



Tumble Dryer

INSTRUCTION MANUAL

**Model
DI325
GAS**



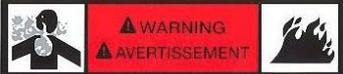
TABLE OF CONTENTS

	PAGE
<u>SECTION 1: IMPORTANT INFORMATION</u>	1-1
A. RECEIVING AND HANDLING	1-1
B. SAFETY PRECAUTIONS	1-1
<u>SECTION 2: SPECIFICATIONS/COMPONENT IDENTIFICATION</u>	2-1
A. TECHNICAL SPECIFICATION	2-1
B. TECHNICAL DIMENSION	2-2
C. COMPONENT IDENTIFICATION	2-3
<u>SECTION 3: INSTALLATION PROCEDURES</u>	3-1
A. REASSEMBLY OF DRYER	3-1
B. LOCATION REQUIREMENTS	3-1
C. FRESH AIR SUPPLY	3-2
D. EXHAUST REQUIREMENTS	3-3
E. COMPRESSED AIR SUPPLY	3-4
F. ELECTRIC INFORMATION	3-4
G. GAS INFORMATION	3-6
H. STEAM INFORMATION	3-9
I. PREPARATION FOR OPERATION	3-13
<u>SECTION 4: COMPONENT SYSTEM DESCRIPTION</u>	4-1
A. BASKET/TUMBLER DRIVE SYSTEM	4-1
B. BASKET/TUMBLER	4-1
C. AIR BLOWER DRIVE SYSTEM	4-1
D. SAFETY DEVICES	4-2
E. STEAM DAMPER ACTUATOR SYSTEM	4-2
<u>SECTION 5: WARRANTY INFORMATION</u>	5-1
A. WARRANTY	5-1
B. RETURNING WARRANTY PARTS	5-1
<u>SECTION 6: ROUTINE MAINTENANCE</u>	6-1
A. CLEANING	6-1
B. ADJUSTMENTS	6-2
C. LUBRICATION	6-2
D. AC DRIVE MAINTENANCE	6-2
<u>SECTION 7: TROUBLE SHOOTING</u>	7-1
A. MICROPROCESSOR (COMPUTER) MODELS	7-1
B. THE AC DRIVE TROUBLE SHOOTING	7-6
<u>SECTION 8: OPERATING AND PROGRAMMING INSTRUCTION</u>	8-1
A. OPERATING INSTRUCTION	8-1
B. SHUTDOWN INSTRUCTION	8-54
<u>SECTION 9: PARTS LIST</u>	

KEY SYMBOLS

Anyone operating or servicing this machine must follow the safety rules in this manual. Particular attention must be paid to the **DANGER**, and **WARNING**, and **CAUTION** blocks which appear throughout the manual.

Symbols	Description
	<p>This warning symbol indicated the presence of hot surfaces that could cause serious burns. Stainless steel and steam lines can become extremely hot and should not be touched.</p>
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="text-align: center; margin: 0;">WARNING</p> <p style="margin: 0; font-size: small;">DRY ONLY WATER WASHED FABRICS DO NOT USE HEAT FOR DRYING FOAM RUBBER OR SIMILAR TEXTURED RUBBERLIKE MATERIALS</p> </div>	<p>WARNING! Dry only water washed fabrics. Do not use heat for drying foam rubber or similar textured rubber like materials.</p>
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p style="text-align: center; margin: 0;">ROTATION</p>  <p style="margin: 0; font-size: x-small;">FAN MUST ROTATE IN DIRECTION OF ARROW AS VIEWED FROM REAR OF DRYER.</p> </div>	<p>Information Alert to the correct direction of rotation.</p>
<div style="display: flex; align-items: center; justify-content: center;">  <div style="border: 1px solid black; padding: 5px; text-align: left;"> <p style="margin: 0;">WARNING</p> <p style="margin: 0; font-size: small;">Do not operate without guards in place.</p> </div> </div>	<p>DANGER! For the hand, Belts and pulley in motion. Do Not operate with out Guard.</p>
<div style="background-color: orange; border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p style="text-align: center; margin: 0; font-weight: bold; font-size: large;">24 VOLT CONTROLS</p> </div>	<p>Information The machine is use 24 VAC. for control.</p>
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <div style="background-color: black; color: white; padding: 2px; text-align: center; font-weight: bold; font-size: large;">DANGER</div> <div style="text-align: center; font-weight: bold; font-size: x-large;">HIGH VOLTAGE</div> </div>	<p>DANGER! High voltage present.</p>

Symbols	Description
 <p>⚠ WARNING</p> <p>Crush hazard. Machine can lower suddenly with power ON or OFF and cause serious injury or death.</p> <p>Do not put any part of your body under machine unless you first secure safety supports and lockout/tagout machine.</p>	<p>WARNING! Crush hazard. Machine can lower suddenly with power ON or OFF and cause serious injury or death. Do not put any part of your body under machine unless you first secure safety supports and lockout / tagout machine</p>
	<p>STOP – Read manual first.</p>
<p>ROTATION</p>  <p>FAN MUST ROTATE IN DIRECTION OF ARROW AS VIEWED FROM THE BACK END OF THE MOTOR</p>	<p>Information, Alert to the correct direction of rotation.</p>
 <p>⚠ WARNING ⚠ AVERTISSEMENT</p> <ul style="list-style-type: none"> • This dryer must be exhausted to the outdoors. • Exhaust ductwork should be examined and cleaned, if necessary, every three months after installation • Do not distort thimble when installing ductwork. Make sure thimble vanes open and close freely after ductwork has been installed. <ul style="list-style-type: none"> • L'évacuation de la sècheuse doit s'effectuer vers l'extérieur. • Après installation, le conduit d'évacuation doit être vérifié et nettoyé tous les trois mois selon besoin. • Ne pas fausser le dispositif d'assemblage pendant l'installation du conduit d'évacuation. S'assurer de l'ouverture et de la fermeture libres des ailettes du dispositif après installation. 	<p>WARNING! This dryer must be exhausted to the outdoors. Exhaust ductwork should be examined and cleaned, if necessary, every three months after installation. Do not distort thimble when installing ductwork. Make sure thimble vanes open and close freely after ductwork has been installed.</p>
<p>⚠ WARNING</p>  <p>You are exposed to moving parts or parts which may start moving suddenly.</p> <p>Disconnect electric power before servicing.</p> <p>Do not operate with guard/panel removed.</p> 	<p>DANGER! For the hand, Belts and pulley in Not operate with out Guard.</p>

SECTION 1

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 protective 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:

All dryers **should be** inspected upon receipt and before they are signed for. If there is suspected damage or actual damage, the trucker's receipt **should be** so noted. 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 number refused **must be** noted on the receipt.

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. Dryers / parts damaged in transit cannot be claimed under warranty.

Freight claims are the responsibility of the consignee, and all claims **must be** filed at the receiving end. Our company assumes no responsibility for freight claims or damages. If you need assistance in handling the situation, please contact our office

IMPORTANT: The dryer **should 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

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. Dryer(s) **must be** exhausted to the outdoors.
4. Although our company produces a versatile machine, there are some articles that, due to fabric composition or cleaning method, **should not be** dried in it.

WARNING: Dry only water – washed fabrics. **Do not** dry articles spotted or washed in dry cleaning solvents, a combustible detergent, or “all purpose” cleaner. **EXPLOSION COULD RESULT.**

IMPORTANT INFORMATION

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 like materials. Drying in a heated basket (tumbler) may damage plastics or rubber and also may be a fire hazard.

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

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

6. For personal safety, the dryer **must be** electrically grounded in accordance with local codes.

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

7. Under no circumstances should the dryer door switches, lint drawer switch, or heat circuit safety devices ever be disabled.

WARNING: Personal injury or fire could result.

8. This dryer is not to be used in the presence of dry cleaning solvents or fumes.

9. 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.

10. **Do not** operate steam dryers with more than 125 psi steam pressure. Excessive steam pressure can damage steam coil and / or harm personnel.

11. Replace leaking flexible steam hoses or other steam fixtures immediately. **Do not** operate dryer with leaking flexible hoses. Personal injury may result.

12. Read and follow all caution and direction labels attached to dryer.

13. **Do not** operate steam dryers with more than 125 psi steam pressure. Excessive steam pressure can damage steam coil and or harm personnel.

14. Replace leaking flexible steam hoses or other steam fixtures immediately. **Do not** operate dryer with leaking flexible hoses. Personal injury may result.

15. Read and follow all caution and direction labels attached to dryer.

IMPORTANT: You must disconnect and lockout the electric supply and the gas supply or the steam supply before any covers or guards are remove from the machine to allow access to cleaning, adjusting, installation, or testing of any equipment per **OSHA (Occupational Safety and Health Administration) STANDARDS.**

SECTION 2

SPECIFICATIONS / COMPONENT IDENTIFICATION

A. TECHNICAL SPECIFICATION (GAS AND STEAM MODELS)

Maximum Capacity (Dry Weight)		325 lbs.	147.39 kg.
Basket Diameter		63"	160.00 cm.
Basket Depth		61 – 3/4"	157.00 cm.
Basket Motor		5.5 HP.	4 kW.
Door Opening (Diameter)		43 – 5/16" W × 28 – 7/8" H	110 cm. × 73.5 cm.
Door Sill Height		71"	180.3 cm.
Basket Volume		111.60 cu. ft.	3.16 cu. m.
Gas	Voltage Available	208 – 460 V / 3Ø / 50/60 Hz	
	Heat Input	1,180,000 Btu / hr	297,355 kcal / hr
	Blower Motor	20 HP.	15 kW
	Approx. Weight (Uncrated)	4,250 lbs.	1,932 kg.
	Airflow	6,500 cfm.	184 cmm.
	Inlet Size	1 – 1/4"	3.81 cm.
Steam	Voltage Available	208 – 460 V / 3Ø / 50/60 Hz	
	Blower Motor	20 HP.	15 kW.
	Approx. Weight (Uncrated)	4,750 lbs.	2,154 kg.
	Heat Input	35 Bhp	
	Steam Consumption	1208 lb./hr	548kg./hr.
	Airflow	7,500 cfm.	212 cmm.
	Inlet Size	2"	5.08 cm.
	Operating Steam Pressure	125 psi max.	8.6 bar
	80 psi Compressed Air	1/8" FPT	0.318 cm.

NOTES: The factory reserves the right to make changes in specifications at my time, without notice or obligation.

