

# AD-540

## Installation/Operator's 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 vapor and liquids in the vicinity of this or any other appliance.

### — WHAT DO YOU 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 dans le voisinage de cet appareil ou de tout autre appareil.

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

- \* Ne pas tenter d'allumer d'appareil.
- \* Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous vous trouvez..
- \* 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.



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

**American Dryer Corporation**

88 Currant Road

Fall River MA 02720-4781

Telephone: (508) 678-9000 / Fax: (508) 678-9447

e-mail: [techsupport@amdry.com](mailto:techsupport@amdry.com)

# Retain This Manual In A Safe Place For Future Reference

American Dryer Corporation products embody 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/operator's 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 or 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 dans le voisinage 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. **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.

## Important

For your convenience, log the following information:

**DATE OF PURCHASE** \_\_\_\_\_ **MODEL NO.** **AD-540** \_\_\_\_\_  
**DISTRIBUTORS NAME** \_\_\_\_\_  
**Serial Number(s)** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Replacement parts can be obtained from your distributor 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 orders 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.

**“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: Lor des opérations d’entretien des commandes étiqueter tous fils avant de les déconnecter. Toute erreur de câblage peut être une source de danger et de panne.»

## **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 door switch or the heat circuit devices 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 and operator's manual included with the dryer.**

Dryers **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.

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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. **ADC** assumes no responsibility for freight claims or damages.
6. If you need assistance in handling the situation, please contact the **ADC** Traffic Manager at (508) 678-9000.

**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 ADC produces a very versatile machine, 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 solvent will create a fire hazard.

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



7. A program **should be** established for the inspection and cleaning of lint in the heating unit area, exhaust duct work, 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 duct work 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 door switch, or heat safety circuit 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.

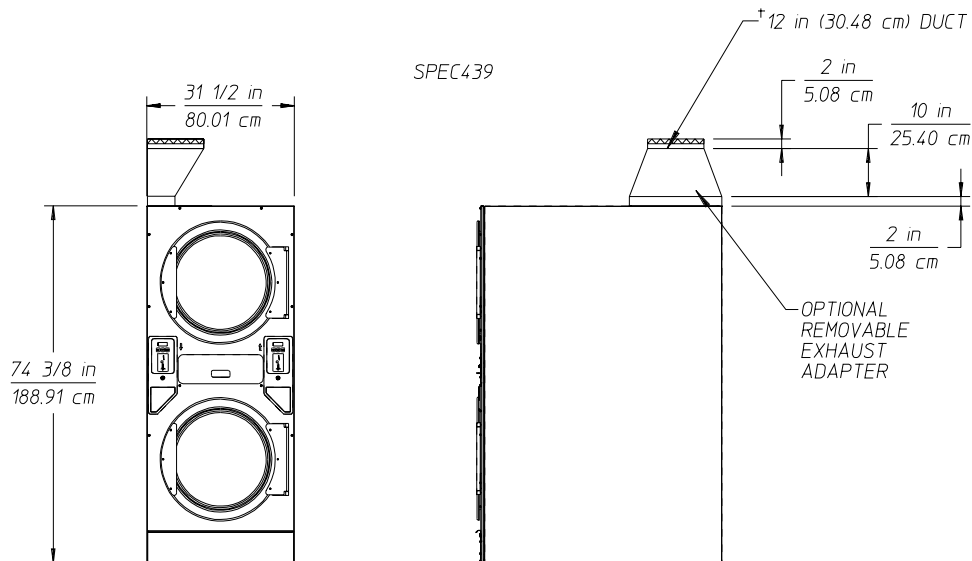
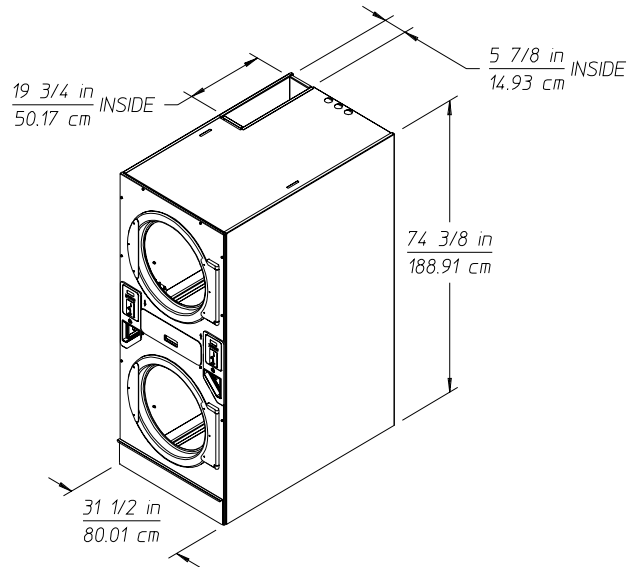
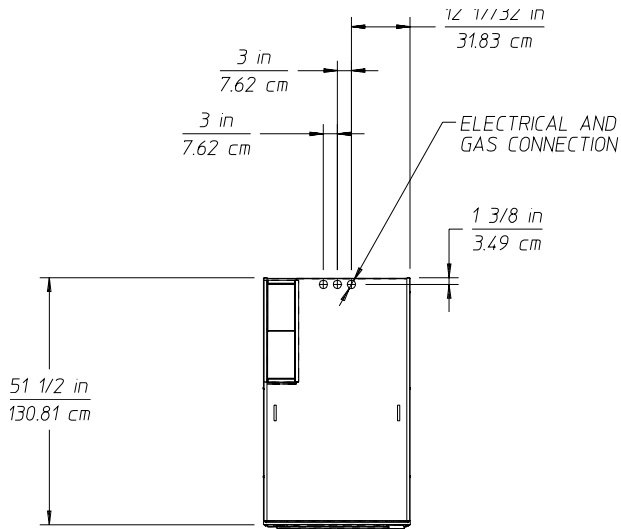
**WARNING:** Articles left in the dryer after the drying and cooling cycles have been completed can create a fire hazard.

12. **READ and FOLLOW ALL CAUTION and DIRECTION LABELS ATTACHED TO THE DRYER.**

**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.**

# SECTION II SPECIFICATIONS

## A. SPECIFICATIONS



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$\dagger$  DUCT WORK SIZE VARIES WITH INSTALLATION CONDITIONS. EXHAUST STATIC PRESSURE SHOULD NOT EXCEED .3 in WATER COLUMN (0.74 mb).

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

MAXIMUM CAPACITY (DRY WEIGHT)*		60 lbs.	<b>27.2 kg</b>
TUMBLER (BASKET) DIAMETER		30"	<b>76.2 cm</b>
TUMBLER (BASKET) DEPTH		26-1/8"	<b>66.36 cm</b>
TUMBLER (BASKET) VOLUME (PER BASKET)		10.7 cu. ft.	<b>0.30 cu.m.</b>
TUMBLER (BASKET) MOTOR (2 PLACES)		1/4 HP	<b>0.186 kw</b>
BLOWER MOTOR (2 PLACES)		1/4 HP	<b>0.186 kw</b>
DOOR OPENING - DIAMETER (2 PLACES)		21-1/2"	<b>54.61 cm</b>
EXHAUST DUCT OUTLET (SINGLE)		12"	<b>30.48 cm</b>
<b>Gas</b>	VOLTAGE AVAILABLE	120-240v	1ø 60 Hz
	HEAT INPUT (TOTAL FOR BOTH BASKETS)	180,000 btu/hr	<b>45,360 kcal/hr</b>
	AIRFLOW (PER TUMBLER/BASKET)	600 cfm	<b>16.99 cmm</b>
	GAS INLET SIZE (SINGLE)	3/4"	<b>1.91 cm</b>

*Shaded areas are stated in metric equivalents*

\*Total capacity for both tumblers (baskets)

030900/WL

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

# 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 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) or Canadian Electrical Codes Parts 1 & 2 CSA C22.1-1990 or LATEST EDITION (for Electrical Connections).

### A. UNPACKING/SETTING UP

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

**NOTE:** The access keys for the service doors are included in the information packet shipped in the tumbler (basket). These keys **should be** removed and put in a safe place, yet made accessible because some **will be** needed throughout various phases in the installation of the dryer.

**Dryers are shipped with a coin box and coin box faceplate ONLY.** The coin box lock is not included and **must be** purchased elsewhere or the lock can be ordered as a parts order from the ADC factory.

**IMPORTANT:** For shipping purposes, the 12” (30.48 cm) exhaust adapter is shipped inside one of the dryer’s tumblers (baskets). This exhaust adapter **should either be** left inside the tumbler (basket) or removed and put in a safe place, and **must be** installed once the dryer is in place prior to making any exhaust duct connections.

