

# Fire Suppression System

Tumble Dryers

Refer to Page 3 for Model Identification

— Installation/Maintenance/Troubleshooting —

**Keep These Instructions for Future Reference.**

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





Installation in the U.S.A., Canada and Australia must conform with the codes listed below; other locations must conform with local codes.

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

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

In Australia, installation must comply with the Australian Gas Association Installation Code for Gas Burning Appliances and Equipment.

|  |                |
|--|----------------|
|   | <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. <span style="float: right;">W033</span></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. <span style="float: right;">W052</span></li></ul> |                |
| <b>FOR YOUR SAFETY</b>   |                |
| <p>Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. <span style="float: right;">W053</span></p>  |                |

|   |                      |
|---|----------------------|
|    | <b>MISE EN GARDE</b> |
| <p><b>POUR VOTRE SÉCURITÉ</b>, les informations de ce guide doivent être respectées afin de réduire les risques d’incendie, d’explosion ou d’éviter les dommages matériels, personnels ou blessures mortelles. <span style="float: right;">W033R3QU</span></p> <ul style="list-style-type: none"><li>• Ne pas entreposer ou utiliser d’essence ou toutes autres vapeurs et liquides inflammables à proximité de cette machine ou de tout autre appareil.</li><li>• <b>QUE FAIRE EN CAS D’ODEUR DE GAZ :</b><ul style="list-style-type: none"><li>– Ne pas mettre d’appareil en marche.</li><li>– Ne pas toucher aux interrupteurs électriques ; ne pas utiliser le téléphone des lieux.</li><li>– Évacuer la pièce, le bâtiment ou la zone de tous les occupants.</li><li>– Appeler immédiatement le fournisseur de gaz de la maison d’un voisin. Respecter les instructions communiquées par le fournisseur.</li><li>– Si vous ne pouvez pas joindre le fournisseur de gaz, appeler le service d’incendie.</li></ul></li><li>• L’installation et l’entretien doivent être effectués par un installateur, service d’entretien qualifiés ou par le fournisseur de gaz. <span style="float: right;">W052R5QU</span></li></ul> |                      |
| <b>POUR VOTRE SÉCURITÉ</b>  |                      |
| <p>Ne pas entreposer ou utiliser d’essence ou toutes autres vapeurs et liquides inflammables à proximité de cette unité ou de tout autre appareil. <span style="float: right;">W053R2QU</span></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.

# Table of Contents

|  |    |
|--|----|
| <b>Introduction</b> .....  | 3  |
| Model Identification .....   | 3  |
| Serial Plate Location .....  | 7  |
| Wiring Diagram .....   | 7  |
| <b>Safety Information</b> .....  | 8  |
| Explanation of Safety Messages.....                                    | 8  |
| Important Safety Instructions .....                                    | 9  |
| <b>Theory of Operation</b> .....                                       | 11 |
| Temperature Sensor .....   | 13 |
| Modes of Operation .....   | 14 |
| <b>Installation</b> .....  | 15 |
| Check Local Codes and Permits.....                                     | 15 |
| Control Box Dimensions .....   | 16 |
| Water Requirements .....   | 18 |
| Water Connections.....   | 18 |
| Electrical Requirements .....  | 20 |
| Auxiliary Alarm .....  | 21 |
| <b>Maintenance</b> .....   | 22 |
| Fire Suppression System Maintenance Test .....                         | 22 |
| Maintenance Record .....   | 24 |
| <b>Troubleshooting</b> .....   | 25 |
| Tumbler Does Not Operate and Light Is On.....                          | 26 |
| Water Discharge, but No Fire .....                                     | 27 |
| Tumbler Does Not Operate and Light Is Off.....                         | 28 |
| Tumbler Operates, but Water Does Not Discharge<br>and Light Is On..... | 29 |

© 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:

|                 | Gas            |                |        | Steam/Thermal Oil |        | Electric          |
|-----------------|----------------|----------------|--------|-------------------|--------|-------------------|
| <b>25 Pound</b> | CHD25G2-CA025L | HT025L         | PT025L | CHD25S2-CT025S    | LT025S | Not<br>Applicable |
|                 | CHD25G2-CA025N | HT025N         | PT025N | CHD25S2-CU025S    | LU025S |                   |
|                 | CHD25G2-CT025L | HU025L         | PU025L | DR25S2-BT025S     | PT025S |                   |
|                 | CHD25G2-CT025N | HU025N         | PU025N | DR25S2-BU025S     | PU025S |                   |
|                 | CHD25G2-CU025L | IPD25G2-IT025L | SA025L | GT025S            | ST025S |                   |
|                 | CHD25G2-CU025N | IPD25G2-IT025N | SA025N | GU025S            | SU025S |                   |
|                 | DR25G2-BA025L  | KA025L         | ST025L | HT025S            | UT025S |                   |
|                 | DR25G2-BA025N  | KA025N         | ST025N | HU025S            | UU025S |                   |
|                 | DR25G2-BT025L  | KT025L         | SU025L | IPD25S2-IT025S    | YT025S |                   |
|                 | DR25G2-BT025N  | KT025N         | SU025N | KT025S            | YU025S |                   |
|                 | DR25G2-BU025L  | KU025L         | UA025L | KU025S            |        |                   |
|                 | DR25G2-BU025N  | KU025N         | UA025N |                   |        |                   |
|                 | GA025L         | LA025L         | UT025L |                   |        |                   |
|                 | GA025N         | LA025N         | UT025N |                   |        |                   |
|                 | GT025L         | LT025L         | UU025L |                   |        |                   |
|                 | GT025N         | LT025N         | UU025N |                   |        |                   |
|                 | GU025L         | LU025L         | YT025L |                   |        |                   |
|                 | GU025N         | LU025N         | YT025N |                   |        |                   |
|                 | HA025L         | PA025L         | YU025L |                   |        |                   |
|                 | HA025N         | PA025N         | YU025N |                   |        |                   |
| <b>30 Pound</b> | CHD30G2-CA030L | HT030L         | PT030N | CHD30S2-CT030S    | LT030S | Not<br>Applicable |
|                 | CHD30G2-CA030N | HT030N         | PU030L | CHD30S2-CU030S    | LU030S |                   |
|                 | CHD30G2-CT030L | HU030L         | PU030N | DR30S2-BT030S     | PT030S |                   |
|                 | CHD30G2-CT030N | HU030N         | SA030L | DR30S2-BU030S     | PU030S |                   |
|                 | CHD30G2-CU030L | IPD30G2-IT030L | SA030N | GT030S            | ST030S |                   |
|                 | CHD30G2-CU030N | IPD30G2-IT030N | ST030D | GU030S            | SU030S |                   |
|                 | DR30G2-BA030L  | KA030L         | ST030L | HT030S            | UT030S |                   |
|                 | DR30G2-BA030N  | KA030N         | ST030N | HU030S            | UU030S |                   |
|                 | DR30G2-BT030L  | KT030L         | SU030L | IPD30S2-IT030S    | YT030S |                   |
|                 | DR30G2-BT030N  | KT030N         | SU030N | KT030S            | YU030S |                   |
|                 | DR30G2-BU030L  | KU030L         | UA030L | KU030S            |        |                   |
|                 | DR30G2-BU030N  | KU030N         | UA030N |                   |        |                   |
|                 | GA030L         | LA030L         | UT030L |                   |        |                   |
|                 | GA030N         | LA030N         | UT030N |                   |        |                   |
|                 | GT030L         | LT030L         | UU030L |                   |        |                   |
|                 | GT030N         | LT030N         | UU030N |                   |        |                   |
|                 | GU030L         | LU030L         | YT030L |                   |        |                   |
|                 | GU030N         | LU030N         | YT030N |                   |        |                   |
|                 | HA030L         | PA030L         | YU030L |                   |        |                   |
|                 | HA030N         | PA030N         | YU030N |                   |        |                   |
| HT030D          | PT030L         |                |        |                   |        |                   |

(continued)

**Introduction**

(continued)

|                 | <b>Gas</b>     |                |        | <b>Steam/Thermal Oil</b> |        | <b>Electric</b>   |
|-----------------|----------------|----------------|--------|--------------------------|--------|-------------------|
| <b>35 Pound</b> | CHD35G2-CA035L | HT035L         | PT035L | CHD35S2-CT035S           | LT035S | Not<br>Applicable |
|                 | CHD35G2-CA035N | HT035N         | PT035N | CHD35S2-CU035S           | LU035S |                   |
|                 | CHD35G2-CT035L | HU035L         | PU035L | DR35S2-BT035S            | PT035S |                   |
|                 | CHD35G2-CT035N | HU035N         | PU035N | DR35S2-BU035S            | PU035S |                   |
|                 | CHD35G2-CU035L | IPD35G2-IT035L | SA035L | GT035S                   | ST035S |                   |
|                 | CHD35G2-CU035N | IPD35G2-IT035N | SA035N | GU035S                   | SU035S |                   |
|                 | DR35G2-BA035L  | KA035L         | ST035L | HT035S                   | UT035S |                   |
|                 | DR35G2-BA035N  | KA035N         | ST035N | HU035S                   | UU035S |                   |
|                 | DR35G2-BT035L  | KT035L         | SU035L | IPD35S2-IT035S           | YT035S |                   |
|                 | DR35G2-BT035N  | KT035N         | SU035N | KT035S                   | YU035S |                   |
|                 | DR35G2-BU035L  | KU035L         | UA035L | KU035S                   |        |                   |
|                 | DR35G2-BU035N  | KU035N         | UA035N |                          |        |                   |
|                 | GA035L         | LA035L         | UT035L |                          |        |                   |
|                 | GA035N         | LA035N         | UT035N |                          |        |                   |
|                 | GT035L         | LT035L         | UU035L |                          |        |                   |
|                 | GT035N         | LT035N         | UU035N |                          |        |                   |
|                 | GU035L         | LU035L         | YT035L |                          |        |                   |
|                 | GU035N         | LU035N         | YT035N |                          |        |                   |
|                 | HA035L         | PA035L         | YU035L |                          |        |                   |
|                 | HA035N         | PA035N         | YU035N |                          |        |                   |
| <b>50 Pound</b> | AT050L         | GT050L         | LU050N | AT050S                   | KT050T | AT050E            |
|                 | AT050N         | GT050N         | PA050L | CHD50S2-CT050S           | KU050S | CHD50E2-CT050E    |
|                 | CHD50G2-CA050L | GU050L         | PA050N | CHD50S2-CU050S           | KU050T | CHD50E2-CU050E    |
|                 | CHD50G2-CA050N | GU050N         | PT050L | CT050T                   | LT050S | DR55E2-BT050E     |
|                 | CHD50G2-CT050L | HA050L         | PT050N | CU050T                   | LT050T | DR55E2-BU050E     |
|                 | CHD50G2-CT050N | HA050N         | PU050L | DR50S2-BT050S            | LU050S | GT050E            |
|                 | CHD50G2-CU050L | HT050D         | PU050N | DR50S2-BT050T            | LU050T | GU050E            |
|                 | CHD50G2-CU050N | HT050L         | SA050L | DR50S2-BU050S            | PT050S | HT050E            |
|                 | DR50G2-BA050L  | HT050N         | SA050N | DR50S2-BU050T            | PT050T | HU050E            |
|                 | DR50G2-BA050N  | HU050L         | ST050D | DR55S2-BT050S            | PU050S | IPD50E2-IT050E    |
|                 | DR50G2-BT050D  | HU050N         | ST050L | DR55S2-BT050T            | PU050T | KT050E            |
|                 | DR50G2-BT050L  | IPD50G2-IT050L | ST050N | DR55S2-BU050S            | ST050S | KU050E            |
|                 | DR50G2-BT050N  | IPD50G2-IT050N | SU050L | DR55S2-BU050T            | ST050T | ST050E            |
|                 | DR50G2-BU050L  | KA050L         | SU050N | GT050S                   | SU050S | SU050E            |
|                 | DR50G2-BU050N  | KA050N         | UA050L | GT050T                   | SU050T | UT050E            |
|                 | DR55G2-BA050L  | KT050L         | UA050N | GU050S                   | UT050S | UU050E            |
|                 | DR55G2-BA050N  | KT050N         | UT050L | GU050T                   | UT050T | YT050E            |
|                 | DR55G2-BT050D  | KU050L         | UT050N | HT050S                   | UU050S | YU050E            |
|                 | DR55G2-BT050L  | KU050N         | UU050L | HT050T                   | UU050T |                   |
|                 | DR55G2-BT050N  | LA050L         | UU050N | HU050S                   | YT050S |                   |
|                 | DR55G2-BU050L  | LA050N         | YT050L | HU050T                   | YT050T |                   |
|                 | DR55G2-BU050N  | LT050L         | YT050N | IPD50S2-IT050S           | YU050S |                   |
|                 | GA050L         | LT050N         | YU050L | IPD50S2-IT050T           | YU050T |                   |
|                 | GA050N         | LU050L         | YU050N | KT050S                   |        |                   |