B. TECHNICAL DIMENSION

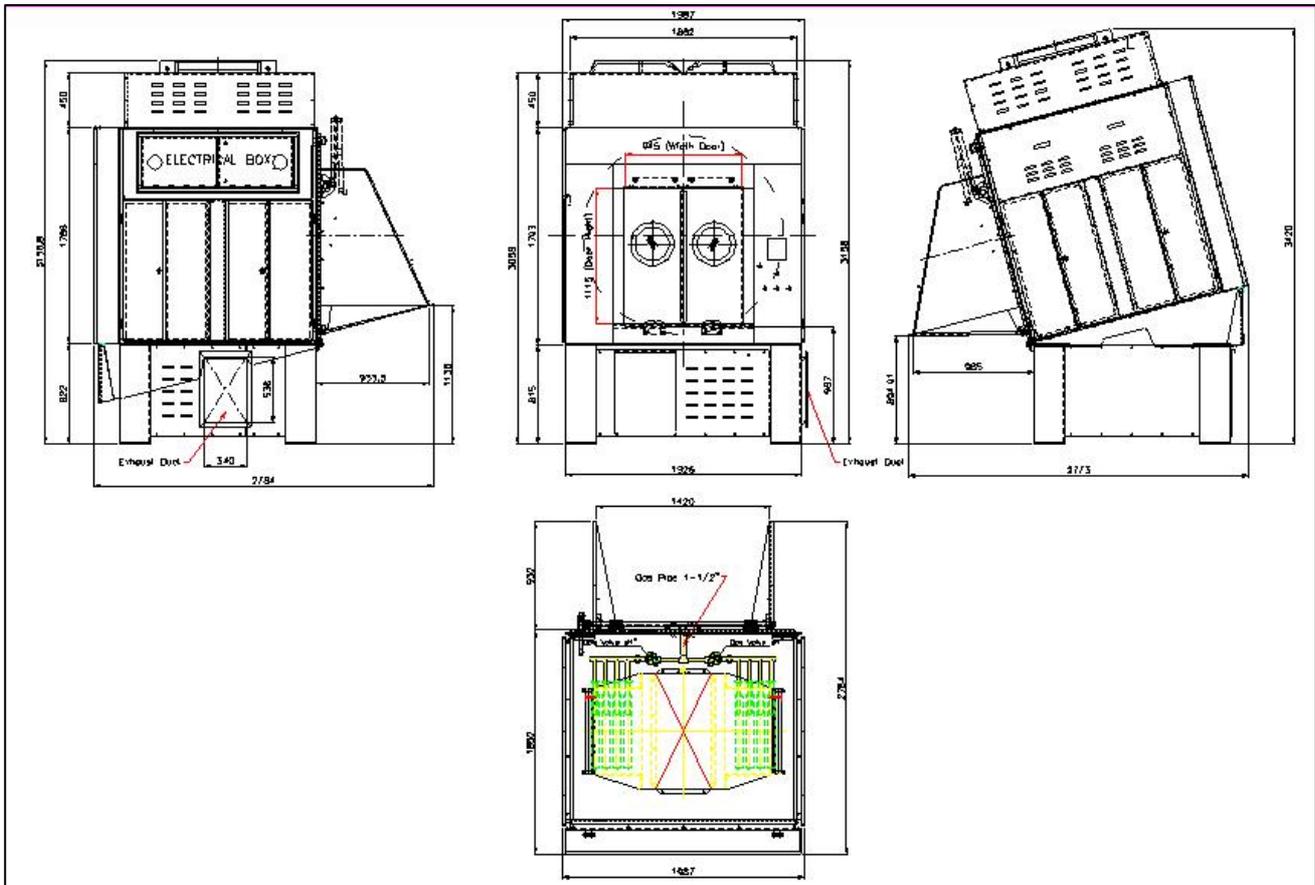
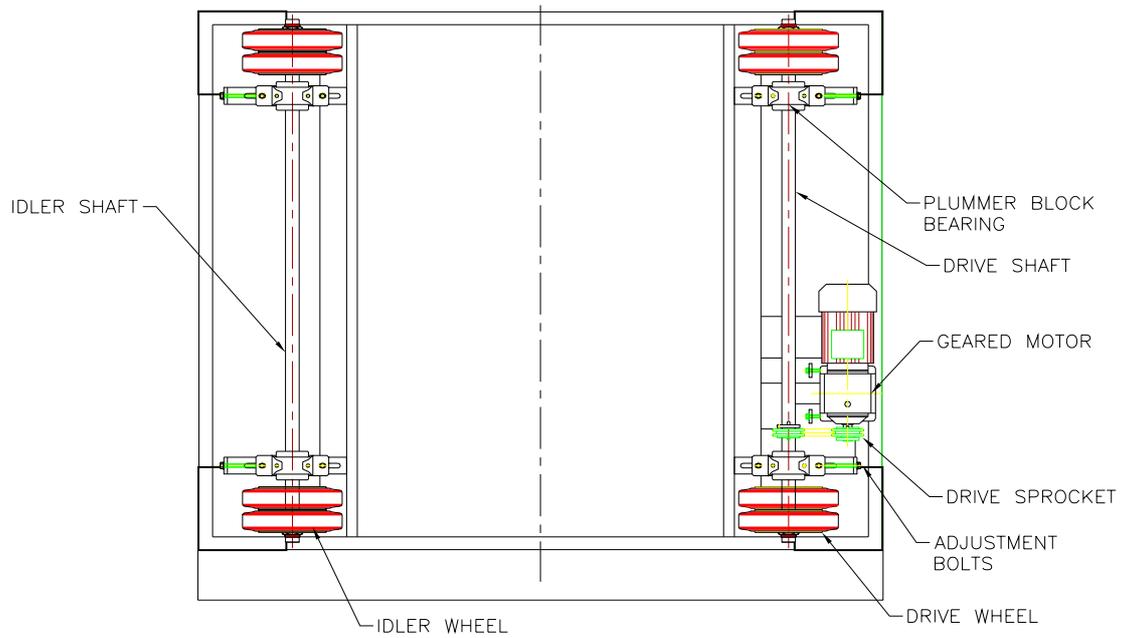


Figure.2-1 Standard Machine Dimension



WHEN REPLACING A DRIVE WHEEL

1. ALWAYS CHANGE BOTH WHEELS ON SHAFT.
2. MARK POSITION OF BEARING ON SUPPORTS THIS WILL.
MAKE REASSEMBLY OF SHAFT AND CENTERING OF TUMBLER EASIER.
3. SHOVE BLOCKS OF WOOD UNDER TUMBLER TO TAKE IT'S WEIGHT OFF
OF DRIVE WHEELS
4. REMOVE BEARING HOLD DOWN BOLTS AND ADJUSTMENT BOLT.
5. IF DRIVE SHAFT IS BEING REMOVED, TAKE OFF DRIVE PULLEY.
6. SLIDE COMPLETE SHAFT ASSEMBLY OUT OF SIDE OF DRYER.

Figure.2-2 Tumbler Drive System

SECTION 3

INSTALLATION PROCEDURES

Installation **should be** performed by competent technicians in accordance with local and state codes. In the absence of these codes, 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 (L.P. Gas) or LATEST EDITION (for General Installation and Gas Plumbing) or Canadian Electrical Code Parts 1 & 2 CSA C22.1 – 1990 or LATEST EDITION (for Electrical Connections).

A. REASSEMBLY OF DRYER

IMPORTANT: Always keep the basket (tumbler) section of the dryer in an upright position when moving it.

The dryer can be shipped in two (2) ways as a complete unit fully assembled and ready for hookup or in two (2) pieces with the middle frame separated from the base. At installation, the middle frame will be lifted onto the base. Use cables through the eye bolts on top of the middle frame for lifting. Fasten the middle frame to the base by using the bolts. Also, reconnect the V – belts, belt guard at the rear of the unit, and reconnect the electrical plugs located in the front control boxes.

If the steam coil and damper piston removed, lift the steam connection pipes facing the right side of the unit, and bolt the coil to the top of the middle frame using the # 3/8 – 16 bolts. Also, bolt the damper piston and solenoid valve to the top of the middle frame using the bolts provided. There are three (3) panels that cover the front, right side, and rear of the steam coil. Fasten these panels in position.

1. Reconnect the four (4) pin / socket connectors at the bottom of the right control box.
2. Reconnect the three (3) pin / socket connectors at the bottom of the left control box.
3. Reconnect the two (2) pin / socket connectors within the left control box.
4. Rewire the drive motor by inserting the three (3) black wires into the T1, T2, and T3 connections of the soft start.
5. Rewire the blower (impellor/fan) motor by inserting the three (3) blue wires into the T1, T2 and T3 connections of the blower contactor.

B. LOCATION REQUIREMENTS

The dryer requires 18 inches and 32 inches of space on each side of the dryer and 24 inches of space behind the unit for ease of maintenance. A minimum of 12 inches **must be** allowed between the top of machine dryer the ceiling. The dryer **must be** leveled for proper operation. If shimming is required put metal shims, which are the same size as the base feet under the base feet. The dryer **must be** lagged to the floor.

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

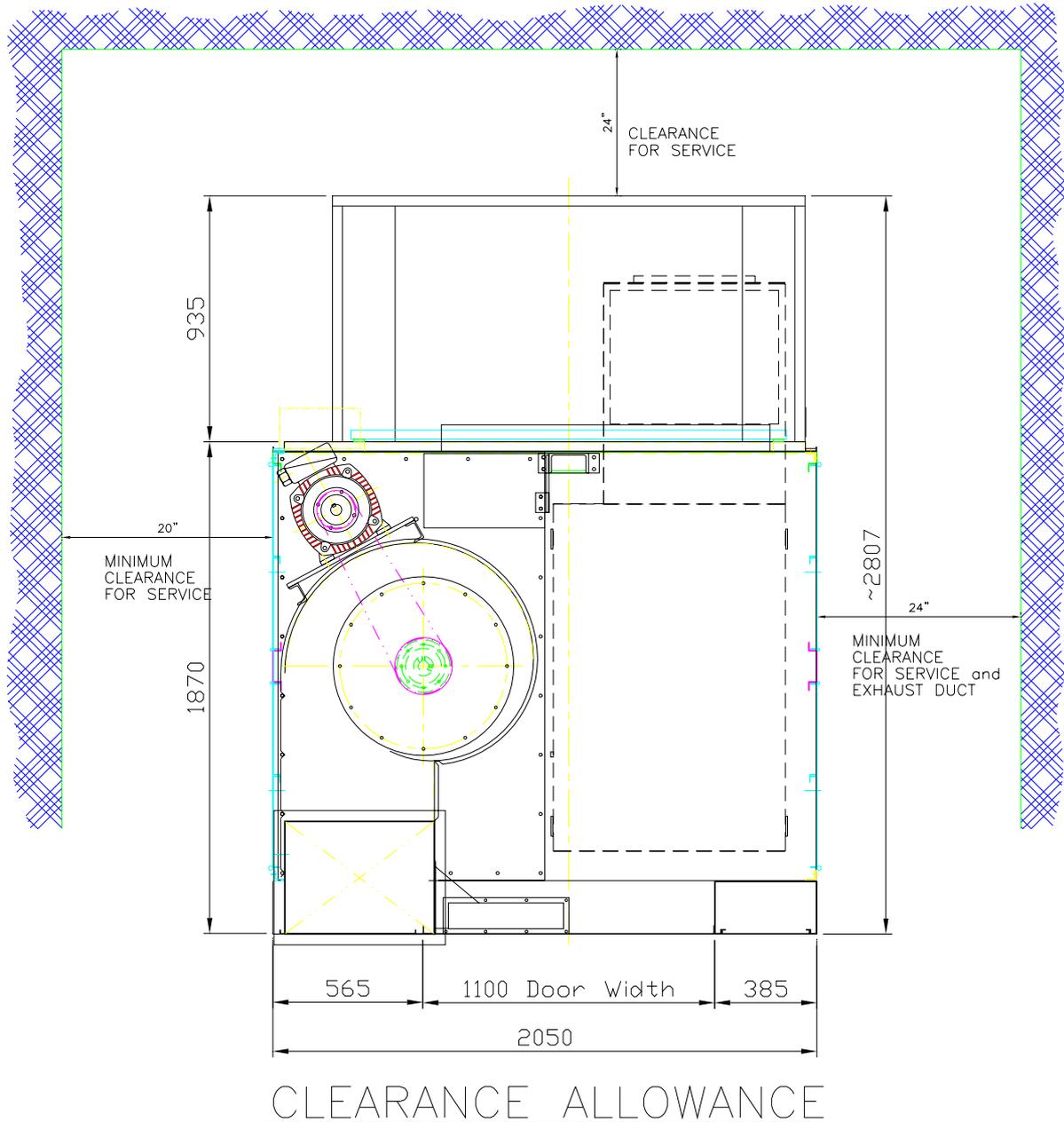


Figure.3-1 Clearance Allowance

C. FRESH AIR SUPPLY

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 problem 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. Airflow **must be** supplied to each dryer as specified in specification. As a general rule, an unrestricted air entrance from the outdoors (atmosphere) of a minimum of five (5) square feet is required for each gas dryer and a minimum of six (6) square feet is required for each steam dryer.

INSTALLATION PROCEDURES

To compensate for the use of registers or louver used over the opening, this make – up air area **must be** increased by approximately thirty – three (33) percent. 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.

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

IMPORTING: 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 motors and other dryer components.

NOTE: Component failure due to dry cleaning solvent fumes **VOIDS WARRANTY.**

D. EXHAUST REQUIREMENTS

General Exhaust Duct Work Information

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

The duct work **should be** laid out in such a way that the duct work travels as directly as possible to the outdoors with as few turns as possible. Single or independent dryer venting is recommended.

