

# Tumble Dryers

25 Pound (11,3 Kilogram) Capacity

30 Pound (13,6 Kilogram) Capacity

35 Pound (16 Kilogram) Capacity

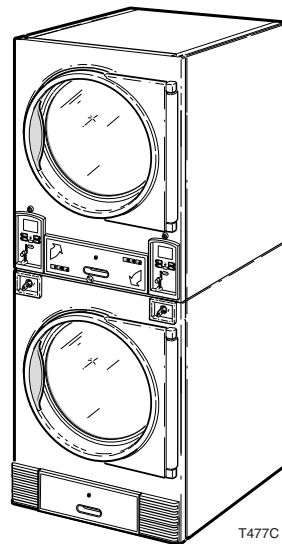
Stacked 30 Pound (13,6 Kilogram) Capacity

Stacked 45 Pound (20,4 Kilogram) Capacity

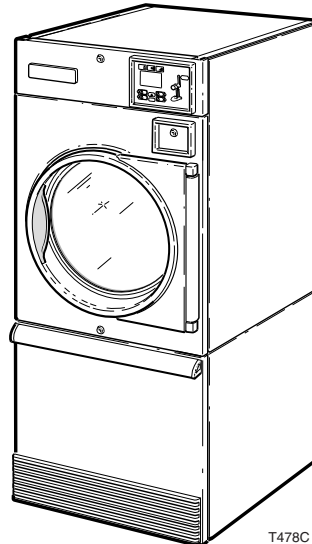
55 Pound (25 Kilogram) Capacity

Starting Serial No. 0602004144

Refer to Page 6 for Model Identification



T477C



T478C

## Original Instructions

**Keep These Instructions for Future Reference.**

(If this machine changes ownership, this manual must accompany machine.)





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 ANSI/NFPA 70 “National Electric Code.”

In Canada, installation must comply with Standards CAN/CSA-B149.1 or 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.



## WARNING

**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.

W033

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS:**
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Clear the room, building or area of all occupants.
  - Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

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



## WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the tumble dryer before servicing.
- Close gas shut-off valve to gas tumble dryer before servicing.
- Close steam valve to steam tumble dryer before servicing.
- Never start the tumble dryer with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumble dryer is properly grounded.

W002R1



## WARNING

- Installation of unit must be performed by a qualified installer.
- Install tumble dryer according to manufacturer's instructions and local codes.
- DO NOT 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.

W752R1

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 91 cm (36 inch) 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.

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# Introduction

## Model Identification

Information in this manual is applicable to these models:

	Gas			Steam		Electric	
<b>025 Series</b>	CHD25G2-CA025L	HA025L	ST025N	CHD25S2-CT025S	IT025S	CHD25E2-CT025E	IT025E
	CHD25G2-CA025N	HA025N	SU025L	CHD25S2-CU025S	ST025S	CHD25E2-CU025E	ST025E
	CHD25G2-CT025L	HK025N	SU025N	DR25S2-BT025S	SU025S	DR25E2-BT025E	SU025E
	CHD25G2-CT025N	HT025L	UA025L	DR25S2-BU025S	UT025S	DR25E2-BU025E	UT025E
	CHD25G2-CU025L	HT025N	UA025N	HT025S	UU025S	HT025E	UU025E
	CHD25G2-CU025N	HU025L	UK025N	HU025S	YT025S	HU025E	YT025E
	CK025N	HU025N	UT025L	IPD25S2	YU025S	IPD25E2	YU025E
	DR25G2-BA025L	IPD25G2	UT025N				
	DR25G2-BA025N	IT025L	UU025L				
	DR25G2-BK025N	IT025N	UU025N				
	DR25G2-BT025L	SA025L	YT025L				
	DR25G2-BT025N	SA025N	YT025N				
	DR25G2-BU025L	SK025N	YU025L				
	DR25G2-BU025N	ST025L	YU025N				
<b>030 Series</b>	CHD30G2-CA030L	HA030L	ST030L	CHD30S2-CT030S	IT030S	CHD30E2-CT030E	IT030E
	CHD30G2-CA030N	HA030N	ST030N	CHD30S2-CU030S	ST030S	CHD30E2-CU030E	ST030E
	CHD30G2-CT030L	HK030N	SU030L	DR30S2-BT030S	SU030S	DR30E2-BT030E	SU030E
	CHD30G2-CT030N	HT030D	SU030N	DR30S2-BU030S	UT030S	DR30E2-BU030E	UT030E
	CHD30G2-CU030L	HT030L	UA030L	HT030S	UU030S	HT030E	UU030E
	CHD30G2-CU030N	HT030N	UA030N	HU030S	YT030S	HU030E	YT030E
	CK030N	HU030L	UK030N	IPD30S2	YU030S	IPD30E2	YU030E
	DR30G2-BA030L	HU030N	UT030L				
	DR30G2-BA030N	IPD30G2	UT030N				
	DR30G2-BK030N	IT030L	UU030L				
	DR30G2-BT030D	IT030N	UU030N				
	DR30G2-BT030L	SA030L	YT030L				
	DR30G2-BT030N	SA030N	YT030N				
	DR30G2-BU030L	SK030N	YU030L				
	DR30G2-BU030N	ST030D	YU030N				
<b>T30 Series</b>	CHD30STG2-CAT30L	HAT30L	SKT30N	CHD30STS2-CTT30S	ITT30S	CHD30STE2-CTT30E	ITT30E
	CHD30STG2-CAT30N	HAT30N	STT30D	CHD30STS2-CUT30S	STT30S	CHD30STE2-	STT30E
	CHD30STG2-CTT30L	HKT30N	STT30L	DRST30S2-BTT30S	SUT30S	CUT30E	SUT30E
	CHD30STG2-CTT30N	HTT30D	STT30N	DRST30S2-BUT30S	UTT30S	DRST30E2-BTT30E	UTT30E
	CHD30STG2-CUT30L	HTT30L	SUT30L	HTT30S	UUT30S	DRST30E2-BUT30E	UUT30E
	CHD30STG2-	HTT30N	SUT30N	HUT30S		HTT30E	
	CUT30N	HUT30L	UAT30L	IPD30STS2		HUT30E	
	CKT30N	HUT30N	UAT30N			IPD30STE2	
	DR335	IPD30STG2	UKT30N				
	DR335G2-BKT30N	ITT30L	UTT30L				
	DRST30G2-BAT30L	ITT30N	UTT30N				
	DRST30G2-BAT30N	MTT30N	UUT30L				
	DRST30G2-BTT30D	NTT30N	UUT30N				
	DRST30G2-BTT30L	SAT30L					
	DRST30G2-BTT30N	SAT30N					
	DRST30G2-BUT30L						
	DRST30G2-BUT30N						

(Continued)



(Continued)

	Gas			Steam		Electric	
<b>035 Series</b>	AT035L	HA035L	SU035N	AT035S	IT035S	AT035E	IT035E
	AT035N	HA035N	UA035L	CHD35S2-CT035S	ST035S	CHD35E2-CT035E	ST035E
	CHD35G2-CA035L	HK035N	UA035N	CHD35S2-CU035S	SU035S	CHD35E2-CU035E	SU035E
	CHD35G2-CA035N	HT035L	UK035N	DR35S2-BT035S	UT035S	DR35E2-BT035E	UT035E
	CHD35G2-CT035L	HT035N	UT035L	DR35S2-BU035S	UU035S	DR35E2-BU035E	UU035E
	CHD35G2-CT035N	HU035L	UT035N	HT035S	YT035S	HT035E	YT035E
	CHD35G2-CU035L	HU035N	UU035L	HU035S	YU035S	HU035E	YU035E
	CHD35G2-CU035N	IPD35G2	UU035N	IPD35S2		IPD35E2	
	CK035N	IT035L	YT035L				
	DR35G2-BA035L	IT035N	YT035N				
	DR35G2-BA035N	SA035L	YU035L				
	DR35G2-BK035N	SA035N	YU035N				
	DR35G2-BT035L	SK035N					
	DR35G2-BT035N	ST035L					
	DR35G2-BU035L	ST035N					
	DR35G2-BU035N	SU035L					
<b>T45 Series</b>	CKT45N	HAT45L	STT45N	Not Applicable		Not Applicable	
	CTT45L	HAT45N	SUT45L				
	CTT45N	HKT45N	SUT45N				
	DR445G2-BAT45L	HTT45D	UAT45L				
	DR445G2-BAT45N	HTT45L	UAT45N				
	DR445G2-BKT45N	HTT45N	UKT45N				
	DR445G2-BTT45D	HUT45L	UTT45L				
	DR445G2-BTT45L	HUT45N	UTT45N				
	DR445G2-BTT45N	IPD45STG2	UUT45L				
	DR445G2-BUT45L	ITT45L	UUT45N				
	DR445G2-BUT45N	ITT45N					
	DRST45G2-BAT45L	MTT45N					
	DRST45G2-BAT45N	NTT45N					
	DRST45G2-BTT45D	SAT45L					
	DRST45G2-BTT45L	SAT45N					
	DRST45G2-BTT45N	SKT45N					
	DRST45G2-BUT45L	STT45D					
	DRST45G2-BUT45N	STT45L					
<b>055 Series</b>	CA055L	HA055L	ST055L	Not Applicable		CT055E	IPD55E2
	CA055N	HA055N	ST055N			CU055E	IT055E
	CK055N	HK055N	SU055L			DR55SE2-BT055E	ST055E
	CT055L	HT055D	SU055N			DR55SE2-BU055E	SU055E
	CT055N	HT055L	UA055L			HT055E	UT055E
	CU055L	HT055N	UA055N			HU055E	UU055E
	CU055N	HU055L	UK055N				
	DR55SG2-BA055L	HU055N	UT055L				
	DR55SG2-BA055N	IPD55G2	UT055N				
	DR55SG2-BK055N	IT055L	UU055L				
	DR55SG2-BT055D	IT055N	UU055N				
	DR55SG2-BT055L	SA055L					
	DR55SG2-BT055N	SA055N					
	DR55SG2-BU055L	SK055N					
	DR55SG2-BU055N	ST055D					

(see next page for suffixes)

## Introduction

Includes models with the following control suffixes:

3B – reversing DX4 vended	KW – reversing prep for coin	R3 – reversing DX4 OPL
3O – DX4 OPL	KX – prep for coin	RE – reversing LED OPL
3V – DX4 vended	KY – prep for card	RQ – reversing dual digital timer
3W – reversing DX4 prep for coin	KZ – reversing prep for card	RU – reversing UniLinc OPL
3X – DX4 prep for coin	LB – reversing network adaptable coin	SD – single drop
BB – reversing basic electronic, coin	LC – network adaptable coin	SX – single drop, prep for coin
BC – basic electronic, coin	LW – reversing network adaptable, prep for coin	UO – UniLinc OPL
BG – basic electronic, OPL mode	LX – network adaptable, prep for coin	WB – reversing network ready coin
BL – basic electronic, central pay	LY – network adaptable, prep for card	WC – network ready coin
BW – reversing basic electronic, prep for coin	LZ – reversing network adaptable, prep for card	WW – reversing network ready, prep for coin
BX – basic electronic, prep for coin	NC – NetMaster coin	WX – network ready, prep for coin
BY – basic electronic, prep for card	NR – NetMaster card	WY – network ready, prep for card
BZ – reversing basic electronic, prep for card	NX – NetMaster, prep for coin	WZ – reversing network ready, prep for card
DO – DMP OPL	NY – NetMaster, prep for card	ZC – NetMaster network coin
DV – DMP vended	OM – OPL micro	ZR – NetMaster network card
DX – DMP prep for coin	QT – dual digital timer	ZX – NetMaster network, prep for coin
EO – LED OPL		ZY – NetMaster network, prep for card
KB – reversing single coin		
KC – single coin		

# Contact Information

If service is required, contact the nearest Factory Authorized Service Center.

If you are unable to locate an authorized service center or are unsatisfied with the service performed on your unit, contact:

**Alliance Laundry Systems**  
**Shepard Street**  
**P.O. Box 990**  
**Ripon, WI 54971-0990**  
**U.S.A.**

**www.alliancelaundry.com**

**Phone: +1 (920) 748-3121 Ripon, Wisconsin**  
**+32 56 41 20 54 Wevelgem, Belgium**

When calling or writing about your unit, PLEASE GIVE THE MODEL AND SERIAL NUMBERS. The model and serial numbers are located on the nameplate. The nameplate will be in the location shown in *Figure 1*.

Date Purchased \_\_\_\_\_

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Please include a copy of your bill of sale and any service receipts you have.



## WARNING

**To reduce the risk of serious injury or death, DO NOT repair or replace any part of the unit or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that you understand and have the skills to carry out.**

W329

If replacement parts are required, contact the source from where you purchased your tumble dryer or call +1 (920) 748-3950 or +32 56 41 20 54 for the name and address of the nearest authorized parts distributor.

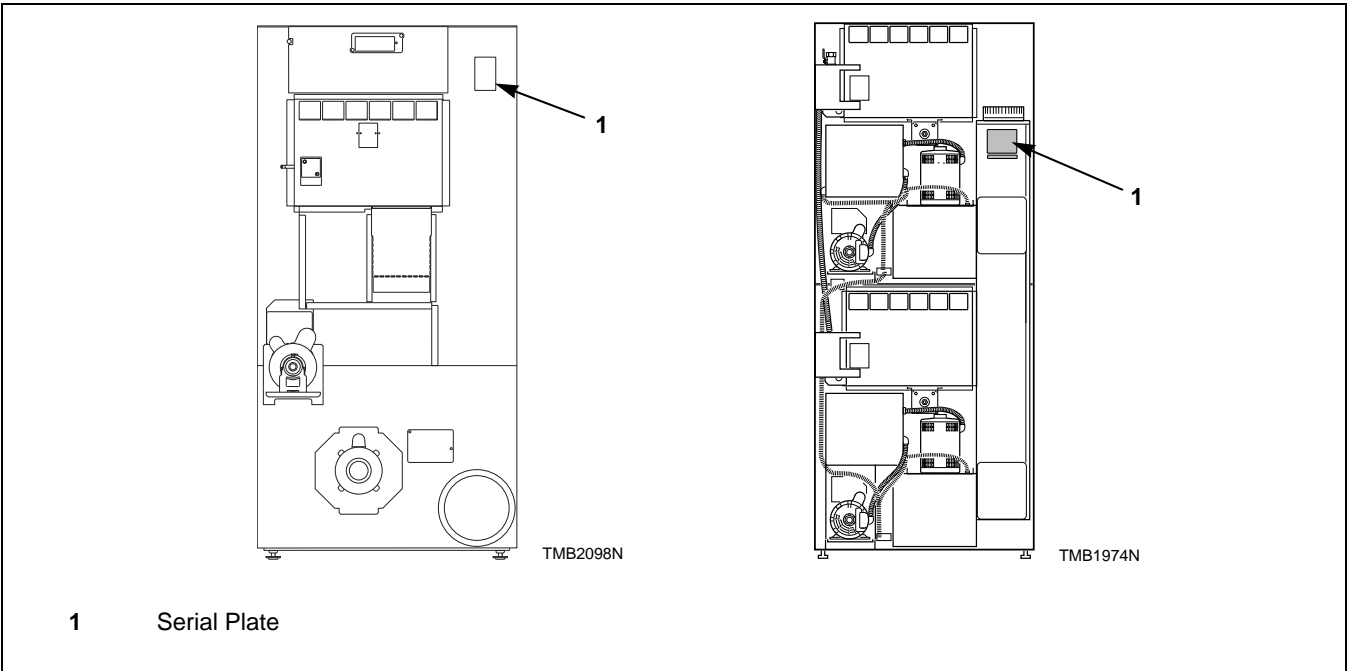





Figure 1

# Safety Information


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.


	<b>WARNING</b>
Failure to install, maintain, and/or operate this machine according to manufacturer’s instructions may result in conditions which can produce serious injury, death and/or property damage.	
W051R1	

**NOTE:** The WARNING and IMPORTANT instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution and carefulness are factors which CANNOT be built into this tumble dryer. These factors MUST BE supplied by the person(s) installing, maintaining or operating the tumble dryer.

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

## Save These Instructions

### Important Safety Instructions

	<b>WARNING</b>
<p><b>To reduce the risk of fire, electric shock, serious injury or death to persons when using your tumbler, follow these basic precautions.</b></p>	
<small>W776</small>	

1. Read all instructions before using the tumble dryer.
2. 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.
3. 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.
4. This appliance must not be activated without lint/foam filter.
5. When you perceive a gas odor, immediately switch off the gas supply and ventilate the room. Do not switch 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 fitter, and if so desired, the gas company, as soon as possible.
6. To avoid fire and explosion, keep surrounding areas free of flammable and combustible products. Regularly clean the dryer drum and exhaust tube should be cleaned periodically by competent maintenance personnel. Daily remove piled up dust from filter and inside of filter compartment.
7. Do not use or store flammable materials near this appliance.
8. Do not dry 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.
9. Do not spray aerosols in the vicinity of this appliance while it is in operation.
10. 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.).
11. 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.
12. Do not allow children on or in the tumble dryer. This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
13. Do not reach into the tumble dryer if the cylinder is revolving.
14. 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 drum to dry textiles that have been washed in water. Only insert spin-dried linen in the dryer.
15. Always read and follow manufacturer's instructions on packages of laundry and cleaning aids. Heed 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).
16. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
17. Remove laundry immediately after tumble dryer stops.

## Safety Information

18. 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.
19. 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 tumbling when the door is opened. Do not use the tumble dryer if it does not stop tumbling when the door is opened or starts tumbling without pressing or turning the START mechanism. Remove the tumble dryer from use and call for service.
20. Tumble dryer(s) will not operate with lint panel open. DO NOT bypass lint panel safety switch to permit the tumble dryer to operate with the lint panel open.
21. Do not modify this appliance.
22. 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.
23. 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.
24. At the end of each working day, close off all main supplies of gas, steam and current.
25. 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.
26. Before the tumble dryer is removed from service or discarded, remove the door to the drying compartment and the door to the lint compartment.
27. 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. 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 on any problems or conditions you do not understand.

# Specifications and Dimensions

Specifications		025 Series	030 Series	035 Series	055 Series
Noise level measured during operation at operator position of 3.3 feet (1 meter) in front of machine and 5.2 feet (1.6 meters) from floor		60 dBA	61 dBA	63 dBA	63 dBA
Net Weight (approximate): Pounds (kg )		300 (137)	330 (150)	360 (163)	435 (197)
Standard Packaging Weight: Pounds (kg )		332 (151)	364 (165)	394 (179)	476 (216)
Standard Packaging Shipping Dimensions: Inch (mm)		30 x 43 x 69 (762 x 1,092 x 1,753)	30 x 49 x 69 (762 x 1,245 x 1,753)	33 x 49 x 69 (838 x 1,245 x 1,753)	35.5 x 59 x 72 (902 x 1,499 x 1,829)
Slat Crate Packaging Weight: Pounds (kg )		406 (184)	446 (202)	480 (218)	506 (230)
Slat Crate Shipping Dimensions: Inch (mm)		34.5 x 46 x 87.75 (876 x 1,168 x 2,229)	34.5 x 52 x 87.75 (876 x 1,321 x 2,229)	37.5 x 52 x 87.75 (953 x 1,321 x 2,229)	40 x 60 x 87.25 (1,016 x 1,524 x 2,216)
Cylinder Size: Inch (mm)		26.5 x 24 (673 x 610)	26.5 x 30 (673 x 762)	30 x 30 (762 x 762)	33 x 35 (838 x 889)
Cylinder Capacity (dry weight): Pounds (kg )		25 (11.3)	30 (13.6)	35 (15.9)	55 (24.9)
Drive Motor: Horsepower (kW)		1/4 (0.1865)	1/4 (0.1865)	1/4 (0.1865)	Nonreversing 1/2 (0.373) Reversing 1/4 (0.1865)
Fan Motor: Horsepower (kW)		1/4 (0.1865)	1/4 (0.1865)	1/4 (0.1865)	1/2 (0.373)
Maximum Airflow per Pocket: C.F.M. (l/sec)	50 Hertz	430 (203)	430 (203)	550 (260)	600 (283)
	60 Hertz	500 (236)	500 (236)	650 (307)	700 (330)
Maximum Static Back Pressure: Inch W.C. (mbar, kPa)	50 Hertz	0.6 (1.5, 0.15)	0.6 (1.5, 0.15)	0.5 (1.3, 0.13)	0.5 (1.3, 0.13)
	60 Hertz	0.8 (2.0, 0.2)	0.8 (2.0, 0.2)	0.6 (1.5, 0.15)	0.6 (1.5, 0.15)
Gas Models					
Gas Connection		1/2 in. NPT	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT
Gas Burner Rating: Btu/hr. (kW, Mj/hr.)	50 Hertz	64,000 (18.7, 67.5)	73,000 (21.4, 77)	90,000 (26.4, 95)	102,000 (29.9, 107.6)
	60 Hertz	64,000 (18.7, 67.5)	73,000 (21.4, 77)	90,000 (26.4, 95)	112,000 (32.8, 118.2)
Electric Models					
Heating Element Rating:	400/50/3	10 kW	21 kW	24 kW	27 kW
	Standard	12 kW			
Steam Models					
Steam Connection		3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	N/A
Steam Coil Rating at 100 psig: Boiler Horsepower (Btu/hr.) (recommended operating pressure 80-100 psig)		3.9 (134,700)	3.9 (134,700)	4.8 (166,000)	N/A

N/A = Not Applicable

**NOTE: All machines are shipped with extra nipple to convert to metric thread (from Standard).**

## Specifications and Dimensions

Specifications		T30 Series	T45 Series
Noise level measured during operation at operator position of 3.3 feet (1 meter) in front of machine and 5.2 feet (1.6 meters) from floor		66 dBA	67 dBA
Net Weight (approximate): Pounds (kg)		544 (247)	673 (305)
Standard Packaging Weight: Pounds (kg)		582 (264)	718 (326)
Standard Packaging Shipping Dimensions: Inch (mm)		32.5 x 47 x 81 (826 x 1,194 x 2,057)	35.5 x 54 x 85 (902 x 1,372 x 2,159)
Slat Crate Packaging Weight: Pounds (kg)		661 (300)	748 (339)
Slat Crate Shipping Dimensions: Inch (mm)		37 x 50 x 87.75 (940 x 1,270 x 2,229)	40 x 57 x 87.25 (1,016 x 1,448 x 2,216)
Cylinder Size: Inch (mm)		30 x 26 (762 x 660)	33 x 30 (838 x 762)
Cylinder Capacity (dry weight): kg (Pounds)		2 x 30 (2 x 13.6)	2 x 45 (2 x 20.5)
Drive Motor**: Horsepower (kW)		1/4 (0.1865)	1/2 (0.373)
Fan Motor**: Horsepower (kW)		1/4 (0.1865)	1/2 (0.373)
Maximum Airflow per Pocket**: C.F.M. (l/sec)	50 Hertz	340 (160)	500 (236)
	60 Hertz	400 (189)	600 (283)
Maximum Static Back Pressure*: Inch W.C. (mbar, kPa)	50 Hertz	0.8 (2.0, 0.2)	0.8 (2.0, 0.2)
	60 Hertz	0.9 (2.3, 0.23)	0.9 (2.3, 0.23)
<b>Gas Models</b>			
Gas Connection		1/2 in. NPT	1/2 in. NPT
Gas Burner Rating**: Btu/hr. (kW, Mj/hr.)	50 Hertz	73,000 (21.4, 77)	87,000 (25.5, 91.8)
	60 Hertz	73,000 (21.4, 77)	95,000 (27.8, 100.2)
<b>Electric Models</b>			
Heating Element Rating**:		21 kW	N/A
<b>Steam Models</b>			
Steam Connection		3/4 in. NPT	N/A
Steam Coil Rating at 100 psig**: Boiler Horsepower (Btu/hr.) (recommended operating pressure 80-100 psig)		3.2 (111,000)	N/A

\* with both pockets running

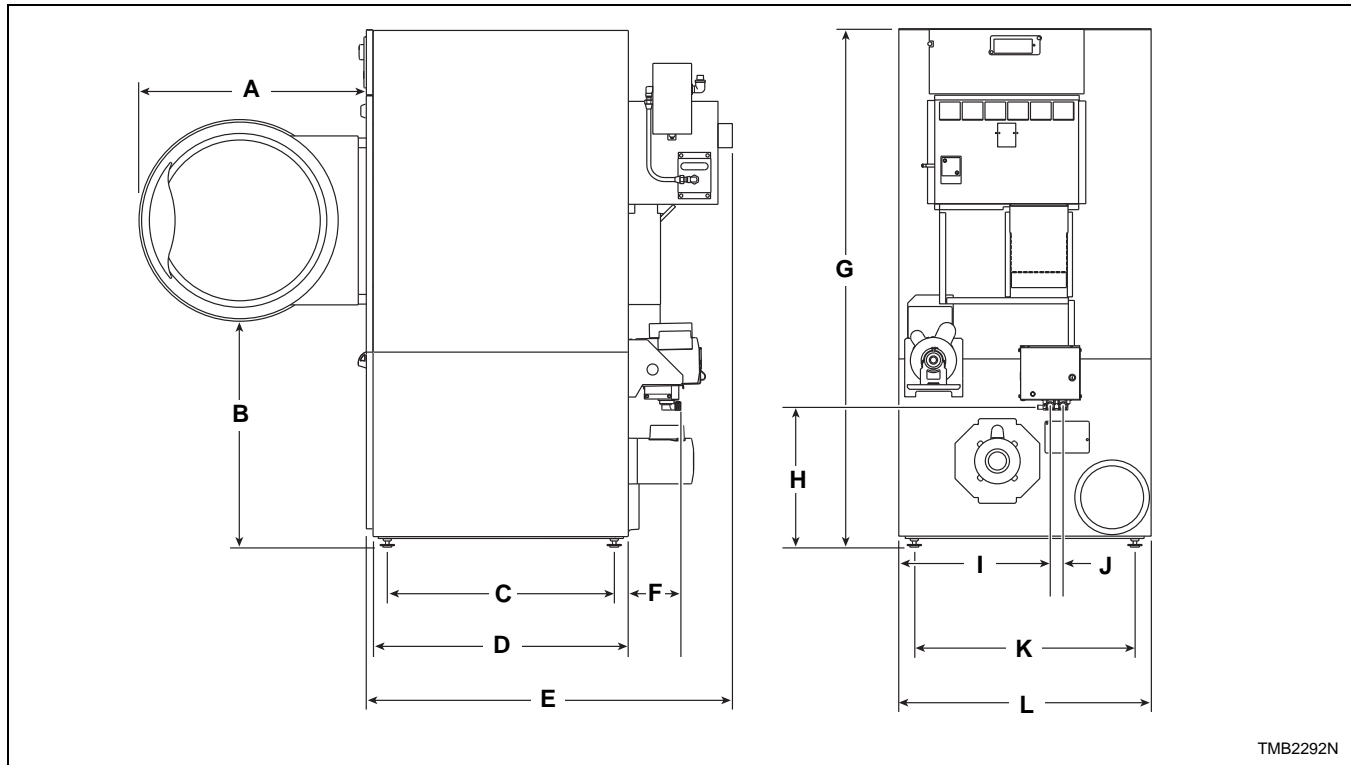
\*\* for each pocket

N/A = Not Applicable

**NOTE: All machines are shipped with extra nipple to convert to metric thread (from Standard).**



## Cabinet Dimensions – 025, 030, 035 and 055 Series



Models	A	B	C	D	E	F*
<b>025 Series</b>	26.25 in. (667 mm)	27.5 in. (669 mm)	23.35 in. (593 mm)	25.75 in. (654 mm)	40.875 in. (1,038 mm)	6.53 in. (166 mm)
<b>030 Series</b>	26.25 in. (667 mm)	27.5 in. (669 mm)	28.35 in. (720 mm)	31.75 in. (806 mm)	46.875 in. (1,191 mm)	6.53 in. (166 mm)
<b>035 Series</b>	28 in. (711 mm)	27.5 in. (669 mm)	28.35 in. (720 mm)	31.75 in. (806 mm)	46.875 in. (1,191 mm)	6.53 in. (166 mm)
<b>055 Series</b>	31.88 in. (810 mm)	26.87 in. (682.5 mm)	33.75 in. (857.25 mm)	38.25 in. (971.5 mm)	53.62 in. (1,365 mm)	6.53 in. (166 mm)

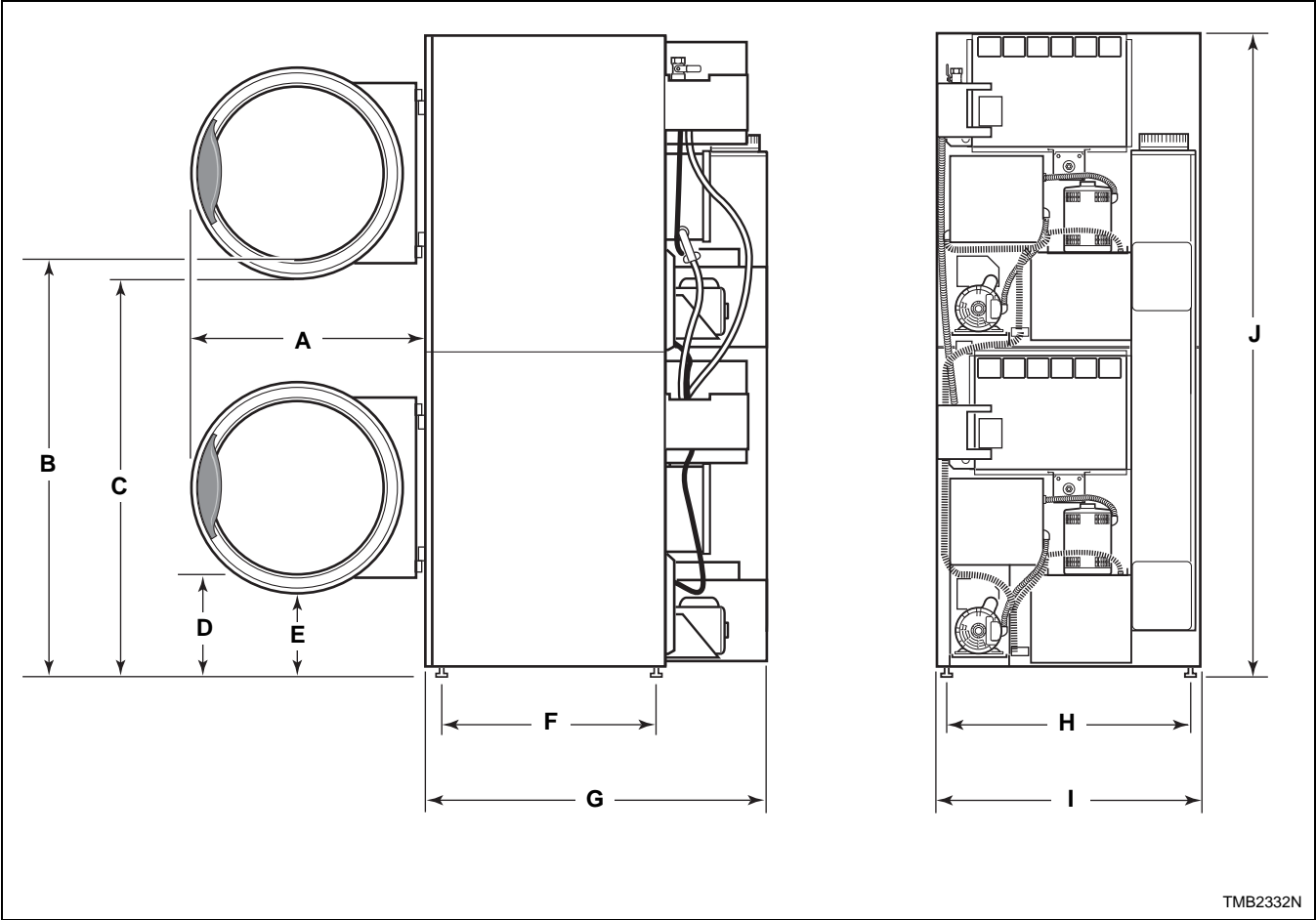
Models	G	H*	I*	J*	K	L
<b>025 Series</b>	63.875 in. (1,622 mm)	16.48 in. (419 mm)	15.41 in. (391 mm)	1.59 in. (40 mm)	24.64 in. (626 mm)	28 in. (711 mm)
<b>030 Series</b>	63.875 in. (1,622 mm)	16.48 in. (419 mm)	15.41 in. (391 mm)	1.59 in. (40 mm)	24.64 in. (626 mm)	28 in. (711 mm)
<b>035 Series</b>	63.875 in. (1,622 mm)	16.48 in. (419 mm)	19.59 in. (497.5 mm)	1.59 in. (40 mm)	27.38 in. (695 mm)	31.5 in. (800 mm)
<b>055 Series</b>	66.72 in. (1,694.7 mm)	17.75 in. (451 mm)	18.65 in. (474 mm)	1.59 in. (40 mm)	30.5 in. (774.7 mm)	34.5 in. (876 mm)

\* Fire suppression system optional - may not be on machine.

