

# Drying Tumblers

50 Pound Capacity

75 Pound Capacity

Refer to page 3 for Model Identification



— Installation/Operation Supplement —

**Keep These Instructions for Future Reference.**

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




[www.comlaundry.com](http://www.comlaundry.com)


Part No. 70278501R5EN  
December 2007



Installation must conform with local codes.

|  |                |
|--|----------------|
|   | <b>WARNING</b> |
| <p><b>FOR YOUR SAFETY</b>, 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.</p> <p style="text-align: right;">W033</p> <ul style="list-style-type: none"> <li>• Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.</li> <li>• <b>WHAT TO DO IF YOU SMELL GAS:</b> <ul style="list-style-type: none"> <li>– Do not try to light any appliance.</li> <li>– Do not touch any electrical switch; do not use any phone in your building.</li> <li>– Clear the room, building or area of all occupants.</li> <li>– Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.</li> <li>– If you cannot reach your gas supplier, call the fire department.</li> </ul> </li> <li>• Installation and service must be performed by a qualified installer, service agency or the gas supplier.</li> </ul> <p style="text-align: right;">W052</p> |                |
| <p><b>FOR YOUR SAFETY</b></p> <p>Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.</p> <p style="text-align: right;">W053</p>   |                |

**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.

|  |                |
|--|----------------|
|   | <b>WARNING</b> |
| <p>To reduce the risk of fire, electric shock, serious injury or death to persons when using the tumbler unit, follow these basic precautions:</p> <ul style="list-style-type: none"> <li>• Read all instructions before using tumbler.</li> <li>• <b>DO NOT</b> tamper with controls.</li> <li>• <b>DO NOT</b> bypass any safety devices.</li> <li>• Always follow the fabric care instructions supplied by the garment manufacturer.</li> <li>• Remove laundry immediately after the tumbler stops.</li> <li>• <b>DO NOT</b> reach into tumbler if cylinder is revolving.</li> </ul> <p>To avoid creating any flammable vapors which may explode, ignite or cause corrosive damage, <b>DO NOT</b> dry the following materials:</p> <ul style="list-style-type: none"> <li>• Articles that have been cleaned in, soaked in, washed in or spotted with gasoline, dry-cleaning solvents or other flammable/explosive substances.</li> <li>• Plastics or articles containing foam rubber or similarly textured rubberlike materials.</li> <li>• Articles that have traces of flammable substances like cooking oil, machine oil, flammable chemicals or thinner.</li> <li>• Articles containing wax or cleaning chemicals.</li> <li>• Fiberglass curtains or draperies (unless the label says it can be done).</li> </ul> <p style="text-align: right;">W440R1</p> |                |

# Table of Contents

|  |    |
|--|----|
| <b>Introduction</b> .....                                    | 3  |
| Model Identification .....                                   | 3  |
| Wiring Diagram .....   | 3  |
| Serial Plate Location.....                                   | 4  |
| <b>Safety Information</b> .....                              | 5  |
| Important Safety Instructions .....                          | 5  |
| <b>Installation</b> .....                                    | 7  |
| Specifications and Dimensions.....                           | 7  |
| Cabinet Dimensions .....                                     | 8  |
| Horizontal Exhaust Outlet Locations.....                     | 9  |
| Gas Connection Locations .....                               | 10 |
| Electrical Connection Locations .....                        | 11 |
| Steam Connection Locations .....                             | 12 |
| Position and Level the Tumbler.....                          | 13 |
| Fire Suppression System.....                                 | 14 |
| Water Requirements.....                                      | 14 |
| Water Connections.....                                       | 14 |
| Electrical Requirements .....                                | 14 |
| Auxiliary Alarm .....  | 14 |
| Gas Requirements.....  | 15 |
| Natural Gas and Liquefied Petroleum.....                     | 15 |
| European Gas .....   | 16 |
| Exhaust Requirements .....                                   | 18 |
| Make-Up Air .....  | 18 |
| Venting.....   | 18 |
| Electrical Requirements.....                                 | 19 |
| Grounding Instructions .....                                 | 19 |
| Steam Requirements .....                                     | 20 |
| Thermal Oil Prep .....                                       | 20 |
| <b>Operation</b> .....                                       | 22 |
| Emergency Stop Button on CE Models.....                      | 22 |
| Operating Instructions .....                                 | 22 |
| Step 1: Clean Lint Screen/Compartment .....                  | 22 |
| Step 2: Load Laundry.....                                    | 22 |
| Step 3: Determine Control Type and Temperature Setting ..... | 22 |
| Step 4: Remove Laundry .....                                 | 22 |
| Control Instructions .....                                   | 23 |
| Electromechanical Coin Control.....                          | 23 |
| Manual Timer Control .....                                   | 24 |
| Dual Digital Timer Control.....                              | 25 |
| Single Drop Control.....                                     | 26 |
| DMP OPL Control .....  | 27 |
| DMP Coin Control.....  | 28 |
| Ignition Control Operation .....                             | 29 |
| <b>Disposal of Unit</b> .....                                | 30 |

© Published by permission of the copyright owner.

All rights reserved. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the expressed written consent of the publisher.

# Introduction

## Model Identification

Information in this manual is applicable to these models:

|                 | <b>Gas</b>   | <b>Steam/Thermal Oil</b>                            | <b>Electric</b>                 |
|-----------------|--|---|---------------------------------|
| <b>50 Pound</b> | CHD50G2-CU050L<br>CHD50G2-CU050N<br>DR50G2-BU050L<br>DR50G2-BU050N | BU050T<br>CHD50S2-CU050S<br>CU050T<br>DR50S2-BU050S | CHD50E2-CU050E<br>DR50E2-BU050E |
| <b>75 Pound</b> | CHD75G2-CU075L<br>CHD75G2-CU075N<br>DR75G2-BU075L<br>DR75G2-BU075N | BU075T<br>CHD75S2-CU075S<br>CU075T<br>DR75S2-BU075S | CHD75E2-CU075E<br>DR75E2-BU075E |

Includes models with the following control suffixes:

3O – DX4 OPL  
3V – DX4 vended  
3X – DX4 prep for coin  
CD – rotary coin drop  
CX – prep for coin  
DO – DMP OPL

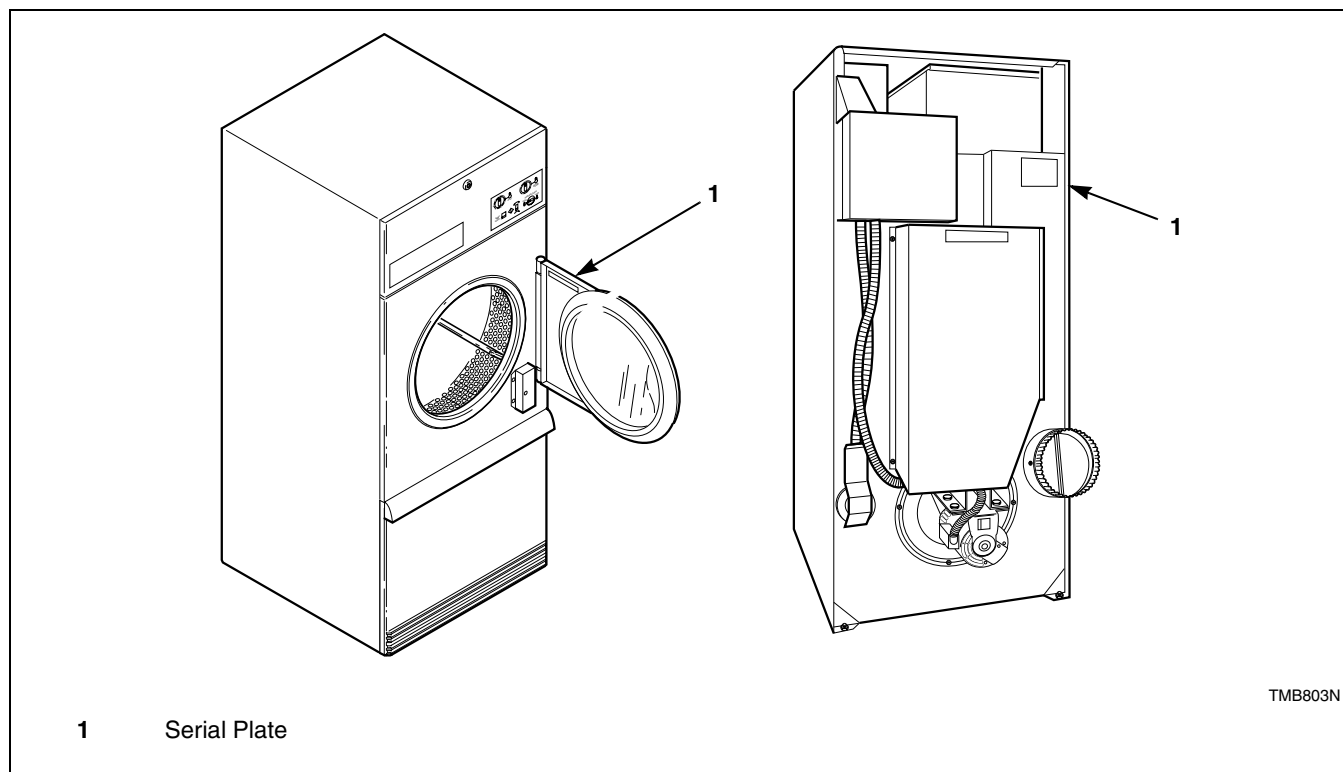
DV – DMP vended  
DX – DMP prep for coin  
MT – manual timer  
QT – dual digital timer  
R3 – reversing DX4 OPL  
RD – reversing DMP OPL

