# Drying Tumblers

25 Pound Capacity 30 Pound Capacity 35 Pound Capacity Stacked 30 Pound Capacity Stacked 45 Pound Capacity 55 Pound Capacity Starting Serial No. 0602004144 Refer to page 3 for Model Identification

CE

### Keep These Instructions for Future Reference.

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

Part No. 70392201R8 September 2008

Installation must conform with local codes.

## 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.

- 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

### FOR YOUR SAFETY

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

W053

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 tumbler for customer use.

## WARNING

To reduce the risk of fire, electric shock, serious injury or death to persons when using the tumbler unit, follow these basic precautions:

- Read all instructions before using tumbler.
- DO NOT tamper with controls.
- DO NOT bypass any safety devices.
- Always follow the fabric care instructions supplied by the garment manufacturer.
- Remove laundry immediately after the tumbler stops.
- DO NOT reach into tumbler if cylinder is revolving.

To avoid creating any flammable vapors which may explode, ignite or cause corrosive damage, DO NOT dry the following materials:

- Articles that have been cleaned in, soaked in, washed in or spotted with gasoline, dry-cleaning solvents or other flammable/explosive substances.
- Plastics or articles containing foam rubber or similarly textured rubberlike materials.
- Articles that have traces of flammable substances like cooking oil, machine oil, flammable chemicals or thinner.
- Articles containing wax or cleaning chemicals.
- Fiberglass curtains or draperies (unless the label says it can be done).

W440R1

# Table of Contents

Introduction	3
Model Identification	3
Serial Plate Location	4
Wiring Diagram	4
Safety Information	5
Important Safety Instructions	5
Installation	7
Specifications and Dimensions	7
Cabinet Dimensions — 25, 30, 35 and 55 Pound Models	8
Cabinet Dimensions – T30 and T45 Model	9
Exhaust Outlet Locations	10
Gas Connection Locations	11
Electrical Connection Locations	12
Steam Connection Locations	13
Position and Level the Tumbler	14
Gas Requirements	15
Natural Gas and Liquefied Petroleum	15
European Gas	15
General Information	15
Exhaust Requirements	19
Make-Up Air	19
Venting	19
Electrical Requirements	20
Grounding Instructions	20
Steam Requirements	21
Operation	23
Emergency Stop Button	23
Operating Instructions	23
Step 1: Clean Lint Screen/Compartment	23
Step 2: Load Laundry	23
Step 3: Determine Control Type and Temperature Setting	23
Step 4: Remove Laundry	23
Control Instructions	24
Dual Digital Timer Control	24
Electronic OPL Micro Control	25
Single Drop Control	26
MDC Coin and Card Control	27
Ignition Control Operation	28
Disposal of Unit	29

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## Introduction

## Model Identification

Information in this manual is applicable to these models.

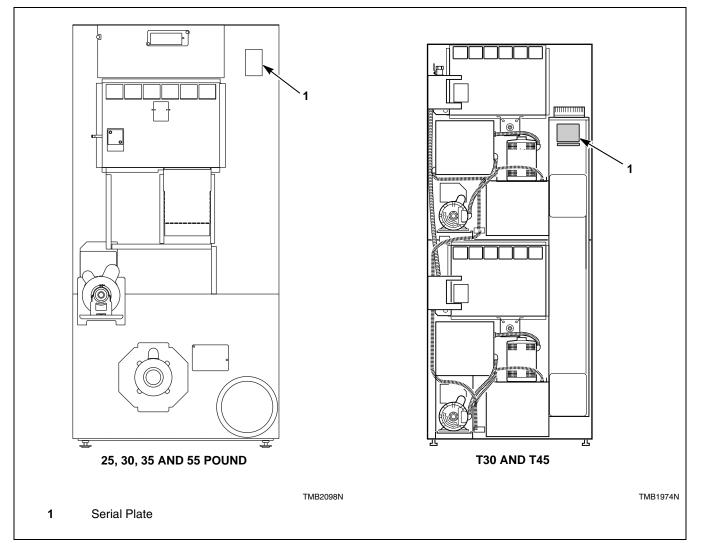
		Gas	Steam	Electric
	GU025L	LU025N	GU025S	GU025E
	GU025N	PU025L	HU025S	HU025E
	HU025L	PU025N	KU025S	KU025E
25 Pound	HU025N	SU025L	LU025S	LU025E
	KU025L	SU025N	PU025S	PU025E
	KU025N	UU025L	SU025S	SU025E
	LU025L	UU025N	UU025S	UU025E
	GU030L	PU030L	GU030S	GU030E
	GU030N	PU030N	HU030S	HU030E
20 Dound	HU030L	SU030L	LU030S	LU030E
30 Pound	HU030N	SU030N	PU030S	PU030E
	LU030L	UU030L	SU030S	SU030E
	LU030N	UU030N	UU030S	UU030E
	GUT30L	LUT30N	GUT30S	GUT30E
	GUT30N	PUT30L	HUT30S	HUT30E
	HUT30L	PUT30N	KUT30S	KUT30E
Т30	HUT30N	SUT30L	LUT30S	LUT30E
	KUT30L	SUT30N	PUT30S	PUT30E
	KUT30N	UUT30L	SUT30S	SUT30E
	LUT30L	UUT30N	UUT30S	UUT30E
	GU035L	LU035N	GU035S	GU035E
	GU035N	PU035L	HU035S	HU035E
	HU035L	PU035N	KU035S	KU035E
35 Pound	HU035N	SU035L	LU035S	LU035E
35 Pound	KU035L	SU035N	PU035S	PU035E
	KU035N	UU035L	SU035S	SU035E
	LU035L	UU035N	UU035S	UU035E
			YU035S	YU035E
TAE	HUT45L	SUT45L	Not Applicable	Not Applicable
T45	HUT45N	SUT45N	Not Applicable	Not Applicable
	HU055L	SU055N		HU055E
55 Pound	HU055N	UU055L	Not Applicable	SU055E
	SU055L	UU055N		UU055E

Includes models with the following control suffixes:

- BC basic electronic, coin
- BX basic electronic, prep for coin
- QT dual digital timer
- SD single drop
- $SX-single\ drop,\ prep\ for\ coin$

- BG basic electronic, OPL mode
- BL basic electronic, central pay
- BY basic electronic, prep for card OM – OPL micro

## **Serial Plate Location**



## Wiring Diagram

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

## **Safety Information**

## **Save These Instructions**

## **Important Safety Instructions**

## WARNING

Hazardous Voltage. Can cause shock, burn or cause death. Allow machine power to remain off for two minutes prior to working in and around AC inverter drive.