The internal dimensions of the dryer's rectangular exhaust vent work are 12 inches by 20 inches (30.5 cm. × 50.8 cm.). The plant's exhaust duct **must be** at least 20 inches (50.8 cm) in diameter of for a rectangular duct has cross sectional areas of 315 square inches (1,549 sq. cm.). The duct work from the dryer to the outside exhaust outlet **should not** exceed thirty (30) feet. The shape of the duct work is not critical so long as the minimum cross sectional area is provided. It is suggested that the use of 90° turns in ducting be avoided use 45° angles instead. The radius of the elbows should preferably be 1 – 1/2 times the width or diameter of the duct. Excluding basket / dryer elbow connections 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 duct work **must be** increased.

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

IMPORTANT: Exhaust back pressure measured by a manometer in the exhaust duct **should not** exceed 0.3 inches of water column.

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

INSTALLATION PROCEDURES

Outside Duct Work Protection

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

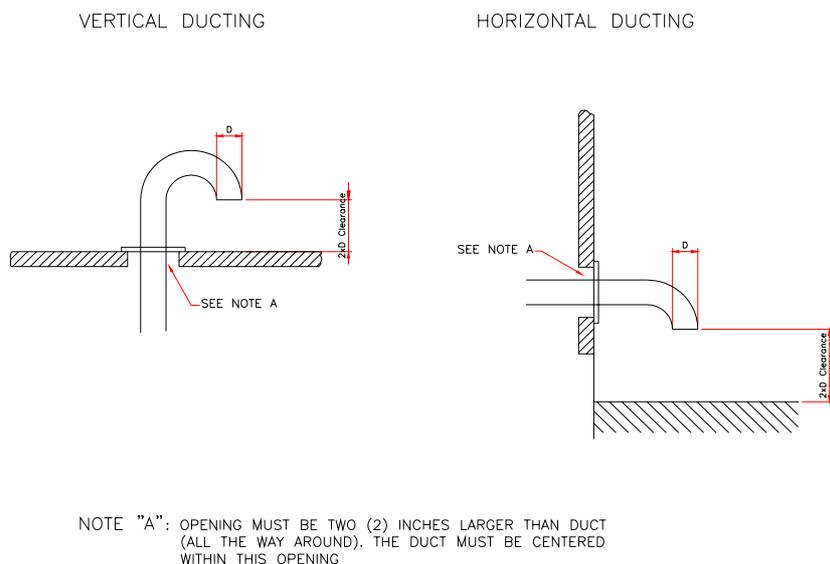


Figure.3-2 Outside Duct Work Connection

E. COMPRESSED AIR SUPPLY

A clean, dry, regulated supply of 80 psi compressed air **must be** supplied to the dryer. The connection size is 1/8 – inch N.P.T. No air filtering or pressures regulating devices are provided with the dryer.

For gas model the air line supply connection is made into the 1/8 – inch N.P.T. port on the air jet solenoid valve which located in the top of the dryer.

F. ELECTRIC INFORMATION

1. Electrical Requirements

It is your responsibility to have all electrical connections made by a properly licensed and competent electrician to assure that the electrical installation is adequate and conforms to local and state regulations or codes. In the absence of such codes, all electrical connections, material, and workmanship **must conform** to the applicable requirements of the National Electrical Code ANSI/NFPA NO. 70 – LATEST EDITION.

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 failures due to improper installation will **VOID WARRANTY**.

INSTALLATION PROCEDURES

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 ampere city and insulation in accordance with electric codes for making all service connections.

NOTE: The uses of aluminum wire will **VOID WARRANTY**.

2. Electrical Service Specifications

Table 3-1 Electrical Service Specification

Dryer Model 325 lbs 20Hp Blower, Reversing, 3Ø Motor				
Electrical Service Specifications (Per Dryer)				
NOTES:	A. Fuse ratings are dual element – time delay – current limiting, class RK1 or RK5 only .			
	B. Circuit breakers are thermal magnetic (industrial) type only . For others, calculate / verify correct breaker size according to appliance amp draw rating and type of breaker used.			
	C. Circuit breakers for 3Ø dryers must be 3 – pole type.			
Service Voltage (50/60Hz)	Phase	Approx. Amp Draw	Minimum Wire Size*	Circuit Breaker
200 – 240	3Ø	77.2	4 AWG / 25 sq. mm.	125
380 – 415	3Ø	46.0	6 AWG / 16 sq. mm.	60
440 – 480	3Ø	42.5	6 AWG / 16 sq. mm.	60

* AWG Stranded Type Wire for individual lengths longer than 100 feet.

The factory 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 panel inside the right side control cabinet.

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 power distribution block located in the left side control cabinet.

Providing local codes permit, power connections to the dryer can be made by the use of a flexible Under writers Laboratory listed chord / 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 serving each dryer **must be** provided.

INSTALLATION PROCEDURES

4. Grounding

Grounding (earth) connections **must be** provided and installed in accordance with state and local codes. In the absence of these codes, grounding **must conform** to applicable requirements of the National Electrical Code ANSI/NFPA NO. 70 – LATEST EDITION. 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 at the left side control cabinet.

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 non – metallic 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 (computer), an earth (zero) ground is required.

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

G. GAS INFORMATION

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

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

The dryer and its individual shut – off valve **must be** disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa). The dryer **must be** isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping 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 valves VOIDING THE WARRANTY.

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

1. Gas Supply

The gas dryer installation must meet the American National Standard: National Fuel Gas Code 2223.1 – 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

INSTALLATION PROCEDURES

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

The dryer **must be** connected to the type of heat/ gas indicated on the dryer data label affixed to the back of the dryer at the upper right hand corner. 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 the factory.

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

The input ratings shown on the dryer data label are for elevations of up to 2,000 feet, unless elevation requirements of over 2,000 feet 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 are made by changing each burner orifice. If this conversion is necessary, contact the distributor who sold the dryer or contact the Dryer factory.

2. Technical Gas Data

a. Gas Specifications

Table 3-2 Technical Gas Data

Description	Type of Gas	
	Natural (NG)	Liquid Propane (LPG)
Manifold Pressure	3.5 – 4.0 inches H ₂ O.	10.5 – 11.0 inches H ₂ O.
Inline Pressure	4.5 – 14.0 inches H ₂ O.	12.0 – 14.0 inches H ₂ O.
Drill Nozzle Size (Hole)	4 mm.	3 mm.
Inlet supply size (Minimum)	1.5 inches	1.5inches
Inlet connection	1.25 inches	1.25 inches

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

b. Gas Connections

Inlet supply size ----- 1.5 inch N.P.T. (minimum)

Inlet connection ----- 1.25 inch N.P.T.

Btu / hr input (per dryer) ---- 1,180,000 Btu / 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 4.5 inches and a maximum of 14.0 inches water column 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 11.0 inches water column. There is no regulator or

INSTALLATION PROCEDURES

regulation provided in an L.P. dryer. The water column pressure **must be** regulated at the source (L.P. tank) or an external regulator **must be** added to each dryer.

3. Piping / Connections

All components / materials **must conform** to National Fuel Gas Code Specifications or in CANADA, the Canadian Installation Codes (for General Installation and Gas Plumbing). It is important that gas pressure regulators meet applicable pressure requirements and that gas meters be rated for the total amount of all the appliance Btu's being supplied.

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

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

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

Consistent gas pressure is essential at **ALL** gas connections. It is recommended that a 1-inch pipe gas loop be installed in the supply line serving 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 of water column pressure.

IMPORTANT: A water column pressure of 3.5 to 4.0 inches for natural gas and 11.0 inches for L.P. dryers is required at the gas valve pressure tap of each dryer for proper and safe operation.

A 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 and L.P. gases **must be** used.

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

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

All components / materials **must conform** to National Fuel Gas Code Specifications ANSI 2223.1 – 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.

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

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

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

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 the manual can result in component failures, which will **VOID THE WARRANTY.**

NOTE: The dryer model 325 lbs is manufactured with a pneumatic (piston) damper system, which requires an external supply of air (80 psi ± 10 psi). See Steam Damper Air System Connections.

1. Steam Requirements, High Pressure

- a. Inlet ----- 2 inches supply line connection.
- b. Return --- 2 inches return line connection.

Table 3-3 Steam Requirements High Pressure

Operating Steam Pressure, High Pressure		
Maximum	125 Psig	8.79 kg. / sq. cm.
Minimum	100 Psig	7.03 kg. / sq. cm.
Heat Input (Normal Load)	35 Bhp	35 Bhp
Consumption (Approximate)	1,125 lbs / hr	511.4 kg. / hr

INSTALLATION PROCEDURES

2. Installation Instructions

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

IMPORTANT: Steam coil failure due to water hammer by wet steam **VOIDS 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 with a minimum 10 – inches riser. This will prevent any condensate from draining towards the dryer.
- b. The steam supply piping to the dryer **must include** a 12 – inch 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. Shut – off 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 at least 12 inches below steam coil as close to the coil as possible.
- f. A vacuum breaker **should be** installed in the piping. This will prevent the condensing steam from causing a vacuum inside the coil and possibly damaging the coil.
- g. The supply and return lines **should be** insulated. This will save energy and provide for the safety of the operator and maintenance personnel.
- h. Water pocket in the supply line, caused by low point, will provide wet steam to the coil possibly causing coil damage. All horizontal runs of steam supply piping **should be** pitched 1/4 – inch for every one (1) foot 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.

INSTALLATION PROCEDURES

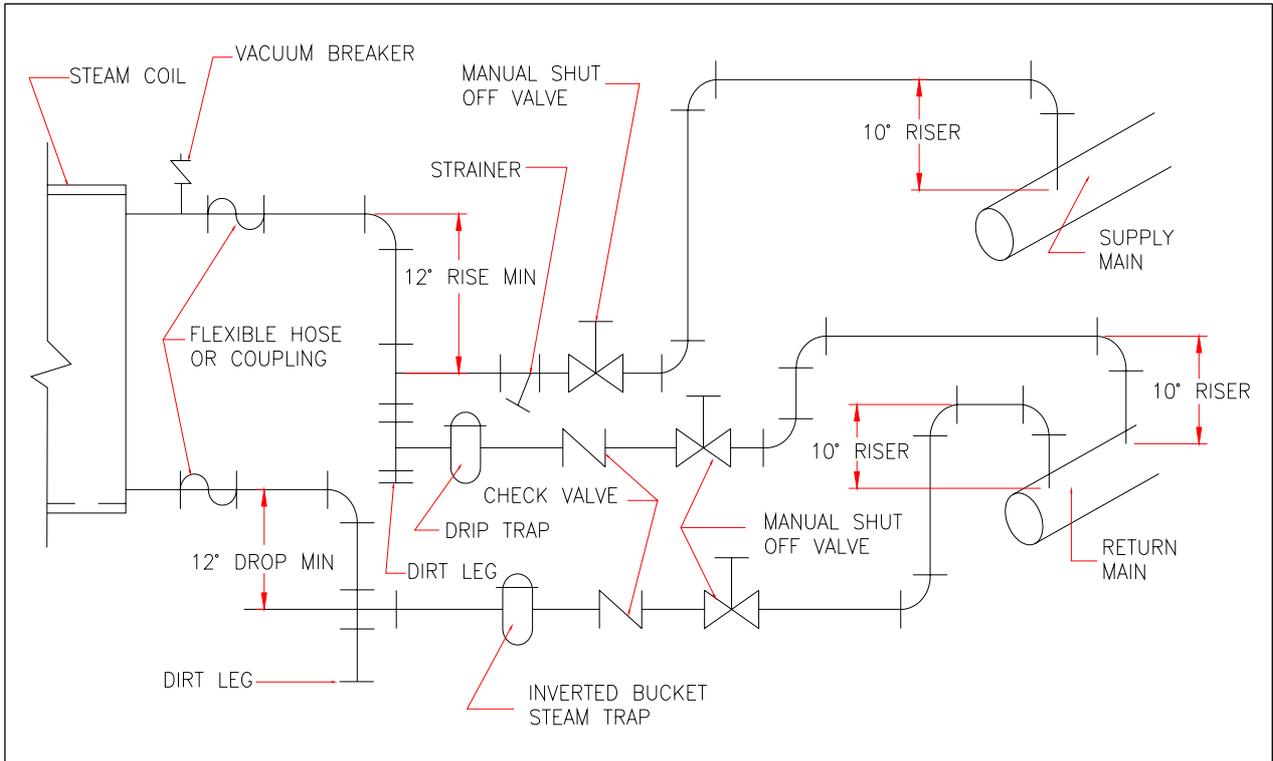


Figure.3-4 Steam Damper System

3. Steam Damper Air System Connections

The dryer model 325 lbs 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 on the outer top, at the rear left hand corner of the dryer.

a. Air Requirements

Table 3-4 Air Requirements

Compressed Air Supply	Air Pressure
Normal	80 psi
Minimum Supply	70 psi
Maximum Supply	90 psi

INSTALLATION PROCEDURES

b. Air Connection

Air connection to system size 10 mm.

