

# MDG120PVV

(Phase 7/Non-Coin with S.A.F.E.)

## Installation Manual

**WARNING:** For your safety the information in this manual must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or death.

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

— **WHAT TO DO IF YOU SMELL GAS:**

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Clear the room, building or area of all occupants.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

**AVERTISSEMENT:** Assurez-vous de bien suivre les instructions données dans cette notice pour réduire au minimum le risque d'incendie ou d'explosion ou pour éviter tout dommage matériel, toute blessure ou la mort.

— Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.

— **QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:**

- Ne pas tenter d'allumer d'appareils.
- Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment.
- Évacuez la pièce, le bâtiment ou la zone.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.

— L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.

**MAYTAG**



**RETAIN THESE INSTRUCTIONS IN A SAFE PLACE FOR FUTURE REFERENCE**

# Retain This Manual In A Safe Place For Future Reference

This product embodies advanced concepts in engineering, design, and safety. If this product is properly maintained, it will provide many years of safe, efficient, and trouble free operation.

*ONLY qualified technicians should service this equipment.*

**OBSERVE ALL SAFETY PRECAUTIONS** displayed on the equipment or specified in the installation manual included with the dryer.

The following “**FOR YOUR SAFETY**” caution **must be** posted near the dryer in a prominent location.

**FOR YOUR SAFETY**

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

**POUR VOTRE SÉCURITÉ**

Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.

We have tried to make this manual as complete as possible and hope you will find it useful. The manufacturer reserves the right to make changes from time to time, without notice or obligation, in prices, specifications, colors, and material, and to change or discontinue models. The illustrations included in this manual may not depict your particular dryer **exactly**.

## Important

For your convenience, log the following information:

**DATE OF PURCHASE** \_\_\_\_\_ **MODEL NO.** **MDG120** \_\_\_\_\_

**DEALER'S NAME** \_\_\_\_\_

**Serial Number(s)** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

For replacement parts, contact the dealer from which the dryer was purchased or contact:

**Maytag Co.**  
403 West Fourth Street North  
Newton, Iowa 50208  
(641) 787-7000

**“IMPORTANT NOTE TO PURCHASER”**

Information **must be** obtained from your local gas supplier on the instructions to be followed if the user smells gas. These instructions **must be** posted in a prominent location near the dryer.

## **IMPORTANT**

**YOU MUST DISCONNECT AND LOCKOUT THE ELECTRIC SUPPLY AND THE GAS SUPPLY BEFORE ANY COVERS OR GUARDS ARE REMOVED FROM THE MACHINE TO ALLOW ACCESS FOR CLEANING, ADJUSTING, INSTALLATION, OR TESTING OF ANY EQUIPMENT PER OSHA (Occupational Safety and Health Administration) STANDARDS.**

“Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper operation.”

«Attention: Au moment de l'entretien des commandes, étiquetez tous les fils avant de les débrancher. Des erreurs de câblage peuvent entraîner un fonctionnement inadéquat et dangereux.»

## **CAUTION**

**DRYERS SHOULD NEVER BE LEFT UNATTENDED WHILE IN OPERATION.**

## **WARNING**

**CHILDREN SHOULD NOT BE ALLOWED TO PLAY ON OR NEAR THE DRYER(S).**  
**CHILDREN SHOULD BE SUPERVISED IF NEAR DRYERS IN OPERATION.**

## **FOR YOUR SAFETY**

**DO NOT DRY MOP HEADS IN THE DRYER.**

**DO NOT USE DRYER IN THE PRESENCE OF DRY CLEANING FUMES.**

## **WARNING**

**UNDER NO CIRCUMSTANCES should the dryer door switch, lint drawer switch, or the heat safety circuits ever be disabled.**

### **WARNING**

The dryer *must never be* operated with any of the back guards, outer tops, or service panels removed. **PERSONAL INJURY OR FIRE COULD RESULT.**

### **WARNING**

**DRYER *MUST NEVER BE* OPERATED WITHOUT THE LINT FILTER/SCREEN IN PLACE, EVEN IF AN EXTERNAL LINT COLLECTION SYSTEM IS USED.**

### **IMPORTANT**

**PLEASE OBSERVE ALL SAFETY PRECAUTIONS displayed on the equipment and/or specified in the installation manual included with the dryer.**

Dryer *must not be* installed or stored in an area where it **will be** exposed to water or weather.

The wiring diagram for the dryer is located in the front electrical control box area.

### **IMPORTANT**

Dryer *must be* installed in a location/environment, which the ambient temperature remains between 40° F (4.44° C) and 130° F (54.44° C).

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# SECTION I

## IMPORTANT INFORMATION

### A. RECEIVING AND HANDLING

The dryer is shipped in a protective stretch wrap cover with protective cardboard corners and top cover (or optional box) as a means of preventing damage in transit. Upon delivery, the dryer and/or packaging, and wooden skid **should be** visually inspected for shipping damage. If any damage whatsoever is noticed, inspect further before delivering carrier leaves.

Dryers damaged in shipment:

1. **ALL** dryers **should be** inspected upon receipt and before they are signed for.
2. If there is suspected damage or actual damage, the trucker's receipt **should be** so noted.
3. If the dryer is damaged beyond repair, it **should be** refused. Those dryers, which were not damaged in a damaged shipment, **should be** accepted, but the number received and the number refused **must be** noted on the receipt.
4. If you determine that the dryer was damaged after the trucker has left your location, you should call the delivering carrier's freight terminal immediately and file a claim. The freight company considers this concealed damage. This type of freight claim is very difficult to get paid and becomes extremely difficult when more than a day or two passes after the freight was delivered. It is your responsibility to file freight claims. Dryer/parts damaged in transit **cannot** be claimed under warranty.
5. Freight claims are the responsibility of the consignee, and **ALL** claims **must be** filed at the receiving end. Manufacturer assumes no responsibility for freight claims or damages.

**IMPORTANT:** The dryer *must be* transported and handled in an upright position at **ALL** times.

## B. SAFETY PRECAUTIONS

**WARNING:** For your safety, the information in this manual *must be* followed to minimize the risk of fire or explosion or to prevent property damage, personal injury, or loss of life.

**WARNING:** The dryer *must never be* operated with any of the back guards, outer tops, or service panels removed. **PERSONAL INJURY OR FIRE COULD RESULT.**

1. **DO NOT** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
2. Purchaser/user should consult the local gas supplier for proper instructions to be followed in the event the user smells gas. The instructions **should be** posted in a prominent location.
3. WHAT TO DO IF YOU SMELL GAS...
  - a. **DO NOT** try to light any appliance.
  - b. **DO NOT** touch any electrical switch.
  - c. **DO NOT** use any phone in your building.
  - d. Clear the room, building, or area of **ALL** occupants.
  - e. Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - f. If you **cannot** reach your gas supplier, call the fire department.
4. Installation and service **must be** performed by a qualified installer, service agency, or gas supplier.
5. Dryer(s) **must be** exhausted to the outdoors.
6. Although **Maytag** produces a very versatile dryer, there are some articles that, due to fabric composition or cleaning method, **should not be** dried in it.

**WARNING:** Dry only water washed fabrics. **DO NOT** dry articles spotted or washed in dry cleaning solvents, a combustible detergent, or "all purpose" cleaner.  
**EXPLOSION COULD RESULT.**

**WARNING:** **DO NOT** dry rags or articles coated or contaminated with gasoline, kerosene, oil, paint, or wax.  
**EXPLOSION COULD RESULT.**

**WARNING:** **DO NOT** dry mop heads. Contamination by wax or flammable solvents will create a fire hazard.



**WARNING:** *DO NOT* use heat for drying articles that contain plastic, foam, sponge rubber, or similarly textured rubber materials. Drying in a heated basket (tumbler) may damage plastics or rubber and may be a fire hazard.

7. A program **should be** established for the inspection and cleaning of lint in the heating unit area, exhaust ductwork, and inside the dryer. The frequency of inspection and cleaning can best be determined from experience at each location.

**WARNING:** The collection of lint in the burner area and exhaust ductwork can create a potential fire hazard.

8. For personal safety, the dryer **must be** electrically grounded in accordance with local codes and/or the National Electrical Code ANSI/NFPA NO. 70-LATEST EDITION, or in Canada, the Canadian Electrical Codes Parts 1 & 2 CSA C22.1-1990 or LATEST EDITION.

**NOTE:** Failure to do so will VOID THE WARRANTY.

9. UNDER NO CIRCUMSTANCES should the dryer door switch, lint drawer switch, or the heat safety circuits ever be disabled.

**WARNING: PERSONAL INJURY OR FIRE COULD RESULT.**

10. This dryer is not to be used in the presence of dry cleaning solvents or fumes.
11. Remove articles from the dryer as soon as the drying cycle has been completed.

**WARNING:** Articles left in the dryer after the drying and cooling cycles have been completed can create a fire hazard.

12. **READ AND FOLLOW ALL CAUTION AND DIRECTION LABELS ATTACHED TO THE DRYER.**
13. For safety, proper operation, and optimum performance, the dryer **must not be** operated with a load less than sixty-six percent (66%), 85 lbs (38 kg) of its rated capacity.

**WARNING: YOU MUST DISCONNECT AND LOCKOUT THE ELECTRIC SUPPLY AND THE GAS SUPPLY BEFORE ANY COVERS OR GUARDS ARE REMOVED FROM THE MACHINE TO ALLOW ACCESS FOR CLEANING, ADJUSTING, INSTALLATION, OR TESTING OF ANY EQUIPMENT PER OSHA (Occupational Safety and Health Administration) STANDARDS.**

**IMPORTANT:** Dryer *must be* installed in a location/environment, which the ambient temperature remains between 40° F (4.44° C) and 130° F (54.44° C).

# SECTION II

## SPECIFICATIONS/COMPONENT IDENTIFICATION

### A. SPECIFICATIONS

|                               |                           |                            |                       |
|-------------------------------|---------------------------|----------------------------|-----------------------|
| MAXIMUM CAPACITY (DRY WEIGHT) |                           | 120 lbs                    | <b>54.4 kg</b>        |
| BASKET (TUMBLER) DIAMETER     |                           | 44-1/2"                    | <b>113 cm</b>         |
| BASKET (TUMBLER) DEPTH        |                           | 42-1/2"                    | <b>107.9 cm</b>       |
| BASKET (TUMBLER) MOTOR        |                           | 3/4 hp                     | <b>0.560 kW</b>       |
| BLOWER MOTOR                  |                           | 3 hp                       | <b>2.238 kW</b>       |
| DOOR OPENING (DIAMETER)       |                           | 31-3/8"                    | <b>79.7 cm</b>        |
| BASKET (TUMBLER) VOLUME       |                           | 38.2 cu ft                 | <b>1.08 cu m</b>      |
| AIRFLOW                       |                           | 2,150 cfm                  | <b>60.88 cmm</b>      |
| S.A.F.E. WATER CONNECTION     |                           | 3/4-11.5 NH                |                       |
| <b>GAS</b>                    | VOLTAGE AVAILABLE         | 208-575v 3ø 3, 4w 50/60 Hz |                       |
|                               | APPROX. WEIGHT (UNCRATED) | 1,349 lbs                  | <b>611.9 kg</b>       |
|                               | APPROX. WEIGHT (CRATED)   | 1,489 lbs                  | <b>675.4 kg</b>       |
|                               | HEAT INPUT                | 375,000 Btu/hr             | <b>94,500 kcal/hr</b> |
|                               | INLET SIZE                | 1-1/4" F.N.P.T.            |                       |

*Shaded areas are stated in metric equivalents*

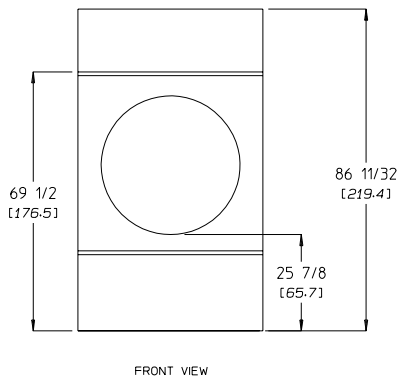
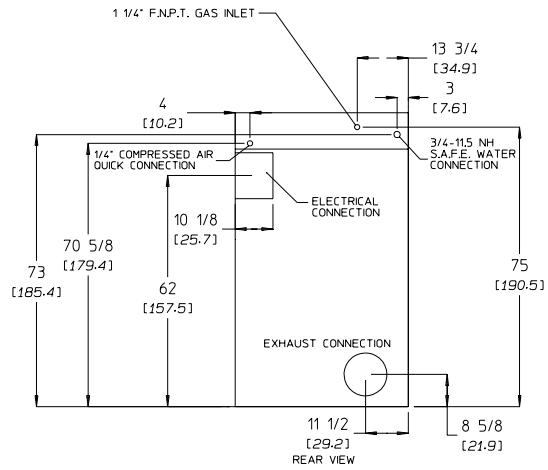
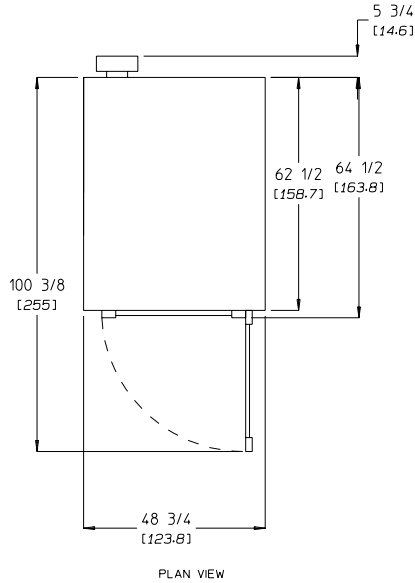
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**NOTE:** Manufacturer reserves the right to make changes in specifications at any time without notice or obligation.

# Specifications – Gas

DRYER NOTES:

- ° DUCTWORK SIZE VARIES WITH INSTALLATION CONDITIONS.
- ° EXHAUST STATIC PRESSURE MUST BE NO LESS THAN 0 AND MUST NOT EXCEED 0.3" (0.74 MB) WATER COLUMN.

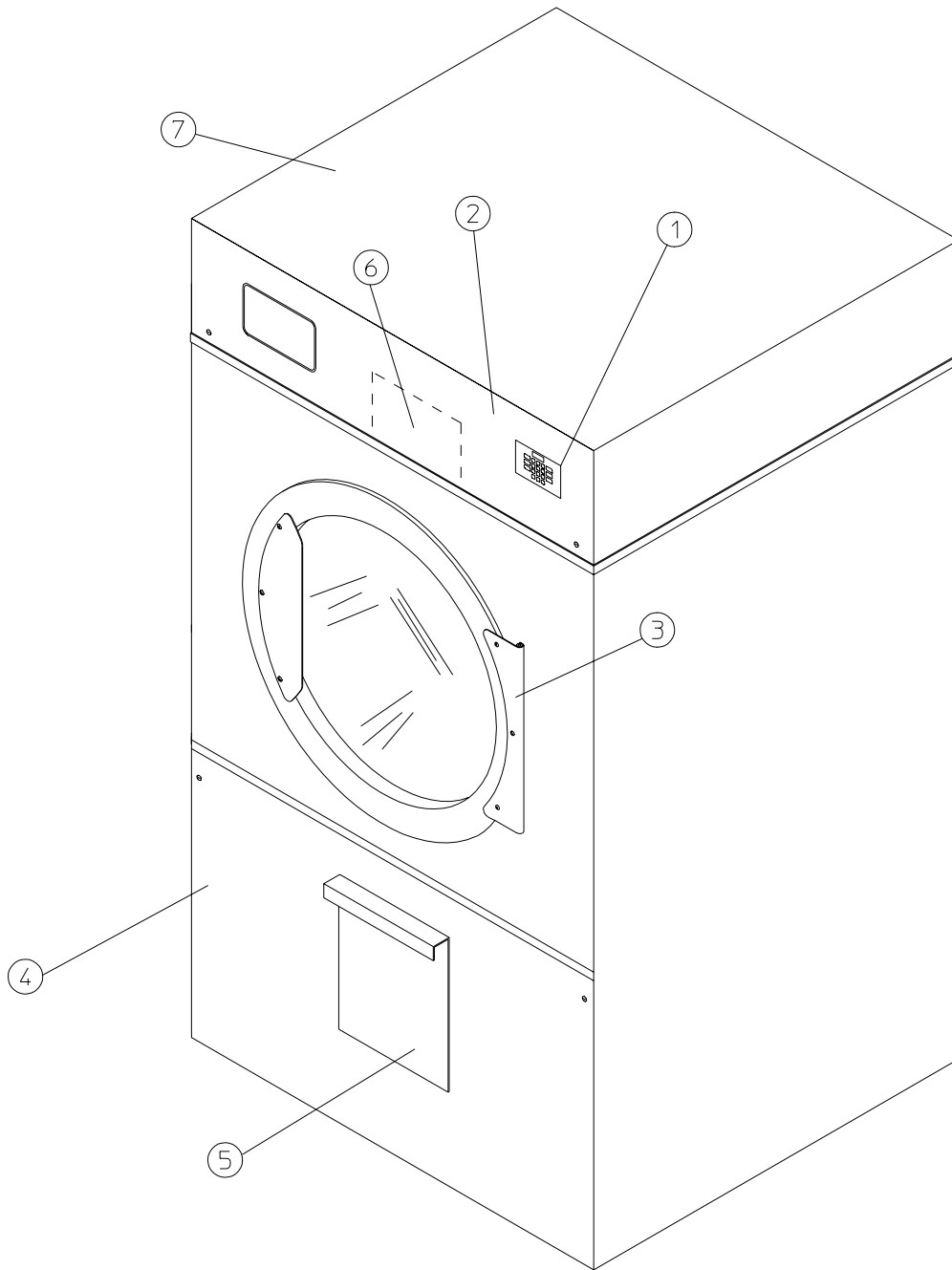


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**NOTE:** Manufacturer reserves the right to make changes in specifications at any time without notice or obligation.

