,000,000	1	1	1-1/4	1-1/4	1-1/4	1-1/2

For L.P. Gas, correct the total Btu/hr by multiplying it by 0.6. The answer is the equivalent Btu on the above chart.

Table 11

## High Altitude Burner Orifice Sizing

For proper operation at altitudes above 2000 feet [610 m], the gas burner orifice size must be reduced to ensure complete combustion. Heat input derate of 4% per 1,000 feet [305 meters] of altitude above sea level. Refer to *Table 12* .

For IEC models, consult local gas supplier.

Model	Market	Gas	Altitude	Burner Orifice			
			feet [meters]	No.	inches [mm]	Quantity	Part No.
050 Series	T, G, A, H, J, K, R, U	Natural Gas	2,001-4,000 [610-1,220]	28	0.1405 [3.66]	2	M401014
			4,001-6,000 [1,221-1,830]	29	0.1360 [3.57]		M400997
			6,001-8,000 [1,831-2,440]	---	0.1299 [3.45]		44253801
			8,001-10,000 [2,441-3,050]	---	0.1299 [3.30]		44253801
	T, G, H, J, R	L.P. Gas	2,001-4,000 [610-1,220]	44	0.0860 [2.18]		M401011
			4,001-6,000 [1,221-1,830]	45	0.0820 [2.08]		M401027
			6,001-8,000 [1,831-2,440]	46	0.0810 [2.06]		M401033
			8,001-10,000 [2,441-3,050]	48	0.0760 [1.93]		M401001
	U	L.P. Gas	2,001-4,000 [610-1,220]	49	0.0730 [1.85]		M401018
			4,001-6,000 [1,221-1,830]	50	0.0700 [1.78]		M401016
			6,001-8,000 [1,831-2,440]	51	0.0670 [1.70]		M401019
			8,001-10,000 [2,441-3,050]	52	0.0635 [1.61]		M401025
	A	L.P. Gas	2,001-4,000 [610-1,220]	44	0.0860 [2.18]		M401011
			4,001-6,000 [1,221-1,830]	45	0.0820 [2.08]		M401027
			6,001-8,000 [1,831-2,440]	46	0.0810 [2.06]		M401003
			8,001-10,000 [2,441-3,050]	48	0.0760 [1.93]		M401001

Table 12 *continues...*

Model	Market	Gas	Altitude	Burner Orifice			
			feet [meters]	No.	inches [mm]	Quantity	Part No.
Classic Line 075 Series	T, G, A, H, J, K, R, U	Natural Gas	2,001-4,000 [610-1,220]	---	0.1339 [3.40]	3	44254001
			4,001-6,000 [1,221-1,830]	---	0.1299 [3.30]		44253801
			6,001-8,000 [1,831-2,440]	1/8	0.1250 [3.18]		M402489
			8,001-10,000 [2,441-3,050]	31	0.1200 [3.05]		M401017
	T, G, H, J, R	L.P. Gas	2,001-4,000 [610-1,220]	45	0.0820 [2.08]		M401027
			4,001-6,000 [1,221-1,830]	47	0.0785 [1.99]		M400999
			6,001-8,000 [1,831-2,440]	48	0.0760 [1.93]		M401001
			8,001-10,000 [2,441-3,050]	49	0.0730 [1.85]		M401018
	U	L.P. Gas	2,001-4,000 [610-1,220]	51	0.0670 [1.70]		M401019
			4,001-6,000 [1,221-1,830]	52	0.0635 [1.61]		M401025
			6,001-8,000 [1,831-2,440]	1/16	0.0625 [1.59]		N/A
			8,001-10,000 [2,441-3,050]	53	0.0595 [1.51]		N/A
	A	L.P. Gas	2,001-4,000 [610-1,220]	45	0.0820 [2.08]		M401027
			4,001-6,000 [1,221-1,830]	47	0.0785 [1.99]		M400999
			6,001-8,000 [1,831-2,440]	48	0.0760 [1.93]		M401001
			8,001-10,000 [2,441-3,050]	49	0.0730 [1.85]		M401018

