CG165-75
(Gas and Steam)
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 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.

CONTINENTAL GIRBAU, INC.

For replacement parts, contact the distributor from which the dryer was purchased or
Continental Girbau, Inc.®
2500 State Road 44
Oshkosh WI 54904
Telephone: (920) 231-8222 / Fax: (920) 231-4666
www.cont-girbau.com

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CGI Part No. A113305

Retain This Manual In A Safe Place For Future Reference

Continental Girbau, Inc.® 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	POUR VOTRE SÉCURITÉ
Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.	Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de yout autre appareil.

We have tried to make this manual as complete as possible and hope you will find it useful. 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.

Important

For your convenience, log the following information:

DATE OF PURCHASE _____ **MODEL NO.** CG165-75

DISTRIBUTOR'S NAME _____

Serial Number(s) _____

_____

_____

Replacement parts can be obtained from your distributor or **Continental Girbau, Inc.®** 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 OR STEAM 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 étre 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 dryer door switches, lint drawer switch, or heat safety circuit 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.

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. **Continental Girbau, Inc.®** assumes no responsibility for freight claims or damages.

6. If you need assistance in handling the situation, please contact the **Continental Girbau, Inc.®** Traffic Manager at (920) 231-8222 Ext. 16.

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 **Continental Girbau, Inc.®** 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 also may be a fire hazard.

7. A program **should be** established for the inspection and cleaning of lint in the burner area, exhaust ductwork, and area around the back of 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 switches, lint drawer 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.**

13. For safety, proper operation, and optimum performance, the dryer **must not be** operated with a load less than sixty-six percent (66%) of its rated capacity.

14. **DO NOT** operate steam dryers with more than 125 PSI (8.6 bars) steam pressure. Excessive steam pressure can damage steam coil and/or harm personnel.

15. Replace leaking flexible hoses or other steam fixtures immediately. **DO NOT** operate the dryer with leaking flexible hoses. **PERSONAL INJURY MAY RESULT.**

WARNING: **YOU MUST DISCONNECT AND LOCKOUT THE ELECTRIC SUPPLY AND THE GAS SUPPLY OR THE STEAM 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/COMPONENT IDENTIFICATION

A. SPECIFICATIONS (GAS AND STEAM)

BASKET (TUMBLER) DIAMETER			51-1/2”	**130.8 cm**
BASKET (TUMBLER) DEPTH			42-1/2”	**107.95 cm**
BASKET MOTOR			1 HP	**0.746 kw**
BLOWER MOTOR			7-1/2 HP	**5.6 kw**
DOOR OPENING (DIAMETER)			31-3/8”	**79.7 cm**
BASKET (TUMBLER) VOLUME			51.2 cu. ft.	**1.45 cu. m.**
Gas* **	VOLTAGE AVAILABLE		208-575v 3ø 3, 4w 50/60 Hz	
	APPROX. NET WEIGHT		1,900 lbs.	**861.8 kg.**
	APPROX. SHIPPING WEIGHT		2,066 lbs.	**937.1 kg.**
	HEAT INPUT		550,000 btu/hr	**138,600 kcal/hr**
	AIRFLOW		3,700 cfm	**104.8 cmm**
	EXHAUST CONNECTION*		18” Round	**45.7 cm**
	INLET PIPE CONNECTION**		1-1/2” F.P.T.	
	COMPRESSED AIR VOLUME		2.5 cfh	**0.07 cmh**
	COMPRESSED AIR CONNECTION		1/8” F.P.T.	
Steam* **	VOLTAGE AVAILABLE		208-575v 3ø 3, 4w 50/60 Hz	
	APPROX. NET WEIGHT		2,149 lbs.	**974.8 kg.**
	APPROX. SHIPPING WEIGHT		2,316 lbs.	**1,050.5 kg.**
	AIRFLOW		4,400 cfm	**124.6 cmm**
	EXHAUST CONNECTION*		20” Round	**50.8 cm**
	COMPRESSED AIR VOLUME		6 cfh	**0.17 cmh**
	COMPRESSED AIR CONNECTION		1/8” F.P.T.	
	STEAM CONSUMPTION	BOILER HP NORMAL LOAD		
	725 Ibs/hr	**329.1 kg/hr** 19		
	OPERATING STEAM PRESSURE		SUPPLY CONSUMPTION**	RETURN CONNECTION**
	125 PSI max	**8.6 bars**	1-1/2” F.P.T.	1-1/2” F.PT.

Shaded areas are stated in metric equivalents

* Ductwork size varies with installation conditions. Exhaust static pressure **must not exceed** 0.3 inches (0.74 mb) of water column (W.C.).

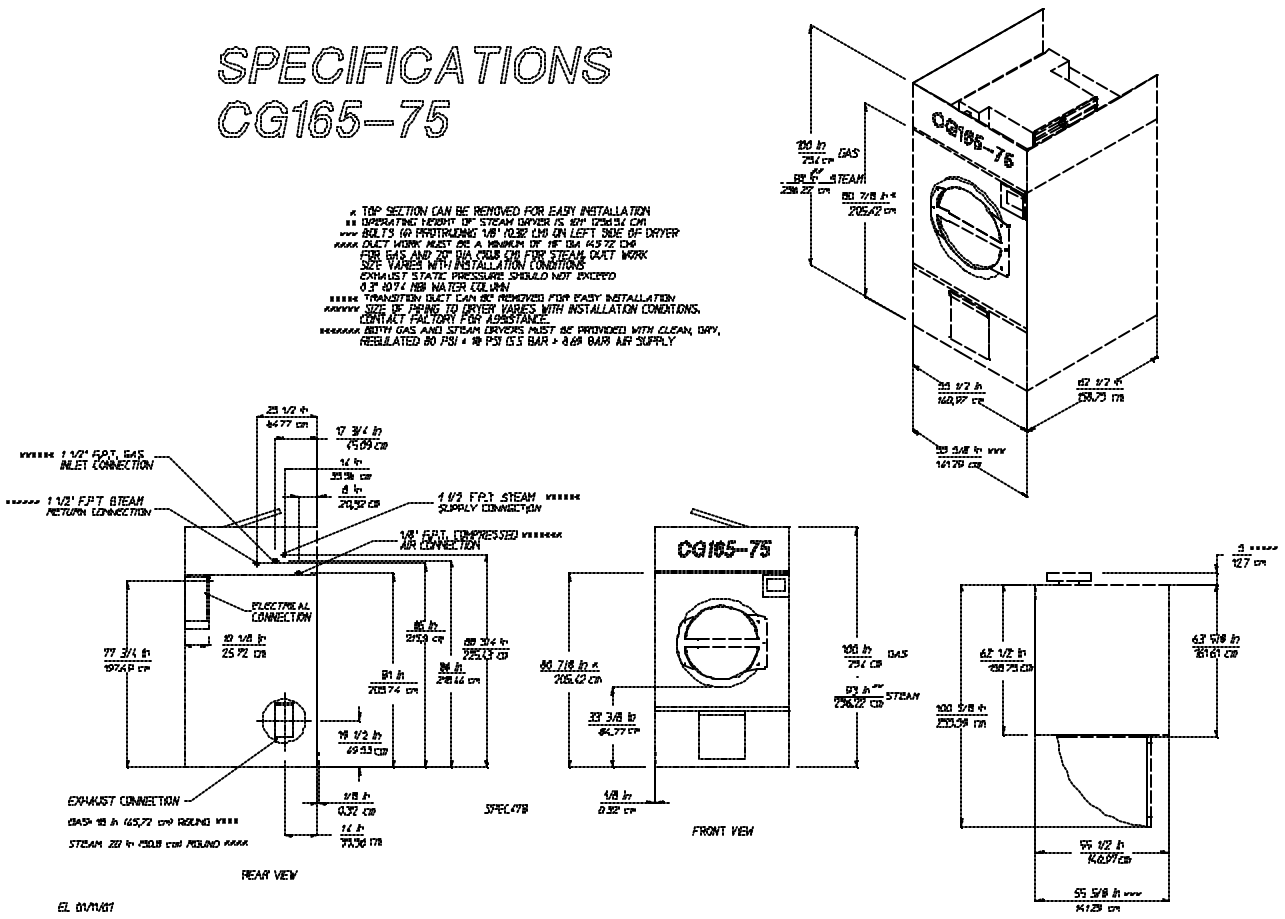
** Size of piping varies with installation conditions. Contact factory for assistance.

*** Both gas and steam dryers **must be** provided with a clean, dry, and regulated 80 PSI +/- 10 PSI (5.51 bars +/- 0.69 bars).

IMPORTANT: Gas dryers and steam dryers ***must be*** provided with a clean, dry, and regulated 80 PSI +/- 10 PSI (5.51 bars +/- 0.69 bars) air supply.

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

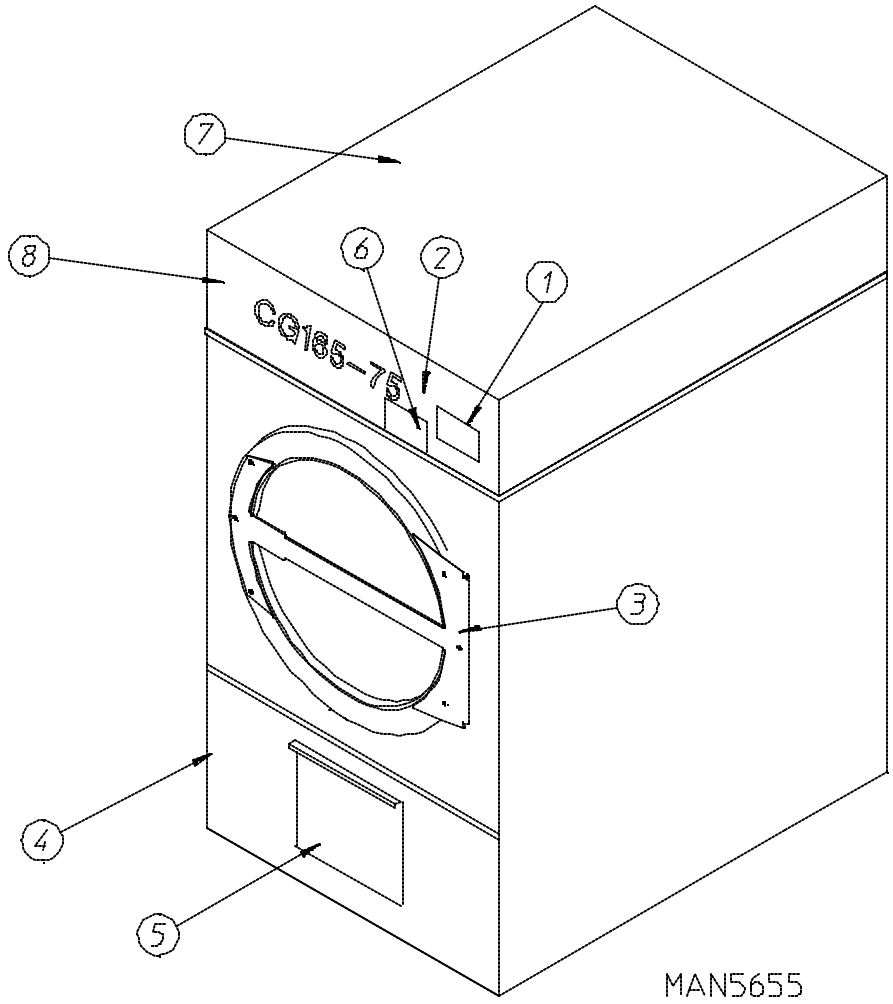
SPECIFICATIONS
CG165-75
(GAS AND STEAM)



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

B. COMPONENT IDENTIFICATION

1. Dryer Front View



FRONT VIEW

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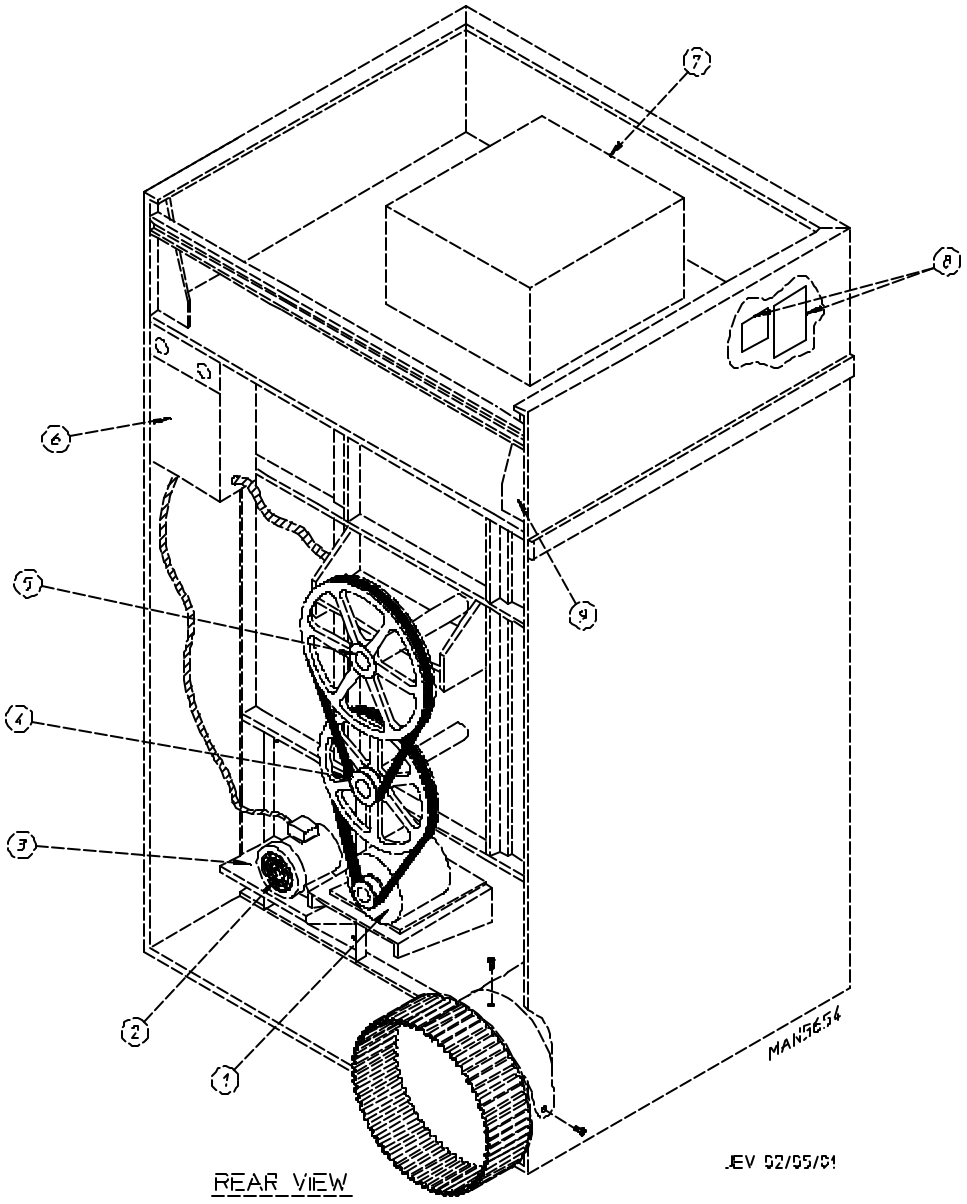
Illus. No.	Description
1	Microprocessor Control/Keyboard (touch pad) Panel Assembly (controls)
2	Control (top access) Door Assembly
3	Main Door Assembly
4	Lint Door Assembly
5	Lint Drawer
6	Wire Diagram (located behind control door)
7	Top Console (module) Assembly
8	Data Label and Installation Label (located on the left side panel area behind the top control [access] door)

2. Dryer Rear View



Illus. No.	Description
1	Basket (drive) Motor Assembly
2	Blower Motor Mount Assembly
3	Impellor (fan) 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
9	Top Console Assembly

* 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** in **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**).