**NOTE: Facia panels available to increase height of models to 72.25 inches (1,835 mm) and 76.25 inches (1,938 mm).**

Specifications and Dimensions

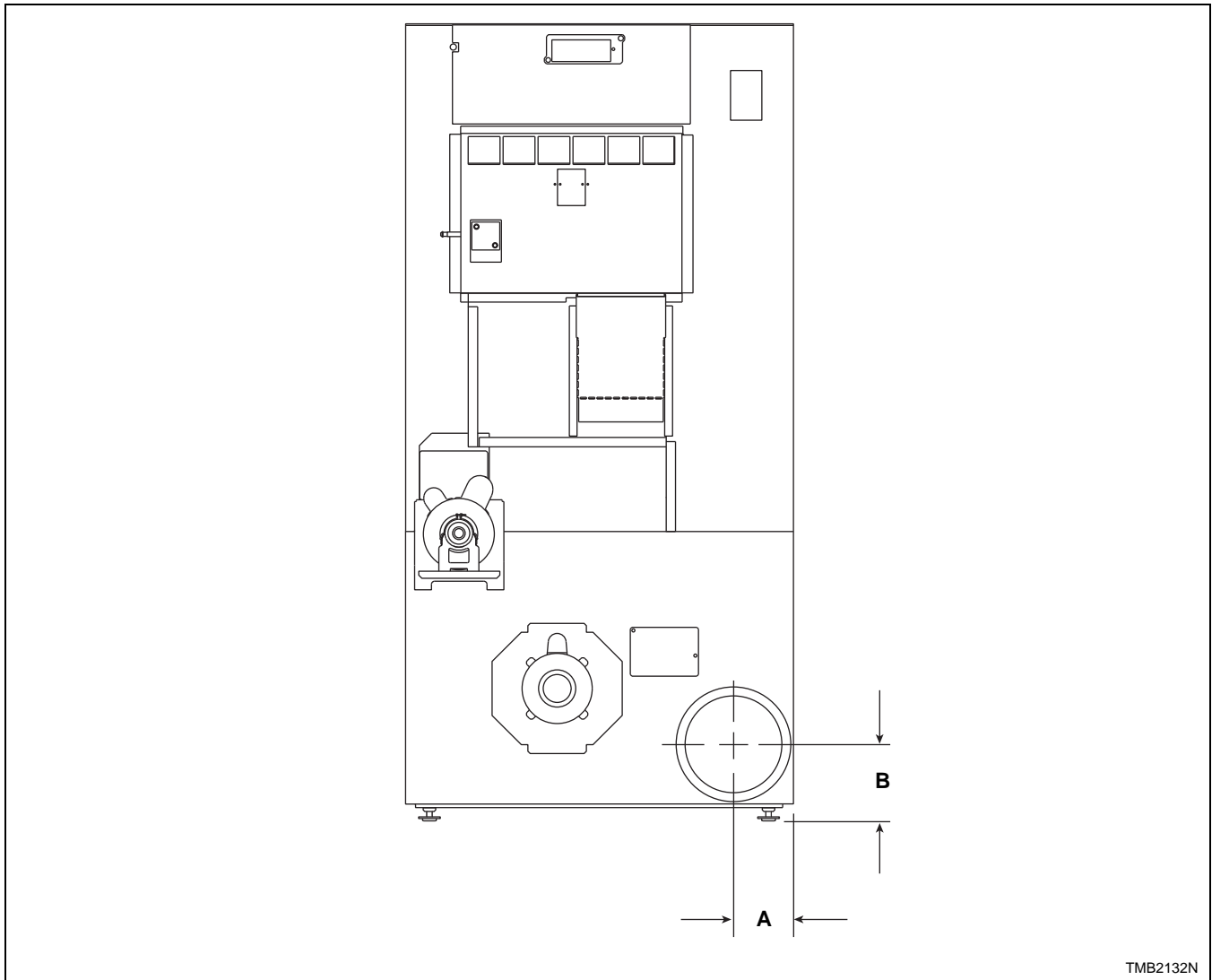
# Cabinet Dimensions – T30 and T45 Series



Models	A	B	C	D	E
T30 Series	28 in. (711 mm)	49 in. (1,245 mm)	48.25 in. (1,226 mm)	11.4 in. (290 mm)	10.7 in. (272 mm)
T45 Series	31.88 in. (810 mm)	50.4 in. (1,280 mm)	49.3 in. (1,252 mm)	10.3 in. (262 mm)	9.3 in. (236 mm)
Models	F	G	H	I	J
T30 Series	25.02 in. (636 mm)	42.76 in. (1,086 mm)	27.38 in. (695 mm)	31.5 in. (800 mm)	76.25 in. (1,937 mm)
T45 Series	29.37 in. (746 mm)	48.62 in. (1,235 mm)	30.50 in. (775 mm)	34.5 in. (876 mm)	81.25 in. (2,063.75 mm)

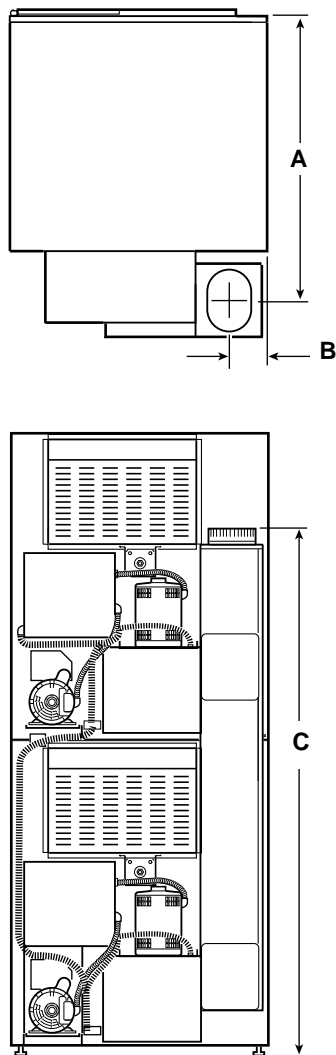
**NOTE: To meet ADA compliance, install a 4 inch (102 mm) riser on T30 models only.**

## Exhaust Outlet Locations – 025, 030, 035 and 055 Series



Models	Rear Exhaust		
	Diameter	A	B
<b>025/030 Series</b>	6 in. (152 mm)	3.875 in. (99 mm)	4.625 in. (117 mm)
<b>035 Series</b>	8 in. (203 mm)	4.875 in. (124 mm)	5.625 in. (143 mm)
<b>055 Series</b>	8 in. (203 mm)	4.808 in. (122 mm)	6.156 in. (156.3 mm)

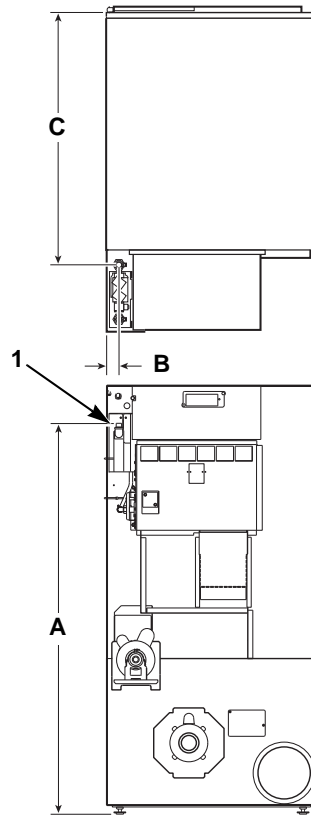
Exhaust Outlet Locations – T30 and T45 Series



TMB1969N

Models	Rear Exhaust			
	Diameter	A	B	C
T30 Series	Elliptical Fits 8 in. (203 mm)	36.54 in. (928 mm)	4.25 in. (108 mm)	62.42 in. (1,585 mm)
T45 Series	Elliptical Fits 10 in. (254 mm)	40.88 in. (1,038 mm)	4.75 in. (121 mm)	66.00 in. (1,676 mm)

## Gas Connection Locations – 025, 030, 035 and 055 Series



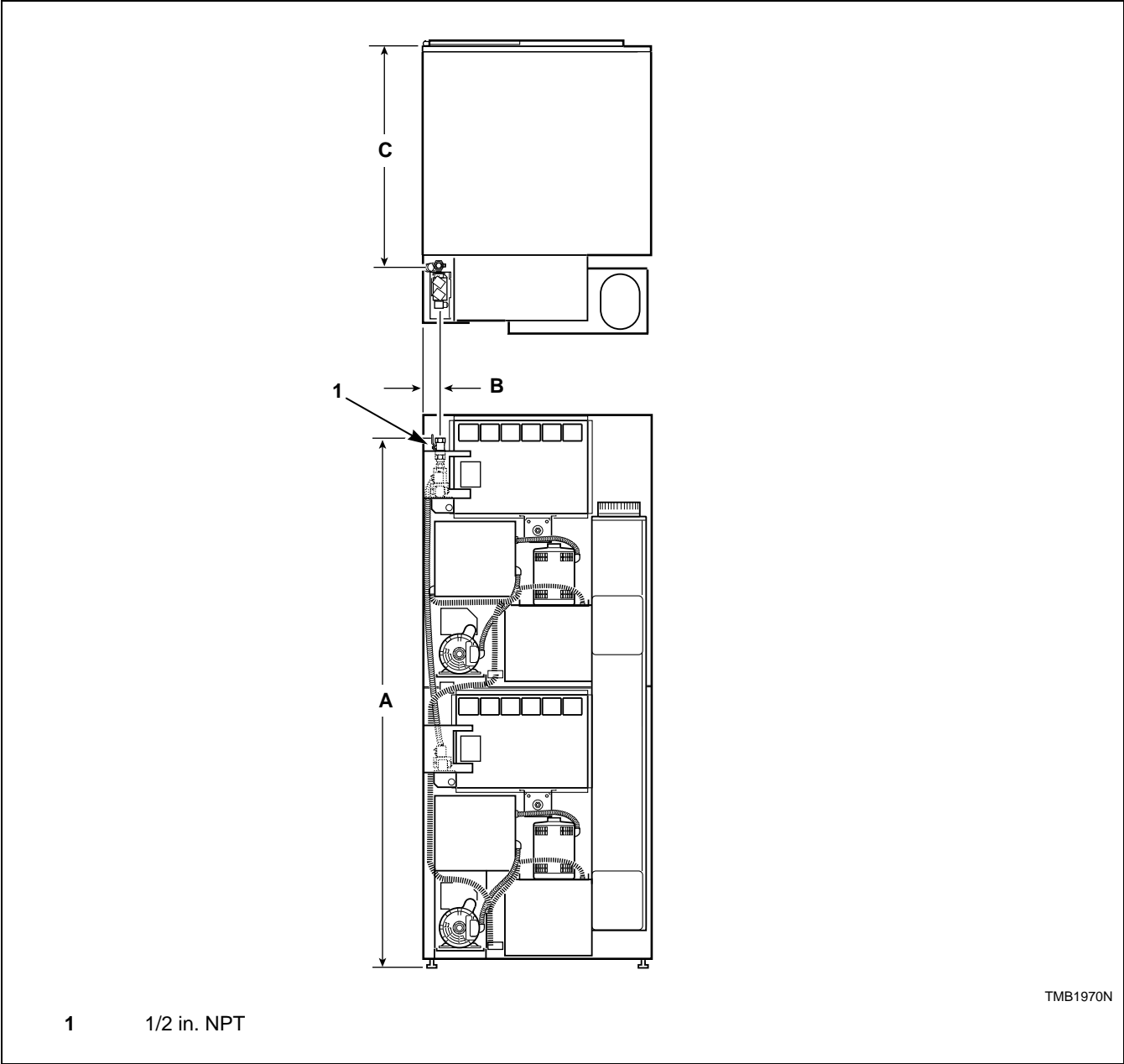
1 1/2 in. NPT

TMB2106N

Models	Gas Connection – CE and Australian Units		
	A	B	C
<b>25 Series</b>	59 in. (1,500 mm)	1.5 in. (38.1 mm)	29 in. (737 mm)
<b>30 Series</b>	59 in. (1,500 mm)	1.5 in. (38.1 mm)	35 in. (889 mm)
<b>35 Series</b>	59 in. (1,500 mm)	2.5 in. (64 mm)	35 in. (889 mm)
<b>55 Series</b>	59 in. (1,500 mm)	2.5 in. (64 mm)	35 in. (889 mm)

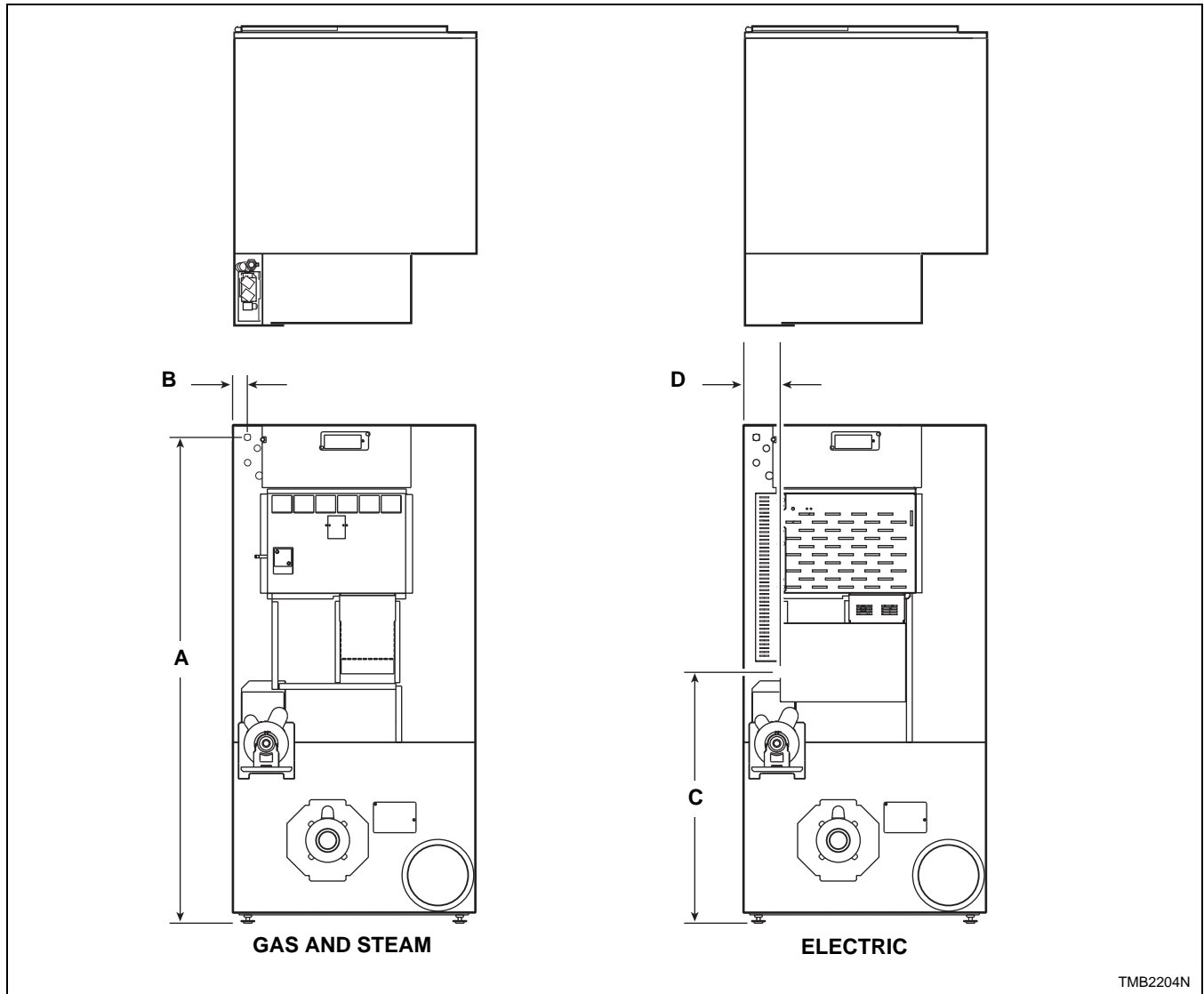
Models	Gas Connection – Non-CE and Non-Australian Units		
	A	B	C
<b>25 Series</b>	57 in. (1,450 mm)	2.5 in. (64 mm)	35.5 in. (927 mm)
<b>30 Series</b>	57 in. (1,450 mm)	2.5 in. (64 mm)	43 in. (1,092 mm)
<b>35 Series</b>	57 in. (1,450 mm)	4 in. (101.6 mm)	43 in. (1,092 mm)
<b>55 Series</b>	55.285 in. (1,404 mm)	1.621 in. (41.17 mm)	46.75 in. (1,187.45 mm)

Gas Connection Locations – T30 and T45 Series



Models		Gas Connection		
		A	B	C
T30 Series	Non-CE and Non-Australian	75.20 in. (1,910 mm)	1.74 in. (44 mm)	36.84 in. (936 mm)
	CE and Australian	75.28 in. (1,912 mm)	2.5 in. (64 mm)	30.60 in. (777 mm)
T45 Series		78.75 in. (2,000 mm)	4.12 in. (105 mm)	42.88 in. (1,089 mm)

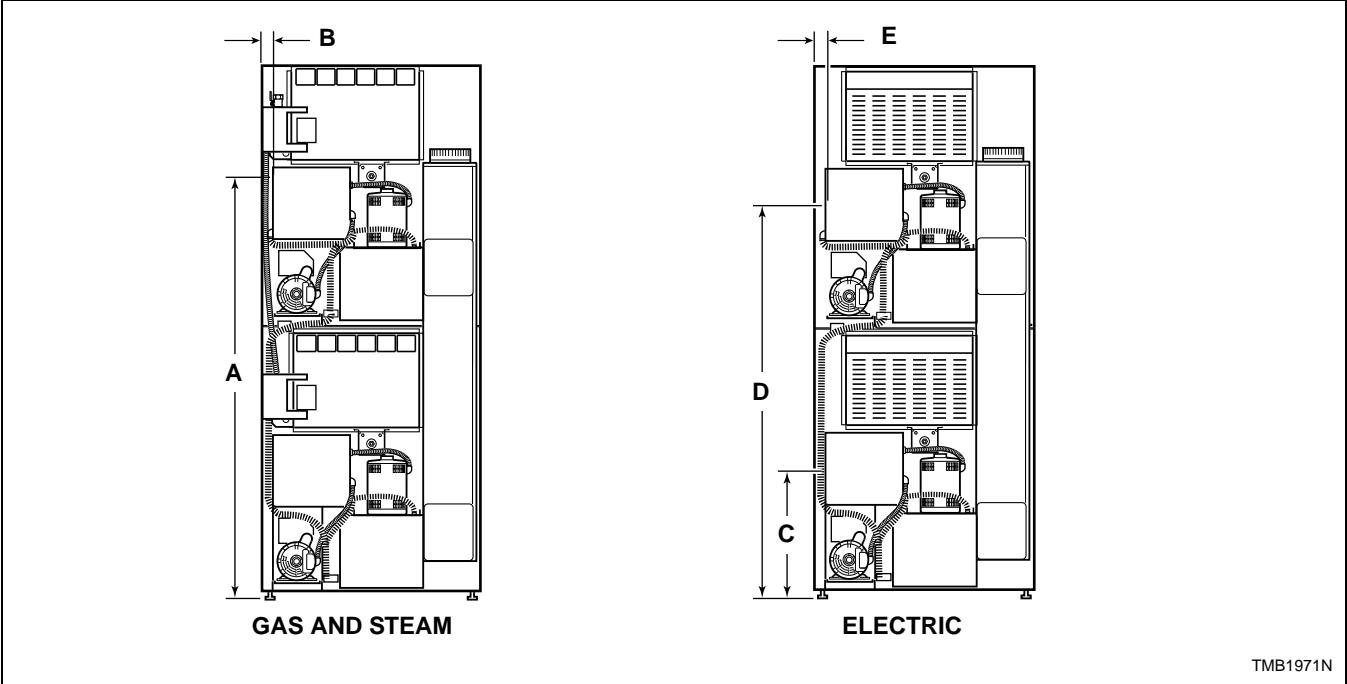
## Electrical Connection Locations – 025, 030, 035 and 055 Series



TMB2204N

Models	Electrical Service			
	Gas and Steam Models		Electric Models	
	A	B	C	D
<b>025/030 Series</b>	62.25 in. (1,581 mm)	2 in. (51 mm)	28 in. (711 mm)	3.25 in. (83 mm)
<b>035 Series</b>	62.25 in. (1,581 mm)	3 in. (76 mm)	28 in. (711 mm)	4.25 in. (108 mm)
<b>055 Series</b>	65.187 in. (1,655.75 mm)	1.765 in. (44.83 mm)	32.526 in. (826.16 mm)	6.547 in. (166.3 mm)

Electrical Connection Locations – T30 and T45 Series

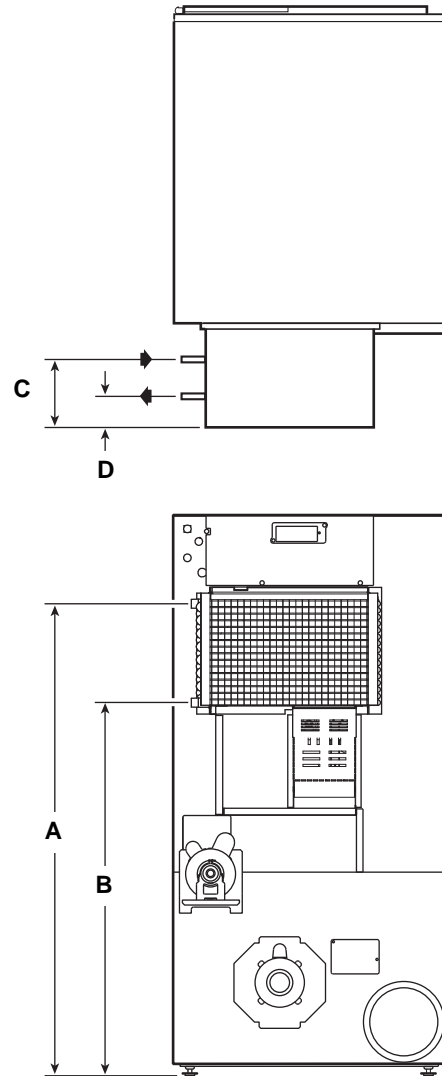


Models	Electric Service				
	Gas and Steam Models		Electric Models		
	A	B	C	D	E
T30 Series	59 in. (1,498 mm)	1.75 in. (44 mm)	35.63 in. (905 mm)	73.21 in. (1,859 mm)	2.28 in. (58 mm)
T45 Series	62.5 in. (1,588 mm)	1.75 in. (44 mm)	N/A	N/A	N/A

N/A = Not Applicable



## Steam Connection Locations – 025, 030 and 035 Series

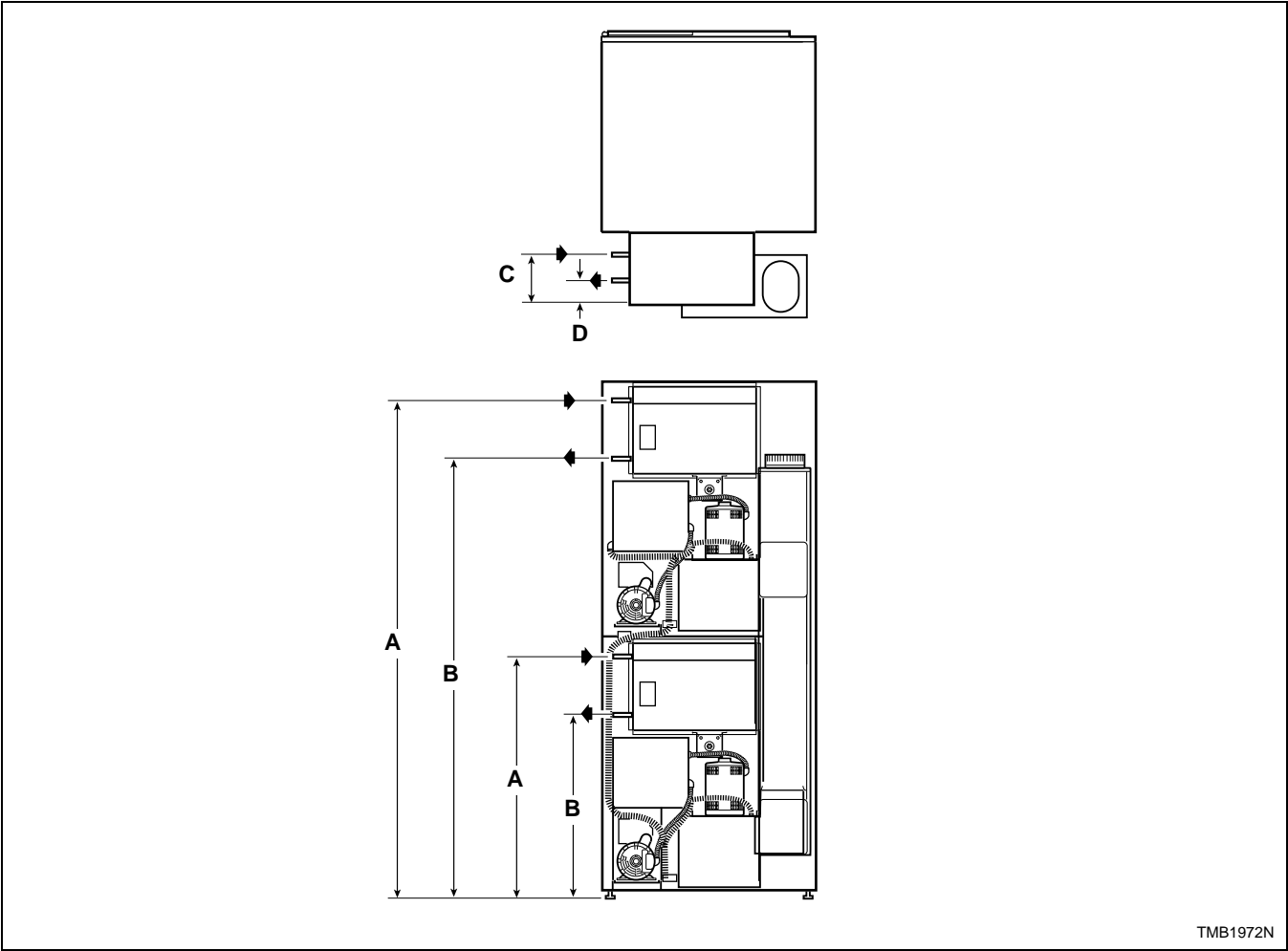


TMB2108N

Models	Inlet		Outlet	
	A	C	B	D
<b>025/030/035 Series</b>	53.75 in. (1,365 mm)	6.29 in. (160 mm)	42.5 in. (1,080 mm)	2.39 in. (61 mm)

**NOTE:** All connections use 3/4 in. NPT pipe.

Steam Connection Locations – T30 Series



Models	Inlet		Outlet	
	A	C	B	D
<b>T30 Series (Upper)</b>	73.93 in. (1,877 mm)	6.29 in. (160 mm)	62.71 in. (1,592 mm)	2.39 in. (61 mm)
<b>T30 Series (Lower)</b>	36.35 in. (923 mm)	6.29 in. (160 mm)	25.13 in. (638 mm)	2.39 in. (61 mm)

**NOTE:** All connections use 3/4 in. NPT pipe.

# 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 shipping tape from the two back draft dampers located in the exhaust outlet.**

**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	One Single Pole 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.
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) (8.79 kg/sq. cm) working pressure for connecting steam coils. Refer to <i>Figure 27</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.

**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).**

## 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*.

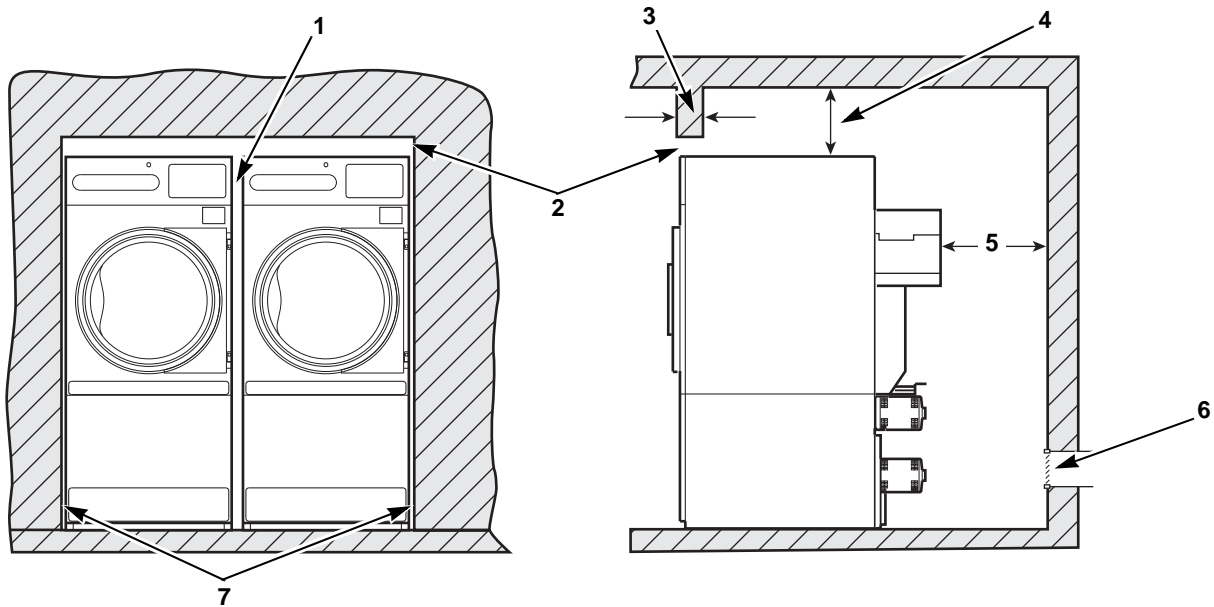
**IMPORTANT: Install tumble dryers with sufficient clearance for servicing and operation, refer to *Figure 2*.**



## WARNING

To reduce the risk of severe injury, clearance of tumbler cabinet from combustible construction must conform to the minimum clearances, and/or local codes and ordinances.

W770



TMB2021N

**NOTE: Shaded areas indicate adjacent structure.**

- 1 0.5 in. (13 mm) recommended between machines for removal or installations.
- 2 Allow 2-4 in. (51-102 mm) opening at top of machine to aid in removal or installation. A removable trim piece may be used to conceal the opening; zero clearance allowed for trim.
- 3 4 in. (102 mm) Maximum Header Thickness
- 4 12 in. (305 mm) Minimum Clearance
- 5 24 in. (610 mm) minimum, 36 in. (914 mm) recommended for maintenance purposes.
- 6 Provision for make-up air.
- 7 0.25 in. (6 mm) recommended for removal or installation purposes, zero clearance allowed.

Figure 2

## Position and Level the Tumble Dryer

Remove lint panel door, and unscrew the four shipping bolts (one at each corner). Remove tumble dryer from skid.

**NOTE: Do not throw bolts away – they are the leveling legs.**

Remove four nuts from the literature package, and screw one fully on to each leveling leg.

Screw the four leveling legs (bolts) back into the level adjusting fittings from the bottom.

Slide tumble dryer to its permanent location. Adjust the leveling legs until the unit is level, or no more than 0.125 inch (3.18 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 0.125 inch [3.18 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.**

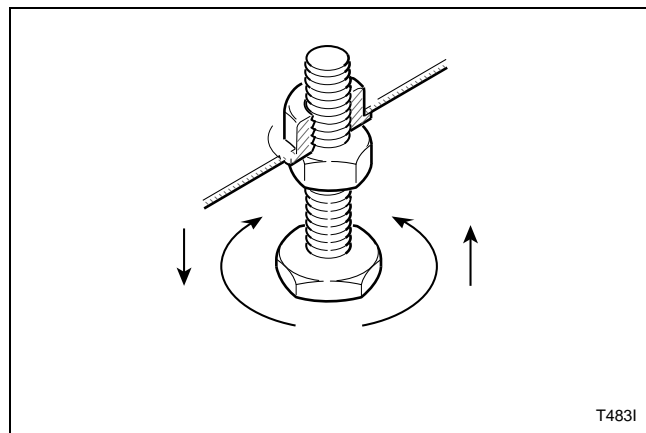


Figure 3

The stacked tumble dryer has a fifth leveling leg which is shipped in the up position. The fifth leveling leg **MUST BE** installed properly on the lower left side of the blower housing to stabilize the tumble dryer. Refer to *Figure 4*.

After leveling with the four cabinet leveling legs, lower the fifth leveling leg so it contacts the floor, and then secure the screws.