Table 12 *continues...*

Model	Market	Gas	Altitude	Burner Orifice			
			feet [meters]	No.	inches [mm]	Quantity	Part No.
Eco Line 075 Series	T, G, A, H, J, K, R, U	Natural Gas	2,001-4,000 [610-1,220]	27	0.1440 [3.66]	2	M400998
			4,001-6,000 [1,221-1,830]	28	0.1405 [3.57]		M401014
			6,001-8,000 [1,831-2,440]	29	0.1360 [3.45]		M400997
			8,001-10,000 [2,441-3,050]	---	0.1299 [3.30]		44253801
F75 Series	T, G, A, H, J, K, R, U	Natural Gas	2,001-4,000 [610-1,220]	23	0.1540 [3.91]	3	M401020
			4,001-6,000 [1,221-1,830]	25	0.1495 [3.80]		M402997
			6,001-8,000 [1,831-2,440]	27	0.1440 [3.66]		M400998
			8,001-10,000 [2,441-3,050]	---	0.1378 [3.50]		70476601
	T, G, A, H, J, K, R, U	L.P. Gas	2,001-4,000 [610-1,220]	43	0.0890 [2.26]		M406184
			4,001-6,000 [1,221-1,830]	44	0.0860 [2.18]		M401011
			6,001-8,000 [1,831-2,440]	45	0.0820 [2.08]		M401027
			8,001-10,000 [2,441-3,050]	47	0.0785 [1.99]		M400999

Table 12

# Electrical Requirements

## Electrical Requirements

	<b>WARNING</b>
<ul style="list-style-type: none"> <li>To reduce the risk of electric shock, disconnect this appliance from the power supply before attempting any user maintenance other than cleaning the lint trap for dryers. Turning the controls to the OFF position does not disconnect this appliance from the power supply.</li> <li>To reduce the risk of fire and electric shock, check with a qualified service person for proper grounding procedures. Improper connection of the equipment grounding conductor may result in a risk of electric shock.</li> <li>Certain internal parts are intentionally not grounded and may present a risk of electric shock only during servicing. Service Personnel - Do not contact the following parts while the appliance is energized: Input/Output Board and Variable Frequency Drive, including the heat sinks.</li> <li>This appliance shall be installed in accordance with the rules in force, and dryers used only in a sufficiently ventilated space. Consult technical instruction before installation and use of this appliance.</li> </ul>	
W935	

	<b>CAUTION</b>
<p>To reduce the risk of injury or component failure, if electrical supply is coming from a three phase service, DO NOT connect a "High Leg" or "Stinger Leg" to a single phase machine. On a three phase machine, if there is a "High Leg" or "Stinger Leg" it should be connected to L3.</p>	
W938	

	<b>WARNING</b>
<p>The appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by a utility.</p>	
W943	

**IMPORTANT:** Electrical connections must be made by a qualified electrician using data on serial plate, installation manuals and wiring diagram provided with tumble dryer and according to local codes. Install a circuit breaker as close to the tumble dryer as possible. If more than one tumble dryer is being installed, a circuit breaker must be provided for each.

**NOTE:** Connect tumble dryer to an individual branch circuit not shared with lighting or other equipment.

**NOTE:** 3 Phase Tumble Dryers Only - Do not use fuses to avoid the possibility of "single phasing" and causing premature failure of the motors.

	<b>WARNING</b>
<p>In case of servicing (or putting the tumble dryer out of order), disconnect the tumble dryer from the main supply by switching off the circuit breaker.</p>	
W796	

## Wiring Diagram

**NOTE:** Wiring diagram location: inside electrical box.

The wiring diagram part number is in the lower portion of the electrical data on the serial plate.

## Wiring for Central Pay

Applicable for the following control suffixes (position 7 and 8 of the model number): BL, NL and WL.

### System Connections

Connection to central pay systems will be made in the rear junction box of the tumble dryer.

Locate the harness with Black, Red, White with Red Stripe and Orange with Black Stripe wires.

The wire colors will be the same regardless of control type.

Splice the after-market central pay system wires to the tumble dryer control wire harness as follows.

Wire Colors	Description
Red	24V AC/DC from central pay system
Black	Common (negative) from central pay system

*Table continues...*

Wire Colors	Description
White with Red Stripe	Machine busy signal to central pay system
Orange with Black Stripe	Machine busy signal to central pay system

#### Start Pulse Requirements

All control types will consider a pulse valid if it is between 200 and 1000 milliseconds in length, with a minimum of 200 milliseconds between pulses.