(continued)

(continued)

|                 | Gas            |                |        | Steam/Thermal Oil |        | Electric          |
|-----------------|----------------|----------------|--------|-------------------|--------|-------------------|
| <b>55 Pound</b> | CA055L         | GT055N         | KU055L | Not<br>Applicable |        | Not<br>Applicable |
|                 | CA055N         | GU055L         | KU055N |                   |        |                   |
|                 | CT055L         | GU055N         | SA055L |                   |        |                   |
|                 | CT055N         | HA055L         | SA055N |                   |        |                   |
|                 | CU055L         | HA055N         | ST055D |                   |        |                   |
|                 | CU055N         | HT055D         | ST055L |                   |        |                   |
|                 | DR55SG2-BA055L | HT055L         | ST055N |                   |        |                   |
|                 | DR55SG2-BA055N | HT055N         | SU055L |                   |        |                   |
|                 | DR55SG2-BT055D | HU055L         | SU055N |                   |        |                   |
|                 | DR55SG2-BT055L | HU055N         | UA055L |                   |        |                   |
|                 | DR55SG2-BT055N | IPD55G2-IT055L | UA055N |                   |        |                   |
|                 | DR55SG2-BU055L | IPD55G2-IT055N | UT055L |                   |        |                   |
|                 | DR55SG2-BU055N | KA055L         | UT055N |                   |        |                   |
|                 | GA055L         | KA055N         | UU055L |                   |        |                   |
|                 | GA055N         | KT055L         | UU055N |                   |        |                   |
| GT055L          | KT055N         |                |        |                   |        |                   |
| <b>75 Pound</b> | AT075L         | GU075L         | PT075N | AT075S            | KT075T | AT075E            |
|                 | AT075N         | GU075N         | PU075L | CHD75S2-CT075S    | KU075S | CHD75E2-CT075E    |
|                 | CHD75G2-CA075L | HA075L         | PU075N | CHD75S2-CU075S    | KU075T | CHD75E2-CU075E    |
|                 | CHD75G2-CA075N | HA075N         | SA075L | CT075T            | LT075S | DR80E2-BT075E     |
|                 | CHD75G2-CT075L | HT075D         | SA075N | CU075T            | LT075T | DR80E2-BU075E     |
|                 | CHD75G2-CT075N | HT075L         | ST075D | DR75S2-BT075S     | LU075S | GT075E            |
|                 | CHD75G2-CU075L | HT075N         | ST075L | DR75S2-BT075T     | LU075T | GU075E            |
|                 | CHD75G2-CU075N | HU075L         | ST075N | DR75S2-BU075S     | PT075S | HT075E            |
|                 | DR75G2-BA075L  | HU075N         | STF75L | DR75S2-BU075T     | PT075T | HU075E            |
|                 | DR75G2-BA075N  | IPD75G2-IT075L | STF75N | DR80S2-BT075S     | PU075S | IPD75E2-IT075E    |
|                 | DR75G2-BT075D  | IPD75G2-IT075N | SU075L | DR80S2-BT075T     | PU075T | KT075E            |
|                 | DR75G2-BT075L  | KA075L         | SU075N | DR80S2-BU075S     | ST075S | KU075E            |
|                 | DR75G2-BT075N  | KA075N         | UA075L | DR80S2-BU075T     | ST075T | ST075E            |
|                 | DR75G2-BU075L  | KT075L         | UA075N | GT075S            | SU075S | SU075E            |
|                 | DR75G2-BU075N  | KT075N         | UT075L | GT075T            | SU075T | UB075E            |
|                 | DR80G2-BA075L  | KU075L         | UT075N | GU075S            | UT075S | UT075E            |
|                 | DR80G2-BA075N  | KU075N         | UTF75L | GU075T            | UT075T | UU075E            |
|                 | DR80G2-BT075D  | LA075L         | UTF75N | HT075S            | UU075S |                   |
|                 | DR80G2-BT075L  | LA075N         | UU075L | HT075T            | UU075T |                   |
|                 | DR80G2-BT075N  | LT075L         | UU075N | HU075S            | YT075S |                   |
|                 | DR80G2-BU075L  | LT075N         | YT075L | HU075T            | YT075T |                   |
|                 | DR80G2-BU075N  | LU075L         | YT075N | IPD75S2-IT075S    | YU075S |                   |
|                 | GA075L         | LU075N         | YU075L | IPD75S2-IT075T    | YU075T |                   |
|                 | GA075N         | PA075L         | YU075N | KT075S            |        |                   |
|                 | GT075L         | PA075N         |        |                   |        |                   |
|                 | GT075N         | PT075L         |        |                   |        |                   |

(continued)

**Introduction**

(continued)

|                  | <b>Gas</b>     |                 |        | <b>Steam/Thermal Oil</b> |        | <b>Electric</b>   |
|------------------|----------------|-----------------|--------|--------------------------|--------|-------------------|
| <b>120 Pound</b> | AT120L         | HA120N          | PT120L | AT120S                   | KU120T | Not<br>Applicable |
|                  | AT120N         | HT120L          | PT120N | CT120S                   | LT120S |                   |
|                  | CA120L         | HT120N          | PU120L | CT120T                   | LT120T |                   |
|                  | CA120N         | HU120L          | PU120N | CU120S                   | LU120S |                   |
|                  | CT120L         | HU120N          | SA120L | CU120T                   | LU120T |                   |
|                  | CT120N         | IPD120G2-IT120L | SA120N | DR120S2-BT120S           | PT120S |                   |
|                  | CU120L         | IPD120G2-IT120N | ST120L | DR120S2-BT120T           | PT120T |                   |
|                  | CU120N         | KA120L          | ST120N | DR120S2-BU120S           | PU120S |                   |
|                  | DR120G2-BA120L | KA120N          | SU120L | DR120S2-BU120T           | PU120T |                   |
|                  | DR120G2-BA120N | KT120L          | SU120N | GT120S                   | ST120S |                   |
|                  | DR120G2-BT120L | KT120N          | UA120L | GT120T                   | ST120T |                   |
|                  | DR120G2-BT120N | KU120L          | UA120N | GU120S                   | SU120S |                   |
|                  | DR120G2-BU120L | KU120N          | UT120L | GU120T                   | SU120T |                   |
|                  | DR120G2-BU120N | LA120L          | UT120N | HT120S                   | UT120S |                   |
|                  | GA120L         | LA120N          | UU120L | HT120T                   | UT120T |                   |
|                  | GA120N         | LT120L          | UU120N | HU120S                   | UU120S |                   |
|                  | GT120L         | LT120N          | YT120L | HU120T                   | UU120T |                   |
|                  | GT120N         | LU120L          | YT120N | IPD120S2-IT120S          | YT120S |                   |
|                  | GU120L         | LU120N          | YU120L | IPD120S2-IT120T          | YT120T |                   |
|                  | GU120N         | PA120L          | YU120N | KT120S                   | YU120S |                   |
| HA120L           | PA120N         |                 | KT120T | YU120T                   |        |                   |
|                  |                |                 | KU120S |                          |        |                   |
| <b>170 Pound</b> | AT170L         | HA170N          | PT170L | AT170S                   | KU170T | Not<br>Applicable |
|                  | AT170N         | HT170L          | PT170N | CT170S                   | LT170S |                   |
|                  | CA170L         | HT170N          | PU170L | CT170T                   | LT170T |                   |
|                  | CA170N         | HU170L          | PU170N | CU170S                   | LU170S |                   |
|                  | CT170L         | HU170N          | SA170L | CU170T                   | LU170T |                   |
|                  | CT170N         | IPD170G2-IT170L | SA170N | DR170S2-BT170S           | PT170S |                   |
|                  | CU170L         | IPD170G2-IT170N | ST170L | DR170S2-BT170T           | PT170T |                   |
|                  | CU170N         | KA170L          | ST170N | DR170S2-BU170S           | PU170S |                   |
|                  | DR170G2-BA170L | KA170N          | SU170L | DR170S2-BU170T           | PU170T |                   |
|                  | DR170G2-BA170N | KT170L          | SU170N | GT170S                   | ST170S |                   |
|                  | DR170G2-BT170L | KT170N          | UA170L | GT170T                   | ST170T |                   |
|                  | DR170G2-BT170N | KU170L          | UA170N | GU170S                   | SU170S |                   |
|                  | DR170G2-BU170L | KU170N          | UT170L | GU170T                   | SU170T |                   |
|                  | DR170G2-BU170N | LA170L          | UT170N | HT170S                   | UT170S |                   |
|                  | GA170L         | LA170N          | UU170L | HT170T                   | UT170T |                   |
|                  | GA170N         | LT170L          | UU170N | HU170S                   | UU170S |                   |
|                  | GT170L         | LT170N          | YT170L | HU170T                   | UU170T |                   |
|                  | GT170N         | LU170L          | YT170N | IPD170S2-IT170S          | YT170S |                   |
|                  | GU170L         | LU170N          | YU170L | IPD170S2-IT170T          | YT170T |                   |
|                  | GU170N         | PA170L          | YU170N | KT170S                   | YU170S |                   |
| HA170L           | PA170N         |                 | KT170T | YU170T                   |        |                   |
|                  |                |                 | KU170S |                          |        |                   |

(continued)

Includes models with the following control suffixes:

- |                |                         |                                   |
|----------------|-------------------------|-----------------------------------|
| 3O – DX4 OPL   | QT – dual digital timer | RM – reversing OPL micro          |
| DO – DMP OPL   | R3 – reversing DX4 OPL  | RQ – reversing dual digital timer |
| EO – LED OPL   | RD – reversing DMP OPL  | RU – reversing UniLinc OPL        |
| OM – OPL micro | RE – reversing LED OPL  | UO – UniLinc OPL                  |



### Serial Plate Location

When calling or writing for information about your product, be sure to mention model and serial numbers. Model and serial numbers are found on serial plate on the rear of machine and inside door.