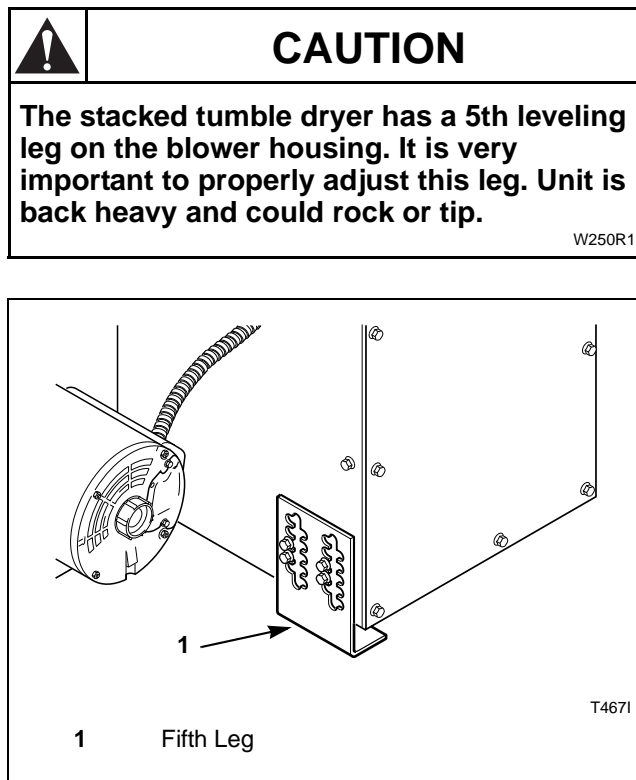


Figure 4

## Installation

# Fire Suppression System

## 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 see 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.

Connection point to the electric water solenoid valve is a 3/4 inch (19 mm) hose. The fire suppression system equipped tumble dryer must be supplied with a minimum water pipe size of 1/2 inch (12.7 mm) and be provided with a minimum of 20 psi (138 kPa) and a maximum of 120 psi (827 kPa) of pressure at all times. Flowrate must be no less than, but approximately 15 gallons (57 liters) per minute.

**NOTE:** Water pressure under 20 psi (138 kPa) will cause low flow and water leakage 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 (4.4°C and 48.9°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 (4.4°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 above 40°F (4.4°C) will the machine reset for operation.

**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

Two hoses and a Y-valve are provided with the tumble dryer to allow for connection of water supply to tumble dryer. The water connections are made to the bushings of the water solenoid valve, located on the rear of the tumble dryer. The Y-valve provides a single female hose connection (Standard US 3/4-11 1/2 NH thread). Refer to *Figure 5* and *Figure 6*.

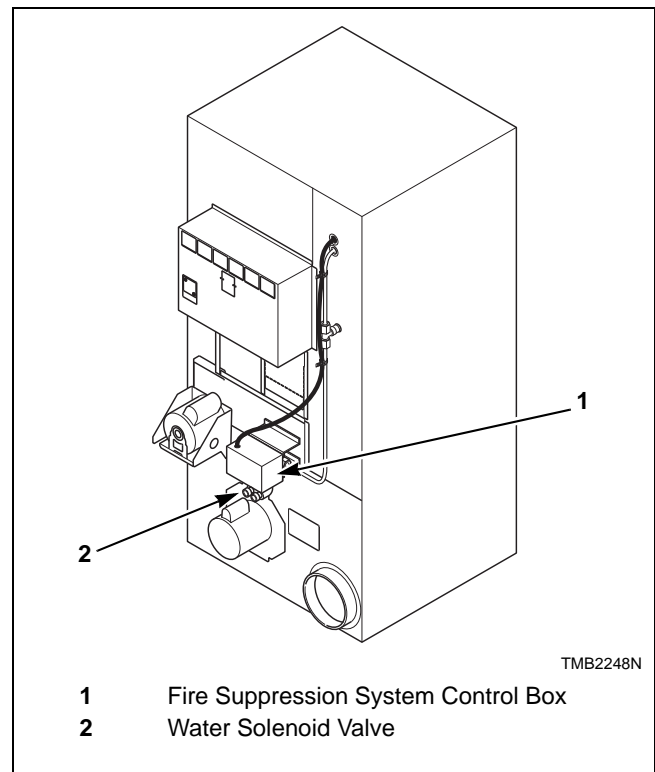


Figure 5

To connect the two hoses (supplied with tumble dryer), insert rubber washers (from literature pack) in water inlet hose couplings. Refer to *Figure 6*.

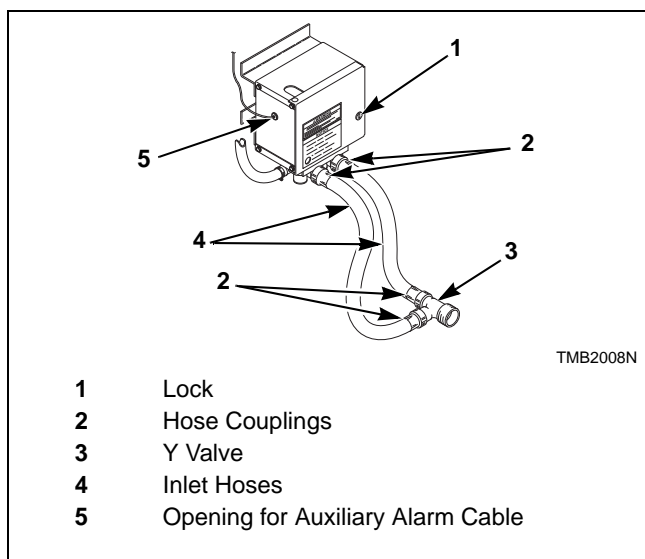


Figure 6

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-valve; connect the Y-valve 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 feet (2.44 m)

Part No. 20618 Inlet hose 10 feet (3.05 m)

**NOTE:** Replacement outlet hoses are available (at extra cost). Order 44073304 Hose, 14 in. (36 cm).

## Electrical Requirements

	<b>WARNING</b>
<p><b>Electrical power must be provided to tumbler at all times. The fire suppression system will be inoperative if the main electrical power supply is disconnected.</b></p>	
<small>W690</small>	

No independent external power source or supply connection is necessary. Power to operate the 24 Volt fire suppression system is from the rear junction/contact box.

## Installation

### Auxiliary Alarm

The fire suppression system provides an auxiliary output signal 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 FS-1 and FS-2 fast-on connections inside the fire suppression control box. Refer to *Figure 7*. The relay is rated for 24 VAC, 5.2 Amp, sealed current.

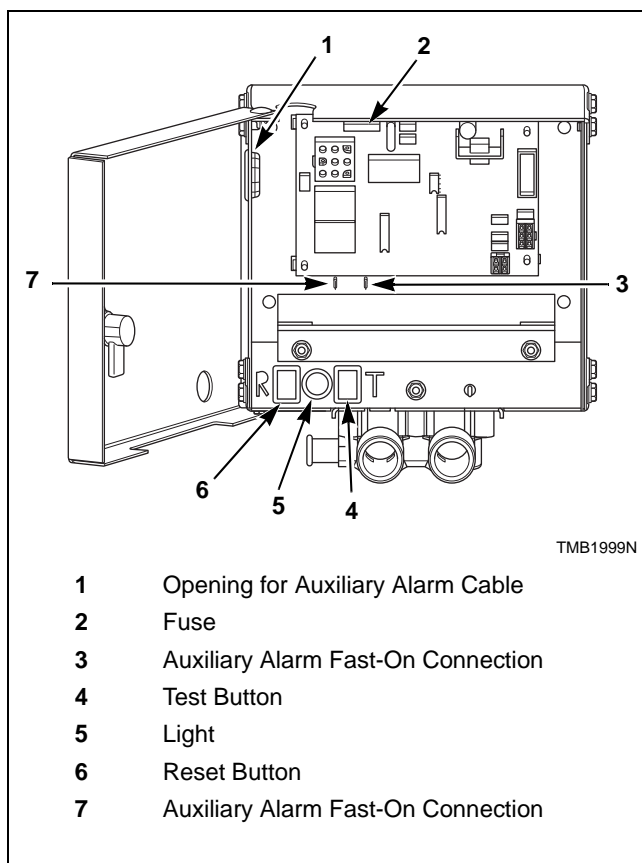


Figure 7

### To Reverse the Loading Door – 025, 030, 035 and 055 Series

The tumble dryer is delivered with a right hinged door, but the door can be changed to a left hinged position.

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. Refer to *Figure 8*.
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.

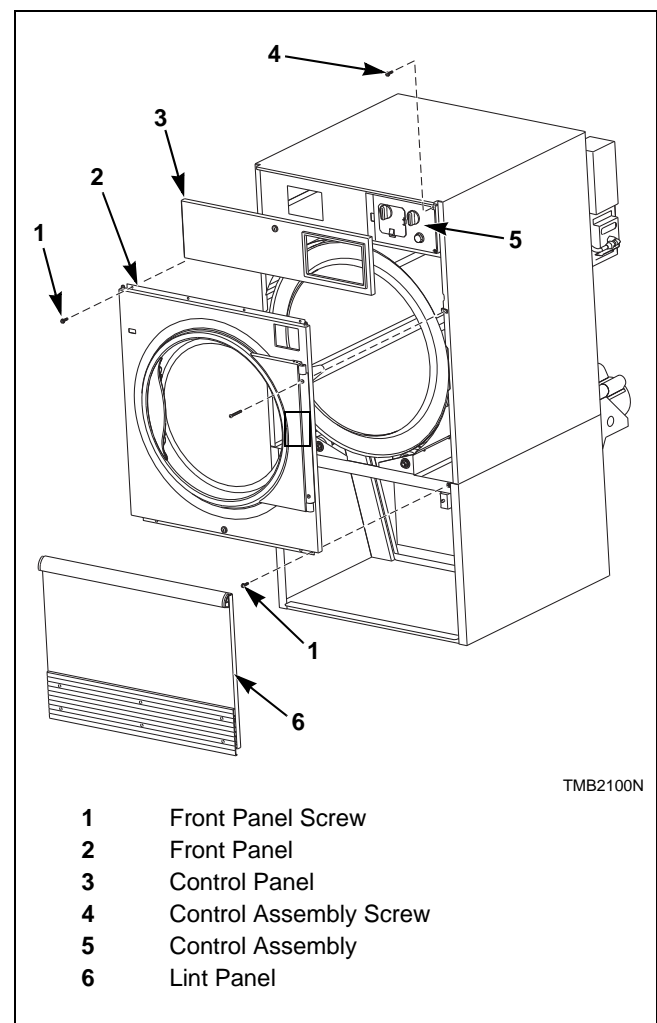


Figure 8



4. Remove four front panel screws. Refer to *Figure 8*. Keep door hinge cams in place on door hinge lug. Pull lug and door assembly off as one piece. Refer to *Figure 9*.
5. Remove remaining front panel screws. Refer to *Figure 8*. Disconnect door switch harness from switch. Take off front panel. Refer to *Figure 9*.
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 9*.

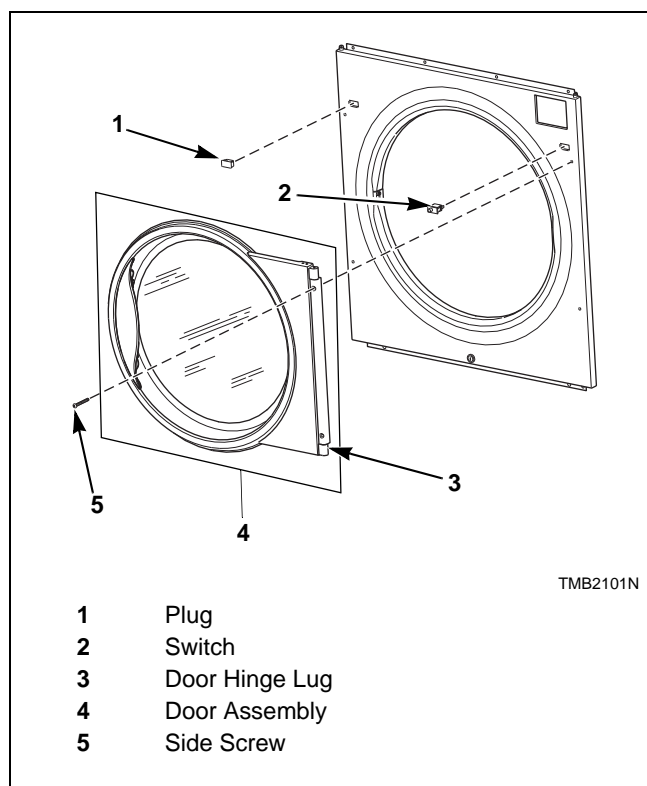


Figure 9

7. Cut wire ties to remove door switch harness bundle. Be careful not to damage harness wires. Refer to *Figure 10*.
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.

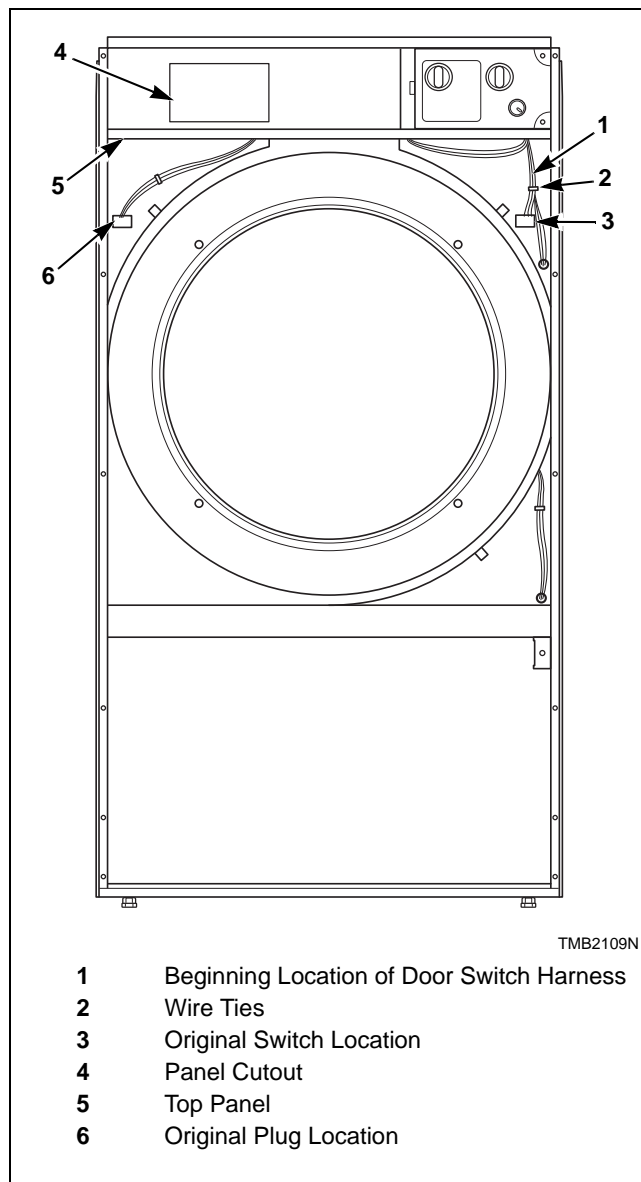


Figure 10

## Installation

9. Place front panel on machine, loosely attach four bottom screws. Connect door switch harness to switch in new location.
10. Remove opposite door hinge cam. **DO NOT DISCARD CAM AND NUT.** Reattach door hinge cam to door hinge assembly securing with screw. Install door assembly and four door hinge side screws loosely. Refer to *Figure 11*.
11. 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.
12. Remove lint panel. Fully tighten bottom screws on front panel.
13. Reinstall top screws.
14. Adjust door catch if necessary to allow 7 – 15 pounds (0.48 – 1.03 bar) pull at center of handle.
15. Reinstall control assembly using mounting screws.
16. Reinstall control panel and lint panel.

**IMPORTANT: Restore power to tumble dryer and test for proper operation of loading door switch. Tumble Dryer should not start with door open; an operating tumble dryer should stop when door is opened.**

**NOTE: If machine is converted back to right hand hinge operation, the door switch harness must be rerouted and rebundled with the lint panel switch harness. Wire ties must be used to secure harnesses. Wire ties (Part No. 55881) can be ordered from Genuine Parts.**

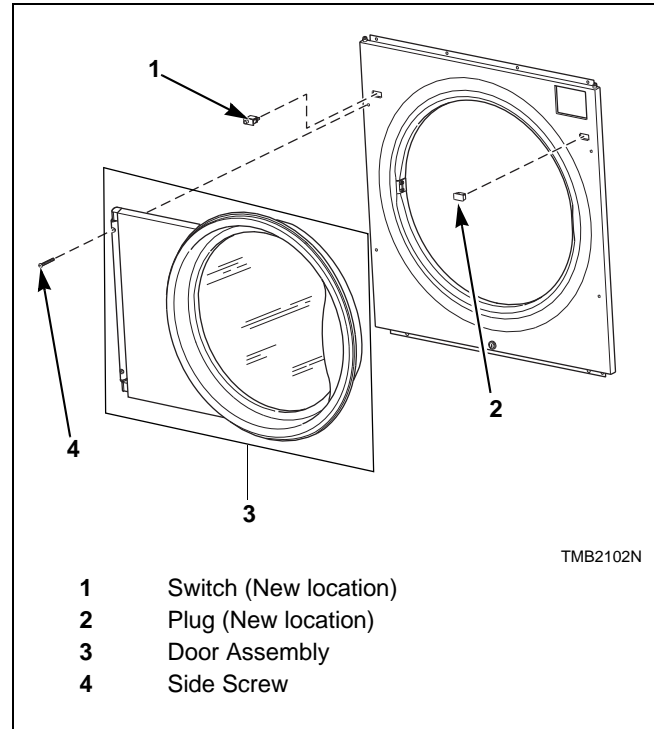


Figure 11

## Before Placing Tumble Dryer into Service

1. Remove or open all panels and check accessible bolts, nuts, screws, terminals and fittings for tightness.
2. Replace all panels and guards.
3. Remove and discard wire tie from the airflow switch so it can swing freely. Refer to *Figure 12*.

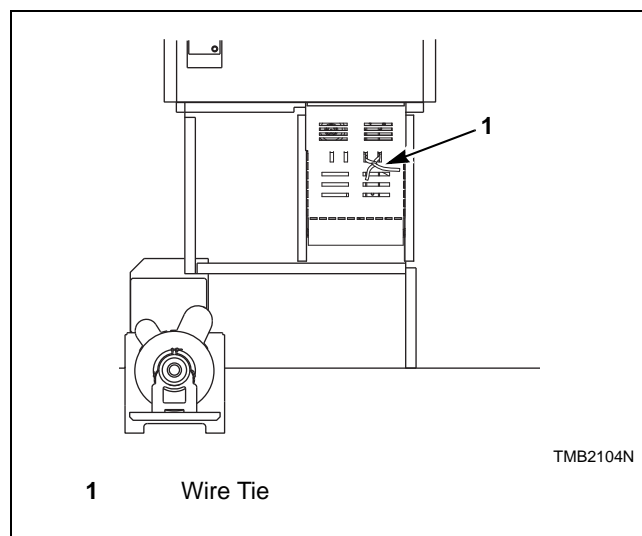


Figure 12

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 Manual* 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 2 inches (51 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. It may be necessary to retry several times to bleed air from the gas lines. To reset, open and close the loading door and restart tumble dryer.

## Installation

	Models	Prepurge Time (seconds)	Trial for Ignition (seconds)	Reset Lockout Condition By:
Models through 3/10/13	CE and Australia	18	10	025, 030, 035, 055: Press reset button on rear of machine T30, T45: Press lighted reset button in rear contactor box
	All others	1-3	10	Open loading door
Models starting 3/11/13	CE	1	10 (attempts to ignite 3 times)	For models with EO, RE, RU or UO control suffixes: Press start on control keypad. For models with all other control suffixes: Press and hold reset button on junction box until light goes out.
	Non-CE and non-Australian	1	10 (attempts to ignite 3 times)	Open loading door
Models starting 3/11/13 through 7/31/13	Australia	18	10	025, 030, 035, 055: Press reset button on rear of machine T30, T45: Press lighted reset button in rear contactor box

(Continued)


(Continued)

	Models	Prepurge Time (seconds)	Trial for Ignition (seconds)	Reset Lockout Condition By:
Models starting 8/1/13	Australia	23	23	For models with EO, RE, RU or UO control suffixes: Press start on control keypad. For models with all other control suffixes: Press and hold reset button on junction box until light goes out.

**If lockout condition persists, check that the manual gas shut-off valve is in the ON position and that the gas service is properly connected. If condition still persists, remove 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 refer to **Adjustments** section. 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 tape still in place, clogged lint screen, failure to remove wire tie, lack of make-up air, or an obstruction in the exhaust duct. These should be checked and the required corrective action taken before attempting to adjust the airflow switch. To adjust the airflow switch, refer to **Adjustments** section.

	<b>WARNING</b>
<p><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></p> <p style="text-align: right; font-size: small;">W407R1</p>	

10. Wipe out the cylinder using an all-purpose cleaner or detergent and water solution. Refer to *Figure 13*.

**IMPORTANT:** The use of chlorine bleach for removing any discoloration should be avoided because bleach could damage the finish.

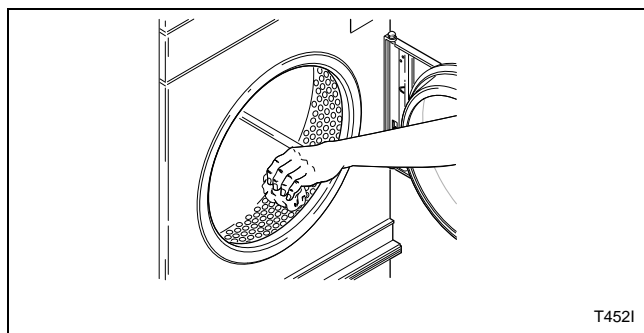


Figure 13

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 CE Models Only

Once machine 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 machine warranty information with customer.
- Apply warning sticker on front panel of machine, in language appropriate to country of sale (included in literature packet).

# Installing CE Gas Tumble Dryer

## General Information

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 on Natural Gas 1,000 Btu/cu. ft. (8,914 kcal/m<sup>3</sup>), or L.P. Gas 2,500 Btu/cu. ft. (22,250 kcal/m<sup>3</sup>), in the countries of GB/IE/PT/ES/IT/GR/LU/CH/BE. To install machines in any other country, or on any other gas, requires some level of modification.

Machines are built in two different configurations:

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

Serial plates supplied from the factory are configured for GB/IE/PT/ES/IT/GR/LU/CH/BE. These instructions pertain to the situations when the country of use or gas supply is different than that on the serial plate.

These instructions are only valid if the following country code is on the appliance: GB/IE/PT/ES/IT/GR/LU/CH/BE. If this code is not present on the appliance, it is necessary to refer to the technical instructions which will provide the necessary information concerning the modification of the appliance to the condition of use for the country.

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

*Table 1* describes the different gases that are available in different CE countries, and how the machines need to be configured to operate with those gases. In the CE, there are Natural Gas configurations that do not allow for machine regulation and L.P. Gas configurations that must be regulated. For L.P. Gas, third family B/P at 50 mbar (5 kPa), order Regulated Natural Gas machines and convert according to *Table 1*.

## CE Orifices

Gas Type	Gas Family	Gas Group	Gas Designation	Supply Pressure	Manifold Pressure	Capacity Model	Orifice Diameter in.	Orifice Diameter mm	Orifice Part No.	Quantity
				in. wc (mbar, kPa)	in. wc (mbar, kPa)					
Natural Gas	Second	I <sub>2H(E)</sub>	G20	8/10 (20/25, 2.0/2.5)	3.25 (8, 0.8)	25	0.1540	3.9	M401020	1
						30	0.1570	4.0	M402996	1
						T30	0.1570	4.0	M402996	2
						35	0.1820	4.6	M411371	1
						T45	0.1820	4.6	M411371	2
						55	0.2040	5.2	M402993	1
		I <sub>2L</sub>	G25	10 (25, 2.5)	4.4 (11, 1.1)	25	0.1540	3.9	M401020	1
						30	0.1570	4.0	M402996	1
						T30	0.1570	4.0	M402996	2
						35	0.1820	4.6	M411371	1
						T45	0.1820	4.6	M411371	2
						55	0.2040	5.2	M402993	1
		I <sub>2E+</sub>	G20	8 (20, 2.0)	Un-regulated	25	0.1220	3.1	70070903	1
						30	0.1299	3.3	44253801	1
						T30	0.1299	3.3	44253801	2
						35	0.1440	3.7	M400998	1
						T45	0.1440	3.7	M400998	2
						55	0.1695	4.3	M402988	1
LP	Third	I <sub>3B/P</sub>	G30	11.25/12 (28/30, 2.8/3.0)	Un-regulated	25	0.0820	2.1	M401027	1
						30	0.0866	2.2	70070906	1
						T30	0.0866	2.2	70070906	2
						35	0.0980	2.5	M406361	1
						T45	0.0935	2.4	M403017	2
						55	0.1200	3.0	M401017	1
		I <sub>3+/3P</sub>	G30	14.9/20 (37/50, 3.7/5.0)	12 (30, 3.0)	25	0.0820	2.1	M401027	1
						30	0.0866	2.2	70070906	1
						T30	0.0866	2.2	70070906	2
						35	0.0980	2.5	M406361	1
						T45	0.0935	2.4	M403017	2
						55	0.1200	3.0	M401017	1
		I <sub>3+/3P</sub>	G30 /G31	11.25/14.9 (28/37, 2.8/3.7)	Un-regulated	25	0.0820	2.1	M401027	1
						30	0.0866	2.2	70070906	1
						T30	0.0866	2.2	70070906	2
						35	0.0980	2.5	M406361	1
						T45	0.0935	2.4	M403017	2
						55	0.1200	3.0	M401017	1

Table 1

## Installation

### Properties of CE Gases


					Wi		Hi		Ws		Hs		d
Gas Type	Gas Family	Group	Gas Description	Gas Designation	Wobbe Index (net)		Heating Value (net)		Wobbe Index (gross)		Heating Value (gross)		Density
					Btu/ft <sup>3</sup>	MJ/m <sup>3</sup>	Btu/ft <sup>3</sup>	MJ/m <sup>3</sup>	Btu/ft <sup>3</sup>	MJ/m <sup>3</sup>	Btu/ft <sup>3</sup>	MJ/m <sup>3</sup>	
Natural Gas	Second	I <sub>2H,E</sub>	Not Applicable	G20	1,226	45.67	913	34.02	1,362	50.72	1,014	37.78	0.555
		I <sub>2E+</sub>	2H										
		I <sub>2L</sub>	Not Applicable	G25	1,004	37.38	785	29.25	1,115	41.52	872	32.49	0.612
		I <sub>2E+</sub>	2L										
LP	Third	I <sub>3B/P</sub>	Not Applicable	G30	2,164	80.58	3,117	116.09	2,345	87.33	3,378	125.81	2.075
		I <sub>3+</sub>	Pure Butane										
		I <sub>3+</sub>	Pure Propane	G31	1,898	70.69	2,363	88	2,063	76.83	2,568	95.65	1.55
		I <sub>3P</sub>	LPG with Propane										

Table 2



## Basic Configuration

1. Determine the necessary conversion operations to convert from the factory-supplied configuration to the desired configuration.
2. Perform the conversions required so the machine is properly configured for the desired country and gas (refer to *Specific Conversion Procedures* section):
  - How to Convert Gas Valve from Regulated to Unregulated
  - How to Change Burner Orifice Size
  - How to Adjust Gas Valve Governor/Regulator
3. If applicable, peel off the appropriate country sticker (included with machine) and apply it to the serial plate over the existing country information.
4. If applicable, peel off the appropriate conversion sticker (included with machine) and apply it to the serial plate over the “ADJUSTED FOR \_\_\_\_\_ GAS: \_\_\_\_\_” information.
5. Commission tumble dryer for use.

	<h2>WARNING</h2>
<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>	
<small>W430R1</small>	

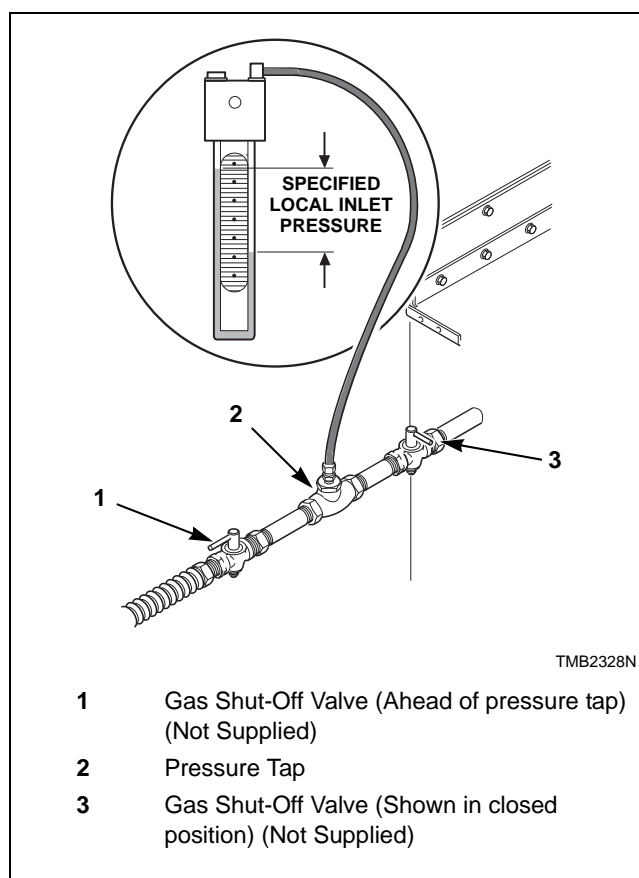


Figure 14

## Specific Conversion Procedures

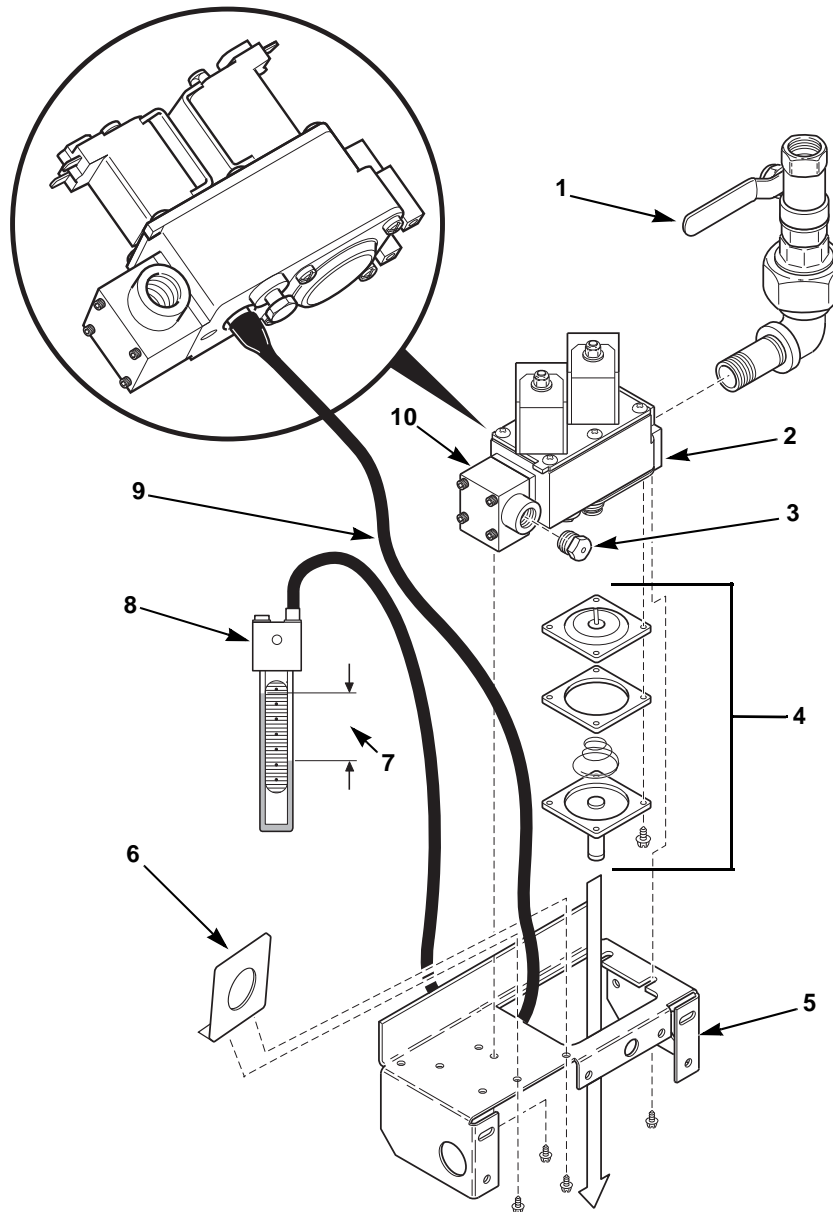
### *How to Convert Gas Valve from Regulated to Unregulated*

**NOTE:** Conversion from regulated to unregulated is only needed when regulated tumble dryers were ordered, but unregulated tumble dryers were needed.