The dryer can be moved to it’s final location while still attached to the skid or with the skid removed. With the skid removed, to make it easier to slide the dryer into it’s final position, slightly lower **ALL** four (4) leveling legs, so that the dryer will slide on the legs instead of the base frame. The dryer is equipped with four (4) leveling legs, one (1) at each corner of the dryer base. The legs can be adjusted by either tilting ... and properly supporting the dryer, and adjusting from underneath with an open end wrench (or adjustable wrench). Or, by removing the rear lower back panel and/or front lower service panel and adjusting the leveling leg with a 1/4” socket.

**IMPORTANT:** When tilting the dryer to adjust the leveling legs, be sure to properly support the bottom of the dryer with a block of wood or similar object. Failure to do so can cause personal injury!

## B. LOCATION OF THE DRYER

Before installing the dryer, be sure the location conforms to local codes and ordinances.

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.

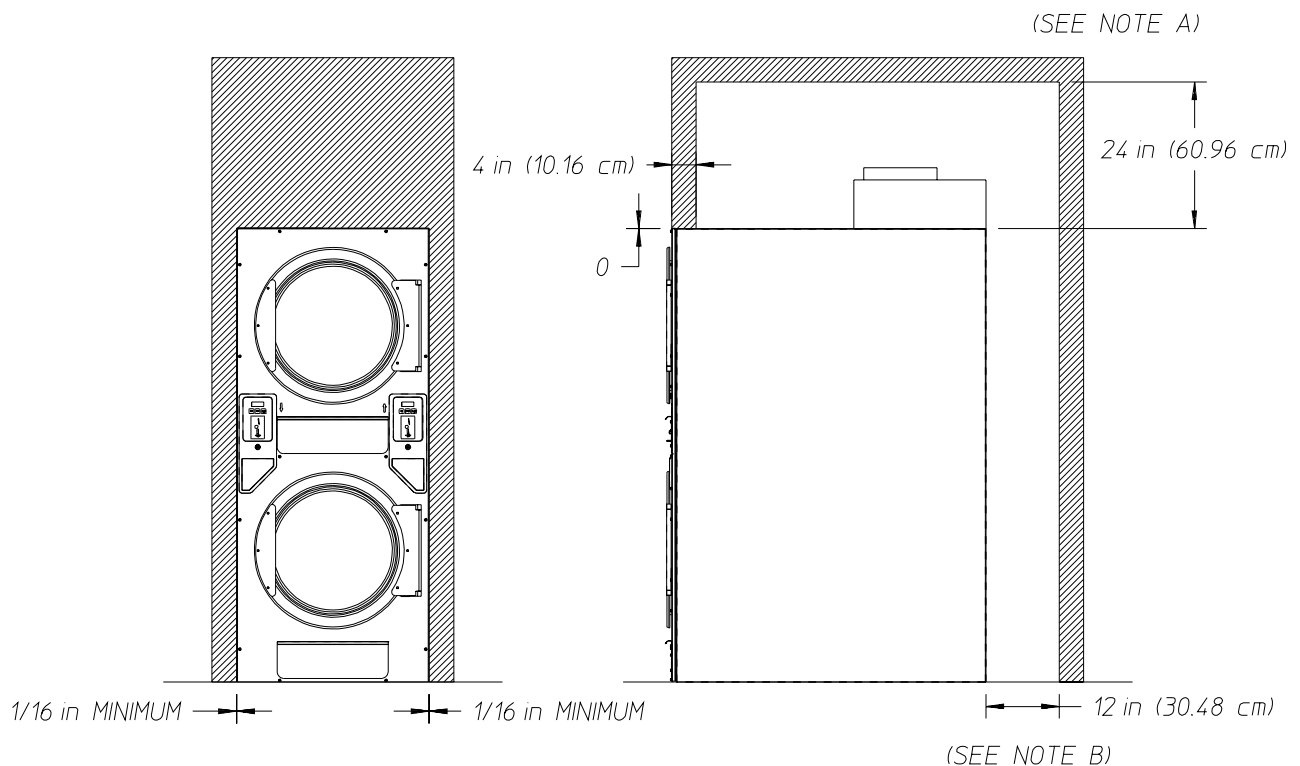
**IMPORTANT:** “The dryer **must be** installed on non-combustible floors only.”

2. 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 (0.61 m) away from the nearest obstruction, i.e., wall, for ease of installation, maintenance, and service.

## C. DRYER ENCLOSURE REQUIREMENTS

Bulkheads and partitions **should be** made of noncombustible materials and **must be** located a minimum of 24-inches (60.96 cm) above the dryer outer top, except along the front of the dryer which may be closed in if desired.

*CLEARANCES SHOWN ARE MINIMUM DIMENSIONS TO NEAREST COMBUSTIBLE MATERIALS.*



### NOTES:

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A. MINIMUM OF 24" (60.96 cm) CLEARANCE IS ACCEPTABLE FOR EASE OF INSTALLATION AND SERVICE (VENTING AND POWER CONNECTIONS).

B. MINIMUM OF 12" (30.48 cm) CLEARANCE IS ACCEPTABLE FOR EASE OF INSTALLATION, MAINTENANCE AND SERVICE, AT LEAST 24" (60.96 cm) IS RECOMMENDED.

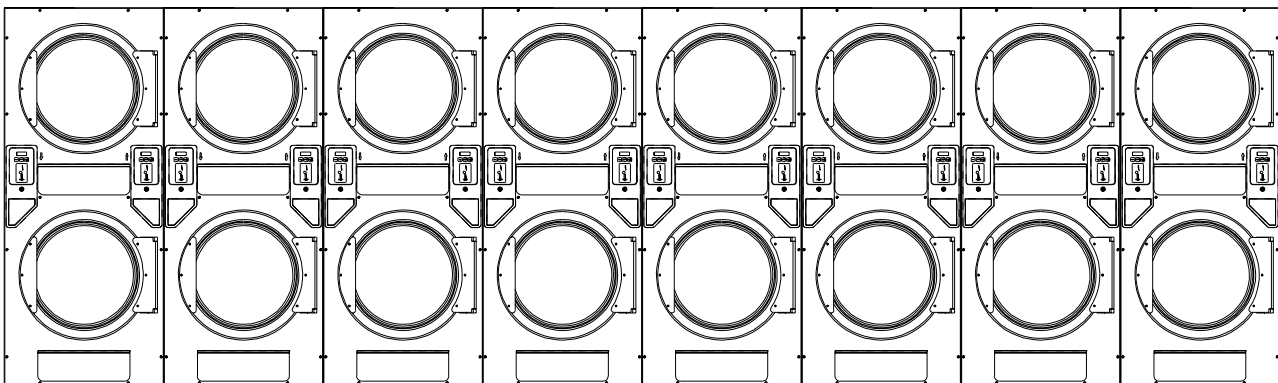
## D. FRESH AIR SUPPLY

Air supply (make-up air) **must be** given careful consideration to assure proper performance of each dryer. An unrestricted source of 1,200 cfm (33.98 cmm) is necessary for each dryer. An unrestricted air entrance from the outdoors (atmosphere) of a minimum of 1-1/2 square feet (0.14 square meters) is required for each dryer. This area **must be** enlarged if louvers or registers cover the opening. 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 the dryers. For example, for a bank of eight (8) dryers, a total make-up air opening of 12 square feet (1.15 square meters) is required. Two (2) openings measuring 2 feet by 3 feet (0.61 m by 0.91 m) (6 square feet [0.58 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.

**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 fumes will result in irreparable damage to motors and other dryer components.

**IMPORTANT:** Make-up air openings **should not be** located near duct work exhaust outlets. If make-up air openings are too close to the exhaust outlet, lint and fumes may be drawn back into the dryer area through these openings.



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TYPICAL INSTALLATION SHOWING MAKE-UP AIR OPENINGS

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

## E. EXHAUST REQUIREMENTS

Exhaust duct work **should be** designed and installed by a qualified professional. Improperly sized duct work will create excessive back pressure which will result in slow drying, increased use of energy, overheating of the dryer, and shut down of the burner by the airflow (sail) switches, burner hi-limits, or tumbler (basket) hi-limit thermostats.

Where possible, it is suggested to provide a separate exhaust duct for each dryer.

**CAUTION: IMPROPERLY SIZED or INSTALLED EXHAUST DUCT WORK CAN CREATE A POTENTIAL FIRE HAZARD.**

The exhaust duct work **must be** laid out in such a way that the duct work travels as directly as possible to the outdoors with as few turns as possible. The shape of the duct work is not critical so long as the minimum cross-sectional area is provided.

When single dryer venting is used, for horizontal or vertical venting the minimum duct size is 12-inches (30.48 cm) in diameter and the duct work from the dryer to the outside exhaust outlet **must not exceed** a distance of 35 feet (10.67 meters) and have no more than two (2) elbows (including both connection to dryer and outside protection).

In the case of multiple (common) venting, using the applicable duct size (diameter) noted in this manual, for horizontal venting the distance from the last dryer to the outside outlet **must not exceed** 15 feet (4.57 meters) and have no more than one (1) elbow (including outside protection). In the case of common vertical venting, the distance from the last dryer to the outside outlet **must not exceed** 25 feet (7.62 meters) and have no more than three (3) elbows (including outside protection).