W359

- 1. Read all instructions before using the tumbler.
- 2. Refer to the *GROUNDING INSTRUCTIONS* for the proper grounding of the tumbler.
- 3. Do not dry articles that have been previously cleaned in, washed in, soaked in, or spotted with gasoline, dry-cleaning solvents, or other flammable or explosive substances, as they give off vapors that could ignite or explode.
- 4. Do not allow children on or in the tumbler. 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.
- 5. Before the tumbler is removed from service or discarded, remove the door to the drying compartment and the door to the lint compartment.
- 6. Do not reach into the tumbler if the cylinder is revolving.
- 7. Do not install or store the tumbler where it will be exposed to water and/or weather.
- 8. Do not tamper with the controls.
- 9. Do not repair or replace any part of the tumbler, 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.
- 10. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- 11. To reduce the risk of fire, **DO NOT DRY** plastics or articles containing foam rubber or similarly textured rubberlike materials.
- 12. Always clean the lint filter daily.

- 13. Keep area around the exhaust opening and adjacent surrounding area free from the accumulation of lint, dust and dirt.
- 14. The interior of the tumbler and the exhaust duct should be cleaned periodically by qualified service personnel.
- 15. If not installed, operated and maintained in accordance with the manufacturer's instructions or if there is damage to or mishandling of this product's components, use of this product could expose you to substances in the fuel or from fuel combustion which can cause death or serious illness and which are known to the State of California to cause cancer, birth defects or other reproductive harm.
- 16. Tumbler will not operate with the loading door open. **DO NOT** bypass the door safety switch to permit the tumbler to operate with the door open. The tumbler will stop tumbling when the door is opened. Do not use the tumbler if it does not stop tumbling when the door is opened or starts tumbling without pressing or turning the START mechanism. Remove the tumbler from use and call for service.
- 17. Tumbler will not operate with lint panel open. **DO NOT** bypass lint panel safety switch to permit the tumbler to operate with the lint panel open.
- 18. Do not put articles soiled with vegetable or cooking oil in the tumbler, as these oils may not be removed during washing. Due to the remaining oil, the fabric may catch on fire by itself.
- 19. To reduce the risk of fire, **DO NOT** put clothes which have traces of any flammable substances such as machine oil, flammable chemicals, thinner, etc. or anything containing wax or chemicals such as in mops and cleaning cloths, or anything dry-cleaned at home with dry-cleaning solvent in the tumbler.
- 20. Use the tumbler only for its intended purpose, drying fabrics.
- 21. **ALWAYS** disconnect and lockout the electrical power to the tumbler before servicing. Disconnect power by shutting off appropriate breaker or fuse.

#### Installation/Operation Supplement

- 22. Install this tumbler according to the *INSTALLATION INSTRUCTIONS*. All connections for electrical power, grounding, and gas supply must comply with local codes and be made by licensed personnel when required.
- 23. Remove laundry immediately after tumbler stops.
- 24. 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 reach of children at all times (preferably in a locked cabinet).
- 25. 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.
- 26. Always follow the fabric care instructions supplied by the garment manufacturer.
- 27. Never operate the tumbler with any guards and/or panels removed.

- 28. **DO NOT** operate the tumbler if it is smoking, grinding, has missing or broken parts.
- 29. DO NOT bypass any safety devices.
- 30. Solvent vapors from dry-cleaning machines create acids when drawn through the heater of the drying unit. These acids are corrosive to the tumbler as well as to the laundry load being dried. Be sure make-up air is free of solvent vapors.
- 31. Failure to install, maintain, and/or operate this machine according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.



## WARNING

To reduce the risk of serious injury, install lockable door(s) to prevent public access to rear of tumblers.