### Wiring Diagram

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

Models starting Serial No. 0309\_\_\_\_ or later will have the wiring diagram part number in the lower portion of the electrical data on the serial plate.

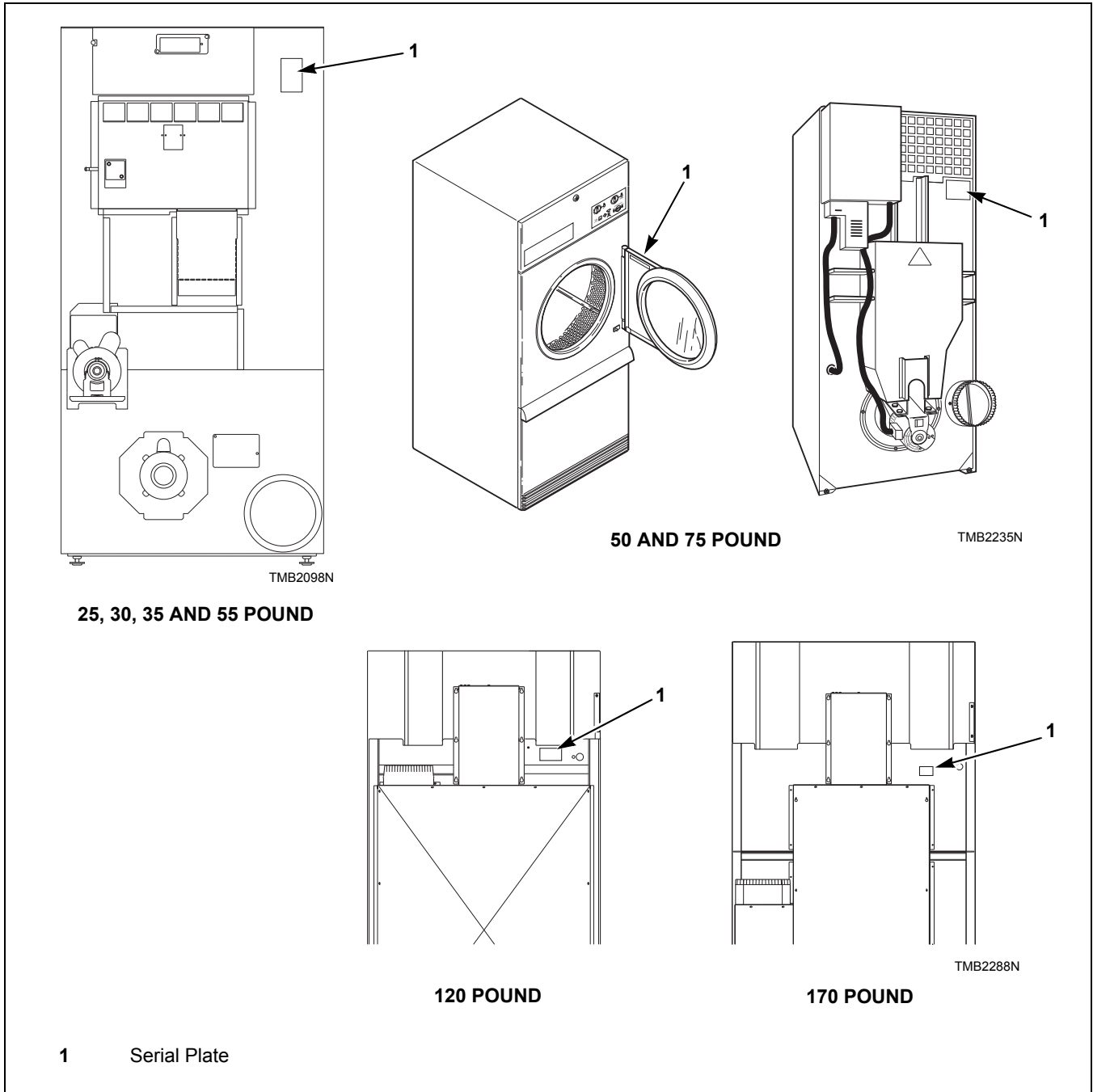




Figure 1


# Safety Information

## Explanation of Safety Messages

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

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


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

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

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

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

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


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

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

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

## Important Safety Instructions

### Save These Instructions


|  |                |
|--|----------------|
|   | <b>WARNING</b> |
| <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, 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.
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.

## Safety Information

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.

|  |                |
|--|----------------|
|   | <b>WARNING</b> |
| <b>To reduce the risk of serious injury, install lockable door(s) to prevent public access to rear of tumble dryers.</b> |                |
| <small>W055R1</small>  |                |

|  |                |
|--|----------------|
|   | <b>WARNING</b> |
| <b>If a laundry fire occurs inside this fire suppression system equipped tumbler, to reduce the risk of serious injury or death:</b>   |                |
| <ul style="list-style-type: none"><li>• <b>Call the fire department.</b></li><li>• <b>DO NOT disconnect electric power to the tumbler.</b></li><li>• <b>DO NOT disconnect water to the tumbler.</b></li><li>• <b>DO NOT touch the tumbler.</b></li></ul> |                |
| <small>W689</small>  |                |

# Theory of Operation

**IMPORTANT:** The fire suppression system is designed to diminish a laundry fire starting inside a fire suppression system equipped tumbler. The fire suppression system is not designed to stop or eliminate high temperature and spontaneous combustion situations. Follow all instructions in the installation manual to ensure the fire suppression system operates properly. Train all operators in the proper preventative maintenance of the fire suppression system.