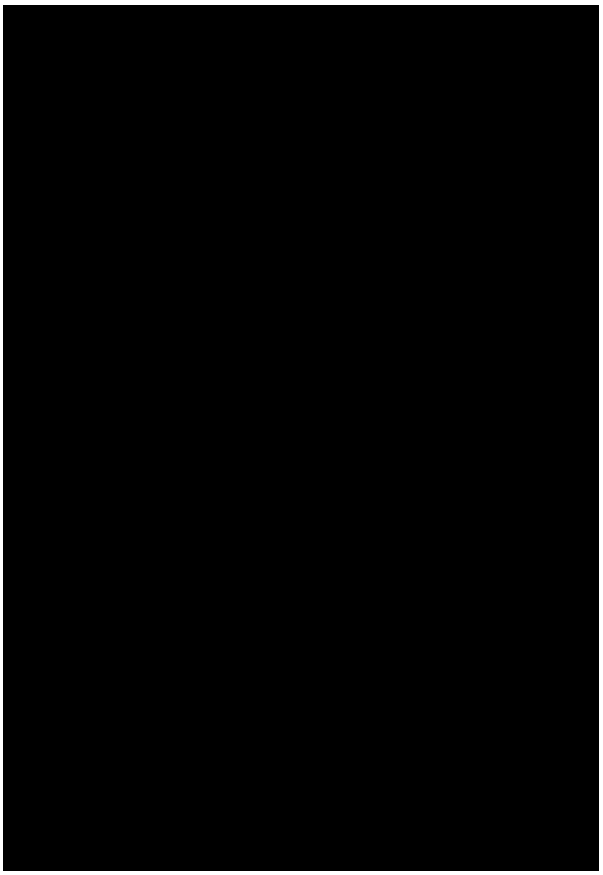
IMPORTANT: Dryer ***should be*** located where a minimum amount of exhaust duct **will be** necessary.

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 four (4) phillips head screws securing lint door in place.



1. Leveling Dryer

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

2. The V-belts are disconnected from the basket drive motor for shipping. Reconnect V-belts before starting the dryer.

   a. To Reconnect V-belts

      1) Remove hardware holding the back (belt) guard and remove guard from the dryer.

      2) Lay one (1) belt into motor sheave (pulley) groove and wind belt into corresponding groove of idler pulley by rotating the idler pulley by hand. Rotate the idler pulley an extra turn or two (2) to insure that the belt is tracking properly in the motor sheave (pulley) and idler pulley grooves without twisting.

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

   a. To Remove Top Console (Module)

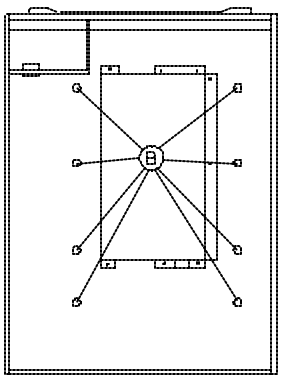
      1) Disconnect the ground wire (A) at the rear upper left hand corner of dryer.

      2) Remove the eight (8) sets of nuts and washers (B) holding the console (module) to base.

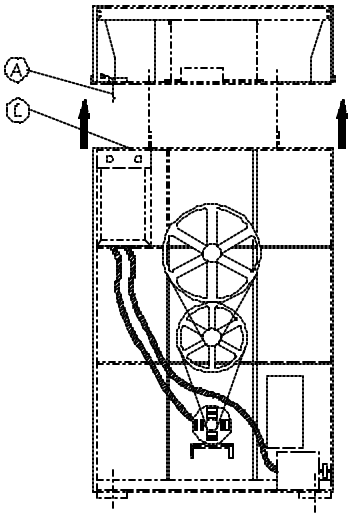
      3) Disconnect white plug connector (C) located on top of the rear electric service/ relay box (provides power to the heat circuit).

      4) Disconnect air connection from the 3-way micro valve.

      5) Lift the console (module) off of the dryer base.



TOP CUT-AWAY VIEW



REAR VIEW

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

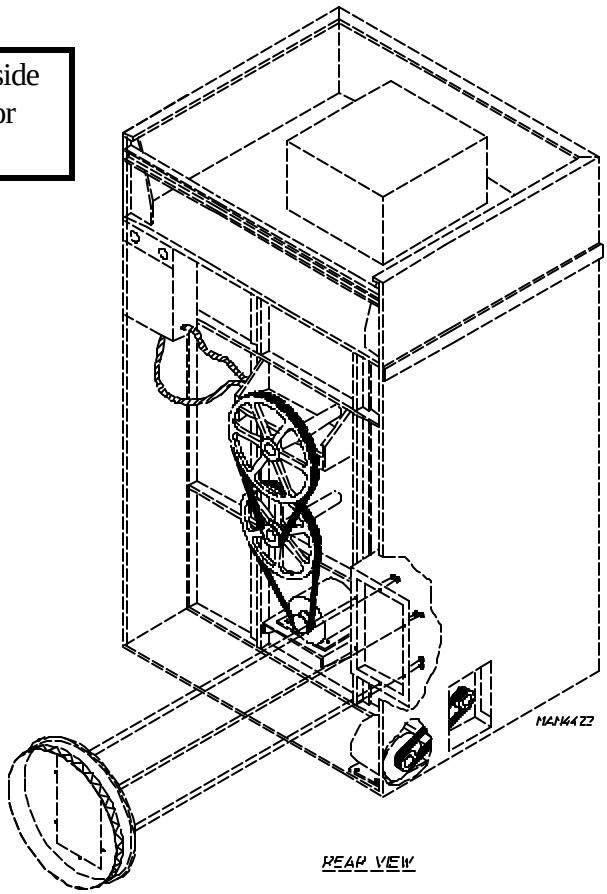
4. Exhaust Ductwork

NOTE: A transition piece for the exhaust is shipped inside the basket (tumbler). This transition piece is for locations with round exhaust ductwork.

   a. To install the transition piece, align the four (4) clinch studs into the four (4) clearance holes on the dryer.

   b. Using the four (4) free spin wash nuts (included with the transition piece), tighten the wash nuts on to the clinch studs which will secure the transition piece to the dryer.

   c. The round duct can now be connected to the dryer.



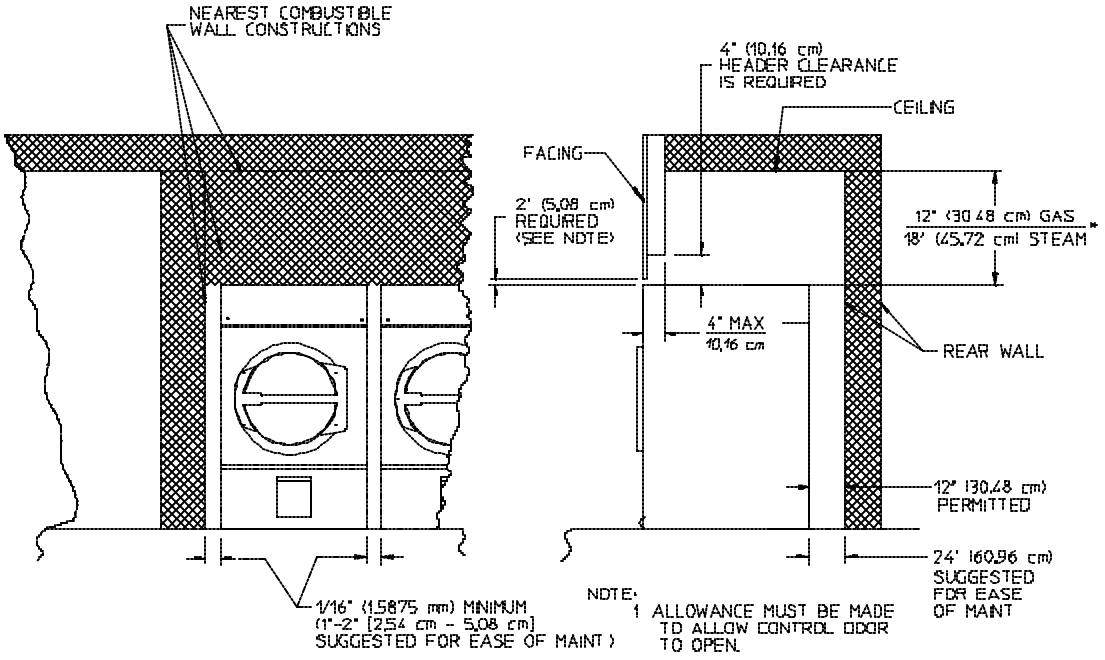
REAR VIEW

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 (0.61 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. A 2-inch (5.08 cm) clearance is required between the bulkhead facing and the top of the dryer.

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 dryer's top console (module) for gas models and 18-inches (45.72 cm) for steam models.

Even though a minimum of 12-inches (30.48 cm) above the dryer's top console (module) is acceptable for gas models and 18-inches (45.72 cm) above the dryer's top console (module) is acceptable for steam models, a clearance of 18-inches (45.72 cm) or more (for gas models) and 24-inches (60.96 cm) or more (for steam models) is suggested for ease of installation and service.



*12" (30.48 cm) OR MORE (18" (45.72 CM) OR MORE FOR STEAM) CLEARANCE IS SUGGESTED, ESPECIALLY IN CASES WHERE SPRINKLER HEADS ARE OVER THE DRYERS.

INSTALLATION: DRYER CLEARANCE TO ADJACENT WALL STRUCTURES.

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NOTE: When fire sprinkler systems are located above the dryers, a minimum of 18-inches (45.72 cm) above the dryer's top console (module) is required. Dryers may be positioned sidewall to sidewall; however, 1 or 2-inches (2.54 cm 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 door and lint door.

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.

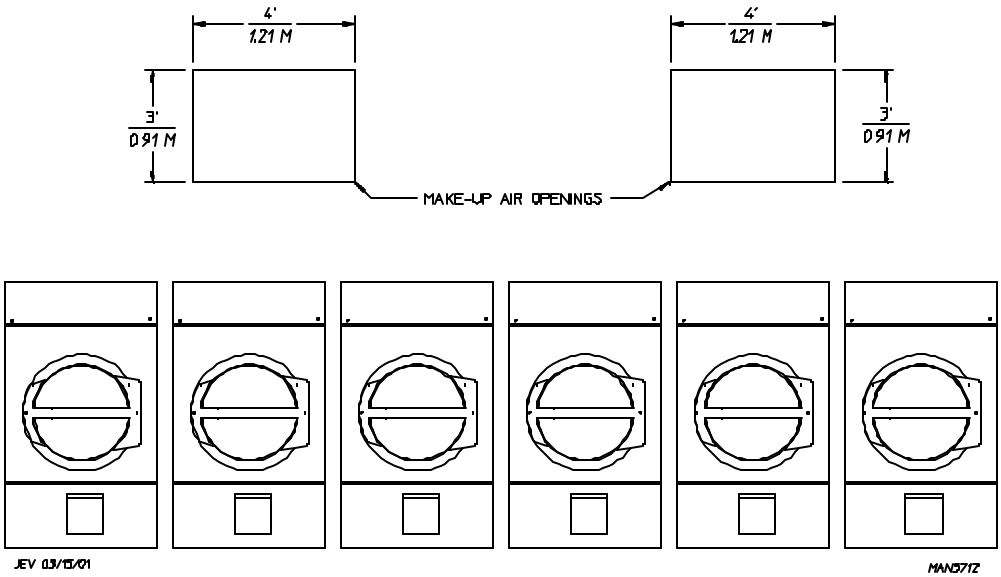
Air supply (make-up air) **must be** given careful consideration to assure proper performance of each dryer. An unrestricted source of air is necessary for each dryer. An airflow of 3,700 cfm (cubic feet per minute) - 104.8 cmm (cubic meters per minute) - **must be** supplied to each gas dryer and 4,400 cfm (124.6 cmm) for each steam dryer. As a general rule, an unrestricted air entrance from the outdoors (atmosphere) of a minimum of 4 square feet (0.37 square meters) is required for each gas dryer and a minimum of 4.75 square feet (0.44 square meters) for each steam dryer or 126 kw electrically heated 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.

EXAMPLE: For a bank of six (6) gas dryers, two (2) openings measuring 3 feet by 4 feet (0.91 meters by 1.21 meters), 24 square feet (2.22 square meters) is acceptable.

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



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-limit thermostats.

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 (6.1 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 (6.1 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 90º turns in ducting be avoided; use 30º and/or 45º 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.

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.

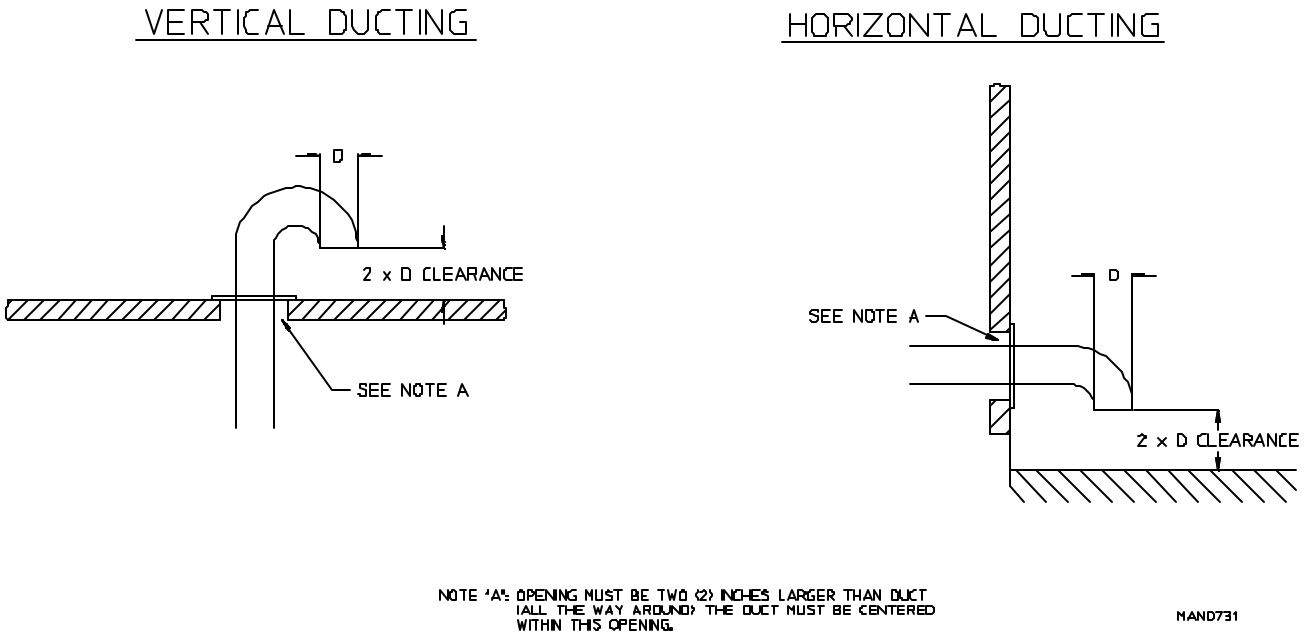
IMPORTANT: Exhaust back pressure measured by a manometer at the dryer exhaust duct area ***must not exceed*** 0.3 inches (0.74 mb) of water column (W.C.).