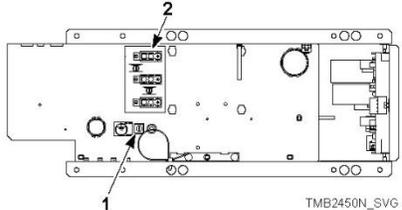
### Grounding Instructions

**NOTE:** To ensure protection against shock, this tumble dryer **MUST** be electrically grounded in accordance with the local codes, or in the absence of local codes, with the latest edition of the National Electrical Code ANSI/NFPA No. 70. In Canada the electrical connections are to be made in accordance with CSA C22.1 latest edition Canadian Electrical Code, or local codes. Electrical work should be done by a qualified electrician.

This tumble dryer must be grounded. In the event of malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for electric current. This tumble dryer must be connected to a grounded metal, permanent wiring system; or an equipment grounding conductor must be run with the circuit conductors and connected to the appropriate ground location.

- Metal conduit and/or BX cable is not considered ground.

#### Service/Ground Location

Model	Ground and Terminal Block Locations
Gas and Steam	 <p>1. Ground 2. Power Distribution Block</p> <p>TMB2450N_SVG</p>

*Table continues...*

- Connecting the Neutral from the electrical service box to the tumble dryer ground screw does not constitute a ground.
- A dedicated ground conduit (wire) must be connected between the electrical service box ground bar and tumble dryer ground screw.

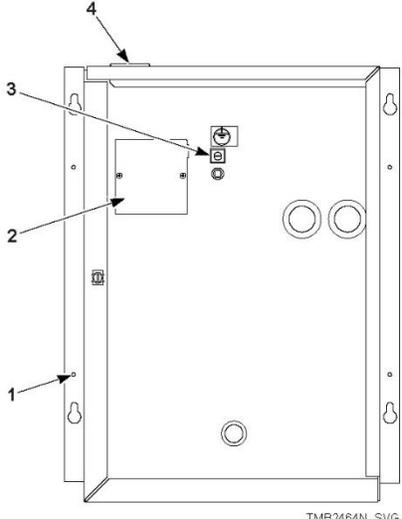
	<b>WARNING</b>
<p>To reduce the risk of electrical shock, de-energize the electrical circuit being connected to the tumble dryer before making any electrical connections. All electrical connections should be made by a qualified electrician. Never attempt to connect a live circuit.</p>	
W409R1	

	<b>CAUTION</b>
<p>Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.</p>	
W071	

#### For On Premises Laundry (OPL) Models Only

All OPL (non-vent) models are factory-equipped with an emergency stop button on the front panel.

**NOTE:** Activation of the emergency stop switch stops all tumble dryer control circuit functions, but **DOES NOT** remove all electrical power from tumble dryer.

Model	Ground and Terminal Block Locations
Electric	 <p style="text-align: right; font-size: small;">TMB2464N_SVG</p> <ol style="list-style-type: none"> <li>1. Junction Box</li> <li>2. Terminal Block</li> <li>3. Earth/Ground</li> <li>4. Electrical Service</li> </ol>

## To Connect Electrical Service To The Tumble Dryer

**NOTE:** The wiring diagram is located in the junction box.

1. Install a circuit breaker as close to the tumble dryer as possible. If more than one tumble dryer is being installed, a disconnect switch or circuit breaker should be provided for each. This will make it possible to disconnect each tumble dryer for maintenance purposes.
2. Connect the wire leads to the appropriate labeled terminal on the terminal block. The ground wire must be connected to the ground connection as shown in *Service/Ground Location*.

## Electrical Specifications

**NOTE:** Wire sizes were obtained from the Canadian Electrical Code for 75 C. wire and are intended for use as a guideline only. Electrical connections should be made by a qualified electrical contractor in accordance with all applicable local and national requirements.

**NOTE:** Electrical specifications below are subject to change without notice. Always refer to product serial plate for most current specifications of product being installed.

	<b>CAUTION</b>
<p>Use copper conductors only with the following rating when wiring appliance to electric supply: Dryer gas and steam heat models require 187°F (75°C) minimum. Dryer electric heat models require 194°F (90°C) minimum.</p>	
W936	

**NOTE:** Connect this appliance to an individual branch circuit.

**NOTE: 3 Phase Only –** Each tumble dryer must be connected to its own individual branch circuit breaker, not fuses, to avoid the possibility of “single phasing” and causing premature failure of the motor(s).