RQ – reversing dual digital timer  
RT – reversing manual timer  
SD – single drop  
SX – single drop, prep for coin

## Wiring Diagram

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


## Serial Plate Location



# Safety Information

## Save These Instructions

### Important Safety Instructions

|  |                                     |
|--|-------------------------------------|
|   | <h2 style="margin: 0;">WARNING</h2> |
| <p><b>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.</b></p> |                                     |
| <small>W359</small>  |                                     |

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 to play 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

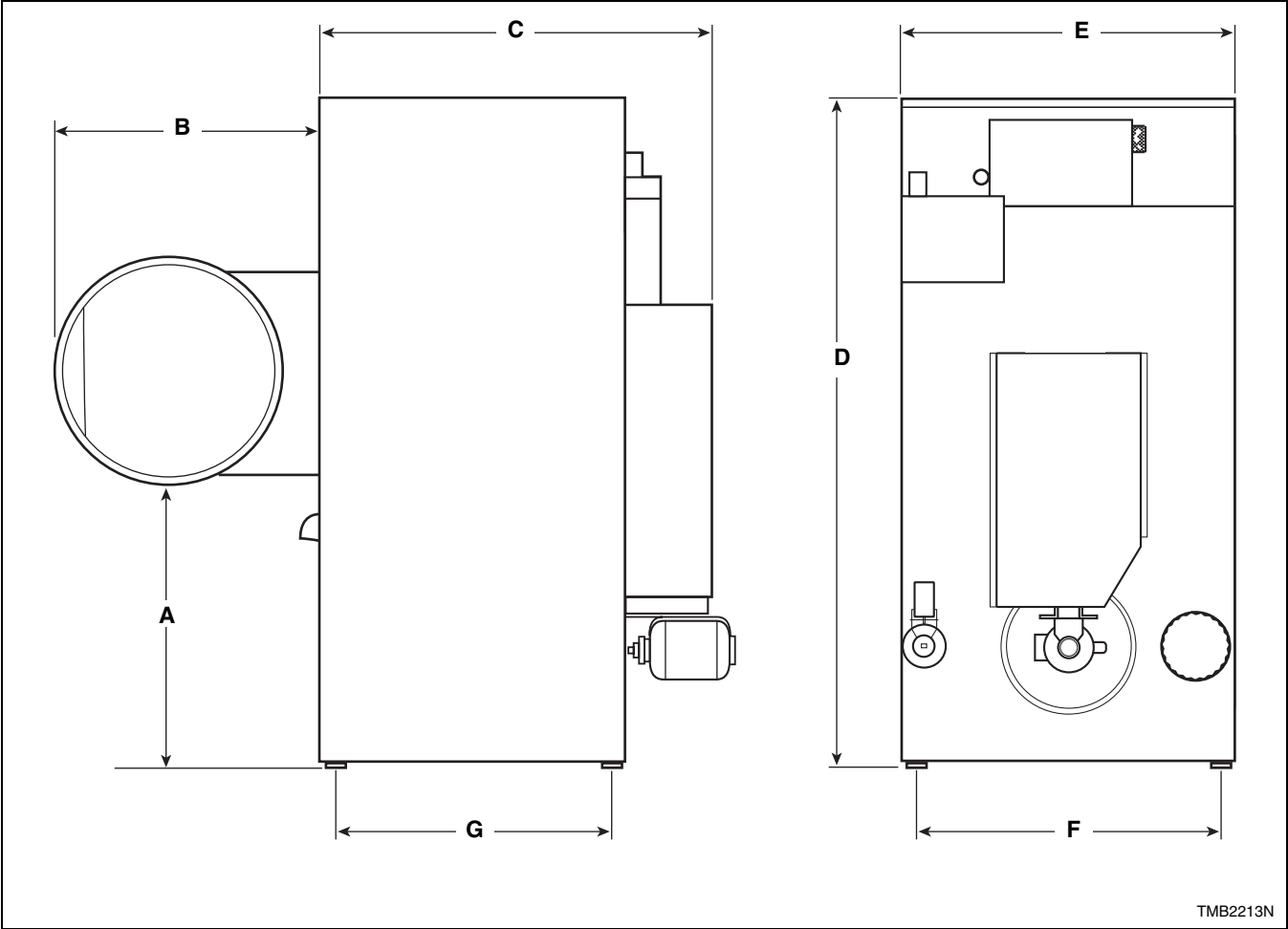


# Installation

## Specifications and Dimensions

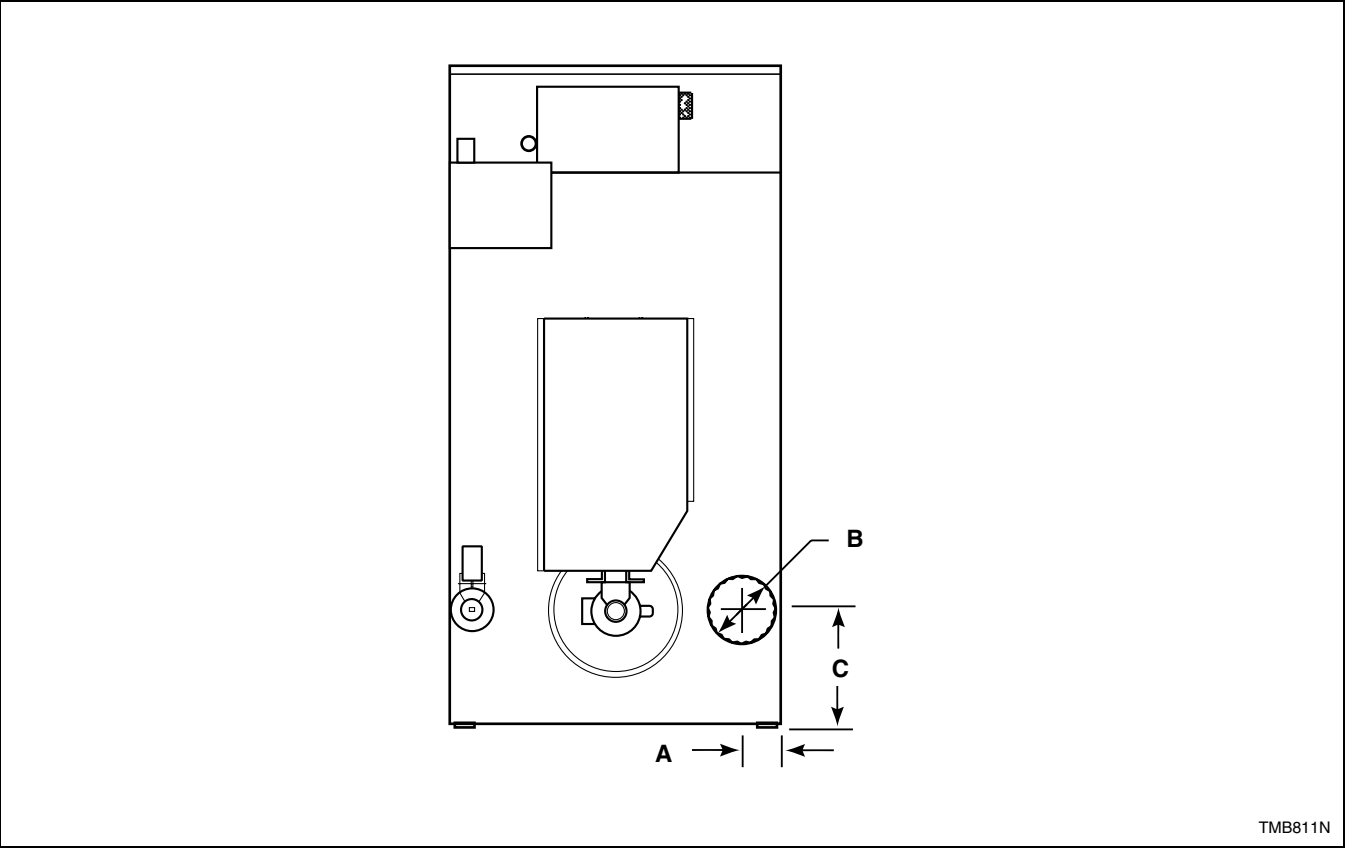
| Specifications   | 50 Pound   | 75 Pound   |
|--|--|--|
| Noise level measured during operation at operator position of 1 meter (3.3 feet) in front of machine and 1.6 meters (5.2 feet) from floor. | 63 dBA   | 69 dBA   |
| Net Weight (approximate):<br>kg (lbs.)   | 247<br>(545)                                     | 279<br>(615)   |
| Cylinder Size:<br>mm (in.)   | 940 x 762<br>(37 x 30)                           | 940 x 914<br>(37 x 36)   |
| Cylinder Capacity (dry weight):<br>kg (lbs.)   | 22.7<br>(50)                                     | 34<br>(75)   |
| Air Outlet Diameter:<br>mm (in.)   | 203<br>(8)                                       | 203<br>(8)   |
| Maximum Static Back Pressure:<br>mbar (W.C.I.)   | 1.3<br>(0.5)                                     | 1.3<br>(0.5)   |
| Maximum Airflow:<br>L/sec. (C.F.M.)  | 354<br>(750)                                     | Gas/Steam 50 Hz 354 (750)<br>Gas/Steam 60 Hz 434 (920)<br>Electric 354 (750) |
| Motor Horsepower:<br>Nonreversing<br>Reversing<br>Fan<br>Cylinder  | 1/2<br><br>1/3<br>1/3                            | 3/4<br><br>1/3<br>1/3  |
| <b>Gas Models</b>  |  |  |
| Gas Connection   | 1/2 in. NPT                                      | 1/2 in. NPT  |
| Gas Burner Rating:<br>Mj/hr (Btu/hr)   | 126.6<br>(120,000)                               | 174.1<br>(165,000)   |
| <b>Electric Models</b>   |  |  |
| Heating Elements Rating:<br>Kilowatts (kW)   | 21 kW (240 V/50 Hertz)<br>30 kW (other voltages) | 30 kW  |
| <b>Steam Models</b>  |  |  |
| Steam Connection   | 3/4 in. NPT                                      | 3/4 in. NPT  |
| Steam Coil Rating:<br>Btu/hr (Boiler Horsepower)   | 5.1<br>(177,500)                                 | 6.1<br>(210,300)   |