W055

## Installation

## **Specifications and Dimensions**

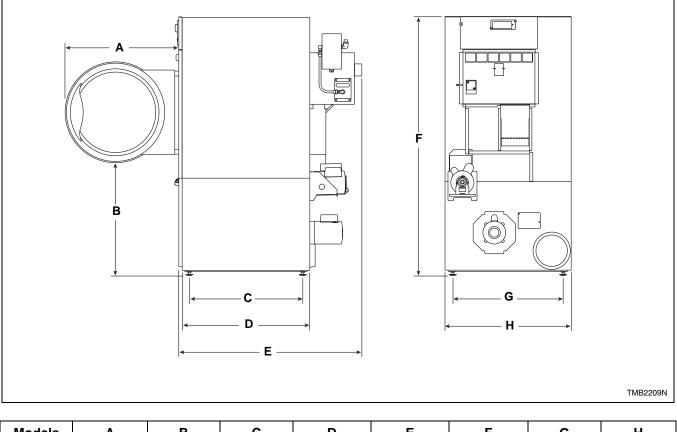
Specification	ns	25 Pound	30 Pound	Т30	35 Pound	T45	55 Pound
Noise level measure operation at operato of 1 meter (3.3 feet) machine and 1.6 me feet) from floor	or position in front of	60 dBA	61 dBA	66 dBA	63 dBA	67 dBA	63 dBA
Net Weight (approxinkg (pounds)	mate):	137 (300)	150 (330)	247 (544)	163 (360)	305 (673)	197 (435)
Cylinder Size: mm (inches)		673 x 610 (26.5 x 24)	673 x 762 (26.5 x 30)	762 x 660 (30 x 26)	762 x 762 (30 x 30)	838 x 762 (33 x 30)	838 x 889 (33 x 35)
Cylinder Capacity (d weight): kg (pounds)	lry	11.3 (25)	13.6 (30)	2 x 13.6 (2 x 30)	15.9 (35)	2 x 20.5 (2 x 45)	24.9 (55)
Drive Motor Horsepo	ower**	1/4	1/4	1/4	1/4	1/2	1/2
Fan Motor Horsepov	ver**	1/4	1/4	1/4	1/4	1/2	1/2
Maximum Airflow per Pocket**:	50 Hertz	203 (430)	203 (430)	160 (340)	260 (550)	N/A	283 (600)
l/sec (C.F.M.)	60 Hertz	236 (500)	236 (500)	189 (400)	307 (650)	283 (600)	330 (700)
Maximum Static	50 Hertz	1.5 (0.6)	1.5 (0.6)	2.0 (0.8)	1.3 (0.5)	N/A	1.3 (0.5)
Back Pressure*: mbar (inches W.C.)	60 Hertz	2.0 (0.8)	2.0 (0.8)	2.3 (0.9)	1.5 (0.6)	2.3 (0.9)	1.5 (0.6)
			Gas Mode	els			
Gas Connection		1/2 in. NPT	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT
Gas Burner Rating** kW, Mj/hr (Btu/hr)	:	18.7, 67.5 (64,000)	21.4, 77 (73,000)	21.4, 77 (73,000)	26.4, 95 (90,000)	27.8, 100.2 (95,000)	32.8, 118.2 (112,000)
			Electric Mo	dels			
Heating Element	400/50/3	10 kW	21 kW	21 kW	24 kW	N/A	27 kW
Rating <sup>*</sup> *:	Standard	12 kW	21 KW	21 K W	27 K W	11/71	27 KW
			Steam Mod	dels			
Steam Connection		3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	N/A	N/A
Steam Coil Rating at 100 psig**: Boiler Horsepower (Btu/hr)		3.9 (134,700)	3.9 (134,700)	3.2 (111,000)	4.8 (166,000)	N/A	N/A
Steam Coil Rating at Boiler Horsepower (	t 15 psig**: Btu/hr)	2.6 (89,940)	2.6 (89,940)	2.2 (74,000)	3.7 (129,000)	N/A	N/A

\* T30 and 45 models – both pockets running

\*\* T30 and 45 models – each pocket

N/A = Not Applicable

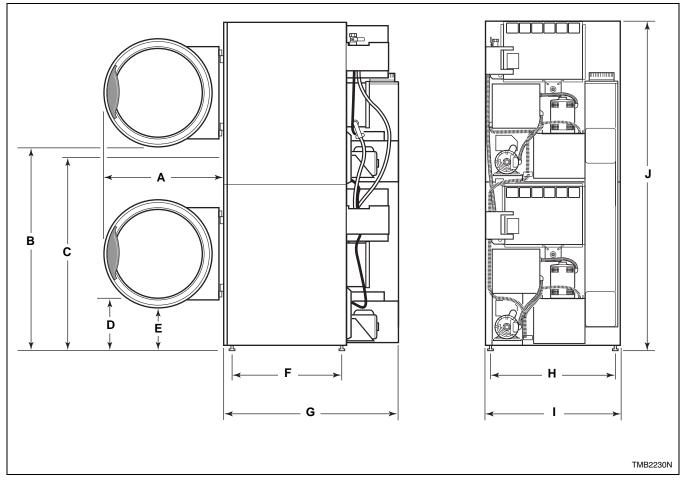
## Cabinet Dimensions — 25, 30, 35 and 55 Pound Models



Models	Α	В	С	D	E	F	G	н
25 Pound	667 mm	699 mm	593 mm	654 mm	1038 mm	1622 mm	626 mm	711 mm
	(26.25 in.)	(27.5 in.)	(23.35 in.)	(25.75 in.)	(40.875 in.)	(63.875 in.)	(24.64 in.)	(28 in.)
30 Pound	667 mm	699 mm	720 mm	806 mm	1191 mm	1622 mm	626 mm	711 mm
	(26.25 in.)	(27.5 in.)	(28.35 in.)	(31.75 in.)	(46.875 in.)	(63.875 in.)	(24.64 in.)	(28 in.)
35 Pound	711 mm	699 mm	720 mm	806 mm	1191 mm	1622 mm	695 mm	800 mm
	(28 in.)	(27.5 in.)	(28.35 in.)	(31.75 in.)	(46.875 in.)	(63.875 in.)	(27.38 in.)	(31.5 in.)
55 Pound	810 mm	682.5 mm	857.25 mm	971.5 mm	1365 mm	1694.7 mm	774.7 mm	876 mm
	(31.88 in.)	(26.87 in.)	(33.75 in.)	(38.25 in.)	(53.62 in.)	(66.75 in.)	(30.5 in.)	(34.5 in.)

NOTE: Facia panels available to increase height of single pocket models to 1835 mm (72.25 inches) and 1938 mm (76.25 inches).