**IMPORTANT:** For safety purposes, do not operate tumbler if a fire has occurred.

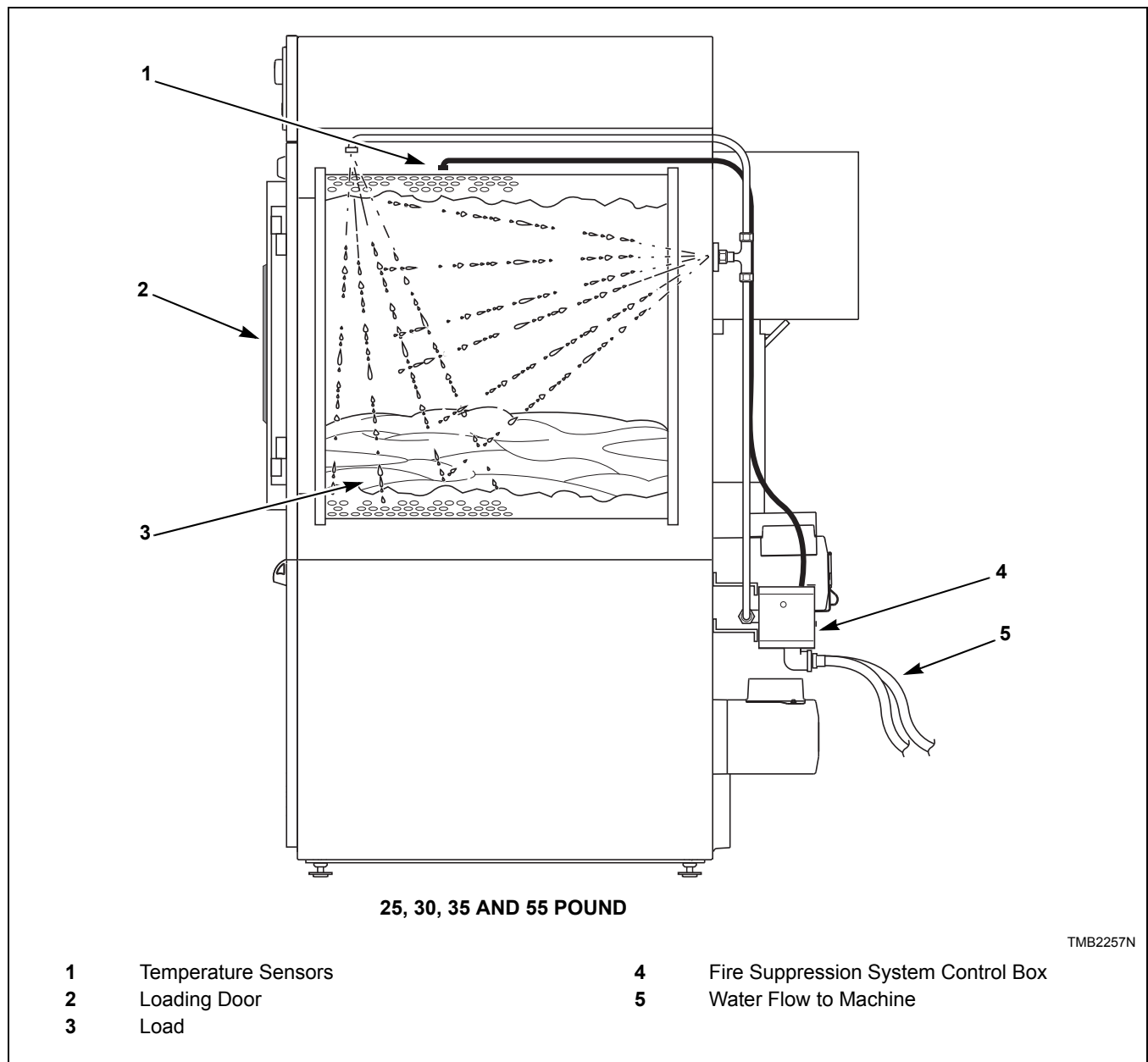


Figure 2

# Theory of Operation

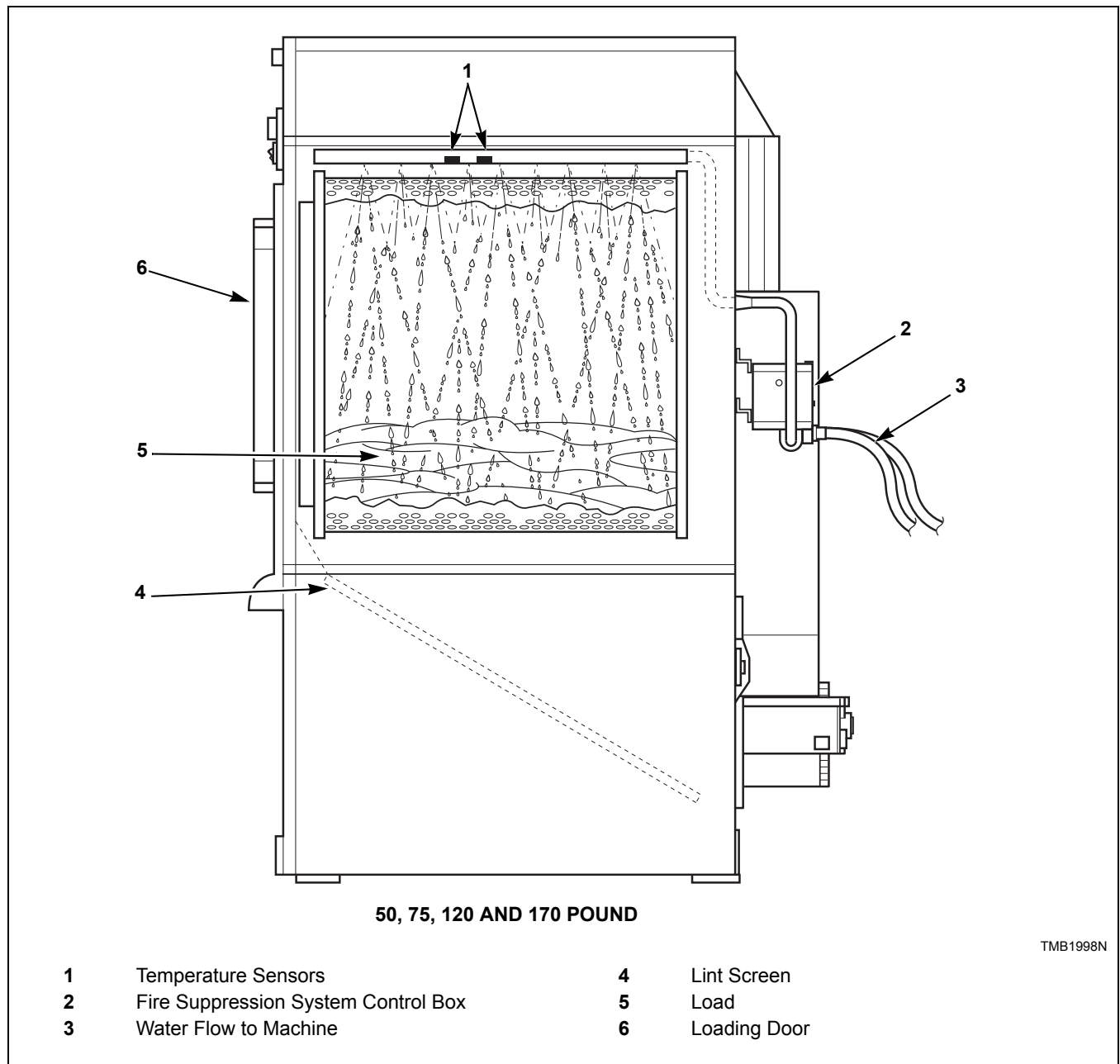


Figure 3

### Temperature Sensor

Two temperature sensors are located in the cylinder area of the tumbler to provide temperature readings. Refer to *Figure 2* and *Figure 3*. These temperature sensors will trigger a mode change based on a pre-set temperature trip-point.

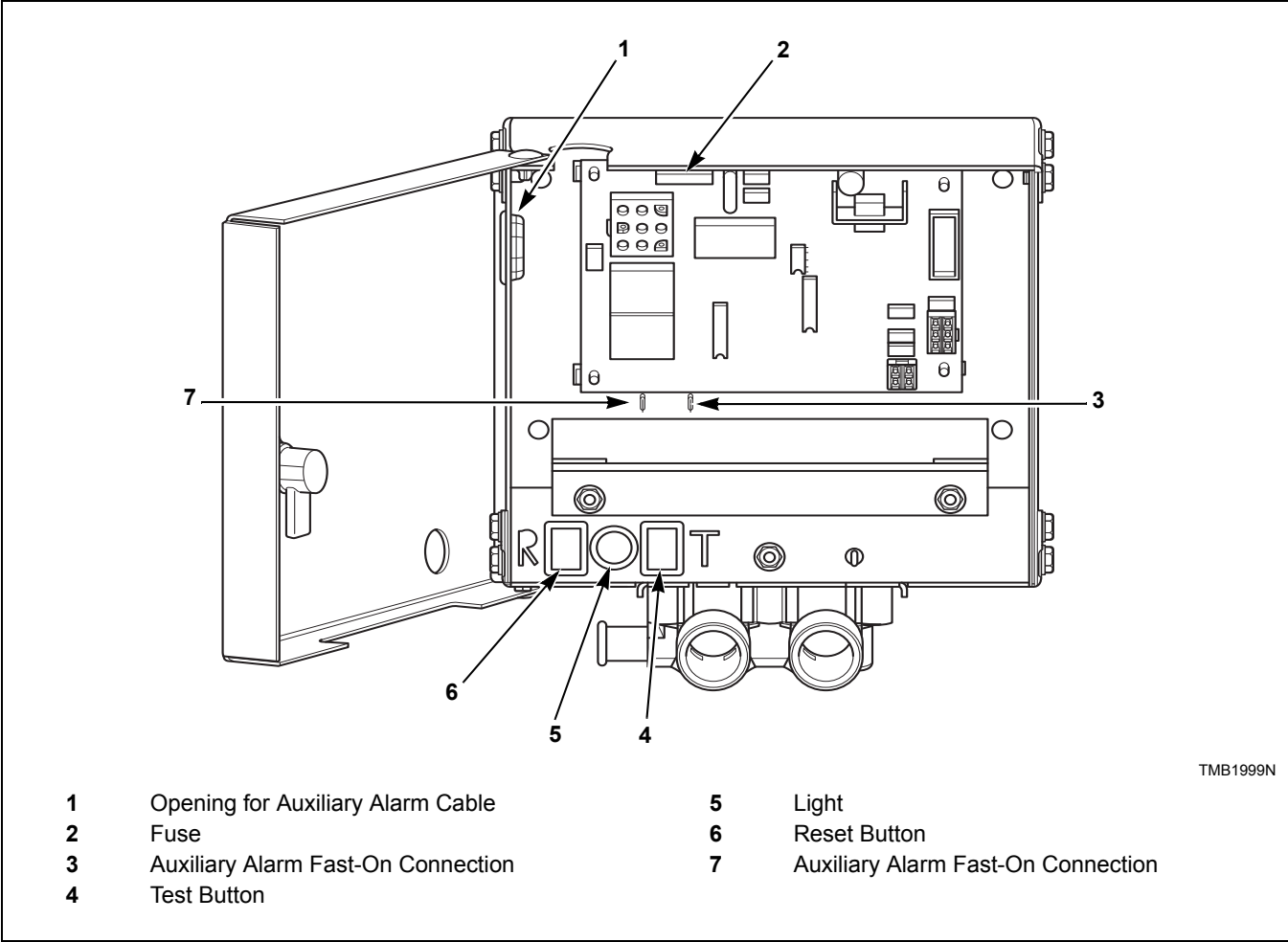
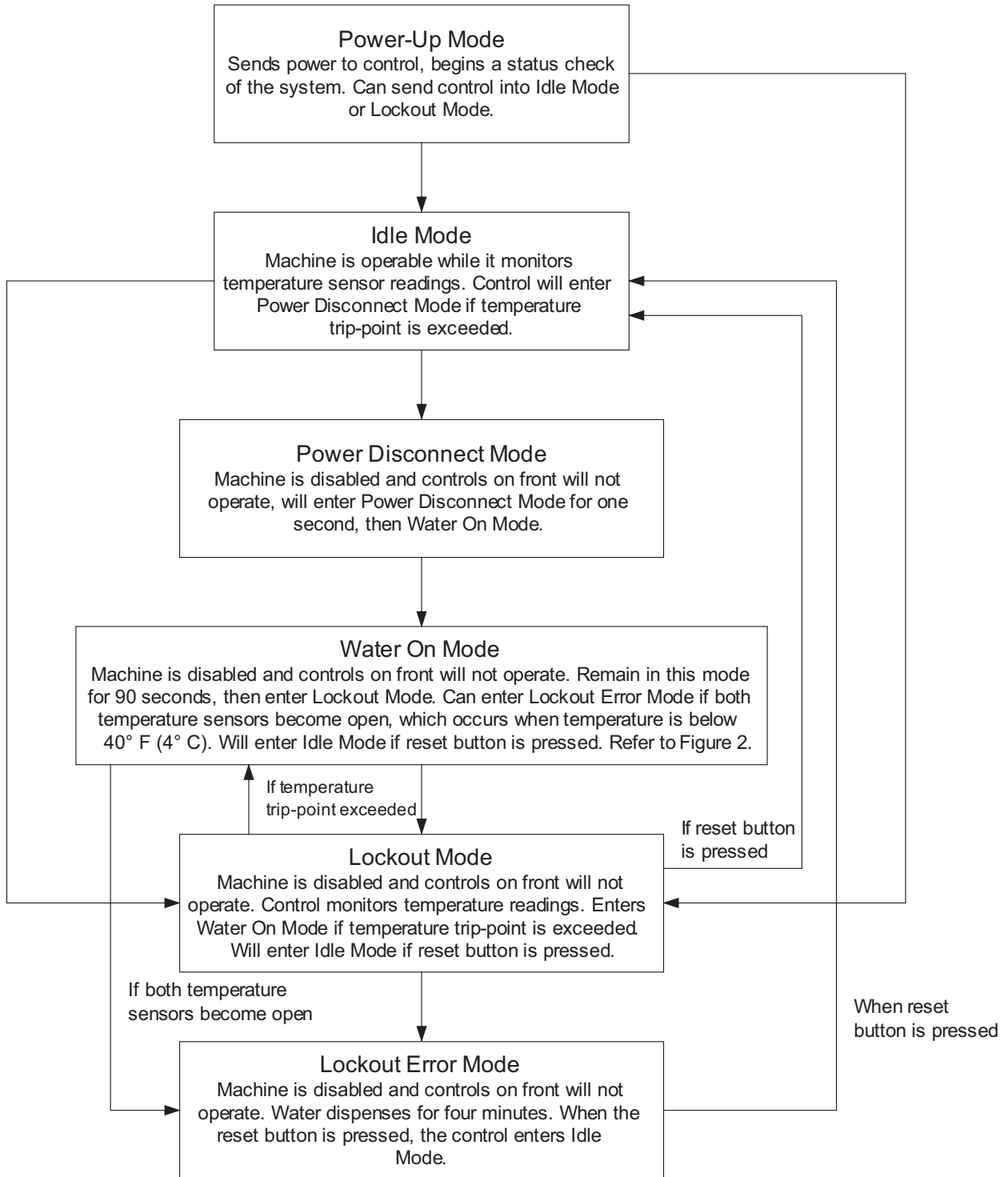