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.



2. Single Dryer Venting

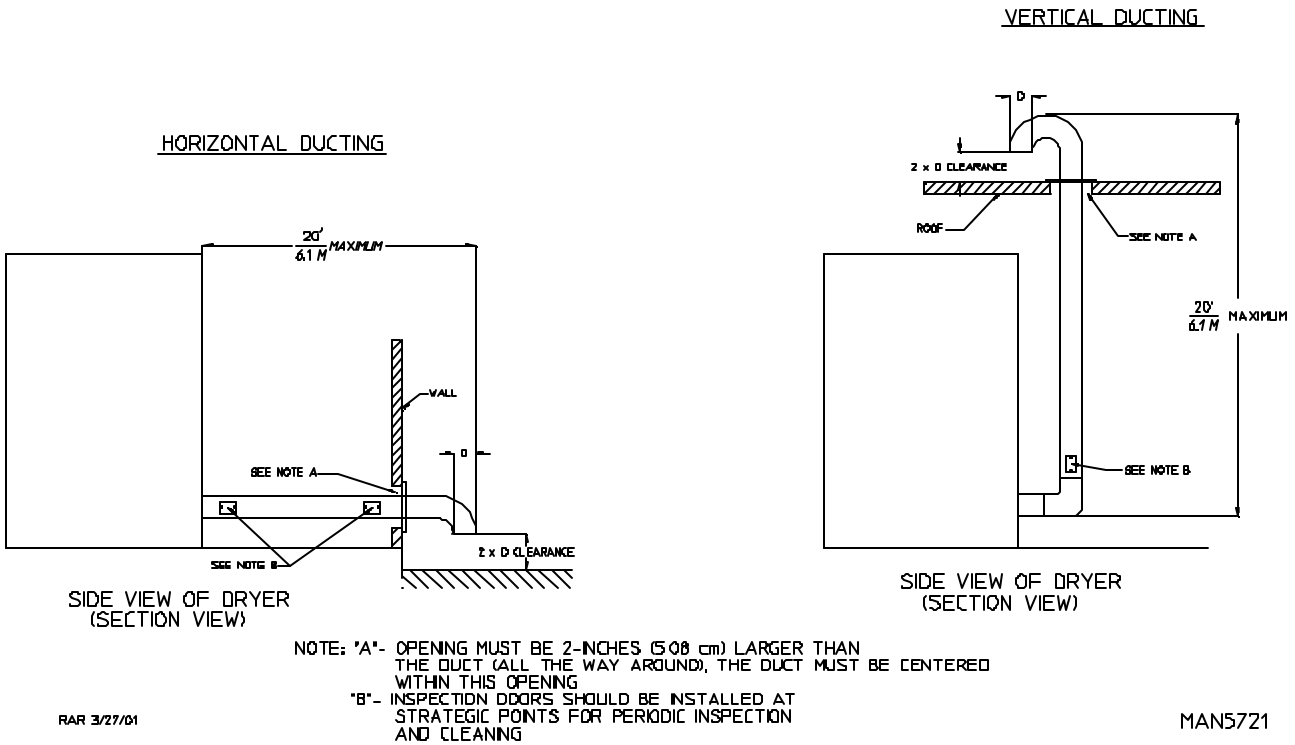
Where possible, it is suggested to provide a separate exhaust duct for each dryer. The exhaust duct **should be** laid out in such a way that the ductwork travels as directly as possible to the outdoors with as few turns as possible. It is suggested that the use of 90° turns in ducting be avoided; use 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 is 18-inches (45.72 cm) for a round duct or 16-inches x 16-inches (40.64 cm x 40.64 cm) for a square duct. **THE DUCT SIZE *MUST NOT BE* REDUCED ANYWHERE DOWNSTREAM OF THE DRYER.**

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

It is suggested that the ductwork from each dryer not exceed 20 feet (6.1 meters) with no more than two (2) elbows (excluding dryer connections and outside exhaust outlets). If the ductwork exceeds 20 feet (6.1 meters) or has numerous elbows, the cross-sectional area of ductwork **must be** increased in proportion to the length and number of elbows in it. In calculating duct size, the cross-sectional area of a square or rectangular duct **must be** increased by twenty percent (20%) for each additional 20 feet (6.1 meters). The diameter of a round exhaust duct **should be** increased ten percent (10%) for each additional 15 feet (4.57 meters). Each 90° elbow is equivalent to an additional 40 feet (12.19 meters), and each 45° elbow is equivalent to an additional 20 feet (6.1 meters).

SINGLE DRYER VENTING



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 (6.1 meters) more than the original limitations of 20 feet (6.1 meters) with two (2) elbows. When the ductwork approaches the maximum limits as noted in this manual, a professional heating, venting, 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 55-5/8" (141.29 cm) apart. The main duct **should be** tapered, with the diameter increasing before each individual 18-inch (45.72 cm) duct is added.

IMPORTANT: The CG165-75 **is not** provided with a back draft damper. When exhausted into a multiple (common) exhaust line, a back draft damper ***must be*** installed at each dryer duct.

IMPORTANT: No more than three (3) 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 **illustrations** on **page 20** show 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 [6.1 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 (6.1 meters). The diameter of a round exhaust **must be** increased ten percent (10%) for each additional 20 feet (6.1 meters). Each 90° elbow is equivalent to an additional 40 feet (12.19 meters), and each 45° elbow is equivalent to an additional 20 feet (6.1 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 (6.1 meters) more than the original limitations of 20 feet (6.1 meters) with two (2) elbows. When the ductwork approaches the maximum limits as noted in this manual, a professional heating, venting, and air conditioning (HVAC) firm ***should be*** consulted for proper venting information.

IMPORTANT: Exhaust back pressure measured by a manometer at the dryer exhaust duct area ***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.

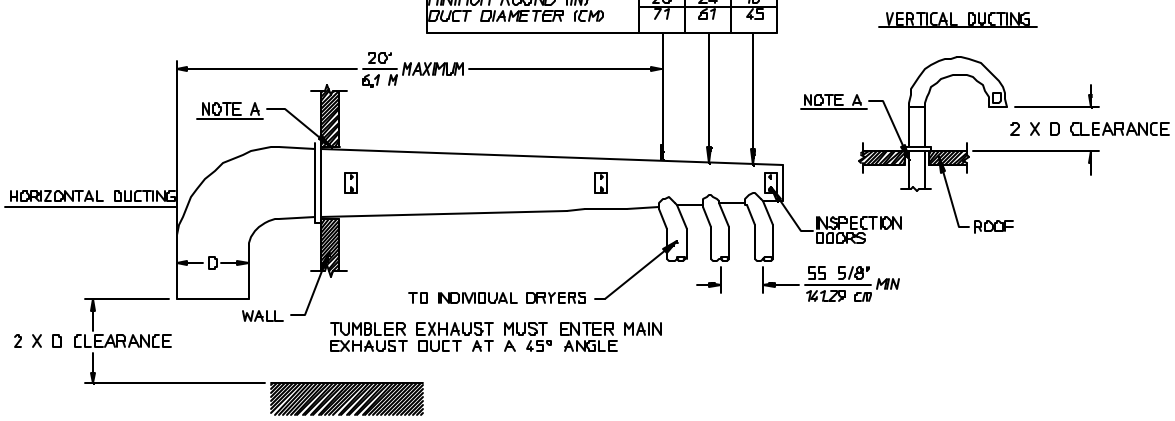
a. Outside Ductwork Protection

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.

MULTIPLE DRYER VENTING (GAS MODELS)
WITH 18" (45.72 cm) DIAMETER (3700 CFM [104.8 cmm]) EXHAUST CONNECTIONS AT COMMON DUCT

NO. OF DRYERS	3	2	1
MINIMUM CROSS (SQ IN) SECTION AREA (SQ CM)	615 / 3968	455 / 2935	255 / 1645
MINIMUM ROUND (IN) DUCT DIAMETER (CM)	28 / 71	24 / 61	18 / 45



IMPORTANT: NO MORE THAN 3 DRYERS CAN BE CONNECTED TO ONE COMMON DUCT (VENT).

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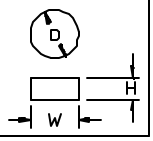
FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA

CROSS SECTIONAL AREA OF A ROUND DUCT = 0.785 (19.939 mm) x D^2 WHERE D = DIAMETER OF THE DUCT

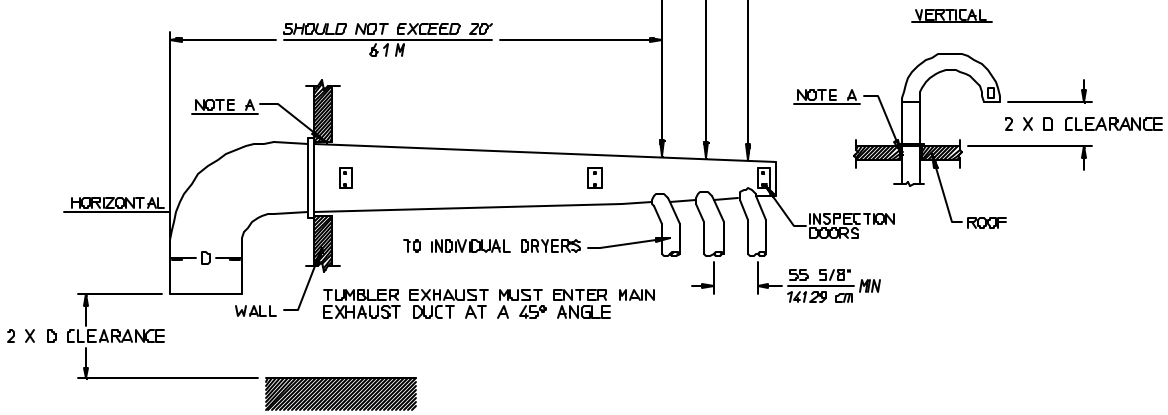
CROSS SECTIONAL AREA OF A RECTANGULAR DUCT = W x H WHERE W = WIDTH AND H = HEIGHT.



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.

MULTIPLE DRYER VENTING (STEAM MODELS)
WITH 20" (50.8 cm) DIAMETER (4400 CFM [124.6 cmm]) EXHAUST CONNECTIONS AT COMMON DUCT

NO. OF DRYERS	3	2	1
MINIMUM CROSS (SQ IN) SECTION AREA (SQ CM)	707 / 4561	531 / 3426	315 / 2032
MINIMUM ROUND (IN) DUCT DIAMETER (CM)	30 / 76	26 / 66	20 / 50



IMPORTANT: NO MORE THAN 3 DRYERS CAN BE CONNECTED TO ONE COMMON DUCT (VENT)

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, materials, and workmanship **must conform** to the applicable requirements of the National Electrical Code ANSI/NFPA NO. 70-LATEST EDITION or in Canada, the Canadian Electrical Codes Parts 1 and 2 CSA C22.1-1990 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.

2. Electrical Service Specifications

CG165-75 (Gas/Steam)

ELECTRICAL SERVICE SPECIFICATIONS (PER DRYER)

IMPORTANT: 208 VAC and 230/240 VAC **ARE NOT THE SAME. When ordering, *specify exact voltage.***

NOTES:
A. Circuit breakers are thermal/magnetic (industrial) motor curve type **ONLY.** For others, calculate/verify correct breaker size according to appliance amp draw rating and type of breaker to be used.
B. Circuit breakers for 3-phase (3ø) dryers **must be** 3-pole type.

SERVICE VOLTAGE	PHASE	WIRE SERVICE	APPROX. AMP DRAW		CIRCUIT BREAKER
			60 Hz	50 Hz	
208	3ø	3/4	29.6	--	50
240	3ø	3	27.4	--	50
380-400	3ø	3/4	--	14.4	20
416	3ø	3/4	--	14.4	20
460/480	3ø	3/4	14.8	--	20
575	3ø	3/4	11.4	--	20

IMPORTANT: The dryer ***must be*** connected to the electric supply shown on the data label that is affixed to the left side panel area behind the top control (access) 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**.

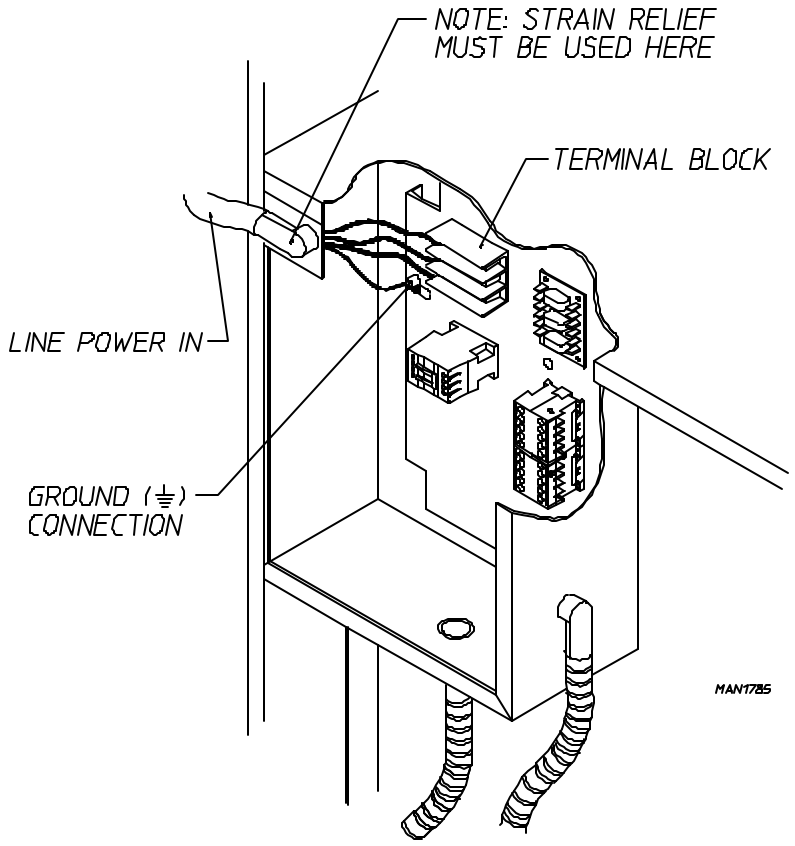
WARNING: **208 VAC and 230/240 VAC ARE NOT THE SAME.** Any damage done to dryer components due to improper voltage connections will automatically VOID THE WARRANTY.