## B. COMPONENT IDENTIFICATION

### 1. Dryer Front View

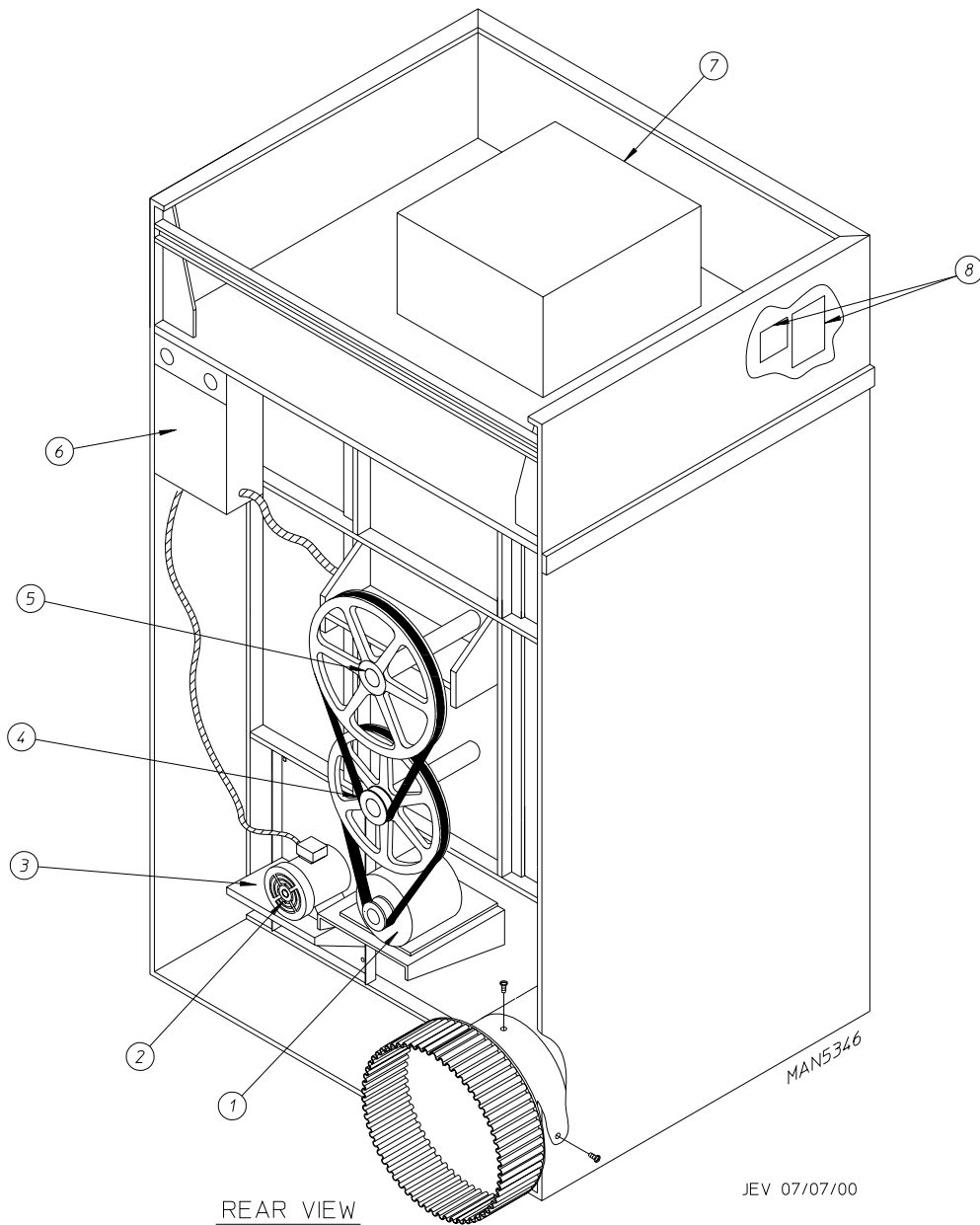


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| <u>Illus. No.</u> | <u>Description</u>  |
|-------------------|---|
| 1                 | Microprocessor Control/Keyboard (touch pad) Panel Assembly (controls) |
| 2                 | Control (top access) Door Assembly                                    |
| 3                 | Main Door Assembly  |
| 4                 | Lint Door Assembly  |
| 5                 | Lint Drawer   |
| 6                 | Wire Diagram (located behind control door)                            |
| 7                 | Top Console (module) Assembly   |

2. Dryer Rear View



| <u>Illus. No.</u> | <u>Description</u>                      |
|-------------------|---|
| 1                 | Basket (tumbler) Drive Motor Assembly   |
| 2                 | Blower Motor Mount Assembly             |
| 3                 | Impellor (fan/blower) Assembly          |
| 4                 | Idler Bearing Mount Assembly            |
| 5                 | Basket (tumbler) Bearing Mount Assembly |
| 6*                | Electric Service Relay Box              |
| 7                 | Heating Unit                            |
| 8                 | Data Label and Installation Label       |

\* Electric service connections are made in this box.

# SECTION III

## INSTALLATION PROCEDURES

Installation **should be** performed by competent technicians in accordance with local and state codes. In the absence of these codes, the installation **must conform** to applicable American National Standards: ANSI Z223.1-LATEST EDITION (National Fuel Gas Code) or ANSI/NFPA NO. 70-LATEST EDITION (National Electrical Code) or in Canada, the installation **must conform** to applicable Canadian Standards: CAN/CGA-B149.1-M91 (Natural Gas) or CAN/CGA-B149.2-M91 (Liquid Propane [L.P.] Gas) or LATEST EDITION (for General Installation and Gas Plumbing) or Canadian Electrical Codes Parts 1 & 2 CSA C22.1-1990 or LATEST EDITION (for Electrical Connections).

### A. LOCATION REQUIREMENTS

Before installing the dryer, be sure the location conforms to local codes and ordinances. In the absence of such codes or ordinances the location **must conform** with the National Fuel Gas Code ANSI.Z223.1 LATEST EDITION, or in Canada, the installation **must conform** to applicable Canadian Standards: CAN/CGA-B149.1-M91 (Natural Gas) or CAN/CGA-B149.2-M91 (L.P. Gas) or LATEST EDITION (for General Installation and Gas Plumbing).

1. The dryer **must be** installed on a sound level floor capable of supporting its weight. Carpeting **must be** removed from the floor area that the dryer is to rest on.

**IMPORTANT:** “The dryer *must be* installed on noncombustible floors only.”

2. The dryer **must not be** installed or stored in an area where it will be exposed to water and/or weather.
3. The dryer is for use in noncombustible locations.
4. Provisions for adequate air supply **must be** provided as noted in this manual (refer to **Fresh Air Supply Requirements** in Section D).
5. Clearance provisions **must be** made from combustible construction as noted in this manual (refer to **Dryer Enclosure Requirements** in Section C).
6. Provisions **must be** made for adequate clearances for servicing and for operation as noted in this manual (refer to **Dryer Enclosure Requirements** in Section C).
7. Dryer **must be** exhausted to the outdoors as noted in this manual (refer to **Exhaust Requirements** Section E).
8. Dryer **must be** located in an area where correct exhaust venting can be achieved as noted in this manual (refer to **Exhaust Requirements** in Section E).

**IMPORTANT:** Dryer *should be* located where a minimum amount of exhaust duct **will be** necessary.

9. The dryer **must be** installed with a proper exhaust duct connection to the outside.

10. The dryer **must be** installed with provisions for adequate combustion and make-up air supply.

**CAUTION:** This dryer produces combustible lint and **must be** exhausted to the outdoors. Every 6 months, inspect the exhaust ducting and remove any lint build up.

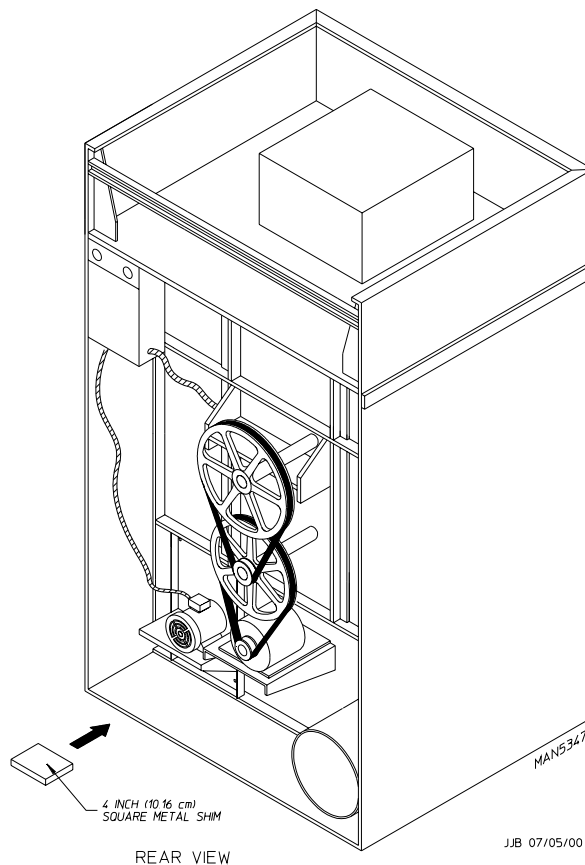
**IMPORTANT:** Dryer **must be** installed in a location/environment, which the ambient temperature remains between 40° F (4.44° C) and 130° F (54.44° C).

## B. UNPACKING/SETTING UP

Remove protective shipping material (i.e., plastic wrap, and/or optional shipping box) from dryer.

**IMPORTANT:** Dryer **must be** transported and handled in an upright position at ALL times.

The dryer can be moved to its final location while still attached to the skid or with the skid removed. To unskid the dryer, locate and remove the four (4) lag bolts securing the base of the dryer to the wooden skid. Two (2) are located at the rear base (remove the back panel for access) and two (2) are located in the bottom of the lint chamber. To remove the two (2) lag bolts located in the lint chamber area, remove the lint drawer and the three (3) Phillips head screws securing lint door in place.



### 1. Leveling Dryer

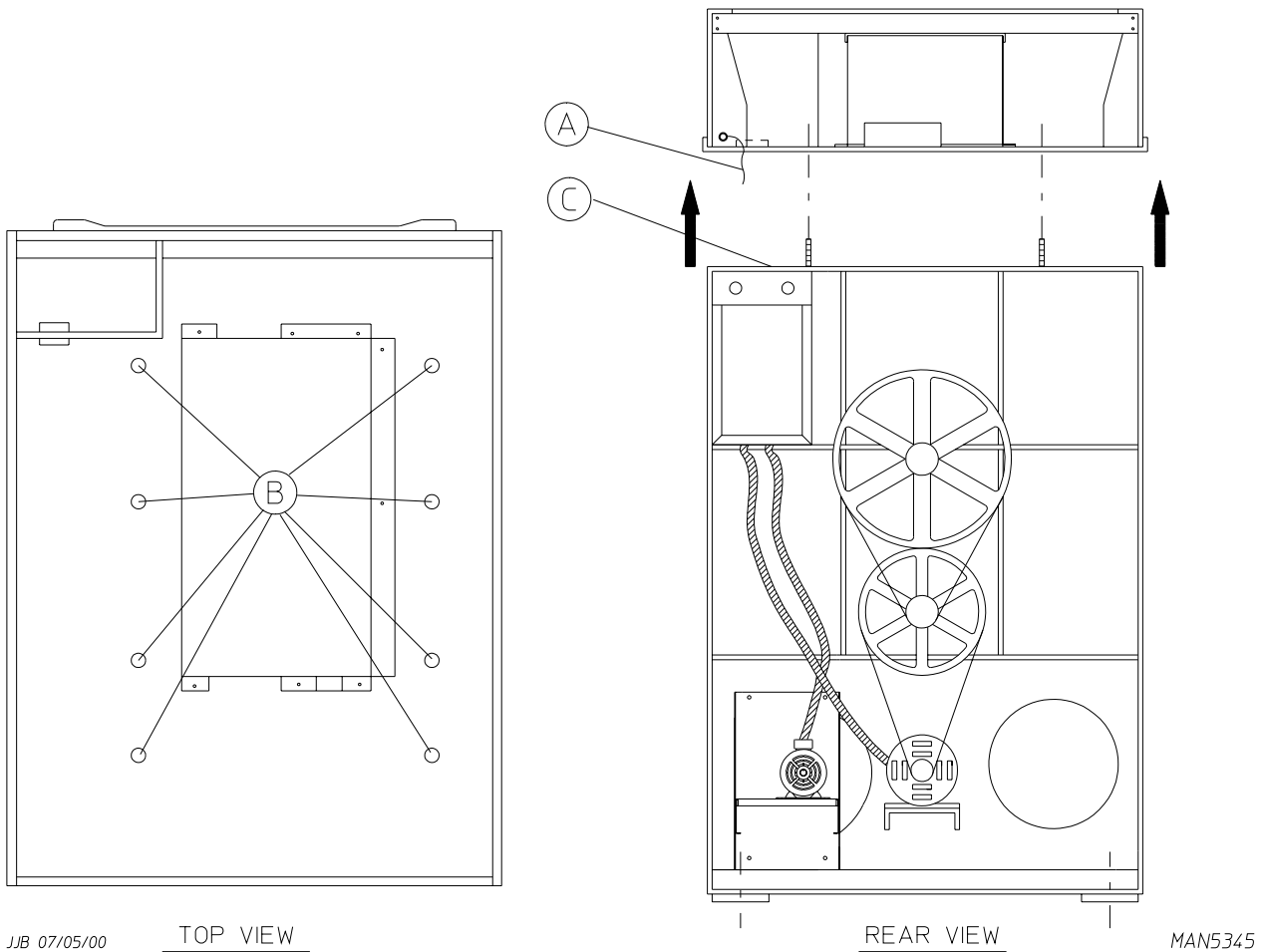
- a. To level dryer, place 4-inch (10.16 cm) square metal shims (refer to **illustration above**) or other suitable material under the base pads. It is suggested that the dryer be tilted slightly to the rear.

2. If more headroom is needed when moving dryer into position, the top console (module) may be removed.

a. To Remove Top Console (Module)

- 1) Disconnect the ground wire (A) at the rear upper left hand corner of dryer.
- 2) Remove the eight (8) sets of nuts and washers (B) holding the console (module) to base.
- 3) Open the control door/control panel and disconnect the white 15-pin plug connector (C) (**illustration below**) located in the base of the control box.
- 4) Disconnect white plug connector located outside back side of the control box (provides power to heat circuit).
- 5) Lift the console (module) off the dryer base.

**IMPORTANT:** The dryer *must be* transported and handled in an upright position at **ALL** times.





### 3. Exhaust Transition Piece

## WARNING

An exhaust duct transition piece is shipped inside of the dryer's tumbler and **must be** installed on the dryer's exhaust duct, with the hardware provided, **BEFORE** location venting is connected to the dryer.