1. Disconnect electrical power from tumble dryer. Close gas shut-off valve to tumble dryer. Refer to *Figure 14*.
2. Follow instructions in Conversion Kit, Part No. 431485 (Johnson Part No. GM-70 CBP).

**NOTE:** This kit does not contain any burner orifices.

3. Replace burner orifice(s) as per *Table 1*.
4. For 025 Series Natural Gas models, L.P. Gas only. Install 025 Series L.P. orifice plate (Part No. 70201901) onto gas valve bracket. Refer to *Figure 15*.
5. Commission tumble dryer for use.



TMB2252N

- |  |   |
|--|---|
| <p><b>1</b> Gas Shut-Off Valve (Shown in closed position)<br/>(Not Supplied)</p> <p><b>2</b> Gas Valve</p> <p><b>3</b> Burner Orifice</p> <p><b>4</b> Regulator Adjusting Housing and Gasket<br/>(Regulated version shown)</p> <p><b>5</b> Gas Valve Bracket</p> | <p><b>6</b> Part No. 70201901 025 Series Natural Gas L.P.<br/>Orifice Plate (For use on 025 Series Natural<br/>Gas Models L.P. only)</p> <p><b>7</b> Required Burner Manifold Pressure</p> <p><b>8</b> Manometer</p> <p><b>9</b> Connect Over Loosened Slotted Pressure Tap<br/>Screw in Bottom of Gas Valve</p> <p><b>10</b> Spud Holder</p> |
|--|---|

Figure 15

### How to Change Burner Orifice Size

1. Disconnect electrical power from tumble dryer. Close gas shut-off valve to tumble dryer. Refer to *Figure 14*.
2. Remove the burner orifice(s) from spud holder. Refer to *Figure 15*.
3. Install the new, correct burner orifice(s). Refer to *Figure 16* and *Table 1*. Torque each to 9 – 10 Nm.
4. Make certain burner orifice(s) are in line with burner tube opening. Refer to *Figure 16*.
5. Commission tumble dryer for use.

**NOTE: Blank burner orifices are Part No. M400995.**

### How to Adjust Gas Valve Governor/Regulator

1. Check gas burner orifice (manifold) pressure as follows. Refer to *Figure 15*.
2. Loosen screw plug inside pressure tap located on underside of valve. Refer to *Figure 15*.
3. Connect a “U”-tube manometer (or similar pressure gauge) to the 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 15*.
5. Commission tumble dryer for use.

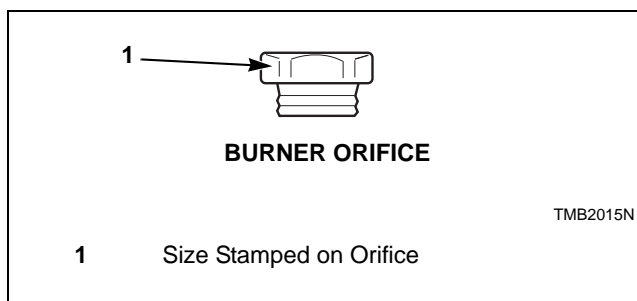



Figure 16

# Exhaust Requirements

	<b>WARNING</b>
<p><b>A drying tumble dryer produces combustible lint. To reduce the risk of fire, the tumble dryer must be exhausted to the outdoors.</b></p> <p style="text-align: right;">W057R1</p>	
<p><b>To reduce the risk of fire, DO NOT use plastic or thin foil ducting to exhaust the tumbler.</b></p> <p style="text-align: right;">W773</p>	
<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> <p style="text-align: right;">W059R1</p>	

## 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.**

Required Make-Up Air Opening (to the outside) for Each Tumble Dryer	
Model	Opening
<b>025/030 Series</b>	110 in. <sup>2</sup> (7,090 mm <sup>2</sup> )
<b>035/055 Series</b>	144 in. <sup>2</sup> (9,280 mm <sup>2</sup> )
<b>T30 Series</b>	220 in. <sup>2</sup> (14,180 mm <sup>2</sup> )
<b>T45 Series</b>	288 in. <sup>2</sup> (18,560 mm <sup>2</sup> )

Make-up air openings with louvers will restrict airflow. The opening must be increased to compensate for area taken up by louvers.

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> <p style="text-align: right;">W749</p>	

**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).

	<h2 style="margin: 0;">WARNING</h2>
<p><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></p> <p style="text-align: right; font-size: small;">W355</p>	

**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 0.0195 inches (0.495 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 17*.

**IMPORTANT:** For best performance provide an individual exhaust duct for each tumble dryer. Do not install a hot 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.

### 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 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 3* to determine equivalent venting.

**NOTE:** The maximum length of a flexible metal duct must not exceed 7.87 ft. (2.4 m) as required to meet UL2158, clause 7.3.2A.

Duct Diameter	Equivalent Length of Rigid Straight Duct
8 in. (203 mm)	One 90° elbow = 9.3 ft. (2.83 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)
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 3

**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

$$\begin{aligned}
 &= 14 \text{ ft. (4.3 m)} + (2) \text{ 90° elbows} \\
 &= 14 \text{ ft. (4.3 m)} + 14 \text{ ft. (4.3 m)} + 14 \text{ ft. (4.3 m)} \\
 &= 42 \text{ ft. (12.8 m)}
 \end{aligned}$$

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.) per minute cannot be maintained, schedule monthly inspections and cleaning of the ductwork.

## Exhaust Requirements

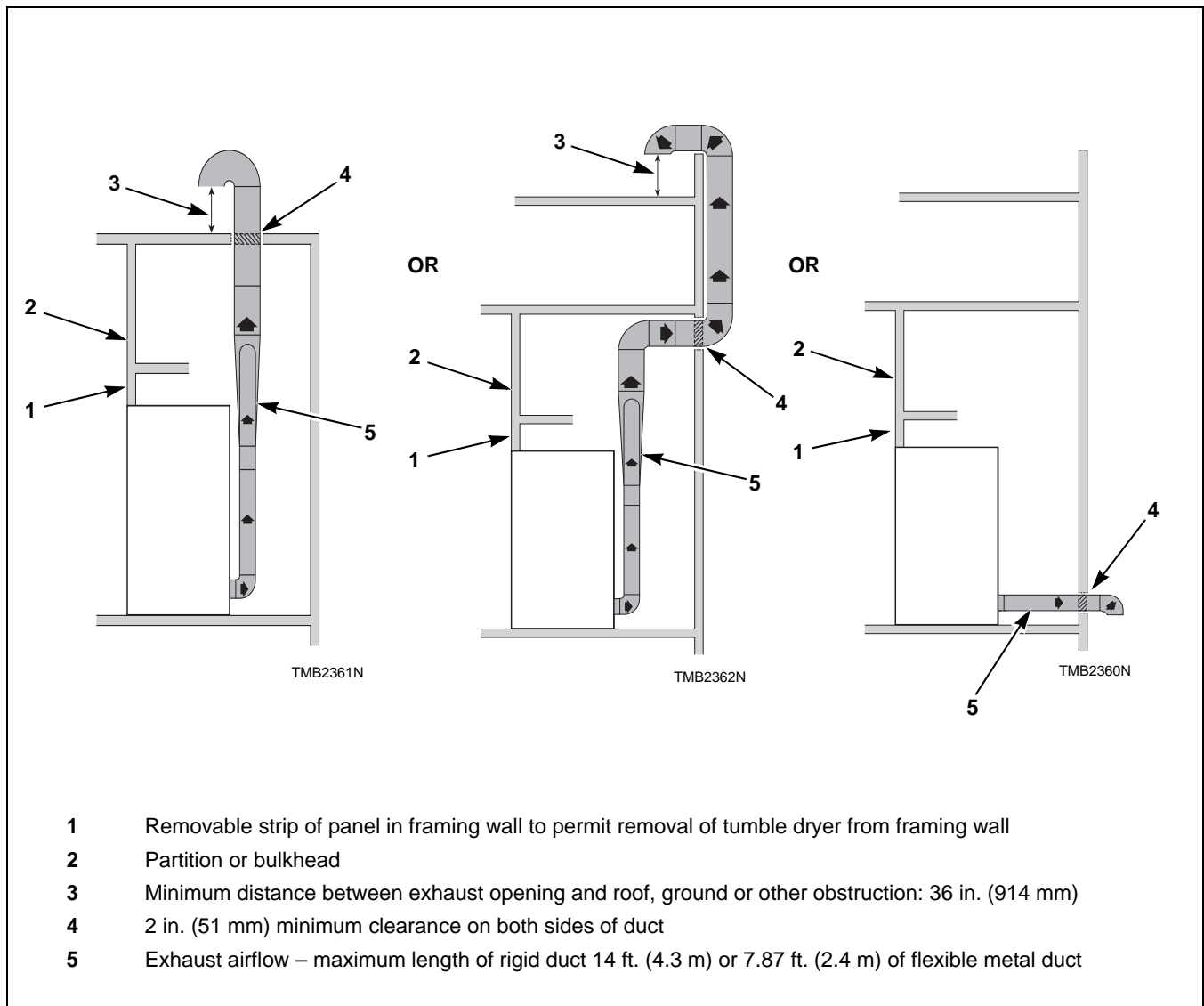


Figure 17

**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.**

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

## 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 19* and *Figure 20*. 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 4* 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 of 0.5 W.C.I. (1.3 bar) as specified 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 18*. 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.

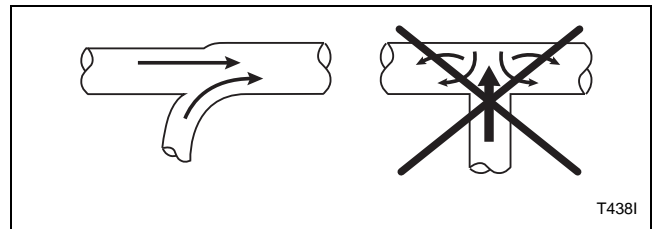


Figure 18

## Exhaust Requirements

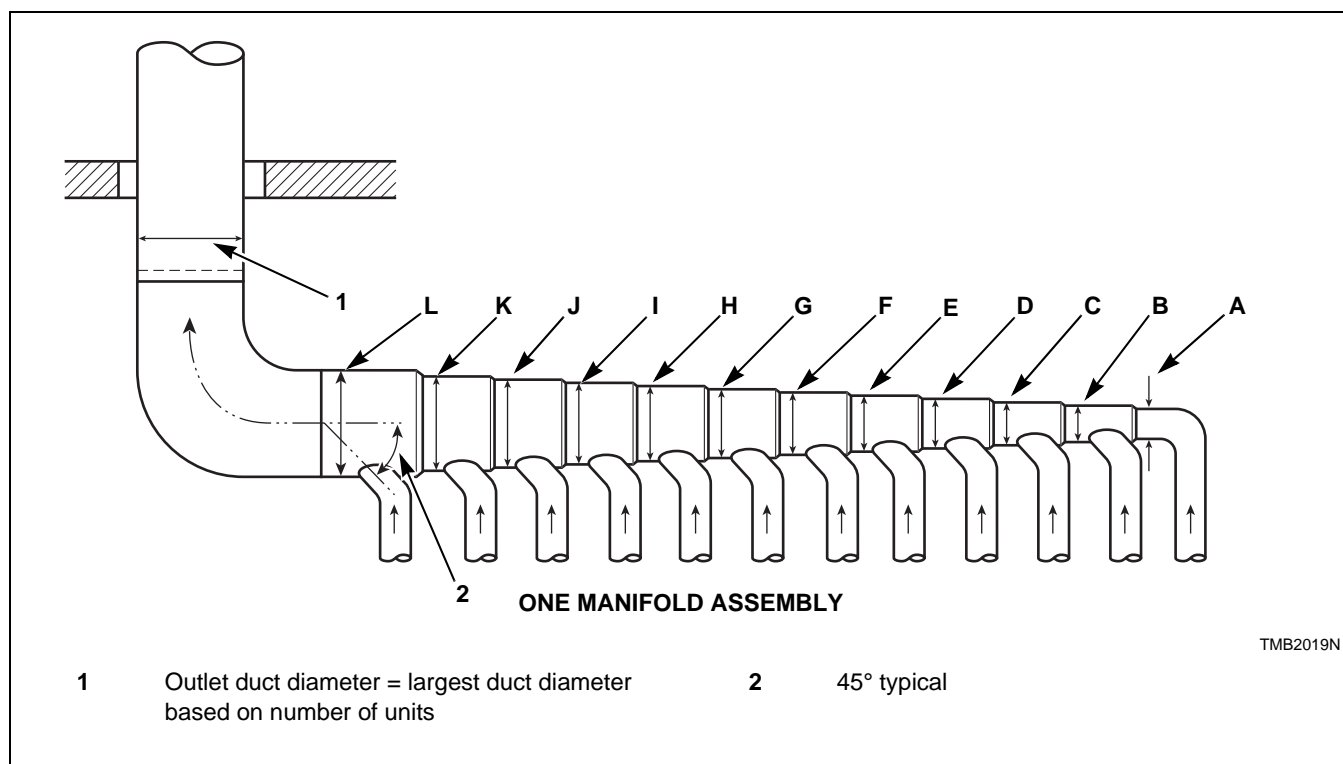


Figure 19

Duct Station	025 and 030 Series	035, 055 and T30 Series	T45 Series
<b>A</b>	6 in. (152 mm)	8 in. (203 mm)	10 in. (254 mm)
<b>B</b>	10 in. (254 mm)	12 in. (305 mm)	15 in. (381 mm)
<b>C</b>	12 in. (305 mm)	15 in. (381 mm)	18 in. (457 mm)
<b>D</b>	14 in. (356 mm)	17 in. (432 mm)	21 in. (533 mm)
<b>E</b>	16 in. (406 mm)	19 in. (483 mm)	24 in. (610 mm)
<b>F</b>	18 in. (457 mm)	21 in. (533 mm)	26 in. (660 mm)
<b>G</b>	19 in. (483 mm)	23 in. (584 mm)	28 in. (711 mm)
<b>H</b>	20 in. (508 mm)	24 in. (610 mm)	30 in. (762 mm)
<b>I</b>	22 in. (559 mm)	26 in. (660 mm)	32 in. (813 mm)
<b>J</b>	23 in. (584 mm)	27 in. (686 mm)	33 in. (838 mm)
<b>K</b>	24 in. (610 mm)	28 in. (711 mm)	35 in. (889 mm)
<b>L</b>	25 in. (635 mm)	30 in. (762 mm)	36 in. (914 mm)

Table 4

**NOTE:** *Table 4* represents units with the same vent size. If multiple vent sizes are used, consult a local HVAC specialist.

**NOTE:** Duct clean-out recommended every 6 feet (183 cm).



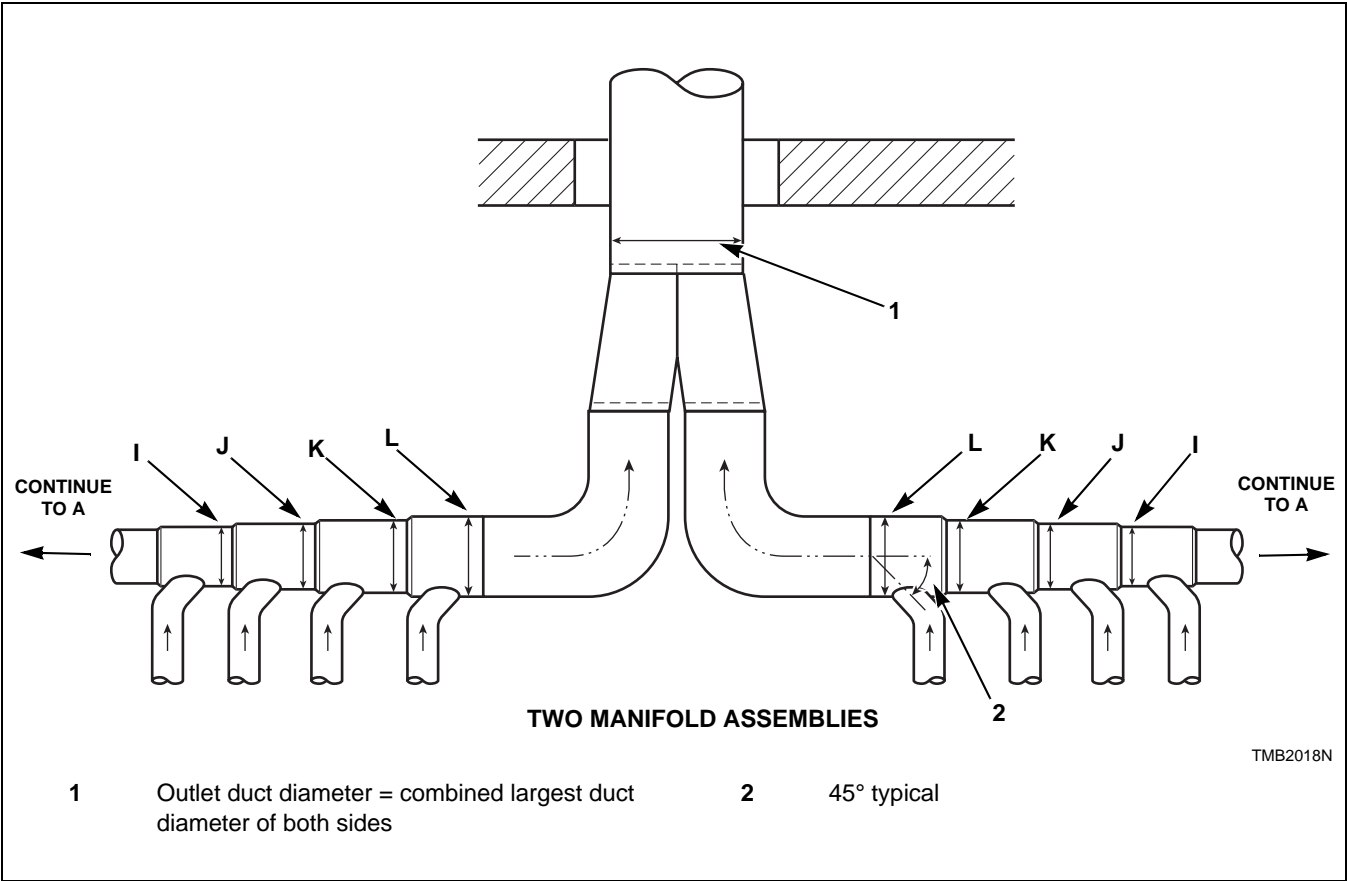



Figure 20

Refer to *Table 4* for measurements for each manifold.

# Gas Requirements

	<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> <p style="text-align: right;">W060R1</p> <p>To reduce the risk of gas leaks, fire or explosion, use a new flexible stainless steel connector.</p> <p style="text-align: right;">W774</p>	

**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 at test pressure equal to or less than 0.5 psig (34.5 mbar, 3.45 kPa).

**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 tumble dryer and its manually operated appliance gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 0.5 psig (34.5 mbar, 3.45 kPa).

**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 or 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.

Obtain specific gas service pipe size from the gas supplier. Refer to *Table 5* 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 21*.

- Sediment traps
- Shut-off valves
- Supply pressure taps

It is important that equal pressure be maintained at all tumble dryer gas connections. This can be done by installing a 1 inch (25.4 mm) pipe gas loop to maintain equal pressure at all gas connections. Refer to *Figure 22*.

	<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> <p style="text-align: right;">W062R1</p>	

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

Maximum gas pressure – 10.5 water column inches (26.1 mbar, 2.61 kPa)

Recommended gas pressure – 6.5 water column inches (16.2 mbar, 1.62 kPa)

Minimum gas pressure – 5 water column inches (12.4 mbar, 1.24 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.

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

Maximum gas pressure – 13 water column inches (32.3 mbar, 3.23 kPa)

Recommended gas pressure – 11 water column inches (27.4 mbar, 2.74 kPa)

Minimum gas pressure – 10 water column inches (24.9 mbar, 2.49 kPa)

For converting Non-CE models from Natural Gas to L.P. Gas:

025 Series - M6699P3

030 Series - M4703P3

T30 Series - M4707P3


035 Series - M4711P3

T45 Series - M4880P3

055 Series - M4924P3

CE GASES refer to **Installing CE Gas Drying Tumble Dryers** section, the above data does not apply to the CE.

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, open and close the door and restart. Repeat these steps until burner ignites. **Use pipe compound, resistant to actions of L.P. gas, on all pipe threads.**



### WARNING

**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 twice a year for leakage.**

W635

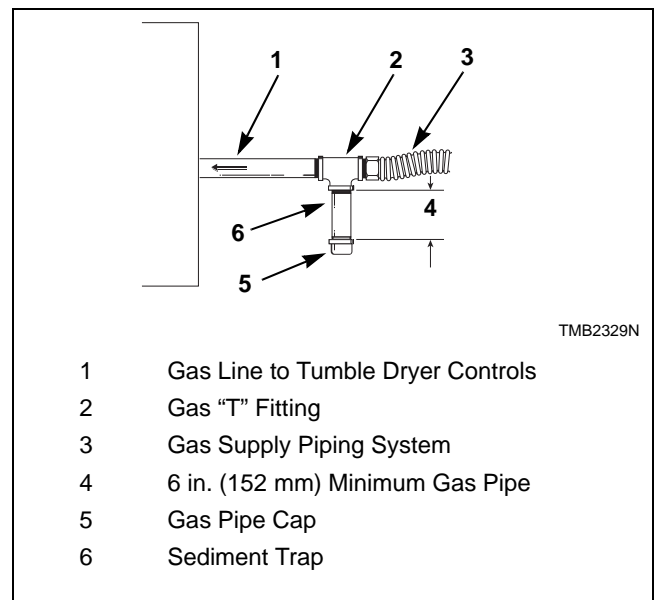
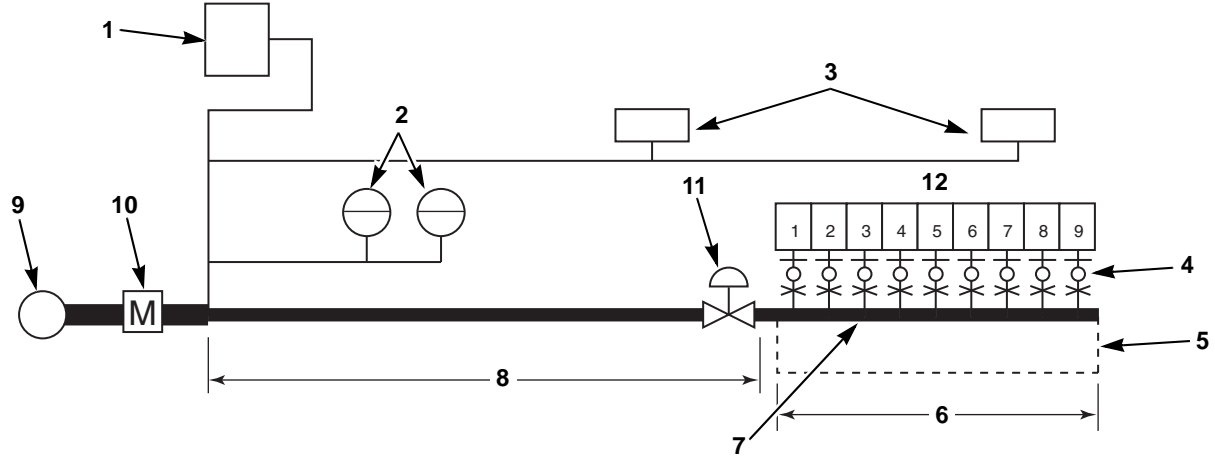


Figure 21

## Gas Requirements

### Gas Supply Pipe Sizing and Looping



TMB2126N

- |    |   |    |   |
|----|---|----|---|
| 1  | Gas furnace (120,000 Btu/hr. [35.2 kW])   | 12 | 025 Series tumble dryer (64,000 Btu/hr. [18.7 kW] each)   |
| 2  | Gas water heaters (400,000 Btu/hr. [117.2 kW] each)                                   |    | 030 Series tumble dryer (73,000 Btu/hr. [21.4 kW] each)   |
| 3  | Gas space heaters (70,000 Btu/hr. [20.5 kW] each)                                     |    | 035 Series tumble dryer (90,000 Btu/hr. [26.4 kW] each)   |
| 4  | Sediment traps, supply pressure taps and shut-off valves. Refer to <i>Figure 21</i> . |    | Stacked 30 Series tumble dryer (73,000 Btu/hr. [21.4 kW] per pocket; 146,000 total Btu/hr. [42.8 kW] for machine) |
| 5  | 1 in. (25.4 mm) gas pipe loop   |    | Stacked 45 Series tumble dryer (95,000 Btu/hr. [27.8 kW] per pocket; 190,000 total Btu/hr. [55.6 kW] for machine) |
| 6  | 19 ft. (5.8 m)  |    | 055 Series tumble dryer (112,000 Btu/hr. [32.8 kW] each)  |
| 7  | Minimum Pipe Size is 0.5 in. (12.7 mm)  |    |   |
| 8  | 25 ft. (7.6 m)  |    |   |
| 9  | Main regulator  |    |   |
| 10 | Gas meter   |    |   |
| 11 | Pressure regulator (if required)  |    |   |

#### 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 030 Series tumble dryers being fed by the main gas supply pipe.  
 = 9 x 73,000 (21.4)  
 = 657,000 Btu/hr. (192.6 kW)

Using *Table 5*, the main supply pipe diameter should be 2 in. (51 mm).

**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.

Figure 22

Gas Pipe Size Required for 1,000 Btu Natural Gas — 0.64 Specific Gravity at 7 ± 1.5 inches (17.4 ± 4 mbar, 1.74 ± 0.37 kPa) Water Column Pressure						
Gas Appliances Total Btu/hr.	Equivalent Length					
	25 feet (7.63 m)	50 feet (15.25 m)	75 feet (22.88 m)	100 feet (30.50 m)	125 feet (38.13 m)	150 feet (45.75 m)
	Based on 0.3 in. (7.62 mm) Water Column Pressure Drop for Length Given Sizes shown in inches (mm)					
100,000	0.75 (19.05)	0.75 (19.05)	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)
120,000	0.75 (19.05)	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)
140,000	0.75 (19.05)	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	31.75 (1.25)
160,000	0.75 (19.05)	1 (25.40)	1 (25.40)	1.25 (31.75)	1.25 (31.75)	1.25 (31.75)
180,000	1 (25.40)	1 (25.40)	1 (25.40)	1.25 (31.75)	1.25 (31.75)	1.25 (31.75)
200,000	1 (25.40)	1 (25.40)	1.25 (31.75)	1.25 (31.75)	1.25 (31.75)	1.5 (38.10)
300,000	1 (25.40)	1.25 (31.75)	1.25 (31.75)	1.5 (38.10)	1.5 (38.10)	1.5 (38.10)
400,000	1.25 (31.75)	1.25 (31.75)	1.5 (38.10)	1.5 (38.10)	1.5 (38.10)	2 (50.80)
500,000	1.25 (31.75)	1.5 (38.10)	1.5 (38.10)	2 (50.80)	2 (50.80)	2 (50.80)
600,000	1.5 (38.10)	1.5 (38.10)	2 (50.80)	2 (50.80)	2 (50.80)	2 (50.80)
700,000	1.5 (38.10)	2 (50.80)	2 (50.80)	2 (50.80)	2 (50.80)	2.5 (63.50)
800,000	1.5 (38.10)	2 (50.80)	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)
900,000	2 (50.80)	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)
1,000,000	2 (50.80)	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)
1,100,000	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)
1,200,000	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)
1,300,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	3 (76.20)
1,400,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)
1,500,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)
1,600,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)
1,700,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)
1,800,000	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3 (76.20)
1,900,000	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3 (76.20)
2,000,000	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3.5 (88.90)
2,200,000	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3.5 (88.90)	3.5 (88.90)
2,400,000	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3.5 (88.90)	3.5 (88.90)
2,600,000	2.5 (63.50)	3 (76.20)	3 (76.20)	3.5 (88.90)	3.5 (88.90)	3.5 (88.90)
2,800,000	2.5 (63.50)	3 (76.20)	3 (76.20)	3.5 (88.90)	3.5 (88.90)	3.5 (88.90)
3,000,000	2.5 (63.50)	3 (76.20)	3.5 (88.90)	3.5 (88.90)	3.5 (88.90)	4 (101.60)

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 5

## Gas Requirements

### High Altitude Burner Orifice Sizing

For proper operation at altitudes above 2,000 feet (610 m), the gas burner orifice size must be reduced to ensure complete combustion. Refer to *Table 6*.

For CE models, consult local gas supplier.

Model	Gas	Altitude		Burner Orifice				Part No.	New Rate (Btu/hr.)*
		feet	meters	#	inches	mm	Quantity		
025 Series	Natural Gas	2,001-4,000	610-1,220	26	0.1470	3.7	1	M401000	58,880
		4,001-6,000	1,221-1,830	27	0.1440	3.7		M400998	53,760
		6,001-8,000	1,831-2,440	28	0.1405	3.6		M401014	48,640
		8,001-10,000	2,441-3,050	29	0.1360	3.4		M400997	43,520
	L.P. Gas	2,001-6,000	610-1,830	43	0.0890	2.3		M406184	58,880
		6,001-8,000	1,831-2,440	44	0.0860	2.2		M401011	48,640
		8,001-10,000	2,441-3,050	46	0.0810	2.1		M401003	43,520
030 Series	Natural Gas	2,001-4,000	610-1,220	22	0.1570	4.0	1	M402996	67,160
		4,001-6,000	1,221-1,830	24	0.1520	3.9		M402980	61,320
		6,001-8,000	1,831-2,440	26	0.1470	3.7		M401000	55,480
		8,001-10,000	2,441-3,050	28	0.1405	3.6		M401014	49,640
	L.P. Gas	2,001-6,000	610-1,830	42	0.0935	2.4		M403017	67,160
		6,001-8,000	1,831-2,440	43	0.0890	2.3		M406184	55,480
		8,001-10,000	2,441-3,050	44	0.0860	2.2		M401011	49,640
T30 Series	Natural Gas	2,001-4,000	610-1,220	22	0.1570	4.0	2	M402996	134,320
		4,001-6,000	1,221-1,830	24	0.1520	3.9		M402980	122,640
		6,001-8,000	1,831-2,440	26	0.1470	3.7		M401000	110,960
		8,001-10,000	2,441-3,050	28	0.1405	3.6		M401014	99,280
	L.P. Gas	2,001-6,000	610-1,830	42	0.0935	2.4		M403017	134,320
		6,001-8,000	1,831-2,440	43	0.0890	2.3		M406184	110,960
		8,001-10,000	2,441-3,050	44	0.0860	2.2		M401011	99,280
035 Series	Natural Gas	2,001-4,000	610-1,220	17	0.1730	4.4	1	M411374	82,800
		4,001-6,000	1,221-1,830	18	0.1695	4.3		M402988	75,600
		6,001-8,000	1,831-2,440	20	0.1610	4.1		M401002	68,400
		8,001-10,000	2,441-3,050	22	0.1570	4.0		M402996	61,200
	L.P. Gas	2,001-4,000	610-1,220	38	0.1015	2.6		M411376	82,800
		4,001-6,000	1,221-1,830	39	0.0995	2.5		M401007	75,600
		6,001-8,000	1,831-2,440	41	0.0960	2.4		M401015	68,400
T45 Series	Natural Gas	2,001-4,000	610-1,220	15	0.1800	4.6	2	M411511	183,000
		4,001-6,000	1,221-1,830	17	0.1730	4.4		M411374	168,400
		6,001-8,000	1,831-2,440	18	0.1695	4.3		M402988	155,000
		8,001-10,000	2,441-3,050	20	0.1610	4.1		M401002	142,600
	L.P. Gas	2,001-4,000	610-1,220	36	0.1065	2.7		M402487	183,000
		4,001-6,000	1,221-1,830	37	0.1040	2.6		M411375	168,400
		6,001-8,000	1,831-2,440	38	0.1015	2.6		M411376	155,000
		8,001-10,000	2,441-3,050	40	0.0980	2.5		M406361	142,600

\*Btu/hr. derate of 4% per 1,000 feet (305 meters) of altitude.

Table 6 (continued)


Table 6 (continued)

Model	Gas	Altitude		Burner Orifice					New Rate (Btu/hr.)*
		feet	meters	#	inches	mm	Quantity	Part No.	
<b>055 Series</b>	Natural Gas	2,001-4,000	610-1,220	10	0.1929	4.9	1	M402994	104,360
		4,001-6,000	1,221-1,830	12	0.1890	4.8		M411372	99,562
		6,001-8,000	1,831-2,440	14	0.1811	4.6		M411371	92,324
		8,001-10,000	2,441-3,050	16	0.1772	4.5		M411373	87,321
	L.P. Gas	2,001-4,000	610-1,220	32	0.1142	2.9		M402444	104,354
		4,001-6,000	1,221-1,830	33	0.1142	2.9		M401022	99,027
		6,001-8,000	1,831-2,440	35	0.1102	2.8		M402487	93,838
		8,001-10,000	2,441-3,050	36	0.1063	2.7		M411375	87,630

\*Btu/hr. derate of 4% per 1,000 feet (305 meters) of altitude.