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 (3ø) power leads (L1, L2, and L3), GROUND, and in the case of 4 wire service, the NEUTRAL. 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 **must be** removed.



The "LINE POWER" and the "GROUND" connections to the dryer **must be** made through the knock out hole at the top of the electric service/relay box. A strain relief **must be** used where the line power/ground wires go into the electric service/relay box.

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.

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, upper left hand corner of the dryer.

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 dryer from supply as noted can cause irreparable damage to the gas valve, which will VOID 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 data label affixed to the left side panel area behind the top control (access) door. If this information does not agree with the type of gas available, ***DO NOT operate the dryer*.** Contact the distributor who sold the dryer or contact **Continental Girbau, Inc.**®

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

The input ratings shown on the dryer's data label are for elevations up to 2,000 feet (610 meters), unless elevation requirements of over 2,000 feet (610 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 (610 meters) are made by changing each burner orifice. If this conversion is necessary, contact the distributor who sold the dryer or contact **Continental Girbau, Inc.**®

2. Technical Gas Data

a. Gas Specifications

	TYPE OF GAS			
	Natural		Liquid Propane	
Manifold Pressure*	3.5 inches W.C.	**8.7 mb**	10.5 inches W.C.	**26.1 mb**
Inline Pressure	6.0 - 12.0 inches W.C.	**14.92 - 29.9 mb**	10.5 inches W.C.	**26.1 mb**

Shaded areas are stated in metric equivalents

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

b. Gas Connections

Inlet connection ---------- 1-1/2" N.P.T.
Inlet supply size ---------- 1-1/2" N.P.T. (minimum)
BTU/hr input (per dryer) ---- 550,000 (138,600 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.

MODEL NUMBER	BTU Per Hour Rating	**Kcal/Hr Rating**	TYPE OF GAS						L.P. Conversion Kit Part Number
			Natural			Liquid Propane			
			Qty.	D.M.S.*	Part Number	Qty.	D.M.S.*	Part Number	
CG165-75	550,000	**138,600**	4	#2	140839	4	#29	140820	882993

Shaded area is stated in metric equivalent

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

Natural Gas ----------#2 = 0.2210" (5.6134 mm).
Liquid Propane Gas ----------#29 = 0.1360" (3.048 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 1-1/2" N.P.T. inlet pipe connection extending out the back area of the burner box. The minimum pipe size (supply line) to the dryer is 1-1/2" N.P.T. For ease in 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 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 1-1/2" (3.81 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 (W.C.) pressure.

IMPORTANT: A water column test 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.

An 1/8-inch 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.

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

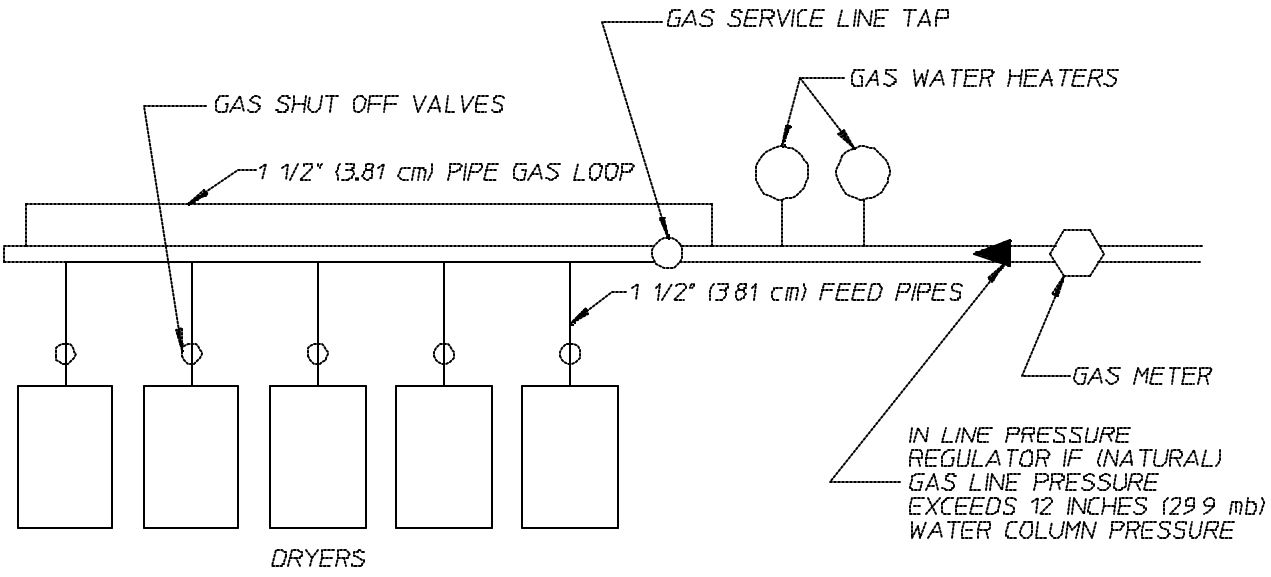
WARNING: NEVER TEST FOR LEAKS WITH A FLAME!!!

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.

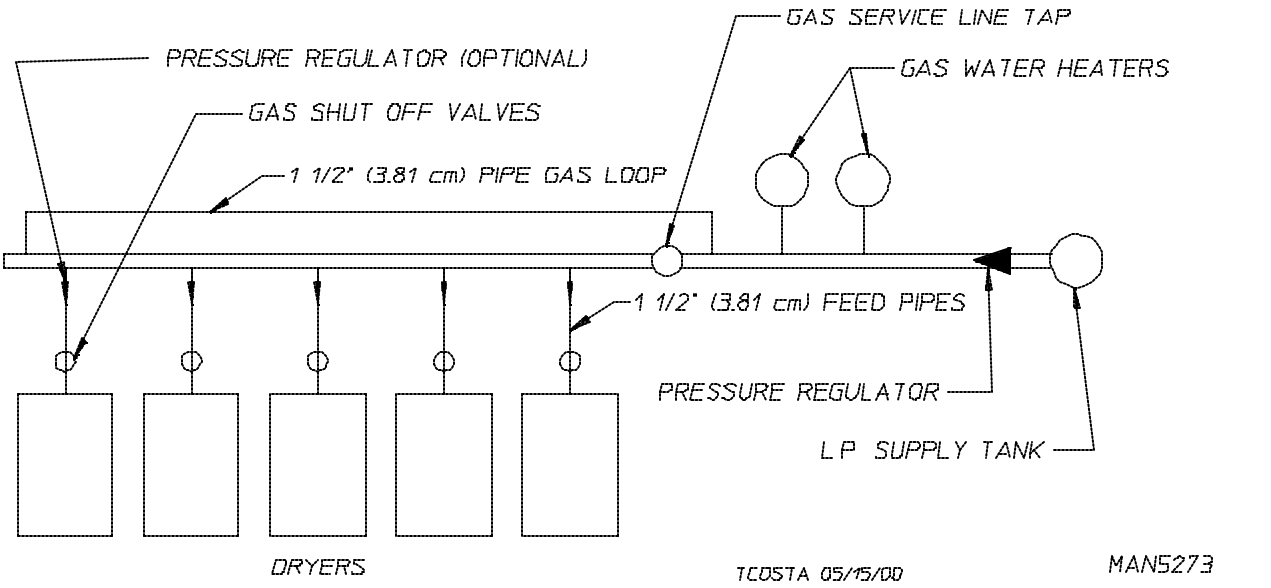
IMPORTANT: The dryer and its individual shutoff valve ***must be*** disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

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 LP GAS INSTALLATION



H. STEAM INFORMATION

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

IMPORTANT: Failure to comply with the requirements stipulated in this manual can result in component failure, which will VOID THE WARRANTY.

NOTE: This dryer is manufactured with a pneumatic (piston) damper system, which requires an external supply of clean, dry, and regulated air (80 PSI +/- 10 PSI [5.51 bars +/- 0.69 bars]). Refer to **Steam Damper Air System Connections**, **in Section H**, **item 4**.

1. Steam Coil PH Level

   The normal PH level for copper type steam coils **must be** maintained between a value of 8.5 to 9.5. For steel type steam coils the PH level **must be** maintained between a value of 9.5 to 10.5. These limits are set to limit the acid attack of the steam coils.

IMPORTANT: Coil failure due to improper PH level will VOID THE WARRANTY.

2. Steam Requirements - High Pressure

   Inlet ---------1-1/2" supply line connection -- qty. one (1) at top manifold.
   Return ------1-1/2" return line connection --- qty. one (1) at bottom manifold.

OPERATING STEAM PRESSURE		
MAXIMUM	125 psig	**862 kPa**
MINIMUM	100 psig*	**689 kPa**
HEAT INPUT (NORMAL LOAD)	19 Bhp	
CONSUMPTION (APPROXIMATE)	725 lbs/hr	**329 kg/hr**

Shaded areas are stated in metric equivalents

* Minimum operating pressure for optimum drying results.

3. Installation Instructions

   To insure that an adequate supply of steam is provided, be sure that the steam supply and steam return lines are sized and laid out as stipulated in this manual. Inadequate steam supply and steam return lines or improper steam plumbing will result in poor performance and can cause component failure. Clean, dry, and regulated steam **must be** provided to the dryer.

IMPORTANT: Steam coil failure due to water hammer by wet steam will VOID THE WARRANTY.

a. The pressure of the condensate in the steam supply will cause water hammer and subsequent heat exchanger (steam coil) failure. The steam supply connection into the main supply line **must be** made within a minimum 12-inch (30.48 cm) riser. This will prevent any condensate from draining towards the dryer.

b. The steam supply piping to the dryer must include a 12-inch (30.48 cm) rise along with a drip trap and check valve. This will prevent any condensate from entering the steam coil.

c. Flexible hoses or couplings **must be** used. The dryer vibrates slightly when it runs and this will cause the steam coil connections to crack if they are hard piped to the supply and return mains.

d. Shutoff valves for each dryer **should be** installed in the supply, return, and drip trap return lines. This will allow the dryer to be isolated from the supply and return mains if the dryer needs maintenance work.

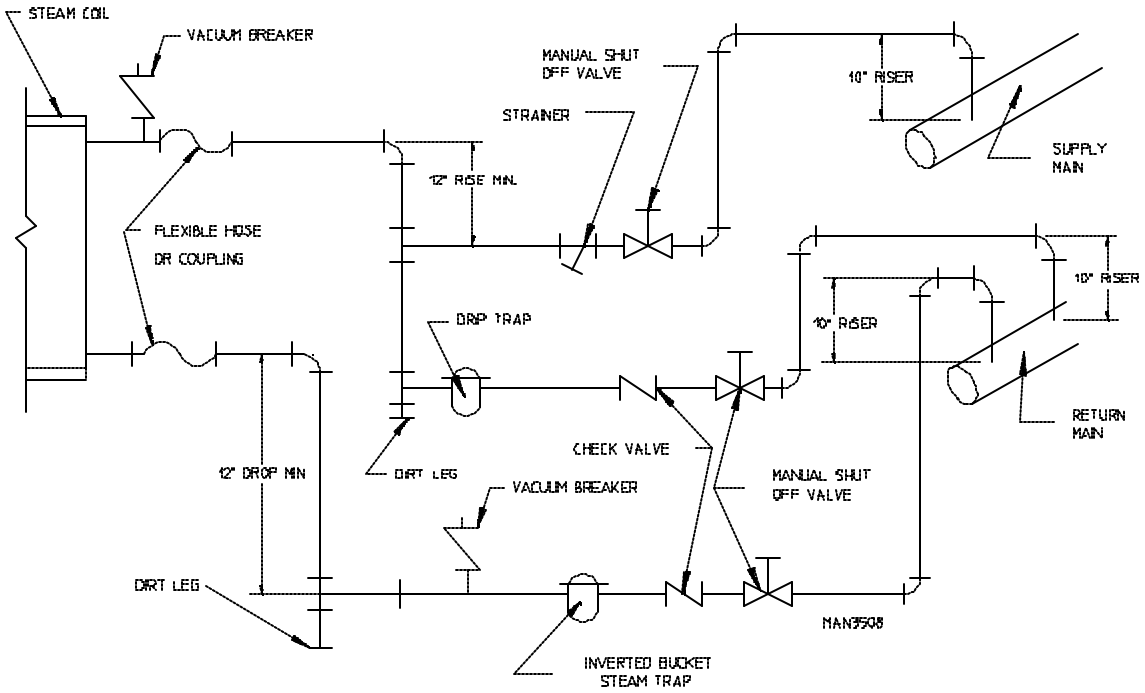
e. Install an inverted bucket steam trap and check valve for each unit at least 12-inches (30.48 cm) below steam coil as close to the coil as possible.

   1) An inverted bucket steam trap with a capacity of 2,000 lbs. (907.18 kg.) of condensate per hour @ 125 PSI (8.6 bars) is required for each dryer.

f. A 3/4-inch (19.05 mm) vacuum breaker **should be** installed. This will save energy and provide for safety of the operator and maintenance personnel.

g. The supply and return lines **should be** insulated. This will save energy and provide for safety of the operator and maintenance personnel.

h. Water pockets in the supply line, caused by low points, will provide wet steam to the coil possibly causing coil damage. **ALL** horizontal runs of steam supply piping **should be** pitched 1/4-inch (6.35 mm) for every 1 foot (0.30 meters) back towards the steam supply header causing any condensate in the line to drain to the header. Install a bypass trap in any low point to eliminate wet steam.



STEAM DAMPER SYSTEM

4. Steam Damper Air System Connections

This dryer is manufactured with a pneumatic (piston) damper system, which requires an external supply of compressed air. The air connection is made to the steam damper solenoid valve, which is located at the rear of the top console.

a. Air Requirements

COMPRESSED AIR SUPPLY	AIR PRESSURE	
Normal	80 PSI	**5.51 bars**
Minimum Supply	70 PSI	**4.82 bars**
Maximum Supply	90 PSI	**6.21 bars**

Shaded areas are stated in metric equivalents

b. Air Connection

Air connection to system --- 1/8-inch F.P.T.

c. No air regulation or filtration is provided with the dryer. External regulation/filtration of 80 PSI (5.51 bars) **must be** provided. It is suggested that a regulator/filter gauge arrangement be added to the compressed air line just before the dryer connection. This is necessary to insure that correct and clean air pressure is achieved.