Cabinet Dimensions



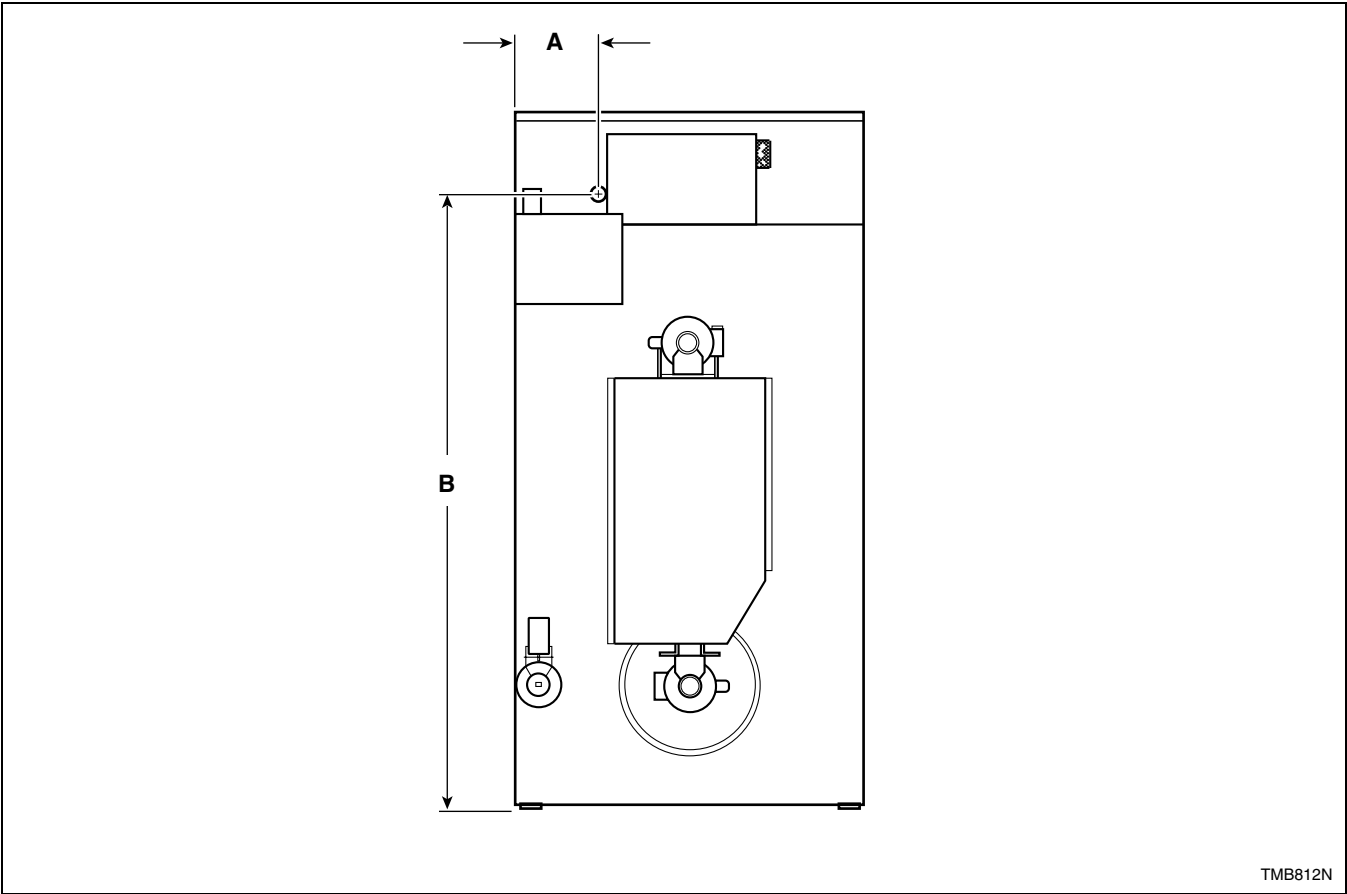
| Models                     | A                     | B                     | C                   | D                       | E                      | F                  | G                    |
|----------------------------|-----------------------|-----------------------|---------------------|-------------------------|------------------------|--------------------|----------------------|
| 050<br>Gas and<br>Electric | 781 mm<br>(30.75 in.) | 717 mm<br>(28.25 in.) | 1194 mm<br>(47 in.) | 1946 mm<br>(76.625 in.) | 981 mm<br>(38.625 in.) | 838 mm<br>(33 in.) | 749 mm<br>(29.5 in.) |
| 050<br>Steam               | 781 mm<br>(30.75 in.) | 717 mm<br>(28.25 in.) | 1194 mm<br>(47 in.) | 2032 mm<br>(80 in.)     | 981 mm<br>(38.625 in.) | 838 mm<br>(33 in.) | 749 mm<br>(29.5 in.) |
| 075<br>Gas and<br>Electric | 781 mm<br>(30.75 in.) | 717 mm<br>(28.25 in.) | 1346 mm<br>(53 in.) | 1946 mm<br>(76.625 in.) | 981 mm<br>(38.625 in.) | 838 mm<br>(33 in.) | 902 mm<br>(35.5 in.) |
| 075<br>Steam               | 781 mm<br>(30.75 in.) | 717 mm<br>(28.25 in.) | 1346 mm<br>(53 in.) | 2032 mm<br>(80 in.)     | 981 mm<br>(38.625 in.) | 838 mm<br>(33 in.) | 902 mm<br>(35.5 in.) |