### 050 Series Gas and Steam Models

Voltage Code	Voltage	Cycle	Phase	Terminal Block Connections Required	Full Load Amps	Recommended Circuit Breaker Rating Amps	Wire Size AWG [mm <sup>2</sup> ]
B	100-120	50-60	1	L1, Neutral, and ground	9	15	14 [2.5]
X	200-240	50-60	1-3	Refer to Figure 21	6	15	14 [2.5]
N	440-480	50-60	3	L1, L2, L3 and ground	3	15	14 [2.5]
P	380-415	50-60	3	L1, L2, L3 and ground	3	15	14 [2.5]

Table 13

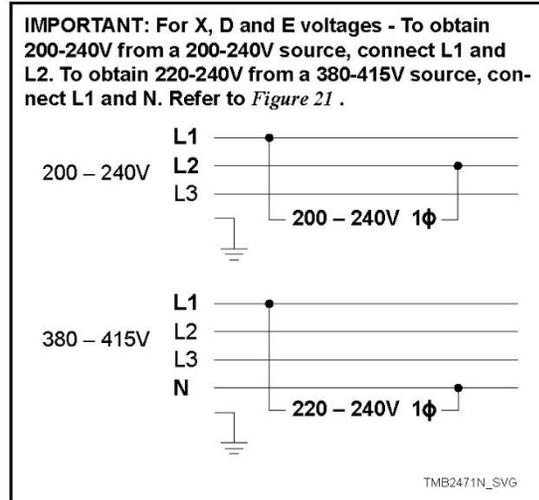


Figure 21

**075 Series Gas and Steam Models**

Voltage Code	Voltage	Cycle	Phase	Terminal Block Connections Required	Full Load Amps	Recommended Circuit Breaker Rating Amps	Wire Size AWG [mm <sup>2</sup> ]
B	100-120	50-60	1	L1, Neutral, and ground	12	15	14 [2.5]
X	200-240	50-60	1-3	Refer to <i>Figure 21</i>	7	15	14 [2.5]
N	440-480	50-60	3	L1, L2, L3 and ground	3	15	14 [2.5]
P	380-415	50-60	3	L1, L2, L3 and ground	3	15	14 [2.5]

Table 14

**F75 Gas Models Only**

Voltage Code	Voltage	Cycle	Phase	Terminal Block Connections Required	Full Load Amps	Recommended Circuit Breaker Rating Amps	Wire Size AWG [mm <sup>2</sup> ]
Q	200-240	50-60	3	L1, L2, L3 and ground	6	15	14 [2.5]
N	440-480	50-60	3	L1, L2, L3 and ground	3	15	14 [2.5]
P	380-415	50-60	3	L1, L2, L3 and ground	3	15	14 [2.5]

Table 15

**21 kW 050 Series Electric Models**

Voltage Code	Voltage	Cycle	Phase	Terminal Block Connections Required	Full Load Amps	Recommended Circuit Breaker Rating Amps	Wire Size AWG [mm <sup>2</sup> ]
E	230-240	50-60	1	Refer to <i>Figure 21</i>	91	125	1 [35]

Table 16

**30 kW 050 Series Electric Models**

Voltage Code	Voltage	Cycle	Phase	Terminal Block Connections Required	Full Load Amps	Recommended Circuit Breaker Rating Amps	Wire Size AWG [mm <sup>2</sup> ]
F	200-208	50-60	3	L1, L2, L3 and ground	87	110	2 [35]
G	230-240	50-60	3	L1, L2, L3 and ground	75	100	3 [26.7]
H	380	50-60	3	L1, L2, L3 and ground	47	60	6 [16]
J	400-415	50-60	3	L1, L2, L3 and ground	43	60	6 [16]
K	440	50-60	3	L1, L2, L3 and ground	41	60	6 [16]
L	460-480	50-60	3	L1, L2, L3 and ground	38	50	8 [10]

Table 17

**36 kW Classic Line 075 Series Electric Models**

Voltage Code	Voltage	Cycle	Phase	Terminal Block Connections Required	Full Load Amps	Recommended Circuit Breaker Rating Amps	Wire Size AWG [mm <sup>2</sup> ]
F	200-208	50-60	3	L1, L2, L3 and ground	104	150	1/0 [50]
G	230-240	50-60	3	L1, L2, L3 and ground	90	125	1 [35]
H	380	50-60	3	L1, L2, L3 and ground	56	70	4 [25]
J	400-415	50-60	3	L1, L2, L3 and ground	52	70	4 [25]
K	440	50-60	3	L1, L2, L3 and ground	49	70	4 [25]
L	460-480	50-60	3	L1, L2, L3 and ground	45	60	6 [16]