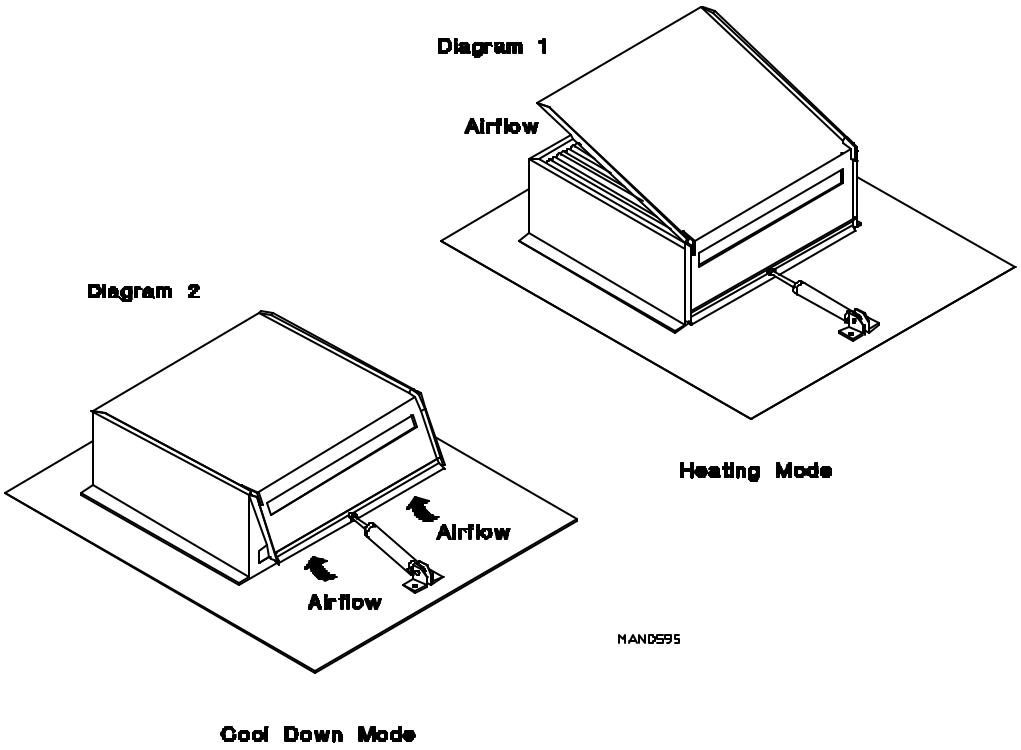
5. Steam Damper System Operation

The steam damper, as shown in the **top illustration** on **page 32**, allows the coil to stay constantly charged eliminating repeated expansion and contraction. When the damper is open, the air immediately passes through the already hot coil, providing instant heat to start the drying process. When the damper is closed, ambient air is drawn directly into the basket (tumbler), allowing a rapid cool down.

Diagram 1 - shows the damper in the heating (open) mode, allowing heat into the basket (tumbler).

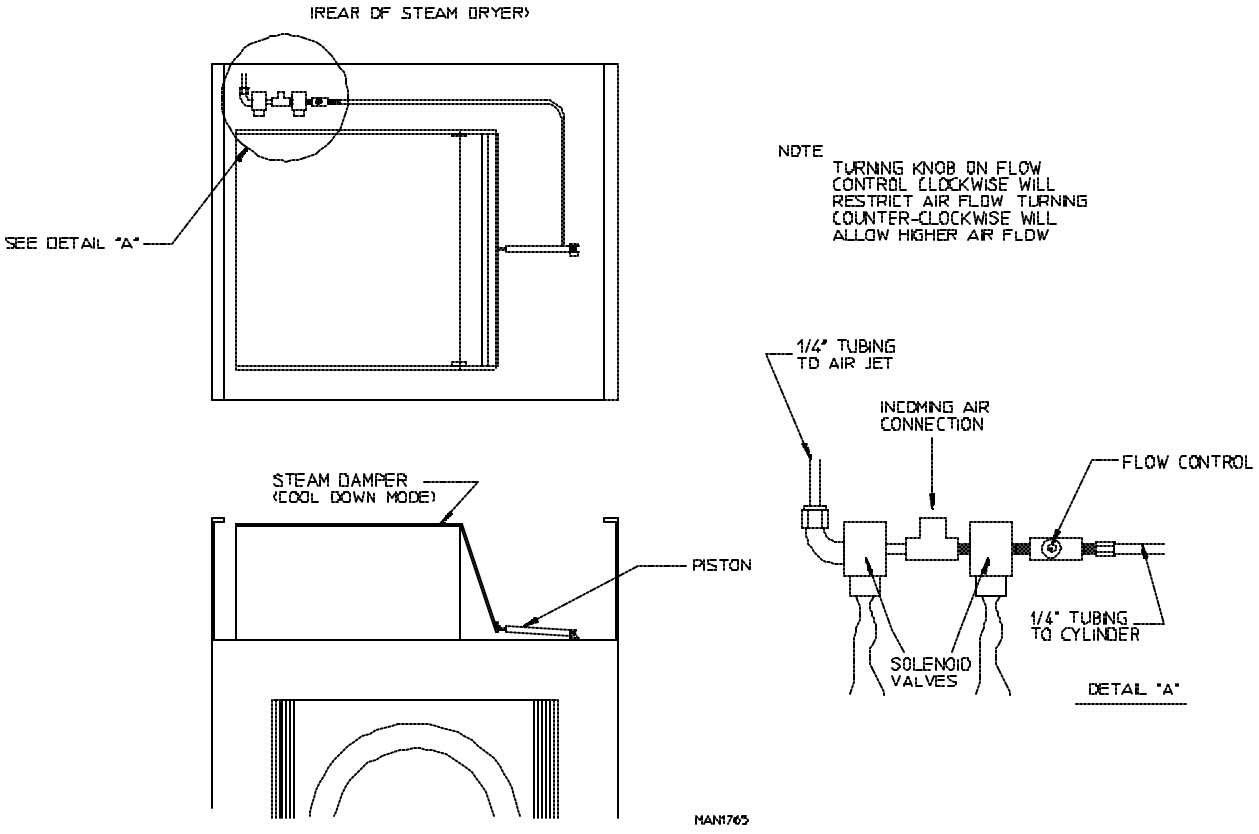
Diagram 2 - shows the damper in the cool down (closed) mode, pulling ambient air directly into the basket (tumbler) without passing through the coils.

NOTE: With the dryer off or with no air supply, the damper is in the cool down mode as shown in Diagram 2.



6. Steam Damper System Operation (Flow Control) Operation Adjustment

Although the damper operation was tested and adjusted prior to shipping at 80 PSI (5.51 bars), steam damper operation **must be** checked before the dryer is put into operation. Refer to the **illustration above** for correct steam damper operation. If damper air adjustment is necessary, locate flow control valve and make necessary adjustments as noted below.



I. PREPARATION FOR OPERATION/START-UP

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's data label affixed to the left side panel area behind the top control (access) door (refer to the **illustration** in **Section IX** of this manual). 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. Check to be sure drive belts between idler pulley and motor pulley have been reconnected.

NOTE: The drive belts were disconnected at factory prior to shipment.

6. **GAS MODELS** - Be sure that **ALL** gas shutoff valves are in the open position.

7. Be sure **ALL** back panels (guards) and electric box covers have been replaced.

8. Check **ALL** service doors to assure that they are closed and secured in place.

9. 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.

10. Rotate the basket (tumbler) by hand to be sure it moves freely.

11. Check bolts, nuts, screws, terminals, and fittings for security.

12. **GAS MODELS and STEAM MODELS** - check to insure air supply (80 PSI [5.51 bars]) is on to the dryer.

13. **STEAM MODELS** - check to insure **ALL** steam shutoff valves are open.

14. **STEAM MODELS** - check steam damper operation.

15. Check basket (tumbler) bearing setscrews to insure they are **ALL** tight.

J. 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. Turn on electric power to the dryer.

2. Make sure the main door is closed and the lint drawer is securely in place.

3. System controls operational test -- to start the dryer...

   a. Microprocessor Controller (Computer) Controls...

      1) Display will read "FILL."

      2) Press the "E" (preprogrammed) cycle key on the keyboard (touch pad).

      3) Light emitting diode (L.E.D.) display will quickly read "Ld30," "Lc04," and "F180" (unless special programs requested). These codes mean that the dryer is in the timed mode and will operate with heat of 180° F (Fahrenheit) 82° C (Celsius) for 30 minutes drying time and have a 4 minute cool down period.

      4) Dryer will now start and the L.E.D. display will read "Dr30" (dry mode for 30 minutes) and count down in minutes.

   b. Dual Timer Dryers

      1) To start the dryer:

         a) Microprocessor Controller (Computer) Dryers

            (1) The L.E.D. display will read "FILL."

            (2) Press the "E" on the keyboard (touch pad).

            (3) The L.E.D. display will quickly show "Ld30," "LC04," "F180." The dryer will start, and the L.E.D. display will show "dr30."

         b) Dual Timer Dryers

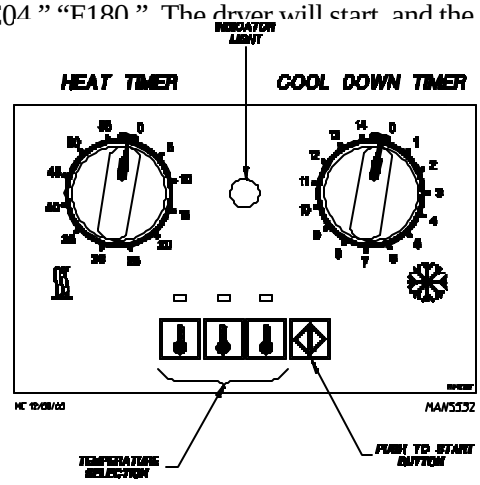
            (1) Turn drying timer knob for a time of 20 minutes.

            (2) Select "High Temp."

            (3) Push "Push To Start" button.

            (4) To stop dryer, open the main door.

      2) Spin and stop times are adjustable at the reversing timer.



4. Check to insure that the basket (tumbler) starts in the clockwise (CW) direction. Additionally, check the direction of the blower motor impellor/fan (squirrel cage) to insure that it is operating in the correct direction (blower motor pulley **should be** turning in the counterclockwise [CCW] direction). If it is, the phasing is correct. If the phasing is incorrect, reverse two (2) leads at L1, L2, or L3 of the power supply connection made to the dryer.

IMPORTANT: Dryer blower motor/pulley that drives the impellor/fan (squirrel cage) when viewed from the back of the dryer must turn in the counterclockwise (CCW) direction, otherwise the efficiency of the dryer **will be** drastically reduced and premature component failure can result.

5. 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 from the lines.

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

      2) The dryer is equipped with a Direct Spark Ignition (DSI) system, which has internal diagnostics. If ignition is not established at first attempt, the DSI module will attempt two (2) more times, if ignition is not established, the heat circuit in the DSI module will lockout until it is manually reset. To reset the DSI system, open and close the main door then restart the dryer.

      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.

   b. Steam Models

      1) Check to insure that the steam damper is functioning properly.

6. 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 dryer off and make necessary adjustments.

7. A reversing basket (tumbler) dryer **should never be** operated with less than a 60 lb. (27.22 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 opposite direction. For microprocessor controller (computer) models, with the automatic (mode) cycle only, the spin time and stop time are not adjustable. The spin and stop times have been preprogrammed into the microprocessor controller (computer) for 120-seconds spin time and a 5-second dwell (stop) time. (For timer controlled models, refer to the **Reversing Timer Spin/ Dwell Adjustments** in **Section VIII** of this manual.)

BASKET 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.

8. 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.

9. 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 Switch

K. 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 either at the external disconnect switch or the circuit breaker.

2. Disconnect heat 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.**

   b. **STEAM MODELS...discontinue steam supply to the dryer at the external (location furnished) shutoff valve.**

L. COMPRESSED AIR REQUIREMENTS

This dryer requires an external supply of compressed air of 2.5 cfh @ 80 PSI (0.07 cmh @ 5.51 bars). For steam models, compressed air is necessary for the air operated steam damper. On both the steam model as well as the gas model, compressed air is necessary (required for blower air jet operation) to clean lint from the impellor/fan (squirrel cage).

1. Air Requirements

COMPRESSED AIR SUPPLY	AIR PRESSURE	
Normal	80 PSI	**5.51 bars**
Minimum Supply	70 PSI	**4.82 bars**
Maximum Supply	90 PSI	**6.21 bars**

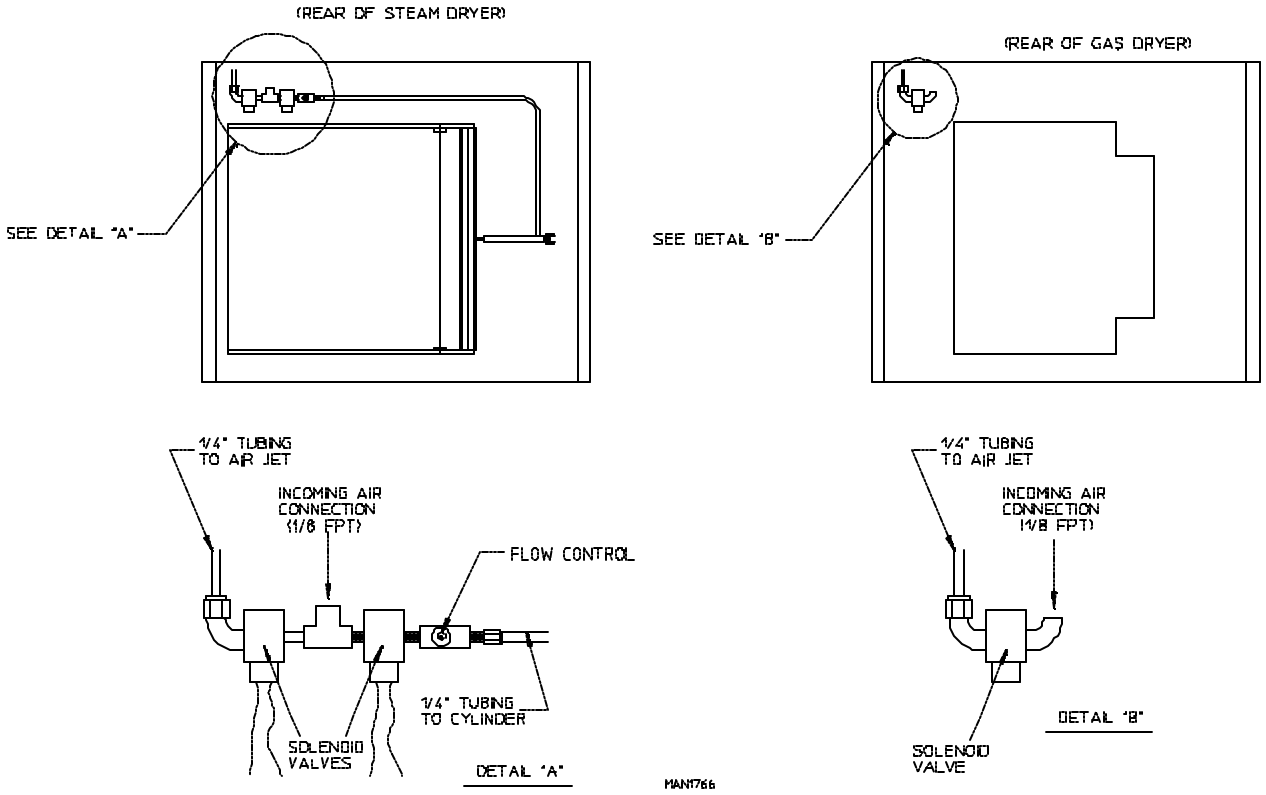
Shaded areas are stated in metric equivalents

2. Air Regulation

   a. No air regulation or filtration is provided with the dryer. External regulation/filtration of 80 PSI (5.51 bars) **must be** provided. It is suggested that a regulator/filter gauge arrangement be added to the compressed air line just before the dryer connection. This is necessary to insure that correct and clean air pressure is achieved.