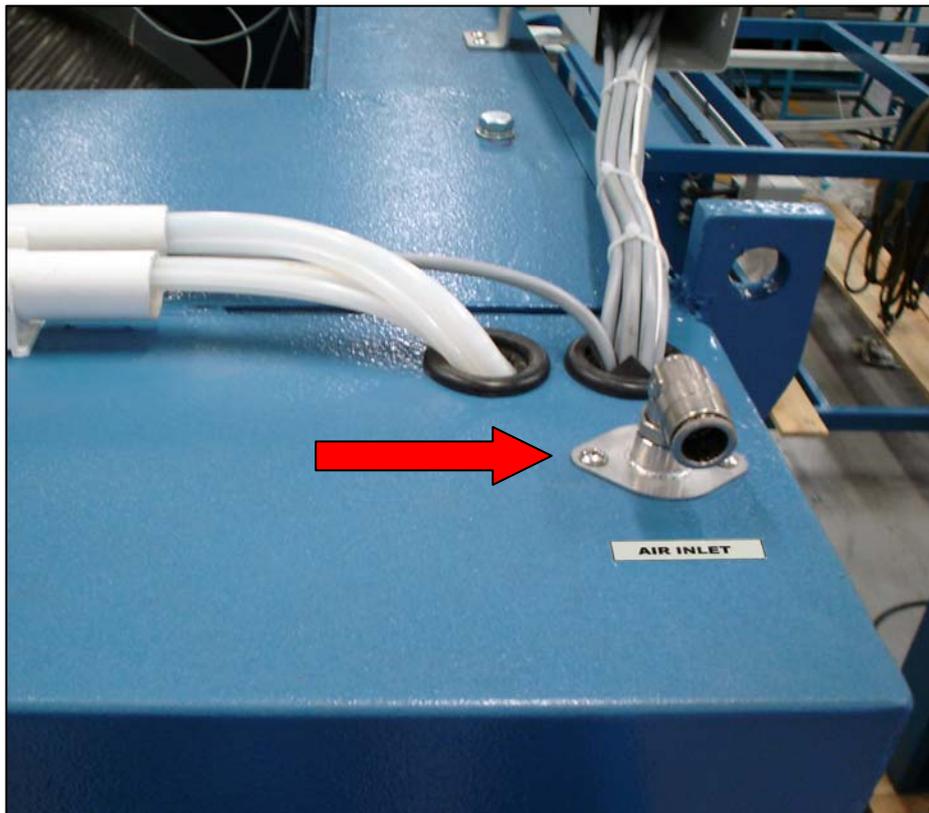


Figure.3-5 Air Connection

c. No air regulation is provided with the dryer

External regulation of 80 psi **must be** provided. It is suggested that a regulator / fitter 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.

4. Steam Damper System Operation

The dryer model 325 lbs steam dampers allow the coil to stay constantly charged eliminating repeated expansion and contraction. When the damper is opened, 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 (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.

INSTALLATION PROCEDURES

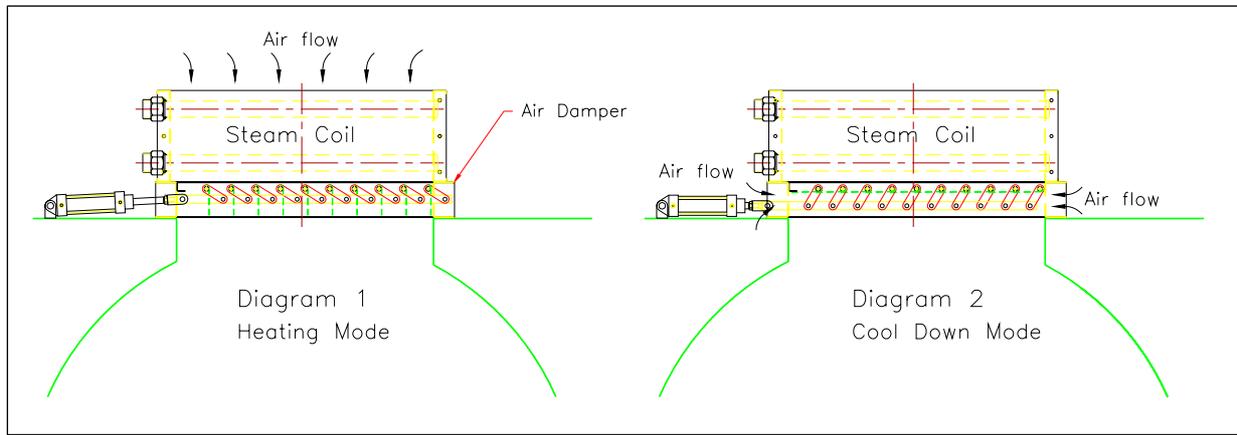


Figure.3-6 Steam Damper System Operation

5. Steam Damper Air Cylinder (Flow Control) Operation Adjustment

Damper operation was tested and adjusted prior to shipping at 80 psi. If damper air adjustment is necessary, locate flow control valve and make necessary adjustments.

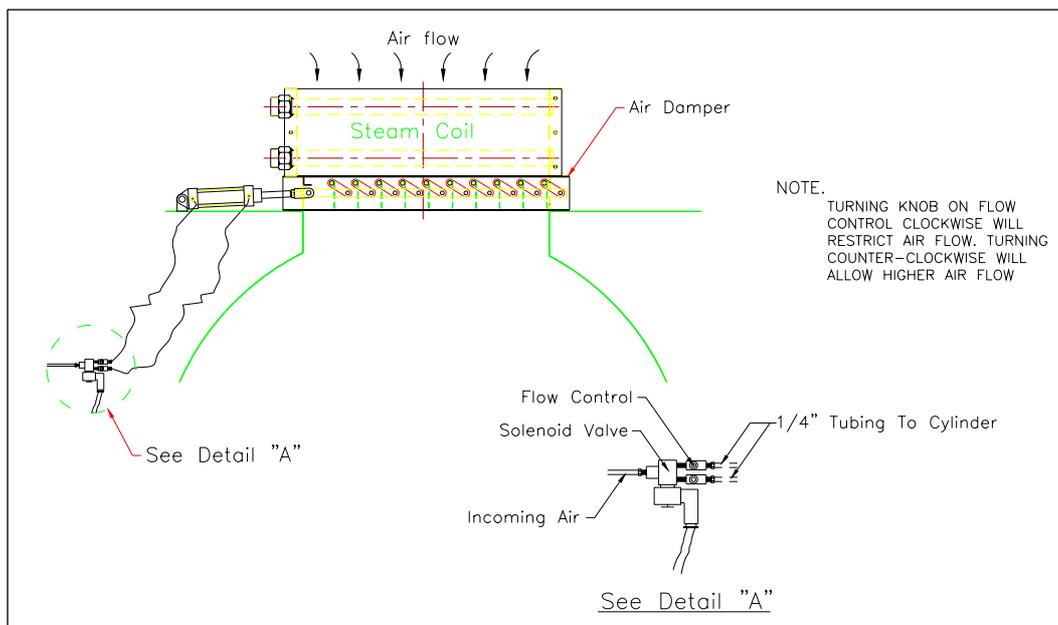


Figure.3-7 Steam Damper Air Cylinder Adjustment

I. PREPARATION FOR OPERATION/START-UP

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

1. Read and follow all **“caution”**, **“warning”** and **“direction”** labels attached to the dryer.
2. Check incoming supply voltage to be sure that it is the same as indicated on the dryer data label affixed behind the right control box door. In the case of 208V AC or 230/240V AC, the supply voltage **must match** the electric service **exactly**.
3. Check to be sure drive belts between idler pulley and motor pulley have been re – connected.

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

INSTALLATION PROCEDURES

4. Be sure all side and base panels and the belt guard are on the dryer.
5. Check all service doors to assure that they are closed and secured in place.
6. Be sure the 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.

7. Rotate the basket (tumbler / drum) by hand to be sure it moves freely.
8. Check bolts, nuts, screws, terminals, and fittings for security.
9. Check to insure air supply (80 psi) is connected to dryer.
10. Check to insure all steam shut – off valves are open.

SECTION 4

COMPONENT SYSTEM DESCRIPTIONS

A. BASKET/TUMBLER DRIVE SYSTEM

The basket (tumbler) is supported and driven by eight (8) 11 inches diameter drive wheels. Two (2) of these wheels are attached to 1 – 3/4 inches diameter idler shaft, while the other two (2) are attached to a 1 – 3/4 inches diameter drive shaft. Each of the wheels is fastened to the shafts by a keyless locking bushing. The Tran torque is made up of three pieces an inner collar, an outer sleeve, and a locking nut. The inner and outer elements have matching opposite tapers. As a result, when the nut is tightened, the Tran torque contracts onto the shaft and expands into the drive wheel locking the wheel onto the shaft. No key is required.

The idler and drive shafts are each supported by two (2) 1 – 3/4 inch diameter pillow block bearings. These bearings sit on slotted support channels and can be moved inward or outward by the adjustment bolts to raise or lower the basket (tumbler). The Drive shaft sticks out through the side of the dryer and has a sprocket No.60 – 2 Attached to it with taper lock bushing. This sprocket is connected to a helical geared motor.

The drive shaft is supported by two (2) 1 – 3/4 inch diameter pillow block bearings. These pillow blocks sit on a slotted platform, and they can be moved forward and back by loosening or tightening the bearing adjustment bolts. This movement is needed to maintain proper tension on the sprocket that run from the helical geared motor idler to the drive shaft.

The helical geared motor sits on an adjustable base so that the helical geared motor can be moved forward and back, allowing proper tension to be maintained on the sprocket.

B. BASKET/TIMBLER

The basket (tumbler) is made of 14 gauge stainless steel preferred panels, four (4) stainless steel ribs, and two (2) outer basket / tumbler rings made of rolled steel angle iron that has turned on a lathe for smoothness, The basket (tumbler) is a completely welded assembly so the perforated panels are not removable.

C. AIR BLOWER DRIVE SYSTEM

The impeller (fan) used in the dryer model 325 lbs is a 17.7 inches diameter forwardly inclined squirrel cage impeller (fan) wheel. That spins in a counterclockwise direction looking at the top of the blower housing.

The impeller / fan shaft is mounted in two (2) 1 – 3/4 inches diameter pillow block bearings, and the shaft is driven by two (2) B – section V – belts connected to the blower motor. The blower motor is mounted on an adjustable base. The motor position can be easily adjusted so that proper tension can be maintained on the V – belts.

D. SAFETY DEVICES

1. Load Door Switches

There are two (2) of these switches located under the main loading doors. These switches ensure that the doors are closed before the dryer can start. If the dryer is started when the load doors are open, the microprocessor controller (computer) LED display will show “door”

2. Lint Basket Switch

This switch ensures that the lint basket is closed before the dryer can start. This switch is located at the front of the dryer at the right side of lint basket. If the lint basket is open when the dryer is started, then the microprocessor controller (computer) LED display will show “door”

3. Basket (tumbler) Hi – limit Safety Thermostat

This disc temperature switch has a setting of 225 °F. It is located below the basket (tumbler) on the temperature sensor bracket, along side the computer sensor, and is an automatic reset type of switch. Access to this switch is gained by sliding / pulling the lint basket / drawer completely out of the dryer.