Table 18

**21 kW Eco Line 075 Series Electric Models**

Voltage Code	Voltage	Cycle	Phase	Terminal Block Connections Required	Full Load Amps	Circuit Breaker	Wire Size AWG [mm <sup>2</sup> ]
F	200-208	50-60	3	L1, L2, L3 and ground	62	80	4 [25]
G	230-240	50-60	3	L1, L2, L3 and ground	54	70	4 [25]
H	380	50-60	3	L1, L2, L3 and ground	33	45	8 [10]
J	400-415	50-60	3	L1, L2, L3 and ground	31	40	8 [10]
K	440	50-60	3	L1, L2, L3 and ground	29	40	8 [10]
L	460-480	50-60	3	L1, L2, L3 and ground	27	35	8 [10]

Table 19

**30 kW Medium Line 075 Series Electric Models**

Voltage Code	Voltage	Cycle	Phase	Terminal Block Connections Required	Full Load Amps	Recommended Circuit Breaker Rating Amps	Wire Size AWG [mm <sup>2</sup> ]
F	200-208	50-60	3	L1, L2, L3 and ground	87	110	2 [35]
G	230-240	50-60	3	L1, L2, L3 and ground	76	100	3 [26.7]
H	380	50-60	3	L1, L2, L3 and ground	47	60	6 [16]
J	400-415	50-60	3	L1, L2, L3 and ground	43	60	6 [16]
K	440	50-60	3	L1, L2, L3 and ground	41	60	6 [16]
L	460-480	50-60	3	L1, L2, L3 and ground	37	50	8 [10]

Table 20

# Steam Requirements

## Steam Requirements

	<b>WARNING</b>
<b>This appliance does not contain inherent pressure relief. A pressure relief valve rated for a maximum of 125 psi shall be provided by the steam source.</b>	
W942	

**NOTE: Steam valve and required adapter are located in cylinder or lint compartment.**

**NOTE: Machines require a constant 80 to 100 psig [5.3 to 6.9 bar] steam service for optimum operation. The maximum allowable steam pressure is 125 psig [8.6 bar]. In no case may the pressure exceed the above value.**

Obtain specific steam service pipe sizes from steam system supplier or a qualified steam fitter.

- Refer to *Figure 22* for proper steam pipe configurations.
- To prevent condensate draining from headers to tumble dryer, piping should have a minimum 12 inch [300 mm] rise above respective header. Do not make steam connection to header with a horizontal or downward facing tee or elbow.
- Whenever possible, horizontal runs of steam lines must drain, by gravity, to respective steam header. Water pockets, or an improperly drained steam header will provide wet steam, causing improper operation of tumble dryer. If pockets or improper drainage cannot be eliminated, install a bypass trap to drain condensate from the low point in the steam header to the return.

- In both steam supply and steam return line, it is recommended that each have a pipe union and shut-off valve. This will enable you to disconnect the steam connections and service the tumble dryer while your laundry facility is in operation.
- Connect the steam solenoid valve to the related steam coil inlet connection with nipples, flex hoses, unions and tees.
- Strainers may require cleaning due to materials from hoses or pipes.
- Install vacuum breaker (optional), bucket trap with built-in strainer and check valve. For successful operation of tumble dryer, install trap 18 inches [460 mm] below coil and as near to the tumble dryer as possible. Inspect trap carefully for inlet and outlet markings and install according to trap manufacturer's instructions. If steam is gravity returned to boiler, omit trap but install vacuum breaker and check valve in return line near tumble dryer. Gravity return requires entire return plumbing be below steam coil outlets.
- Install union and shut-off valve in return line and make final pipe connections to return header.