## Cabinet Dimensions – T30 and T45 Models

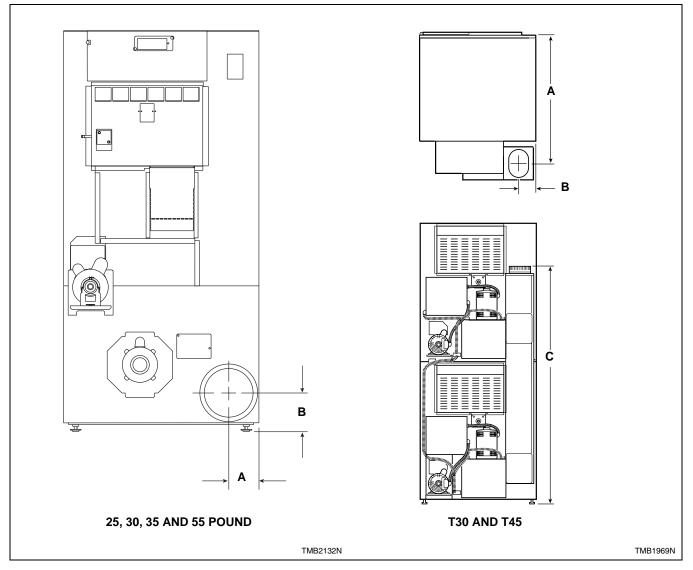


Models	A	В	С	D	E
Т30	711 mm	1219 mm	1118 mm	279 mm	254 mm
	(28 in.)	(48 in.)	(44 in.)	(11 in.)	(10 in.)
T45	810 mm (31.88 in.)	1245 mm (49 in.)	N/A	N/A	229 mm (9 in.)
Models	F	G	н	I	J
Т30	636 mm	1086 mm	695 mm	800 mm	1937 mm
	(25.02 in.)	(42.76 in.)	(27.38 in.)	(31.5 in.)	(76.25 in.)
T45	746 mm	1235 mm	775 mm	876 mm	2063.75 mm
	(29.37 in.)	(48.62 in.)	(30.50 in.)	(34.5 in.)	(81.25 in.)

N/A = Not Applicable

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

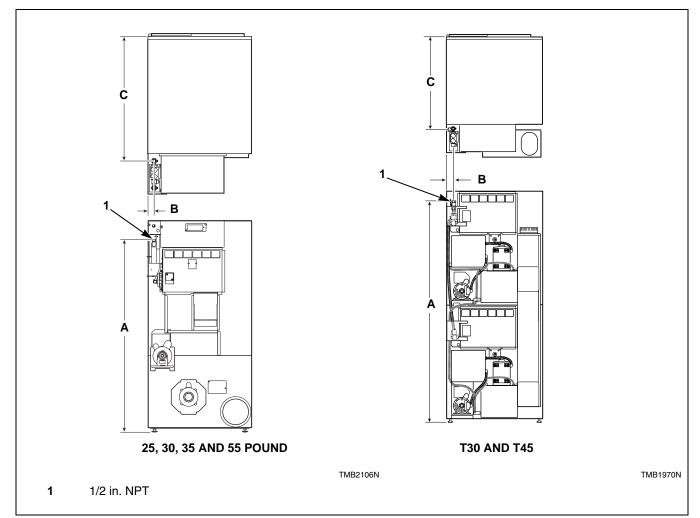
## **Exhaust Outlet Locations**



		Rear Ex	chaust	
Models	Diameter	Α	В	С
25/30 Pound	152 mm (6 in.)	99 mm (3.875 in.)	117 mm (4.625 in.)	N/A
Т30	Elliptical Fits 203 mm (8 in.)	928 mm (36.54 in.)	108 mm (4.25 in.)	1585 mm (62.42 in.)
35 Pound	203 mm (8 in.)	124 mm (4.875 in.)	143 mm (5.625 in.)	N/A
T45	Elliptical Fits 254 mm (10 in.)	1038 mm (40.88 in.)	121 mm (4.75 in.)	1676 mm (66 in.)
55 Pound	203 mm (8 in.)	122 mm (4.808 in.)	156.3 mm (6.156 in.)	N/A

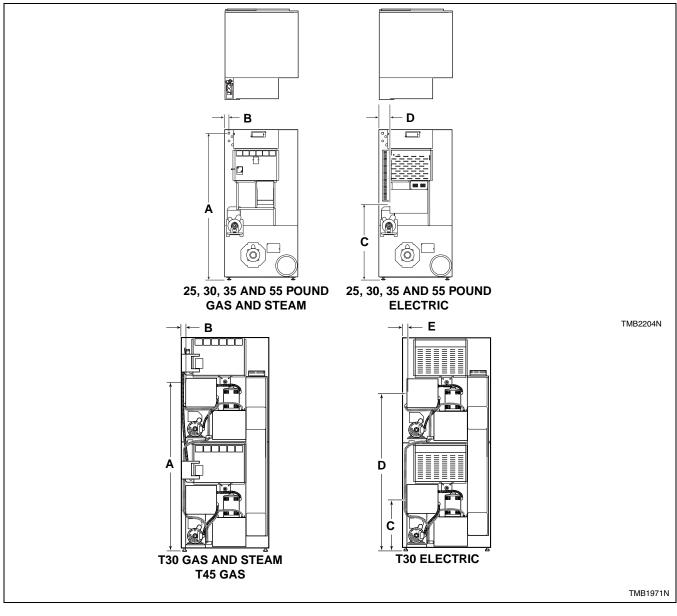
N/A = Not Applicable

## **Gas Connection Locations**



		Gas Connection	
Models —	Α	В	С
25 Pound	1500 mm	38.1 mm	737 mm
	(59 in.)	(1.5 in.)	(29 in.)
30 Pound	1500 mm	38.1 mm	889 mm
	(59 in.)	(1.5 in.)	(35 in.)
Т30	1912 mm	64 mm	777 mm
	(75.28 in.)	(2.5 in.)	(30.60 in.)
35 Pound	1500 mm	64 mm	889 mm
	(59 in.)	(2.5 in.)	(35 in.)
T45	2000 mm	105 mm	1089 mm
	(78.75 in.)	(4.12 in.)	(42.88 in.)
55 Pound	1500 mm	64 mm	889 mm
	(59 in.)	(2.5 in.)	(35 in.)