3. Air Connection

   a. Air connection to this system is a 1/8-inch F.P.T. (Female Pipe Thread) as per the **illustration below**.



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 distributor from whom the **Continental Girbau, Inc.®** equipment was purchased. If the distributor **cannot** be contacted or is unknown, contact the **Continental Girbau, Inc.®** for a distributor in your area.

NOTE: When contacting the **Continental Girbau, Inc.®** 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 equipment was purchased. If the distributor **cannot** be contacted or is unknown, contact the **Continental Girbau, Inc.®** for a distributor near you please call (920) 231-8222.

NOTE: When ordering replacement parts from the distributor or **Continental Girbau, Inc.®** 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. WARRANTY

For a copy of the manufacturer's commercial warranty bond covering your particular dryer(s), contact the distributor from whom you purchased the equipment. If the distributor **cannot** be contacted or is unknown, warranty information can be obtained from **Continental Girbau, Inc.**® at (920) 231-8222.

NOTE: Whenever contacting **Continental Girbau, Inc.**® 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.

B. RETURNING WARRANTY PARTS

CGI's normal procedure is to have our distributors return **ALL** failed warranty items for evaluation and subsequent credit, replacement or warranty rejection depending on the case. **ALL** warranty claims are to be submitted on a Material Return Tag to the **CGI** warranty parts department. This claim must include the following items to be processed:

1. Dryer **serial number**.
2. Dryer **model number**.
3. Part number of item in question.
4. Dryer installation date.
5. Detailed report on failure of the item.
6. Date code of item if one (1) exits.
7. **CGI** acknowledgment or invoice number, on which the replacement part was purchased, **must be** provided.
8. The company returning the part(s) must clearly note the complete company name and address on the outside of the package.
9. **ALL** returns **must be** properly packaged to insure that they are not damaged in transit. *Damage claims are the responsibility of the shipper*.
10. **ALL** returns **should be** shipped to **Continental Girbau, Inc.**® in such a manner that they are insured and a proof of delivery can be obtained by the sender.

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, 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.

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.

STEAM DRYERS

Clean the steam coil fins. We suggest using compressed air and a vacuum cleaner with brush attachment.

WARNING: When cleaning steam coil fins, be careful not to bend the fins. If fins are bent, straighten by using a fin comb, which is available from local air conditioning supply houses.

90 DAYS

Re-grease the two (2) 1-3/8" bearings that support the impellor/fan shaft. Use Shell Alvania #2 grease or its equivalent. Impellor/fan shaft bearings **should be** lubricated.

Check to make sure that the setscrews on the impellor/fan shaft bearings are tight.

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.

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.

Check **ALL** V-belts for tightness and wear. Retighten, realign, or replace V-belt if required.

NOTE: V-belts ***should be*** replaced in matched sets (pairs).

B. ADJUSTMENTS

7 DAYS AFTER INSTALLATION AND EVERY 6 MONTHS THEREAFTER

Inspect bolts, nuts, screws, (bearing setscrews), and nonpermanent gas connections (unions, shutoff valves, orifices, and grounding connections). 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) 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.

90 DAYS

Re-grease the two (2) 1-3/8" bearings that support the impellor/fan shaft. Use Shell Alvania #2 grease or its equivalent. Impellor/fan shaft bearings **should be** lubricated.

Check to make sure that the setscrews on the impellor/fan shaft bearings are tight.

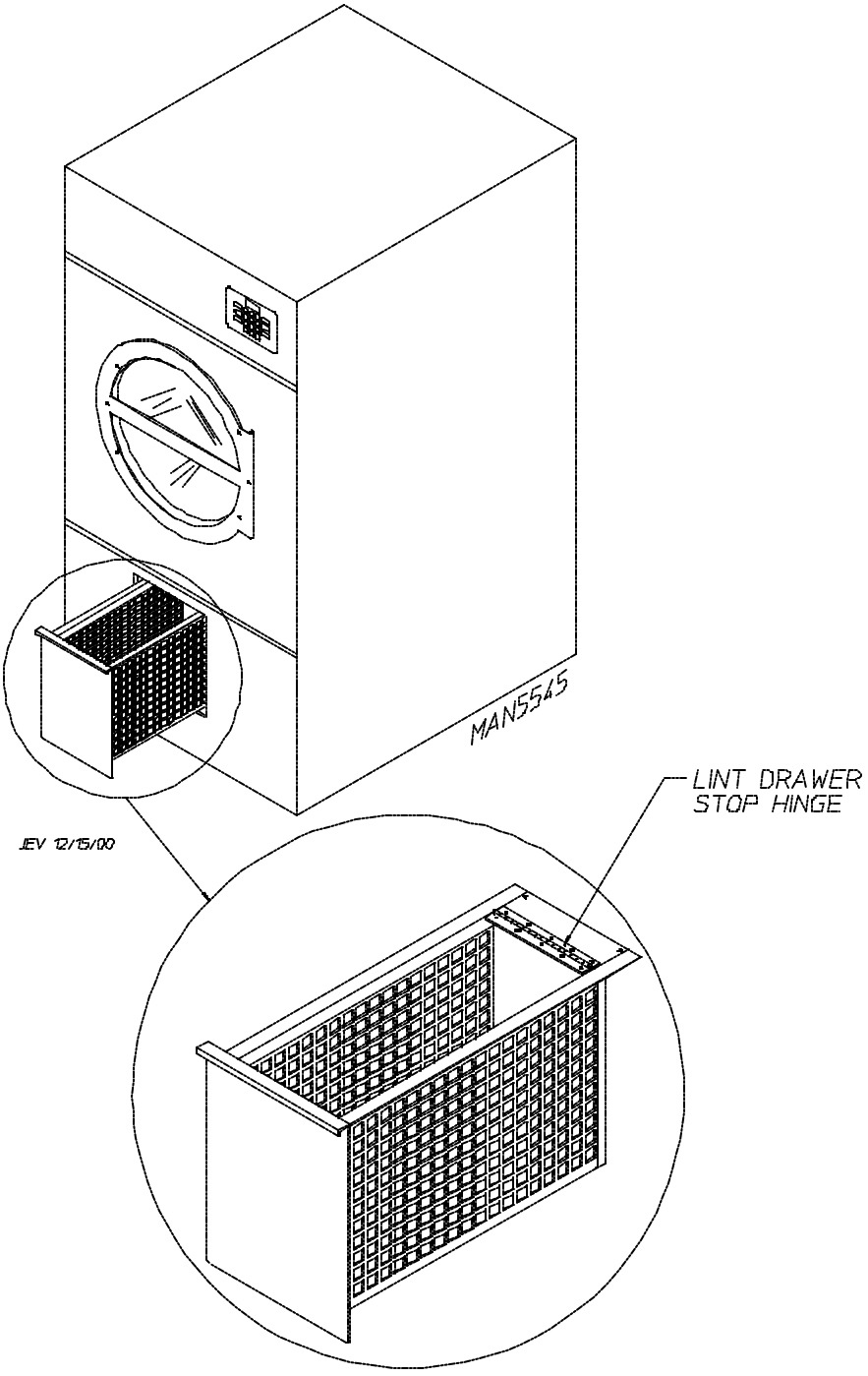
Remove lint from around basket (tumbler), drive motors, and surrounding areas. Remove lint from gas valve burner area with a dusting brush or vacuum cleaner attachment

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

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

D. LINT DRAWER REMOVAL

To remove the lint drawer from the dryer pull drawer out approximately halfway. Rotate/move lint drawer stop hinge (refer to the **illustration below**) downward and pull drawer out.



IMPORTANT: After replacing the lint drawer back into the dryer, be sure to rotate/move hinge back to the upward stop position.

SECTION VII
TROUBLESHOOTING

IMPORTANT: YOU MUST DISCONNECT AND LOCKOUT THE ELECTRIC SUPPLY AND THE GAS SUPPLY OR THE STEAM 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.**

The information provided will help isolate the most probable component(s) associated with the difficulty described. The experienced technician realizes, however, that a loose connection or broken/shorted wire may be at fault where electrical components are concerned...and not necessarily the suspected component itself.

Electrical parts **should always be** checked for failure before being returned to the factory.

The information provided **should not be** misconstrued as a handbook for use by an untrained person making repairs.

IMPORTANT: When replacing blown fuses, the replacement ***must be*** of the exact rating as the fuse being replaced.

WARNING: **ALL** SERVICE AND TROUBLESHOOTING ***SHOULD BE*** PERFORMED BY A QUALIFIED PROFESSIONAL OR SERVICE AGENCY.

WARNING: WHILE MAKING REPAIRS, OBSERVE **ALL** SAFETY PRECAUTIONS DISPLAYED ON THE DRYER OR SPECIFIED IN THIS MANUAL.

MICROPROCESSOR CONTROLLER (COMPUTER) MODELS

A. No light emitting diode (L.E.D.) display (microprocessor controller [computer] models only)...

1. Service panel fuse blown or tripped breaker.
2. Blown control circuit L1 or L2 1/2-amp (slo blo) fuse.
3. Failed microprocessor controller (computer).
4. Failed control step down transformer **(for models 380 volts or higher only**).

B. Drive motor is not operating (does not start)...

1. Failed drive motor contactor (relay).
2. Failed arc suppressor (A.S.) board.
3. Failed drive motor.

4. Failed microprocessor controller (computer).

C. Drive motor (reversing) operates in one (1) direction only...stops and restarts in same direction...

1. Failed drive motor contactor (relay).
2. Failed arc suppressor (A.S.) board.
3. Failed microprocessor controller (computer).

D. Drive motor operates okay for a few minutes and then stops and <u>will</u> <u>not</u> restart...

1. Motor is overheating and tripping out on internal overload protector...
    a. Motor air vents clogged with lint.
    b. Low voltage to the motor.
    c. Failed motor.
    d. Basket (tumbler) is binding...check for obstruction.
    e. Failed idler bearings or basket (tumbler) bearings.

E. Blower motor (impellor/fan) <u>is</u> <u>not</u> operating (<u>does</u> <u>not</u> start)...

1. Failed blower (impellor/fan) motor contactor (relay).
2. Failed arc suppressor (A.S.) board.
3. Failed blower (impellor/fan) motor.
4. Failed microprocessor controller (computer).

F. Blower motor operates okay for a few minutes and then stops and <u>will</u> <u>not</u> restart...

1. Motor is overheating and tripping out on overload protector...
    a. Motor air vents clogged with lint.
    b. Low voltage to the motor.
    c. Failed motor.
    d. Failed blower (impellor/fan) drive shaft bearings.

NOTE: V-belts to tight or bearings **<u>are</u> <u>not</u>** lubricated often enough.

G. Both drive motor and blower (impellor/fan) motor <u>are</u> <u>not</u> operating (DO NOT start)...microprocessor controller (computer) motor indicator dots and relay output light emitting diode (L.E.D.) indicator dots are on...

1. Failed arc suppressor (A.S.) board.
2. Failed contactors (both blower and drive).
3. Failed motor (both blower and drive).

H. Both drive motor and blower (impellor/fan) motor <u>are</u> <u>not</u> operating (DO NOT start)...microprocessor controller (computer) motor indicator dots and "door" L.E.D. indicator are on but relay output L.E.D. indicators are off (L.E.D. display <u>does</u> <u>not</u> read "door")...

1. Failed microprocessor controller (computer).

I. Both drive motor and blower motor run a few minutes and then stop...microprocessor controller (computer) display continues to read time or percent of extraction and <u>ALL</u> indicator dots are off...

1. Fault in main door switch circuit...
    a. Main door switch is out of adjustment.
    b. Loose connection in door switch circuit.
2. Fault in lint drawer switch circuit...
    a. Lint drawer switch out of proper adjustment.
    b. Loose connection in the lint drawer switch circuit.

J. Microprocessor controller (computer) display reads "dSFL" continuously and the buzzer (tone) sounds every 30-seconds...

1. Fault in microprocessor heat sensing circuit...
    a. Blown 1/8-amp ("dSFL") fuse on microprocessor controller (computer).
    b. Failed microprocessor temperature sensor.
    c. Failed microprocessor controller (computer).
    d. Broken wire or connection somewhere between the microprocessor controller (computer) and the microprocessor temperature sensor.

K. Microprocessor controller (computer) display reads "door" and microprocessor controller (computer) "door" L.E.D. indicator is off...

1. Fault (open circuit) in main door/lint drawer switch circuit...
    a. Lint drawer <u>is</u> <u>not</u> closed **<u>ALL</u>** the way.

b. Lint drawer switch is out of proper adjustment.

c. Failed lint drawer switch.

d. Failed main door switch.

e. Broken connection/wire in main door or lint drawer circuit.

2. Failed 24 VAC step down transformer or fault in writing.

L. Microprocessor controller (computer) light emitting diode (L.E.D.) display reads "door" and microprocessor controller (computer) "door" L.E.D. indicator is on...

1. Failed microprocessor controller (computer).

M. Microprocessor controller (computer) <u>will</u> <u>not</u> accept any keyboard (touch pad) entries, i.e., L.E.D. display reads "FILL" and when keyboard (touch pad) entries are selected, the L.E.D. display continues to read "FILL"...

1. Failed keyboard (touch pad) label assembly.

2. Failed microprocessor controller (computer).

N. Microprocessor controller (computer) will only accept certain keyboard (touch pad) entries...

1. Failed keyboard (touch pad) label assembly.

O. Microprocessor controller (computer) locks up and L.E.D. display reads erroneous message(s) or only partial segments...

1. Transient power voltage (spikes)...disconnect power to dryer, wait 1 minute, and reestablish power to dryer. If problem is still evident...

   a. Failed microprocessor controller (computer).

   b. Failed keyboard (touch pad) label assembly.

P. Dryer stops during a cycle, microprocessor controller (computer) buzzer (tone) sounds for 5-seconds, L.E.D. display reads "dSFL," for approximately 30-seconds, and then returns to "FILL"...

1. Loose connection somewhere between the microprocessor controller (computer) and the microprocessor temperature sensor.

2. Loose "dSFL" 1/8-amp fuse on the microprocessor controller (computer).

Q. Dryer stops during a cycle, microprocessor controller (computer) buzzer (tone) sounds for 5-seconds, and then the L.E.D. display returns to "FILL"...

1. Loose connection somewhere in the main power circuit to the microprocessor controller (computer).

2. Failed arc suppressor (A.S.) board.

R. Microprocessor controller (computer) light emitting diode (L.E.D.) display reads "SEFL"...

1. Rotational sensor circuit (option) failure...fault somewhere in basket (tumbler) rotation or circuit...

   a. Basket (tumbler) not rotating...

      1) Broken or loose V-belts.

      2) Failure in drive motor circuit...refer to **Item B**, **Item C**, and/or **Item D** in this **Troubleshooting Section**.

   b. Failed rotational sensor.

   c. Broken wire or connection between sensor and microprocessor controller (computer).

2. Microprocessor controller (computer) program (PL02) is set incorrectly in the active mode ("SEn") where the dryer is not equipped with the optional rotational sensor...program **should be** set as "nSEn."