**NOTE: To prevent water hammering, route return lines below outlets of steam coils.**

**NOTE: Steam inlet lines of each dryer should be trapped to keep line condensation from going into steam coils.**

**NOTE: IEC machines are shipped with BSPT adapters in the lint compartment.**

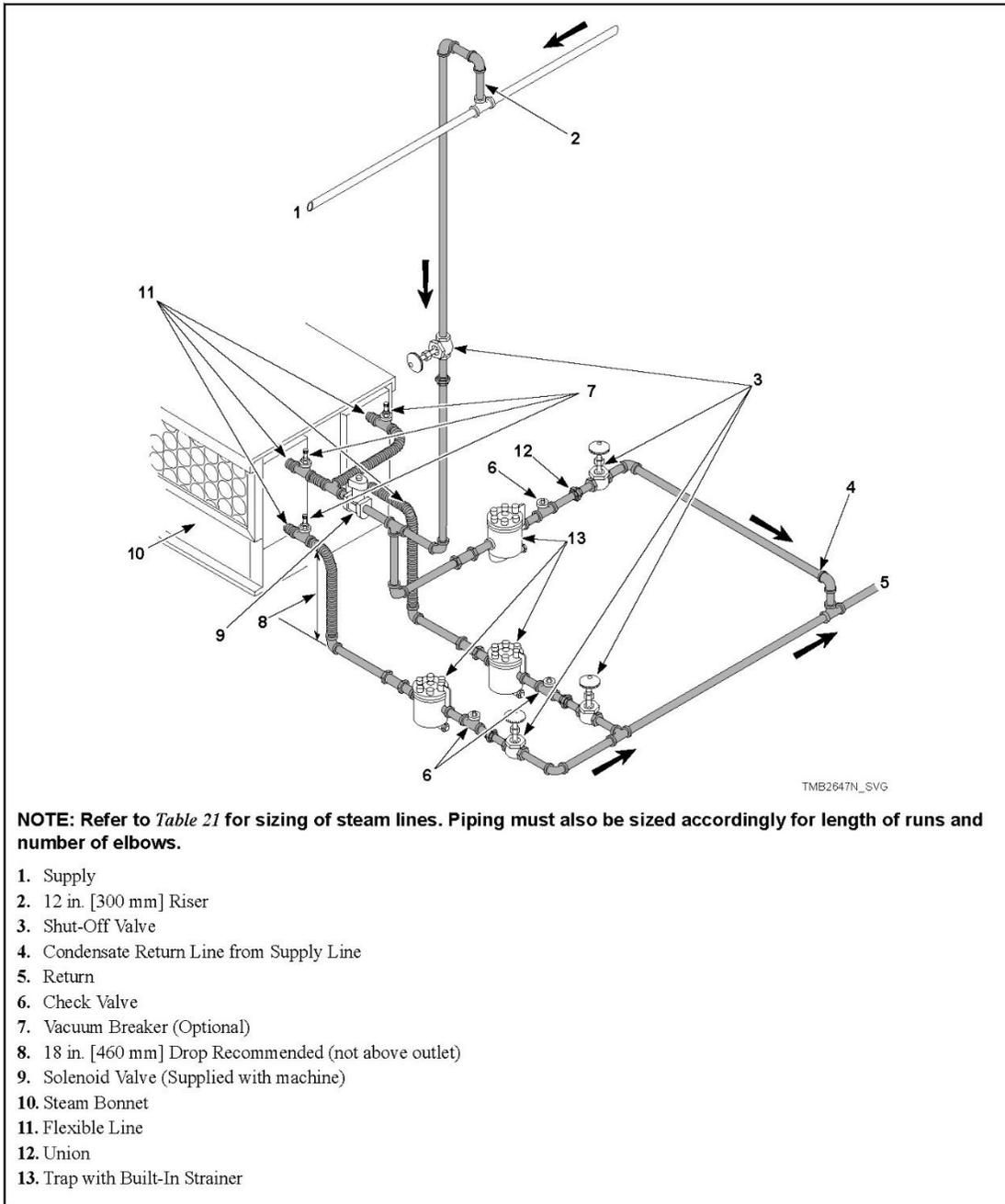


Figure 22

Steam Pressure PSI [bar]	Minimum Supply Pipe Diameter	Steam Trap Size* Pounds Condensate/Hour [Kilograms Condensate/Hour]
80-100 [5.3-6.9]	3/4 NPT	160 [72.6]
*Based on 6.9 bar.		

Table 21

## Piping Recommendations

- Trap each steam coil individually. Always keep the trap clean and in good working condition.
- When tumble dryer is on the end of a line of equipment, extend header at least 4 feet [1.2 m] beyond tumble dryer. Install shut-off valve, union, check valve and bypass trap at end of line. If gravity return to boiler, omit trap.
- Insulate steam supply and return lines for safety of operator and safety while servicing tumble dryer.