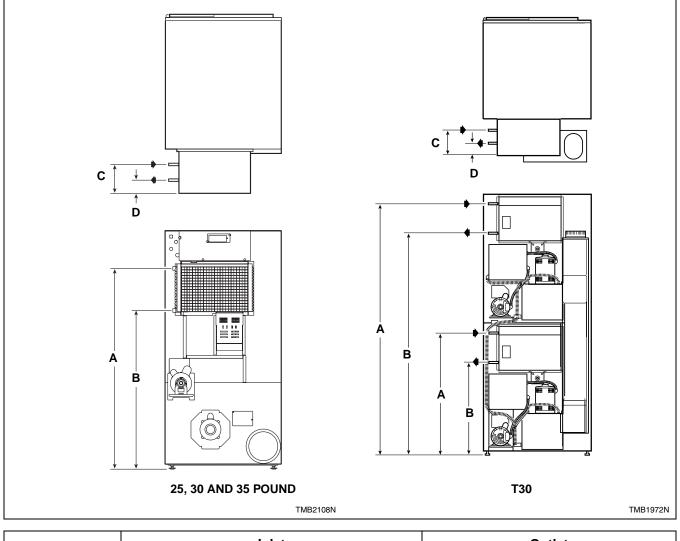
## **Electrical Connection Locations**



			Electrical Service				
Models	Gas and Stea	am Models	Electric Models				
	Α	В	С	D	E		
25/30 Pound	1581 mm (62.25 in.)	51 mm (2 in.)	711 mm (28 in.)	83 mm (3.25 in.)	N/A		
Т30	1498 mm (59 in.)	44 mm (1.75 in.)	905 mm (35.63 in.)	1859 mm (73.21 in.)	58 mm (2.28 in.)		
35 Pound	1581 mm (62.25 in.)	76 mm (3 in.)	711 mm (28 in.)	108 mm (4.25 in.)	N/A		
T45	1588 mm (62.5 in.)	44 mm (1.75 in.)	N/A	N/A	N/A		
55 Pound	1655.75 mm (65.187 in.)	44.83 mm (1.765 in.)	826.16 mm (32.526 in.)	166.3 mm (6.547 in.)	N/A		

N/A = Not Applicable

## **Steam Connection Locations**



Models	In	let	Outlet		
woders	Α	С	В	D	
25/30/35 Pound	1365 mm	198 mm	1080 mm	165 mm	
	(53.75 in.)	(7.8 in.)	(42.5 in.)	(6.5 in.)	
T30 (Upper)	1877 mm	160 mm	1592 mm	61 mm	
	(73.93 in.)	(6.29 in.)	(62.71 in.)	(2.39 in.)	
T30 (Lower)	923 mm	160 mm	638 mm	61 mm	
	(36.35 in.)	(6.29 in.)	(25.13 in.)	(2.39 in.)	

NOTE: All connections use 3/4 inch NPT pipe.

## Position and Level the Tumbler

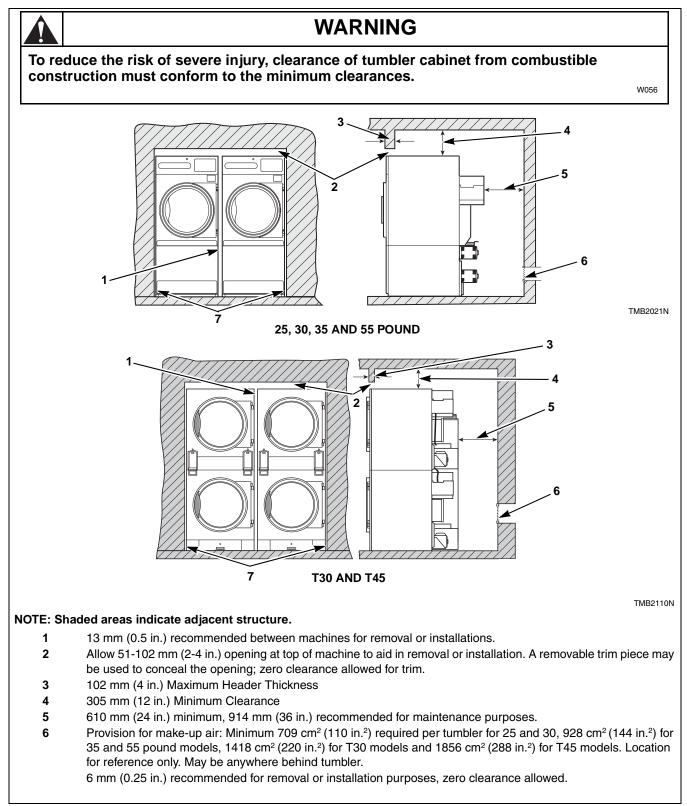


Figure 1

## **Gas Requirements**

### **Natural Gas and Liquefied Petroleum**



## WARNING

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

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

IMPORTANT: The tumbler must be <u>isolated</u> 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 <u>equal to or less than</u> 3.45 kPa, 34.5 mbar (0.5 psi).

**IMPORTANT:** The tumbler and its manually operated appliance gas valve must be <u>disconnected</u> from the gas supply piping system during any pressure testing of that system at test pressures <u>in</u> excess of 3.45 kPa, 34.5 mbar (0.5 psi).

**IMPORTANT:** The installation must comply with local codes.

## WARNING

To reduce the risk of fire or explosion, if the tumbler is to be connected to Liquefied Petroleum (L.P.) gas, a vent to the outdoors must be provided in the room where the tumbler is installed.

**NOTE:** This manual is only a supplement. Refer to installation/operation manual for full instructions.

#### European Gas

## WARNING

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

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

W002

#### **General Information**

This information is to be used when installing gas tumblers in countries, and/or on gases, different than the machine's factory configuration. Tumblers are supplied from the factory for operation on Natural Gas or L.P. Gas in the countries of GB/IE/PT/ES/IT/GR/ LU/CH. To install machines in any other country, or on any other gas, requires some level of modification.