### **THIS EXHAUST DUCT TRANSITION PIECE MUST BE INSTALLED FIRST!**

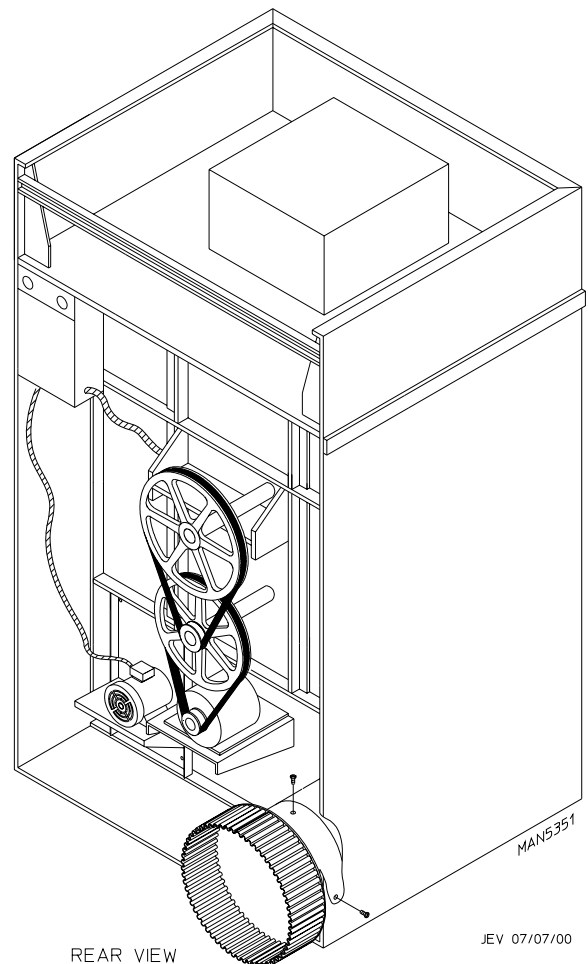
Failure to observe this installation requirement may result in damage to the dryer, create a **FIRE HAZARD** and will **VOID** the manufacturer's warranty.

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- a. Inside the basket (tumbler) of this dryer is an exhaust transition piece that **must be** installed on the outlet of the exhaust before any further venting is connected:
  - 1) Remove the exhaust transition piece from the basket (tumbler) and place it on the exhaust outlet.
  - 2) Using the screws provided, secure the exhaust transition piece to the dryer.

**NOTE:** It is recommended that this joint be taped as well as ALL other duct joints to prevent moisture and lint from escaping into the building.

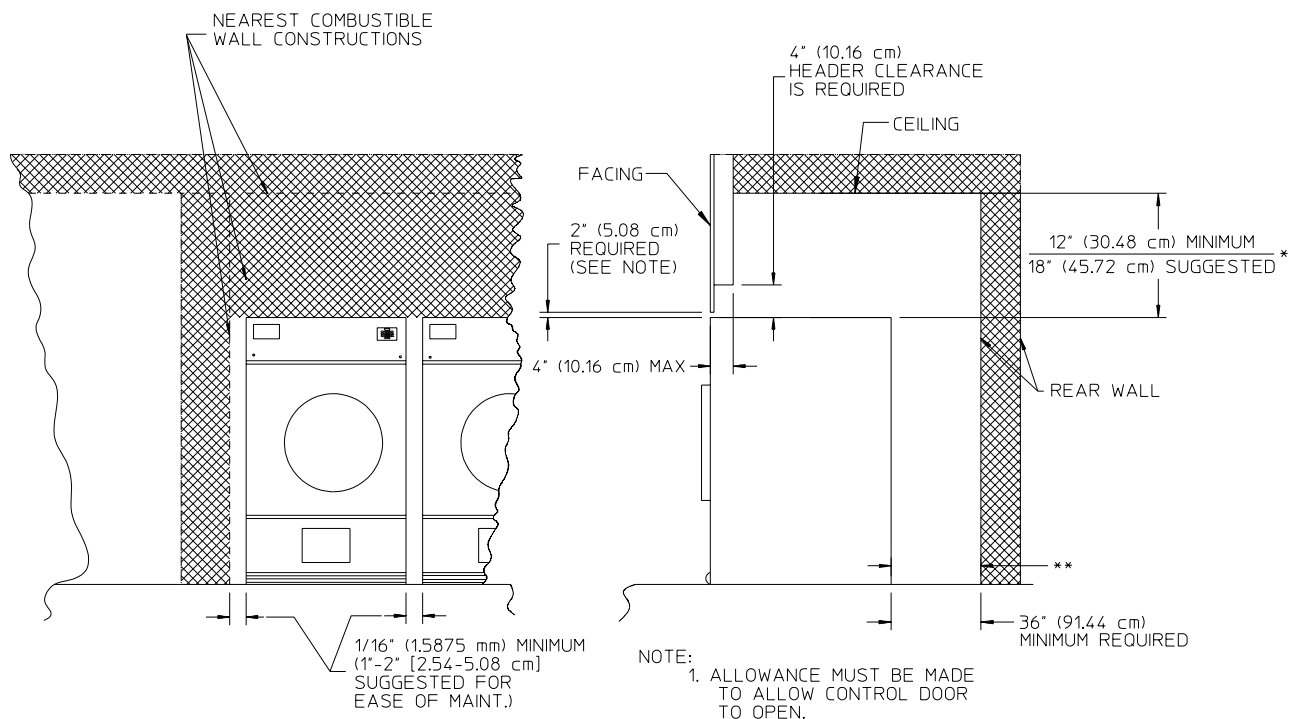


## C. DRYER ENCLOSURE REQUIREMENTS

Even though a 12-inch (30.48 cm) clearance is acceptable, it is recommended that the rear of the dryer be positioned approximately 2 feet (0.60 meters) from the nearest obstruction (i.e., wall) for ease of installation, maintenance, and service. Bulkheads and partitions **should be** made from noncombustible materials. The clearance between the bulkhead header and the dryer **must be** a minimum of 4-inches (10.16 cm) and must not extend more than 4-inches (10.16 cm) to the rear of the dryer front. The bulkhead facing **must not be** closed in **ALL** the way to the top of the dryer. A 2-inch (5.08 cm) clearance is required.

**NOTE:** Bulkhead facing *should not be* installed until after dryer is in place. Ceiling area *must be* located a minimum of 12-inches (30.48 cm) above the top of the dryer.

**NOTE:** When fire sprinkler systems are located above the dryers, a minimum of 18-inches (45.72 cm) above the dryer console (module) is suggested. Dryers may be positioned sidewall to sidewall, however, 1 or 2-inches (2.54 or 5.08 cm) is suggested between dryers (or wall) for ease of installation and maintenance. Allowances *must be* made for the opening and closing of the control and lint doors.



\* 12" (30.48 cm) OR MORE CLEARANCE IS SUGGESTED, ESPECIALLY IN CASES WHERE SPRINKLER HEADS ARE OVER THE DRYERS.

\*\* 24" (60.96 cm) MINIMUM PERMITTED FOR DRYERS VENTING HORIZONTALLY.

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INSTALLATION: DRYER CLEARANCE TO ADJACENT WALL STRUCTURES.

## D. FRESH AIR SUPPLY REQUIREMENTS

When the dryer is operating, it draws in room air, heats it, passes this air through the basket (tumbler), and exhausts it out of the building. Therefore, the room air **must be** continually replenished from the outdoors. If the make-up air is inadequate, drying time and drying efficiency will be adversely affected. Ignition problems and sail switch “fluttering” problems may result, as well as premature motor failure from overheating.

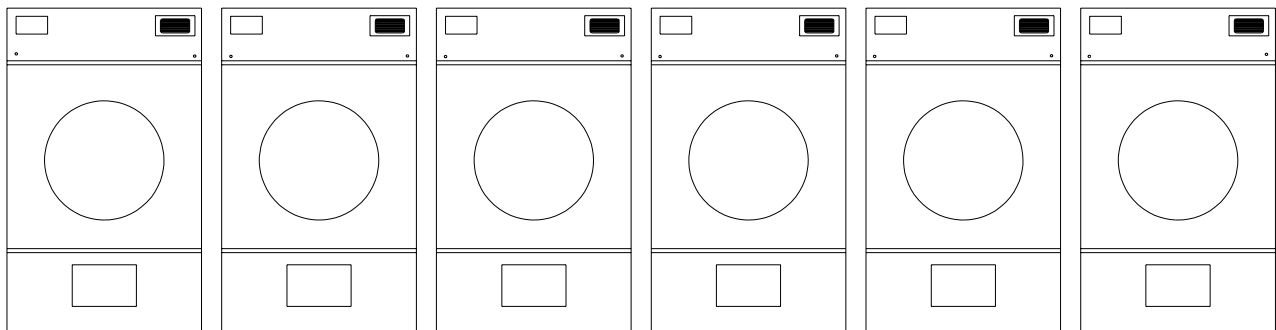
Air supply (make-up air) **must be** given careful consideration to assure proper performance of each dryer. An unrestricted source of air is necessary for each dryer. An airflow of 2,150 cfm (cubic feet per minute [60.88 cmm] [cubic meters per minutes]) **must be** supplied to each dryer. As a general rule, an unrestricted air entrance from the outdoors (atmosphere) of a minimum of 3 square feet (0.28 square meters) is required for each dryer.

To compensate for the use of registers or louvers used over the openings, this make-up air area **must be** increased by approximately thirty-three percent (33%). Make-up air openings **should not be** located in an area directly near where exhaust vents exit the building.

It is not necessary to have a separate make-up air opening for each dryer. Common make-up air openings are acceptable. However, they **must be** set up in such a manner that the make-up air is distributed equally to **ALL** the dryers. The dryer **must be** installed with provisions for adequate combustion and make-up air supply.

EXAMPLE: For a bank of six (6) gas dryers, two (2) openings measuring 3 feet by 3 feet (0.91 meters by 0.91 meters [9 square feet] [0.84 square meters]) are acceptable.

Allowances **must be** made for remote or constricting passageways or where dryers are located at excessive altitudes or predominantly low pressure areas.



JEV 1/3/02

MAN6433

TYPICAL INSTALLATION SHOWING MAKE-UP AIR OPENINGS

**IMPORTANT:** Make-up air *must be* provided from a source free of dry cleaning solvent fumes. Make-up air that is contaminated by dry cleaning solvent fumes will result in irreparable damage to the motors and other dryer components.

**NOTE:** Component failure due to dry cleaning solvent fumes will VOID THE WARRANTY.

## E. EXHAUST REQUIREMENTS

### 1. General Exhaust Ductwork Information

Exhaust ductwork **should be** designed and installed by a qualified professional. Improperly sized ductwork will create excessive back pressure which results in slow drying, increased use of energy, overheating of the dryer, and shutdown of the burner by the airflow (sail) switches, burner hi-limits, or basket (tumbler) hi-heat thermostats. The dryer **must be** installed with a proper exhaust duct connection to the outside.

**CAUTION:** This dryer produces combustible lint and *must be* exhausted to the outdoors.

**CAUTION:** DRYER *MUST BE* EXHAUSTED TO THE OUTDOORS.

**CAUTION: IMPROPERLY SIZED OR INSTALLED EXHAUST DUCTWORK CAN CREATE A POTENTIAL FIRE HAZARD.**

**NOTE:** When a dryer is exhausted separately, **it is recommended** that a back draft damper be installed.

**NOTE:** When dryers are exhausted into a multiple (common) exhaust line, each dryer *must be* supplied with a back draft damper.

The exhaust ductwork **should be** laid out in such a way that the ductwork travels as directly as possible to the outdoors with as few turns as possible. Single or independent dryer venting is recommended. When single dryer venting is used, the ductwork from the dryer to the outside exhaust outlet **must not exceed** 20 feet (6.09 meters). In the case of multiple (common) dryer venting, the distance from the last dryer to the outside exhaust outlet **must not exceed** 20 feet (6.09 meters). The shape of the ductwork is not critical so long as the minimum cross section area is provided. It is suggested that the use of 90° turns in ducting be avoided; use 30° and/or 45° angles instead. The radius of the elbows **should preferably be** 1-1/2 times the diameter of the duct. Excluding basket (tumbler) dryer elbow connections or elbows used for outside protection from the weather, no more than two (2) elbows **should be** used in the exhaust duct run. If more than two (2) elbows are used, the cross section area of the ductwork **must be** increased in proportion to number of elbows added.

**IMPORTANT:** **It is recommended** that exhaust or booster fans not be used in the exhaust ductwork system.

**NOTE:** As per the National Fuel Gas Code, “Exhaust ducts for Type 2 clothes dryers shall be constructed of sheet metal or other noncombustible material. Such ducts shall be equivalent in strength and corrosion resistance to ducts made of galvanized sheet steel not less than 0.0195-inches (26 gauge [0.05 mm]) thick.”

**ALL** ductwork **should be** smooth inside with no projections from sheet metal screws or other obstructions, which will collect lint. When adding ducts, the ducts to be added should overlap the duct to which it is connected. **ALL** ductwork joints **must be** taped to prevent moisture and lint from escaping into the building. Additionally, inspection doors **should be** installed at strategic points in the exhaust ductwork for periodic inspection and cleaning of lint from the ductwork.

To protect the outside end of the horizontal ductwork from the weather, a 90° elbow bent downward **should be** installed where the exhaust exits the building. If the ductwork travels vertically up through the roof, it **should be** protected from the weather by using a 180° turn to point the opening downward. In either case, allow at least twice the diameter of the duct between the duct opening and the nearest obstruction (i.e., roof or ground level).

**IMPORTANT:** Exhaust back pressure measured by a manometer at the dryer exhaust duct area **must be** no less than 0 and **must not exceed** 0.3 inches (0.74 mb) of water column (W.C.).

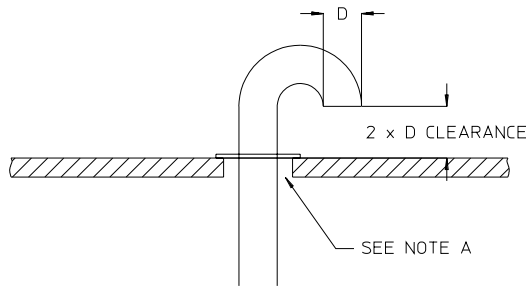
**NOTE:** When the exhaust ductwork passes through a wall, ceiling, or roof made of combustible materials, the opening **must be** 2-inches (5.08 cm) larger than the duct (all the way around). The duct **must be** centered within this opening.

a. Outside Ductwork Protection

- 1) To protect the outside end of the horizontal ductwork from the weather, a 90° elbow bent downward **should be** installed where the exhaust exits the building. If the exhaust ductwork travels vertically up through the roof, it **should be** protected from the weather by using a 180° turn to point the opening downward. In either case, allow at least twice the diameter of the duct between the duct opening and the nearest obstruction.