**IMPORTANT:** Exhaust back pressure measured by a manometer at the dryer exhaust duct area **must not exceed** 0.3 inches of water (0.74 mb).

It is suggested that the use of 90° turns in ducting be avoided; use 30° or 45° angles instead. The duct work **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** duct work joints **must be** taped to prevent moisture and lint from escaping into the building. Also, inspection doors **should be** installed at strategic points in the exhaust duct work for periodic inspection and cleaning.

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

If the duct work run (distance) or the amount of elbows required exceeds the limits noted in this manual, the size (diameter/cross-sectional area) of the duct work **must be** increased in proportion to the length or number of elbows added. When the duct work approaches the maximum limits as noted in this manual, a professional Heating, Venting, Air Conditioning (HVAC) firm **must be** consulted for proper venting information.

1. Dryer exhaust connection. The dryer is shipped with a 12-inches (30.48 cm) exhaust adapter which for shipping purposes is shipped inside of the dryer's tumbler (basket). This exhaust adapter **must be** installed (with screws provided) once the dryer is in place prior to making any exhaust connections.

**IMPORTANT:** Minimum duct size for dryer is 12-inches (30.48 cm) round duct. Duct size **must not be** reduced anywhere downstream of dryer.

## 2. VENTING LAYOUT

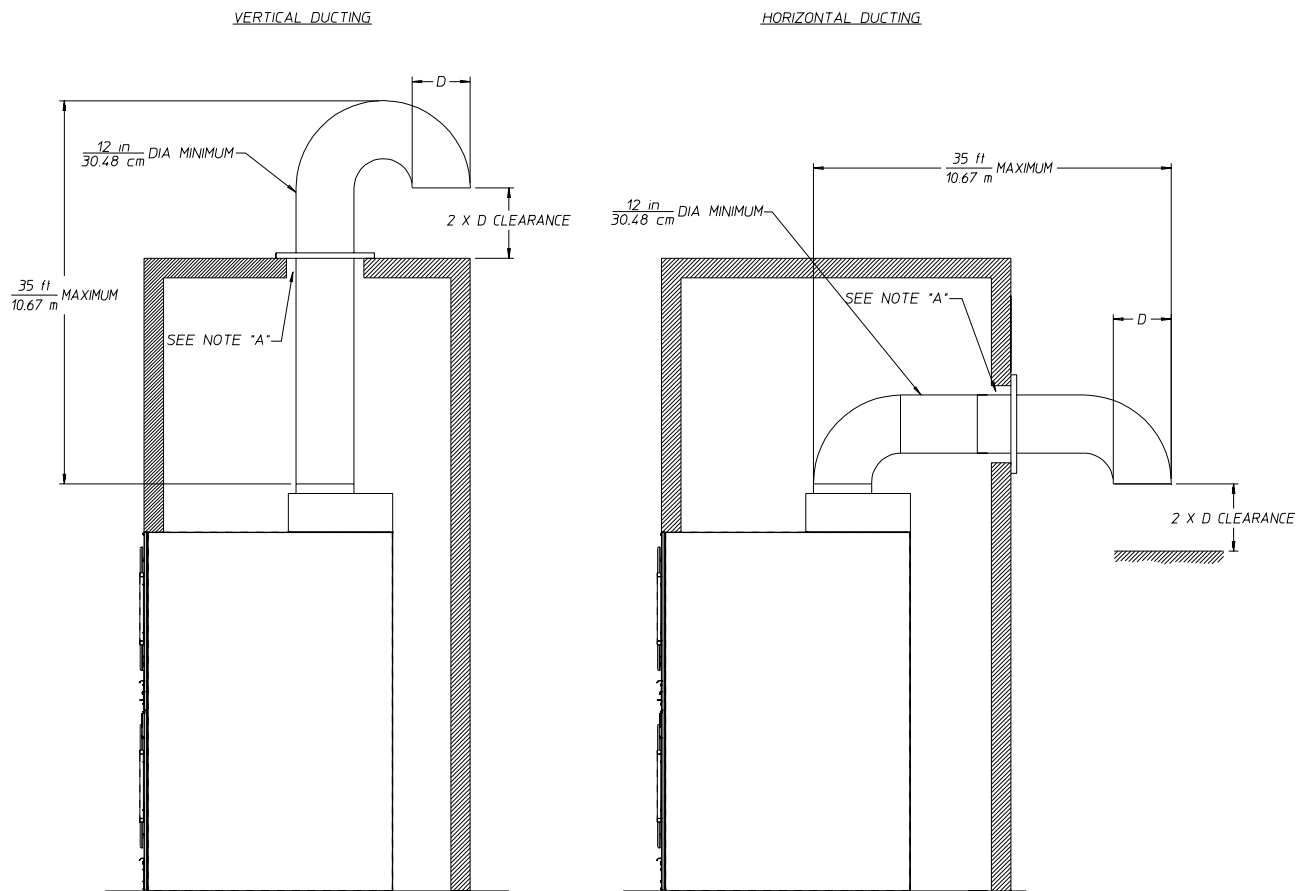
### a. Single Dryer Venting

When single dryer venting is used, for horizontal or vertical venting the minimum duct size is 12-inches (30.48 cm) in diameter and the duct work from the dryer to the outside exhaust outlet **must not exceed** a distance of 35 feet (10.67 meters) and have no more than two (2) elbows (including both connection to dryer and outside protection).

**IMPORTANT:** Exhaust back pressure measured by a manometer at the dryer exhaust duct area **must not exceed** 0.3 inches of water (0.74 mb).

**CAUTION: IMPROPERLY SIZED or INSTALLED EXHAUST DUCT WORK CAN CREATE A POTENTIAL FIRE HAZARD.**

EXTERNAL SINGLE DRYER VENTING CONNECTIONS  
(WITH DRYER COMMON EXHAUST)



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SL 01/20/00  
ABE 01/19/00

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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.



It is suggested that the use of 90° turns in ducting be avoided; use 30° or 45° angles instead. The duct work **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** duct work joints **must be** taped to prevent moisture and lint from escaping into the building. Also, inspection doors **should be** installed at strategic points in the exhaust duct work for periodic inspection and cleaning.

**IMPORTANT:** Minimum duct size for dryer is 12-inches (30.48 cm) round duct. Duct size **must not be** reduced anywhere downstream of dryer.

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

**IMPORTANT:** If the duct work run (distance) or the amount of elbows required exceeds the limits noted in this manual, the size (diameter/cross-sectional area) of the duct work can only be increased to an extent. When the duct work approaches the maximum limits as noted in this manual, a professional Heating, Venting, Air Conditioning (HVAC) firm **must be** consulted for proper venting information.

#### b. 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 the side of the main common duct at an angle not more than 45° in the direction of airflow. The main duct **should be** tapered, with the diameter increasing before each individual duct 12-inch (30.48 cm) is added.

**IMPORTANT:** No more than four (4) dryers or eight (8) pockets total **should be** connected to one (1) common duct.

Minimum duct size between dryer and common duct is 12-inches (30.48) in diameter. This duct must not travel more than 30 feet (9.14 meters) and include no more than 3 elbows (which includes both dryer and common duct connections).

**NOTE:** Refer to **illustrations** on **page 14** and **page 15** for examples of multi dryer (common) venting.

In the case of multiple (common) venting, using the applicable duct size (diameter) noted in this manual, for horizontal venting the distance from the last dryer to the outside outlet **must not exceed** 15 feet (4.57 meters) and have no more than one (1) elbow (including outside protection). In the case of common vertical venting, the distance from the last dryer to the outside outlet **must not exceed** 25 feet (7.62 m) and have no more than three (3) elbows (including outside protection).

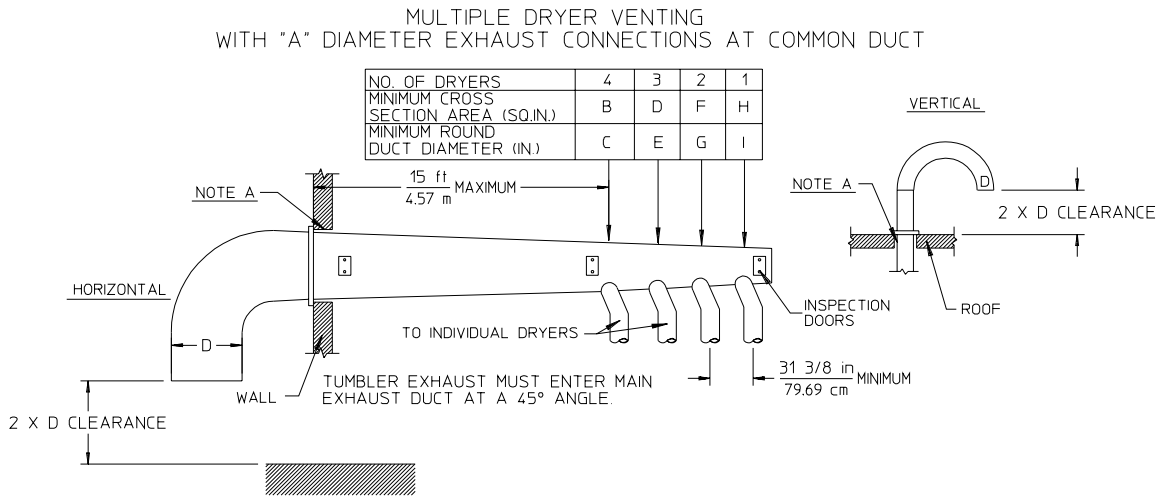
**IMPORTANT:** Exhaust back pressure measured by a manometer at the dryer exhaust duct area **must not exceed** 0.3 inches of water (0.74 mb).