Table 6


# Electrical Requirements

	<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> <p style="text-align: right;">W002R1</p>	
<p>To reduce the risk of fire and electric shock, check with a qualified serviceman for proper grounding procedures. Improper connection of the equipment grounding conductor may result in a risk of electric shock.</p> <p style="text-align: right;">W068</p>	
<p>To reduce the risk of fire and electric shock, if electrical supply is coming from a three phase service, <b>DO NOT</b> 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> <p style="text-align: right;">W069</p>	

**IMPORTANT:** Electrical connections must be made by a qualified electrician using data on serial plate, installation manuals and wiring diagram provided with machine 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 machine to an individual branch circuit not shared with lighting or other equipment.

**NOTE: 3 Phase Machines 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> <p style="text-align: right;">W796</p>	

## Wiring Diagram

The wiring diagram is located in the junction or contactor box.

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



## 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.
- 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.



### WARNING

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.

W409R1



### CAUTION

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

W071

### For CE Models Only

All OPL (non-vend) models are factory-equipped with an emergency stop button on the front panel. If the emergency stop function is desired on coin-operated models, an external emergency stop button may be installed.

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

## Electrical Requirements

### Service/Ground Location

Models Through 7/9/12

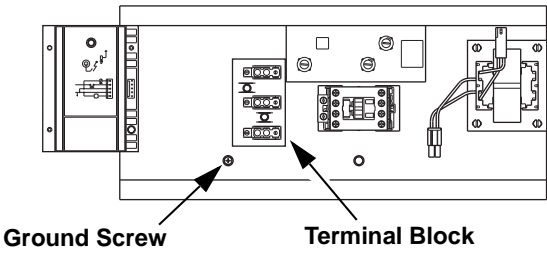
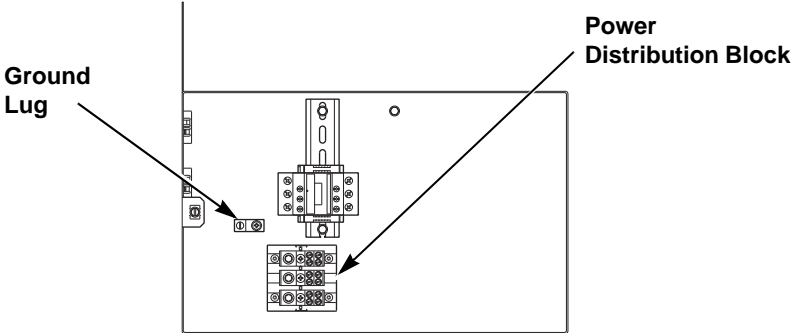
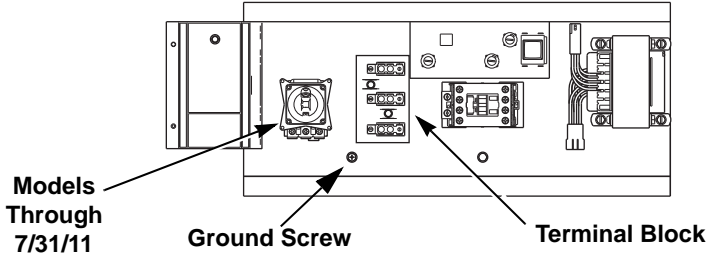
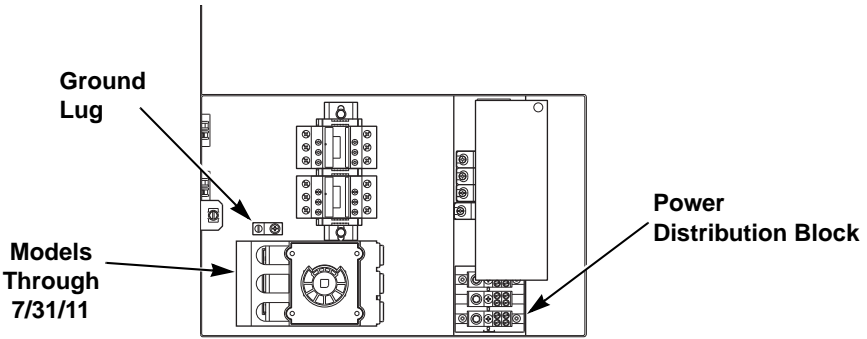
Model	Heat Source	Ground and Terminal Block Locations
<b>Non-CE</b> <b>025</b> <b>030</b> <b>035</b> <b>055</b> <b>Series</b>	Gas or Steam	 <p><b>Ground Screw</b>      <b>Terminal Block</b></p> <p><b>Control Tray</b></p> <p>TMB2127N</p>
<b>Non-CE</b> <b>025</b> <b>030</b> <b>035</b> <b>055</b> <b>Series</b>	Electric	 <p><b>Ground Lug</b>      <b>Power Distribution Block</b></p> <p><b>Accessory Box (located below control tray)</b></p> <p><b>NOTE: Do not make service connections in control tray.</b></p> <p>TMB2128N</p>
<b>CE</b> <b>025</b> <b>030</b> <b>035</b> <b>055</b> <b>Series</b>	Gas or Steam	 <p><b>Models Through 7/31/11</b>      <b>Ground Screw</b>      <b>Terminal Block</b></p> <p>TMB2129N</p>
<b>CE</b> <b>025</b> <b>030</b> <b>035</b> <b>055</b> <b>Series</b>	Electric	 <p><b>Ground Lug</b>      <b>Power Distribution Block</b></p> <p><b>Models Through 7/31/11</b></p> <p>TMB2130N</p>

Figure 23

Models Starting 7/10/12

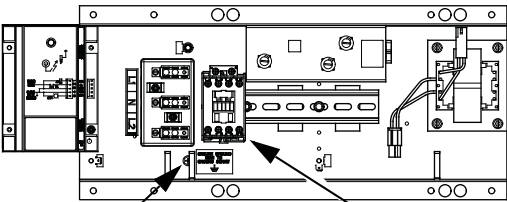
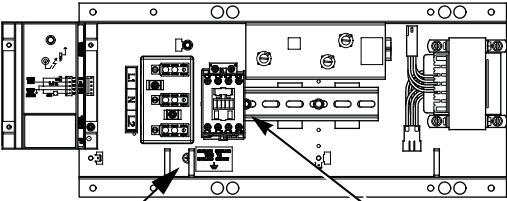
Model	Ground and Terminal Block Locations
Non-CE 025 030 035 055 Series	<div><p>Ground</p><p>Power Distribution Block</p><p>Control Tray</p><p>TMB2377N</p></div>
CE 025 030 035 055 Series	<div><p>Ground</p><p>Power Distribution Block</p><p>Control Tray</p><p>TMB2379N</p></div>

Figure 24

## Electrical Requirements

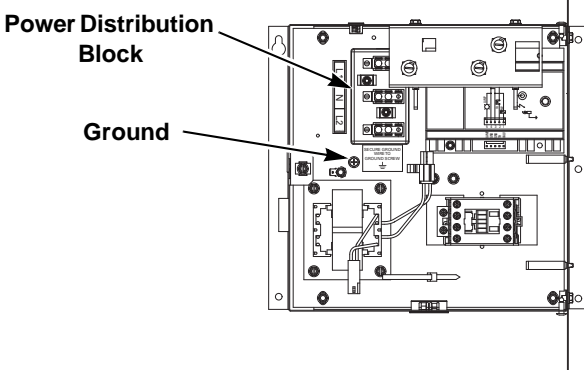
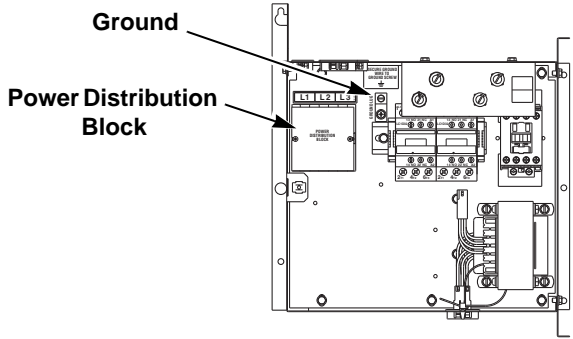
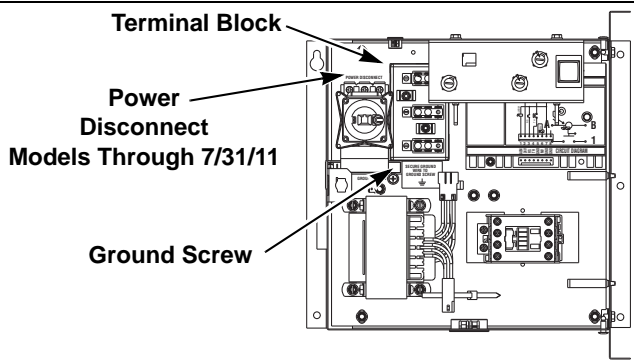
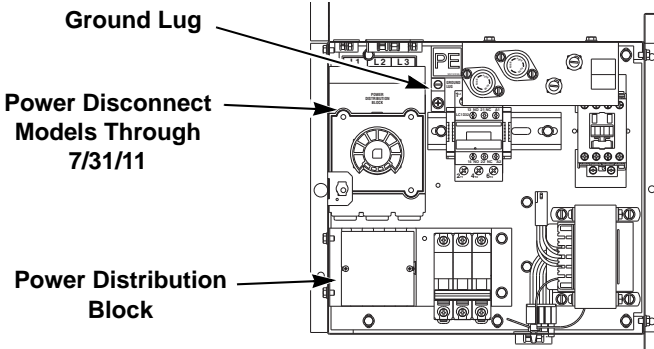
Model	Heat Source	Ground and Terminal Block Locations
<b>Non-CE T30/T45 Series</b>	T30: Gas or Steam T45: Gas	 <p>Power Distribution Block</p> <p>Ground</p> <p>TMB2041N</p>
<b>Non-CE T30 Series</b>	Electric	 <p>Ground</p> <p>Power Distribution Block</p> <p>TMB2113N</p>
<b>CE T30/T45 Series</b>	T30: Gas or Steam T45: Gas	 <p>Terminal Block</p> <p>Power Disconnect Models Through 7/31/11</p> <p>Ground Screw</p> <p>TMB2114N</p>
<b>CE T30 Series</b>	Electric	 <p>Ground Lug</p> <p>Power Disconnect Models Through 7/31/11</p> <p>Power Distribution Block</p> <p>TMB2115N</p>

Figure 25

## To Connect Electrical Service To The Tumble Dryer

The following steps outline the procedure for connecting electrical service to the tumble dryer.

- **3 Phase Models – 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).**
- **Electrical service must be connected using the appropriate permanent rigid metal conduit system.**
- **Service conductors must be copper only.**

For an existing service, determine your service voltage and conductor amperage. Carefully review the tumble dryer serial plate ratings and *Electrical Requirements* section of this manual. If service is inadequate it must be upgraded by a qualified electrical contractor. Never connect an improper or inadequate service to any machine.

### Configuring Your Tumble Dryer for Other Service Voltages

Several gas and steam tumble dryer models have been designed to be field convertible to other service voltages. Refer to *Table 7* for these models:

Models	If your Serial Plate voltage is:	Your tumble dryer can be converted to the following voltages:
025, 030, 035, 055, T30	120 Volt/60 Hertz/ 1 Phase	208-240 Volt/60 Hertz/ 1 Phase
025, 030, 035, 055, T30	200-220 Volt/60 Hertz/ 1 Phase	100 Volt/60 Hertz/ 1 Phase
025, 030, 035, 055, T30	200 Volt/50 Hertz/ 1 Phase	100 Volt/50 Hertz/ 1 Phase
025, 030, 035, 055, T30, T45	240 Volt/60 Hertz/ 3 Phase	200-208 Volt/60 Hertz/ 3 Phase
025, 030, 035, 055, T30	380 Volt/50 Hertz/ 3 Phase	400-415 Volt/50 Hertz/ 3 Phase

Table 7

**NOTE: Electric models are not field convertible and must be connected to service specified on serial plate.**

If tumble dryer requires conversion for use on another service voltage, complete the steps detailed in the *Conversion Instructions* section **prior to connecting service to machine.**

If tumble dryer does not require conversion or has been converted according to the *Conversion Instructions* section of this manual, continue with step 1.

**NOTE: The wiring diagram is located inside the junction or contactor box.**

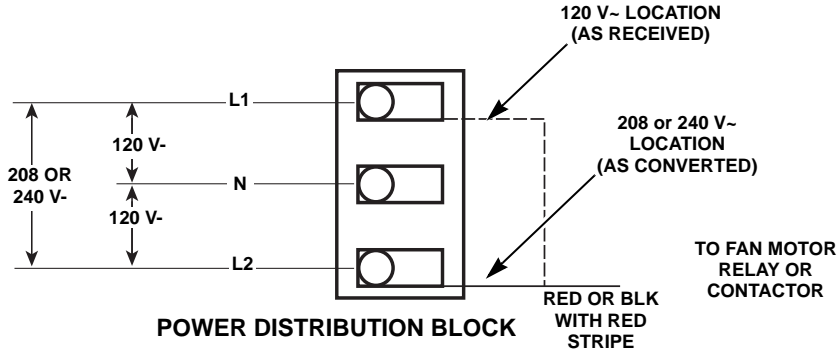
1. For new service, install a circuit breaker of proper voltage and current rating as close to each tumble dryer as possible.
2. Route service conduit from service breaker panel to tumble dryer service connection box. Conduit routing should not obstruct access for maintenance or servicing. Refer to *Service/ Ground Location*.
3. Pull conductors through conduit and attach to circuit breaker and ground connection. Secure service ground wire to the grounding screw or lug. Attach service conductors to appropriately labeled positions on the terminal block. Make sure all connections are secure.
4. Complete ferrite installation instructions for all gas and steam models with OM control suffix.
5. Check electrical service phase sequence (3 Phase models only) as follows:
  - a. Energize the electrical service and momentarily start the tumble dryer. Check the direction of cylinder rotation. If the cylinder rotates clockwise as viewed from the front, the phase sequence is correct. If the cylinder rotates counterclockwise, proceed with step b.
  - b. Disconnect power to machine, disconnect and reverse the L1 and L2 connections on the terminal block.

### Electrical Connections for T30 and T45 Only

All gas and steam tumble dryers require a single service connection to TB1 of the upper unit junction box only. The serial plate reflects current draw, breaker/fuse size and conductor amperage required for the entire machine.

All electric tumble dryers require separate service connections for each upper and lower unit. Serial Plate ratings reflect current draw, breaker/fuse size and conductor amperage required per unit.

Conversion Instructions

If serial plate voltage is:	Tumble Dryer can be converted to the following voltages:
<p><b>120 Volt/60 Hertz/ 1 Phase</b></p> <p><b>2W&amp;G</b></p> <p><b>(All models except T45)</b></p>	<p><b>208-240 Volt/60 Hertz/1 Phase Models: 3W&amp;G</b></p> <p>1. Prior to connecting service, locate the red or black with red stripe wire which runs between terminal block and the fan motor relay or contactor. Refer to figure below.</p> <div data-bbox="581 499 1414 846"></div> <p>2. Disconnect the red or black with red stripe wire from L1 of the terminal block and connect to L2 of the terminal block.</p> <p>3. Sign and date conversion sticker located on back of tumble dryer.</p> <p>4. Follow the instructions covered in <i>Connecting Electrical Service</i> section.</p> <p><b>NOTE: Motors operate on 120 Volt power regardless of input voltage configuration.</b></p>
<p><b>240 Volt/60 Hertz/ 3 Phase</b></p> <p><b>3W&amp;G</b></p>	<p><b>200-208 Volt/60 Hertz/3 Phase Models: 3W&amp;G</b></p> <p>1. Prior to connecting electric service, locate transformer configuration jumper in junction box area.</p> <p>2. Remove the 240 Volt jumper and replace it with the 208 Volt jumper located in the literature packet in cylinder.</p> <p>3. Sign and date conversion sticker located on back of tumble dryer.</p> <p>4. Follow the instructions covered in <i>Connecting Electrical Service</i> section.</p>

If serial plate voltage is:	Tumble Dryer can be converted to the following voltages:
<b>200-220 Volt/60 Hertz/ 1 Phase</b>  <b>200 Volt/50 Hertz/ 1 Phase</b>  <b>2W&amp;G</b>  <b>(All models except T45)</b>	<b>100 Volt/60 Hertz/1 Phase INTERNATIONAL Models: 2W&amp;G</b>  <b>100 Volt/50 Hertz/1 Phase INTERNATIONAL Models: 2W&amp;G</b>  <ol style="list-style-type: none"> <li>1. Prior to connecting electric service, locate transformer configuration jumper in junction box area.</li> <li>2. Remove the 208 Volt jumper and replace it with the 100 Volt jumper located in the literature packet from cylinder.</li> <li>3. Remove small access cover from back of the fan motor. Locate the two internal jumper wires, brown and blue connected to motor terminals #6 and #2. Move brown wire from terminal #6 to terminal #2 and blue wire from terminal #2 to terminal #4. Be careful not to confuse light blue motor harness wire with the dark blue internal jumper.</li> <li>4. Carefully check motor wire connections with wiring diagram and verify that the motors are configured for low voltage operation before replacing covers.</li> <li>5. Sign and date conversion sticker located on back of tumble dryer.</li> <li>6. Follow the instructions covered in <i>Connecting Electrical Service</i> section.</li> </ol>
<b>380 Volt/50 Hertz/ 3 Phase</b>  <b>3W&amp;G</b>  <b>(All models except T45)</b>	<b>400-415 Volt/50 Hertz/3 Phase Models: 3W&amp;G</b>  <ol style="list-style-type: none"> <li>1. Prior to connecting electric service, locate transformer configuration jumper in junction box area.</li> <li>2. Remove the 380 Volt jumper and replace it with the 415 Volt jumper located in the literature packet from cylinder.</li> <li>3. Sign and date conversion sticker located on back of tumble dryer.</li> <li>4. Follow the instructions covered in <i>Connecting Electrical Service</i> section.</li> </ol>

## Electrical Requirements

### Ferrite Ring Installation (025, 030, 035 and 055 Series Only)

#### Gas and Steam Models with OM Control Suffix Only (Models Through 7/31/11)

The ferrite ring provided in the literature packet must be installed over the power leads during connection of electrical service. The ferrite protects the sensitive electronic controls from destructive electrical disturbances which may be present on power lines to the machine. Failure to properly install the ferrite ring may result in damage to the electronic controls and will void control warranty.

To install:

1. Immediately after connection of power leads and before applying power to machine, locate each of the incoming service leads including ground.
2. Snap the ferrite ring closed over all the service leads inside of the contactor box as shown. It is important that the ferrite ring be installed inside the contactor box. Refer to *Figure 26*. Do not install the ferrite outside of the box or other area. Make sure that service leads are in the center of the ferrite before closing the ring so as not to pinch or damage leads.

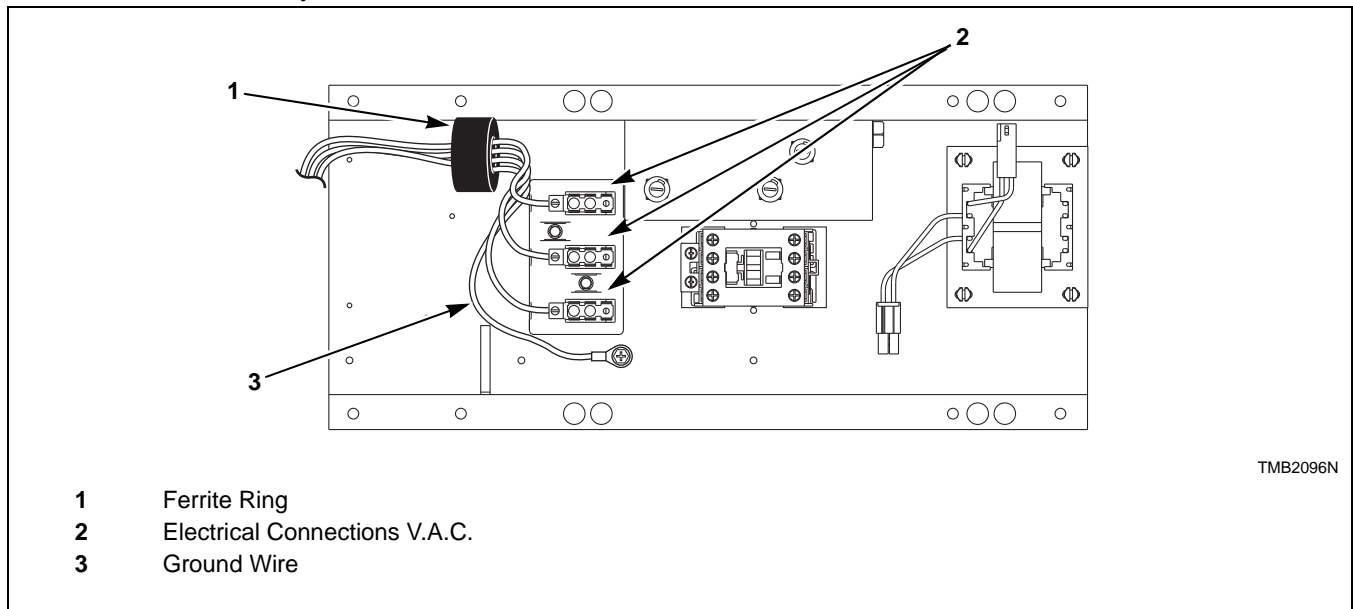


Figure 26



## Electrical Specifications

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

**NOTE:** Use copper conductors only.

**NOTE:** Connect to individual branch circuit.

### 025, 030 and 035 Series Gas and Steam Models

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
120V/60Hz/1ph	L1, Neutral, and ground	12.0	N/A	15A – 1 pole	14 (2.5)
208-240V/60Hz/1ph	L1, L2, Neutral, and ground	6.7	N/A	10A – 2 pole	14 (2.5)
120V/60Hz/1ph	L1, Neutral, and ground	7.5**	N/A	10A – 1 pole	14 (2.5)
208-240V/60Hz/1ph	L1, L2, Neutral, and ground	4.5**	N/A	10A – 2 pole	14 (2.5)
100V/60Hz/1ph	L1, Neutral, and ground	11.0	N/A	15A – 1 pole	14 (2.5)
200-220V/60Hz/1ph	L1, Neutral, and ground	5.8	N/A	10A – 1 pole	14 (2.5)
100V/50Hz/1ph	L1, Neutral, and ground	12.1	N/A	20A – 1 pole	12 (4)
200V/50Hz/1ph	L1, Neutral, and ground	7.5	N/A	10A – 1 pole	14 (2.5)
230-240V/50Hz/1ph	L1, Neutral, and ground	7.5	N/A	10A – 1 pole	14 (2.5)
200-208V/60Hz/3ph	L1, L2, L3, and ground	3.2	4.0	10A* – 3 pole	14 (2.5)
240V/60Hz/3ph	L1, L2, L3, and ground	3.2	4.0	10A* – 3 pole	14 (2.5)
200V/50Hz/3ph	L1, L2, L3, and ground	2.9	3.5	10A* – 3 pole	14 (2.5)
230-240V/50Hz/3ph	L1, L2, L3, and ground	3.5	N/A	10A* – 3 pole	14 (2.5)
380V/50 or 60Hz/3ph	L1, L2, L3, and ground	1.5	2.0	10A* – 3 pole	14 (2.5)
400-415V/50Hz/3ph	L1, L2, L3, and ground	1.6	2.0	10A* – 3 pole	14 (2.5)
440V/60Hz/3ph	L1, L2, L3, and ground	1.6	N/A	10A* – 3 pole	14 (2.5)
460-480V/60Hz/3ph	L1, L2, L3, and ground	1.6	2.0	10A* – 3 pole	14 (2.5)

\* 3 Phase machines should not have fuses, breakers only.

\*\* Special low Amp blower model, 025 Series only.

N/A = Not Applicable

Table 8

## Electrical Requirements

### 055 Series Gas Models

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
120V/60Hz/1ph	L1, Neutral, and ground	9.2	N/A	15A – 1 pole	14 (2.5)
208-240V/60Hz/1ph	L1, L2, Neutral, and ground	6.5	N/A	10A – 2 pole	14 (2.5)
100V/60Hz/1ph	L1, Neutral, and ground	9.8	N/A	15A – 1 pole	14 (2.5)
100V/50Hz/1ph	L1, Neutral, and ground	10	N/A	15A – 1 pole	14 (2.5)
200V/50Hz/1ph	L1, Neutral, and ground	6.2	N/A	15A – 1 pole	14 (2.5)
230-240V/50Hz/1ph	L1, Neutral, and ground	5.5	N/A	10A – 1 pole	14 (2.5)
200-208V/60Hz/3ph	L1, L2, L3, and ground	4.0	4.0	10A* – 3 pole	14 (2.5)
240V/60Hz/3ph	L1, L2, L3, and ground	4.0	4.5	10A* – 3 pole	14 (2.5)
380V/50Hz/3ph	L1, L2, L3, and ground	2.0	2.5	10A* – 3 pole	14 (2.5)
400-415V/50Hz/3ph	L1, L2, L3, and ground	2.0	2.5	10A* – 3 pole	14 (2.5)

\* 3 Phase machines should not have fuses, breakers only.

N/A = Not Applicable

Table 9

### T30 Series Gas and Steam Models (Total Machine)

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps	Recommended Circuit	
			Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
120V/60Hz/1ph	L1, Neutral, and ground	16.0	20A – 1 pole	12 (4)
208-240V/60Hz/1ph	L1, L2, Neutral, and ground	8.0	10A – 2 pole	14 (2.5)
100V/60Hz/1ph	L1, Neutral, and ground	22.0	30A – 1 pole	10 (6)
200-220V/60Hz/1ph	L1, Neutral, and ground	11.6	15A – 1 pole	14 (2.5)
100V/50Hz/1ph	L1, Neutral, and ground	24.2	35A – 1 pole	8 (10)
200/50Hz/1ph	L1, Neutral, and ground	15.0	20A – 1 pole	12 (4)
230-240V/50Hz/1ph	L1, Neutral, and ground	9.0	15A – 1 pole	14 (2.5)
200-208V/60Hz/3ph	L1, L2, L3, and ground	6.4	10A* – 3 pole	14 (2.5)
240V/60Hz/3ph	L1, L2, L3, and ground	6.4	10A* – 3 pole	14 (2.5)
200V/50Hz/3ph	L1, L2, L3, and ground	5.8	10A* – 3 pole	14 (2.5)
230-240V/50Hz/3ph	L1, L2, L3, and ground	7.0	10A* – 3 pole	14 (2.5)
380V/50 or 60Hz/3ph	L1, L2, L3, and ground	3.0	10A* – 3 pole	14 (2.5)
400-415V/50Hz/3ph	L1, L2, L3, and ground	3.2	10A* – 3 pole	14 (2.5)
440V/60Hz/3ph	L1, L2, L3, and ground	3.3	10A* – 3 pole	14 (2.5)
460-480V/60Hz/3ph	L1, L2, L3, and ground	3.3	10A* – 3 pole	14 (2.5)

\* 3 Phase machines should not have fuses, breakers only.

Table 10

## T45 Series Gas Models (Total Machine)

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps	Recommended Circuit	
			Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
<b>208-240V/60Hz/1ph</b>	L1, L2, Neutral, and ground	12.0	15A – 2 pole	14 (2.5)
<b>230V/50Hz/1ph</b>	L1, Neutral and ground	10.2	15A – 1 pole	14 (2.5)
<b>200V/50Hz or 60Hz/1ph</b>	L1, Neutral and ground	11.2	15A – 1 pole	14 (2.5)
<b>230-240V/50Hz/1ph</b>	L1, Neutral and ground	10.8	15A – 1 pole	14 (2.5)
<b>200-208V/60Hz/3ph</b>	L1, L2, L3, and ground	9.6	15A* – 3 pole	14 (2.5)
<b>240V/60Hz/3ph</b>	L1, L2, L3, and ground	9.6	15A* – 3 pole	14 (2.5)

\* 3 Phase machines should not have fuses, breakers only.

Table 11

## 9 kW 025 Series Electric Models

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
<b>400V/50Hz/3ph</b>	L1, L2, L3, and ground	16	N/A	20A* – 3 pole	12 (4)

\* 3 Phase machines should not have fuses, breakers only.

N/A = Not Applicable

Table 12

## 12 kW 025 Series Electric Models

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
<b>208V/60Hz/1ph</b>	L1, L2, Neutral, and ground	64	N/A	80A – 2 pole	4 (25)
<b>240V/60Hz/1ph</b>	L1, L2, Neutral, and ground	57	N/A	80A – 2 pole	4 (25)
<b>200V/50Hz/1ph</b>	L1, Neutral, and ground	63	N/A	80A – 1 pole	4 (25)
<b>200V/60Hz/1ph</b>	L1, L2 and ground	64	N/A	80A – 2 pole	4 (25)
<b>230-240V/50Hz/1ph</b>	L1, Neutral, and ground	58	N/A	80A – 1 pole	4 (25)
<b>200-208V/60Hz/3ph</b>	L1, L2, L3, and ground	37	37	50A* – 3 pole	6 (16)
<b>200V/50Hz/3ph</b>	L1, L2, L3, and ground	36	36	50A* – 3 pole	6 (16)
<b>230-240V/50Hz/3ph</b>	L1, L2, L3, and ground	33	N/A	50A* – 3 pole	6 (16)
<b>240V/60Hz/3ph</b>	L1, L2, L3, and ground	33	33	50A* – 3 pole	6 (16)
<b>380V/50 or 60Hz/3ph</b>	L1, L2, L3, and ground	20	20	25A* – 3 pole	10 (6)
<b>400-415V/50Hz/3ph</b>	L1, L2, L3, and ground	18	18	25A* – 3 pole	10 (6)
<b>440V/60Hz/3ph</b>	L1, L2, L3, and ground	17	N/A	25A* – 3 pole	10 (6)
<b>460-480V/60Hz/3ph</b>	L1, L2, L3, and ground	16	16	25A* – 3 pole	10 (6)

\* 3 Phase machines should not have fuses, breakers only.

N/A = Not Applicable

Table 13

## Electrical Requirements

### 21 kW 030 Series Electric Models

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Non-reversing	Reversing	Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
208V/60Hz/1ph	L1, L2, Neutral, and ground	108	N/A	150A – 2 pole	1/0 (50)
240V/60Hz/1ph	L1, L2, Neutral, and ground	94	N/A	125A – 2 pole	1 (35)
200V/60Hz/1ph	L1, Neutral, and ground	108	N/A	150A – 1 pole	1/0 (50)
200V/50Hz/1ph	L1, Neutral, and ground	105	N/A	150A – 1 pole	1/0 (50)
230-240V/50Hz/1ph	L1, Neutral, and ground	95	N/A	125A – 2 pole	1 (35)
200-208V/60Hz/3ph**	L1, L2, L3, and ground	62	62	80A* – 3 pole	4 (25)
200V/50Hz/3ph**	L1, L2, L3, and ground	60	60	80A* – 3 pole	4 (25)
230-240V/50Hz/3ph**	L1, L2, L3, and ground	55	N/A	70A* – 3 pole	4 (25)
240V/60Hz/3ph**	L1, L2, L3, and ground	54	54	70A* – 3 pole	4 (25)
380V/50 or 60Hz/3ph**	L1, L2, L3, and ground	33	33	45A* – 3 pole	8 (10)
400-415V/50Hz/3ph**	L1, L2, L3, and ground	31	31	40A* – 3 pole	8 (10)
440V/60Hz/3ph	L1, L2, L3, and ground	29	N/A	40A* – 3 pole	8 (10)
460-480V/60Hz/3ph**	L1, L2, L3, and ground	27	27	35A* – 3 pole	8 (10)

\* 3 Phase machines should not have fuses, breakers only.

\*\* These serial plate voltages are only options available on the 30 series electric models.

N/A = Not Applicable

Table 14

### 21 kW T30 Series Electric Models

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps	Recommended Circuit	
			Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
200-208V/60Hz/3ph*	L1, L2, L3, and ground	62**	80A – 3 pole	4 (25)
200V/50Hz/3ph*	L1, L2, L3, and ground	60**	80A – 3 pole	4 (25)
230-240V/50Hz/3ph*	L1, L2, L3, and ground	55**	70A – 3 pole	4 (25)
240V/60Hz/3ph*	L1, L2, L3, and ground	54**	70A – 3 pole	4 (25)
380V/50 or 60Hz/3ph*	L1, L2, L3, and ground	33**	45A – 3 pole	8 (10)
400-415V/50Hz/3ph*	L1, L2, L3, and ground	31**	40A – 3 pole	8 (10)
440V/60Hz/3ph	L1, L2, L3, and ground	29**	40A – 3 pole	8 (10)
460-480V/60Hz/3ph	L1, L2, L3, and ground	27**	35A – 3 pole	8 (10)

\* These serial plate voltages are only options available on the T30 electric models. Current (Amp) is for one pocket only.