Horizontal Exhaust Outlet Locations



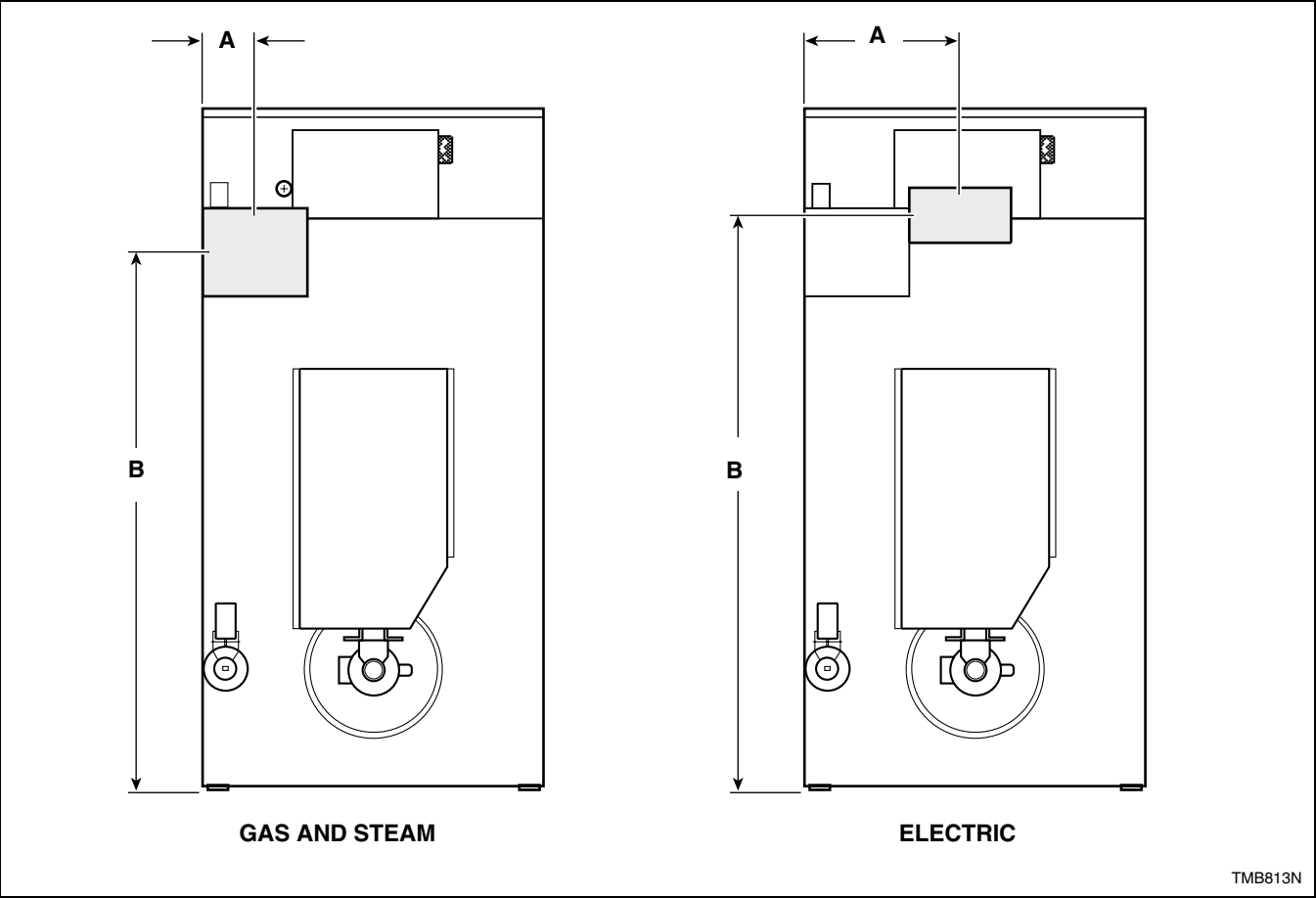
| Models  | A                     | B                 | C                      |
|---------|-----------------------|-------------------|------------------------|
| 050/075 | 137 mm<br>(5.375 in.) | 203 mm<br>(8 in.) | 340 mm<br>(13.375 in.) |

Gas Connection Locations



| Models | Diameter    | A                     | B                      |
|--------|-------------|-----------------------|------------------------|
| 050    | 1/2 in. NPT | 394 mm<br>(15.5 in.)  | 1670 mm<br>(65.75 in.) |
| 075    | 1/2 in. NPT | 400 mm<br>(15.75 in.) | 1670 mm<br>(65.75 in.) |

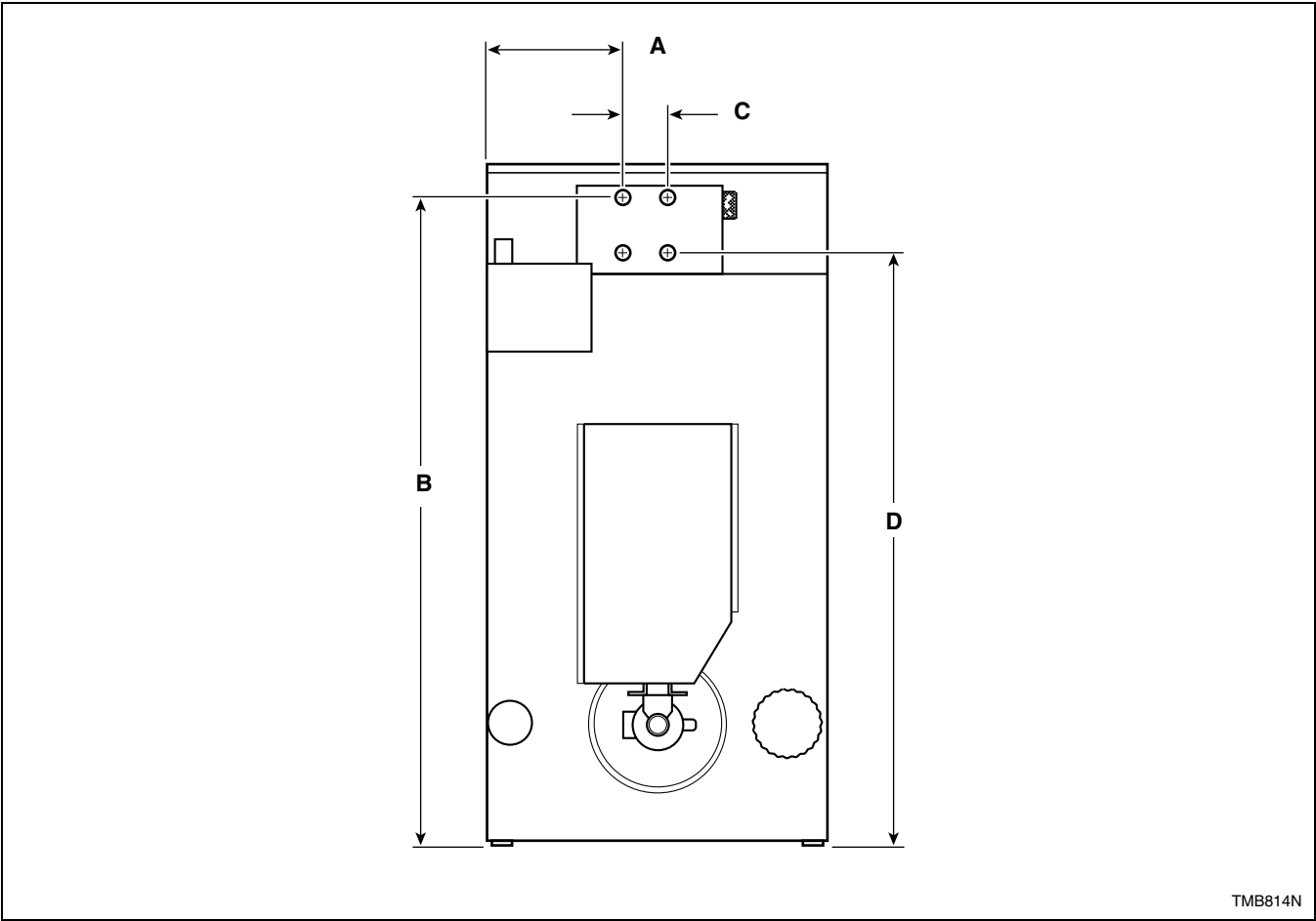
Electrical Connection Locations



| Models        | A                   | B                     |
|---------------|---------------------|-----------------------|
| Gas and Steam | 241 mm<br>(9.5 in.) | 1613 mm<br>(63.5 in.) |
| Electric      | 483 mm<br>(19 in.)  | 1626 mm<br>(64 in.)   |