Figure 4

## Theory of Operation

### Modes of Operation





# Installation

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

## Check Local Codes and Permits

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

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

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

### Control Box Dimensions

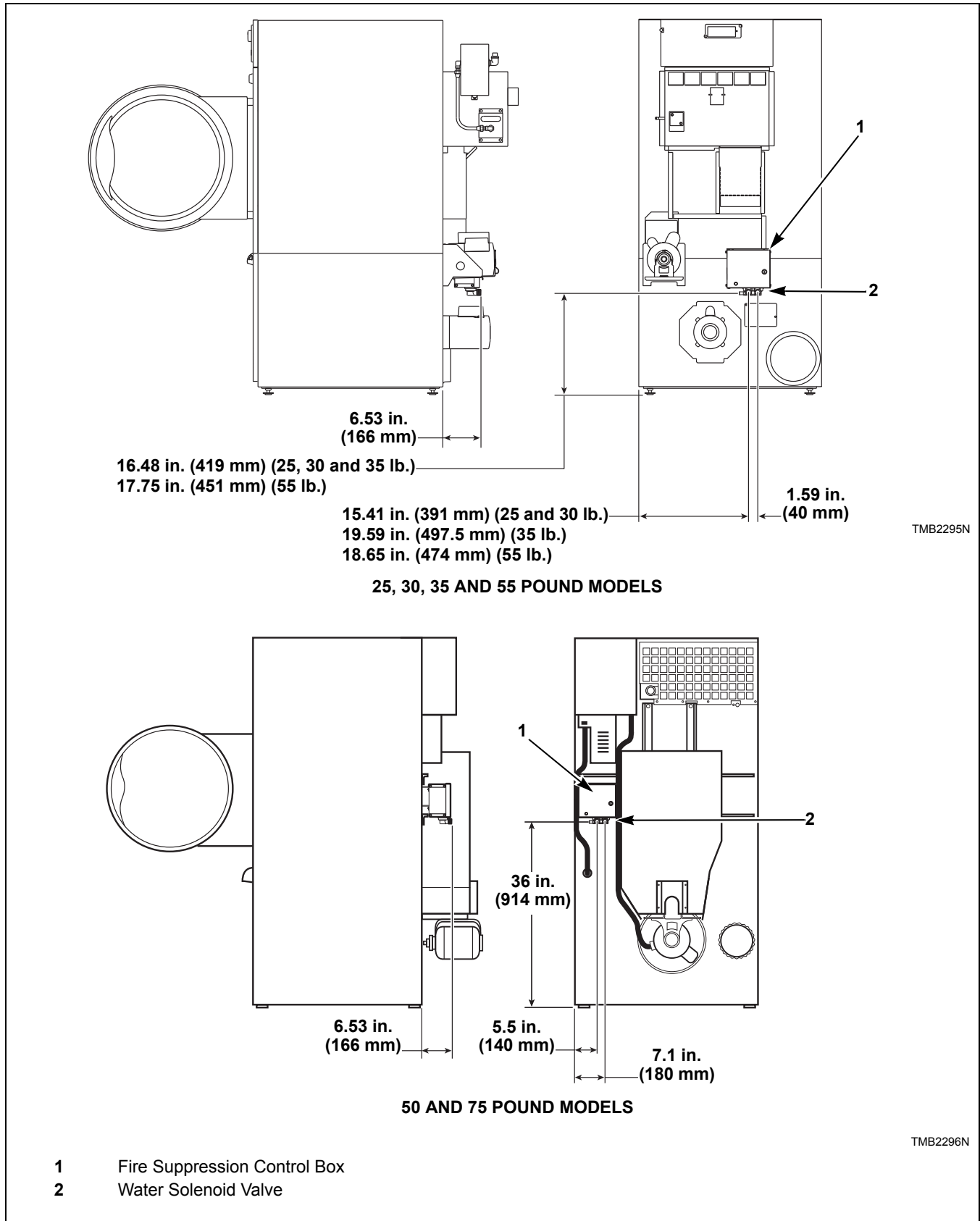


Figure 5 (continued)

Figure 5 (continued)

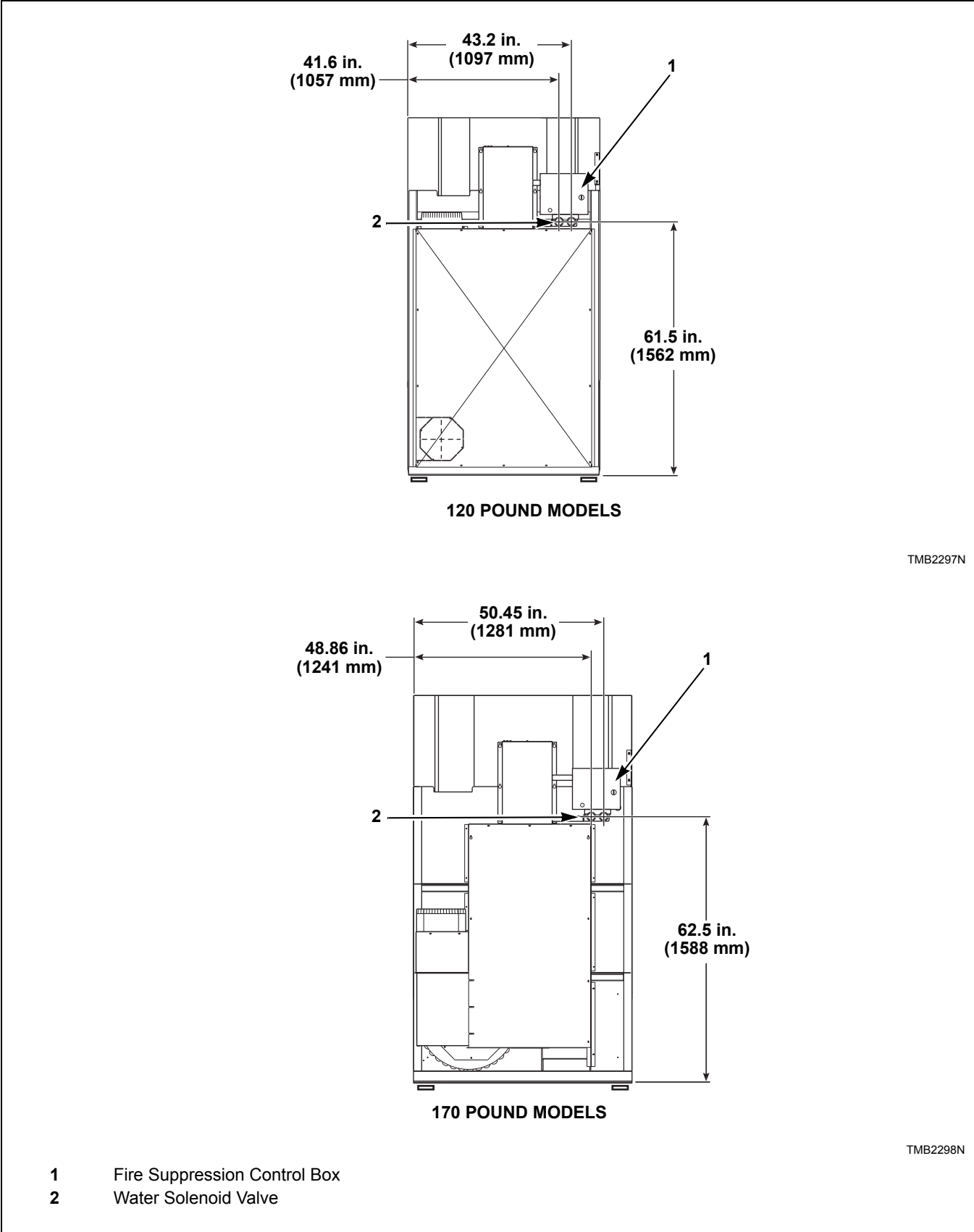


Figure 5

## Water Requirements

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

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

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

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

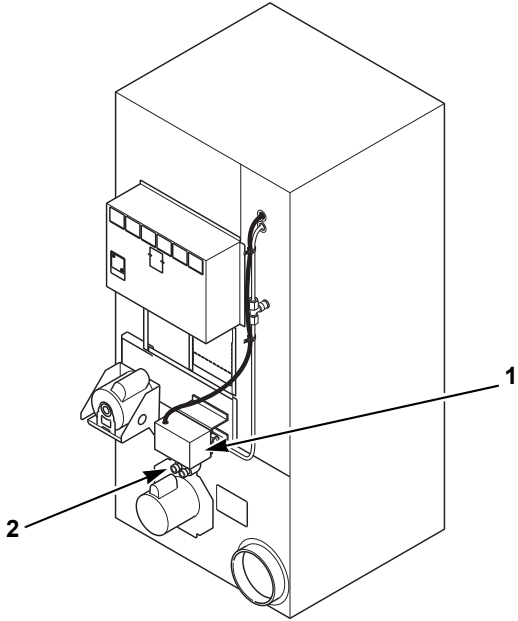
**IMPORTANT: Temperature of the water supply must be kept between 40° and 120°F. If water in the supply line or water solenoid valve freezes, the fire suppression system will not operate.**

**IMPORTANT: If temperature sensors inside the tumbler register a temperature below 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 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.**

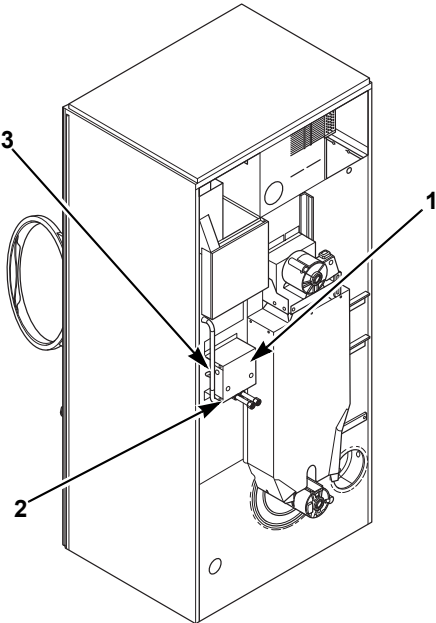
## Water Connections

Two hoses and a Y-valve are provided with the tumbler to allow for connection of water supply to tumbler. The water connections are made to the bushings of the water solenoid valve, located on the rear of the tumbler. The Y-valve provides a single female hose connection (Standard US 3/4-11 1/2 NH thread). Refer to *Figure 6* and *Figure 7*.



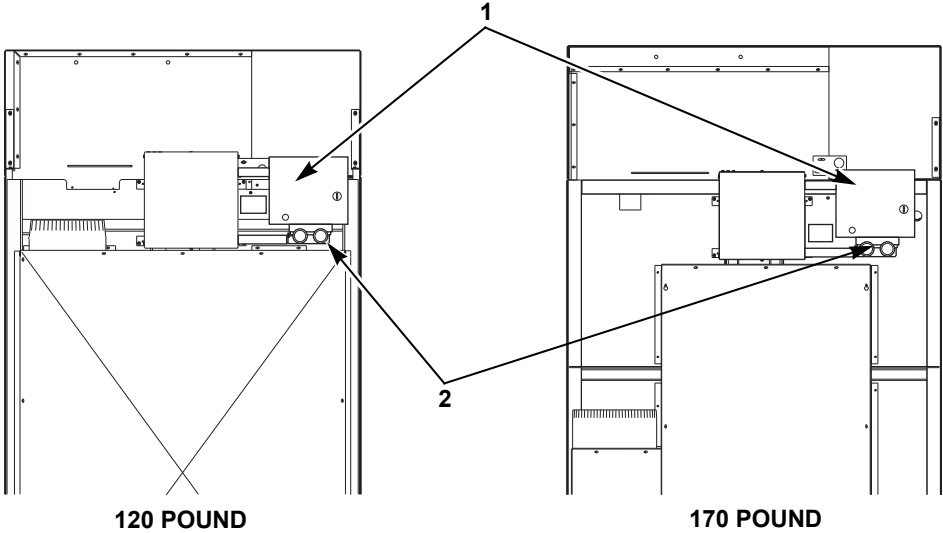
25, 30, 35 AND 55 POUND

TMB2248N



50 AND 75 POUND

TMB2000N



120 POUND

170 POUND

TMB2012N

- 1 Fire Suppression System Control Box
- 2 Water Solenoid Valve
- 3 Opening for Auxiliary Alarm Cable

Figure 6

## Installation

To connect the two hoses (supplied with tumbler), insert rubber washers (from literature pack) in water inlet hose couplings. Refer to *Figure 7*.