This switch backs up the computer sensor and in case of a computer sensor malfunction will prevent the basket’s (tumbler’s) temperature from becoming excessive. If these switch trips, the gas flow to the burner box will be shut down. However the basket (tumbler) will still rotate

4. Burner Box Hi – limit Safety Thermostat (GAS DRYERS ONLY)

This disc temperature switch has a setting of 330 °F. It is located on the right side of the burner box, and is an automatic reset type of switch. This switch ensures that there is proper airflow through the burner box. Upon a low airflow condition, which ensures may be caused by a clogged lint screen, excessively long or blocked exhaust duct, or improper make – up air, the temperature in the burner box will increase tripping this switch. This will shut off the gas flow to the burner box. However the basket (tumbler) will still run.

5. Sail Switch (GAS DRYERS ONLY)

The sail switch is located in the front top of the burner box. A sail switch consists of a round damper plate on a lever arm which is in contact with an electric switch. When the air blower comes on, it draws air through the gas burner. This creates a negative pressure inside the burner box, and this negative pressure pulls in the round damper and activates the sail switch. If there is an improper (low) airflow through the dryer, the sail switch damper will not pull in, preventing the heat from

Low airflow through the dryer will be caused by overly long or blocked exhaust ducting, lack of make – up air, or a clogged lint screen.

E. STEAM DAMPER ACTUATOR SYSTEM

This system consists of a hinged damper plate, pneumatic piston, and 24 volt solenoid valve with a needle valve to control the speed of the piston actuation.

On a call for heat, a 24 volt signal is applied to the 3 ways / 2 position solenoid valves. This signal switches the valve so that compressed air is sent to the piston. The piston rod extends, pushing the hinged steam damper plate to the open position. This allows room air to be drawn through the hot steam coil and then through the basket (tumbler).

When the temperature set point has been reached, the 24 volt signal is removed from the solenoid valve, so that the solenoid valve blocks the air supply to the piston and the air in the piston is bled to the atmosphere. The spring in the piston now retracts the piston rod, closing the steam

COMPONENT SYSTEM DESCRIPTIONS

damper. The steam damper plate now covers the steam coil and allows room air to bypass the coil before entering the basket (tumbler) for a rapid cool down.

The steam damper plate should open and close slowly and smoothly. This speed can be modulated by adjusting the needle valve knob. Turning the knob clockwise restricts the compressed airflow and slows down the steam damper movement. Counterclockwise adjustment speeds up the steam damper motion. Upon completion of adjustment, tighten the needle valve's locking nut.

SECTION 5

WARRANTY INFORMATION

A. WARRANTY

For a copy of the commercial warranty covering your particular dryer (s), contact the distributor from whom you purchased the equipment and request dryer warranty form.

NOTE: Whenever contacting the factory 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

All dryer or parts warranty claims or inquires **should be** addressed to the factory. To expedite processing, the following procedures **must be** followed:

1. No parts are to be returned to the factory without prior written authorization.

NOTE: A Return Material Authorization (RMA) is valid for only sixty (60) days from date of issue.

The RMA Issued by the factory, as well as any other correspondence pertaining to the returned part (s), **must be** included inside the package with the failed merchandise.

2. Each part **must be** tagged with the following information:

- **Model number** and **serial number** of the dryer from which part was removed.
- Nature of failure (be specific).
- Date of dryer installation.
- Date of part failure.

3. The company returning the part(s) must clearly note the complete company name and address on the outside of the package.

4. All returns **must be** properly packaged to insure that they are not damaged in transit. Damage claims are the responsibility of the shipper.

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

5. All returns **should be** shipped to the factory in such a manner that they are insured and a proof of delivery can be obtained by the sender.

6. Shipping charges are not the responsibility of Dryer. All returns **should be** "prepaid" to the factory. Any "C.O.D." or "COLLECT" returns will not be accepted.

SECTION 6

ROUTINE MAINTENANCE

A. CLEANING

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

WARNING: Lint from most fabrics is highly combustible. The accumulation of lint can create a potential fire hazard.

WARNING: Keep Dryer area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

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

Suggested Cleaning Schedule

After Every load

Clean the lint basket. A clogged lint basket will cause poor dryer performance. The lint basket is located in the lint drawer in the base of the dryer. Pull out the lint drawer, brush the lint off the lint basket, and remove the lint. Inspect lint screen and replace if torn.

Weekly

Open the hinged panels on each side of the basket (tumbler) section and remove any lint accumulation.

Slide the lint basket all the way out of the dryer and clean any lint accumulation off the temperature sensor bracket, which is located above the lint basket.

WARNING: To avoid the hazard of electrical shock, discontinue electrical supply to the Dryer.

Steam Dryers Only

Clean the steam coil lint screen located on top of the steam coil. (This may have to be done more frequently.)

Monthly

Apply a high – temperature grease to the four (4) 1 – 3/4 inch diameter tumbler drive shaft pillow block bearings. Use # 45 grease or equivalent.

Retighten set screws in the collars of the four (4) 1 – 3/4 inch diameter tumbler drive shaft bearings.

ROUTINE MAINTENANCE

Every 6 Months

Grease the two (2) 1 – 3 /4 inch pillow block bearings and the two (2) 1 – 3/4 inch pillow block bearings located in the dryer's base. Use # 45 grease or equivalent.

Grease the two (2) motors in the base with Chevron SR # 1 or 2 grease or equivalent unless otherwise stamped on the motor label.

Check V – belts for tightness and wear. Retighten or replace if required.

On steam dryers, clean steam coil fins. We suggest using compressed air and a vacuum cleaner with brush attachment.

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

Inspect and remove lint accumulation in customer furnished exhaust duct work system and from dryers internal exhaust ducting.

WARNING: The accumulation of lint in the exhaust duct work can create a **POTENTIAL FIRE HAZARD**.

WARNING: **DO NOT** obstruct the flow of combustion and ventilation air. Check customer furnished back draft dampers in exhaust duct work. Inspect and remove any lint accumulation which can cause damper to bind or stick.

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

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

B. ADJUSTMENTS

7 Day after Installation and Every 6 Months Thereafter

Inspect bolts, nuts, screws (bearing set screws), non – permanent gas connections (unions, shut – off valves, orifices, and grounding connections). 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, idler bearings, and tumbler bearings are permanently Lubricated, **NO LUBRICATION IS NECESSARY**.

D. THE AC DRIVE MAINTENANCE

Perform daily and periodic inspection to avoid trouble and keep reliable operation for a long time. Take care of the following during work.

SECTION 9

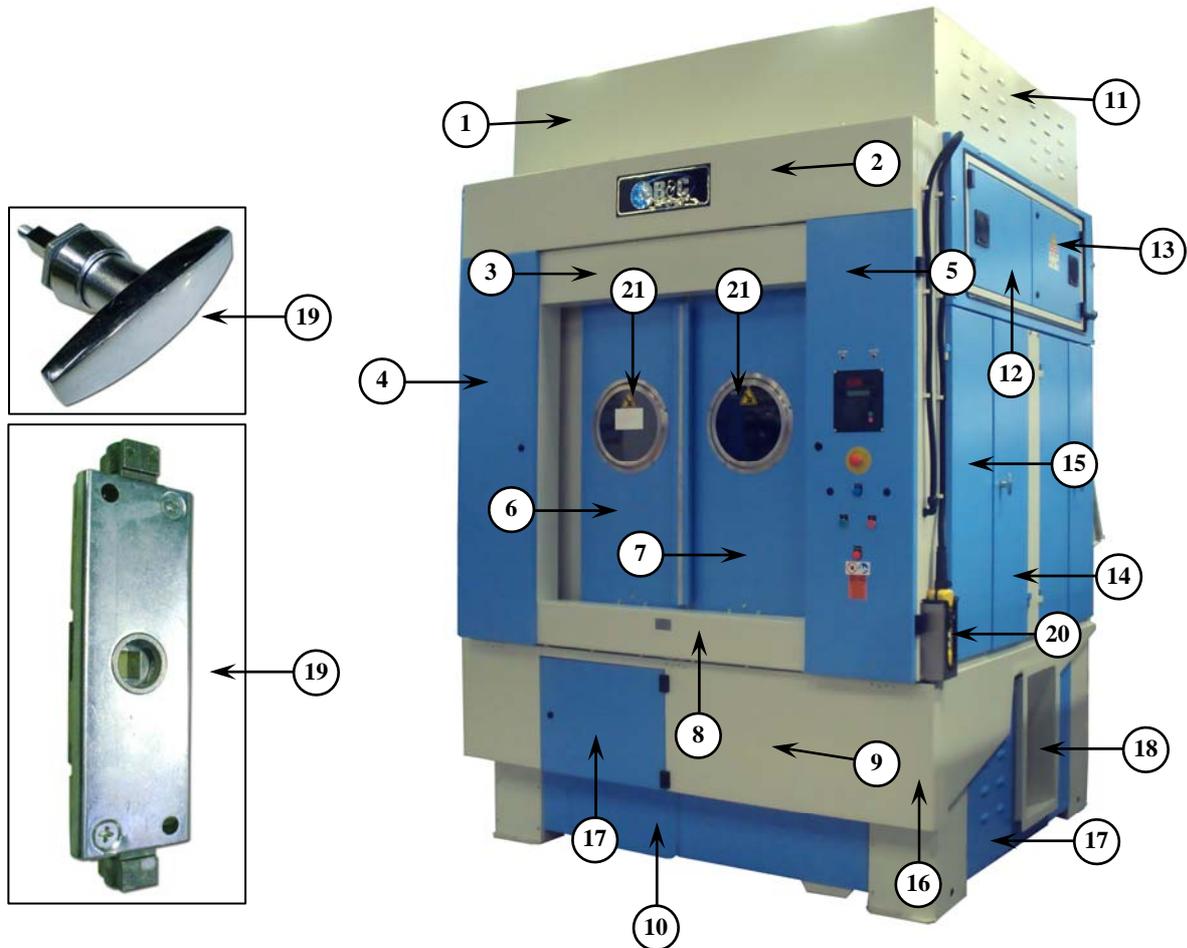
PARTS LIST

Ordering Spare Parts

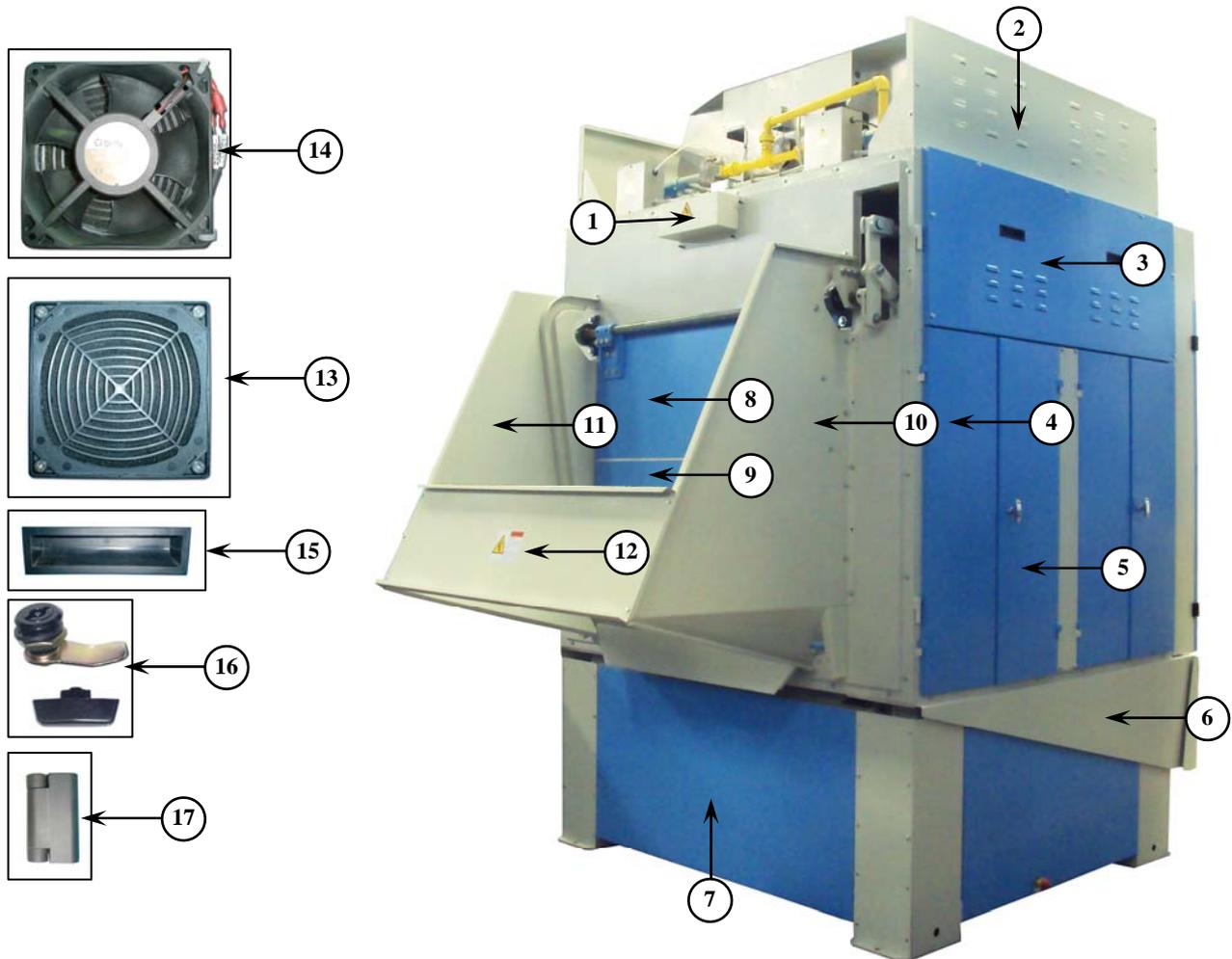
In case spare parts are needed, please include the following information with your order:

1. Model and serial number of the equipment (located on the name plate).
2. Part number, part name, and quantity required. Use this manual to facilitate ordering.
3. When ordering electrical motors, please include complete name plate data, motor manufacturer, and wiring diagram number.

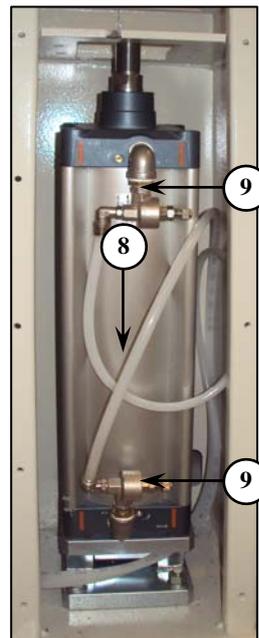
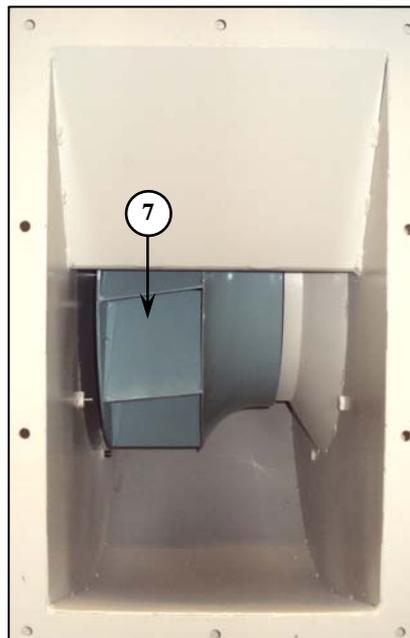
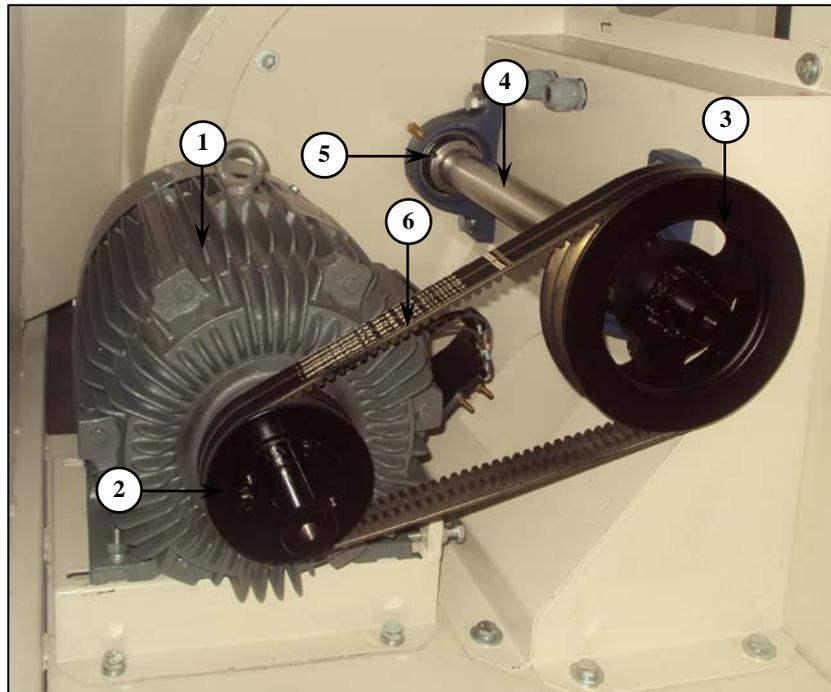
Our service and spare parts department consists of specially trained personnel to assist you with your needs. Please **do not** hesitate to call if we can be of any assistance to you.



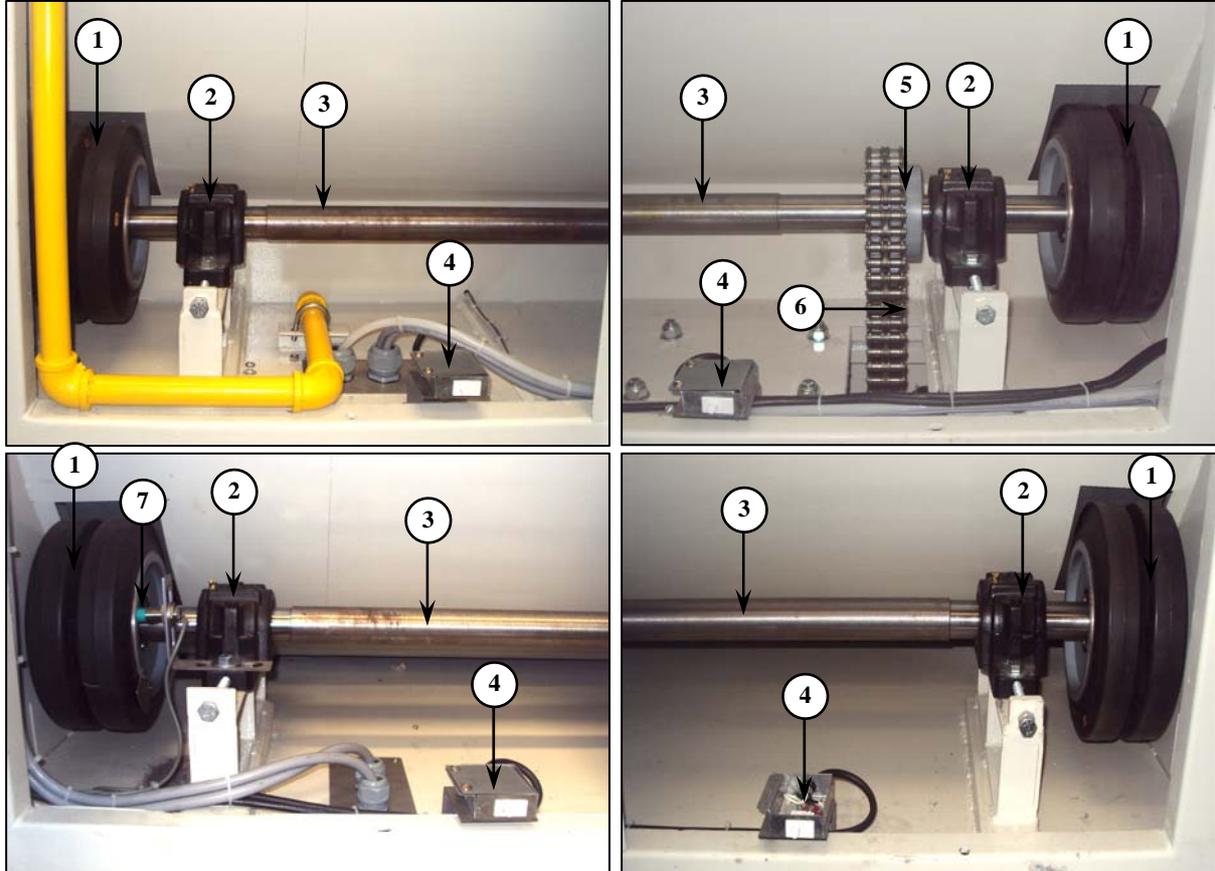
Item	Part No.	Qty.	Description
1	A2-S325-001	1	Front panel assembly, Top
2	A2-S325-002	1	Panel front, Top
3	A2-S325-003	1	Front top panel assembly, Door
4	A2-S325-005	1	Front control panel assembly, Right
5	A2-S325-006	1	Front control panel assembly, Left
6	A2-S325-007	1	Door dryer slide, Right
7	A2-S325-008	1	Door dryer slide, Left
8	A2-S325-004	1	Front lower panel assembly, Door
9	A2-S325-010	1	Panel, Tilt safety guard, Front
10	A2-S325-009	1	Filter panel assembly
11	A2-S325-012	2	Panel assembly, Top
12	A2-S325-049	1	Door control cover, Right
13	A2-S325-050	1	Door control cover, Left
14	A2-S325-015	4	Door panel assembly, Left
15	A2-S325-052	1	Panel, Tilt safety guard, Left (1Way Tilt)
16	A2-S325-052	1	Lower panel assembly, Right
17	A2-S325-036	1	Door, Lint filter access (Color : PU-0121)
18	A2-S325-018	1	Blower body
19	A0-A013-021	4	Latch, Lock
20	A0-E032-031	1	Pendant control stations
21	A2-S325-037	2	Door ring
	A0-A003-012	2	Door glass