**IMPORTANT:** **DO NOT** use screens, louvers, or caps on the outside opening of the exhaust ductwork.

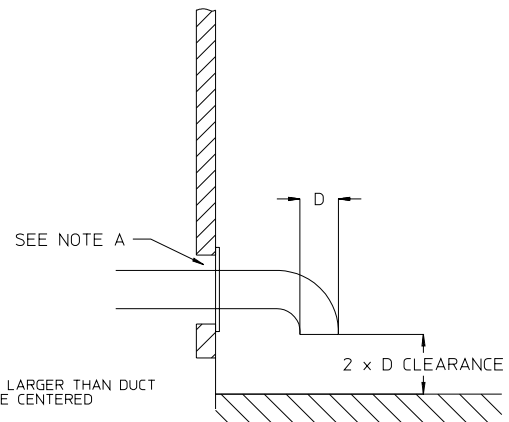
VERTICAL DUCTING



MAN4589

NOTE "A": OPENING MUST BE TWO (2) INCHES (5.08 CM) LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

HORIZONTAL DUCTING



## 2. Single Dryer Venting

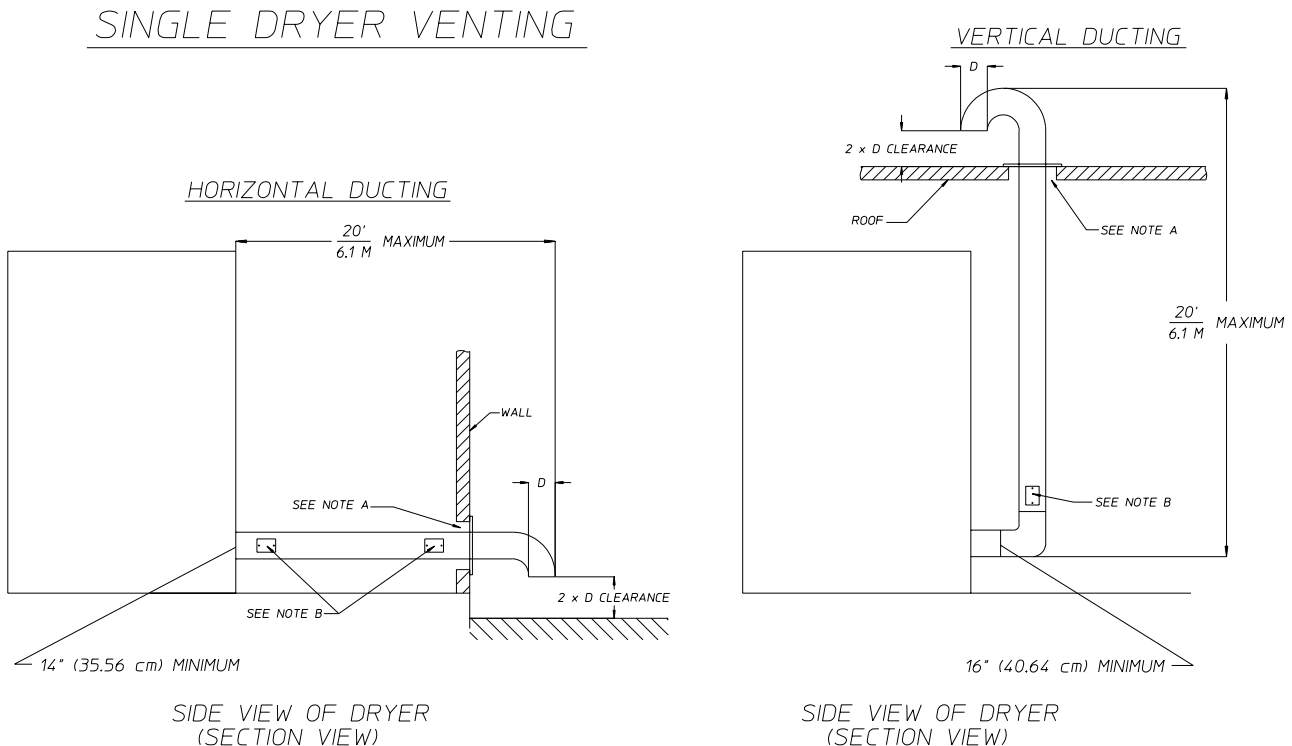
When possible, it is suggested that provide a separate exhaust duct for each dryer. The exhaust duct **should be** laid out in such a way that the ductwork travels as directly as possible to the outdoors with as few turns as possible. It is suggested that the use of 90° turns in ducting be avoided; use 30° and/or 45° angles instead. The shape of the exhaust ductwork is not critical so long as the minimum cross section area is provided.

**IMPORTANT:** Minimum duct size for a dryer with a vertical run and not more than three (3) elbows (including dryer connection and outside outlets) is 16-inches (40.64 cm) for a round duct or 14-1/2" by 14-1/2" (36.83 cm by 36.83 cm) for a square duct. ***DUCT SIZE MUST NOT BE REDUCED ANYWHERE DOWNSTREAM OF DRYER.***

**IMPORTANT:** Exhaust back pressure measured by a manometer at each basket (tumbler) exhaust duct area **must be** no less than 0 and **must not exceed** 0.3 inches (0.74 mb) of water column (W.C.).

It is suggested that the ductwork from each dryer (minimum 14-inches [35.56 cm]) not exceed 20 feet (6.09 meters) with no more than three (3) elbows (including dryer connections and outside exhaust outlets). If the ductwork exceeds 20 feet (6.09 meters) or has numerous elbows, the cross section area of the ductwork **must be** increased in proportion to the length and number of elbows in it. In calculating duct size, the cross section area of a square or rectangular duct **must be** increased by twenty percent (20%) for each additional 20 feet (6.09 meters). The diameter of a round exhaust duct **should be** increased ten percent (10%) for each additional 15 feet (4.57 meters). Each 14-inch (35.56 cm) 90° elbow is equivalent to 30 feet (9.14 meters) and each 16-inch (40.64 cm) 90° elbow is equivalent to 36 feet (10.97 meters).

### SINGLE DRYER VENTING



NOTE: "A"- OPENING MUST BE 2-INCHES (5.08 cm) LARGER THAN THE DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.  
 "B"- INSPECTION DOORS SHOULD BE INSTALLED AT STRATEGIC POINTS FOR PERIODIC INSPECTION AND CLEANING

MAN6445 JEV 1/15/03

**IMPORTANT:** For extended ductwork runs, the cross section area of the duct can only be increased to an extent. Maximum proportional ductwork runs **cannot** exceed 20 feet (6.09 meters) more than the original limitations of 20 feet (6.09 meters) with two (2) elbows. When the ductwork approaches the maximum limits as noted in this manual, a professional heating, ventilating, and air-conditioning (HVAC) firm **should be** consulted for proper venting information.

**ALL** ductwork **should be** smooth inside with no projections from sheet metal screws or other obstructions, which will collect lint. When adding ducts, the duct to be added should overlap the duct to which it is to be connected. **ALL** ductwork joints **must be** taped to prevent moisture and lint from escaping into the building. Inspection doors **should be** installed at strategic points in the exhaust ductwork for periodic inspection and cleaning of lint from the ductwork.

**NOTE:** When the exhaust ductwork passes through a wall, ceiling, or roof made of combustible materials, the opening **must be** 2-inches (5.08 cm) larger than the duct (all the way around). The duct **must be** centered within this opening.

a. Outside Ductwork Protection

- 1) To protect the outside end of the horizontal ductwork from the weather, a 90° elbow bent downward **should be** installed where the exhaust exits the building. If the exhaust ductwork travels vertically up through the roof, it **should be** protected from the weather by using a 180° turn to point the opening downward. In either case, allow at least twice the diameter of the duct between the duct opening and nearest obstruction.

**IMPORTANT:** **DO NOT** use screens, louvers, or caps on the outside opening of the exhaust ductwork.

3. Multiple Dryer (Common) Venting

If it is not feasible to provide separate exhaust ducts for each dryer, ducts from individual dryers may be channeled into a “common main duct.” The individual ducts should enter the bottom or side of the main duct at an angle not more than 45° in the direction of airflow and **should be** spaced at least 48-3/8” (122.87 cm) apart. The main duct **should be** tapered, with the diameter increasing before each individual 14-inch (35.56 cm) duct is added.

**IMPORTANT:** The dryer is provided with a back draft damper.

**IMPORTANT:** No more than four (4) dryers **should be** connected to one (1) main common duct.

The main duct may be any shape or cross-sectional area, so long as the minimum cross section area is provided. The **illustration on page 21** shows the minimum cross section area for multiple dryer round or square venting. These figures **must be** increased 10 square inches (64.51 square centimeters) when rectangular main ducting is used, and the ratio of duct width to depth **should not be** greater than 3-1/2 to 1. These figures **must be** increased in proportion if the main duct run to the last dryer to where it exhausts to the outdoors is unusually long (over 20 feet [6.09 meters]) or has numerous elbows (more than two [2]) in it. In calculating ductwork size, the cross section area of a square or rectangular duct **must be** increased twenty percent (20%) for each additional 20 feet (6.09 meters). The diameter of a round exhaust **must be** increased ten percent (10%) for each additional 20 feet (6.09 meters). Each 90° elbow is equivalent to an additional 15 feet (4.57 meters).

**IMPORTANT:** For extended ductwork runs, the cross section area of the ductwork can only be increased to an extent. Maximum proportional ductwork runs **cannot** exceed 20 feet (6.09 meters) more than the original limitations of 20 feet (6.09 meters) with two (2) elbows. When the ductwork approaches the maximum limits as noted in this manual, a professional heating, ventilating, and air-conditioning (HVAC) firm **should be** consulted for proper venting information.

**IMPORTANT:** Exhaust back pressure measured by a manometer at each dryer exhaust duct area **must be** no less than 0 and **must not exceed** 0.3 inches (0.74 mb) of water column (W.C.).

The duct **should be** smooth inside with no projections from sheet metal screws or other obstructions, which will collect lint. When adding ducts, the duct to be added should overlap the duct to which it is to be connected. **ALL** ductwork joints **must be** taped to prevent moisture and lint from escaping into the building. Inspection doors **should be** installed at strategic points in the exhaust ductwork for periodic inspection and cleaning of lint from the ductwork.

**NOTE:** When the exhaust ductwork passes through a wall, ceiling, or roof made of combustible materials, the opening **must be** 2-inches (5.08 cm) larger than the duct (all the way around). The duct **must be** centered within this opening.

a. Outside Ductwork Protection

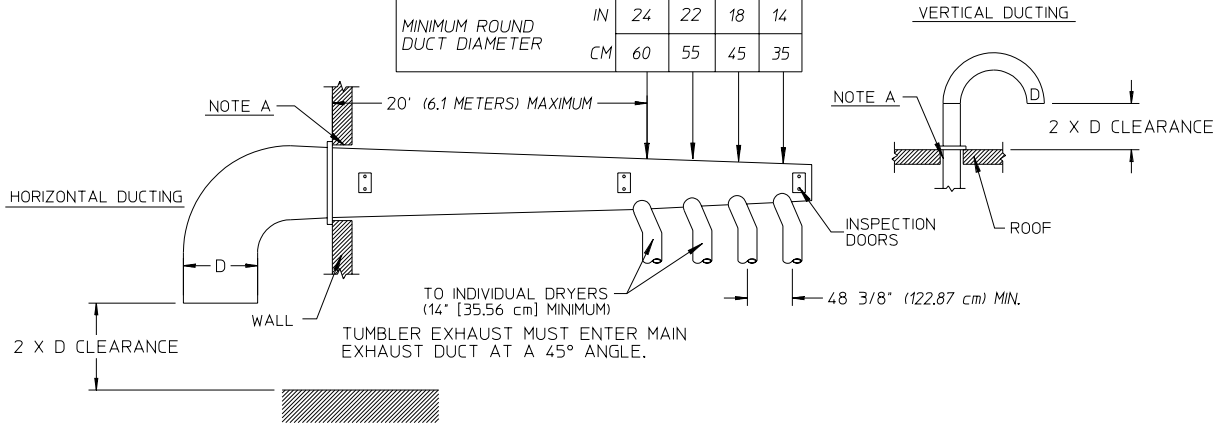
- 1) To protect the outside end of the horizontal ductwork from the weather, a 90° elbow bent downward **should be** installed where the exhaust exits the building. If the exhaust ductwork travels vertically up through the roof, it **should be** protected from the weather by using a 180° turn to point the opening downward. In either case, allow at least twice the diameter of the duct between the duct opening and nearest obstruction.

**IMPORTANT:** **DO NOT** use screens, louvers, or caps on the outside opening of the exhaust ductwork.



# 14" (35.56 cm) Diameter 2,150 cfm (60.88 cmm) Exhaust Connection at Common Duct

| NO. OF DRYERS               |       | 4    | 3    | 2    | 1   |
|-----------------------------|-------|------|------|------|-----|
| MINIMUM CROSS SECTION AREA  | SQ IN | 455  | 380  | 255  | 115 |
|                             | SQ CM | 2935 | 2452 | 1645 | 742 |
| MINIMUM ROUND DUCT DIAMETER | IN    | 24   | 22   | 18   | 14  |
|                             | CM    | 60   | 55   | 45   | 35  |



IMPORTANT: NO MORE THAN 4 DRYERS CAN  
BE CONNECTED TO ONE COMMON DUCT ( VENT ).

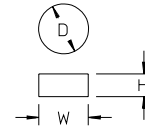
TCOSTA 6/22/01

MAN5814

### FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA

CROSS SECTIONAL AREA OF A ROUND DUCT = .785 (19.939 mm) x D<sup>2</sup> WHERE D = DIAMETER OF THE DUCT.

CROSS SECTIONAL AREA OF A RECTANGULAR DUCT = W x H WHERE W = WIDTH AND H = HEIGHT.



NOTE A: OPENING MUST BE 2-INCHES (5.08 cm) LARGER THAN THE DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## F. ELECTRICAL INFORMATION

### 1. Electrical Requirements

It is your responsibility to have **ALL** electrical connections made by a properly licensed and competent electrician to assure that the electrical installation is adequate and conforms to local and state regulations or codes. In the absence of such codes, **ALL** electrical connections, material, and workmanship **must conform** to the applicable requirements of the National Electrical Code ANSI/NFPA NO. 70-LATEST EDITION or in Canada, the Canadian Installation Codes CAN/CGA-B149.1-M91 (Natural Gas) or CAN/CGA-B149.2-M91 (Liquid Propane [L.P.] Gas) or LATEST EDITION.

**IMPORTANT:** Failure to comply with these codes or ordinances, and/or the requirements stipulated in this manual can result in personal injury or component failure.

**NOTE:** Component failure due to improper installation will VOID THE WARRANTY.

Each dryer **should be** connected to an independently protected branch circuit. The dryer **must be** connected with copper wire only. **DO NOT use aluminum wire, which could cause a fire hazard.** The copper conductor wire/cable **must be** of proper ampacity and insulation in accordance with electric codes for making **ALL** service connections.

**NOTE:** The use of aluminum wire will VOID THE WARRANTY.

**NOTE:** Wiring diagrams are affixed to the left side panel area behind the top control (access) door.

2. Electrical Service Specifications

| <b>GAS</b>   |       |              |                  |       |                   |                         |       |                 |       |
|--|-------|--------------|------------------|-------|-------------------|-------------------------|-------|-----------------|-------|
| <b>ELECTRICAL SERVICE SPECIFICATIONS (PER DRYER)</b>   |       |              |                  |       |                   |                         |       |                 |       |
| <b>IMPORTANT:</b> 208 VAC AND 230/240 VAC <b>ARE NOT THE SAME</b> . When ordering, <i>specify exact voltage</i> .  |       |              |                  |       |                   |                         |       |                 |       |
| <b>NOTES:</b>  |       |              |                  |       |                   |                         |       |                 |       |
| A. When fuses are used they <b>must be</b> dual element, time delay, current limiting, class RK1 or RK5 <b>ONLY</b> . Calculate/determine correct fuse value, by applying either local and/or National Electrical Codes to listed appliance amp draw data. |       |              |                  |       |                   |                         |       |                 |       |
| B. Circuit breakers are thermal-magnetic (industrial) motor curve type <b>ONLY</b> . For others, calculate/verify correct breaker size according to appliance amp draw rating and type of breaker used.  |       |              |                  |       |                   |                         |       |                 |       |
| C. Circuit breakers for 3-phase (3Ø) dryers <b>must be</b> 3-pole type.  |       |              |                  |       |                   |                         |       |                 |       |
| SERVICE VOLTAGE  | PHASE | WIRE SERVICE | APPROX. AMP DRAW |       | MINIMUM WIRE SIZE | FUSING                  |       | CIRCUIT BREAKER |       |
|  |       |              |                  |       |                   | Dual Element Time Delay |       |                 |       |
|  |       |              | 60 Hz            | 50 Hz |                   | 60 Hz                   | 50 Hz | 60 Hz           | 50 Hz |
| 208  | 3Ø    | 3            | 14.5             | —     | *                 | 20                      | —     | 20              | —     |
| 230/240  | 3Ø    | 3            | 14.6             | 17.4  | *                 | 20                      | 25    | 20              | 25    |
| 380-400  | 3Ø    | 4**          | —                | 8.7   | *                 | —                       | 15    | —               | 15    |
| 416  | 3Ø    | 4**          | —                | 8.4   | *                 | —                       | 15    | —               | 15    |
| 460/480  | 3Ø    | 3            | 7.8              | —     | *                 | 15                      | —     | 15              | —     |
| 575  | 3Ø    | 3            | 5.8              | —     | *                 | 15                      | —     | 15              | —     |

\* AWG Stranded Wire Type...size wire as per National Electrical Code or local codes.

9/4/03

\*\* 3-Wire is available.

**IMPORTANT:** The dryer *must be* connected to the electric supply shown on the data label that is affixed to the left side panel/wall area behind the control door. In the case of 208 VAC or 230/240 VAC, the supply voltage must match the electric service specifications of the data label **exactly**.