\*\* Per heater on T30 electric models, each has two heaters.

Table 15

## 24 kW 035 Series Electric Models

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
208V/60Hz/1ph	L1, L2, Neutral, and ground	122	N/A	175A – 2 pole	2/0 (70)
240V/60Hz/1ph	L1, L2, Neutral, and ground	107	N/A	150A – 2 pole	1/0 (50)
200V/60Hz/1ph	L1, Neutral, and ground	122	N/A	175A – 1 pole	2/0 (70)
200V/50Hz/1ph	L1, Neutral, and ground	119	N/A	150A – 1 pole	1/0 (50)
230-240V/50Hz/1ph	L1, Neutral, and ground	108	N/A	150A – 1 pole	1/0 (50)
200-208V/60Hz/3ph	L1, L2, L3, and ground	71	71	90A* – 3 pole	3 (26.7)
200V/50Hz/3ph	L1, L2, L3, and ground	65	65	90A* – 3 pole	3 (26.7)
230-240V/50Hz/3ph	L1, L2, L3, and ground	62	N/A	80A* – 3 pole	4 (25)
240V/60Hz/3ph	L1, L2, L3, and ground	62	62	80A* – 3 pole	4 (25)
380V/50 or 60Hz/3ph	L1, L2, L3, and ground	38	38	50A* – 3 pole	6 (16)
400-415V/50Hz/3ph	L1, L2, L3, and ground	35	35	45A* – 3 pole	8 (10)
440V/60Hz/3ph	L1, L2, L3, and ground	33	N/A	45A* – 3 pole	8 (10)
460-480V/60Hz/3ph	L1, L2, L3, and ground	31	31	40A* – 3 pole	8 (10)

\* 3 Phase machines should not have fuses, breakers only.  
N/A = Not Applicable

Table 16

## 27 kW 055 Series Electric Models

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm <sup>2</sup> )
208V/60Hz/1ph	L1, L2, Neutral, and ground	129	N/A	175A – 2 pole	2/0 (70)
240V/60Hz/1ph	L1, L2, Neutral, and ground	115	N/A	150A – 2 pole	1/0 (50)
200V/60Hz/1ph	L1, Neutral, and ground	122	N/A	175A – 1 pole	2/0 (70)
200V/50Hz/1ph	L1, Neutral, and ground	131	N/A	175A – 1 pole	2/0 (70)
230-240V/50Hz/1ph	L1, Neutral, and ground	119	N/A	150A – 1 pole	1/0 (50)
200-208V/60Hz/3ph	L1, L2, L3, and ground	79	79	100A* – 3 pole	3 (26.7)
240V/60Hz/3ph	L1, L2, L3, and ground	65	65	80A* – 3 pole	4 (25)
380V/50Hz/3ph	L1, L2, L3, and ground	43	43	60A* – 3 pole	8 (10)
400-415V/50Hz/3ph	L1, L2, L3, and ground	38	38	50A* – 3 pole	8 (10)

\* 3 Phase machines should not have fuses, breakers only.  
N/A = Not Applicable

Table 17

# Steam Requirements

**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 for use with 50 Hertz tumble dryers 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 27* for proper steam pipe configurations.
- To prevent condensate draining from headers to tumble dryer, piping should have a minimum 12 inch (305 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 (457 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.**

## 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.



### WARNING

**All system components must have a 8,6 bar (125 psig) 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 tumbler steam coil connections.**

W804

## 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 27* 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 (457 mm) 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.

Steam Requirements

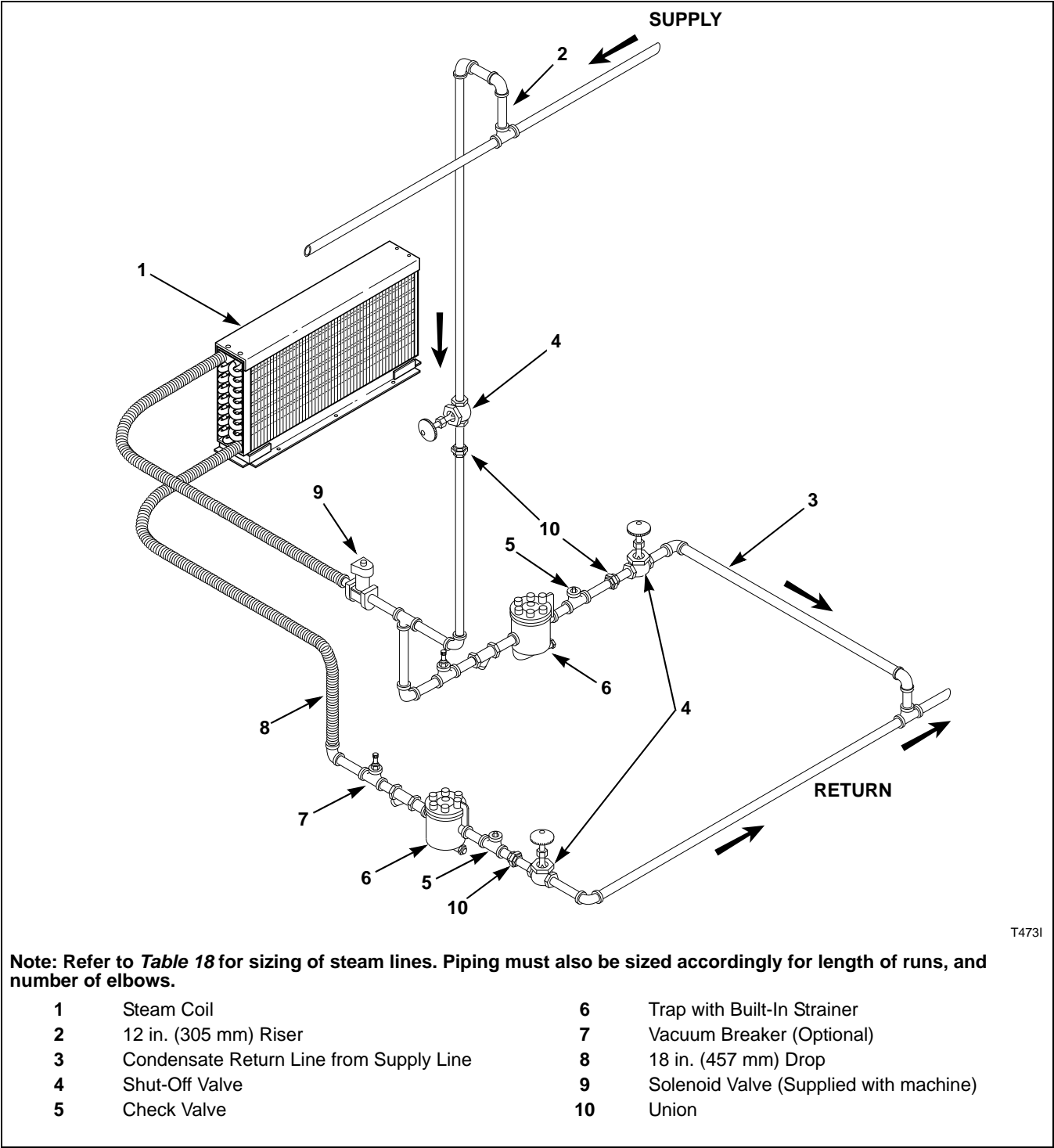


Figure 27

Model	Steam Pressure PSI (bar)	Minimum Supply Pipe Diameter	Steam Trap Size * Pounds Condensate/Hour (Kilograms Condensate/Hour)
025/030 Series	80-100 (5.3-6.9)	3/4 in. NPT	134 (60.8)
035 Series	80-100 (5.3-6.9)	3/4 in. NPT	166 (75.3)
T30 Series	80-100 (5.3-6.9)	3/4 in. NPT	110 (49.9)

\* Based on 100 psi.

Table 18



# Single Drop Timer

**NOTE: The following information is for models with an SD control suffix only.**

## Power-Up Mode

When power is applied to the tumble dryer, the *IN USE* light flashes factory status information. Following this, the control goes into READY Mode (light off) or RUN Mode if power was interrupted during a cycle (light on, time remaining unchanged).

## Ready Mode

In READY Mode (light off), the control waits for the vend to be satisfied. When vend is satisfied the control goes into START Mode.

## Start Mode

In START Mode (light on), the vend has been satisfied but the start button has not been pressed. Time remaining in the cycle will not change until the start button is pressed. When the start button is pressed the machine goes into RUN Mode.

## Run Mode

In RUN Mode (light on), the machine is running a cycle and the time remaining is counting down. When time remaining counts down to zero, the control goes into READY Mode.

## Setting Dry Time Dipswitches

To change the dry time on the tumble dryer, combinations of dipswitches can be set on the control.

There are eight dipswitches on the tumble dryer control. The first six switches are used to program the amount of additional heat time given for each coin pulse. The additional drying time is added to the factory default minimum heat time of one minute. A value of 1 to 64 minutes of additional drying time is available for each coin drop pulse.

## Models Through Serial No. 0908xxxxx

The last two switches are used to program the amount of additional cool down time. The additional cool down time is added to the factory default minimum cool down time of 1 minute. A value of 1 to 3 additional minutes is available. The control is shipped from the factory programmed with 1 minute of minimum heat time, preset with 7 additional minutes of drying time (dipswitches 1, 2 and 3 in ON position) and 1 minute of minimum cool down time for a total time of 9 minutes for a coin pulse. For dipswitch

settings refer to *Table 19*.

## Models Starting Serial No. 0909xxxxx

The seventh switch is used to program the amount of additional cool down time. The additional cool down time is added to the factory default minimum cool down time of 1 minute. A value of 3 additional minutes is available. The control is shipped from the factory programmed with 1 minute of minimum heat time, preset with 7 additional minutes of drying time (dipswitches 1, 2 and 3 in ON position) and 1 minute of minimum cool down time for a total time of 9 minutes for a coin pulse. For dipswitch settings refer to *Table 19*.

The eight switch is used for the cycle reset. If the switch is OFF (default), the control will save the time left on a cycle in case of a power failure. If the switch is ON, the control will clear the cycle and go back to Ready Mode if there is a power failure.

The control reads the dipswitch settings at power-up. The control must be powered down to change the dipswitch settings.

To change the time for a coin pulse, the desired dry time dipswitches must be set to ON position. All other dipswitches must be in OFF position.

**NOTE: The control must be powered down for 10 seconds before the dipswitches can be changed.**

## Resetting Cycle Time to Zero

(Models Starting Serial No. 0909xxxxx)

To remove any cycle time that may have accumulated on the control during setup, the cycle time on the control can be reset to zero.

To reset the time, unplug the tumble dryer and set dipswitch 8 to ON position. Restore power to the tumble dryer for 10 seconds and once again unplug tumble dryer. Set dipswitch 8 to OFF position and restore power to the tumble dryer.

# Single Drop Timer

## Dipswitch Settings

Heat Time Per Coin Pulse (in minutes)	Heat Switch Number					
	1	2	3	4	5	6
1	OFF	OFF	OFF	OFF	OFF	OFF
2	ON	OFF	OFF	OFF	OFF	OFF
3	OFF	ON	OFF	OFF	OFF	OFF
4	ON	ON	OFF	OFF	OFF	OFF
5	OFF	OFF	ON	OFF	OFF	OFF
6	ON	OFF	ON	OFF	OFF	OFF
7	OFF	ON	ON	OFF	OFF	OFF
8 (factory default)	ON	ON	ON	OFF	OFF	OFF
9	OFF	OFF	OFF	ON	OFF	OFF
10	ON	OFF	OFF	ON	OFF	OFF
11	OFF	ON	OFF	ON	OFF	OFF
12	ON	ON	OFF	ON	OFF	OFF
13	OFF	OFF	ON	ON	OFF	OFF
14	ON	OFF	ON	ON	OFF	OFF
15	OFF	ON	ON	ON	OFF	OFF
16	ON	ON	ON	ON	OFF	OFF
17	OFF	OFF	OFF	OFF	ON	OFF
18	ON	OFF	OFF	OFF	ON	OFF
19	OFF	ON	OFF	OFF	ON	OFF
20	ON	ON	OFF	OFF	ON	OFF
21	OFF	OFF	ON	OFF	ON	OFF
22	ON	OFF	ON	OFF	ON	OFF
23	OFF	ON	ON	OFF	ON	OFF
24	ON	ON	ON	OFF	ON	OFF
25	OFF	OFF	OFF	ON	ON	OFF
26	ON	OFF	OFF	ON	ON	OFF
27	OFF	ON	OFF	ON	ON	OFF
28	ON	ON	OFF	ON	ON	OFF
29	OFF	OFF	ON	ON	ON	OFF
30	ON	OFF	ON	ON	ON	OFF
31	OFF	ON	ON	ON	ON	OFF
32	ON	ON	ON	ON	ON	OFF
33	OFF	OFF	OFF	OFF	OFF	ON
34	ON	OFF	OFF	OFF	OFF	ON
35	OFF	ON	OFF	OFF	OFF	ON
36	ON	ON	OFF	OFF	OFF	ON
37	OFF	OFF	ON	OFF	OFF	ON

Table 20 (continued)

Table 20 (continued)

Heat Time Per Coin Pulse (in minutes)	Heat Switch Number					
	1	2	3	4	5	6
38	ON	OFF	ON	OFF	OFF	ON
39	OFF	ON	ON	OFF	OFF	ON
40	ON	ON	ON	OFF	OFF	ON
41	OFF	OFF	OFF	ON	OFF	ON
42	ON	OFF	OFF	ON	OFF	ON
43	OFF	ON	OFF	ON	OFF	ON
44	ON	ON	OFF	ON	OFF	ON
45	OFF	OFF	ON	ON	OFF	ON
46	ON	OFF	ON	ON	OFF	ON
47	OFF	ON	ON	ON	OFF	ON
48	ON	ON	ON	ON	OFF	ON
49	OFF	OFF	OFF	OFF	ON	ON
50	ON	OFF	OFF	OFF	ON	ON
51	OFF	ON	OFF	OFF	ON	ON
52	ON	ON	OFF	OFF	ON	ON
53	OFF	OFF	ON	OFF	ON	ON
54	ON	OFF	ON	OFF	ON	ON
55	OFF	ON	ON	OFF	ON	ON
56	ON	ON	ON	OFF	ON	ON
57	OFF	OFF	OFF	ON	ON	ON
58	ON	OFF	OFF	ON	ON	ON
59	OFF	ON	OFF	ON	ON	ON
60	ON	ON	OFF	ON	ON	ON
61	OFF	OFF	ON	ON	ON	ON
62	ON	OFF	ON	ON	ON	ON
63	OFF	ON	ON	ON	ON	ON
64	ON	ON	ON	ON	ON	ON

## Models Through Serial No. 0908xxxxx

Cool Down Per Cycle (in minutes)	Cool Down Switch Number	
	7	8
1 (factory default)	OFF	OFF
2	ON	OFF
3	OFF	ON
4	ON	ON

## Models Starting Serial No. 0909xxxxx

Cool Down Per Cycle (in minutes)	Cool Down Switch Number	Cycle Reset Switch Number
	7	
1 (factory default)	OFF	OFF
3	ON	ON

Total Cycle Time = Heat Time + Cool Down Time

Table 19

# Operating Instructions



## WARNING

To reduce the risk of fire:

- DO NOT DRY articles containing foam rubber or similarly textured rubberlike materials.
- DO NOT DRY plastics, anything containing wax or chemicals such as mops and cleaning cloths, or anything dry-cleaned at home with a dry-cleaning solvent.
- 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.

W076

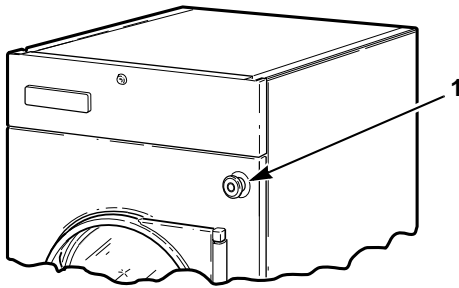
To reduce the risk of serious injury, allow cylinder to stop before cleaning lint screen.

W412

## Emergency Stop Button on CE Models

All CE approved tumble dryers are factory equipped with an emergency stop button located on the front panel. Refer to *Figure 28* and *Figure 29*.

### 025, 030, 035 AND 055 SERIES

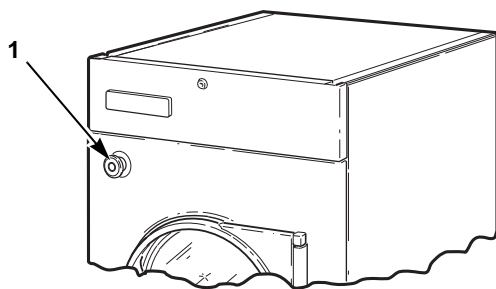


TMB1664N

1 Emergency Stop Button

Figure 28

### T30 AND T45 SERIES



TMB2264N

1 Emergency Stop Button

Figure 29

To operate emergency stop button:

- a. Press red emergency stop button to stop all action.
- b. To restart machine, pull red emergency stop button out and press START pad or button.

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



## WARNING

To reduce the risk of fire, electric shock, or injury to persons, read the **IMPORTANT SAFETY INSTRUCTIONS** before operating this appliance.

W727


**IMPORTANT:** This appliance shall not be used to dry off solvents or dry cleaning fluids.

## Operating Instructions

### Step 1: Clean Lint Screen/Compartment

Remove any accumulated lint from the lint screen and compartment. Close panel tightly against tumble dryer frame and lock panel securely, if applicable.

**IMPORTANT: Clean lint screen and lint compartment daily. Failure to clean the lint screen daily will result in higher than normal temperatures that may damage laundry.**

	<b>WARNING</b>
<p><b>To reduce the risk of fire and risk of lint collecting in exhaust duct, do not operate tumbler without lint filter in place.</b></p> <p style="text-align: right;">W772</p>	

### Step 2: Load Laundry

Open loading door and load cylinder with laundry.

Maximum drying load is:

Model	pound	kg
025	25	11.3
030	30	13.6
T30 (per cylinder)	30	13.6
035	35	15.9
T45 (per cylinder)	45	20.5
055	55	24.9

**DO NOT OVERLOAD.**

**NOTE: Overloading causes slow drying and wrinkling.**

Close loading door. Tumble dryer will not operate with the door open.

### Step 3: Determine Control Type and Temperature Setting

Refer to the various control pages and follow instructions for the appropriate control type.

The type of fabric being dried will determine the temperature setting. Consult the fabric care label or fabric manufacturer to determine proper temperature setting.

**IMPORTANT: Always follow the fabric care instructions supplied by the garment manufacturer.**

### Step 4: Remove Laundry

When the cycle is complete, open door and remove the laundry.

## Operating Instructions

### Control Instructions

#### Dual Digital Timer Control

##### QT and RQ Control Suffixes

1. Select HIGH, MED, LOW or NO HEAT by turning the temperature knob.

HIGH Temperature 190°F (88°C)

MED Temperature 170°F (77°C)

LOW Temperature 120°F (49°C)

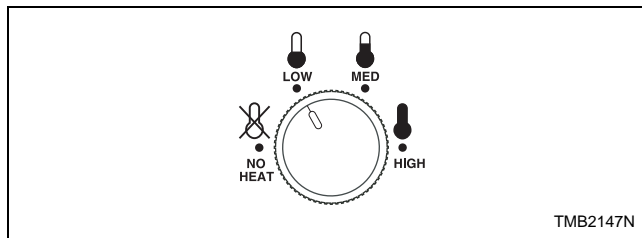


Figure 30

2. Set the HEAT TIME for the number of minutes (from 0 - 60) desired.

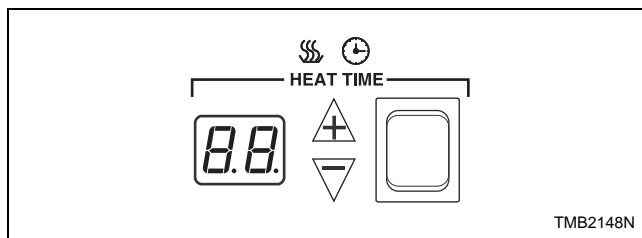


Figure 31

3. Set the COOL DOWN TIME for the number of minutes (from 0 - 15) desired.

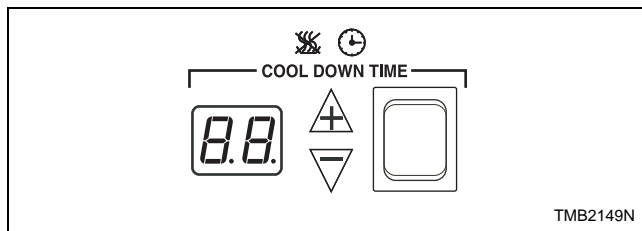


Figure 32

4. Select reversing or nonreversing cylinder rotation setting, if applicable.

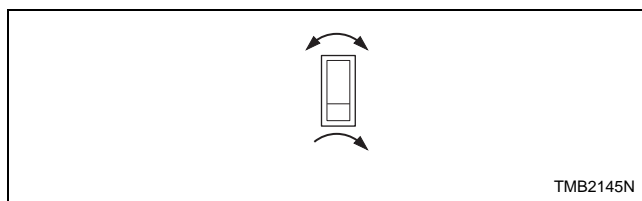


Figure 33

5. Press and release START button to start tumble dryer. Display will show minutes remaining before end of cycle.

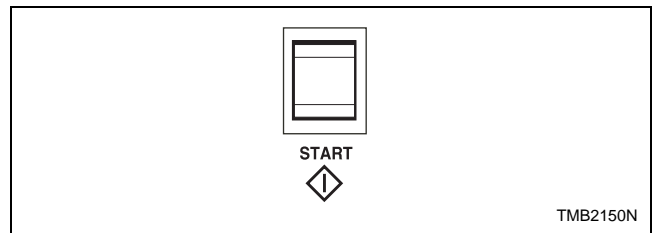


Figure 34


**NOTE:** One touch drying is available for repetitive loads. If the START button is pressed while the machine is in Idle Mode, when the display is dark, the tumble dryer will repeat the last drying cycle. If the cycle time is adjusted before the cycle is started, the time displayed when the START button was pressed will be used for future cycles.

**IMPORTANT:** To stop the tumble dryer at any time during the cycle, OPEN DOOR. If the loading door or lint panel door is opened during the cycle, the heating system will shut off and the motor will stop. To restart the cycle, both doors must be closed and the START button must be pressed in.

If the load cools to 90°F (32°C) before cool down time expires, the control will flash "Lr" (load ready) in the heat time display. If the door is not opened, the tumble dryer completes the selected cool down time. If the door is opened after reaching "Lr" temperature, the cycle will be terminated.

**NOTE:** If display shows an error code, refer to **Error Codes** section.

6. When the cycle is complete, open door and remove the laundry.

	<b>WARNING</b>
<b>To prevent the risk of fire, remove laundry immediately in case of power failure.</b>	
W779	

**NOTE:** This machine includes an anti-wrinkle/extended tumble feature. After the drying cycle is complete, the cylinder will tumble without heat every few minutes. The intermittent tumbling will continue for one hour or until the door is opened. Anti-wrinkle feature will tumble the load without heat for 30 seconds every 2 minutes for 1 hour OR until the loading door is opened.

## Error Codes

Display	Definition	Corrective Action
<b>OP</b>	Open thermistor error	<ul style="list-style-type: none"> <li>• Check thermistor. Replace if inoperative.</li> <li>• Check wiring diagram between control and thermistor. Refer to wiring diagram for proper wiring.</li> <li>• Check control. Replace if inoperative.</li> </ul>
<b>SH</b>	Shorted thermistor error	<ul style="list-style-type: none"> <li>• Check thermistor. Replace if inoperative.</li> <li>• Check wiring between control and thermistor. Refer to wiring diagram for proper wiring.</li> <li>• Check control. Replace if inoperative.</li> </ul>
<b>AF - 1</b>	Airflow switch closed when cycle started	<ul style="list-style-type: none"> <li>• Check airflow switch. Replace if inoperative.</li> </ul>
<b>AF - 2</b>	Airflow switch failed to close after cycle started	<ul style="list-style-type: none"> <li>• Check airflow switch. Replace if inoperative.</li> </ul>
<b>AF (Flashing)</b>	Bouncing Airflow Switch	<ul style="list-style-type: none"> <li>• Check airflow switch to ensure that it is properly aligned and securely mounted in the mounting bracket.</li> <li>• Make sure airflow switch can open and close freely.</li> <li>• Check installation and make sure there is adequate airflow.</li> <li>• Make sure exhaust is not blocked.</li> <li>• Clean the lint screen.</li> <li>• Replace airflow switch if inoperative.</li> </ul>
<b>AF (Solid)</b>	Airflow Switch Closed when Resuming Cycle	<ul style="list-style-type: none"> <li>• Allow up to 20 seconds for this condition to clear.</li> <li>• Check if airflow switch opens at end of cycle.</li> <li>• Replace airflow switch if inoperative.</li> </ul>

## Operating Instructions

### Electronic OPL Micro Control

#### OM Control Suffix

1. To use an Automatic Cycle, press an ON/ SELECT pad. Select HIGH, MEDIUM, MED LOW, LOW or NO HEAT for items that should not be dried with heat. A light to the left of the selected pad lights up.

HIGH temperature\* 185°F (85°C)

HIGH temperature\*\* 190°F (88°C)

MED temperature\* 160°F (71°C)

MED temperature\*\* 165°F (74°C)

MED LOW temperature\* 145°F (63°C)

MED LOW temperature\*\* 155°F (68°C)

LOW temperature (025-055) 120°F (49°C)

\* = (025, 030)

\*\* = (035, 055)

To use a Time Dry or Custom Cycle, refer to the *Programming Manual*.

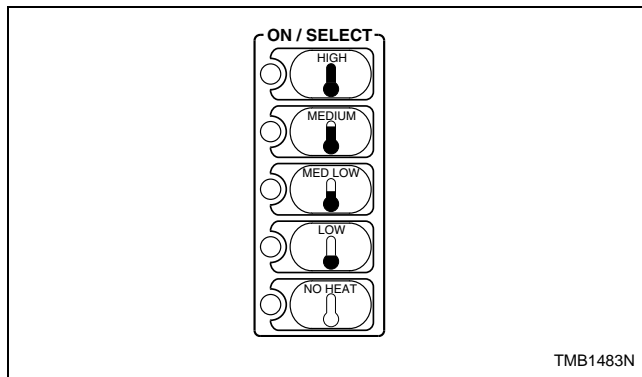


Figure 35

**NOTE:** Do not press directly on lights or the center of pad. For proper selection, press on pad slightly to the right of center. Refer to *Figure 36*.

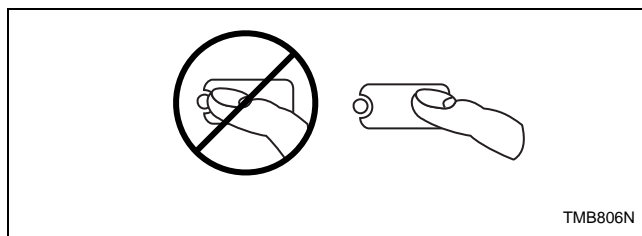


Figure 36

2. Press START pad to start tumble dryer.

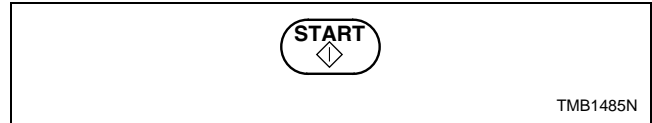


Figure 37

**NOTE:** All pads can be pressed in any sequence without damaging control or tumble dryer. To stop the tumble dryer at any time, open the door or press STOP/RESET.

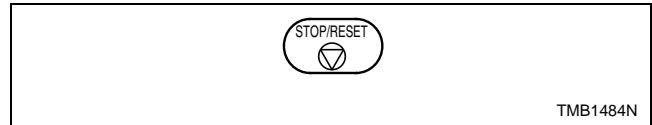
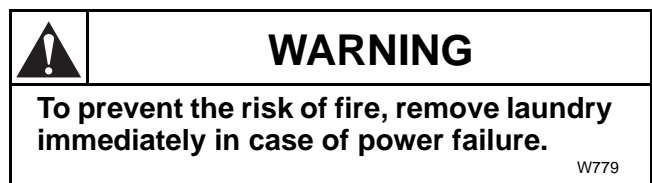


Figure 38

**NOTE:** The window display will flash. Press STOP/RESET twice (within three seconds) to end the cycle and reset the control to idle status. To restart the tumble dryer, CLOSE door and press START pad.

**IMPORTANT:** If the loading door or lint panel door is opened during the cycle, the heating system will shut off and the motor will stop. To restart the cycle, both doors must be closed and START pad must be pressed.

3. When the cycle is complete, open door and remove the laundry.



**NOTE:** This machine includes an anti-wrinkle/extended tumble feature. After the drying cycle is complete, the cylinder will tumble without heat every few minutes. The intermittent tumbling will continue for one hour or until the door is opened.



## Single Drop Control

### SD and SX Control Suffixes

1. Select HIGH, MED, LOW or NO HEAT by turning the temperature knob.

HIGH Temperature 190°F (88°C)

MED Temperature 160°F (71°C)

LOW Temperature 130°F (54°C)

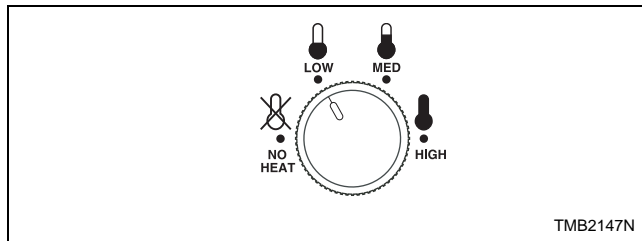


Figure 39

2. Insert the coin(s) in the coin slot.

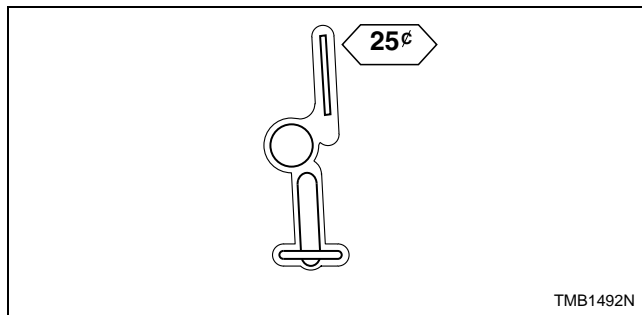


Figure 40

3. Press START button to start tumble dryer.

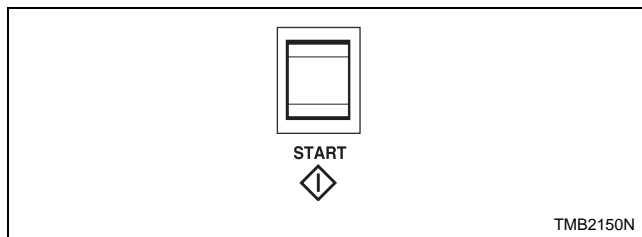


Figure 41

**IMPORTANT:** To stop the tumble dryer at any time during the cycle, **OPEN DOOR**. To restart the tumble dryer, **CLOSE** door and press **START** button.

**NOTE:** If display shows an error code, refer to **Error Codes** section.

4. When the cycle is complete, open door and remove the laundry.



## WARNING

**To prevent the risk of fire, remove laundry immediately in case of power failure.**

W779

**NOTE:** This machine includes an extended tumble feature. Starting 20 minutes after a cycle ends, the cylinder will tumble for two minutes every hour without heat, up to 18 hours or until door is opened.

### Power-Up Mode

When power is applied to the tumble dryer the control will enter Ready Mode, unless a cycle was in process prior to a disruption of power. If a power disruption is less than 5 seconds, with a cycle in process, the control will enter Run Mode once power is restored and continue the cycle. If a power disruption is more than 5 seconds, with a cycle in process, the control will enter START Mode once power is restored.

If the dry time dipswitch settings have not changed from the factory default, the *IN USE* LED will flash two to five times, depending on model.

### Ready Mode

In Ready Mode, the control waits for the vend to be satisfied before entering START Mode.

### Start Mode

In Start Mode, the vend has been satisfied, but the Start button has not been pressed. The *IN USE* LED will be lit. The timer will not count down until the START button is pressed.

### Run Mode

In Run Mode, the control is running a cycle. The *IN USE* LED is lit.

### Door Open Mode

In Door Open Mode, the control turns off the heater and motor when the door is opened during a run cycle. The timer will continue to count down time and the *IN USE* LED is lit.

### End of Cycle Mode

In End of Cycle Mode, a cycle is complete and the *IN USE* LED is off. The control remains in this mode until the door is opened or additional vend has been satisfied.

Operating Instructions

Topoffs

Any time the control receives a coin drop pulse during a cycle it will add the programmed dry time to the time currently remaining in the cycle. The maximum cycle time is 99 minutes, the control will not add time beyond 99 minutes. The cool down time will not change.