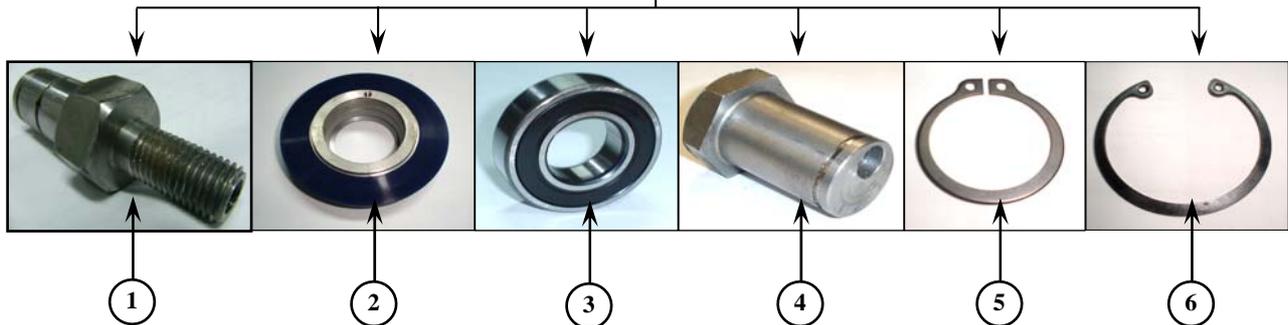
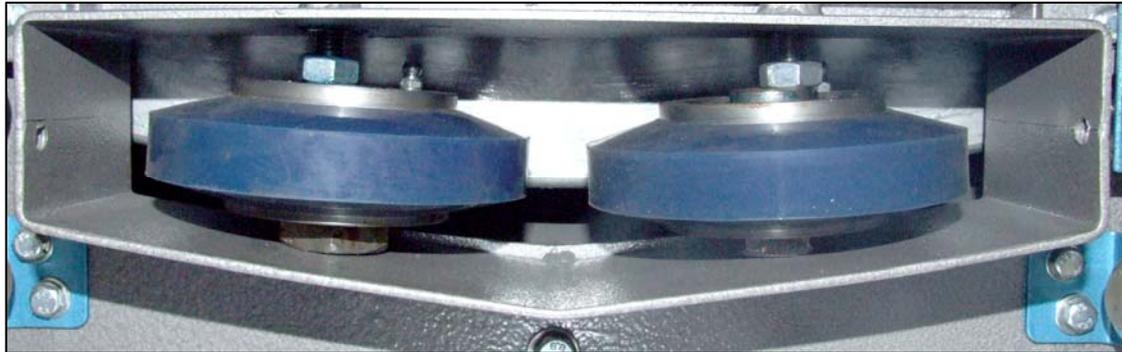
Item	Part No.	Qty.	Description
1	A2-S325-032	2	Wheel rubber box
2	A2-S325-012	2	Panel assembly, Top
3	A2-S325-011	2	Top panel assembly, Right (Color : PU-0121)
4	A2-S325-014	4	Door panel assembly, Right (Color : PU-0121)
5	A2-S325-015	4	Door panel assembly, Left (Color : PU-0121)
6	A2-S325-051	1	Panel, Tilt safety guard, Right (1Way Tilt)
7	A2-S325-024	1	Lower Panel assembly, Rear (Color : PU-0121)
8	A2-S325-327	1	Rear door (Top) (Color : PU-0121)
9	A2-S325-328	1	Rear door (Low) (Color : PU-0121)
10	A2-S325-324	1	Rear shuttle - Right panel
11	A2-S325-325	1	Rear shuttle - Left panel
12	A2-S325-326	1	Rear shuttle - Main panel
13	A0-E012-009	1	Filter, Cooling fan
14	A0-TSEN01-061	1	Fan, Cooling
15	A0-A086-005	8	Door handle
16	A0-A013-002	4	Door lock
17	A0-A029-005	10	Hinge, Off set panel door



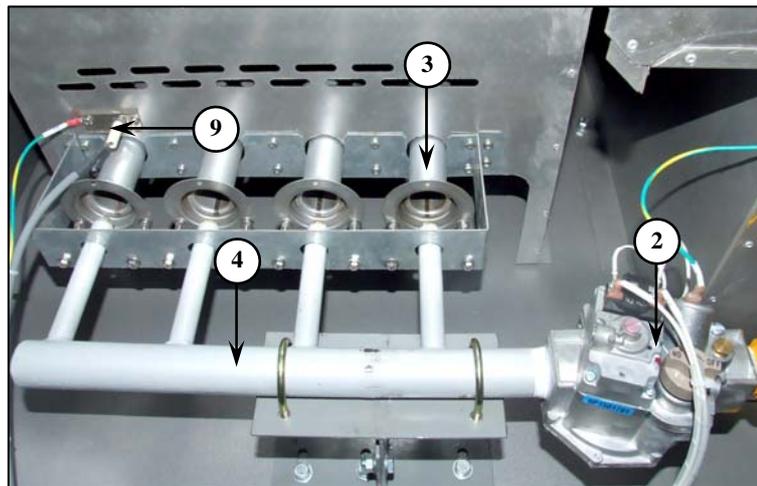
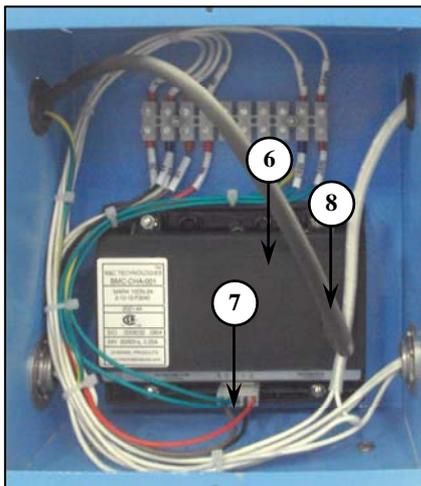
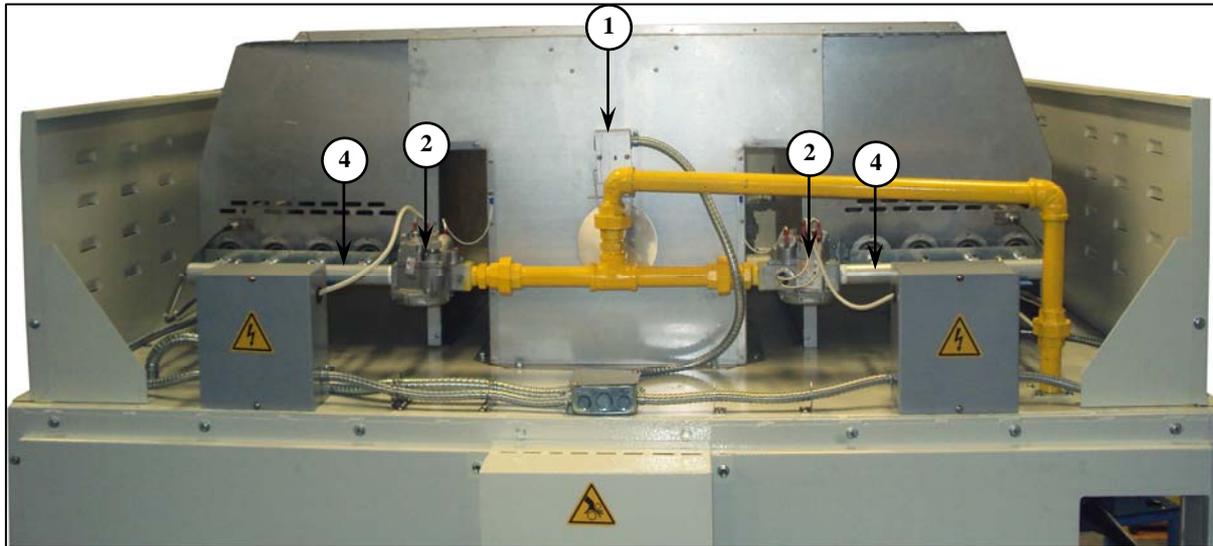
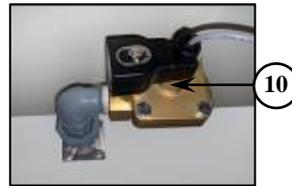
Item	Part No.	Qty.	Description
1	A0-E008-939	1	Blower motor
2	A0-M008-045	1	Motor sheave suction fan
3	A0-M008-044	1	Idle sheave suction fan
	A0-M009-078	1	Sleeve idle sheave suction fan
4	A0-M011-024	1	Drive shaft blower
5	A0-A004-043	2	Y-Bearing
	A0-A006-125	2	Adapter sleeve
6	A0-A002-089	2	V-Belt motor to suction fan
7	A0-M003-014	1	Wheel suction fan
8	A0-TSP01-383	4	Air cylinder
9	A0-P006-016	4	Silencer 3/8"



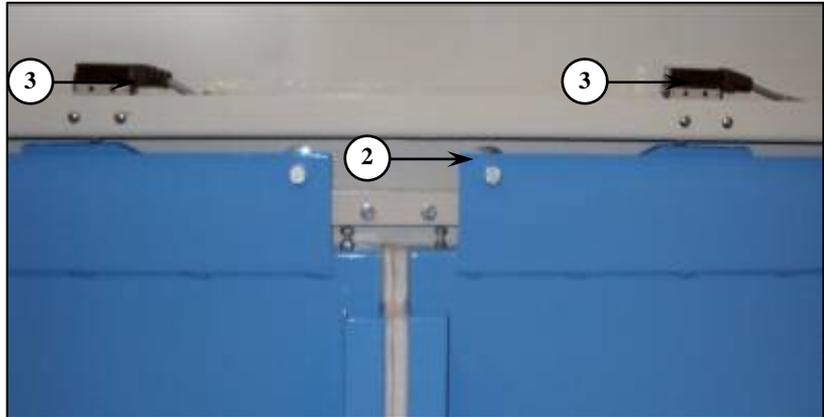
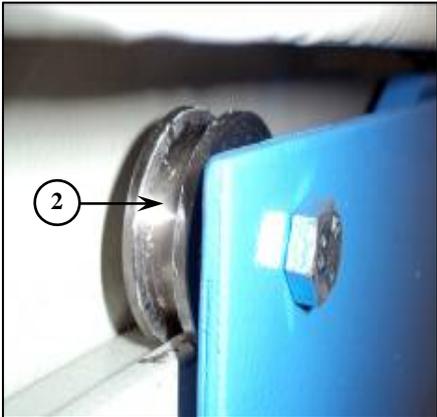
Item	Part No.	Qty.	Description
1	A0-A016-002	8	Rubber basket wheel
	A0-A054-003	4	Hub basket wheel (Double)
	A0-M009-071	4	Sleeve hub wheel basket
2	A0-A005-031	4	Seal TSN510L
	A0-A007-020	8	Bearing housing 2FXR9/90
	A0-A007-009	4	Housing
	A0-A004-161	4	Bearing
	A0-A006-135	4	Adapters sleeves H310
3	A0-M011-022	2	Drive shaft basket
4	A0-E015-011	4	Door over travel switch
5	A0-M001-030-04	1	Shaft double sprocket
	A0-M009-071	1	Sleeve shaft double sprocket
6	A0-A051-020	1	Double chain
7	A0-E023-003	1	Proximity sensor



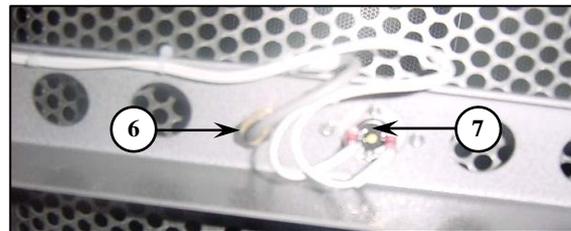
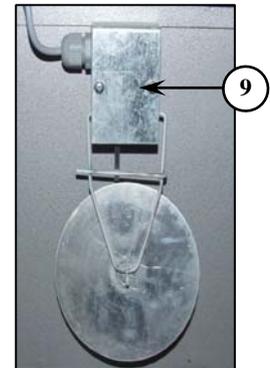
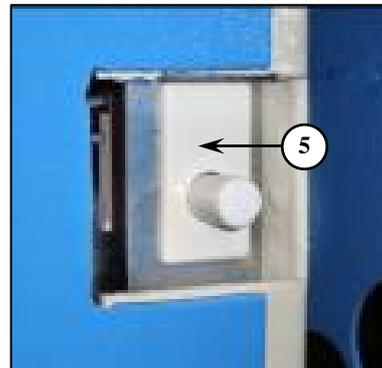
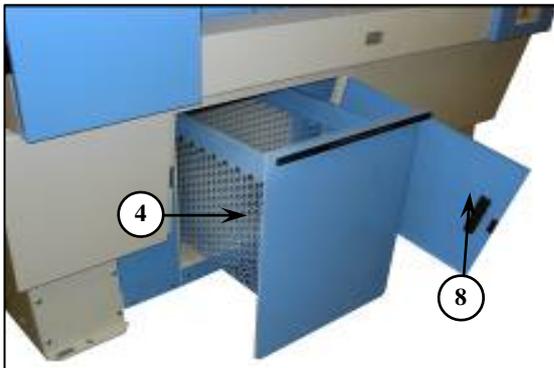
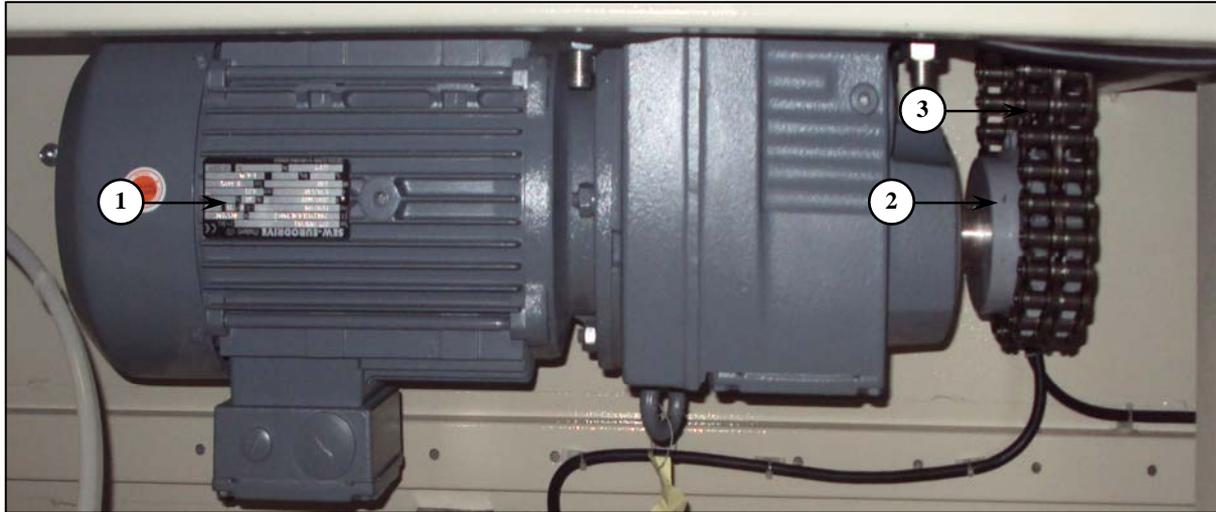
Item	Part No.	Qty.	Description
1	A2-SDI1-015	1	Guide Wheel Mounting Shaft For Non Std Machines (Option)
2	A0-A016-004	1	Wheel, Guide Silicone basket
3	A0-A004-147	1	Ball Bearing for guide wheel
4	A2-SDI1-014	1	Guide wheel Mounting Shaft for Std machine (STD)
5	A0-A041-010	1	Circlip Outer for guide wheel shaft NO 25
6	A0-A042-026	1	Circlip Inner for guide wheel NO 50