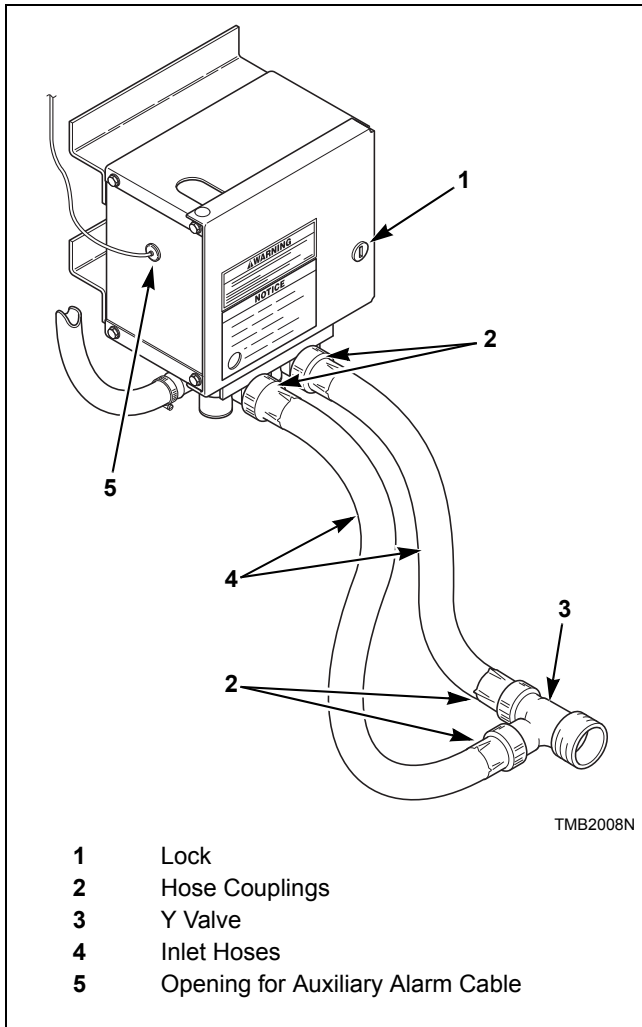


Figure 7

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

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

**IMPORTANT: Hoses and other natural rubber parts deteriorate after extended use. Hoses may develop cracks, blisters or material wear from the temperature and constant high pressure they are subjected to.**

**All hoses should be checked on a yearly basis for any visible signs of deterioration. Any hose showing the signs of deterioration listed above should be replaced immediately. All hoses should be replaced every five years.**

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

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

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

**NOTE: Replacement outlet hoses are available (at extra cost). Order hoses as follows:**

| Part No. | Models            | Length         |
|----------|-------------------|----------------|
| 44073301 | 50 and 75         | 39 in. (99 cm) |
| 44073302 | 120               | 21 in. (53 cm) |
| 44073303 | 170               | 31 in. (79 cm) |
| 44073304 | 25, 30, 35 and 55 | 14 in. (36 cm) |

## Electrical Requirements


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

## Auxiliary Alarm

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

The connection to the auxiliary output is made through the FS-1 and FS-2 fast-on connections inside the fire suppression control box. Refer to *Figure 4*. The relay is rated for 24 VAC, 5.2 Amp, sealed current.

**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.)**

|   |                |
|---|----------------|
|    | <b>WARNING</b> |
| <p><b>Electrical power must be provided to tumbler at all times. The fire suppression system will be inoperative if the main electrical power supply is disconnected.</b></p> <p style="text-align: right;"><small>W690</small></p> |                |

# Maintenance

## Fire Suppression System Maintenance Test

To ensure proper operation, the fire suppression system must be tested every three months. If the system test does not perform as indicated:


1. Discontinue use of the tumbler.
2. Refer to the **Troubleshooting section** of this manual or contact a qualified service person.
3. Restore the fire suppression system to proper working order before using tumbler.

The maintenance record on the following page is provided to record inspections. Store this record in an area where it will not be damaged, but is easily accessible to person performing tests.

**NOTE: Failure to maintain the fire suppression system will void the tumbler warranty.**

**NOTE: The auxiliary output is activated during the fire suppression system maintenance test sequence. Consider this fact prior to testing the system 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.)**

**IMPORTANT: For Electric Models only – Whenever the machine has been internally sprayed with water, the heating elements must be completely dry before you run the machine with heat. To fully dry the heating elements, run the machine WITHOUT HEAT for a minimum of sixty (60) minutes before resuming normal operation.**

|   |                |
|---|----------------|
|  | <b>CAUTION</b> |
| <b>Clean up any water spilled during testing to avoid personal injury.</b>          |                |
| <small>W487</small>   |                |

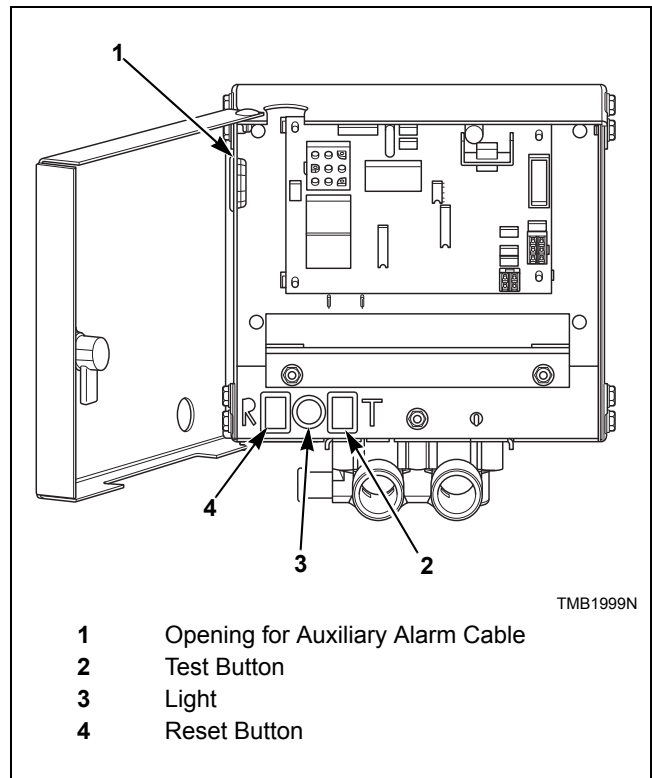


Figure 8

To perform the fire suppression system maintenance test:

1. If the auxiliary alarm output is connected to a separate alarm system, disconnect prior to performing the fire suppression system maintenance test.
2. Remove any lint from the lint compartment.
3. Ensure temperature sensors are free of lint.
4. Place a load of dry towels in the tumbler. Refer to *Table 1* for proper load size. Ensure the cylinder baffles are to the left and right of the spray manifold located at the center top of the cylinder.
5. Unlock the fire suppression system control box.
6. Press and hold the test button, verify the light is on, this should take approximately five seconds. Refer to *Figure 8*. After a one-second pause water should begin to spray into the cylinder.
7. After 15 seconds of water spray, press and hold the reset button until water spray is off and light is off. This should take approximately one second. Refer to *Figure 8* and *Figure 9*.



8. Immediately remove and weigh the load. Refer to *Table 1* for acceptable weight range. If less than minimum pounds indicated in *Table 1*, the fire suppression system has failed the maintenance test. Refer to the **Troubleshooting section** of this manual.

**IMPORTANT: If the fire suppression system failed the maintenance test, DO NOT operate the tumbler.**

|     | Dry Weight (lbs.) | Wet Weight (lbs.) | Minimum Weight (lbs.) |
|-----|-------------------|-------------------|-----------------------|
| 25  | 15                | 20-24             | 18                    |
| 30  | 15                | 20-24             | 18                    |
| 35  | 25                | 30-34             | 28                    |
| 55  | 25                | 33-37             | 31                    |
| 50  | 25                | 40-44             | 35                    |
| 75  | 40                | 57-61             | 52                    |
| 120 | 60                | 75-79             | 70                    |
| 170 | 80                | 95-99             | 90                    |

Table 1

9. Clean up any water on the floor.
10. **Electric Models Only:** Run machine **WITHOUT HEAT** for a **minimum** of 60 minutes before continuing with steps 11-14.
11. Lock the fire suppression system control box.
12. If the separate alarm option is being used, reconnect the auxiliary alarm output.
13. Start the tumbler to dry the test load.
14. On maintenance record, check box if fire suppression system passed the test, date and sign record.