**NOTE:** These figures are approximate dimensions only.

Steam Connection Locations



| Models  | Diameter    | A                     | B                      | C                   | D                      |
|---------|-------------|-----------------------|------------------------|---------------------|------------------------|
| 050/075 | 3/4 in. NPT | 387 mm<br>(15.25 in.) | 1848 mm<br>(72.75 in.) | 190 mm<br>(7.5 in.) | 1645 mm<br>(64.75 in.) |

## Position and Level the Tumbler

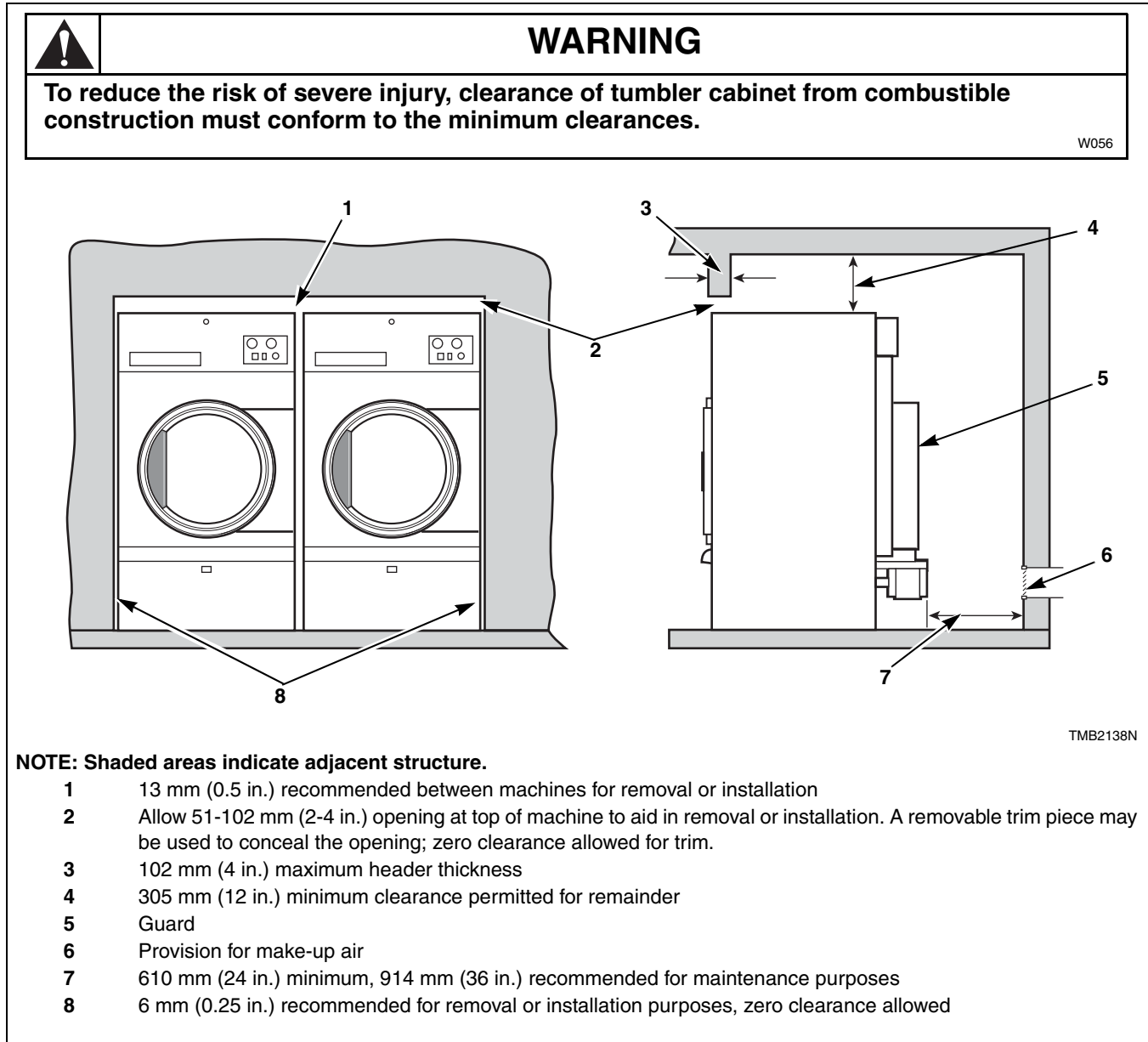


Figure 1

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

## Fire Suppression System

### 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 19 mm (3/4 inch) hose. The fire suppression system equipped tumbler must be supplied with a minimum water pipe size of 12.7 mm (1/2 inch) and be provided with a minimum of 138 kPa (20 psi) and a maximum of 827 kPa (120 psi) of pressure at all times. Flowrate must be no less than, but approximately 57 liter (15 gallons) per minute.

**NOTE:** Water pressure under 138 kPa (20 psi) will cause low flow and water leakage at water solenoid valve.

**IMPORTANT:** Temperature of the water supply must be kept between 4.4° and 48.9°C (40° and 120°F). If water in the supply line or water solenoid valve freezes, the fire suppression system will not operate.

**IMPORTANT:** If temperature sensors inside the tumbler register a temperature below 4.4°C (40°F), the fire suppression system control will lock out. This feature protects against operation of the tumbler with a possible frozen water supply. Only when the temperature sensors register a temperature above 4.4°C (40°F) 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

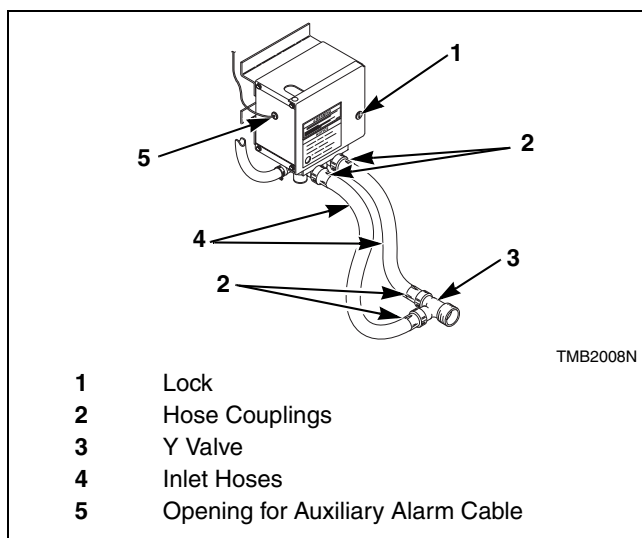


Figure 2

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

**IMPORTANT:** Replace all hoses every five years.

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

Part No. 20617 Inlet hose 2.44 m (8 feet)

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

### Electrical Requirements

|  |                |
|--|----------------|
|  | <b>WARNING</b> |
| <p>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.</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/contactator box.

### Auxiliary Alarm


During tumbler installation, you have the option to connect a separate alarm system to this auxiliary output. Use of the auxiliary output is not required for the fire suppression system to operate, but may be used for additional protection.

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



## Gas Requirements

### Natural Gas and Liquefied Petroleum


|  |                |
|--|----------------|
|   | <b>WARNING</b> |
| <p>To reduce the risk of fire or explosion, <b>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!</b> It will first be necessary to convert the gas burner orifice and gas valve. Appropriate conversion kits are available.</p> |                |
| W060   |                |

**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 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 3.45 kPa, 34.5 mbar (0.5 psi).


**IMPORTANT:** The tumbler 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 3.45 kPa, 34.5 mbar (0.5 psi).

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

|   |                |
|---|----------------|
|    | <b>WARNING</b> |
| <p>To reduce the risk of fire or explosion, if the tumbler is to be connected to <b>Liquefied Petroleum (L.P.) gas</b>, a vent to the outdoors must be provided in the room where the tumbler is installed.</p> |                |
| W062  |                |

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

## European Gas

|   |                |
|---|----------------|
|    | <b>WARNING</b> |
| <p><b>To reduce the risk of electric shock, fire, explosion, serious injury or death:</b></p> <ul style="list-style-type: none"><li>• <b>Disconnect electric power to the tumbler before servicing.</b></li><li>• <b>Close gas shut-off valve to gas tumbler before servicing.</b></li><li>• <b>Close steam valve to steam tumbler before servicing.</b></li><li>• <b>Never start the tumbler with any guards/panels removed.</b></li><li>• <b>Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.</b></li></ul> <p style="text-align: right;">W002</p> |                |

### *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:

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

Machines configured for Natural Gas (regulator/governor) may be converted to L.P. Gas (not regulated/no governor) with block-open kit, Part No. M400763.

Serial plates are configured for GB/IE/PT/ES/IT/GR/LU/CH.