	<b>WARNING</b>
<p><b>All system components must have a 125 psig [8.6 bar] working pressure. Shut-off valves must be installed upstream of the steam solenoid valve and downstream of each steam trap so components can be isolated for maintenance or emergency purposes. All components (solenoid valve, traps) must be supported to minimize loads on the tumble dryer steam coil connections.</b></p>	
W701R1	

## Installing Steam Trap and Making Condensate Return Connections

The steam trap must be installed and the coil outlet connections must be connected to the condensate return lines. The following steps outline the procedure for installing the steam trap and connecting the condensate return lines. Refer to *Figure 22* for typical installations.

1. Use flexible lines between steam inlet solenoid and steam coils, as well as outlet between steam coil and traps.
2. If necessary, install a strainer at the end of each flexible hose.
3. Install a steam trap to each strainer.
 

**IMPORTANT: Steam trap must be installed a minimum of 18 inches [460 mm] recommended below the steam coil outlet connections.**
4. Install a shut-off valve to each steam trap.
5. Connect to the condensate return lines.
6. For steam solenoid valve wiring connections, refer to Wiring Diagram supplied with tumble dryer.

## Removing Tumble Dryer from Service

1. Turn off electrical supply external to machine.
2. Turn off gas supply external to machine.
3. Turn off manual gas shut-off valve on machine.
4. Turn off steam supply external to machine.
5. Remove all electric, gas and steam connections.

## Disposal of Unit

This appliance is marked according to the European directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Refer to *Figure 28*. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. Ensuring this product is disposed of correctly will help prevent potential negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact the local city office, household waste disposal service, or the source from which the product was purchased.

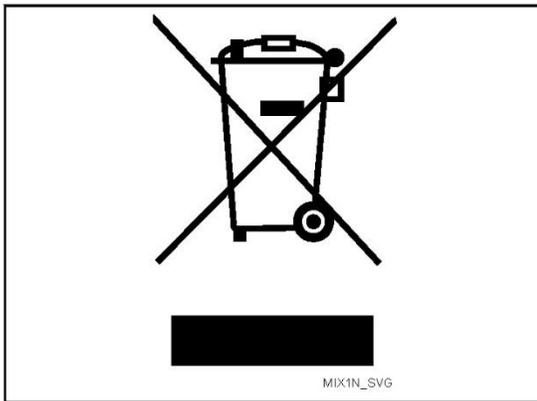


Figure 28

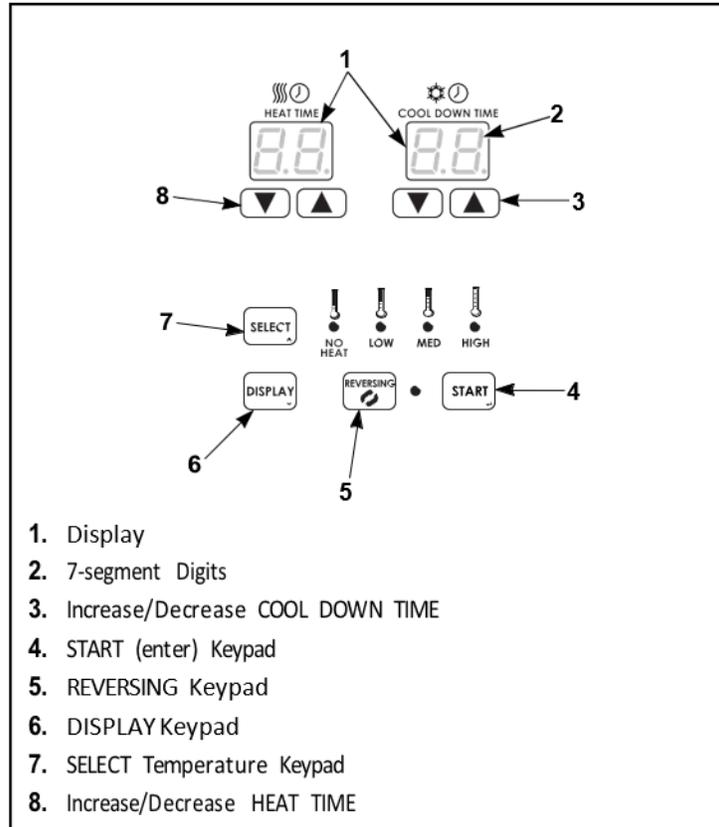
# China Restriction of hazardous substances (RoHS)