If the control receives a coin drop pulse during cool down the *IN USE* LED will flash briefly to indicate the coin input, the machine will exit cool down and it will start heating. The cycle time will be equal to the programmed dry time.

Temperature Selector Switch

For five minutes after the control is powered up, there is a diagnostic feature that allows the temperature selector switches to be tested.

When the temperature selector is changed, the new setting is displayed by flashing the *IN USE* LED as follows:

- High/Normal: 4 flashes
- Medium/PP: 3 flashes
- Low/Delicate: 2 flashes
- No Heat: 1 flash

**NOTE:** To change dipswitch settings refer to *Single Drop Timer Section*.

To Program a Short Test Cycle:

1. Unplug machine power cord.
2. Write down machine control dip switch settings, then set them all to the off position. Refer to *Figure 42*.
3. Plug machine in and start a cycle.

**NOTE:** With all control dip switches off, the total cycle time will be 2 minutes long (1 minute of heat and 1 minute of cool down).

4. Once all testing is complete, unplug machine and re-set dip switches to their original settings.
5. Plug machine in.

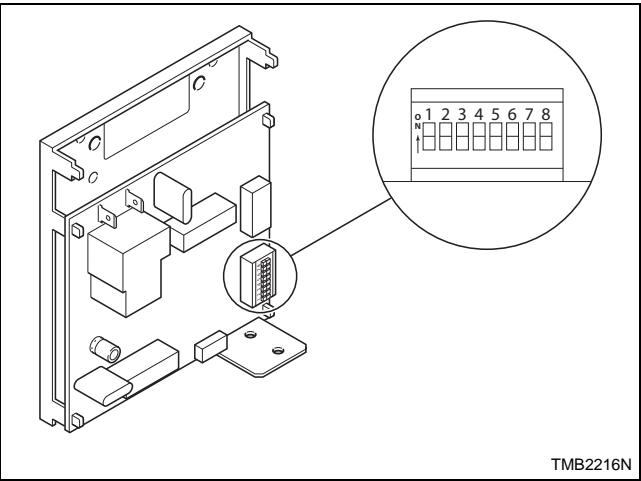


Figure 42

Error Codes

Display	Definition	Corrective Action
AF (flashing)	Airflow switch opened/closed 5 or more times in a running cycle.	<ul style="list-style-type: none"><li>• Check airflow switch. Replace if inoperative.</li></ul>

## MDC Coin and Card Control

### BB, BC, BG, BL, BW, BX, BY and BZ Control Suffixes

1. Select temperature by pressing the appropriate temperature pad.

HIGH Temperature 190°F (88°C)

MED Temperature 180°F (82°C)

LOW Temperature 160°F (72°C)

DELICATES Temperature 130°F (54°C)

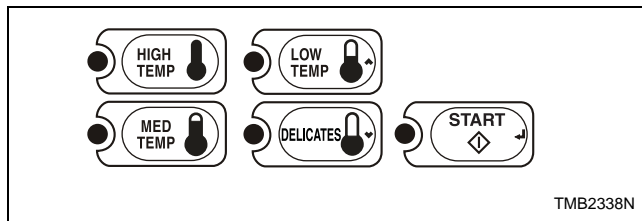


Figure 43

2. Insert the coin(s) in the coin slot, or the card into the opening.

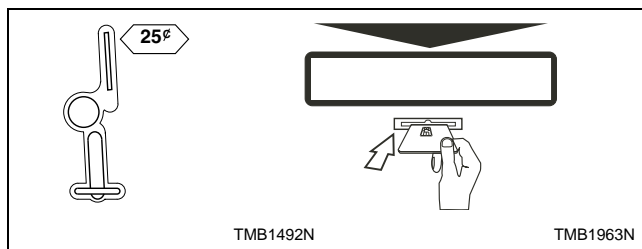


Figure 44

3. Press START pad to start tumble dryer.

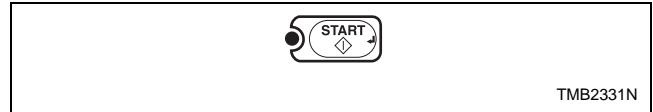
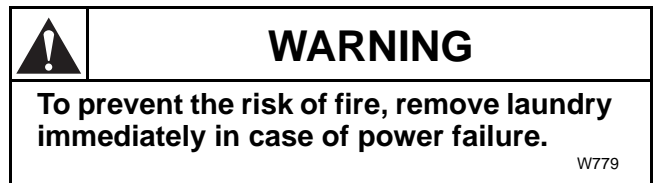


Figure 45

**IMPORTANT: To stop the tumble dryer at any time during the cycle, OPEN DOOR. To restart the tumble dryer, CLOSE door and press START pad.**

4. When the cycle is complete, open door and remove the laundry.



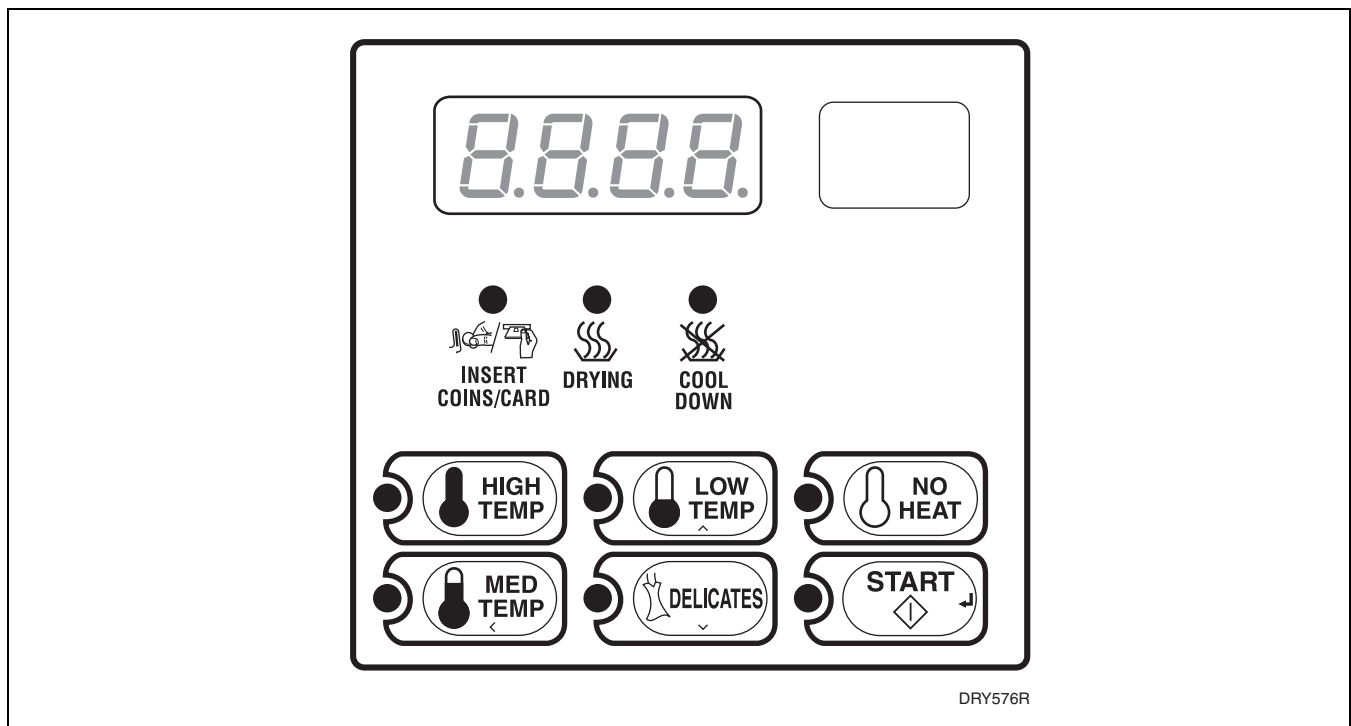


Figure 46

## Quantum Control

*LB, LC, LW, LX, LY, LZ, WB, WC, WW, WX, WY and WZ Control Suffixes*

1. Select HIGH, MED, LOW, NO HEAT or DELICATES by pressing the appropriate temperature pad.

HIGH Temperature 190°F (88°C)

MED Temperature 180°F (82°C)

LOW Temperature 160°F (72°C)

DELICATES Temperature 130°F (54°C)

2. Insert the coin(s) in the coin slot or card into the card opening.
3. Press START pad to start tumble dryer.

**IMPORTANT:** To stop the tumble dryer at any time during a cycle, **OPEN DOOR**. To restart the tumble dryer, **CLOSE door** and press **START** pad.

4. When the cycle is complete, open door and remove the laundry.

	<b>WARNING</b>
<b>To prevent the risk of fire, remove laundry immediately in case of power failure.</b>	
<small>W779</small>	

**NOTE:** This machine includes an extended tumble feature. Starting 20 minutes after a cycle ends, the cylinder will tumble for two minutes every hour without heat, up to 18 hours or until door is opened.

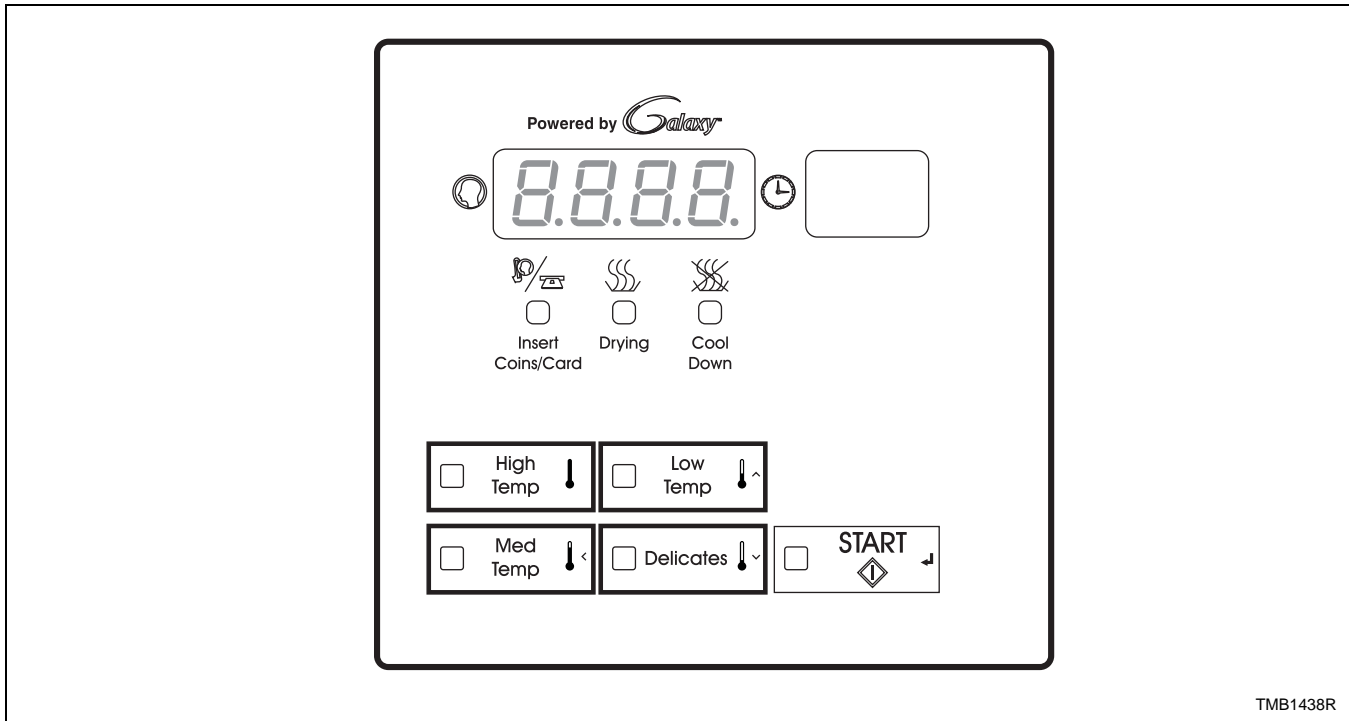


Figure 47


## Galaxy 600 Control

### *KB, KC, KW, KX, KY and KZ Control Suffixes*

1. Select HIGH, MED, LOW or DELICATES by pressing the appropriate temperature pad.  
HIGH Temperature 190°F (88°C)  
MED Temperature 180°F (82°C)  
LOW Temperature 160°F (72°C)  
DELICATES Temperature 130°F (54°C)
2. Insert the coin(s) in the coin slot or card into the card opening.
3. Press START pad to start tumble dryer.

**IMPORTANT:** To stop the tumble dryer at any time during a cycle, **OPEN DOOR**. To restart the tumble dryer, **CLOSE door** and press **START pad**.

4. When the cycle is complete, open door and remove the laundry.

	<h2 style="margin: 0;">WARNING</h2> <p style="margin: 0;"><b>To prevent the risk of fire, remove laundry immediately in case of power failure.</b></p> <p style="text-align: right; font-size: small;">W779</p>
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**NOTE:** This machine includes an extended tumble feature. Starting 20 minutes after a cycle ends, the cylinder will tumble for two minutes every hour without heat, up to 18 hours or until door is opened.

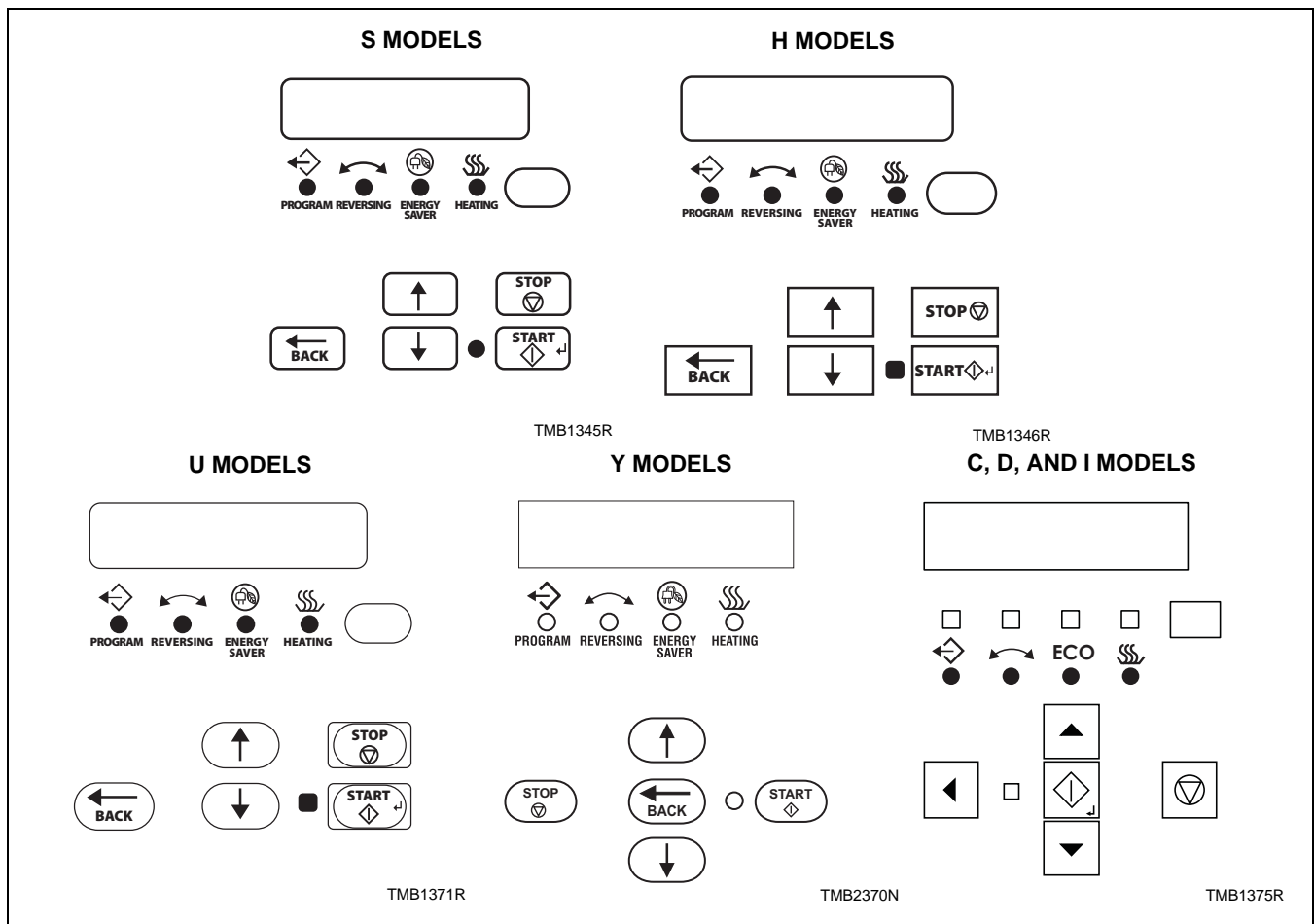


Figure 48

## LED OPL Control

### EO and RE Control Suffixes

1. Press the Up (↑) or Down (↓) keypad to change cycles.

To customize a cycle, refer to the *Programming Manual*.

2. Press START (◇/↵) to Start selected cycle.

**IMPORTANT:** If the loading door or lint panel door is opened during the cycle, the heating system will shut off and the motor will stop. To restart the cycle, both doors must be closed and the START (◇/↵) pad must be pressed.

3. When the cycle is complete, open door and remove laundry.



## WARNING

**To prevent the risk of fire, remove laundry immediately in case of power failure.**

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**NOTE:** This machine includes an anti-wrinkle/extended tumble feature. After the drying cycle is complete, the cylinder will tumble without heat every few minutes. The intermittent tumbling will continue for one hour or until the door is opened. After an hour the machine enters delayed tumble and will tumble for two minutes every hour for up to 18 hours or until the door is opened.

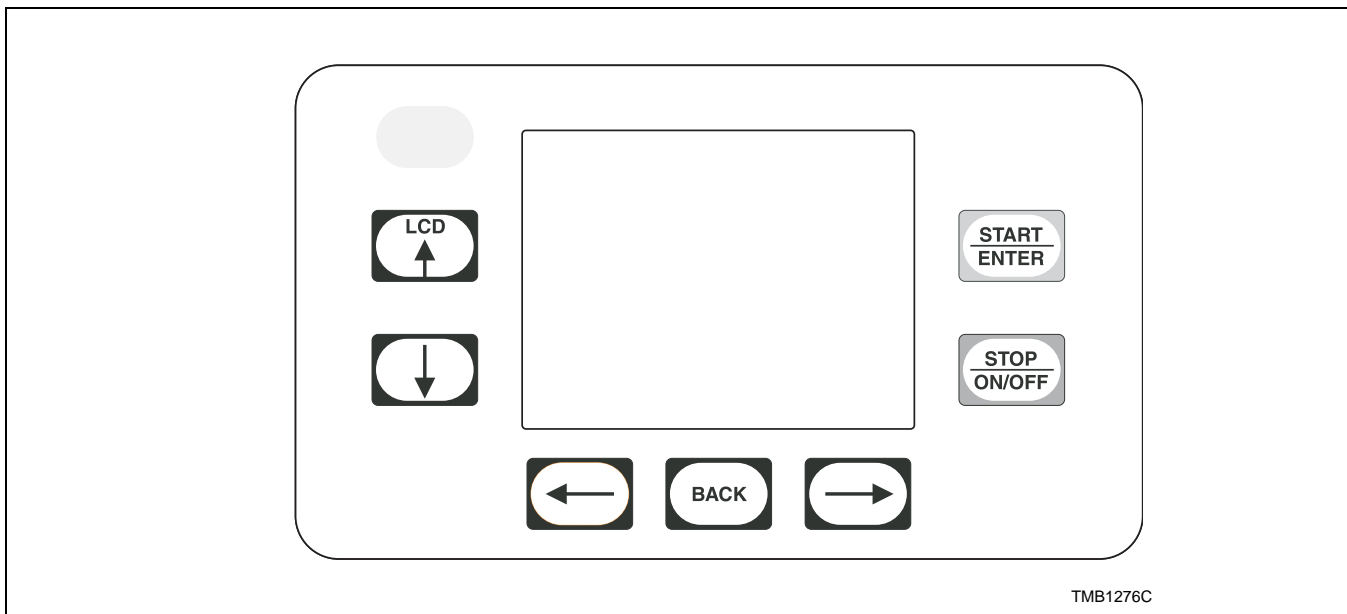


Figure 49


## UniLinc Control

### UO and RU Control Suffixes

1. Press the (←) or (→) keypad to change cycles. The center highlighted position is the selected cycle.

To customize a cycle, refer to the *Programming Manual*.

2. Press START  to Start selected cycle.

**IMPORTANT:** If the loading door or lint panel door is opened during the cycle, the heating system will shut off and the motor will stop. To restart the cycle, both doors must be closed and the START  pad must be pressed.

3. When the cycle is complete, open door and remove laundry.



## WARNING

**To prevent the risk of fire, remove laundry immediately in case of power failure.**

W779

**NOTE:** This machine includes an anti-wrinkle/extended tumble feature. After the drying cycle is complete, the cylinder will tumble without heat every few minutes. The intermittent tumbling will continue for one hour or until the door is opened. After an hour the machine enters delayed tumble and will tumble for two minutes every hour for up to 18 hours or until the door is opened.

## Operating Instructions

### DX4 Coin Control

#### 3B, 3V, 3W and 3X Control Suffixes

1. Open door and fill drum with clothes.
2. Close door.
3. Insert the coin(s) in the coin slot.
4. Press and release one of the cycle buttons to select a cycle and start the tumble dryer. Refer to Table 20.

To use a custom cycle, refer to the **Programming Manual**.

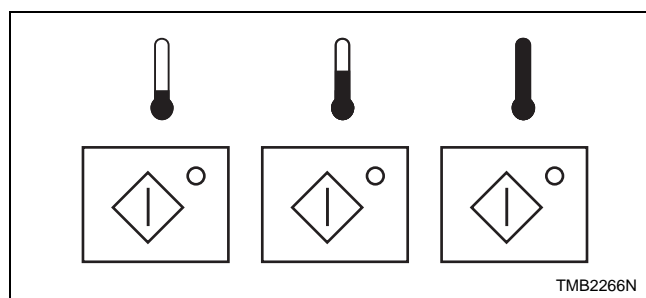


Figure 50

	Temperature	Drying Time	Cool Down Time
Left Button	104°F (40°C)	Varies	2 min.
Middle Button	140°F (60°C)	Varies	2 min.
Right Button	176°F (80°C)	Varies	2 min.

Table 20

**NOTE:** Drying times will be dependent on the number of coins that are inserted in the coin slot.

**IMPORTANT:** To stop the tumble dryer at any time during the cycle, OPEN DOOR. To restart the tumble dryer, CLOSE door and press START button.

5. When the cycle is complete, open door and remove the laundry.

### WARNING

To prevent the risk of fire, remove laundry immediately in case of power failure.

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### DX4 OPL Control

#### 3O and R3 Control Suffixes

1. Open door and fill drum with clothes.
2. Press and release one of the cycle buttons to select a cycle and start the tumble dryer. Refer to Table 21.

To use a custom cycle, refer to the **Programming Manual**.

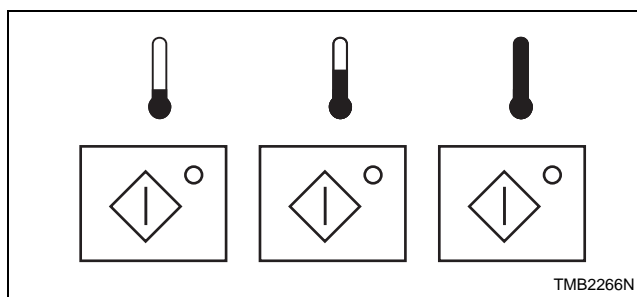


Figure 51

	Temperature	Drying Time	Cool Down Time
Left Button	104°F (40°C)	30 min.	2 min.
Middle Button	140°F (60°C)	30 min.	2 min.
Right Button	176°F (80°C)	35 min.	2 min.

Table 21

**IMPORTANT:** To stop the tumble dryer at any time during the cycle, OPEN DOOR. To restart the tumble dryer, CLOSE door and press START button.

3. When the cycle is complete, open door and remove the laundry.

### WARNING

To prevent the risk of fire, remove laundry immediately in case of power failure.

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## Diagnostic Microprocessor Control

### General Operation

The Diagnostic Microprocessor Control (DMP) is designed to manage the drying and cooling cycles of the tumble dryer. The controller is also programmed from the factory with five different default programs as described below. The operator has the flexibility to select the time for the drying and the cool down cycles and the drying temperature. The operator may also select either reversing or nonreversing basket action only if the tumble dryer is equipped for reversing. The operator may also reprogram the default programs. See Programming.

### Default Programs

Programs	Dry Time (Min.)	Cool Time (Min.)	Temp. Set Point	Reversing
<b>1 – Towels</b>	40	5	185°/195°F (85°/91°C)	No
<b>2 – Sheets</b>	30	5	165°F (74°C)	Yes
<b>3 – Misc-1</b>	30	5	150°F (66°C)	No
<b>4 – Misc-2</b>	25	5	135°F (57°C)	Yes
<b>5 – Extra Dry</b>	5	2	150°F (66°C)	No

**NOTE:** If an altered program is determined to be corrupted, the default program settings will be used.

Table 22

### Features

- Drying time: 0-60 minutes
- Cooling time: 2-60 minutes
- LED display of cycle time, set temperature, and actual temperature
- Thermistor controlled temperature
- Safety tumble cycle
- Buzzer for end of cycle, audible alarm
- Reversing/Nonreversing selection
- Five user programmable programs
- RPM display – when equipped with rotational sensor only
- Monitors the lint door switch operation
- Monitors the thermistor for operation

The minimum drying time is 0 minutes, and the minimum cooling time is 2 minutes. The maximum drying or cooling time is 60 minutes. The drying temperature may be set from 100°F (38°C) to 185°/195°F (85°/91°C). The drying time, cooling time, or temperature may be modified during an operating cycle.

If it is necessary to reset the drying and cooling times for the current cycle, press STOP once to stop the tumble dryer. Press STOP again to cancel the cycle.

If it is necessary to change programs during a current cycle, press STOP once to stop the tumble dryer and press STOP again to cancel the current cycle.

## Operating Instructions

### DMP OPL Models

#### DO Control Suffix

#### Description of the OPL Control Panel

Refer to Figure 52.

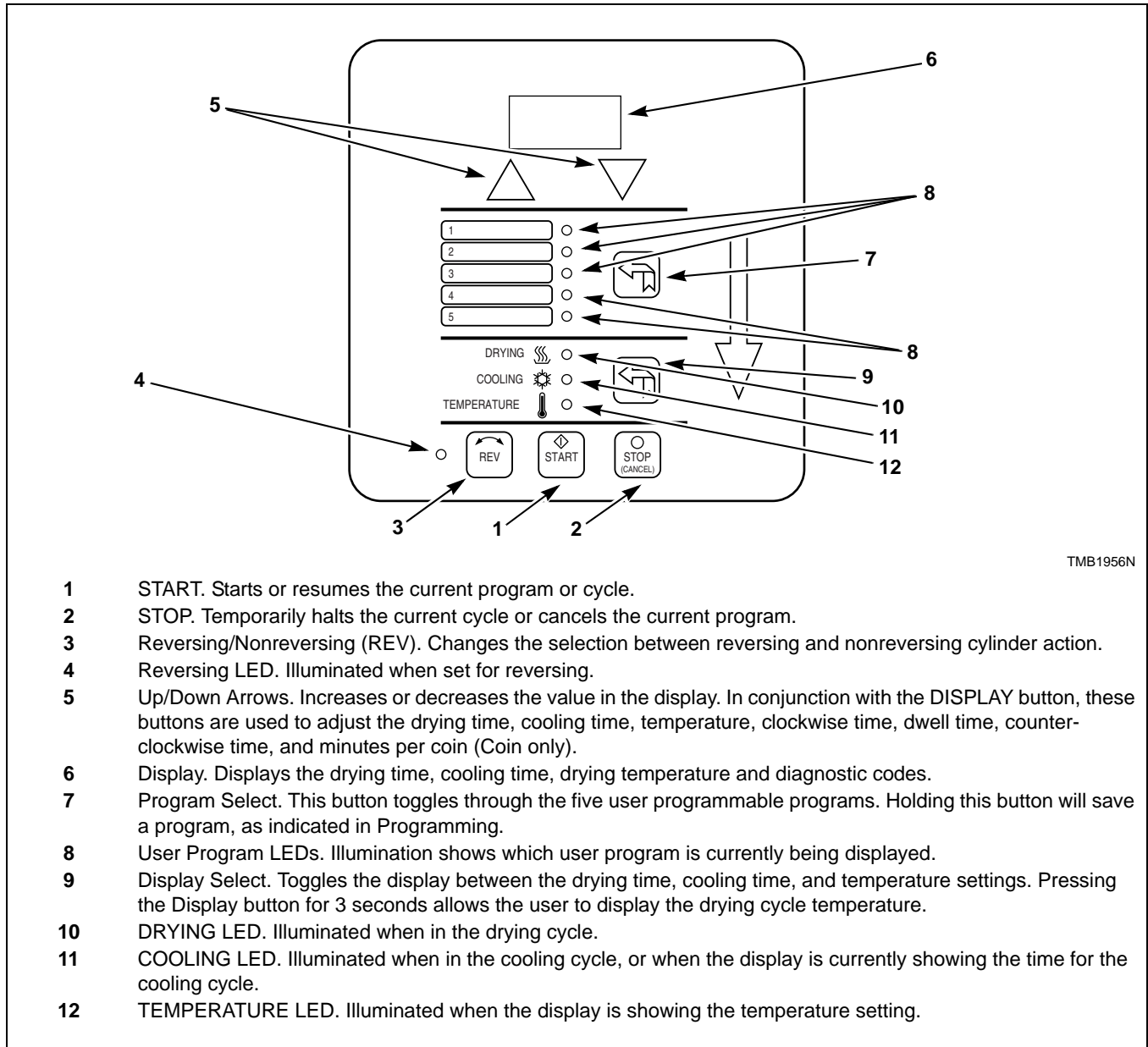


Figure 52

## DMP OPL Features

### DIP Switch Settings

The DMP has an 8 position DIP switch bank that is accessible from the back of the control board. By switching these DIP switches, it is possible for the operator to customize the display and some of the operating features of the tumble dryer.

Function	OPL	Coin				
<b>1</b>	Tumble dryer Type	OFF	ON	OPL=Off; Coin=On		
<b>2</b>	Temperature Units	OFF	OFF	°F=Off; °C=On		
<b>3</b>	Local/Remote Reversing	ON	ON	Local=On; Remote=Off		
<b>4</b>	Empty	ON	ON	Always ON		
<b>5</b>	Empty	ON	ON	Always ON		
<b>6</b>	Buzzer Timer	ON	ON	5 Sec=Off; Continuous=On		
<b>7</b>	Safety Tumble (OPL) or Coin Count/Pay (Coin)	ON	OFF	#1	#7	DIP SWITCH
				OFF	ON	SAFETY TUMBLE
				OFF	OFF	NO SAFETY TUMBLE
				ON	ON	COIN COUNT
				ON	OFF	PAY
<b>8</b>	Programming	OFF	OFF	Disable=Off; Enable=On		

Table 23

### DIP Switch Functions Explained

1. Tumble dryer Type: This DIP switch selects the type of tumble dryer, i.e., OPL or Coin.
2. Temperature Units: Selects °F or °C for the temperature display. Factory setting is for °F.
3. Local/Remote Reversing: Preset at the factory; usually for local reversing. Remote reversing for use with Reversing Timer Board only.
4. Empty: Preset at the factory; always ON.
5. Empty: Preset at the factory; always ON.
6. Buzzer Timer: This DIP switch determines the length of time that the end of cycle buzzer will remain on. "OFF" indicates that the buzzer will sound for 5 seconds when the drying cycle is completed. "ON" indicates that the buzzer will sound continuously until the STOP button is pressed or the loading door is opened.
7. Safety Tumble (OPL) or Coin count/Pay (Coin): If DIP switch #1 is set for OPL, then DIP switch #7 in the ON position enables the safety tumble. If DIP switch #1 is set for Coin, then DIP switch #7 in the ON position enables the display of the coin count. DIP switch #7 in the OFF position enables the display of "PAY", to indicate that coins are needed to run the tumble dryer.
8. Programming: This switch enables or disables the programming feature and should normally be in the OFF position.

## Operating Instructions

### DMP Coin

#### DV and DX Control Suffixes

#### Description of The Coin Control Panel

Refer to *Figure 53*.