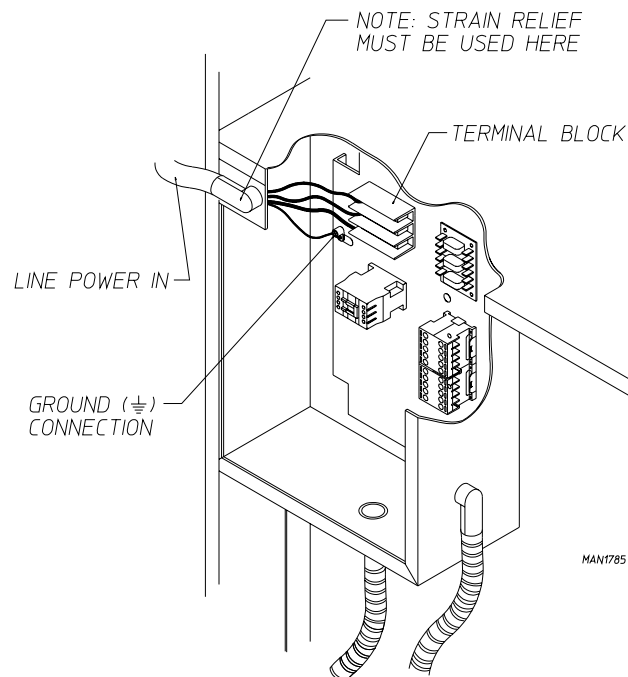
**WARNING:** **208 VAC AND 230/240 VAC ARE NOT THE SAME**. Any damage done to dryer components due to improper voltage connections will automatically **VOID THE WARRANTY**.

**NOTE:** Manufacturer reserves the right to make changes in specifications at any time without notice or obligation.

### 3. Electrical Connections

**NOTE:** A wiring diagram is included with each dryer and is affixed to the rear upper right guard/panel of the dryer.

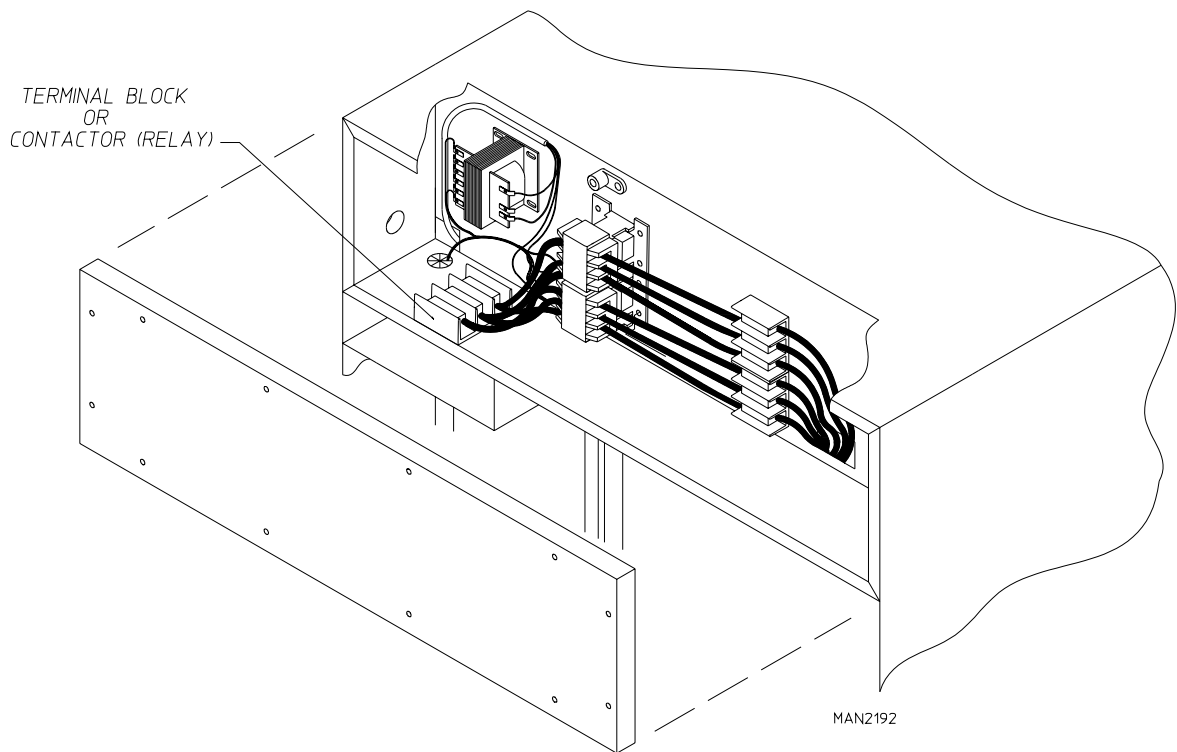
The only electrical input connections to the dryer are the 3-phase (3 $\phi$ ) power leads (L1, L2, and L3), GROUND, and in the case of 4 wire service, the neutral. Providing local codes permit, power connections to the dryer can be made by the use of a flexible underwriters laboratory listed cord/pigtail (wire size **must conform** to rating of the dryer), or the dryer can be hard wired directly to the service breaker. In **ALL** cases, a strain relief **must be** used where the wire(s) enter the dryer electrical service (relay) box.



#### a. Gas Model Dryers

These electrical connections are made at the terminal block located in the electric service/relay box at the rear, upper left hand corner of the dryer. To gain access into this service box, the service cover (upper back guard) **must be** removed.

**NOTE:** A CIRCUIT SERVICING EACH DRYER **MUST BE** PROVIDED.



#### 4. Grounding

A ground (earth) connection **must be** provided and installed in accordance with state and local codes. In the absence of these codes, grounding **must conform** to applicable requirements of the National Electrical Code ANSI/NFPA NO. 70-LATEST EDITION, or in Canada, the installation **must conform** to applicable Canada Standards: Canadian Electrical Codes Parts 1 & 2 CSA C22.1-1990 or LATEST EDITION. The ground connection may be to a proven earth ground at the location service panel.

**NOTE:** A grounding connection (terminal lug) is provided in the dryer's electrical service/relay box at the rear.

For added personal safety, when possible, it is suggested that a separate ground wire (sized per local codes) be connected from the ground connection of the dryer to a grounded cold water pipe. **DO NOT ground to a gas or hot water pipe.** The grounded cold water pipe must have metal to metal connections **ALL** the way to electrical ground. If there are any nonmetallic interruptions, such as a meter, pump, plastic, rubber, or other insulating connectors, they **must be** jumped out with no. 4 copper wire and securely clamped to bare metal at both ends.

**IMPORTANT:** For personal safety and proper operation, the dryer **must be** grounded. For proper operation of the microprocessor controller (computer), an earth (zero) ground is required.

**NOTE:** Grounding via metallic electrical conduit (pipe) **is not recommended.**

## G. GAS INFORMATION

It is your responsibility to have **ALL** plumbing connections made by a qualified professional to assure that the gas plumbing installation is adequate and conforms to local and state regulations or codes. In the absence of such codes, **ALL** plumbing connections, materials, and workmanship **must conform** to the applicable requirements of the National Fuel Gas Code ANSI Z223.1-LATEST EDITION, or in Canada, the Canadian Installation Codes CAN/CGA-B149.1-M91 (Natural Gas) or CAN/CGA-B149.2-M91 (Liquid Propane [L.P.] Gas) or LATEST EDITION.

**IMPORTANT:** Failure to comply with these codes or ordinances, and/or the requirements stipulated in this manual, can result in personal injury and improper operation of the dryer.

The dryer and its individual shutoff valves **must be** disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa). The dryer **must be** isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure test of the gas supply system at test pressures equal to or less than 1/2 psig (3.5 kPa).

**IMPORTANT:** Failure to isolate or disconnect the dryer from supply as noted can cause irreparable damage to the gas valve VOIDING THE WARRANTY.

**WARNING: FIRE OR EXPLOSION COULD RESULT.**

### 1. Gas Supply

The gas dryer installation **must meet** the American National Standard...National Fuel Gas Code ANSI Z223.1-LATEST EDITION, or in Canada, the Canadian Installation Codes CAN/CGA-B149.1 M91 (Natural Gas) or CAN/CGA-B149.2-M91 (L.P. Gas) or LATEST EDITION, as well as local codes and ordinances and **must be** done by a qualified professional.

**NOTE:** Undersized gas piping will result in ignition problems, slow drying, increased use of energy, and can create a safety hazard.

The dryer **must be** connected to the type of heat/gas indicated on the dryer data label affixed to the left side panel/wall area behind the control door. If this information does not agree with the type of gas available, **DO NOT operate the dryer**. Contact the dealer who sold the dryer or contact the **Maytag Co.**

**IMPORTANT:** Any burner changes or conversions **must be** made by a qualified professional.

The input ratings shown on the dryer data label are for elevations up to 2,000 feet (609.6 meters), unless elevation requirements of over 2,000 feet (609.6 meters) were specified at the time the dryer order was placed with the factory. The adjustment or conversion of dryers in the field for elevations over 2,000 feet (609.6 meters) is made by changing each burner orifice. If this conversion is necessary, contact the dealer who sold the dryer or contact the **Maytag Co.**

2. Technical Gas Data

a. Gas Specifications

| <b>TYPE OF GAS</b> |                        |                        |                  |                |
|--------------------|------------------------|------------------------|------------------|----------------|
|                    | NATURAL                |                        | LIQUID PROPANE   |                |
| Manifold Pressure* | 3.5 inches W.C.        | <b>8.7 mb</b>          | 10.5 inches W.C. | <b>26.1 mb</b> |
| In-Line Pressure   | 6.0 - 12.0 inches W.C. | <b>14.92 - 29.9 mb</b> | 11.0 inches W.C. | <b>27.4 mb</b> |

*Shaded areas are stated in metric equivalents*

\* Measured at outlet side of gas valve pressure tap when gas valve is on.

b. Gas Connections

Inlet connection ----- 1" N.P.T.  
 Inlet supply size ----- 1" N.P.T. (minimum)  
 BTU/hr input (per dryer) --- 375,000 (94,500 kcal/hr)

1) Natural Gas

Regulation is controlled by the dryer's gas valve's internal regulator. Incoming supply pressure **must be** consistent between a minimum of 6.0 inches (14.92 mb) and a maximum of 12.0 inches (29.9 mb) water column (W.C.) pressure.

2) Liquid Propane (L.P.) Gas

Dryers made for use with L.P. gas have the gas valve's internal pressure regulator blocked open so that the gas pressure **must be** regulated upstream of the dryer. The pressure measured at each gas valve pressure tap **must be** a consistent 10.5 inches (26.1 mb) water column. There is no regulator or regulation provided in an L.P. dryer. The water column pressure **must be** regulated at the source (L.P. tank) or an external regulator **must be** added to each dryer.

|               |                | <b>TYPE OF GAS</b> |         |          |                |         |          | Liquid Propane Conversion Kit Part Number |
|---------------|----------------|--------------------|---------|----------|----------------|---------|----------|---|
| Btu/hr Rating | kcal/hr Rating | Natural            |         |          | Liquid Propane |         |          |   |
|               |                | Qty.               | D.M.S.* | Part No. | Qty.           | D.M.S.* | Part No. |   |
| 375,000       | <b>94,500</b>  | 3                  | #4      | 140832   | 3              | #30     | 140819   | 880886                                    |

*Shaded area is stated in metric equivalent*

\* Drill Measurement Size (D.M.S.) equivalents are as follows:

Natural Gas ..... #4 = 0.2090" (5.3086 mm).  
 Liquid Propane Gas ..... #30 = 0.1285" (3.2639 mm).

### 3. Piping/Connections

**ALL** components/materials **must conform** to National Fuel Gas Code Specifications ANSI Z223.1-LATEST EDITION, or in Canada, CAN/CGA-B149.1-M91 (Natural Gas) or CAN/CGA-B149.2-M91 (Liquid Propane [L.P.] Gas) or LATEST EDITION (for General Installation and Gas Plumbing), as well as local codes and ordinances and **must be** done by a qualified professional. It is important that gas pressure regulators meet applicable pressure requirements, and that gas meters be rated for the total amount of **ALL** the appliance Btus being supplied.

The dryer is provided with a 1" N.P.T. inlet pipe connection extending out the back area of the burner box. The minimum pipe size connection (supply line) to the dryer is 1" N.P.T. For ease of servicing, the gas supply line of each dryer must have its own shutoff valve.

The size of the main gas supply line (header) will vary depending on the distance this line travels from the gas meter or, in the case of L.P. gas, the supply tank, other gas-operated appliances on the same supply line, etc. Specific information regarding supply line size **should be** determined by the gas supplier.

**NOTE:** Undersized gas supply piping can create a low or inconsistent pressure, which will result in erratic operation of the burner ignition system.

Consistent gas pressure is essential at **ALL** gas connections. It is recommended that a 1-inch (2.54 cm) pipe gas loop be installed in the supply line servicing a bank of dryers. An in-line pressure regulator **must be** installed in the gas supply line (header) if the (natural) gas pressure exceeds 12.0 inches (29.9 mb) of water column pressure (W.C.).

**IMPORTANT:** A water column pressure of 3.5 inches (8.7 mb) for natural gas and 10.5 inches (26.1 mb) for L.P. dryers is required at the gas valve pressure tap of each dryer for proper and safe operation.

A 1/8" N.P.T. plugged tap, accessible for a test gauge connection, **must be** installed in the main gas supply line immediately upstream of each dryer.

**IMPORTANT:** Pipe joint compounds that resist the action of natural and L.P. gases **must be** used.

**IMPORTANT:** Test **ALL** connections for leaks by brushing on a soapy water solution (liquid detergent works well).

**WARNING: NEVER TEST FOR GAS LEAKS WITH A FLAME!!!**

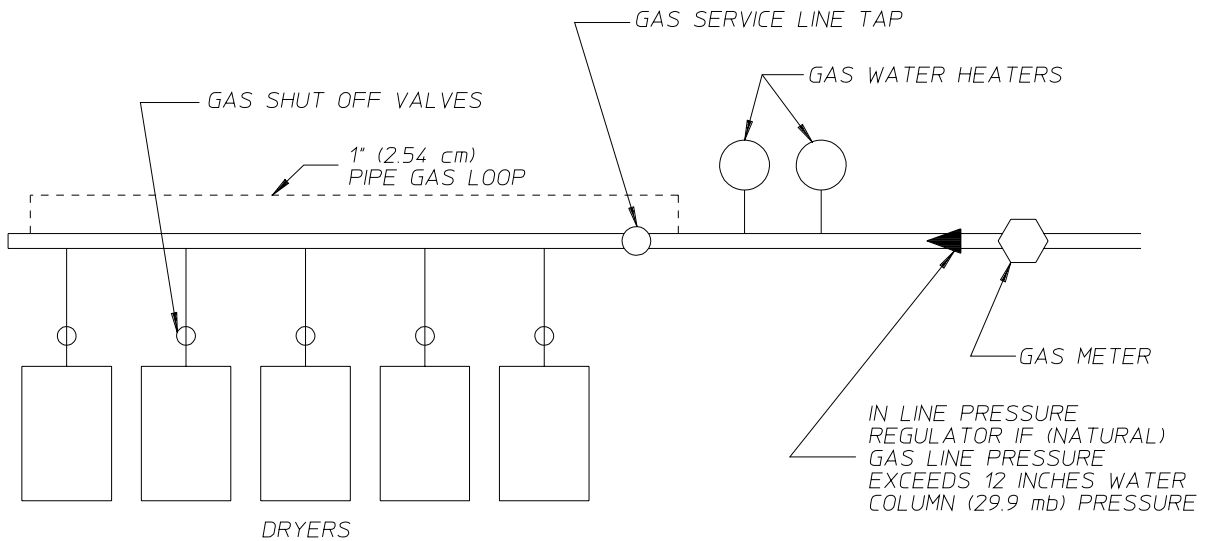
**ALL** components/materials **must conform** to National Fuel Gas Code Specifications ANSI Z223.1-LATEST EDITION, or in Canada, CAN/CGA-B149.1-M91 (Natural Gas) or CAN/CGA-B149.2-M91 (L.P. Gas) or LATEST EDITION (for General Installation and Gas Plumbing), as well as local codes and ordinances and **must be** done by a qualified professional. It is important that gas pressure regulators meet applicable pressure requirements, and that gas meters be rated for the total amount of **ALL** the appliance Btus being supplied.