**CAUTION: IMPROPERLY SIZED or INSTALLED EXHAUST DUCT WORK CAN CREATE A POTENTIAL FIRE HAZARD.**

It is suggested that the use of 90° turns in ducting be avoided; use 30° or 45° angles instead. The duct work **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** duct work joints **must be** taped to prevent moisture and lint from escaping into the building. Also, inspection doors **should be** installed at strategic points in the exhaust duct work for periodic inspection and cleaning.

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

**IMPORTANT:** If the duct work run (distance) or the amount of elbows required exceeds the limits noted in this manual, the size (diameter/cross-sectional area) of the duct work can only be increased to an extent. When the duct work approaches the maximum limits as noted in this manual, a professional Heating, Venting, Air Conditioning (HVAC) firm **must be** consulted for proper venting information.



IMPORTANT: NO MORE THAN 4 DRYERS (8 TUMBLERS) CAN BE CONNECTED TO ONE COMMON DUCT (VENT).

ABE 01/19/00

MAN4934

FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA

CROSS SECTIONAL AREA OF A ROUND DUCT =  $.785 \times D^2$  WHERE D = DIAMETER OF THE DUCT.

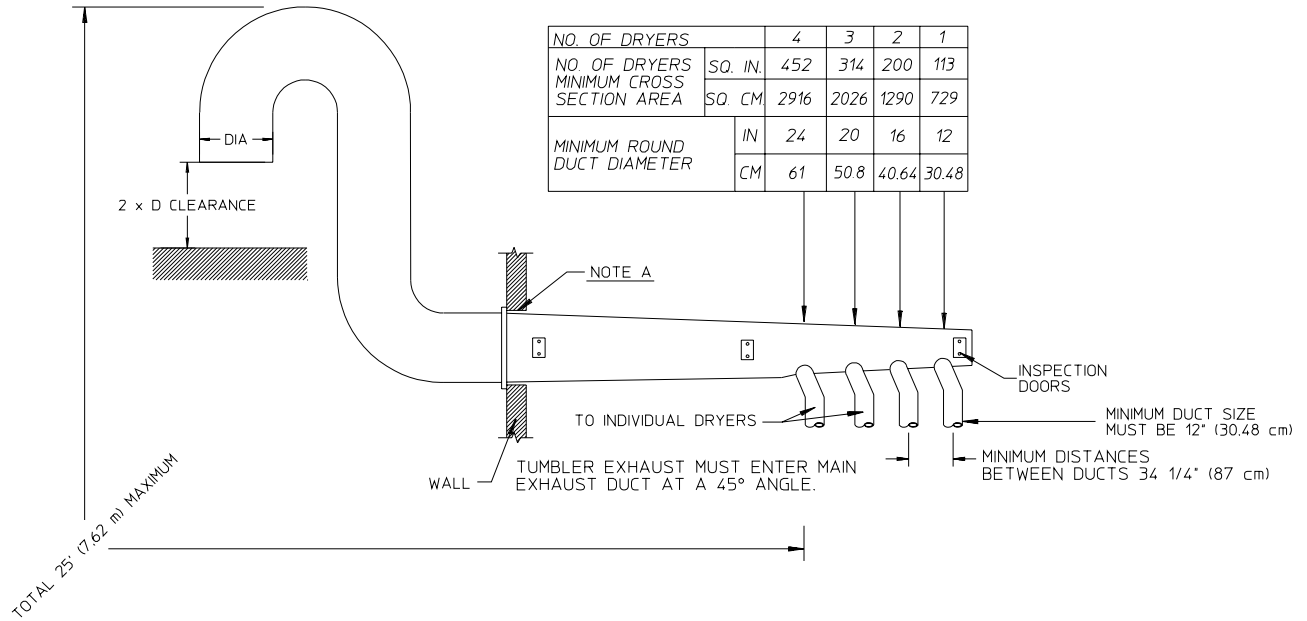
CROSS SECTIONAL AREA OF A RECTANGULAR DUCT =  $W \times H$  WHERE W = WIDTH AND H = HEIGHT.

**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.

A	B	C	D	E	F	G	H	I
12 in	256 in	18 in	210 in	16 in	164 in	14 in	120 in	12 in
30.48 cm	650.24 cm	45.72 cm	533.4 cm	40.64 cm	416.56 cm	35.56 cm	304.8 cm	30.48 cm

DRYER EXHAUST DUCT SIZE: 12 in (30.48 cm)  
 DRYER AIRFLOW: 1200 CFM (340 cmm)  
 MODEL NO(S): AD - 540  
 HEAT RECLAIMER: YES  NO   
 CONTROLS: COIN  OPL

MULTIPLE DRYER VENTING (VERTICAL) WITH A MINIMUM 12" (30.48 cm) DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



IMPORTANT: NO MORE THAN 4 DRYERS (8 TUMBLERS) CAN BE CONNECTED TO ONE COMMON DUCT ( VENT ).

MAN4955

FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA

CROSS SECTIONAL AREA OF A ROUND DUCT =  $.785 \times \text{DIA}^2$

CROSS SECTIONAL AREA OF A RECTANGULAR DUCT = WIDTH  $\times$  HEIGHT.

ABE 01/21/00  
SL 01/20/00

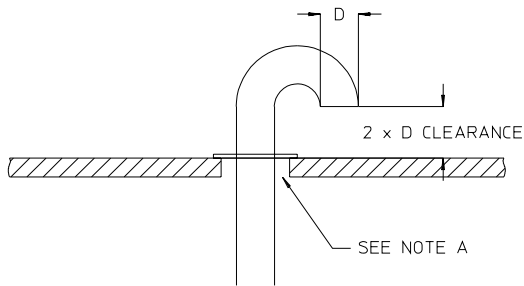
NOTE A: OPENING MUST BE TWO (2) INCHES (5.08 cm) LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

c. Outside Duct (Vent) Work Protection

To protect the outside end of the horizontal duct work from the weather, a 90° elbow turned downward **should be** installed where the exhaust duct exits the building. If the duct work travels vertically up through a roof, it **should be** protected from the weather by using a 180° turn (goose neck) 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 or caps on the outside opening of the exhaust duct work.

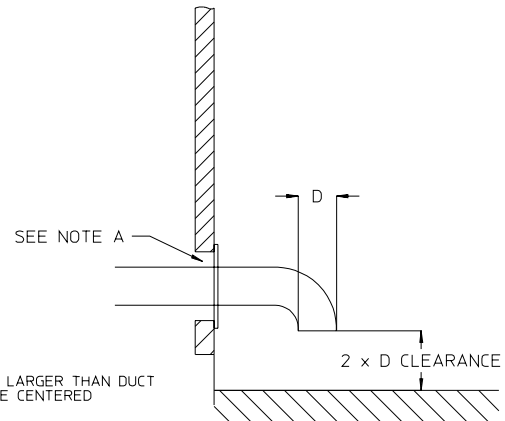
## VERTICAL DUCTING



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



Wherever the exhaust duct work passes through a wall, ceiling, or roof made of combustible materials, the opening **must be** 2-inches (5.08 cm) larger (**ALL** the way around) than the duct. 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 with local and state regulations or codes. In the absence of such codes, **ALL** electrical connections, materials, and workmanship **must conform** to the applicable requirements of the National Electrical Code ANSI/NFPA NO.70-LATEST EDITION, or in Canada, the installation **must conform** to applicable Canadian Standards: Canadian Electrical Codes Parts 1 & 2 CSA C22.1-1990 or LATEST EDITION (for Electrical Connections).