## Gases and Configurations

| Country Code                         | Gas Type    | Group | Supply Pressure, mbar | Burner Orifice Pressure, mbar | Capacity/ Model | Diameter, mm | Quantity | Burner Orifice Part No. |
|--------------------------------------|-------------|-------|-----------------------|-------------------------------|-----------------|--------------|----------|-------------------------|
| <b>DK/NO/SE/FI/CZ/EE/LV/LT/SI/SK</b> | Natural Gas | H     | 20                    | 8.9                           | 050<br>075      | 3.7<br>3.6   | 2<br>3   | M401000<br>M401014      |
|                                      | L.P. Gas    | B/P   | 30                    | No Governor                   | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |
| <b>DE**</b>                          | Natural Gas | E     | 20                    | 8.9                           | 050<br>075      | 3.7<br>3.6   | 2<br>3   | M401000<br>M401014      |
|                                      |             | LL    | 25                    | 12.6                          | 050<br>075      | 3.7<br>3.6   | 2<br>3   | M401000<br>M401014      |
|                                      | L.P. Gas    | B/P   | 30                    | No Governor                   | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |
|                                      |             | B/P   | 50                    | 28.5                          | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |
| <b>NL</b>                            | Natural Gas | L     | 25                    | 12.6                          | 050<br>075      | 3.7<br>3.6   | 2<br>3   | M401000<br>M401014      |
|                                      | L.P. Gas    | B/P   | 30                    | No Governor                   | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |
| <b>BE/FR*</b>                        | Natural Gas | E+    | 20/25                 | No Governor                   | 050<br>075      | 3.0<br>2.9   | 2<br>3   | M401017<br>N/A          |
|                                      | L.P. Gas    | +     | 28/37                 | No Governor                   | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |
| <b>GB/IE/PT/ES/IT/GR/LU/CH</b>       | Natural Gas | H     | 20                    | 8.9                           | 050<br>075      | 3.7<br>3.6   | 2<br>3   | M401000<br>M401014      |
|                                      | L.P. Gas    | +     | 28/37                 | No Governor                   | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |
| <b>AT**</b>                          | Natural Gas | H     | 20                    | 8.9                           | 050<br>075      | 3.7<br>3.6   | 2<br>3   | M401000<br>M401014      |
|                                      | L.P. Gas    | B/P   | 50                    | 28.5                          | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |
| <b>CY/IS/MT</b>                      | L.P. Gas    | B/P   | 30                    | No Governor                   | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |
| <b>HU</b>                            | Natural Gas | H     | 25                    | 8.9                           | 050<br>075      | 3.7<br>3.6   | 2<br>3   | M401000<br>M401014      |
|                                      | L.P. Gas    | B/P   | 30                    | No Governor                   | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |
| <b>PL</b>                            | Natural Gas | H     | 20                    | 8.9                           | 050<br>075      | 3.7<br>3.6   | 2<br>3   | M401000<br>M401014      |
|                                      | L.P. Gas    | 3P    | 37                    | No Governor                   | 050<br>075      | 2.1<br>2.0   | 2<br>3   | M401003<br>M400999      |

Table 1

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


N/A = Part no longer available.

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

\*\* For L.P. Gas, Group B/P with 50 mbar supply pressure, convert using Natural Gas model, M411334 L.P. Conversion Kit.

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

## Exhaust Requirements

|  |                |
|--|----------------|
|   | <b>WARNING</b> |
| <p><b>A drying tumbler produces combustible lint. To reduce the risk of fire, the tumbler must be exhausted to the outdoors.</b></p> <p style="text-align: right;">W057</p>  |                |
| <p><b>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.</b></p> <p style="text-align: right;">W059</p> |                |

### 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 each tumbler is:

**928 sq. cm** (144 sq. in.) for 50 pound tumbler models

**1258 sq. cm** (195 sq. in.) for 75 pound tumbler 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 a room containing tumblers. It is better to have the water heater in a separate room with a separate air inlet.

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

## Electrical Requirements


|  |                |
|--|----------------|
|   | <b>WARNING</b> |
| <p><b>To reduce the risk of electric shock, fire, explosion, serious injury or death:</b></p> <ul style="list-style-type: none"> <li>• Disconnect electric power to the tumbler before servicing.</li> <li>• Close gas shut-off valve to gas tumbler before servicing.</li> <li>• Close steam valve to steam tumbler before servicing.</li> <li>• Never start the tumbler with any guards/panels removed.</li> <li>• Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumbler is properly grounded.</li> </ul> <p style="text-align: right;">W002</p> |                |
| <p><b>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.</b></p> <p style="text-align: right;">W068</p>  |                |
| <p><b>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.</b></p> <p style="text-align: right;">W069</p>   |                |


### 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.

|   |                |
|---|----------------|
|    | <b>WARNING</b> |
| <p><b>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.</b></p> <p style="text-align: right;">W409</p> |                |

|   |                |
|---|----------------|
|    | <b>CAUTION</b> |
| <p><b>Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.</b></p> <p style="text-align: right;">W071</p> |                |

All OPL (non-vend) 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.

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

## Steam Requirements

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

- Refer to *Figure 3* 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 the system has a gravity return to 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

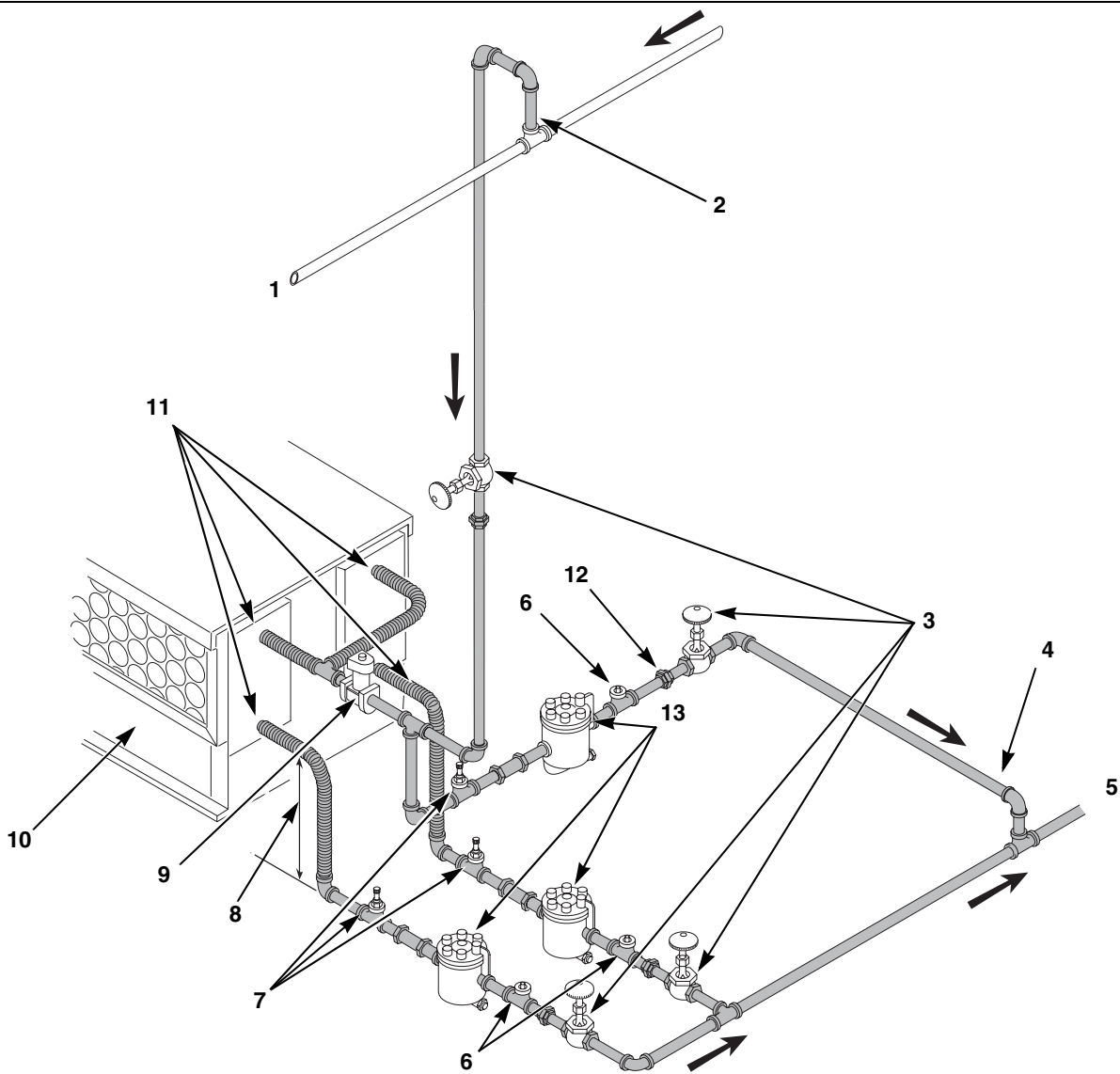
**All system components must have a 8.6 bar (125 psig) working pressure. Shut-off valves must be installed upstream of the steam solenoid valve and downstream of each steam trap so components can be isolated for maintenance or emergency purposes.**

**All components (solenoid valve, traps) must be supported to minimize loads on the tumbler steam coil connections.**

W701

## Thermal Oil Prep

It is the responsibility of the customer to install appropriate coil and heating system for thermal oil prep models. Alliance Laundry Systems, LLC. is not responsible for the performance or safety of the customer installed thermal oil system. To ensure proper operation, refer to the ***Specifications and Dimensions*** section for the BTU input of equivalent steam models. Thermal oil systems that do not deliver appropriate BTUs will dry slower. For solenoid valve wiring connections, refer to the Wiring Diagram supplied with tumbler.