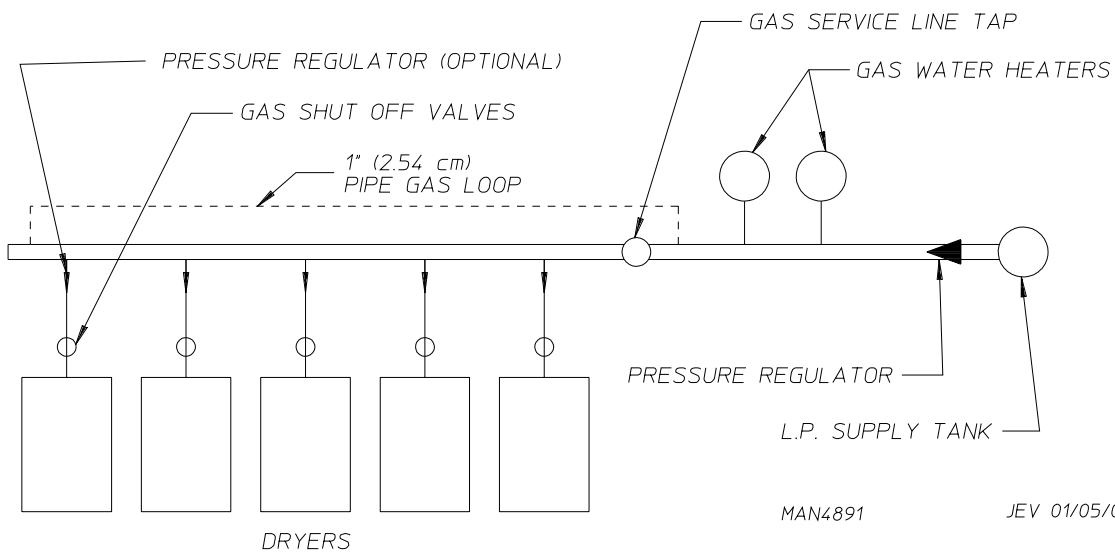
**IMPORTANT:** The dryer and its individual shutoff valve *must be* disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

**NOTE:** The dryer *must be* isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

TYPICAL NATURAL GAS INSTALLATION



TYPICAL L.P. GAS INSTALLATION



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## H. PREPARATION FOR OPERATION

The following items **should be** checked before attempting to operate the dryer:

1. Read **ALL** “CAUTION,” “WARNING,” and “DIRECTION” labels attached to the dryer.
2. Check incoming supply voltage to be sure that it is the same as indicated on the dryer data label affixed to the left side panel/wall area behind the control door as shown on **page 8**. In case of 208 VAC or 230/240 VAC, the supply voltage must match the electric service **exactly**.
3. **GAS MODELS** - check to assure that the dryer is connected to the type of heat/gas indicated on the dryer data label.
4. **GAS MODELS** - the sail switch damper assembly was installed and adjusted at the factory prior to shipping. However, each sail switch adjustment **must be** checked to assure that this important safety control is functioning.
5. **GAS MODELS** - be sure that **ALL** gas shutoff valves are in the open position.
6. Be sure **ALL** back panels (guards) and electric box covers have been replaced.
7. Check **ALL** service doors to assure that they are closed and secured in place.
8. Be sure lint drawer is securely in place.

**NOTE: LINT DRAWER *MUST BE* ALL THE WAY IN PLACE TO ACTIVATE SAFETY SWITCH OTHERWISE THE DRYER WILL NOT START.**


9. Rotate the basket (tumbler) by hand to be sure it moves freely.
10. Check bolts, nuts, screws, terminals, and fittings for security.
11. Check basket (tumbler) bearing setscrews to insure they are **ALL** tight.


# I. PREOPERATIONAL TESTS

**ALL** dryers are thoroughly tested and inspected before leaving the factory. However, a preoperational test **should be** performed before the dryer is publicly used. It is possible that adjustments have changed in transit or due to marginal location (installation) conditions.

1. To start the dryer:
  - a. Microprocessor Controller (Computer) Dryers...
    - 1) Light emitting diode (L.E.D.) display will read “REAdY” (meaning no cycle in progress).
    - 2) Press the letter on the keyboard (touch pad) corresponding to the cycle desired (i.e., key “E”)...
      - a) The dryer will then start (rotate).
    - 3) L.E.D. display will now show “Cycle In Progress” and “Cycle Status” meaning that the dryer is in the drying cycle (dry mode for 30 minutes) and count downwards in minutes.

**NOTE:** Pressing keyboard (touch pad) key “A,” “B,” “C,” “D,” or “F,” will also start the dryer. The six (6) preprogrammed drying cycles “A” through “F” have been stored in the microprocessor controller’s (computer’s) memory. Refer to the Programming Manual supplied with the dryer for more specific operating instructions.

**NOTE:** The dryer can be stopped at any time by opening the main door or by pressing the “STOP” red key. To restart the dryer, press the “START”  green key or a preprogrammed cycle key (i.e., “E”).

**NOTE:** Selection (settings) changes can be made at any time during the drying cycle by pressing the “STOP”  red key twice. The L.E.D. display will return to “REAdY” at which time a new cycle selection can be made.

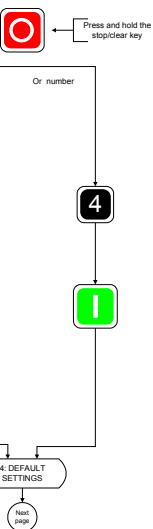
2. Check to insure that the basket (tumbler) starts in the clockwise (CW) direction. Additionally, check the direction of the blower motor (impellor/fan) to insure that blower motor (impellor/fan) rotates in the clockwise (CW) direction as viewed from the front. If it is, the phasing is correct. If the phasing is incorrect, reverse two (2) of the leads at L1, L2, or L3 of the power supply connections made to the dryer.

**IMPORTANT:** Dryer blower motor (impellor/fan) as viewed from the front must turn in the clockwise (CW) direction, otherwise dryer efficiency **will be** drastically reduced and premature component failure can result.

3. Heat Circuit Operational Test

- a. Gas Models

- 1) When the dryer is first started (during initial start-up), the burner has a tendency not to ignite on the first attempt. This is because the gas supply piping is filled with air, so it may take a few minutes for this air to be purged.



- 2) The dryer is equipped with a Direct Spark Ignition (DSI) system, which has internal diagnostics. If ignition is not established after the first attempt, the heat circuit DSI module will “LOCKOUT” until it is manually reset. To reset the DSI system, open and close main door and restart dryer (press the “ENTER/START” key).

**NOTE:** During the purging period, check to be sure that **ALL** gas shutoff valves are open.

- 3) Once ignition is established, a gas pressure test **should be** taken at the gas valve pressure tap of each dryer to assure that the water column (W.C.) pressure is correct and consistent.

**NOTE:** Water column pressure requirements (measured at the gas valve pressure tap)...

Natural Gas ----- 3.5 inches (8.7 mb) water column.

Liquid Propane (L.P.) Gas ----- 10.5 inches (26.1 mb) water column.

**IMPORTANT:** There is no regulator provided in an L.P. dryer. The water column pressure **must be** regulated at the source (L.P. tank) or an external regulator **must be** added to each dryer.

4. Make a complete operational check of **ALL** safety-related circuits (i.e., lint drawer switch and sail switch on gas models).

**NOTE:** To check for proper sail switch operation, open the main door and while holding main door switch plunger in, start dryer. Dryer should start but heat circuit **should not be** activated (on). If heat (burner) does activate, shut the dryer off and make necessary adjustments.

5. A reversing basket (tumbler) dryer **should never be** operated with less than a 85 lb (38 kg) load (dry weight). The size of the load will affect the coast-down and dwell (stop) times. The basket (tumbler) must come to a complete stop before starting in the opposite direction.

a. Microprocessor Controller (Computer) Dryer Models

- 1) Spin and dwell (stop) times are not adjustable in the Automatic Mode and have been preprogrammed into the microprocessor controller (computer) for a 120-second spin time and a 5-second dwell (stop) time.
- 2) Spin and dwell (stop) times are adjustable in the Manual (Timed) Mode.

b. Dual Timer Dryer Models...

- 1) Spin and dwell (stop) times are adjustable at the reversing timer.

### BASKET (TUMBLER) COATING

The basket (tumbler) is treated with a protective coating. We suggest dampening old garments or cloth material with a solution of water and nonflammable mild detergent and tumbling them in the basket (tumbler) to remove this coating.

6. Each dryer **should be** operated through one (1) complete cycle to assure that no further adjustments are necessary and that **ALL** components are functioning properly.

7. Make a complete operational check of **ALL** operating controls.
  - a. Microprocessor Controller (Computer) Programs and Selections...
    - 1) Each microprocessor controller (computer) has been preprogrammed by the factory with the most commonly used parameter (program) selections. If computer program changes are required, refer to the computer programming manual, which was shipped with the dryer.
  - b. Dual Timer Dryers Check...
    - 1) Heating Timer
    - 2) Cool Down Timer
    - 3) Temperature Selection Functions

## J. SHUTDOWN INSTRUCTIONS

If the dryer is to be shutdown (taken out of service) for a period of time, the following **must be** performed:

1. Discontinue power to the dryer either at the external disconnect switch or the circuit breaker.
2. Discontinue the gas or steam supply:
  - a. ***GAS MODELS*...discontinue the gas supply.**
    - 1) **SHUT OFF external gas supply shutoff valve.**
    - 2) **SHUT OFF internal gas supply shutoff valve located in the gas valve burner area.**

## K. OPERATING INSTRUCTIONS



**NOTE:** Before attempting to start the dryer make sure that the main door is closed and the lint drawer is securely in place.

1. To start the dryer:

a. Microprocessor Controller (Computer) Dryers...

- 1) Light emitting diode (L.E.D.) display will read “REAdY” (meaning no cycle in progress).
- 2) Press the letter on the keyboard (touch pad) corresponding to the cycle desired (i.e., key “E”)...
  - a) The dryer will then start (rotate).
- 3) L.E.D. display will now show the “Cycle In Progress” and “Cycle Status” meaning that the dryer is in the drying cycle (dry mode for 30 minutes) and count downwards in minutes.

**NOTE:** Pressing keyboard (touch pad) key “A,” “B,” “C,” “D,” or “F” will also start the dryer. The six (6) preprogrammed drying cycles “A” through “F” have been stored in the microprocessor controller’s (computer’s) memory. Refer to the Programming Manual supplied with the dryer for more specific operating instructions.

**NOTE:** The dryer can be stopped at any time by opening the main door or by pressing the “STOP”  red key. To restart the dryer, press the “START”  green key or a preprogrammed cycle key (i.e., “E”).

**NOTE:** Selection (settings) changes can be made at any time during the drying cycle by pressing the “STOP” red key twice. The L.E.D. display will return to “REAdY” at which time a new cycle selection can be made.

b. Dual Timer Dryer Models...

- 1) Select drying time and cool down time desired...
  - a) Turn heat timer clockwise (CW) to desired time (i.e., 1 minute to 60 minutes).
  - b) Turn cool down timer clockwise (CW) to desired time (i.e., 0 minutes to 15 minutes).
- 2) Select drying temperature.
- 3) Push “Start” button...
  - a) Dryer will now start.
- 4) To stop dryer, open the main door.

# SECTION IV

## SERVICE/PARTS INFORMATION

### A. SERVICE

1. Service **must be** performed by a qualified trained technician, service agency, or gas supplier. If service is required, contact the dealer from whom the **Maytag** equipment was purchased. If the dealer **cannot** be contacted or is unknown, contact the **Maytag Co.** for a dealer in your area.

**NOTE:** When contacting the **Maytag Co.**, be sure to give them the correct **model number** and **serial number** so that your inquiry is handled in an expeditious manner.

### B. PARTS

1. Replacement parts **should be** purchased from the dealer from whom the **Maytag** equipment was purchased. If the **Maytag** dealer **cannot** be contacted or is unknown, contact the **Maytag Co.** for a dealer in your area.

**NOTE:** When ordering replacement parts from the **Maytag** dealer or the **Maytag Co.** be sure to give them the correct **model number** and **serial number** so that your parts order can be processed in an expeditious manner.

# SECTION V

## WARRANTY INFORMATION

### A. RETURNING WARRANTY CARDS

1. Before any dryer leaves the manufacturer's test area, a warranty card is placed on the back side of the main door glass. These warranty cards are intended to serve the customer where we record the individual installation date and warranty information to better serve you should you file a warranty claim.

**IMPORTANT:** A separate warranty card *must be* completed and returned for each individual dryer.

**NOTE:** Be sure to include the installation date when returning the warranty card(s).

### B. WARRANTY

For a copy of the manufacturer's commercial warranty covering your particular dryer(s), contact the **Maytag** dealer from whom you purchased the equipment and request a dryer warranty form. If the dealer **cannot** be contacted or is unknown, warranty information can be obtained from the **Maytag Co.**

**NOTE:** Whenever contacting the **Maytag Co.** for warranty information, be sure to have the dryer's **model number** and **serial number** available so that your inquiry can be handled in an expeditious manner.



# SECTION VI

## ROUTINE MAINTENANCE

### A. CLEANING

A program and/or schedule **should be** established for periodic inspection, cleaning, and removal of lint from various areas of the dryer, as well as throughout the ductwork system. The frequency of cleaning can best be determined from experience at each location. Maximum operating efficiency is dependent upon proper air circulation. The accumulation of lint can restrict this airflow. If the guidelines in this section are met, a **Maytag** dryer will provide many years of efficient, trouble free, and most importantly, safe operation.

**WARNING: LINT FROM MOST FABRICS IS HIGHLY COMBUSTIBLE. THE ACCUMULATION OF LINT CAN CREATE A POTENTIAL FIRE HAZARD.**

**WARNING: KEEP DRYER AREA CLEAR AND FREE FROM COMBUSTIBLE MATERIALS, GASOLINE, AND OTHER FLAMMABLE VAPORS AND LIQUIDS.**

**NOTE:** Suggested time intervals shown are for average usage which is considered six (6) to eight (8) operational (running) hours per day.

**IMPORTANT:** Dryer produces combustible lint and *must be* exhausted to the outdoors. Every 6 months, inspect the exhaust ducting and remove any lint build up.

***CLEAN THE LINT DRAWER/SCREEN EVERY THIRD OR FOURTH LOAD.***

**NOTE:** Frequency can best be determined at each location.

### SUGGESTED CLEANING SCHEDULE

#### ***DAILY (beginning of each work shift)***

1. Clean lint from screen.
2. Inspect lint screen and replace if torn.

#### ***WEEKLY***

Clean lint accumulation from lint chamber, thermostat, and microprocessor temperature sensor (sensor bracket) area.

**WARNING: TO AVOID THE HAZARD OF ELECTRICAL SHOCK, DISCONTINUE ELECTRICAL SUPPLY TO THE DRYER.**

## **90 DAYS**

Remove lint from around basket (tumbler), drive motors, and surrounding areas. Remove lint from gas valve burner area with a dusting brush or vacuum cleaner attachment.

**NOTE:** To prevent damage, avoid cleaning and/or touching ignitor/flame-probe assembly.

Remove lint accumulation from inside control box and at the rear area behind control box.

## **6 MONTHS**

Inspect and remove lint accumulation in customer furnished exhaust ductwork system and from dryer's internal exhaust ducting.

Blower motor (impellor/fan) belts and drive belts **should be** examined. Cracked and/or seriously frayed belts **should be** replaced. Tighten belts when necessary.

**WARNING:** THE ACCUMULATION OF LINT IN THE EXHAUST DUCTWORK CAN CREATE A POTENTIAL FIRE HAZARD.

**WARNING:** ***DO NOT*** OBSTRUCT THE FLOW OF COMBUSTION AND VENTILATION AIR. CHECK CUSTOMER FURNISHED BACK DRAFTED DAMPERS IN EXHAUST DUCTWORK. INSPECT AND REMOVE ANY LINT ACCUMULATION, WHICH CAN CAUSE DAMPER TO BIND OR STICK.

**NOTE:** A back draft damper that is sticking partially closed can result in slow drying and shutdown of the heat circuit safety switches or thermostats.

**NOTE:** When cleaning dryer cabinet(s), avoid using harsh abrasives. A product intended for the cleaning of appliances is recommended.

## B. ADJUSTMENTS

### *7 DAYS AFTER INSTALLATION AND EVERY 6 MONTHS THEREAFTER*

Inspect bolts, nuts, screws (bearing setscrews), grounding connections, and nonpermanent gas connections (unions, shutoff valves, and orifices). Motor and drive belts **should be** examined. Cracked or seriously frayed belts **should be** replaced. Tighten loose V-belts when necessary. Complete operational check of controls and valves. Complete operational check of **ALL** safety devices (door switch, lint drawer switch, sail switch, burner, and hi-limit thermostats).