S. Microprocessor controller (computer) L.E.D. display reads "Hot"...

1. Possible overheating condition...microprocessor controller (computer) has sensed a temperature, which has exceeded 220º F (104° C).

   "Hot" display will not clear until temperature sensed has dropped to 220º F (104° C) or lower and the microprocessor controller (computer) is manually reset by pressing the "CLEAR/STOP" key.

T. Heating unit is not operating (no heat)...no voltage at heating unit (i.e., gas models Direct Spark Ignition [DSI] module or steam model damper system pneumatic solenoid) when dryer is first started and both the heat indicator dot and the "HEAT" output L.E.D. are on...

GAS MODELS

1. Fault in sail switch circuit...

   a. Sail switch is out of adjustment and/or has failed.

   b. Sail switch damper is not closing or is fluttering...

      1) Lint drawer screen is dirty.

      2) Restriction in exhaust ductwork.

      3) No exhaust airflow.

         a) Failed impellor (fan/blower) "squirrel cage."

         b) Loose or failed impellor (fan/blower) assembly drive belts.

         c) Fault in impellor (fan/blower) motor circuit...refer to **Item E** and **Item F** in this **Troubleshooting Section**.

2. Failed burner hi-limit circuit.

3. Failed lint chamber sensor bracket basket (tumbler) hi-limit switch.

STEAM MODELS

1. Fault in lint chamber sensor bracket basket (tumbler) hi-limit switch.

U. Heat unit is not operating (no heat)...no voltage at heating unit (i.e., gas model Direct Spark Ignition [DSI] module or steam model damper system pneumatic solenoid) when dryer is first started and the microprocessor controller (computer) heat indicator dot is on but the "HEAT" relay output light emitting diode (L.E.D.) is not on...

1. Failed microprocessor controller (computer).

V. No heat...voltage is confirmed at heating unit (i.e., gas model DSI module or steam model damper system 3-way micro valve)...

GAS MODELS

1. Fault in DSI ignition system...

    a. Ignitor sparks but no ignition and DSI module locks out ("red" L.E.D. indicator light stays on)...

        1) Ignitor probe assembly is out of adjustment or has failed.

        2) Severe air turbulence.

        3) Failed DSI module.

        4) Failed gas valve.

    b. Ignitor sparks, burner lights but goes off right away...

        1) Ignitor probe assembly is out of adjustment or has failed.

        2) Sail switch is fluttering...

            a) Lint drawer screen is dirty.

            b) Restriction in exhaust ductwork.

    c. Ignitor does not spark and DSI module locks out ("red" L.E.D. indicator light stays on)...

        1) Fault in high voltage (HV) wire...

            a) Break in wire.

            b) Loose connection.

c) Failed ignitor probe assembly.

d) Failed Direct Spark Ignition (DSI) module.

STEAM MODELS

1. No (external) compressed air (80 PSI [5.51 bars] required) to steam damper solenoid.
2. Flow control valve is not adjusted correctly...
    a. Too much restriction.
3. Failed steam damper pneumatic (air) solenoid.
4. Damper stuck in "closed" position...
    a. Check for obstruction.
5. Leak in the pneumatic (air) system.
6. Failed air piston.

W. Dryer operates but is taking too long to dry...

1. Exhaust ductwork run too long or is undersized...back pressure **cannot** exceed 0.3 inches (0.74 mb) water column (W.C.).
2. Restriction in exhaust ductwork...
    a. Customer furnished exhaust back draft damper is sticking partially closed.
    b. Restriction in exhaust ductwork...
        1) Check ductwork from dryer **ALL** the way to the outdoors.
3. Insufficient make-up air.
4. Impellor (blower/fan) "squirrel cage" is rotating in the wrong direction.
5. Lint drawer screen is dirty or is not being cleaned often enough.
6. Inadequate airflow...
    a. Impellor (blower/fan) "squirrel cage" failure.
    b. Loose impellor (blower/fan) "squirrel cage" drive V-belts.

7. Gas Models

   a. Low and/or inconsistent gas pressure...

      Natural gas pressure **must be** 3.5 inches (8.7 mb) of water column (W.C.). Liquid propane (L.P.) gas pressure **must be** consistent 10.5 inches (26.1 mb) of water column.

   b. Poor air/gas mixture (too much gas or not enough air) at burner...yellow or poor flame pattern...

      1) Not enough make-up air.

      2) Restriction in exhaust ductwork.

      3) Gas pressure too high.

      4) Impellor (blower/fan) "squirrel cage" rotating in the wrong direction.

      5) Burner orifice size (Drill Material Size [D.M.S.]) too large for application (i.e., high elevation).

   c. Sail switch is fluttering...

      1) Restriction in exhaust ductwork...

         a) Lint drawer screen is dirty or <u>is</u> <u>not</u> being cleaned often enough.

   d. Failed burner hi-limit switch...opens at incorrect temperature.

   e. Gas supply may have low heating value.

8. Steam Models

   a. Low steam supply...

      1) Steam trap too small.

      2) Supply line too small.

   b. Low steam pressure.

   c. Insufficient make-up air.

   d. Lint drawer screen is dirty or <u>is</u> <u>not</u> being cleaned often enough.

   e. Restriction in exhaust ductwork.

   f. Dirty steam coil.

      1) Fins clogged with lint.

   g. Steam damper system <u>is</u> <u>not</u> functioning properly...

      1) Damper is sticking closed.

2) Leak in pneumatic (air) system.

9. Extractors (washers) are not performing properly.

10. Failed lint chamber hi-heat switch (thermostat)...opens at incorrect temperature.

11. Failed microprocessor controller (computer controlled models only)...temperature calibration is inaccurate.

12. Failed microprocessor temperature sensor (computer controlled models only)...calibration is inaccurate.

13. Exceptionally cold/humid or low barometric pressure atmosphere.

14. Microprocessor temperature sensor (computer controlled models only) is covered with lint.

NOTE: Lint accumulation on the sensor bracket can act as an insulator, which will affect the accuracy of the Automatic Drying Cycle.

X. Main burners are burning with a yellow flame (for gas models only)...

1. Poor air/gas mixture (too much gas or not enough air) at burner...

   a. Not enough make-up air.

   b. Restriction in exhaust ductwork.

   c. Gas pressure too high.

   d. Impellor (blower/fan) "squirrel cage" rotating in the wrong direction.

   e. Burner orifice size (Drill Material Size [D.M.S.]) too large for application (i.e., high elevation).

Y. Condensation on main door glass...

1. Too long, undersized, or improperly installed ductwork.

2. Dryer connected to common exhaust duct with another dryer, and no back draft damper was installed in customer-furnished ductwork.

3. Customer furnished back draft damper in ductwork is sticking in partially closed position.

Z. Dryer is making scraping noise at basket (tumbler) area...

1. Check for object caught in basket (tumbler)/wrapper area.

2. Basket (tumbler) is out of proper alignment.

   a. Check both vertical alignment and lateral alignment.

   b. Check gap between front panel and basket (tumbler)...setscrews may have come loose, and basket (tumbler) walked forward or back.

3. Loose basket (tumbler) tie rod.

4. Failed basket (tumbler) support.

AA. Excessive noise and/or vibration...

1. Dryer is not leveled properly.
2. Impellor (fan/blower) "squirrel cage" out of balance.
   a. Excessive lint build-up impellor (fan/blower) "squirrel cage."

NOTE: Check to insure that the air jet is functioning.

   b. Failed impellor (fan/blower) "squirrel cage."
3. Loose basket (tumbler) tie rod.
4. Failed basket (tumbler) support.
5. Loose motor mount.
6. Failed idler, basket (tumbler), or impellor (fan) bearings.
7. V-belt(s) either too tight or too loose.
8. Bearing setscrews (basket [tumbler], idler, or impellor [blower] shaft) are loose.
9. Failed motor bearings.

TIMER MODELS

A. Dryer will not start...both drive and blower motors are not operating (indicator light is off)...

1. Service panel fuse blown or tripped breaker.
2. Dryer control circuit L1 or L2 1/2-amp fuse is blown.
3. Open main door/lint drawer switch circuit...
   a. Lint drawer switch is not closed **ALL** the way.
   b. Lint drawer switch is out of proper adjustment.
   c. Failed lint drawer switch.
   d. Failed main door switch.
   e. Broken connection/wire in main door or lint drawer switch circuit.
4. Failed push to start relay.
5. Failed 24 VAC step down transformer **(for models 380 volts or higher only)**.

B. Drive motor is not operating (does not start)...

1. Failed drive motor contactor (relay).
2. Failed drive motor.

C. Drive motor (reversing) operates in one (1) direction only...stops and restarts in same direction...

1. Failed reversing contactor (relay).
2. Failed reversing timer.

D. Drive motor operates okay for a few minutes and then stops and will not restart...

1. Motor is overheating and tripping out on internal overload protector...
    a. Motor air vents clogged with lint.
    b. Low voltage to the motor.
    c. Failed motor.
    d. Basket (tumbler) is binding...check for obstruction.
    e. Failed idler bearings or basket (tumbler) bearings.

E. Blower (impellor/fan) motor is not operating (does not start)...

1. Failed blower (impellor/fan) motor contactor (relay).
2. Failed blower (impellor/fan) motor.

F. Blower motor operates okay for a few minutes and then stops and will not restart...

1. Motor is overheating and tripping out on overload protector...
    a. Motor air vent is clogged with lint.
    b. Low voltage to motor.
    c. Failed motor.
    d. Failed blower (impellor/fan) drive shaft bearings...

NOTE: V-belts to tight or bearings **are not** lubricated often enough.

G. Both drive motor and blower (impellor/fan) motor are not operating (DO NOT start) and indicator light is on...

1. Fault in L1 or L2 termination(s) between terminal block and contactors (relays).
2. Failed contactors (both blower and drive).
3. Failed motors (both blower and drive).

H. Heating unit is not operating (no heat)...no voltage at heating unit (i.e., gas model Direct Spark Ignition [DSI] module or steam model damper system pneumatic solenoid)...

GAS MODELS

1. Fault in sail switch circuit...
    a. Sail switch is out of adjustment or has failed.
    b. Sail switch damper is not closing or is fluttering...
        1) Lint drawer screen is dirty.
        2) Restriction in exhaust ductwork.
        3) No exhaust airflow...
            a) Failed impellor (fan/blower) "squirrel cage."
            b) Loose or failed impellor (fan) assembly drive V-belts.
            c) Fault in impellor (fan/blower) motor circuit...refer to **Item E** and **Item F** in this **Troubleshooting Section**.
2. Failed burner hi-limit switch.
3. Failed lint chamber sensor bracket basket (tumbler) hi-limit switch or circuit.
4. Failed temperature selection switch or circuit.
5. Failed temperature cycle thermostat (try another selection).
6. Failed heat timer.

STEAM MODELS

1. Failed lint chamber sensor bracket basket (tumbler) hi-limit switch circuit.
2. Failed temperature selection switch or circuit.
3. Failed temperature cycle thermostat (try another selection).
4. Failed heat timer.

I. No heat...voltage is confirmed at heating unit (i.e., gas model Direct Spark Ignition [DSI] module or steam model damper system pneumatic solenoid)...

GAS MODELS

1. Fault in DSI ignition system...
    a. Ignitor sparks but no ignition and DSI module locks out ("red" L.E.D. indicator light stay on)...
        1) Ignitor probe assembly is out of adjustment or has failed.
        2) Severe air turbulence.
        3) Failed DSI module.
        4) Failed gas valve.
    b. Ignitor sparks, burner lights but goes off right away...
        1) DSI ignitor is out of adjustment or has failed.
        2) Sail switch is fluttering...
            a) Lint drawer screen is dirty.
            b) Restriction in exhaust ductwork.
    c. Ignitor <u>does</u> <u>not</u> spark and DSI module locks out ("red" L.E.D. indicator light stays on)...
        1) Fault in high voltage (HV) wire...break or loose connection.
        2) Failed ignitor probe assembly.
        3) Failed DSI module.

STEAM MODELS

1. No (external) compressed air (80 PSI [5.51 bars] is required) to steam damper solenoid.
2. Flow control valve is not adjusted correctly...
    a. Too much restriction.
3. Failed steam damper pneumatic (air) solenoid.
4. Damper stuck in "closed" position...
    a. Check for obstruction.
5. Leak in the pneumatic (air) system.
6. Failed air piston.

J. Dryer operates but is taking too long to dry...

1. Exhaust ductwork run too long or is undersized...back pressure **cannot** exceed 0.3 inches (0.74 mb) water column (W.C.).
2. Restriction in exhaust ductwork...
    a. Customer furnished exhaust back draft damper is sticking partially closed.
    b. Restriction in exhaust ductwork...
        1) Check ductwork from dryer **ALL** the way to the outdoors.
3. Insufficient make-up air.
4. Impellor (blower/fan) "squirrel cage" is rotating in the wrong direction.
5. Lint drawer screen is dirty or is not being cleaned often enough.
6. Inadequate airflow...
    a. Impellor (blower/fan) "squirrel cage" failure.
    b. Loose impellor (blower/fan) "squirrel cage" drive V-belts.
7. Gas Models
    a. Low and/or inconsistent gas pressure...

        Natural gas pressure **must be** 3.5 inches (8.7 mb) of water column. Liquid propane (L.P.) gas pressure **must be** consistent 10.5 inches (26.1 mb) of water column.

b. Poor air/gas mixture (too much gas or not enough air) at burner...yellow or poor flame pattern...

1) Not enough make-up air.

2) Restriction in exhaust ductwork.

3) Gas pressure too high.

4) Impellor (blower/fan) “squirrel cage” rotating in the wrong direction.

5) Burner orifice size (Drill Material Size [D.M.S.]) too large for application (i.e., high elevation).

c. Sail switch is fluttering...

1) Restriction in exhaust ductwork...

a) Lint drawer screen is dirty or <u>is</u> <u>not</u> being cleaned often enough.

d. Failed burner hi-limit switch...opens at incorrect temperature.

e. Gas supply may have low heating value.

8. Steam Models

a. Low steam supply...

1) Steam trap too small.

2) Supply line too small.

b. Low steam pressure.

c. Insufficient make-up air.

d. Lint drawer screen is dirty or <u>is</u> <u>not</u> being cleaned often enough.

e. Restriction in exhaust ductwork.

f. Dirty steam coil...

1) Fins clogged with lint.

g. Steam damper system <u>is</u> <u>not</u> functioning properly...

1) Damper is sticking closed.

2) Leak in pneumatic (air) system.

9. Extractors (washers) <u>are</u> <u>not</u> performing properly.

10. Failed lint chamber hi-limit switch (thermostat)...opens at incorrect temperature.

11. Failed microprocessor controller (computer controlled models only)...temperature calibration is inaccurate.

12. Failed microprocessor temperature sensor (computer controlled models only)...calibration is inaccurate.

13. Exceptionally cold/humid or low barometric pressure atmosphere.

14. Microprocessor temperature sensor (computer controlled models only) is covered with lint.

NOTE: Lint accumulation on the sensor bracket can act as an insulator, which will affect the accuracy of the Automatic Drying Cycle.