**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**.

A separate circuit serving each tumbler (basket) **must be** provided. The dryer **must be** connected to copper wire **ONLY**. **DO NOT use aluminum wire which could cause a fire hazard.**

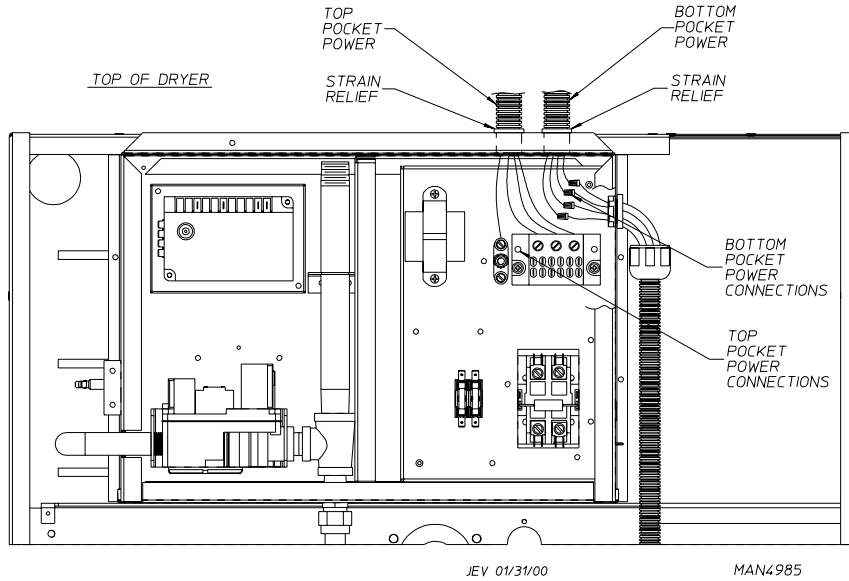
**NOTE:** The use of aluminum wire will **VOID THE WARRANTY**.

### 2. Electrical Connections

A wire diagram is included with each dryer showing the wiring connection sequence. The electrical connections are made in the wiring box located at the rear top area of the dryer.

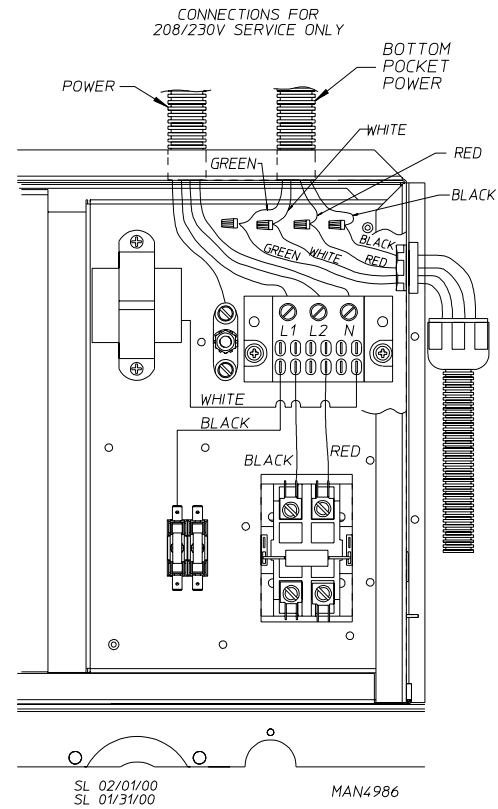
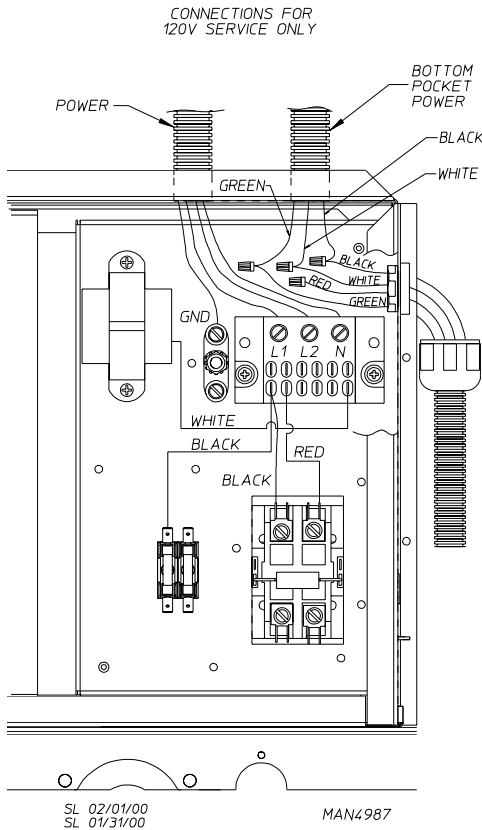
Each pocket **must be** provided with a separate circuit. The external power connection for the top pocket is made to a terminal block and the lower external power connection is made to a wire harness, both are located in the above mentioned wire box.

If local codes permit, power to the dryer can be made by the use of a flexible U.L. listed power cord/pigtail (wire size **must conform** to rating of dryer), or the dryer can be hard wired directly to the service breaker panel. In both cases, a strain relief **must be** installed where the wiring enters the dryer.



Electrical Power Connection examples...

**IMPORTANT:** For a 120v installation, a two (2) wire service (L1 and Neutral) and a ground is required (\*). In the case of a 208v or 240v 1 phase service, three (3) wires (L1, L2 and Neutral) and a ground is required (\*).  
 (\*) For each tumbler/pocket.



### 3. Grounding

Grounding (earth) connections **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 Canadian Standards: Canadian Electrical Codes Parts 1 & 2 CSA C22.1-1990 or LATEST EDITION (for Electrical Connections). The ground connection may be to a proven earth ground at the location service panel.

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 pipe or hot water pipe.** The grounded cold water pipe must have metal to metal connections **ALL** the way to the 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 wire and securely clamped to bare metal at both ends.

**IMPORTANT:** For personal safety and proper operation, the dryer **must be** grounded.

### 4. Electrical Service Specifications (per pocket)

**IMPORTANT:** The dryer **must be** connected to the electrical supply shown on the data label located on the inside of the middle access control door.

**WARNING:** Any damage done to dryer components due to improper voltage application or connections will automatically VOID THE WARRANTY.

<b>ADG-540, 1ø Motor (Gas)</b>						
<b>SERVICE VOLTAGE</b>	<b>PHASE</b>	<b>WIRE SERVICE</b>	<b>APPROX. AMP DRAW</b>	<b>MINIMUM WIRE SIZE</b>	<b>FUSING Dual Element Time Delay</b>	<b>CIRCUIT BREAKER</b>
120	1ø	2	8.6	*	12	15
208	1ø	3	5.4	*	9	15
240	1ø	3	5.4	*	9	15

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

**NOTE:** Contact factory for electrical information not listed.

**NOTE:** 1. Fuse ratings are dual element-time-delay-current-limiting, class RK1 or RK5 ONLY.  
2. Circuit breakers are thermal magnetic (industrial) type **ONLY**. For others, calculate/verify correct breaker size according to appliance amp draw and type of breaker used.

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

## 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 with 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 (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 shut-off 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).

The dryer **must be** isolated from the gas supply piping system by closing its individual manual shut-off 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 located on the inside of the middle access (control) door. If this information does not agree with the type of gas available, contact the distributor who sold the dryer or the **ADC** factory.

**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) are made by changing each burner orifice. If this conversion is necessary, contact the distributor who sold the dryer or contact the **ADC** factory.

**IMPORTANT:** The dryer **is not** provided with an internal gas shut off. An external shut off **must be** provided.

## 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>
Inline Pressure	6.0 - 12.0 inches W.C.	<b>14.92 - 29.9 mb</b>	10.5 inches W.C.	<b>26.1 mb</b>

*Shaded areas are stated in metric equivalents*

\* Measured at gas valve pressure tap when the gas valve is on.

<b>ADG-540</b>	
Gas Inlet Size (each tumbler/basket)	3/4" N.P.T.
Btu/hr Input (each tumbler/basket)	90,000
Btu/hr Input (total for both tumblers/baskets)	180,000