Models are built in two different configurations:

- **Regulated Natural Gas** Burner orifice is sized for Natural Gas, second family, group H (E) at 20 mbar inlet pressure. Regulator/governor is operational. Gas valve CAN be field-converted to a non-regulating type.
- Unregulated Liquefied Petroleum (L.P.) Gas Burner orifice is sized for L.P., third family, group 3+ at 28.37 mbar inlet pressure. Regulator/ governor is blocked open. Gas valve CANNOT be field-converted to a regulating type.

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

#### Installation/Operation Supplement

#### Gases and Configurations

Country Code	Gas Type	Group	Supply Pressure, mbar	Burner Orifice Pressure, mbar	Capacity/ Model	Diameter, mm	Quantity	Burner Orifice Part No.
DK/NO/ SE/FI/CZ/	Natural Gas	Н	20	7.6 8.0 8.0 8.0 8.0 8.0 8.0	25 30 T30 35 T45 55	3.9 4.0 4.0 4.6 4.6 5.2	1 1 2 1 2 1	M402980 M402992 M402992 M411511 M411371 M402993
ÉE/LV/LT/ SI/SK	L.P. Gas	B/P	30	No Governor	25 30 T30 35 T45 55	2.1 2.2 2.2 2.5 2.5 3.0	1 1 2 1 2 1	M401003 M401011 M401011 M406361 M401007 M401017
	Natural Gas	E	20	7.6 8.0 8.0 8.0 8.0 8.0 8.0	25 30 T30 35 T45 55	3.9 4.0 4.0 4.6 4.6 5.2	1 1 2 1 2 1	M402980 M402992 M402992 M411511 M411371 M402993
DE	L.P. Gas	LL	30	No Governor	25 30 T30 35 T45 55	2.1 2.2 2.2 2.5 2.5 3.0	1 1 2 1 2 1	M401003 M401011 M401011 M406361 M401007 M401017
	Natural Gas	L	25	11.0	25 30 T30 35 T45 55	3.9 4.0 4.0 4.6 4.6 4.8	1 1 2 1 2 1	M402980 M402992 M402992 M411511 M411371 M411372
NL	L.P. Gas	B/P	30	No Governor	25 30 T30 35 T45 55	2.1 2.2 2.2 2.5 2.5 3.0	1 1 2 1 2 1	M401003 M401011 M401011 M406361 M401007 M401017

Table 1 (continued)

Burner orifice information at 0-600 meters (0-2000 feet) altitude.

Country Code	Gas Type	Group	Supply Pressure, mbar	Burner Orifice Pressure, mbar	Capacity/ Model	Diameter, mm	Quantity	Burner Orifice Part No.
	Natural Gas	E+	20 or 25	No Governor	25 30 T30 35 T45 55	3.9 3.3 3.3 3.7 3.7 4.0	1 1 2 1 2 1	M402980 M401021 M401021 M400998 M401000 M401012
BE/FR*	L.P. Gas	+	28 or 37	No Governor	25 30 T30 35 T45 55	2.1 2.2 2.2 2.5 2.5 2.5 2.8	1 1 2 1 2 1	M401003 M401011 M401011 M406361 M401007 M411512
GB/IE/PT/	Natural Gas	Н	20	7.6 8.0 8.0 8.0 8.0 8.0 8.0	25 30 T30 35 T45 55	3.9 4.0 4.0 4.6 4.6 5.2	1 1 2 1 2 1	M402980 M402992 M402992 M411511 M411371 M402993
ES/IT/GR/ LU/CH	L.P. Gas	+	28 or 37	No Governor	25 30 T30 35 T45 55	2.1 2.2 2.2 2.5 2.5 2.5 2.8	1 1 2 1 2 1	M401003 M401011 M401011 M406361 M401007 M411512
	Natural Gas	Н	20	7.6 8.0 8.0 8.0 8.0 8.0 8.0	25 30 T30 35 T45 55	3.9 4.0 4.0 4.6 4.6 5.2	1 1 2 1 2 1	M402980 M402992 M402992 M411511 M411371 M402993
AT	L.P. Gas	B/P	30	No Governor	25 30 T30 35 T45 55	2.1 2.2 2.2 2.5 2.5 3.0	1 1 2 1 2 1	M401003 M401011 M401011 M406361 M401007 M401017
CY/IS/MT	L.P. Gas	B/P	30	No Governor	25 30 T30 35 T45 55	2.1 2.2 2.2 2.5 2.5 3.0	1 1 2 1 2 1	M401003 M401011 M401011 M406361 M401007 M401017

Table 1 (continued)

Table 1 (continued)

Burner orifice information at 0-600 meters (0-2000 feet) altitude.

\*For Natural Gas, Group E+ applications, convert using L.P. Gas model and replace burner orifice.

Country Code	Gas Type	Group	Supply Pressure, mbar	Burner Orifice Pressure, mbar	Capacity/ Model	Diameter, mm	Quantity	Burner Orifice Part No.
HU	Natural Gas	Н	25	7.6 8.0 8.0 8.0 8.0 8.0 8.0	25 30 T30 35 T45 55	3.9 4.0 4.0 4.6 4.6 5.2	1 1 2 1 2 1	M402980 M402992 M402992 M411511 M411371 M402993
nu	L.P. Gas	B/P	30	No Governor	25 30 T30 35 T45 55	2.1 2.2 2.2 2.5 2.5 3.0	1 1 2 1 2 1	M401003 M401011 M401011 M406361 M401007 M401017
	Natural Gas	Н	20	7.6 8.0 8.0 8.0 8.0 8.0 8.0	25 30 T30 35 T45 55	3.9 4.0 4.0 4.6 4.6 5.2	1 1 2 1 2 1	M402980 M402992 M402992 M411511 M411371 M402993
PL	L.P. Gas	3Р	37	No Governor	25 30 T30 35 T45 55	2.1 2.2 2.2 2.5 2.5 2.5 2.8	1 1 2 1 2 1	M401003 M401011 M401011 M406361 M401007 M411512

Table 1 (continued)

Table 1

Burner orifice information at 0-600 meters (0-2000 feet) altitude.