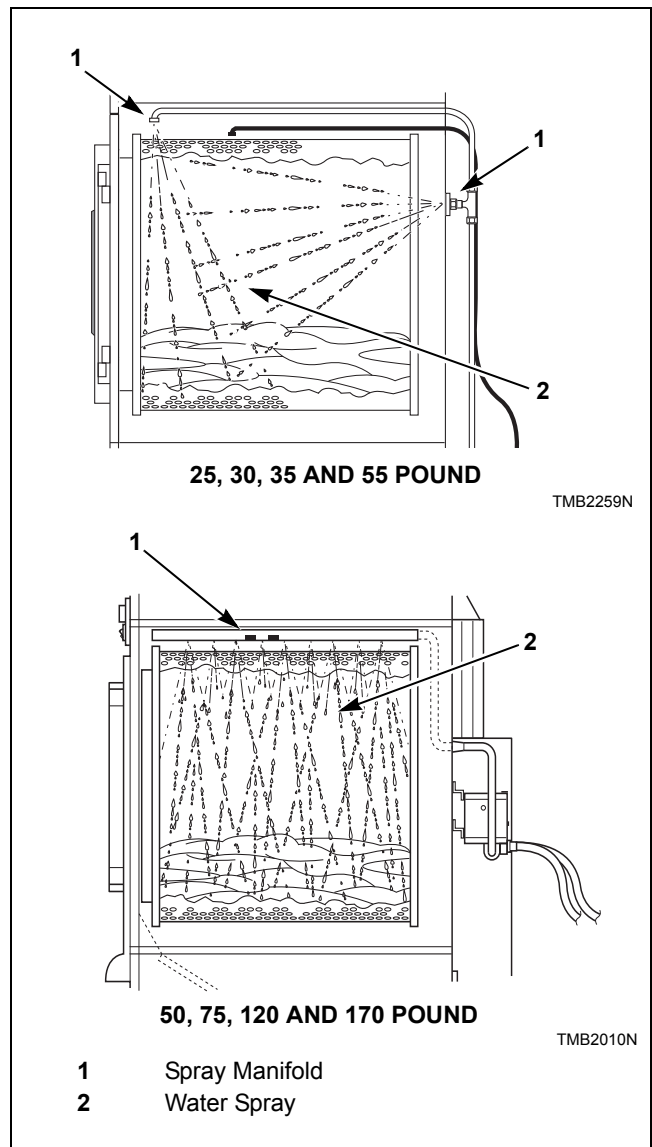


Figure 9

Maintenance

Maintenance Record

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

| MONTH | PASSED | DATE | SIGNATURE | MONTH | PASSED | DATE | SIGNATURE |
|-------|--------|------|-----------|-------|--------|------|-----------|
| 1     |        |      |           | 145   |        |      |           |
| 4     |        |      |           | 148   |        |      |           |
| 7     |        |      |           | 151   |        |      |           |
| 10    |        |      |           | 154   |        |      |           |
| 13    |        |      |           | 157   |        |      |           |
| 16    |        |      |           | 160   |        |      |           |
| 19    |        |      |           | 163   |        |      |           |
| 22    |        |      |           | 166   |        |      |           |
| 25    |        |      |           | 169   |        |      |           |
| 28    |        |      |           | 172   |        |      |           |
| 31    |        |      |           | 175   |        |      |           |
| 34    |        |      |           | 178   |        |      |           |
| 37    |        |      |           | 181   |        |      |           |
| 40    |        |      |           | 184   |        |      |           |
| 43    |        |      |           | 187   |        |      |           |
| 46    |        |      |           | 190   |        |      |           |
| 49    |        |      |           | 193   |        |      |           |
| 52    |        |      |           | 196   |        |      |           |
| 55    |        |      |           | 199   |        |      |           |
| 58    |        |      |           | 202   |        |      |           |
| 61    |        |      |           | 205   |        |      |           |
| 64    |        |      |           | 208   |        |      |           |
| 67    |        |      |           | 211   |        |      |           |
| 70    |        |      |           | 214   |        |      |           |
| 73    |        |      |           | 217   |        |      |           |
| 76    |        |      |           | 220   |        |      |           |
| 79    |        |      |           | 223   |        |      |           |
| 82    |        |      |           | 226   |        |      |           |
| 85    |        |      |           | 229   |        |      |           |
| 88    |        |      |           | 232   |        |      |           |
| 91    |        |      |           | 235   |        |      |           |
| 94    |        |      |           | 238   |        |      |           |
| 97    |        |      |           | 241   |        |      |           |
| 100   |        |      |           | 244   |        |      |           |
| 103   |        |      |           | 247   |        |      |           |
| 106   |        |      |           | 250   |        |      |           |
| 109   |        |      |           | 253   |        |      |           |
| 112   |        |      |           | 256   |        |      |           |
| 115   |        |      |           | 259   |        |      |           |
| 118   |        |      |           | 262   |        |      |           |
| 121   |        |      |           | 265   |        |      |           |
| 124   |        |      |           | 268   |        |      |           |
| 127   |        |      |           | 271   |        |      |           |
| 130   |        |      |           | 274   |        |      |           |
| 133   |        |      |           | 277   |        |      |           |
| 136   |        |      |           | 280   |        |      |           |
| 139   |        |      |           | 283   |        |      |           |

# Troubleshooting

A water discharge or system fault is indicated when the fire suppression system control box light is on. Refer to *Figure 8*.

**IMPORTANT: When handling electronic controls, use a ground wrist strap. Due to the sensitivity of electronic controls, careful handling is required. Wrist strap, cord and alligator clip are designed to carry away any electrostatic charge from your body and to direct charge to an available ground. By using this static protection device, potential electrostatic discharge problems associated with handling of electronic control will be minimized. Always handle electronic control by its metal edges.**



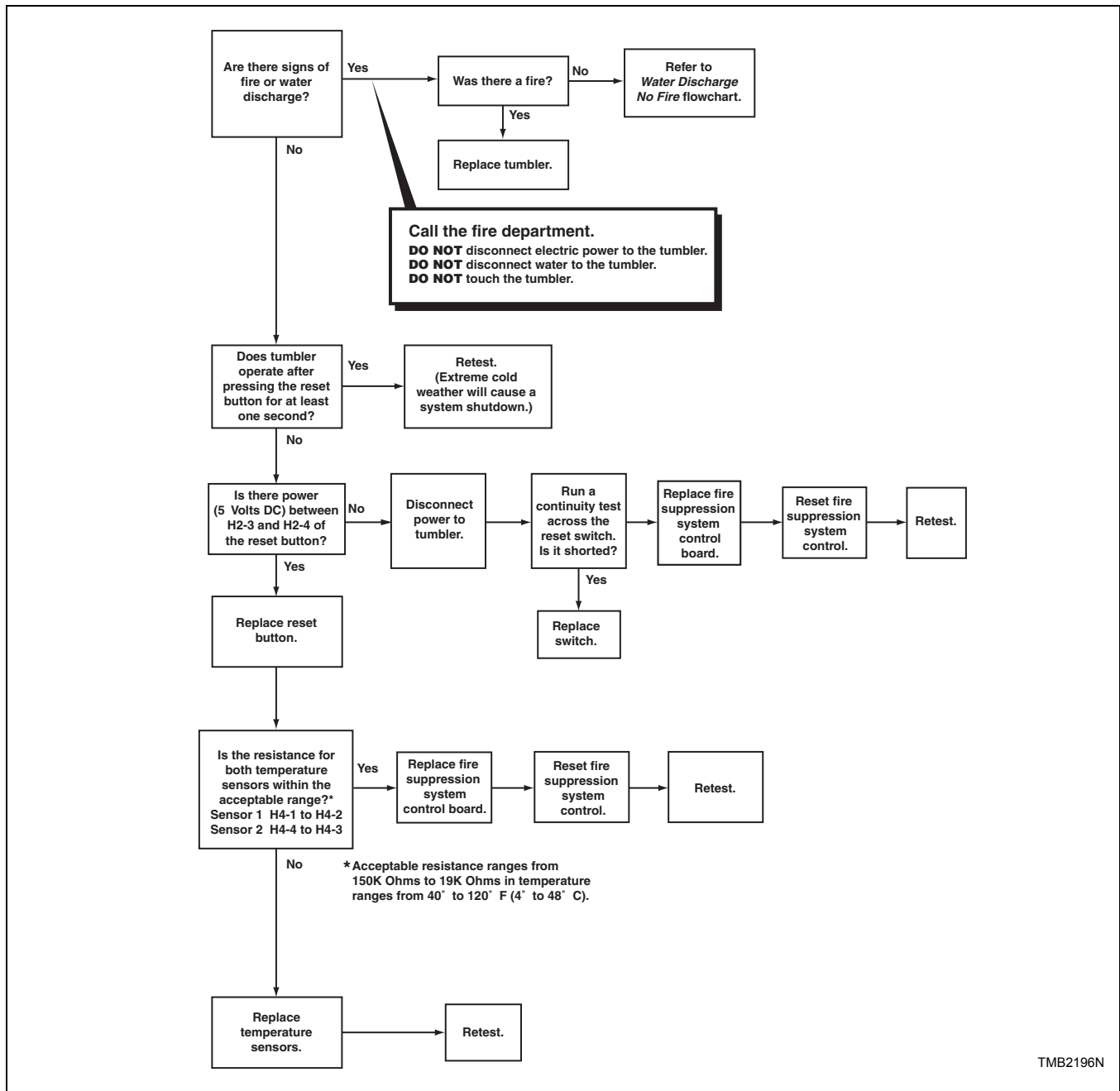
## WARNING

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


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

W002R1

### Tumbler Does Not Operate and Light Is On



TMB2196N



WARNING

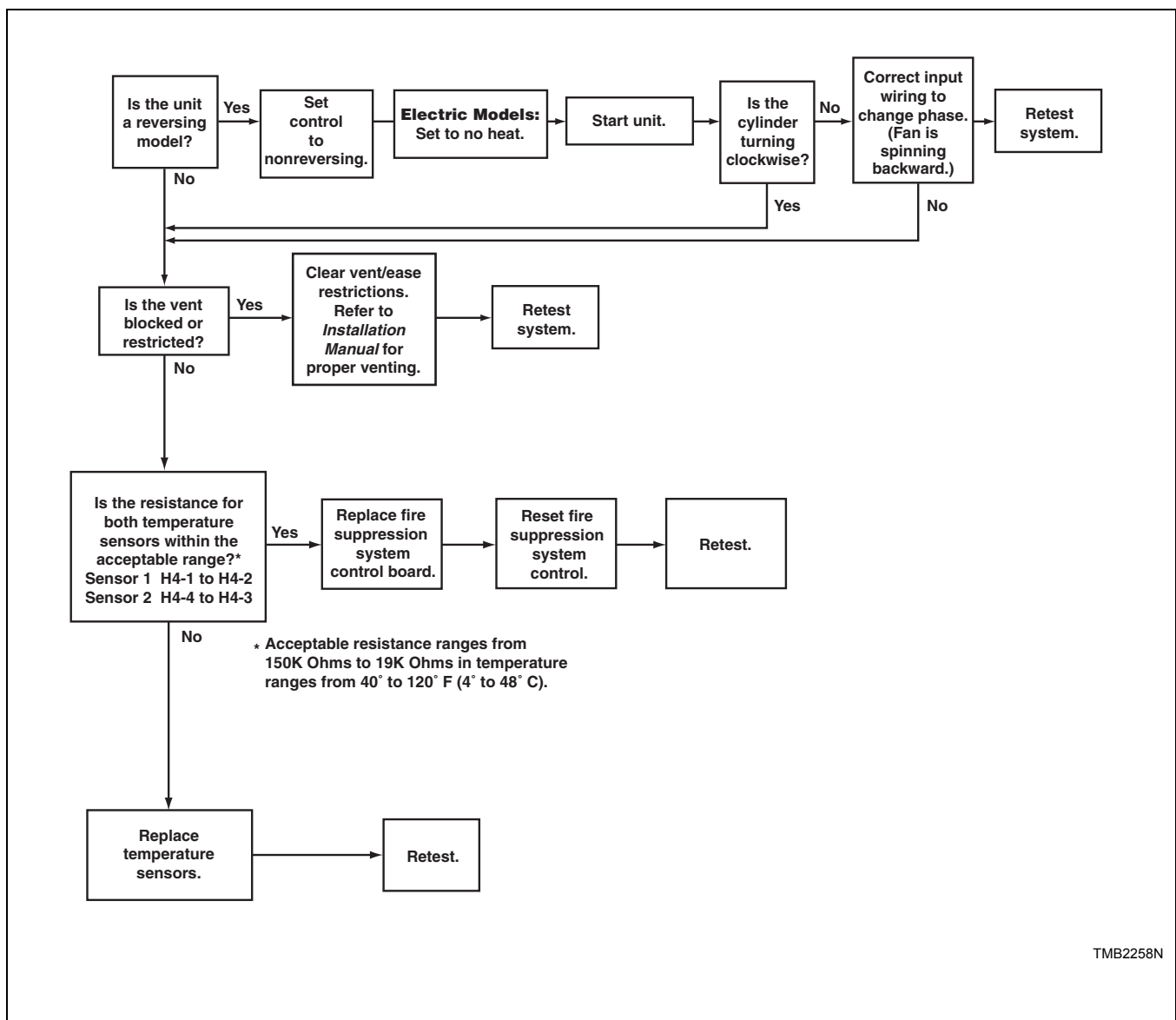
**To reduce the risk of electric shock, fire, explosion, serious injury or death:**

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

W002R1

### Water Discharge, but No Fire

**IMPORTANT: Electric Models:** If water has discharged into machine, you MUST perform this diagnostic test with **NO HEAT** to the machine.