N.P.T. = National Pipe Thread

### b. Natural Gas

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

### c. Liquid Propane (L.P.) Gas

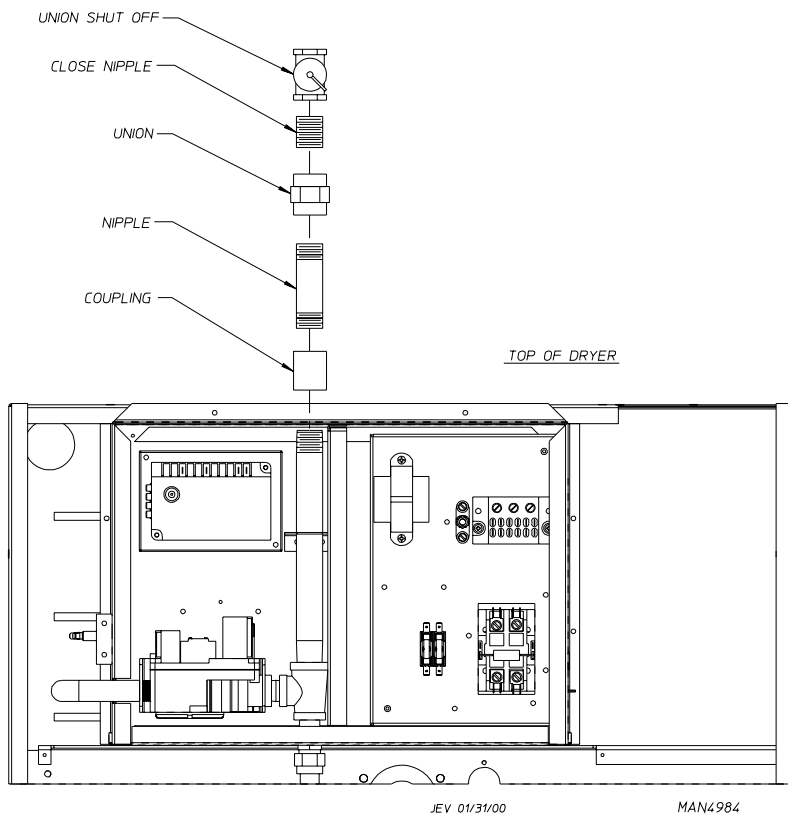
Dryers made for use with L.P. gas have the gas valve's internal pressure regulator blocked open so that the gas pressure **must be** regulated upstream of the dryer. The pressure measured at each gas valve pressure tap **must be** a consistent 10.5 inches water column (W.C.) - 26.1 millibars. There is 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.

## 3. Piping Connections

**ALL** components/materials **must conform** to National Fuel Gas Code specifications, or in CANADA, the Canadian Installation Codes (for General Installation and Gas Plumbing).

It is important that the gas pressure regulators meet applicable pressure requirements and that gas meters be rated for the total amount of **ALL** the appliance Btu's being supplied.





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. [liquid propane] gas, the supply tank), the number of tees, other gas-operated appliances on the 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 3/4" pipe loop be installed in the supply line serving the bank of dryers. An in-line pressure regulator **must be** installed in the gas supply line (header) if (natural) gas line pressure exceeds 12.0 inches water column pressure - 29.2 millibars. (Refer to the illustration on page 22 for details.)

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

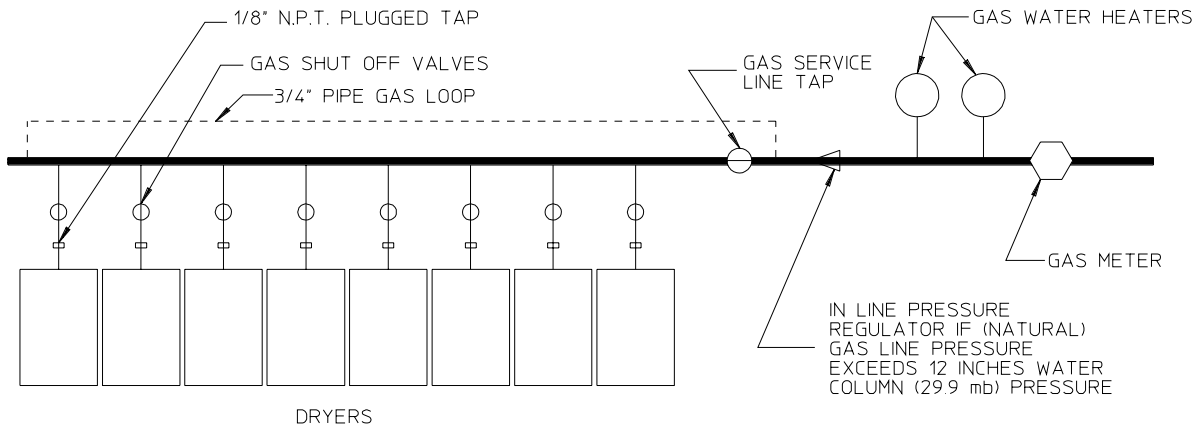
A 1/8" N.P.T. plugged tap, accessible for a test gauge connection, **must be** installed in the main gas supply line immediately upstream of each dryer.

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

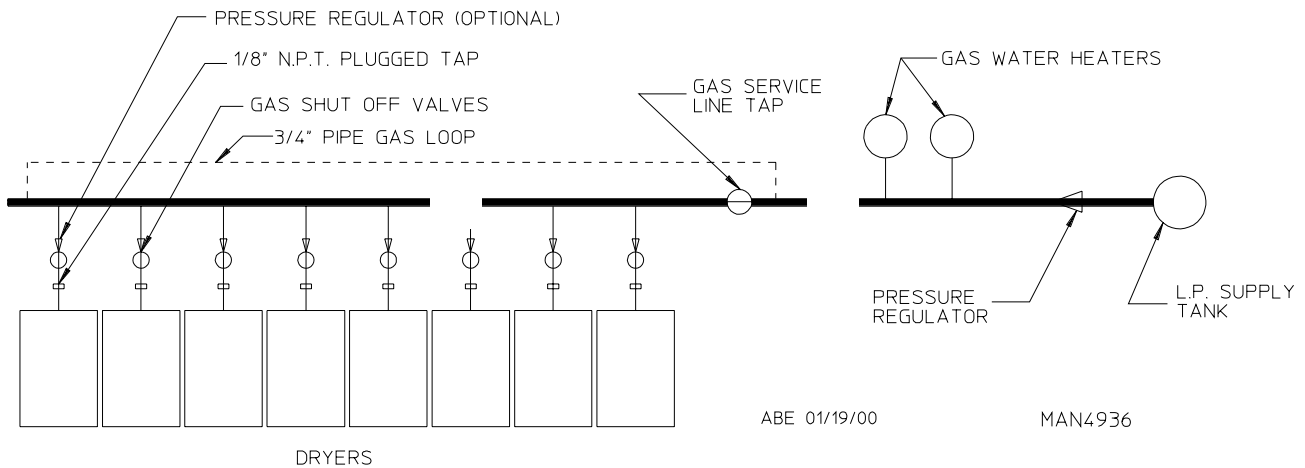
**WARNING:** Test **ALL** connections for leaks by brushing on a soapy water solution (liquid detergent also works well).

**WARNING:** **NEVER TEST FOR GAS LEAKS WITH AN OPEN FLAME!!!**

### TYPICAL NATURAL GAS INSTALLATION



### TYPICAL L.P. GAS INSTALLATION



ABE 01/19/00

MAN4936

## 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 on the back of the dryer control (service) door.
3. Check to assure that the dryer is connected to the type of heat/gas indicated on the dryer data label.
4. 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. Check bolts, nuts, screws, terminals, and fittings for tightness.

6. Be sure that **ALL** gas shut-off valves are in the open position.
7. Be sure **ALL** back guard panels and service box covers have been replaced.
8. Check the lint drawer to assure that it is closed and secured in place.
9. Rotate the tumbler (basket) by hand to be sure they move freely.

## 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.

1. Turn on electric power to the dryer.
  - a. Open **ALL** gas shut-off valves.
2. Computer System Operational Test.
  - a. *COIN MODELS ONLY*
    - 1) The L.E.D. (light emitting diode) display(s) will flash back and forth between “FILL” and the amount needed to start the dryer (i.e., “25”), meaning that the dryer is available and 25¢ is required to start it.
    - 2) Insert the proper number of coins into coin acceptor. Once the correct amount needed to start the dryer has been inserted, the L.E.D. (light emitting diode) display(s) will read “PUSH” ... “tEnP.”
    - 3) Start the dryer by pressing the desired setting for either the upper tumbler (basket) or lower tumbler (basket) (i.e., “LO” selection for the upper tumbler (basket). The L.E.D. (light emitting diode) display will now read selection (setting) made and the amount of time vended (i.e., “LO 10”).

**NOTE:** The dryer can be stopped at any time by opening the main door. To restart the dryer, shut the main door and press the desired setting.

- 4) Open main door to stop the dryer, and change selection to “PERM PRESS” (medium) setting. Repeat this procedure, but change the selection (setting) to “HI” (high). This will confirm that setting key circuits and door switch circuits are functioning properly.

**NOTE:** Selection (setting) changes can be made at any time during the drying cycle by opening and closing the main door and then making a new selection.

- 5) Repeat above procedure for the other tumbler (basket).
3. Heat Circuit Operational Test.
    - a. When a gas dryer is first started (during initial start-up), it has a tendency not to ignite on the first ignition attempt. This is because the gas supply piping is filled with air, so it may take a few minutes for the air to be purged from the lines.

The dryer is equipped with a direct spark ignition (DSI) system which has internal diagnostics. If ignition is not established 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 desired temperature selection).

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

- b. 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 pressure is correct and consistent.

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

Natural Gas ---- 3.5 Inches Water Column (8.7 millibars)  
L.P. Gas ----- 10.5 Inches Water Column (26.1 millibars)

**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 basket switches and sail switches).
5. Each tumbler (basket) **should be** operated through one (1) complete cycle to assure that no further adjustments are necessary and that **ALL** components are functioning properly.