K. Main burners are burning with a yellow flame (for gas models only)...

1. Poor air/gas mixture (too much gas or not enough air) at burner...

   a. Not enough make-up air.

   b. Restriction in exhaust ductwork.

   c. Gas pressure too high.

   d. Impellor (blower/fan) "squirrel cage" rotating in the wrong direction.

   e. Burner orifice size (Drill Material Size [D.M.S.]) too large for application (i.e., high elevation).

L. Condensation on main door glass...

1. Too long, undersized, or improperly installed ductwork.

2. Dryer connected to common exhaust duct with another dryer, and no back draft damper was installed in customer furnished ductwork.

3. Customer furnished back draft damper in ductwork is sticking in partially closed position.

M. Dryer is making scraping noise at basket (tumbler) area...

1. Check for object caught in basket (tumbler)/wrapper area.

2. Basket (tumbler) is out of proper alignment.

   a. Check both vertical alignment and lateral alignment.

   b. Check gap between front panel and basket (tumbler) setscrews may have come loose, and basket (tumbler) walked forward or back.

3. Loose basket (tumbler) tie rod.

4. Failed basket (tumbler) support.

N. Excessive noise and/or vibration...

1. Dryer is not leveled properly.
2. Impellor (fan/blower) “squirrel cage” out of balance.
    a. Excessive lint build-up impellor (fan/blower) “squirrel cage.”

NOTE: Check to insure that the air jet is functioning.

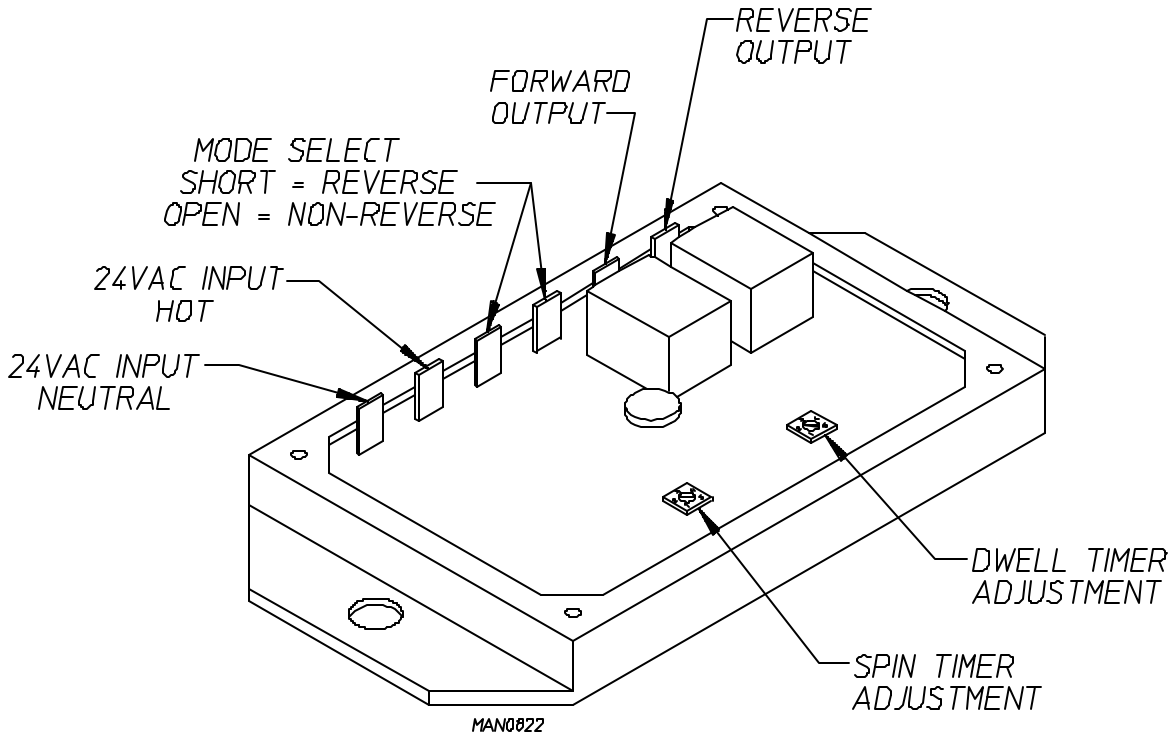
    b. Failed impellor (fan/blower) “squirrel cage.”
3. Loose basket (tumbler) tie rod.
4. Failed basket (tumbler) tie rod.
5. Looses motor mount.
6. Failed idler, basket (tumbler), or fan (impellor) bearings.
7. V-belt(s) either too tight or too loose.
8. Bearing setscrews (basket [tumbler], idler, or impellor [blower] shaft) are loose.
9. Failed motor bearings.
10. Basket (tumbler) is out of adjustment or adjustment bolts (hardware) are loose.

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.

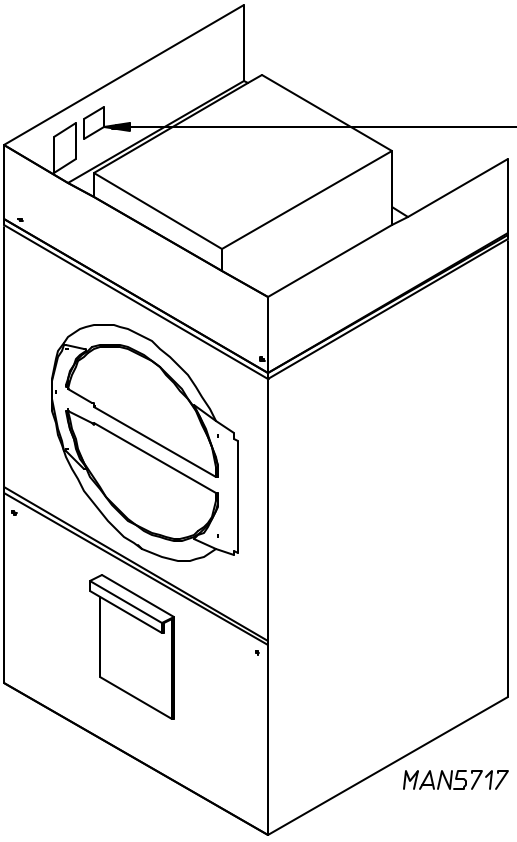
Both the dwell (stop) time and basket (tumbler) spin time are adjustable by mode selection switches located on the electronic timer (as noted in the **illustration below**).



TIMING LEGEND					
SPIN TIME					
Adjustment Position Number	1	2	3	4	5
Time in Seconds*	30	60	90	120	150
DWELL (Stop) TIME					
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
DATA LABEL INFORMATION

A. DATA LABEL



MODEL

SERIAL NUMBER
XXXXXX

MANUFACTURING CODE NUMBER
XXXXXXXXXXXXXXXXXXXXXXXXXX

TYPE OF HEAT
GAS/NATURAL

HEAT INPUT (0 TO 2,000 FT)*

ORIFICE SIZE

ELECTRIC SERVICE

GAS MANIFOLD PRESSURE

3.5 IN W.C.
FOR USE WITH GASES

ANSI Z21.5.2

CLOTHES DRYER, VOL.I
(SECHEUSES, VOL.2)

*FOR CANADIAN INSTALLATIONS WITH ELEVATIONS BETWEEN 2,000 AND 4,500 FT.

HEAT INPUT-

ORIFICE SIZE-

P/N: 112008

RAR 03/19/01

When contacting **Continental Girbau, Inc.®** certain information is required to insure proper service/parts information. This information is on the data label located on the left side panel area behind the top control (access) door. When contacting the distributor or **Continental Girbau, Inc.®** please have the **model number** and **serial number** available.

THE DATA LABEL

1. **MODEL NUMBER**
   The model number describes the size of the dryer and the type of heat (gas, electric, or steam).

2. **SERIAL NUMBER**
   The serial number allows the manufacturer 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) 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 Standards Association International.

SECTION X

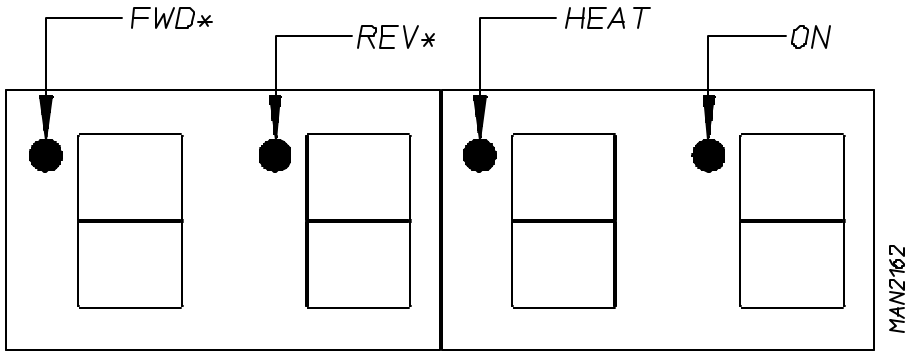
PROCEDURE FOR FUNCTIONAL CHECK OF REPLACEMENT COMPONENTS

1. Microprocessor Controller (Computer) Board

   a. Upon completing installation of the replacement microprocessor controller (computer) board, reestablish power to the dryer.

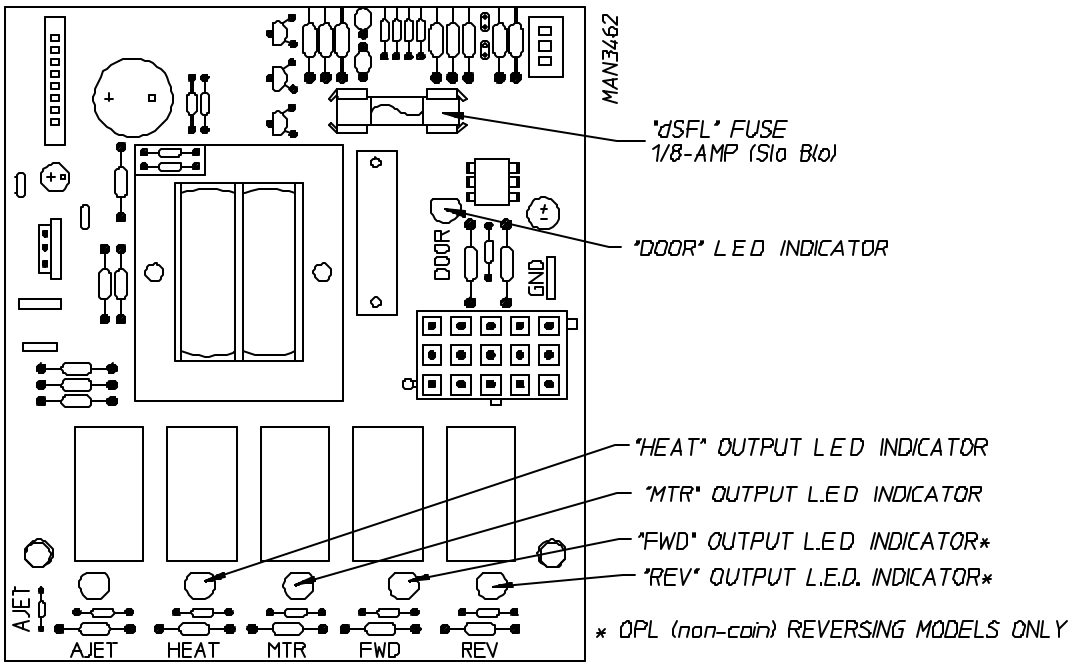
   b. Start the drying cycle.

   c. Verify that the motor(s) and the heat indicator dots, in the microprocessor controller (computer) light emitting diode (L.E.D.) display are on. (Refer to the **illustration below**.)



*OPL (NON-COIN) REVERSING MODELS ONLY.

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



e. Open main door. The dryer must stop and **ALL** output indicator lights on the back side of the microprocessor controller (computer) board must go out.

f. Try to restart the dryer with the main door open.

g. The microprocessor controller (computer) board's light emitting diode (L.E.D.) display must read "DOOR."

h. Close the main door and restart the dryer.

i. Functional check of microprocessor controller (computer) board is complete.

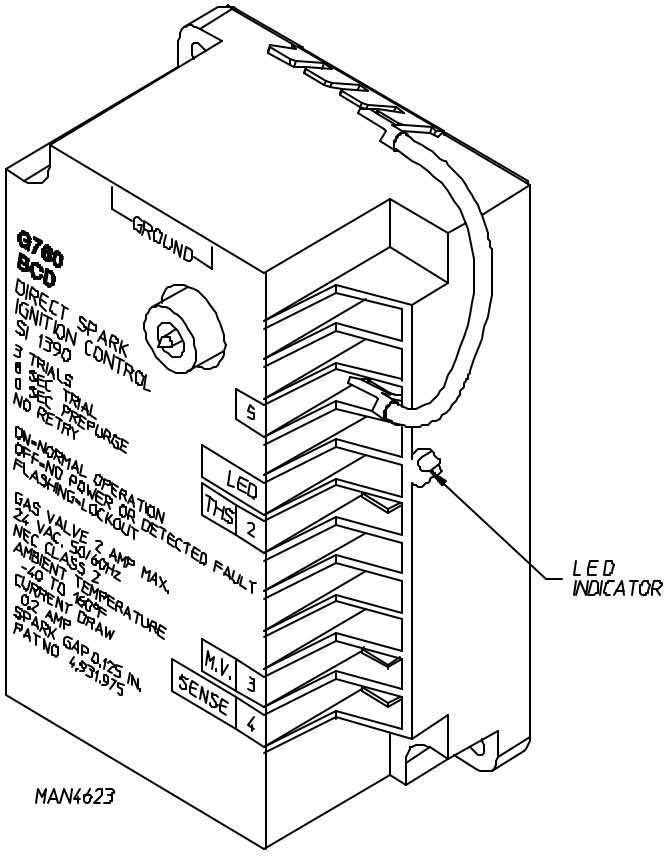
2. For Models With Johnson Controls Direct Spark Ignition (DSI) Module (G760)

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 XI

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

I M P O R T A N T

MANUAL RESET HI-LIMIT INSTRUCTIONS

FOR TIMER OR PHASE 5 WITHOUT HEAT FAULT

(GAS MODELS ONLY)

This dryer was manufactured with a burner and basket (tumbler)/lint chamber manual reset hi-limit thermostat. If either burner manual reset 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. The applicable 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.

The location of the burner manual reset hi-limit switch is on the right side of the burner box.

IMPORTANT

This dryer is equipped with a burner hi-limit and tumbler/lint chamber hi-limit thermostat which must be reset manually.

WARNING: Discontinue power to dryer before attempting to reset hi-limit.

I M P O R T A N T

MANUAL RESET HI-LIMIT INSTRUCTIONS

FOR TIMER OR PHASE 5 WITHOUT HEAT FAULT

(STEAM MODELS ONLY)

This dryer was manufactured with a burner and basket (tumbler)/lint chamber manual reset hi-limit thermostat. If the manual reset 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. The applicable manual reset hi-limit **must be** reset manually.

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

The location of the burner manual reset hi-limit switch is in the lint chamber area.

WARNING: Discontinue electrical power to the dryer before attempting to reset hi-limit.

IMPORTANT

This dryer is equipped with a lint chamber hi-limit thermostat which must be reset manually.

WARNING: Discontinue power to dryer before attempting to reset hi-limit.