The Table of Hazardous Substances/Elements and their Content      As required by China's Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products

Hazardous substances						
Part Name	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (CR[VI])	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
PCBs	X	O	O	O	O	O
Electromechanical Parts	O	O	O	O	O	O
Cables and Wires	O	O	O	O	O	O
Metal Parts	O	O	O	O	O	O
Plastic Parts	O	O	O	O	O	O
Batteries	O	O	O	O	O	O
Textile	O	O	O	O	O	O
Timing Belts	O	O	O	O	O	O
Insulation	O	O	O	O	O	O
Glass	O	O	O	O	O	O
Display	O	O	O	O	O	O
<p>This table is prepared in accordance with the provisions of SJ/T-11364.</p> <p>O: Indicates that the content of said hazardous substance in all of the homogenous materials in the component is within the limits required by GB/T 26572.</p> <p>X: Indicates that the content of said hazardous substance exceeds the limits required by GB/T 26572 in at least one homogenous material in the component.</p> <p><b>All parts named in this table with an "X" are in compliance with the European Union's RoHS Legislation.</b></p> <p><b>NOTE: The referenced Environmental Protection Use Period Marking was determined according to normal operating use conditions of the product such as temperature and humidity.</b></p>						
	<p>This product under normal use, durable years of environmental protection is 15 years.</p>					

# MODES:

## Control Interface:



## Circul-Air Turnout Dryer System Programming:

# Modes

- 1 - NO HEAT**
- 2 - OUTER SHELLS**
- 3 - LINERS/HOODS**
- 4 - GENERAL, NON-PPE DRY**

# MACHINE OPERATION:

## Start Mode

The control enters this mode when it is ready to start or resume a cycle. The control will display the last cycle that was run and the remaining cycle time.

If the DISPLAY keypad is pressed or if there is no input from the operator for 4.25 minutes (i.e., keypad presses, opening or closing the loading door), the display will turn off. Operator input (i.e., keypad presses opening or closing the loading door) will turn on the display.

After pressing the START (enter) keypad if the door is closed, the cycle will begin. The cycle time in minutes will be displayed.

## Run Mode

The control enters this mode when a cycle is running. The time remaining appears in the display.

Upon the start of a cycle, the control will display the heat cycle time and cool down cycle time. When the heat portion of the cycle ends, the cool down portion begins.

Once the cycle is complete, the control will proceed to the *End of Cycle Mode*.

## End of Cycle Mode

When a cycle is complete, the control displays **00** until the door is opened or a keypad is pressed. When one of these options occurs, the control reverts back to *Start Mode*. If enough time elapses and the door is not opened or a keypad is pressed, the control will enter *Extended Tumble Mode*.

## Power Failure Display Mode

In Power Failure Display Mode the control will show **Pr FL**. This informs the user that a cycle was interrupted and did not complete normally. This mode is entered from *System Check Mode* if a power failure occurred during a cycle and the cycle is not able to automatically resume. If the user presses any key, *Start Mode* is entered.

## Extended Tumble Mode

If the door hasn't been opened and no keys have been pressed 20 minutes after the cycle has ended, the control increments the Total Number Extended Tumble Cycles audit counter and enters Extended Tumble. The cylinder will tumble for two minutes every 60 minutes for up to 18 hours or until the door is opened or a key is pressed.

# TROUBLESHOOTING:

## Troubleshooting Guide

Won't Start	Won't Heat	Gear Not Dry	Possible Reason – Corrective Actions
•			Close the loading door tightly.
•			Close lint panel tightly.
•			Press the PUSH-TO-START or START pad/button.
•			Be sure power cord is plugged all the way into the electrical outlet and hard or direct wire connections are tight.
•			Check the main fuse and circuit breaker.
•			Check fuses located in the machine.
	•		Insufficient airflow.
	•		Gas shut-off valve in OFF position.
	•		Broken drive belt. Call the service person.
	•	•	Tumble dryer is in Cool Down Mode.
	•	•	Lint screen clogged. Clean lint screen.
	•	•	Exhaust duct to outside is blocked. Clean out.



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