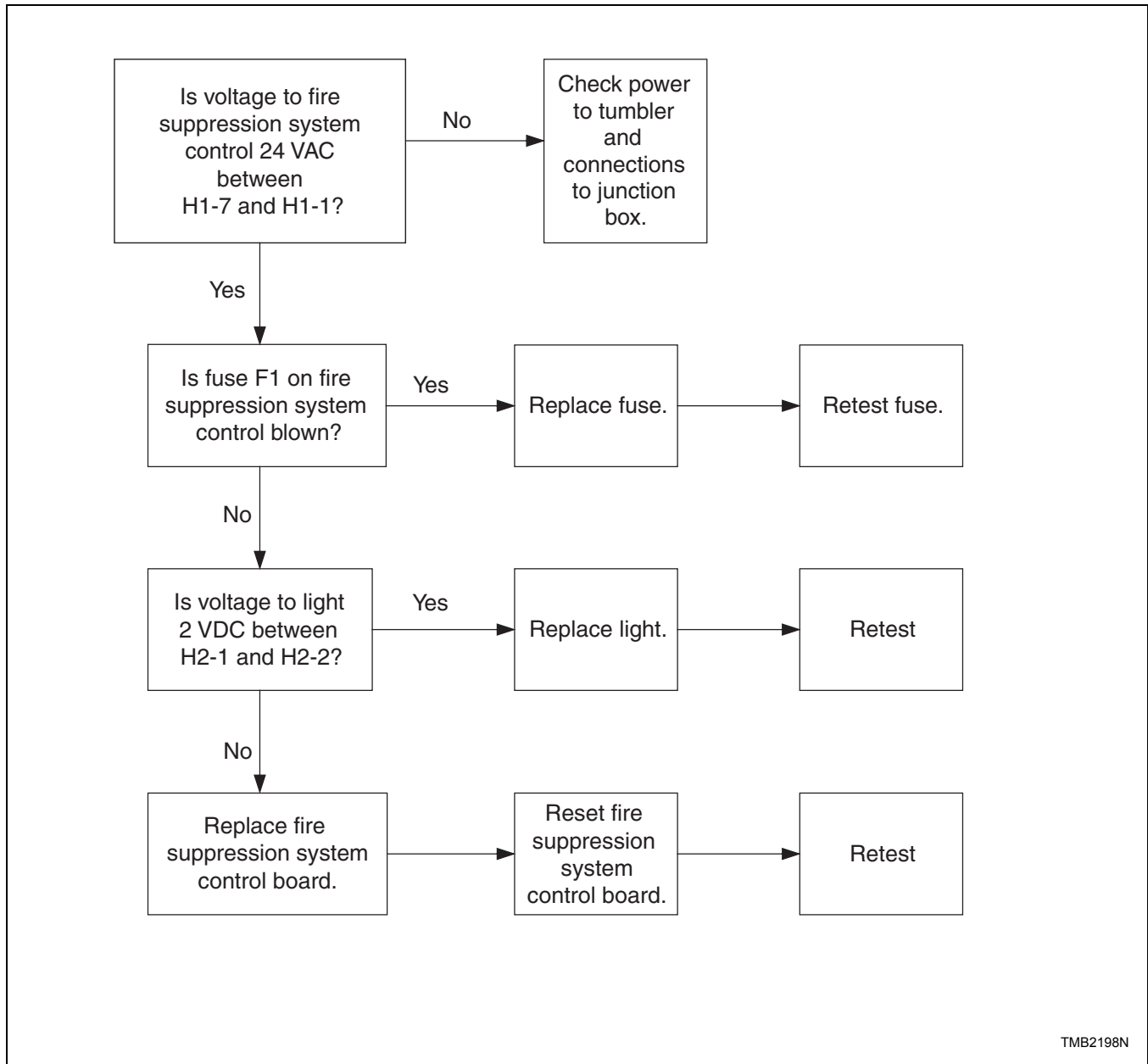
## WARNING

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

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

W002R1

### Tumbler Does Not Operate and Light Is Off



TMB2198N



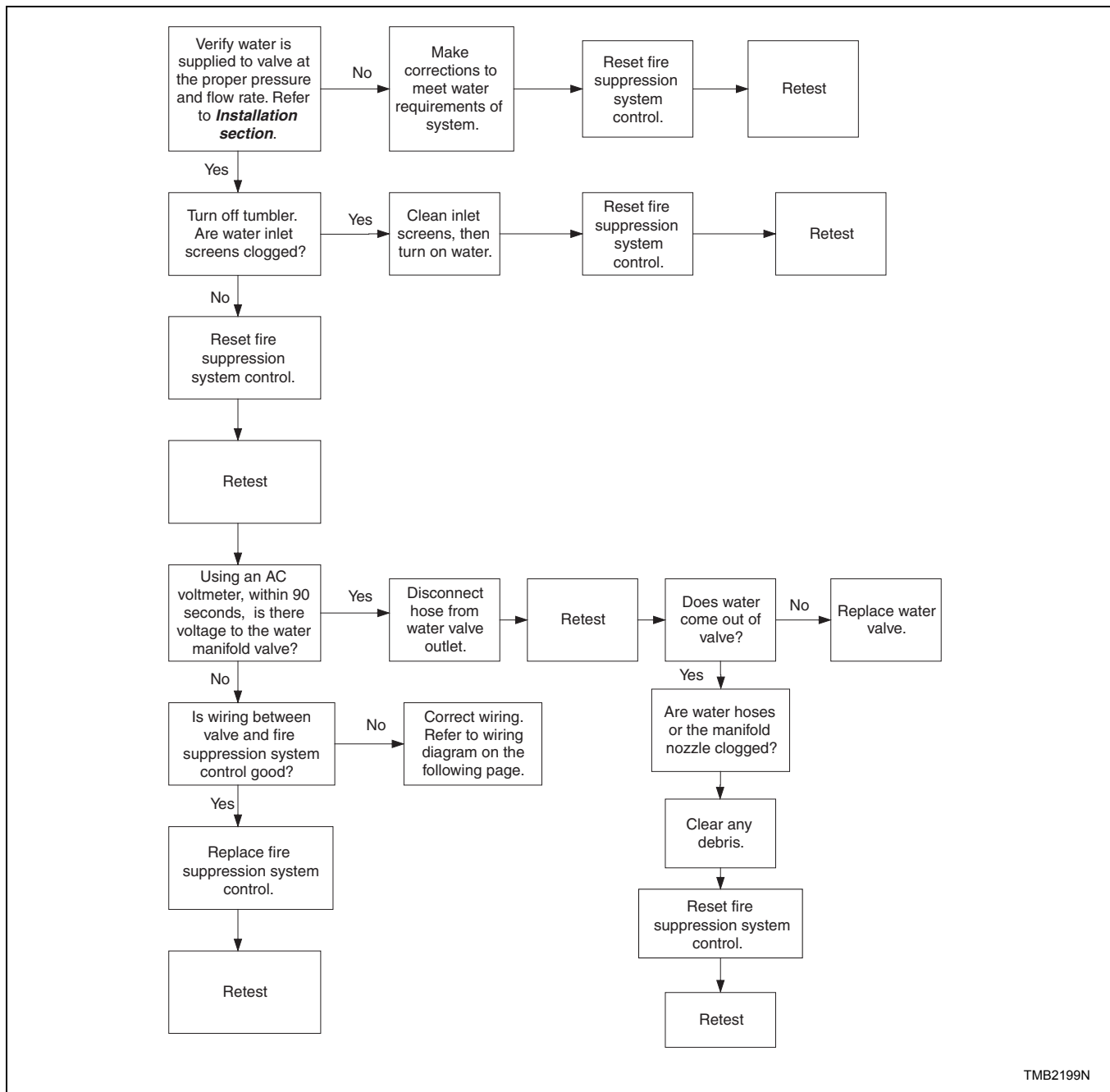
## WARNING

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

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

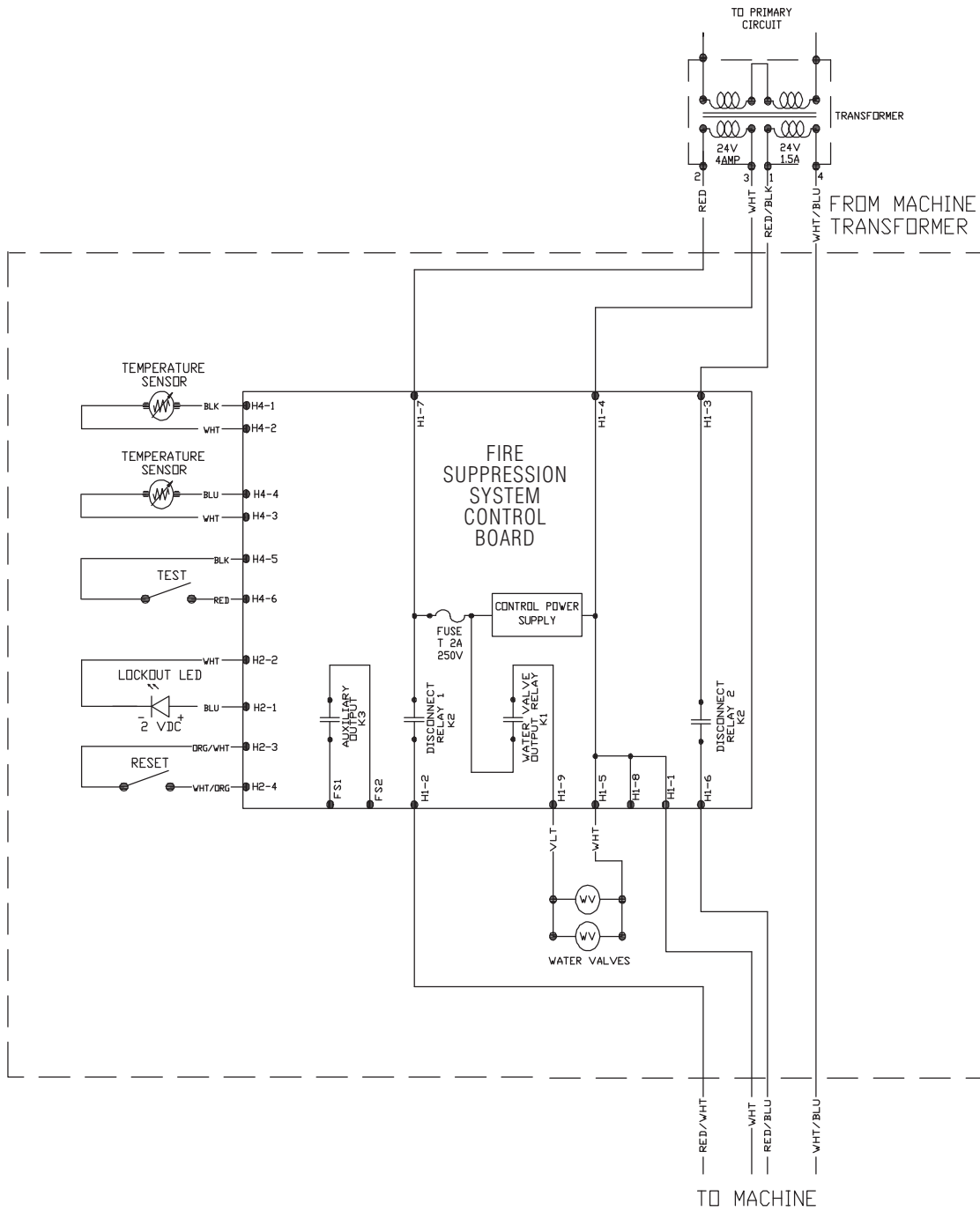
W002R1

### Tumbler Operates, but Water Does Not Discharge and Light Is On



TMB2199N

# Troubleshooting



TMB2200N