**NOTE:** The sail switch can be checked for proper operation by opening the control door while the dryer is running and the heating unit (burner) active (on). The heating unit(s) should shut-off within a few seconds. If not, make the necessary adjustments.

#### BASKET COATING

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

**NOTE:** Drying and cooling cycles are complete when the L.E.D. (light emitting diode) display reads ... "donE."

6. Computer Programs/Selections...

Each Microprocessor Controller computer has been preprogrammed by the factory with the most commonly used program (parameter) selections. If microprocessor (computer) program changes are required, refer to the **Microprocessor Controller Programming Manual** which was shipped with the dryer.

## J. SHUT DOWN INSTRUCTIONS

In the case where the dryer is to be shut down (taken out of service) for a period of time, the following **must be** performed:

1. Discontinue power to the dryer (both tumblers [baskets]) either at the external disconnect switch or the circuit breaker.
2. Discontinue the gas supply:
  - a. **SHUT OFF external gas supply shut-off valve.**

# SECTION IV

## OPERATING INSTRUCTIONS

### A. STARTING THE DRYER

The dryer is available for use when the L.E.D. (light emitting diode) display reads “FILL” and/or the amount needed to start the dryer (i.e., “25”). Once the load has been put into the dryer and the main door is closed, start the dryer as follows:

1. Insert the proper number of coins into the coin acceptor. Once the correct “Amount To Start” has been inserted, the L.E.D. (light emitting diode) display will read “PUSH” ... “tEnP.”
2. Determine fabric setting (selection). Setting “HI TEMP” is the high temperature range, “PERM PRESS” is the medium temperature range, and “LO TEMP” is the low temperature range.

Once the fabric temperature setting (selection) has been determined, you start the dryer by pressing the fabric setting key for the tumbler (basket) being used (i.e., “LO TEMP” setting for the upper tumbler [basket]).

3. The dryer will now start, and the L.E.D. (light emitting diode) display for the tumbler (basket) selected will read the setting and the time vended (i.e., “LO 10”).
4. The cycle time will count down until the drying and cooling cycles are completed.
5. Upon completion of the drying cycle and cooling cycle, the dryer will shut-off, the tone (buzzer) will sound for five (5) seconds, and the L.E.D. (light emitting diode) display will read “donE.”

**NOTE:** If the Anti-Wrinkle program is active, the L.E.D. (light emitting diode) display will remain reading “donE,” and the microprocessor controller (DMC) computer will proceed through the Anti-Wrinkle program until the maximum “Active Guard Time” has expired or until the main door is opened, whichever comes first.

**NOTE:** If the Anti-Wrinkle program is not active or in use, the L.E.D. (light emitting diode) display will read “donE” until the main door is opened, at which time the L.E.D. (light emitting diode) display will read “FILL” and/or the “Amount To Start.”

#### 6. *Notes*

- a. The dryer tumbler (basket) can be stopped at any time by opening the main door. To restart dryer, shut the main door and press desired setting.

**NOTE:** When a cycle is interrupted by opening the main door, cycle time will continue to count downward, regardless if the door is open or closed until a keyboard (touchpad) selection is made.

- b. Selection (setting) changes can be made at any time during the drying cycle by opening and closing the main door and then making a new selection.

- c. Additional time can be purchased at any time. If the dryer is in operation (drying mode) and additional coins are inserted, the L.E.D. (light emitting diode) display(s) will read “PUSH” ... “tEnP,” and the selection (setting) key for the appropriate tumbler (basket) **must be** pressed.

**NOTE:** Any one of the three (3) selection keys can be pressed for the appropriate tumbler (basket). No matter which key is pressed, the Dual Microprocessor Controller (DMC) computer will continue the cycle selection time that was in operation at the time of inserting additional coins.

**NOTE:** When both tumblers (baskets) are in operation and additional coins are inserted for one tumbler (basket) and the appropriate tumbler (basket) selection is made, the other tumbler (basket) automatically resumes cycle status.

**NOTE:** If the Anti-Wrinkle program is active, the L.E.D. (light emitting diode) display will remain reading “donE,” and the microprocessor controller (DMC) computer will proceed through the Anti-Wrinkle program until the maximum “Active Guard Time” has expired or until the main door is opened, whichever comes first.

**NOTE:** If the Anti-Wrinkle program **is not** active or in use, the L.E.D. (light emitting diode) display will read “donE” until the main door is opened, at which time, the L.E.D. (light emitting diode) display will read “FILL” and/or “FrEE.”

d. *Notes*

- 1) The dryer tumbler (basket) can be stopped at any time by opening the main door. To restart dryer, shut the main door and press desired setting.

**NOTE:** If the Anti-Wrinkle program **is not** active or in use, the L.E.D. (light emitting diode) display will read “donE” until the main door is opened, at which time, the L.E.D. (light emitting diode) display will read “FILL” and/or “FrEE.”

- 2) Selection (setting) changes can be made at any time during the drying cycle by opening and closing the main door then making a new selection.

# SECTION V

## SERVICE/PARTS INFORMATION

### A. SERVICE

1. Only properly licensed or trained technicians should service the dryer. If service is required, contact the distributor from whom the **ADC** equipment was purchased. If the distributor **cannot** be contacted or is unknown, contact the **ADC** Service Department for a distributor in your area.

**NOTE:** When contacting the **ADC** Service Department, 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 distributor from whom the **ADC** equipment was purchased. If the distributor **cannot** be contacted or is unknown, contact the **ADC** Parts Department for a distributor in your area. Parts may also be purchased directly from the factory by calling the **ADC** Parts Department at (508) 678-9000 or you may FAX in your order at (508) 678-9447.

**NOTE:** When ordering directly from the **ADC** Parts Department, 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 VI

## WARRANTY INFORMATION

### A. RETURNING WARRANTY CARD(S)

1. Before any dryer leaves the **ADC** factory 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.
  - a. If a warranty card did not come with your dryer, contact the **ADC** Warranty Department or **ADC** Service Department at (508) 678-9000.

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

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

### B. WARRANTY

For a copy of the **ADC** commercial warranty covering your particular dryer(s), contact the **ADC** distributor from whom you purchased the equipment and request dryer warranty form. If the distributor **cannot** be contacted or is unknown, warranty information can be obtained from the factory by contacting the **ADC** Warranty Department at (508) 678-9000.

**NOTE:** Whenever contacting the **ADC** factory for warranty or 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.

### C. RETURNING WARRANTY PART(S)

**ADC** has a Warranty Parts Department that handles **ALL** returned warranted merchandise. To expedite processing, the following procedures **must be** followed:

1. No parts are to be returned to **ADC** without prior written authorization (“Return Material Authorization”) from the factory.

**NOTE:** An R.M.A. (“Return Material Authorization”) is valid for only sixty (60) days from date of issue.

- a. The R.M.A. issued by the factory, as well as any other correspondence pertaining to the returned part(s), **must be** included inside the package with the failed merchandise.

2. Each part **must be** tagged with the following information:
  - a. **Model number** and **serial number** of the dryer from which part was removed.
  - b. Nature of failure (be specific).
  - c. Date of dryer installation.
  - d. Date of part failure.
  - e. Specify whether the part(s) being returned is for a replacement, a credit, or a refund.

**NOTE:** If a part is marked for a credit or a refund, the invoice number covering the purchase of the replacement part **must be** provided.

**NOTE:** Warranty tags (ADC Part No. 450064) are available at “no charge” from ADC upon request.

3. The company returning the part(s) **must clearly note** the complete company name and address on the outside of the package.
4. **ALL** returns **must be** properly packaged to insure that they are not damaged in transit. *Damage claims are the responsibility of the shipper.*

**IMPORTANT:** No replacements, credits, or refunds **will be** issued for merchandise damaged in transit.

5. **ALL** returns **should be** shipped to the ADC factory in such a manner that they are insured and a proof of delivery can be obtained by the sender.
6. **Shipping charges are not the responsibility of ADC. ALL returns should be “prepaid” to the factory. Any “C.O.D.” or “COLLECT” returns will not be accepted.**

**IMPORTANT:** No replacements, credits, or refunds **will be** issued if the claim **cannot** be processed due to insufficient information. The party filing the claim **will be** notified in writing, either by “FAX” or “CERTIFIED MAIL - Return Receipt Requested,” as to the information necessary to process claim. If a reply **is not** received by the ADC Warranty Department within thirty (30) days from the FAX/letter date, then no replacement, credit, or refund **will be** issued, and the merchandise **will be discarded**.

# SECTION VII

## 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 duct work 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, an ADC 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.

### SUGGESTED CLEANING SCHEDULE

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

Clean lint from lint drawer/screen.

Inspect lint screen and replace if torn.

#### *WEEKLY*

Clean lint accumulation from around microprocessor temperature sensor probes and sensor bracket assemblies.