TMB2014N

**NOTE:** Refer to *Table 2* for sizing of steam lines. Piping must also be sized accordingly for length of runs, and number of elbows.

- |   |   |    |  |
|---|---|----|--|
| 1 | Supply                                  | 8  | 457 mm (18 in.) Drop                   |
| 2 | 305 mm (12 in.) Riser                   | 9  | Solenoid Valve (Supplied with machine) |
| 3 | Shut-Off Valve                          | 10 | Steam Bonnet                           |
| 4 | Condensate Return Line from Supply Line | 11 | Flexible Line                          |
| 5 | Return                                  | 12 | Union                                  |
| 6 | Check Valve                             | 13 | Trap with Built-In Strainer            |
| 7 | Vacuum Breaker (Optional)               |    |  |

Figure 3

| Steam Pressure<br>bar (PSI) | Minimum Pipe Diameter | Steam Trap Size*<br>(Pounds Condensate/Hour) |
|-----------------------------|-----------------------|--|
| 5.3 - 6.9 (80-100)          | 3/4 in. NPT           | 160  |

\* Based on 100 PSI.

Table 2

# 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.

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 OPL tumblers are factory equipped with an emergency stop button located on the front panel. Refer to *Figure 4*.

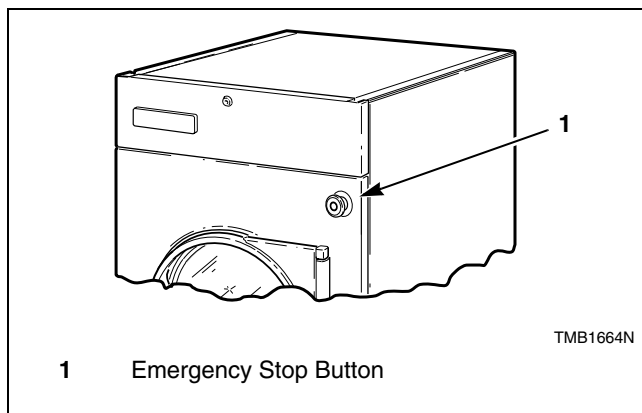


Figure 4

To operate emergency stop button:

- Press red emergency stop button to stop all action.
- 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 23-28, and follow instructions for the appropriate control type.

The type of fabric being dried will determine the 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

### Electromechanical Coin Control

#### *CD and CX Control Suffixes*

1. Set the TEMPERATURE selector at HIGH or LOW, or anywhere between these settings.

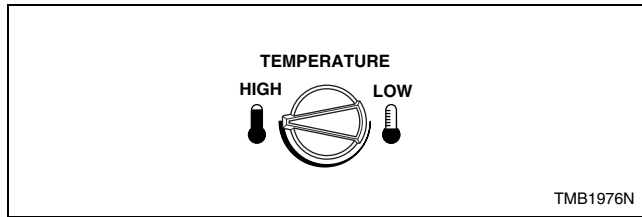


Figure 5

2. Coin Drop Models: Insert the coin(s) in the coin slot, turn the knob to the right and release it.

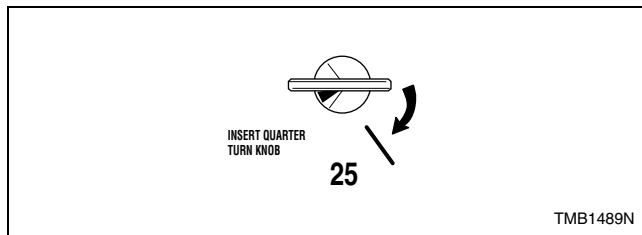


Figure 6

3. Press the PUSH TO START button and hold it in for approximately three (3) seconds.

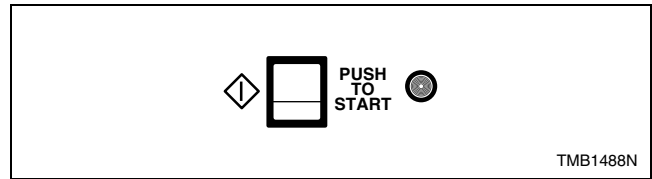


Figure 7

**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. However, the timer will continue to run. To restart the cycle, both doors must be closed and the PUSH TO START button must be pressed.**