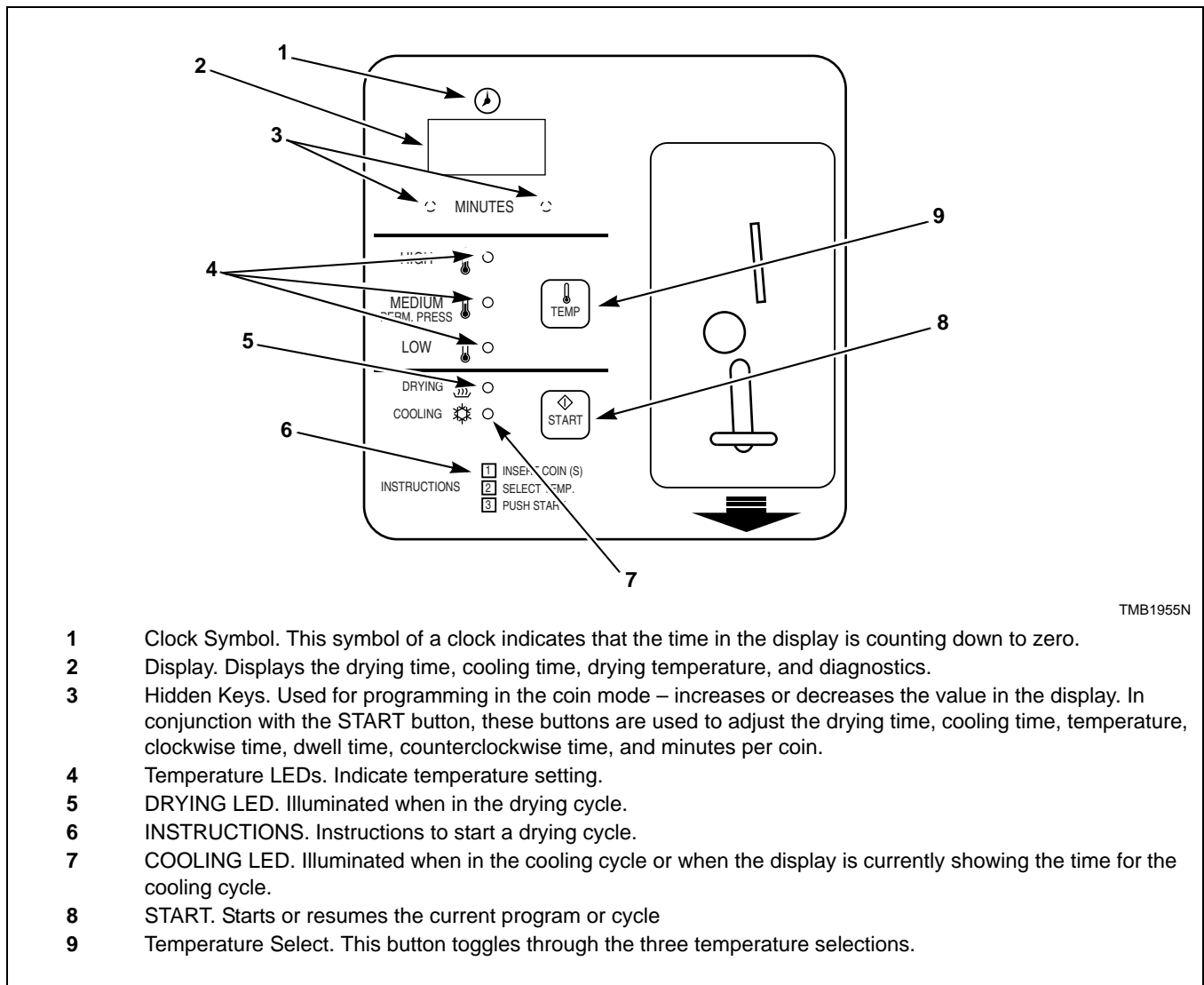


Figure 53

## DMP Coin Features

### Coin Keypad Interface

- START button to start or resume a cycle.
- TEMP button to select HIGH, MEDIUM, or LOW temperature.
- Two hidden buttons to increment or decrement the programmable time and temperature options.

### Power-Up

Upon applying power to the tumble dryer, the display will show "PAy" and the DRYING and COOLING LEDs will be off until coins are deposited to increase the tumble dryer run time. When time is displayed, the default (LOW) temperature setting LED will be on until a different temperature setting is selected.

### Power Failure

If a power loss occurs during operation, a cycle will not resume until the START button is pressed. To cancel the remaining cycle, press the internal CLEAR button.

### Coin Operation

The tumble dryer run time is determined by the pre-programmed run time per coin and the number of coins deposited into the tumble dryer. The maximum time that can be accumulated and displayed is 99 minutes. The drying time is the difference between the run time and the cooling time. The cooling time is pre-programmed to be 2 to 5 minutes. The drying temperature can be selected from LOW, MEDIUM, or HIGH temperature settings by pressing the TEMP button.

### Coin Programming

The Coin board programming mode can only be entered when "PAy" is displayed. DIP switch #7 must be in the OFF position.

Programming is enabled by setting DIP switch #8 to the ON position.

The programming mode is entered by pressing and holding the CLEAR button for three seconds.

The programming follows the following parameter order:

1. Tumble dryer run time per coin (DRYING), COOLING time, HIGH temperature setpoint, MEDIUM temperature setpoint, LOW temperature setpoint.
2. An LED will be on to indicate which parameter is flashing on the display.
3. The hidden front panel increment and decrement keys are used to change the value.
4. The CLEAR button is used to recall the default value.
5. The START button is used to step to the next parameter.
6. After the last parameter, "End" will be flashing.
7. Press the START button one last time to store the settings and exit the program mode.
8. "PAy" will be displayed.
9. If it is determined that the data did not program correctly, the error message "E2F" will flash for 4 seconds, and then the default coin parameters will be used.

The tumble dryer run time per coin is programmable for 1 to 20 minutes with the default preset to 10 minutes.

The cooling run time is programmable from 2 to 5 minutes with the default preset to 2 minutes.

The three temperatures setpoints are programmable for 100°F (38°C) to 185°/195°F (85°/90°C) with the following default settings:

- HIGH equal to 185°F (85°C)
- MEDIUM equal to 150°F (66°C)
- LOW equal to 135°F (57°C)

### Stop

When in the Coin mode, the tumble dryer will stop if the tumble dryer door is opened while the tumble dryer is running. If the CLEAR button, located behind the board, is pressed, the tumble dryer will stop, the tumble dryer time will be zeroed and the display will show "PAy".

### Coin Count

The unit will count the number of coins deposited.

Setting DIP switch #7 to the ON position will display the coin count since it was the last reset.

To reset the count, press the CLEAR button and "00" will be displayed.

If the coin count is greater than "999", the display will flash "999".

Setting DIP switch #7 to the OFF position will return the display to "PAy".

## Operating Instructions

### Programming

1. Set DIP switch #8 to the ON position.
2. Select the desired program number to change. The LED should be flashing.
3. Select DRY TIME. Set the time with the Up/Down arrows.
4. Select COOL TIME. Set the time with the Up/Down arrows.
5. Select TEMPERATURE. Set the temperature with the Up/Down arrows.
6. Select reversing REV (illuminated) or nonreversing REV (not illuminated). To change basket direction and dwell time, see *Reversing Operation*.
7. Press and hold the Program Select button about 3 seconds until the LED stops flashing. The selected program number is now programmed. If the Program button is pressed for less than 3 seconds, the controller will cancel the program and display the next program's settings. If not programmed correctly, the display will flash "E2F" for 4 seconds, and the default settings will be used. Follow steps 4 through 7 to reprogram any program number. When finished, set DIP switch #8 to OFF. The programs are now stored.
8. During the Program Mode, if the Up/Down arrows, REV, or Display button is not pressed within 10 seconds, the default program settings will be used.
9. Temporary Reprogramming of Current Programs (OPL ONLY).
10. The Drying Time, Cooling Time, Temperature, and Reversing Mode of a program currently in use may be modified simply by adjusting any or all of the program parameters for that program, as needed. Once a modification has been made, the current program LED will flash indicating that it has been modified.
11. Use the Up/Down arrows to adjust program time.
12. Use the Display Select button to choose between Drying Time, Cooling Time, and Temperature. Then use the Up/Down arrows to adjust the times and temperature.
13. Toggle between reversing REV (illuminated) or nonreversing REV (not illuminated). (Only for tumble dryers with the reversing option.)
14. To cancel this temporary programming mode push the STOP button once to stop the current cycle and once more to cancel the modified program settings. The program will revert back to its original settings.

### Reversing Operation

1. When the LOCAL reversing operation is selected, the reversing times are stored in the EEPROM which is located on the controller board. If the values stored are determined to be invalid, the clockwise and counterclockwise times will default to 60 seconds, and the dwell time will default to 4 seconds.
2. The reversing time program has the following sequence: (1) clockwise time, (2) dwell time and (3) counterclockwise time.
3. To program new reversing times DIP switches #3 and #8 must be on.
4. Press and hold the reverse button (REV) for 3 seconds to display the clockwise time.
5. Use the Up/Down arrows to set the clockwise time within the range of 30-120 seconds.
6. Press REV to display the dwell time.
7. Use the Up/Down arrows to change the dwell time within the range of 3-10 seconds.
8. Press the REV button to display the counterclockwise time.
9. Use the Up/Down arrows to change the counterclockwise time within the range of 30-120 seconds.
10. Press the REV button to save these settings and leave DIP switch #3 in the ON position and flip DIP switch #8 to the OFF position.

When the DMP controller is retrofitted to an existing tumble dryer with the reversing feature, off board reversing will be required and DIP switch #3 on the DMP must be in the OFF position and the DMP must be connected to the Reversing Timer Board for proper operation. The DMP settings for clockwise, dwell, and counterclockwise times are no longer valid when used with the Reversing Board. Instead these settings are made on the Reversing Timer Board.

### *Rotation Sensor*

The rotation sensor must “read” the key on the basket shaft or pulley. The sensor must be set approximately 1/4 inch from the key or pulley. Look for the light on the sensor to come on as the key passes the sensor; this is a correctly operating sensor. If no light appears, either the sensor is out of range or the key/pulley or the sensor is bad. In addition, if the light stays on continuously, then the sensor is too close to the component or the sensor is bad.

### *Safety Tumble/Anti-Wrinkle*

At the end of the cool down cycle, the tumble dryer will stop and display “END.” The DMP control will automatically rotate the basket for 5 seconds every 2 minutes for a total of 20 minutes, until some function of the tumble dryer is activated/deactivated by the user.

### *Operational Check for the Board Diagnostics*

1. “dor” indicates that the loading or lint door is open.
2. Cycle the tumble dryer to check if the buzzer activates.
3. “P-F” indicates that the thermistor is short circuited or open circuited.
4. “bbt” indicates a broken belt condition or a faulty rotation sensor. (Only available on tumble dryers with the rotation sensor.)
5. Hold the START button to display the drum RPM’s; the display will read “r##” where ## are the RPM’s. (Only available on tumble dryers with the rotation sensor.)

## Ignition Control Operation and Troubleshooting for Models Starting 3/11/13



### WARNING

**70458601 and 70458701 controls cannot be serviced by the user. If any control failures are detected, the controls must be replaced by qualified service personnel. Risk of explosion or fire can result if the control module has been opened or with any attempts to repair it and the warranty is void.**

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Before troubleshooting the system, check the following items:

- Verify all mechanical and electrical connections are secure and tight.
- Verify all system wiring is correct.
- Verify there is a proper system ground. The igniter, flame sensor and igniter module must share a common ground with the burner. *Nuisance shutdowns are often caused by a poor or erratic ground.*
- Verify that the system is powered and that the control is calling for heat.
- If the control proceeds to an error code on the red diagnostic LED, troubleshoot per the Fault conditions table below:

Fault Conditions	
LED Indication	Fault Mode
Off	Normal Operation
1 Flash	At Power Up
2 Flashes	Flame Without Call For Heat
3 Flashes	Ignition Lockout
4 Flashes (70458701 only)	Manual Reset Error
Steady On	Internal Control Failure

**NOTE: The LED will flash on for 1/4 second, then off for 1/4 second during a fault condition. The pause between fault codes is 3 seconds.**

## Internal Control Failure

If the control detects an error in its software or hardware, all outputs are turned off and the red LED displays a steady ON condition. If this condition persists after an attempt to restart, then the control must be replaced.

## Troubleshooting

Troubleshooting Guide	
Symptom	Probable Cause
Control in Lockout Mode (70458701 Control Only)	Manual reset of the control is needed. Reset by pushing red lockout button or use front end control.
Control does not start, green LED is off	1. 24 VAC present between 24V and ground on 70458701 only. If not, see machine schematic. 2. 24 VAC present between TH and ground. If not, see machine schematic.
Thermostat on, no spark or valve	1. Cable connects to control and electrode. Voltage present at gas valve. 2. Bad control. Check red LED for steady on or flashing codes.
Valve on, no spark during TFI	1. Shorted electrode. 2. Spark gap not correct. Set to .094-.156 inch. 3. High voltage cable is faulty or has a poor connection. 4. Control failure.
Spark on, no flame	1. Is gas on? 2. 24 VAC at gas valve. 3. Bad control. Check voltage between gas valve terminal MV and GND on control.
Flame okay during TFI, no flame sense after TFI	1. Check electrode position and cleanliness. 2. Check high voltage wire. 3. Poor ground at burner. 4. Poor flame, check flame current.
Reset failure	1. Reset switch was pressed too long. Try to reset again. 2. Reset switch is shorted. Replace switch.



## Proper Electrode Location

Proper location of the electrode assembly is important for optimal system performance. The electrode assembly should be located so that the tips are inside the flame envelope and about 1/2 inch (1.2 cm) above the base of the flame. Refer to *Figure 54*.

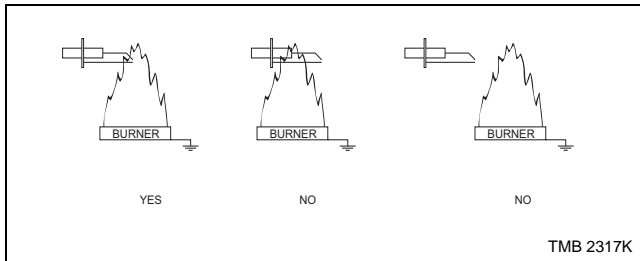


Figure 54

## Flame Current Measurement

Flame current is the current that passes through the flame from sensor to ground. To measure flame current, connect a True RMS or analog DC micro-ammeter to the FC+ and the FC- terminals. The reading should be 1.0 micro-amps DC or higher. If the meter reads negative or below “0” on the scale, the meter leads are reversed. Re-connect leads with proper polarity.

Alternately, a Digital Voltmeter may be used to measure the DC voltage between the FC+ and FC- terminals. Each micro-amp of flame current produces 1.0 VDC, so a reading of 2.6 VDC would equate to 2.6 micro-amps.

A good burner ground that matches the control ground is critical for reliable flame sensing.

## Operating Instructions

# Ignition Control Operation for Non-CE Models Through 3/10/13

### Power Up

When power is applied to the ignition control, the control will begin the ignition sequence within 1 – 3 seconds prepurge waiting time.

### Ignition Sequence

The control begins the ignition sequence after prepurge by powering the igniter and opening the gas valve. The igniter will remain on either until a flame is sensed or until a maximum of ten (10) seconds (10 +0/-4 sec) has elapsed. If a flame is established and lost during the 10 second period, the igniter will be powered up again in an attempt to re-ignite the gas.

If no flame is detected within the ten (10) second ignition sequence, the control will terminate power to the gas valves, ignitor, and enter lockout within 5 seconds.

### Normal Operation

Once a flame has been established, the spark ignitor will stop sparking and the control will continually monitor all inputs. If the controller senses a loss of flame after flame is established, the gas valve will remain energized and sparking will commence within one second of the flame loss. If flame reattempt fails, lockout will occur within 11 seconds of initial flame loss.

### Termination of Flame

Normal flame termination occurs when the thermostat has been satisfied, meaning there is no immediate need for more heat. The thermostat will disconnect power from the ignition control, which will cause the gas valve to close and the flame to go out. After a short period of time, not less than 1 second, the thermostat will cool down and close causing power to be reapplied to the ignition control. When this occurs, the control must complete the same prepurge and ignition sequence specified above.

### Control Lockout

When the control locks out, the gas valve will be closed and all requests for heat will be ignored. The lockout mode may only be discontinued by interrupting power to the control or cycling the thermostat. After this occurs, the control will restart with its normal power up and ignition sequence.

### Low Voltage Detection

The control will have capability for detection of a low voltage input condition. If input voltage on power up is below 19.0VAC +0.8VAC/-0.5VAC, the control will disable output to gas valve control relay. If input voltage rises above 19.8VAC for at least three (3) seconds, the control will then re-enable function of the gas valve control relay and ignition sequence may begin. On powerup, the control function must always be disabled if greater than 19.8VAC.

## Ignition Control Operation for CE Models Through 3/10/13

### Power Up

After 24VAC is applied to the ignition control pins 24V and GND, the Diagnostic LED on the ignition control will turn orange/yellow. If a fault is detected the ignition control will enter Lockout Mode. If no faults are detected, the Diagnostic LED will turn Green and the ignition control will enter Standby Mode.

### Standby Mode

While in Standby Mode, the ignition control will continually monitor the system for faults. Once 24VAC is applied to terminals TH and GND on the control, the ignition control will enter Start Up Mode.

### Start Up Mode

During Start Up Mode, the ignition control will monitor the system for faults and begin the ignition sequence. If no faults are present, the ignition control will begin the ignition sequence by entering an 18 second waiting period. During this time the Green LED on the ignition control will switch between Red and Green, before maintaining a Green color.

After the waiting period, the ignition control will turn on the igniter and gas valve. The igniter will remain on until a flame is sensed, or up to 10 seconds.

Once a flame has been sensed the ignition control will stop sparking, the gas valve will remain on and ignition control will enter Run Mode.

If a flame is not sensed, the ignition control will then begin two additional retrials for ignition. The ignition control will re-enter the 18 seconds waiting period before the ignition control makes another attempt at ignition. If the three attempts at ignition fail, the ignition control will enter Lockout Mode.

### Run Mode

While in Run Mode the ignition control leaves the gas valve on, monitors the flame signal, and leaves the igniter off.

If a flame signal is lost during Run Mode, one additional retrial for ignition will take place within one second. The ignition control will restore the spark for approximately 10 seconds. If the ignition re-attempt fails, the ignition control will enter Lockout Mode.

The ignition control will remain in Run Mode until 24VAC is removed from terminals TH and GND on the control.

### Termination of Flame

The flame will go out when power is removed from ignition control. The ignition control will turn off the gas valve and enter Standby Mode.

### Lockout Mode

When Lockout Mode is entered, the ignition control will remove power to the gas valve, the igniter will turn off, the Lockout/Reset Light will turn on, and the Diagnostic LED will display the appropriate Error Code.

### Lockout Manual Reset

Lockout Mode is cleared by pressing an external reset switch for three seconds. The ignition control will clear all error codes and enter Standby Mode. During Lockout Manual Reset, the Diagnostic LED on the ignition control flashes red and orange, and the Reset Light remains on until the ignition control is reset. After the Reset Light turns off, stop pressing the switch. Holding the reset for three seconds after lockout has been cleared will cause a fault and result in entering Lockout Mode again.

### System Tests

The following system tests are performed during normal operation. System tests are performed at a minimum of every 24 hours.

### Low Voltage Detection

If the voltage between terminals TH and GND on the control is below 18.75VAC +/- 0.75VAC for more than 3 seconds the ignition control will turn off the gas valve and will not attempt to spark. The Diagnostic LED will display Error Code 5. The ignition control will not enter Lockout Mode if a low voltage condition is detected, but will enter Standby Mode and wait for the low voltage condition to be cleared.

If the voltage between terminals TH and GND on the control rises above 19.75VAC +/- 0.1VAC for at least 3 seconds, the ignition control will then enter Start Up Mode.

Low Voltage Detection test is disabled during Run Mode.

### Gas Valve

The ignition control verifies that the gas valve is connected. Failure of this test results in the ignition control entering Lockout Mode with the Diagnostic LED displaying Error Code 2.

Operating Instructions

Flame Probe Tests

Unexpected Presence of Flame

The Unexpected Presence of Flame test is performed when no flame is expected. Failure of this test results in the ignition control entering Lockout Mode with the Diagnostic LED displaying Error Code 3.

Flame Monitoring

During the Flame Monitoring test, the flame is checked to ensure the gas is being burned when the gas valve is on. Failure of this test will result in the ignition control entering Lockout Mode with the Diagnostic LED displaying Error Code 3.

Diagnostic LED (DGN LED)/Error Codes

The Diagnostic LED or DGN LED is located by the power connector on the ignition control. Refer to *Figure 55*. The Diagnostic LED will indicate the status of the ignition control. Refer to *Table 24*.

LED Color	Description
Orange-Yellow	Initialization
Green	Standby/Normal Operation
Red	Fault Indication Code

Table 24

The Diagnostic LED will flash error codes one half second on and one half second off. Error codes are separated by a one second pause before the code is repeated.

Error Code	DGN LED status	Fault Type
1	Red	Ignition Control Internal Failure
2	2 Red Flashes	Gas Valve Not Connected
3	3 Red Flashes	Ignition/Flame Sense Failure
4	4 Red Flashes	Reset Switch is Shorted
5	Slow Red and Green Flashes	Low Voltage Detection
6	Fast Red and Orange Flashes	Ignition Control is in Reset Delay

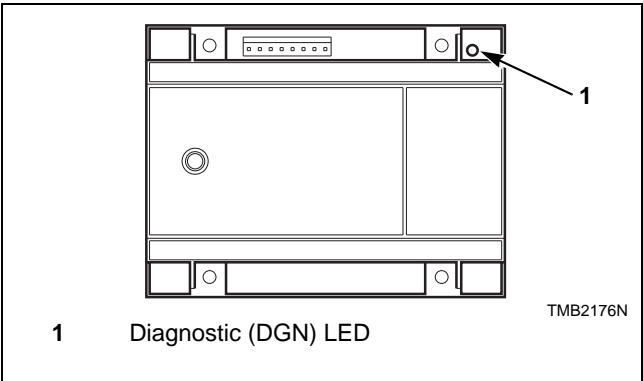



Figure 55

# Adjustments

## Airflow Switch

The airflow switch is set at the factory for proper operation. No adjustment necessary.

The airflow switch operation may be affected by shipping tape still in place, lack of make-up air, or an obstruction in the exhaust duct. These should be checked and the required corrective action taken.

	<b>WARNING</b>
<p><b>The tumble dryer must not be operated if the airflow switch does not operate properly. Faulty airflow switch operation may cause an explosive gas mixture to collect in the tumble dryer.</b></p> <p style="text-align: right;">W072R1</p>	

**IMPORTANT:** Airflow switch vane must remain closed during operation. If it opens and closes during the drying cycle, this indicates insufficient airflow through the tumble dryer. If switch remains open, or pops open and closed during the cycle, the heating system will shut off. The cylinder and fan will continue to operate even though the airflow switch is indicating insufficient airflow.

**NOTE:** To properly mount the airflow switch bracket, or in case of a load not drying, the airflow switch bracket may need to be checked for proper alignment. Be sure the locator pins are securely in their respective holes before tightening the bracket mounting screws. This will assure proper alignment of the airflow switch arm in the channel of the airflow switch bracket and prevent binding of the arm.

## Loading Door Switch

The door switch should be adjusted so the cylinder stops when door is opened 2 inches (51 mm) plus or minus 0.25 inch (6 mm). This switch is a normally open switch and is closed by the hinge cam when the door is closed. If adjustment is required, refer to *Figure 56* and proceed as follows:

1. Close door and start tumble dryer, slowly open loading door. Cylinder and heat system should shut off when door is open 2 inches (51 mm) plus or minus 0.25 inch (6 mm).
2. Slowly close the loading door. When door is 2 inches (51 mm) from being fully closed, the door switch actuating bracket (located on the door) should depress the button and the switch arm with an audible “click.”
3. If the actuating bracket does not operate the switch at the appropriate door closure, bend the actuating switch arm in or out to achieve proper actuation.

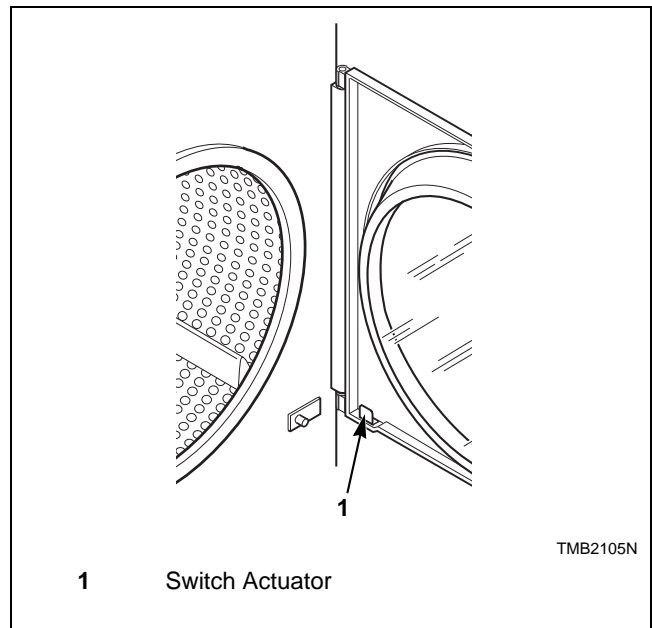


Figure 56

## Adjustments

### Door Strike

The door strike must be adjusted to have sufficient tension to hold loading door closed against force of the load tumbling against it. There is proper adjustment of pull force when 8 to 15 pounds (35.6 N – 66.7 N) is required to open door.

If adjustment is required, refer to *Figure 57* and proceed as follows:

To adjust, open door, loosen acorn nut, and turn door strike screw in or out as required. Retighten acorn nut.

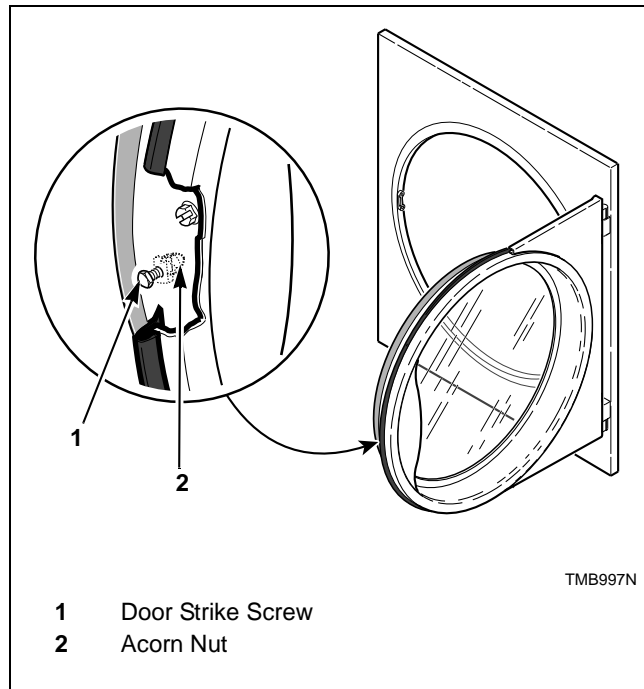



Figure 57

# Maintenance

## Daily

1. Inspect the area surrounding tumble dryers, remove all combustible materials, including lint, before operating the machines.
2. Check cylinder for foreign objects to avoid damage to clothing and equipment.
3. Clean lint from lint compartment and screen to maintain proper airflow and avoid overheating.

	<h3>WARNING</h3>
<p><b>To reduce the risk of serious injury, do not open the lint panel while the tumble dryer is in operation. Before cleaning the lint screen, open tumble dryer door and allow cylinder to completely stop.</b></p>	
<small>W410R1</small>	

- a. Open the lint panel/lint drawer.
  - b. Remove all accumulated lint in the lint compartment area. Lightly brush any lint that may be left on the lint screen.
  - c. Be sure the lint screen is not torn.
  - d. The lint screen is designed to completely cover the entire opening in the lint screen panel. Be sure that it does so.
  - e. Wipe lint off of the cabinet high limit thermostat and thermistor. Refer to *Figure 58*.
  - f. Replace the lint compartment panel on the tumble dryer ensuring a tight fit, and lock if applicable.
4. At end of day, clean the machine's top, front and side panels with mild detergent. Rinse with clean water. **DO NOT** use products that contain alcohol on the control panel.

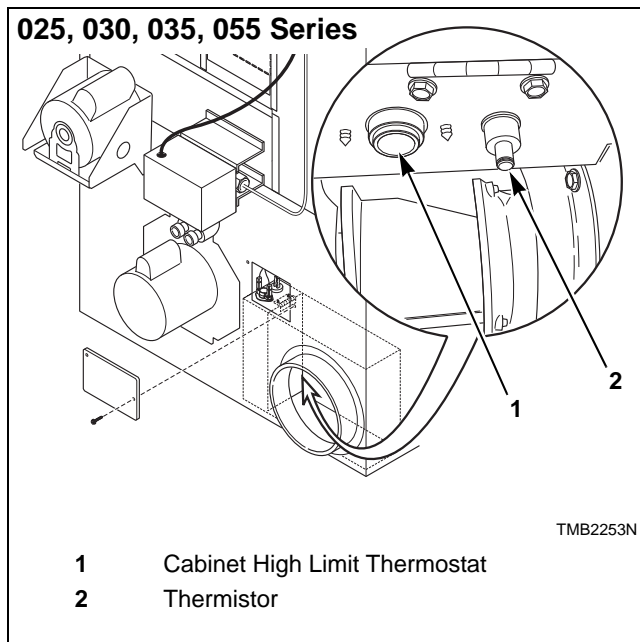


Figure 58

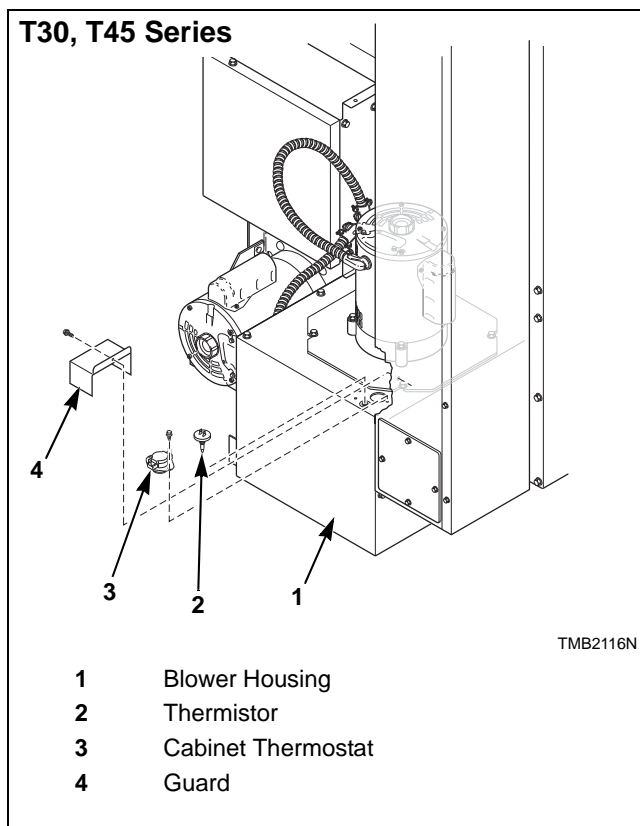


Figure 59

# Before You Call for Service

Won't Start	Won't Heat	Clothes Not Dry	Possible Reason – Corrective Actions
•			Insert correct coin(s) or valid card if applicable.
•			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.
•			Drying timer is in OFF position.
•			Check the main fuse and circuit breaker.
•			Check fuses located in the machine.
	•		Insufficient airflow.
	•		Gas shut-off valve in OFF position.
	•		Are controls properly set?
	•		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.

## Removing Tumble Dryer from Service

If the tumble dryer is to be removed from service, perform the following steps where applicable:

- Turn off electrical supply external to machine.
- Turn off electrical disconnect on machine.
- Turn off gas supply external to machine.
- Turn off manual gas shut-off valve on machine.
- Turn off steam supply external to machine.
- 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 60*. 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.

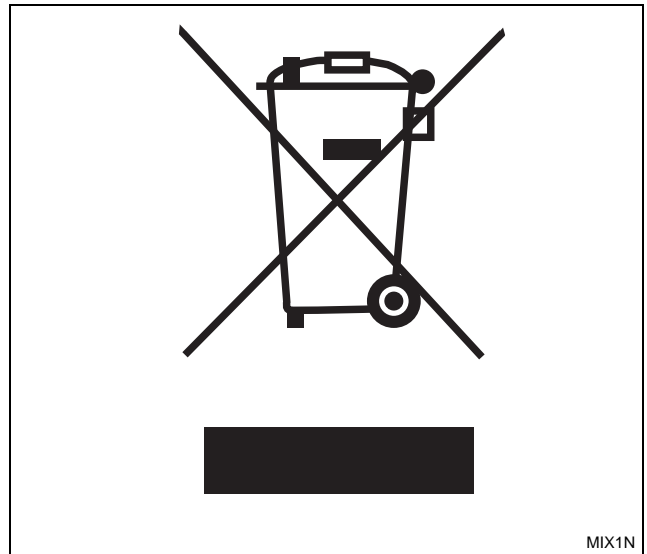


Figure 60