## **Exhaust Requirements**

## WARNING

A drying tumbler produces combustible lint. To reduce the risk of fire, the tumbler must be exhausted to the outdoors.

W057

To reduce the risk of fire and accumulation of combustible gases, DO NOT exhaust tumbler 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.

W059

#### Make-Up Air

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

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

The required make-up air opening to the outside for <u>each</u> tumbler is:

709 sq. cm (110 sq. in.) for 25 and 30 pound models

**928 sq. cm** (144 sq. in.) for 35 and 55 pound models

1418 sq. cm (220 sq. in.) for T30 models

1856 sq. cm (288 sq. in.) for T45 models

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

If it is necessary to duct make-up air to the tumbler(s), increase the area of the ductwork by 25% to compensate for any restriction in air movement.

#### Venting

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 to prevent the accumulation of lint.

DO NOT use plastic or thin foil flexible ducts. Use exhaust ducts made of sheet metal or other noncombustible material. Use duct tape or pop-rivets on all seams and joints.

Verify that old ducts are thoroughly cleaned out before installing new tumbler.

NOTE: The ducts must be equivalent in strength and corrosion resistance to ducts made of galvanized sheet steel not less than 0.495 mm (0.0195 inches) thick.

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

## **Electrical Requirements**

## WARNING

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

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

W002

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.

W068

To reduce the risk of fire and electric shock, if electrical supply is coming from a three phase service, DO NOT connect a "High Leg" or "Stinger Leg" to a single phase machine. On a three phase machine, if there is a "High Leg" or "Stinger Leg" it should be connected to L3.

V069

### **Grounding Instructions**

NOTE: To ensure protection against shock, this tumbler 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 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 tumbler 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 tumbler ground screw does not constitute a ground.
- A dedicated ground conduit (wire) must be connected between the electrical service box ground bar and the tumbler ground screw.

## WARNING

To reduce the risk of electrical shock, de-energize the electrical circuit being connected to the tumbler before making any electrical connections. All electrical connections should be made by a qualified electrician. Never attempt to connect a live circuit.

W409



## CAUTION

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

All manually operated models are factory-equipped with an emergency stop button on the front panel.

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

## **Steam Requirements**

## NOTE: The maximum allowable steam pressure is 8.6 bar (125 psig). In no case may the pressure exceed this value.

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

- Refer to *Figure 2* for proper steam pipe configurations.
- When tumbler is on the end of a line of equipment, extend header at least 1.2 meters (4 feet) beyond tumbler. Install shut-off valve, union, check valve and bypass trap at end of line. If system has a gravity return to the boiler, omit trap.
- Insulate steam supply and return lines for safety of operator and safety while servicing tumbler.
- Keep tumbler in good working condition. Repair or replace any worn or defective parts.

## 

## 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.

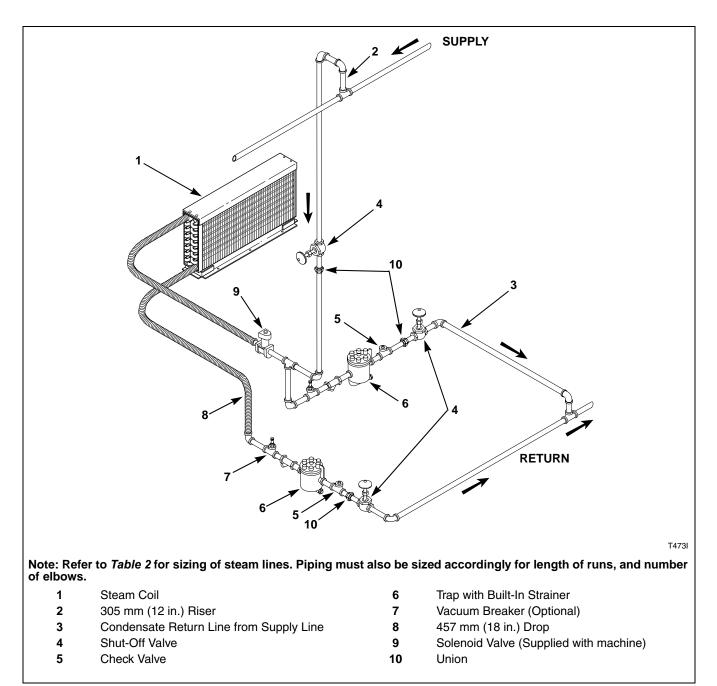


Figure 2

Model	Steam Pressure PSI (bar)	Minimum Pipe Diameter	Steam Trap Size * (Pounds Condensate/Hour)
25/30 Pound	15-100 (1-6.9)	3/4 in. NPT	134
Т30	15-100 (1-6.9)	3/4 in. NPT	110
35 Pound	15-100 (1-6.9)	3/4 in. NPT	166

\* Based on 100 PSI.

Table 2

W412

## Operation

## 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.

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

**Emergency Stop Button** 

All OPL tumblers are factory equipped with an emergency stop button located on the front panel. Refer to *Figure 3*.

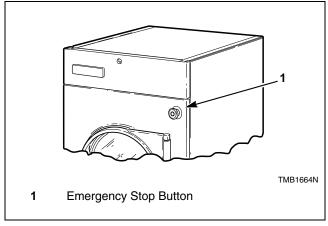


Figure 3

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.