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

## Manual Timer Control

### MT and RT Control Suffixes

1. Set the HEAT/DRYING timer for the number of minutes (from 0-60) desired.

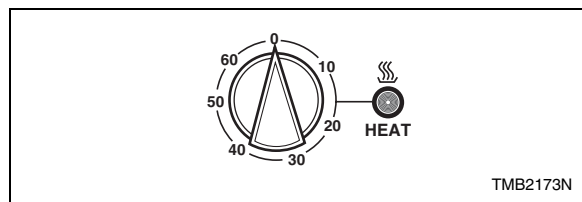


Figure 8

2. Set the COOL DOWN/COOLING timer for the number of minutes (from 0-15) desired.

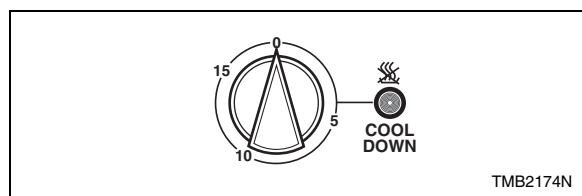


Figure 9

3. Set the TEMPERATURE selector at HIGH, LOW or anywhere between these settings.

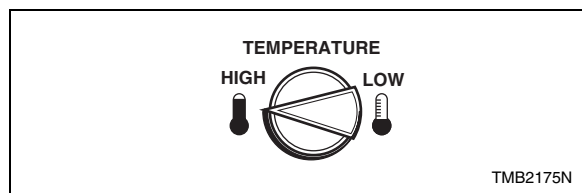


Figure 10

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

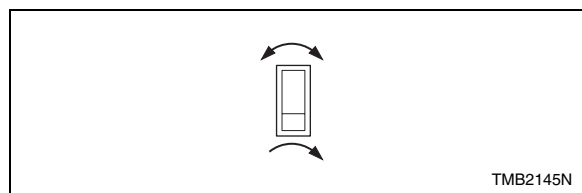


Figure 11

5. Press the PUSH TO START button in and hold it in for approximately three (3) seconds. This starts the tumbler cycle.

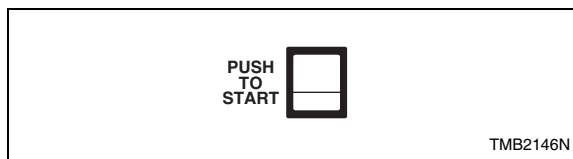


Figure 12

**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.**

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

## Dual Digital Timer Control

### QT and RQ Control Suffixes

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

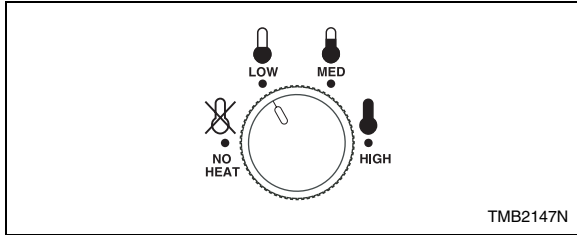


Figure 13

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

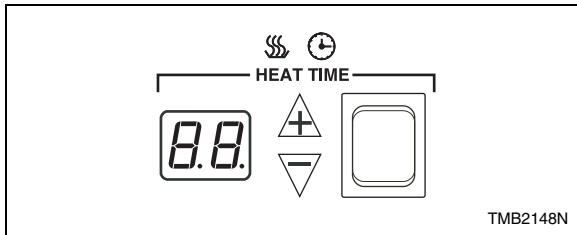


Figure 14

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

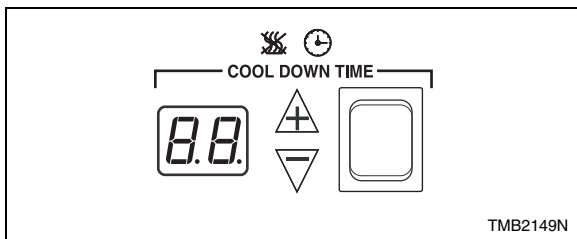


Figure 15

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

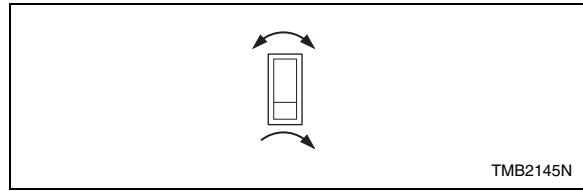


Figure 16

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

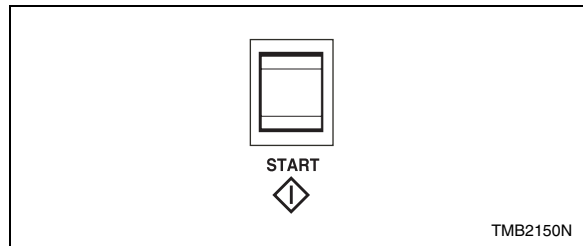


Figure 17

**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.

6. 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.

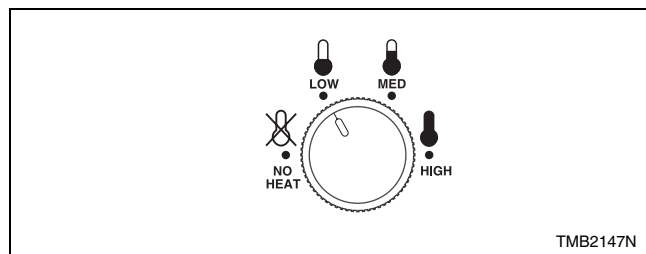


Figure 18

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

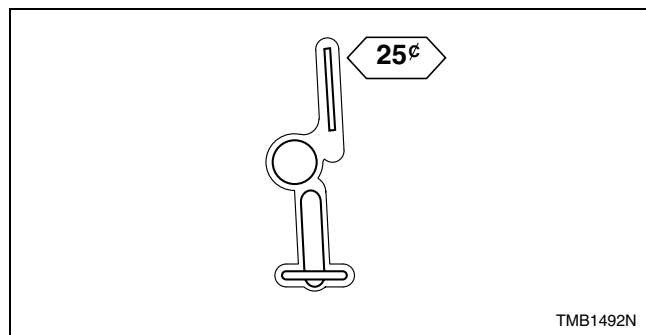


Figure 19

3. Press START button to start tumbler.

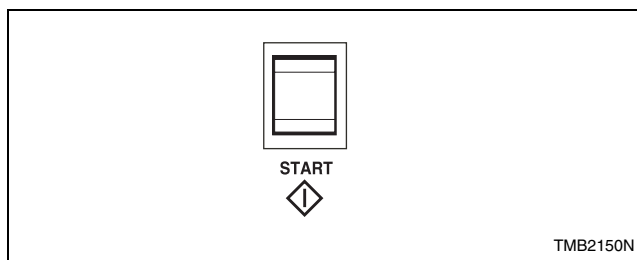


Figure 20

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

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

## DMP OPL Control

### DO Control Suffix

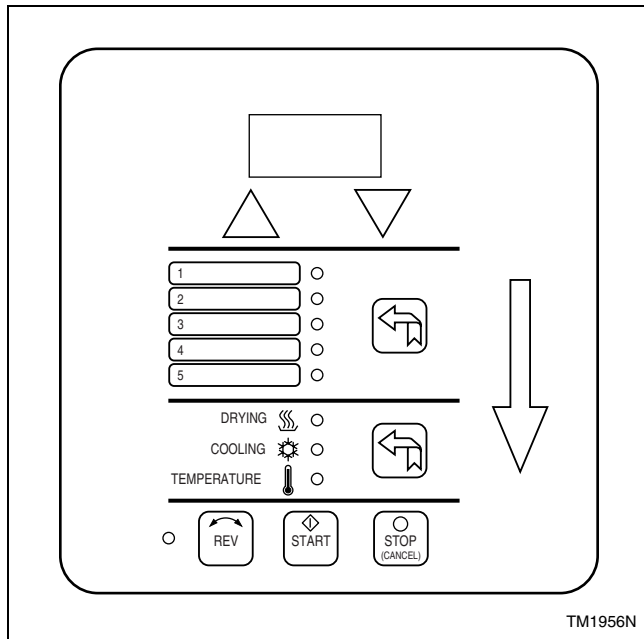


Figure 21

### DMP OPL Features

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 tumbler.

### 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, refer to **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.

### 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.

## DMP Coin Control

### *DV and DX Control Suffixes*

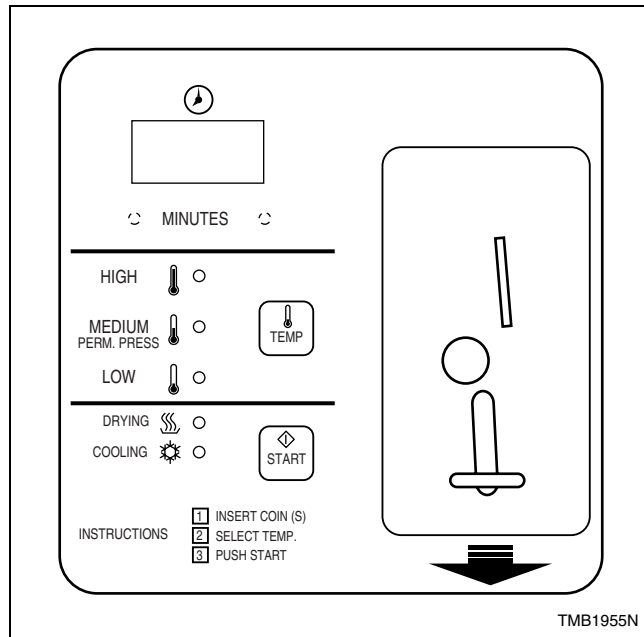


Figure 22

### *DMP Coin Features*

- 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.

# Ignition Control Operation

## 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 23*. The Diagnostic LED will indicate the status of the ignition control. Refer to *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.

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

Table 3

| 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 |

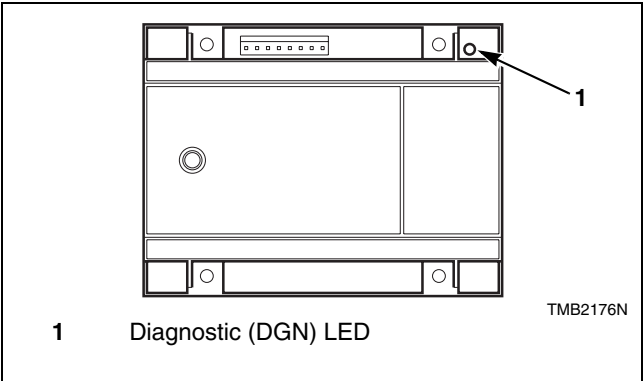


Figure 23

## 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 24*. 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.

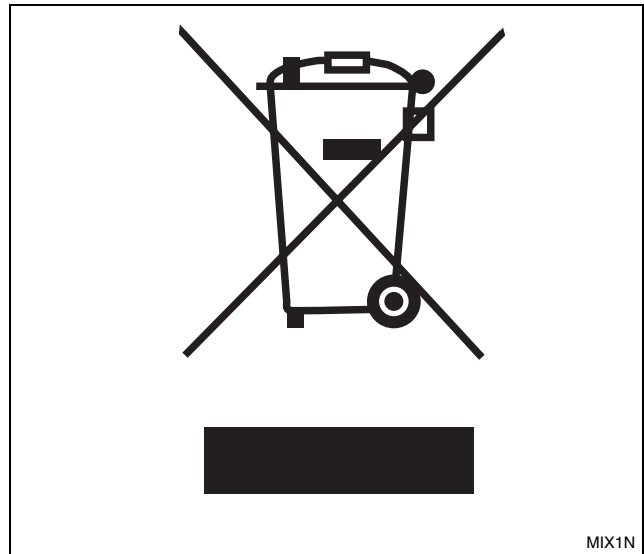


Figure 24