## C. LUBRICATION

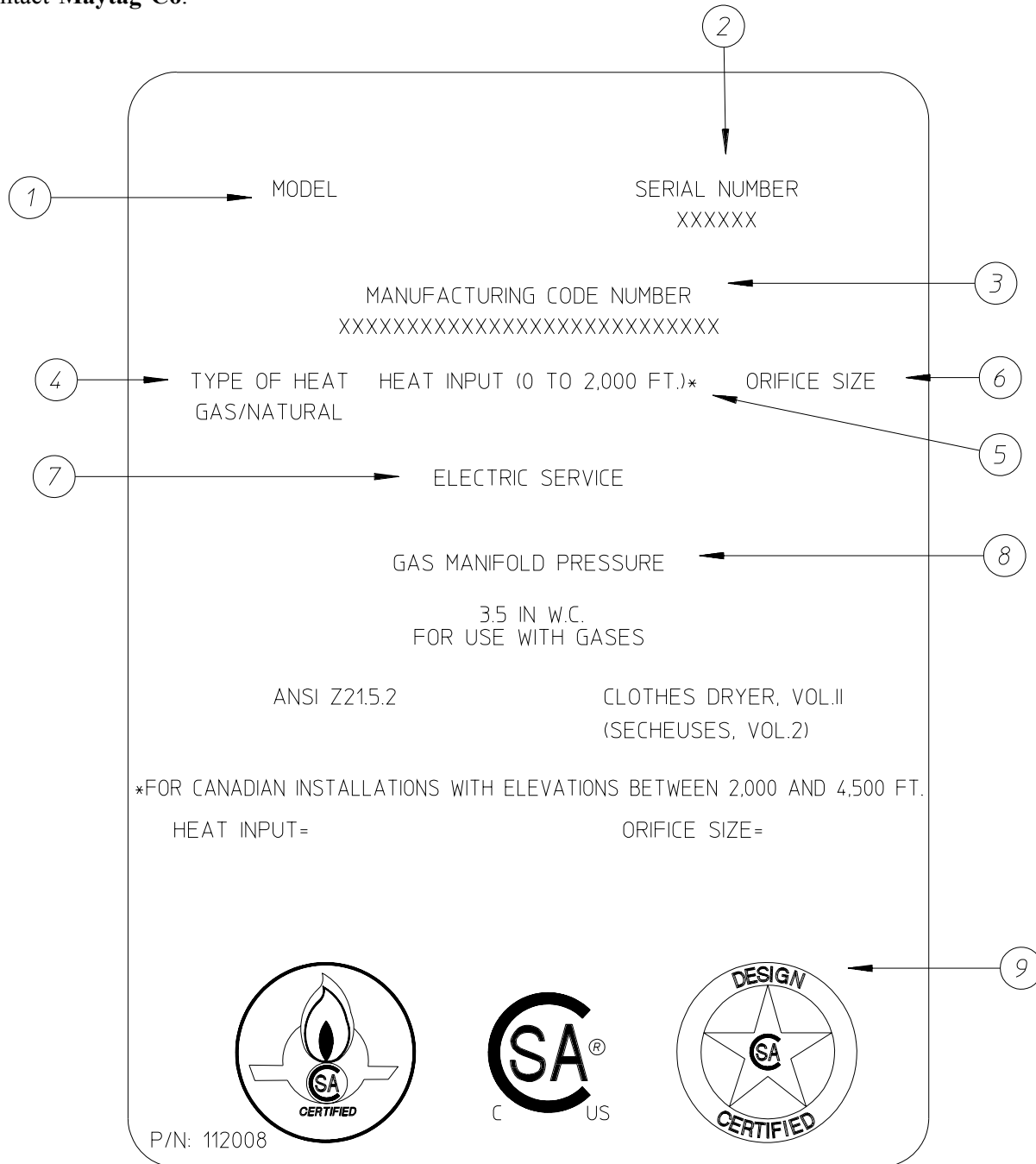
The motor bearings and under normal/most conditions the basket (tumbler) and idler bearings are permanently lubricated. It is physically possible to relubricate the basket (tumbler) and idler bearings if you choose to do so even though this practice is not necessary. Use Shell Alvania #2 or its equivalent. The basket (tumbler) and idler bearings used in the dryer **DO NOT** have a grease fitting. Provisions are made in the bearing housing for the addition of a grease fitting which can be obtained elsewhere, or from the **Maytag** dealer by ordering kit Part No. 882159 (basket [tumbler] ONLY), which includes two (2) fittings.

# SECTION VII

## DATA LABEL INFORMATION

### A. DATA LABEL

Contact **Maytag Co.**



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When contacting **Maytag**, certain information is required to insure proper service/parts information from **Maytag**. This information is on the data label affixed to the left side panel/wall area behind the control door. When contacting **Maytag**, please have the **model number** and **serial number** available.

## **THE DATA LABEL**

### **1. MODEL NUMBER**

The model number is an **Maytag Company** number, which describes the size of the dryer and the type of heat (gas, electric, or steam).

### **2. SERIAL NUMBER**

The serial number allows **Maytag** to gather information on your particular dryer.

### **3. MANUFACTURING CODE NUMBER**

The manufacturing code number is a number issued by the manufacturer, which describes ALL possible options on your particular model.

### **4. TYPE OF HEAT**

This describes the type of heat for your particular dryer: gas (either natural gas or liquid propane [L.P.] gas), electric, or steam.

### **5. HEAT INPUT (for GAS DRYERS)**

This describes the heat input in British Thermal Units per Hour (Btu/hr).

### **6. ORIFICE SIZE (for GAS DRYERS)**

Gives the number drill size used.

### **7. ELECTRIC SERVICE**

This describes the electric service for your particular model.

### **8. GAS MANIFOLD PRESSURE (for GAS DRYERS)**

This describes the manifold pressure taken at the gas valve tap.

### **9. APPLICABLE APPROVAL SEAL(S)**

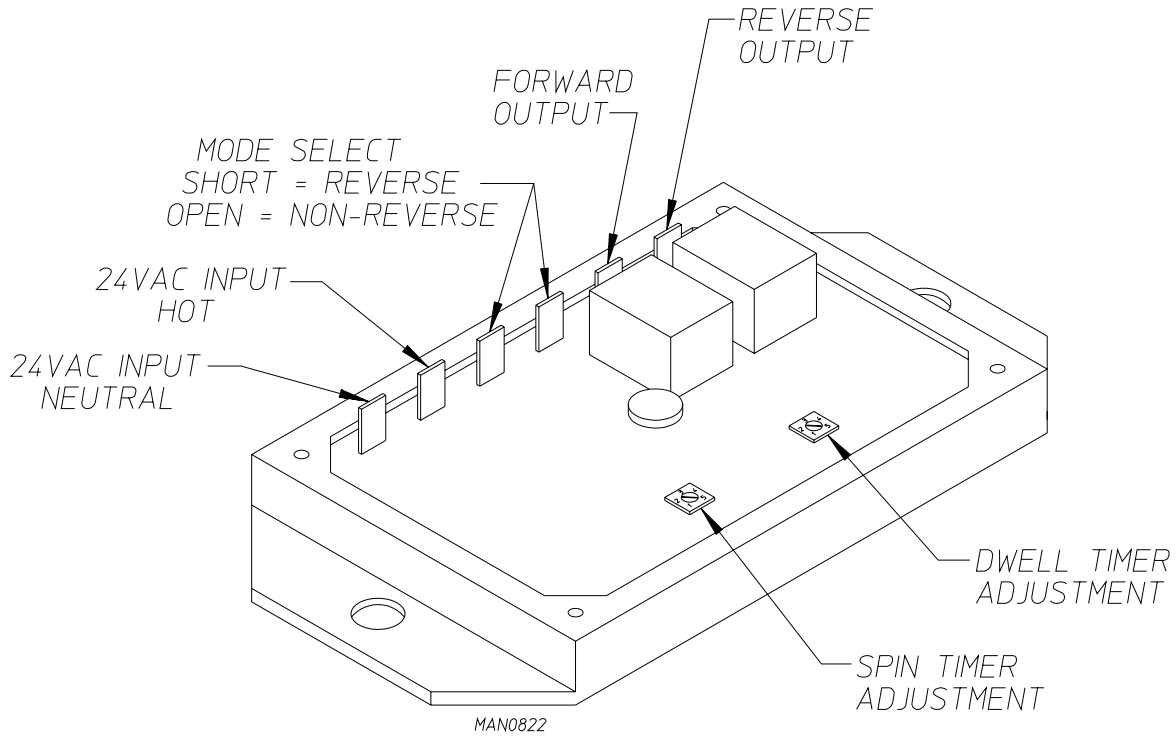
I.E., Canadian Standards Association International.

# SECTION VIII

## REVERSING TIMER SPIN/DWELL ADJUSTMENTS

Timer models have an electric reversing timer in the electric service box, which is located in the upper left rear area of the dryer.

Both the dwell (stop) time and basket (tumbler) spin time are adjustable by mode selection switches located on the electronic timer (refer to the **illustration below**).



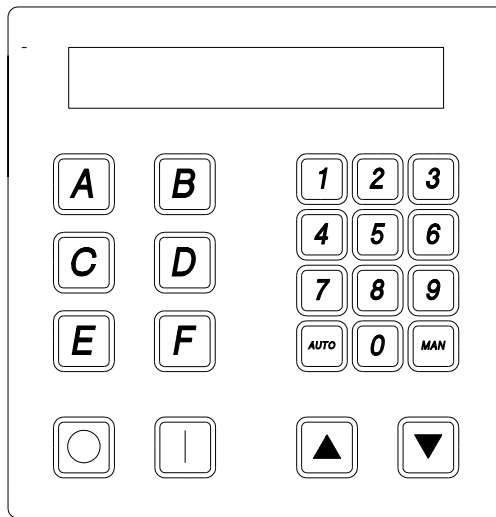
| <b>TIMING LEGEND</b>             |    |     |     |     |      |
|----------------------------------|----|-----|-----|-----|------|
| <b>SPIN TIME</b>                 |    |     |     |     |      |
| Adjustment Position Number       | 1  | 2   | 3   | 4   | 5    |
| Time in Seconds*                 | 30 | 60  | 90  | 120 | 150  |
| <b>DWELL (STOP) TIME</b>         |    |     |     |     |      |
| Adjustment Position Number       | 1  | 2   | 3   | 4   | 5    |
| Time in Seconds*                 | 5  | 6.3 | 7.6 | 8.9 | 10.2 |
| * Values shown are +/- 1-second. |    |     |     |     |      |

# SECTION IX

## PROCEDURE FOR FUNCTIONAL CHECK OF REPLACEMENT COMPONENTS

### 1. Microprocessor Controller (Computer) Board

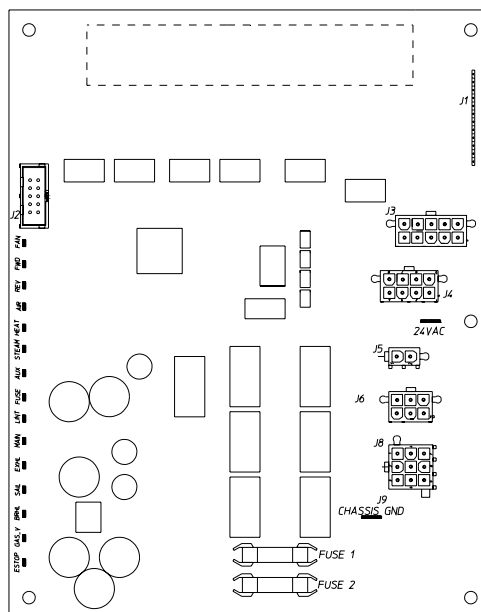
- a. Upon completing installation of the replacement microprocessor controller (computer) board, reestablish power to the dryer.
- b. Start the drying cycle by pressing any of the preset cycles in letters A-F.



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- c. Verify that the applicable indicator lights on the back side of the microprocessor controller (computer) board are lit. (Refer to the **illustration below.**)



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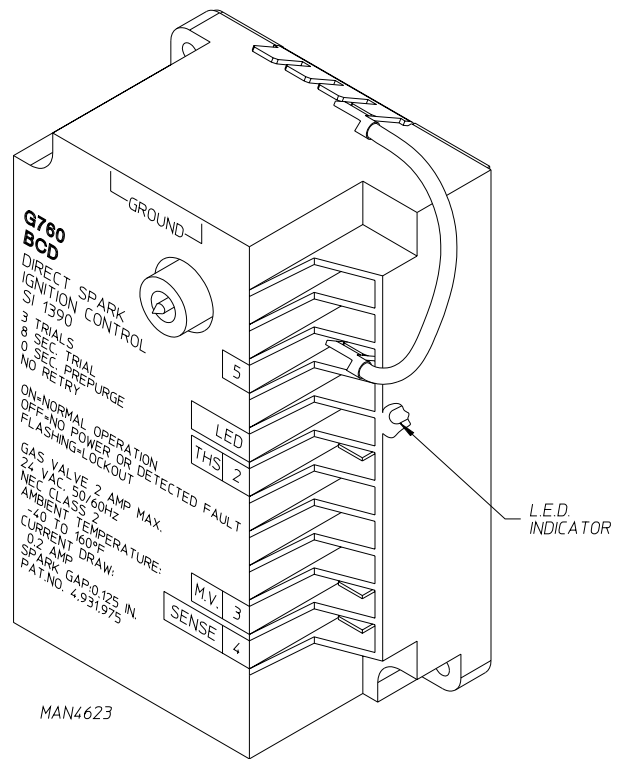
2. For Models With Johnson Controls Direct Spark Ignition (DSI) Module (G760)

Theory Of Operation:

Start the drying cycle. When the gas burner ignites within the chosen trial for ignition time (6-seconds), the flame sensor detects gas burner flame and signals the DSI module to keep the gas valve open...as long as there is a call for heat. The DSI module will “LOCKOUT” if the gas burner flame is not sensed at the end of the trial for ignition period. The trial for ignition period will be repeated for a total of three (3) retries/trials (the initial try and two [2] more retries/trials). If the flame is not sensed at the end of the third retry/trial (inter-purge period of 30-seconds) the DSI module will “LOCKOUT” (L.E.D. flashes).

A steady L.E.D. indicator indicates normal operation.

No L.E.D. indicator indicates a power or an internal failure has occurred.





**SECTION X**  
**SENSOR ACTIVATED**  
**FIRE EXTINGUISHING (S.A.F.E.) SYSTEM**

***S.A.F.E. System In Action***

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The exclusive Sensor Activated Fire Extinguishing (S.A.F.E.) System will extinguish fires that may start in the drying basket (tumbler). A series of sensors positioned throughout the basket (tumbler) and interfaced with the microprocessor will trigger the S.A.F.E. system water jet(s) to quickly extinguish the flames. The water jet(s) remain on for 2 minutes and will automatically activate again if a fire condition remains or reignites. While the water jet(s) are activated, the basket (tumbler) will jog to move the water throughout the load. The microprocessor will display that the system was activated and will continue to display until the dryer is attended to.

We have tried to make this manual as complete as possible and hope you will find it useful. **ADC** reserves the right to make changes from time to time, without notice or obligation, in prices, specifications, colors, and material, and to change or discontinue models.

## BEFORE YOU START!

### 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 installation is adequate and conforms to local, state, and federal regulations or codes.

**IMPORTANT:** It is the installation or owners responsibility to see that the necessary or required water, water pressure, pipe size, or connections are provided. Manufacturer assumes no responsibility if the Sensor Activated Fire Extinguishing (S.A.F.E.) System **is not** connected, installed, or maintained properly.

## INSTALLATION

### 1. Requirements

The S.A.F.E. system **must be** supplied with a minimum water pipe size of 1/2" and be provided with 40 psi +/- 20 psi (2.75 bar +/- 1.37 bar) of pressure. For use of optional manual bypass, a second source with the same piping and pressure requirements is required.

Flexible 1/2 feeds **must be** provided to avoid damage to electric water solenoid valve by vibration.

**IMPORTANT:** Flexible supply line/coupling **must be** used. Solenoid valve failure due to hard plumbing connections WILL VOID WARRANTY.

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

**WARNING:** If the water in the supply line or water solenoid valve freezes, the S.A.F.E. system **will be** INOPERATIVE!!

**IMPORTANT:** Appliance is to be connected to the water mains using a new hose-set and the old hose-sets **should not be** reused.

## 2. Water Connections:

The water connection is made to the 3/4"-11.5 NH hose adapter of the electric water solenoid valve, located at the rear upper midsection of the dryer (refer to the photo).