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

#### *90 DAYS*

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

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

**WARNING: *DO NOT* OBSTRUCT THE FLOW OF COMBUSTION AIR and VENTILATION AIR.**

**WARNING: INSPECT and REMOVE ANY LINT ACCUMULATION WHICH CAN CAUSE THE BACK DRAFT DAMPER TO BIND or STICK.**

**NOTE:** A back draft damper that is sticking partially closed can result in slow drying and shut down of the heat circuit safety switches and/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 set screws), non-permanent gas connections (unions, shut-off valves, orifices, and grounding connections) and examine wheels. Motor and drive belts **should be** examined. Cracked or seriously frayed belt(s) **should be** replaced. Tighten loose belts when necessary. Complete operational check of controls and valves. Complete operational check of **ALL** safety devices (door switches, lint drawer switch, sail switch, burner and hi-limit thermostats).



## **THE DATA LABEL**

### **1. MODEL DRYER**

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

### **2. SERIAL NUMBER**

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

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

The manufacturing code number is a number issued by **ADC** which describes **ALL** possible options on your particular model.

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

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

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

This describes the heat input in British Thermal Units per Hour (BTUH).

### **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)**

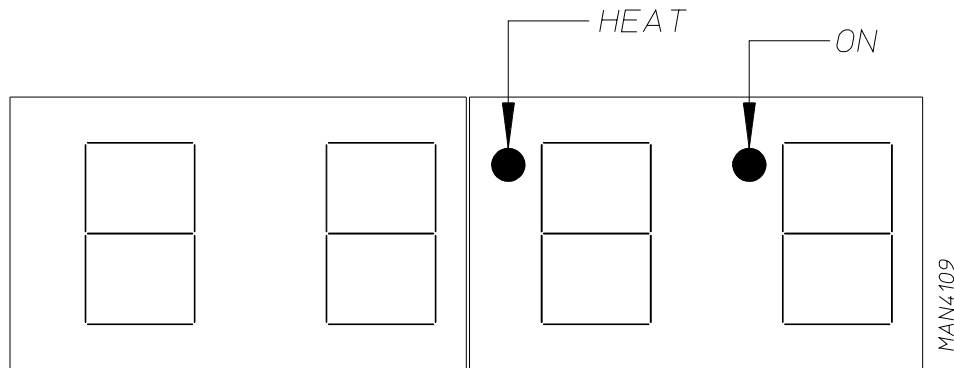
i.e., Canadian Gas Association.

# SECTION IX

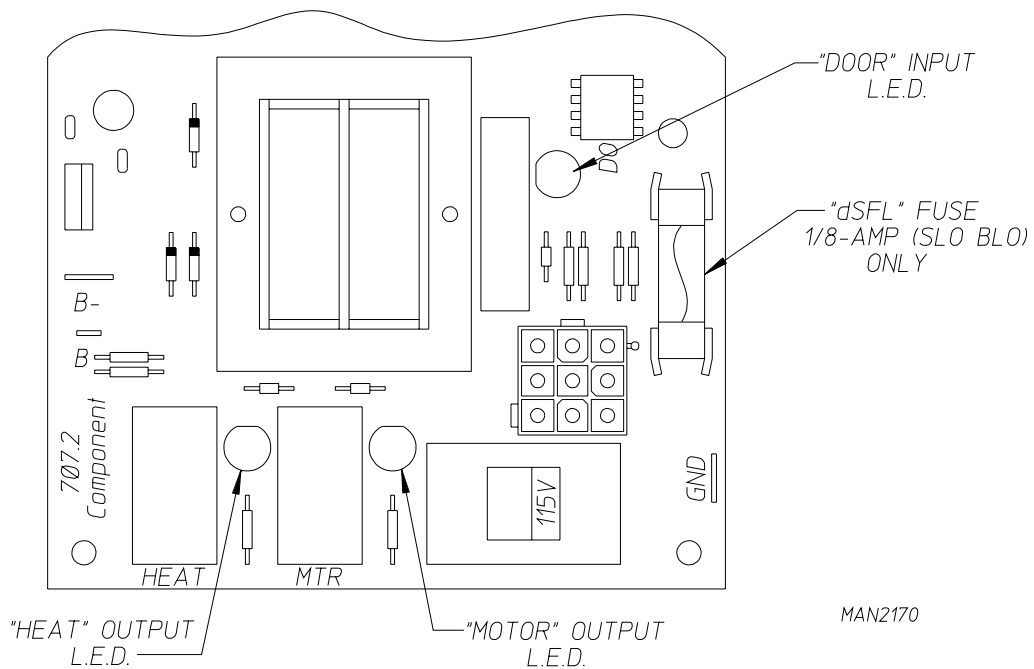
## PROCEDURE FOR FUNCTIONAL CHECK OF REPLACEMENT COMPONENTS

1. Microprocessor (computer) Board

- a. Upon completing installation of the replacement microprocessor (computer) board, reestablish power to the dryer.
- b. Start the drying cycle.
- c. Verify that the motor(s) and the heat indicator dots, in the microprocessor (computer) L.E.D. (light emitting diode) display are on. (Refer to the illustration below.)

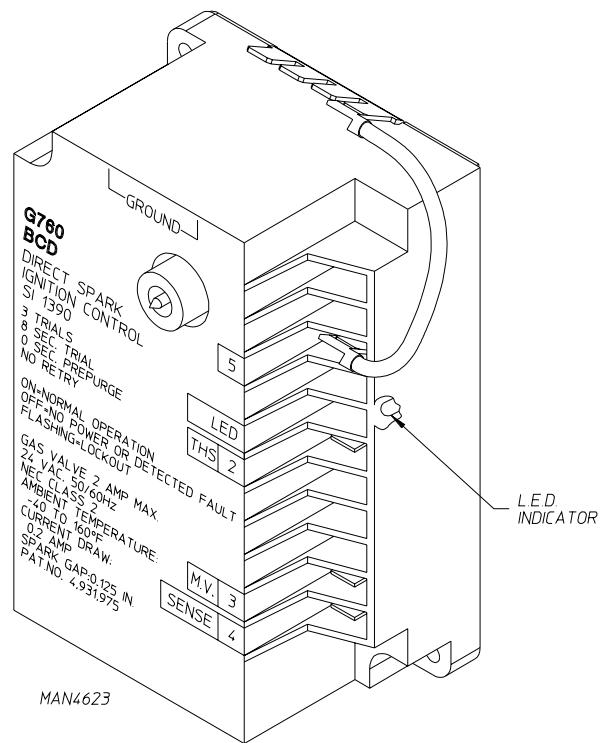


- d. Verify that the motor(s) heat and door indicator lights on the back side of the microprocessor (computer) board are lit. (Refer to the illustration below.)



2. Johnson Control G760 BCD-1

- a. Upon completing installation of the replacement Direct Spark Ignition (DSI) module, reestablish power to the dryer.
- b. Start the drying cycle.
- c. The module's indicator light will then turn "green." The gas valve will be energized and the ignitor probe will spark for approximately 8 seconds. The burner flame **should now be** established.
- d. With the burner flame on, remove the flame sensor wire from the sense terminal of the DSI module.
- e. The burner flame **must shut off** and the ignition module will wait 30 seconds and try again and repeat two (2) more times.



- f. Now the DSI module L.E.D. (light emitting diode) indicator will light a blinking "GREEN" light continuously...LOCKOUT mode. This indicates that the module tried to ignite the gas a total of three (3) times of an 8-second spark each time. After the third time this blinking "GREEN" L.E.D. (light emitting diode) comes on.
- g. Functional check of the Direct Spark Ignition (DSI) Module is complete.



# SECTION X

## BURNER AND LINT (TUMBLER) CHAMBER MANUAL RESET HI-LIMIT INSTRUCTIONS

**Fig. 10-11**

**Fig. 10-11**

This dryer was manufactured with a manual reset burner hi-limit and tumbler/lint chamber hi-limit thermostat. If either manual reset burner hi-limit thermostat is open prior to the start of the drying cycle, or during the cycle, the dryer will not recognize the open state of the burner hi-limit thermostat and will start or continue through the drying cycle with no heat. Manual reset hi-limit thermostat must be reset manually.

This hi-temperature condition may be caused due to a restricted exhaust, poor airflow or improper burner oven operation.

### IMPORTANT

If the burner hi-limit thermostat is open prior to the start of the drying cycle, or during the cycle, the dryer will not recognize the open state of the burner hi-limit thermostat and will start or continue through the drying cycle with no heat. Manual reset hi-limit thermostat must be reset manually.

**WARNING:** This hi-temperature condition may be caused due to a restricted exhaust, poor airflow or improper burner oven operation.

^ a` #rlk VNNQMP

ADC 113044

1- 02/02/00-25

2- 02/06/00-25

3\* 02/07/00-300

4\* 04/13/00-10

5- 06/08/00-300

6- 09/28/00-300

7\* 10/24/00-500

8\* 03/07/01-382