## **Operating Instructions**

### Step 1: Clean Lint Screen/Compartment

Remove any accumulated lint from the lint screen and compartment. Close panel tightly against tumbler 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.

## Step 2: Load Laundry

Open loading door and load cylinder with laundry. DO NOT OVERLOAD.

NOTE: Overloading causes slow drying and wrinkling.

Close loading door. Tumbler will not operate with the door open.

## Step 3: Determine Control Type and Temperature Setting

Refer to the various controls in the *Control Instructions Section*, pages 24 - 27 determine appropriate control and then follow the instructions.

T30 Models Only: Use the correct coin slot and control panel for the top or bottom cylinder.

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.

## **Control Instructions**

## **Dual Digital Timer Control**

### QT Control Suffix

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

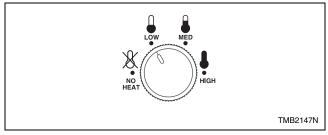


Figure 4

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

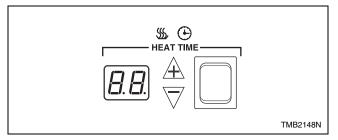


Figure 5

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

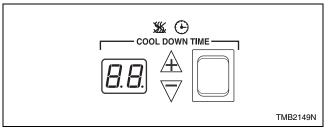


Figure 6

4. Press and release START button to start tumbler. Display will show minutes remaining before end of cycle.

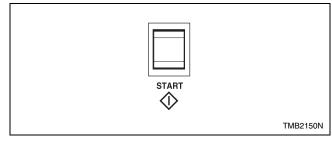


Figure 7

IMPORTANT: To stop the tumbler 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.

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

## **Electronic OPL Micro Control**

#### H, L, P, S, U and Y Models with OM Control Suffix

 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.

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

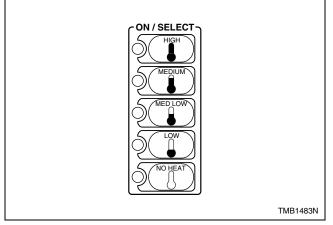


Figure 8

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 9*.

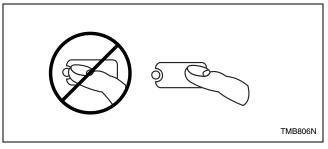
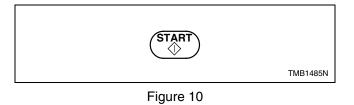


Figure 9

2. Press START pad to start tumbler.



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



Figure 11

NOTE: The window display will flash. Press STOP/ RESET twice (within 3 seconds) to end the cycle and reset the control to idle status. To restart the tumbler, 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 the PUSH TO START button must be pressed in.

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

#### G and K Models with OM Control Suffix

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

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

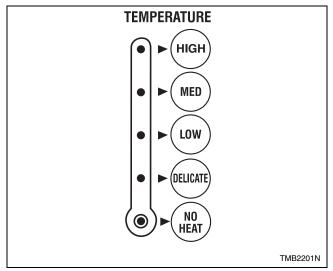


Figure 12

#### Installation/Operation Supplement

2. Press START pad to start tumbler.



Figure 13

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

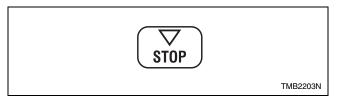


Figure 14

NOTE: The window display will flash. Press STOP twice (within 3 seconds) to end the cycle and reset the control to idle status. To restart the tumbler, 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 the PUSH TO START button must be pressed in.

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

### **Single Drop Control**

#### SD and SX Control Suffixes

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

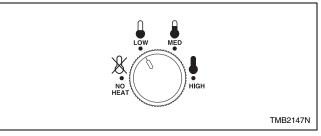


Figure 15

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

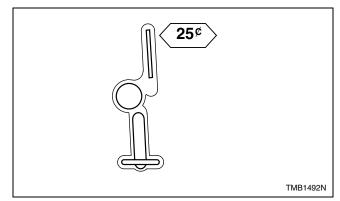


Figure 16

3. Press START button to start tumbler

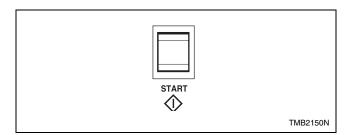


Figure 17

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

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

### MDC Coin and Card Control

#### BC, BG, BL, BX and BY Control Suffixes

1. Select temperature by pressing the appropriate temperature pad.

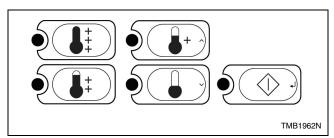


Figure 18

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

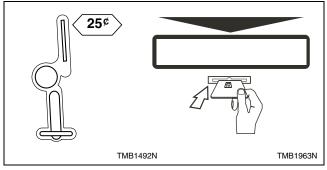


Figure 19

3. Press START pad to start tumbler.

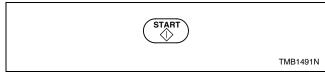


Figure 20

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

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

## **Ignition Control Operation**

#### **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 21*. The Diagnostic LED will indicate the status of the ignition control. Refer to *Table 3*.

LED Color	Description	
Orange-Yellow	Initialization	
Green	Standby / Normal Operation	
Red	Fault Indication Code	
Table 3		

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

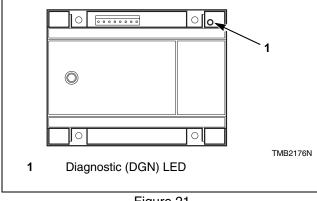


Figure 21

## **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 22*. 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.

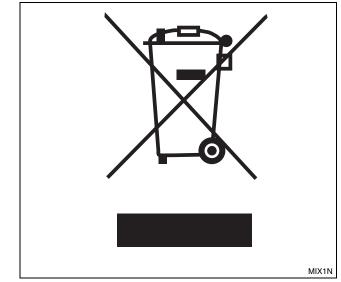


Figure 22