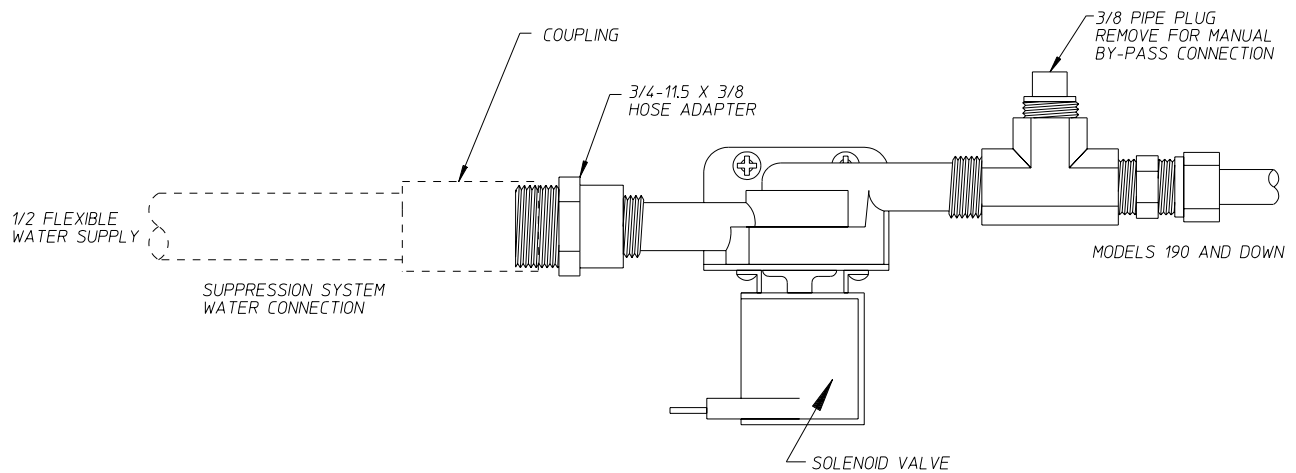
The water solenoid valve has a 3/8" M.P.T. connection supplied with a 3/4"-11.5 NH hose adapter to provide the minimum 1/2-inch supply (feed) line. Flexible supply line/coupling **must be** used in an effort to avoid damaging the electric water solenoid valve.



**NOTE:** The 3/4"-11.5 NH is a standard hose coupling screw thread. It **is not** to be confused with 3/4" N.P.T. The sealing of an NH connection is made with a washer opposed to the mating threads of an N.P.T. assembly. The two (2) thread designs **are not** compatible.

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

### Typical water supply...



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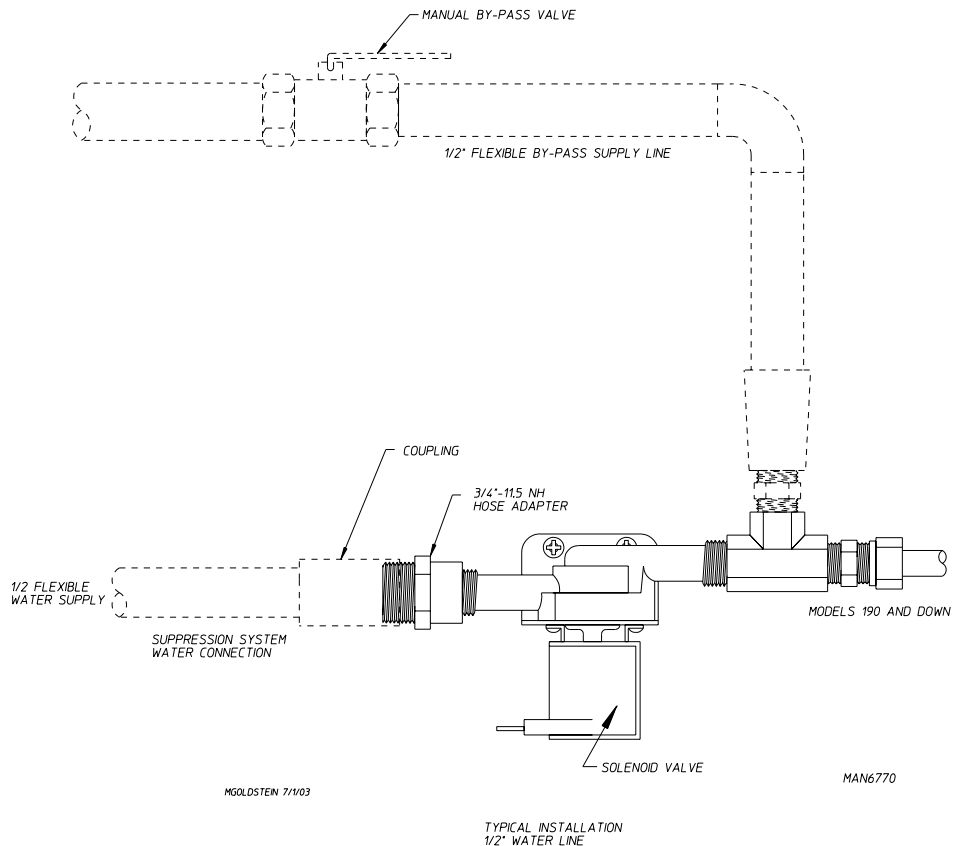
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## OPTIONAL MANUAL BYPASS

Provisions are made in the dryer Sensor Activated Fire Extinguishing (S.A.F.E.) system for the installation of an optional manual bypass. Depending on the model dryer, the connections for the manual bypass are made at the “T” or “four way” fitting located in the outlet supply side of the water solenoid valve. The use and connections of this manual bypass are at the option or discretion of the owner.

The water connection for the manual bypass is made to the “T” or “four way” fitting which has a 3/8” F.P.T. and a coupling **must be** used to provide the minimum 1/2” supply (feed) line.

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



**WARNING:** If the water in the supply line or water solenoid valve freezes, the S.A.F.E. system **will be** INOPERATIVE!!

The manual ball cock shutoff valve **must be** located outside of the dryer at a distance from the dryer where it is easily accessible.

### 3. Electrical Requirements

No independent external power source or supply connection is necessary. The 24 volt power to operate the S.A.F.E. system is accomplished internally in the dryer (from the dryer controls).

**WARNING:** Electrical power **must be** provided to the dryer at **ALL** times. If the main electrical power supply to the dryer is disconnected, the S.A.F.E. system is INOPERATIVE!!

# Sensor Activated Fire Extinguishing (S.A.F.E.) System Theory of Operation


While the dryer is in an idle state or 20-seconds after the heat turns off, the Phase 7 control monitors the S.A.F.E. system probe located in the top of the basket (tumbler) chamber and records the minimum temperature. If the minimum recorded S.A.F.E. system probe temperature is no less than 120° F (48° C) and the control detects a 50° rise in temperature, this will be the trip point and the S.A.F.E. system routine will activate.

While a drying cycle is in process and the heat has turned on at least once, the Phase 7 control monitors the exhaust temperature transducer. If the drying cycle temperature set point is set greater than 160° F (71° C) and the control detects an exhaust temperature rise 25° F greater than set point, this will be the trip point and the S.A.F.E. system routine will activate. If set point is below 160° F (71° C) the trip point will be 185° F (85° C).

Once the S.A.F.E. system routine is activated, water will be injected into the basket (tumbler) chamber. Anytime water is being injected into the basket (tumbler); the basket (tumbler) drive will turn the load for 1-second every 15-seconds. This process will continue for a minimum of 2 minutes. After 2 minutes has elapsed, the control will check if the temperature remained above trip point, if so water will remain on. The control will continue to check if temperature is above trip point every 30-seconds. If the water has been on for a constant 10 minutes, the water will be turned off regardless of the temperature. If the temperature has dropped below trip point, the control will turn off the water prior to 10 minutes.

## SYSTEM RESET

After the microprocessor determines that the situation is under control and shuts the water being injected into the basket (tumbler) off, the microprocessor display will read “S.A.F.E. System activated,” and the horn/tone will sound until reset manually.

To reset the microprocessor once the control displays “S.A.F.E. System activated,” press the red  key on the keyboard (touch pad).

## NON-COIN S.A.F.E. SYSTEM CHECK PROCEDURE

The operation of the water solenoid valve can be tested to insure that the water supply system and valve are functional. Before attempting system check, be sure that **ALL** water supply shutoff valves to the dryer are in the OPEN position, and the dryer **must be** in the “READY” mode where no cycle is loaded or in progress.

The procedure is as follows:

1. Press and hold the RED STOP key (while in “READY” mode and no cycle in progress).
2. Press and hold the “A” key.
3. Water valve will open and water will be dispensed into basket (tumbler) area as long as both keys are held.

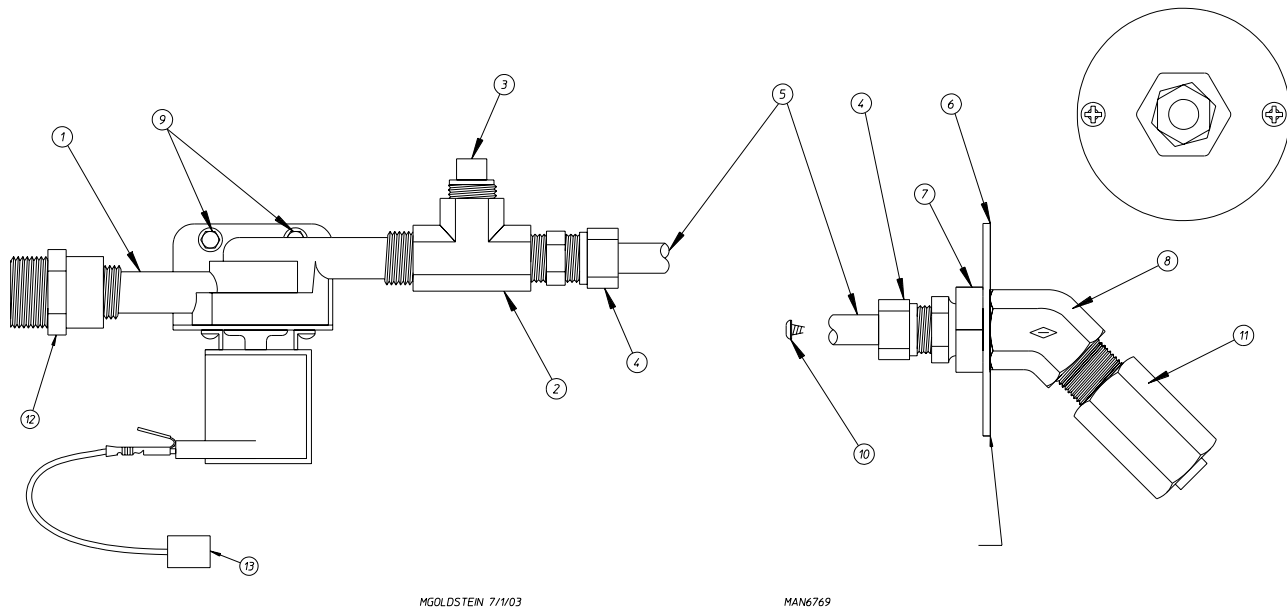
**IMPORTANT:** This is a test function only and the keys *should be* held and system activated for only a second or so, otherwise water will accumulate in various places in the dryer.

# Sensor Activated Fire Extinguishing (S.A.F.E.) System Parts Break Down

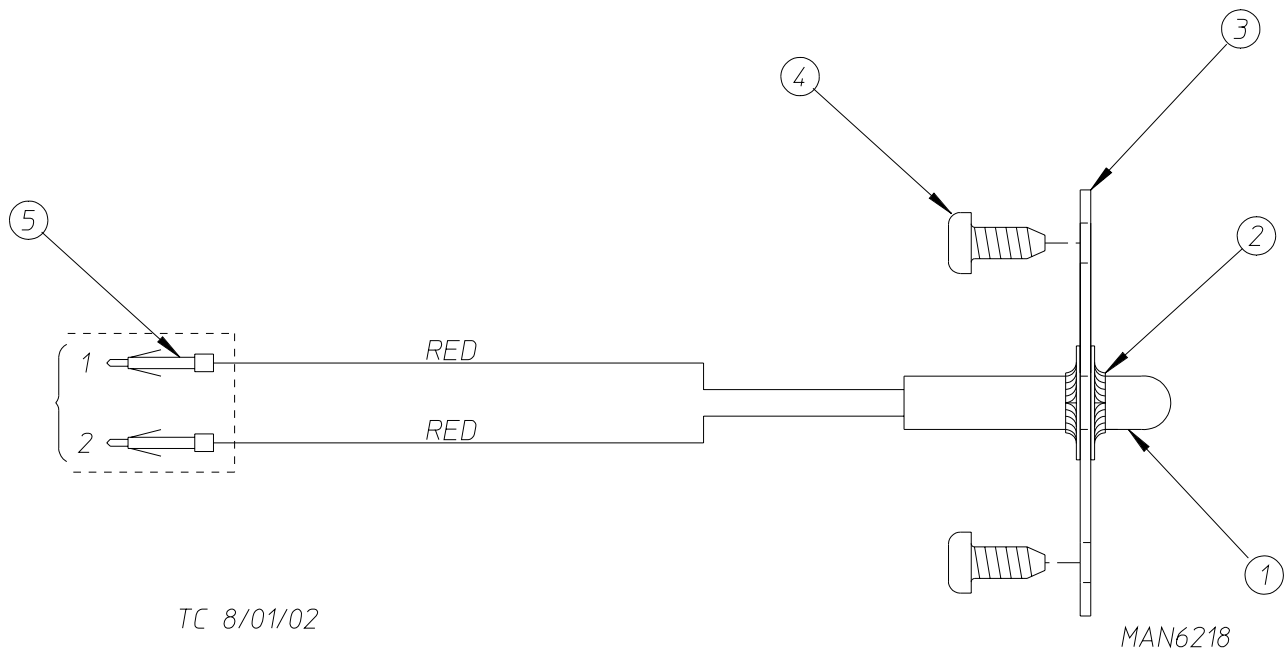
Replacement parts can be obtained from your reseller or the ADC factory. When ordering replacement parts from the factory, you can FAX your order to ADC at (508) 678-9447 or telephone your order directly to the ADC Parts Department at (508) 678-9000. Please specify the dryer **model number** and **serial number** in addition to the **description** and **part number**, so that your order is processed accurately and promptly.

The illustrations on the following pages may not depict your particular dryer exactly. The illustrations are composite of the various dryer models. Be sure to check the descriptions of the parts thoroughly before ordering.

We have tried to make this manual as complete as possible and hope you will find it useful. ADC reserves the right to make changes from time to time, without notice or obligation, in prices, specifications, colors, and material, and to change or discontinue models.



| <u>Illus. No.</u> | <u>Part No.</u> | <u>Qty.</u> | <u>Description</u>                          |
|-------------------|-----------------|-------------|---|
| 1                 | 165114          | 1           | S.A.F.E. System Solenoid Valve 24V 50/60 Hz |
| 2                 | 143220          | 1           | 3/8" F.P.T. Brass Tee                       |
| 3                 | 143251          | 1           | 3/8" M.P.T. Brass Plug                      |
| 4                 | 143208          | 2           | 3/8" Comp x 3/8" M.P.T. Brass Connector     |
| 5                 | 143108          | 1           | 20" Long Stainless Steel Flexible Tubing    |
| 6                 | 311588          | 1           | Sprinkler Head Mounting Plate               |
| 7                 | 143303          | 1           | 3/8" N.P.T. Brass Lock Nut                  |
| 8                 | 143301          | 1           | 3/8" Brass 45° Elbow                        |
| 9                 | 150309          | 2           | #10-16 x 1/2" Hex Head TEK Crimptite Screw  |
| 10                | 150301          | 2           | #8-18 x 7/16" Phillips Pan Head TEK Screw   |
| 11                | 143581          | 1           | 3 GPM 3/8" F.P.T. Spray Nozzle              |
| 12                | 143025          | 1           | 3/4"-11.5 NH x 3/8" N.P.T. Hose Adapter     |
| 13                | 824081          | 1           | R.C. Network Assembly                       |



| <u>Illus. No.</u> | <u>Part No.</u> | <u>Qty.</u> | <u>Description</u>   |
|-------------------|-----------------|-------------|--|
| 1                 | 822752          | 1           | S.A.F.E. System Temperature Probe Assembly<br>(includes illus. nos. 1 through 5) |
| 2                 | 154007          | 2           | Push On Fastener   |
| 3                 | 390390          | 1           | Sensor Bracket ONLY  |
| 4                 | 150301          | 2           | #8-18 x 7/16" Phillips Pan Head TEK Screw  |
| 5                 | 122647          | 1           | Connector ONLY<br><b>(does not include terminals)</b>                            |