Item	Part No.	Qty.	Description
1	A2-SDE1-027	1	Sail switch complete assembly (Cabinet, Heater)
	A0-E014-010	1	Safety switch (For burner)
2	A0-E018-003	2	Gas valve 1"
3	A0-A089-005	8	Gas burner tube
4	A2-S325-069	2	Gas manifold
	A0-A105-002-02	8	Gas nozzle 1/4", Hole 4mm.
5	A0-E016-013	2	Thermostat for safety high temp.
6	A0-E020-001	2	Ignition control
7	A0-E020-203	2	Wiring harnesses
8	A0-E019-006	2	Wire, Suppression
9	A0-E019-005	2	Spark probe
10	A0-E040-008	1	Solenoid water valve 1"



Item	Part No.	Qty.	Description
1	A2-S325-330	1	Basket
2	A2-S325-067	4	Front door support wheel
	A0-A004-036	4	Ball bearing
3	A0-E011-033	2	Door safety switch

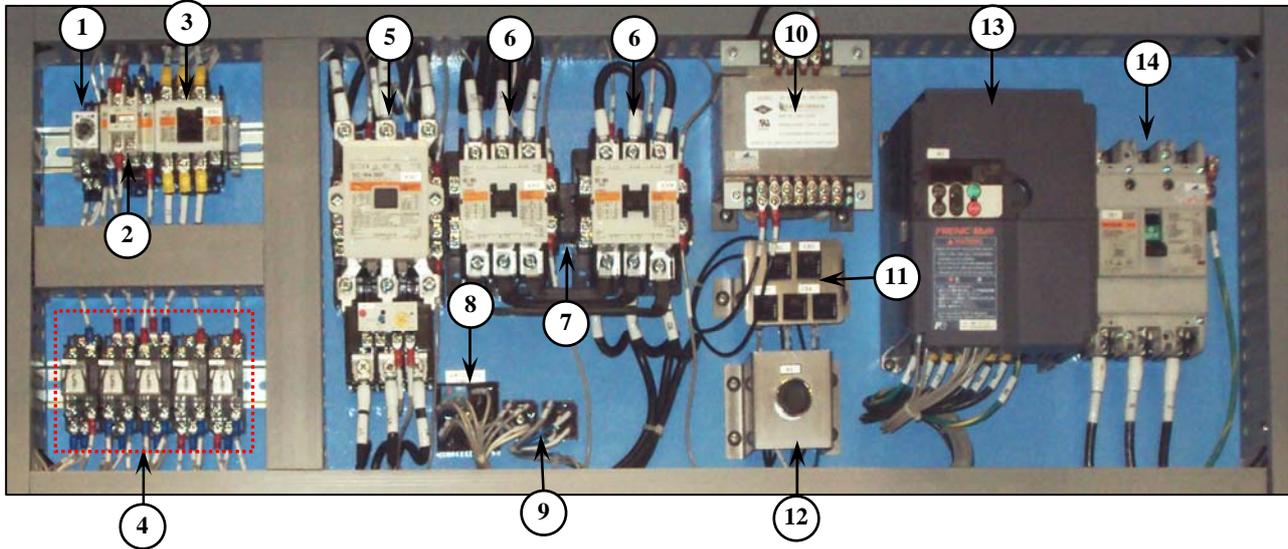


Item	Part No.	Qty.	Description
1	A0-E008-947	1	Main drive motor 4 Kw. 50 Hz.
2	A0-A051-020	1	Double chain
3	A0-M001-029	1	Motor double sprocket
	A0-M009-078	1	Sleeve motor double sprocket
4	A0-A043-009	1	Lint filter cloth
	A2-S325-009	1	Filter panel assembly (Color : PU-0121)
5	A0-E015-011	1	Door over travel switch
6	A0-E027-010	1	Temperature probe
7	A0-E016-011	1	Thermostat L-200°F
8	A2-S325-036	1	Door, Lint filter access (Color : PU-0121)
9	A2-SDE1-027	1	Sail switch complete assembly (Cabinet, Heater)
	A0-E014-010	1	Micro switch

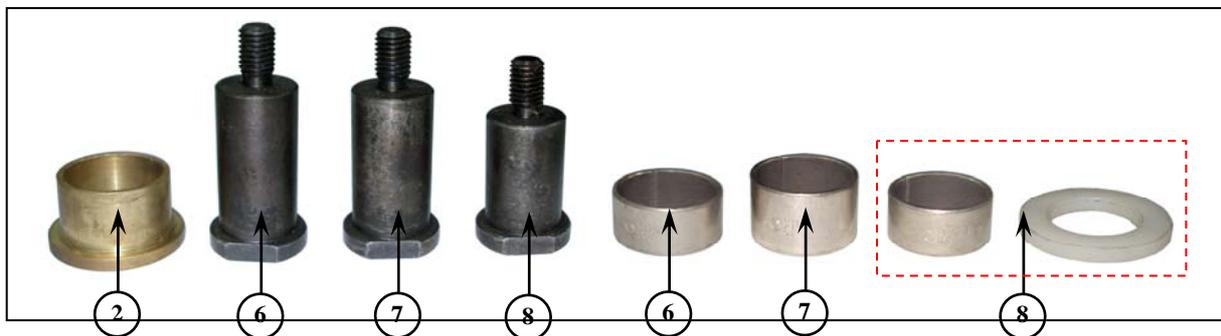
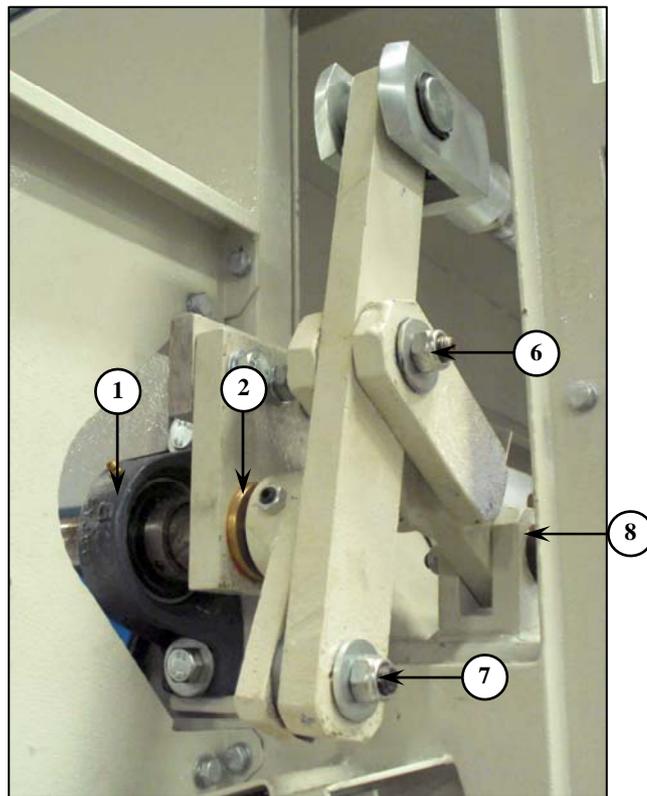
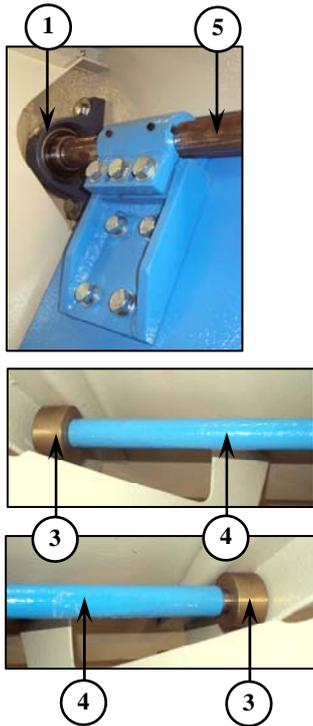


Item	Part No.	Qty.	Description
1	A0-E032-018	1	Emergency Stop
2	A0-E035-021	1	Pilot light (Blue)
3	A0-E032-007	1	Pushbutton, Red
4	A0-E032-009	1	Pushbutton, Green
5	A0-E059-005	2	Lamp, Indicator, Red (for Gas type)
6	A0-E007-168	1	Mobics M720 Dryer Controller

Item	Part No.	Qty.	Description
8	A0-A090-043	1	Decal Mobics
7	A0-A150-001	1	Gasket Froan rubber size150mmX165mmX1.5mm
9	A0-E007-109	1	M721 controller
10	A0-E027-055	1	Temperature probe with cable PT100
11	A0-X022-120	1	Lithium battery"
12	A0-TSEN01-1470	1	M703B Sersor Probe cable long 3.2 m 4 P
13	A0-TSEN01-1471	1	M703A PCB connect Sersor Probe
14	A0-E035-019	1	Pilot light
15	A0-P005-137	1	Air solenoid
16	A0-P004-022	1	Air regulator



Item	Part No.	Qty.	Description
1	A0-E031-025	1	Timer relay
	A0-E031-026	1	Socket timer relay
2	A0-E009-075	1	Relay coil 24VAC.
	A0-E024-011	1	Auxiliary contact
3	A0-E004-070	1	Magnetic contactor coil 24VAC.
4	A0-E009-082	5	Relay coil 24VAC.
	A0-E009-083	5	Socket relay
5	A0-E004-075	1	Magnetic contactor coil 24VAC.
	A0-E025-060	1	Overload
6	A0-E004-076	2	Magnetic contactor coil 24VAC.
7	A0-E036-006	1	Mechanical interlock
8	A0-E031-019	1	Watch dog timer relay
9	A0-E050-002	2	Bridge rectifier
10	A0-E006-032	1	Transformer 250VA
11	A0-E010-035	1	Circuit breaker 2A
	A0-E010-034	3	Circuit breaker 3A
	A0-E010-029	1	Circuit breaker 6A
12	A0-E032-033	1	Push button switch for sprinkle test
13	A0-E001-143	1	Inverter 5HP, 230V. 3PH.
14	A0-E010-083	1	Circuit breaker 50A



Item	Part No.	Qty.	Description
1	A0-A004-271	2	Y-Bearing UCP207
2	A2-SDI1-021	1	Brass bushing (ID 35 mm. OD 40 mm., Dai 35, L 27 mm.)
3	A2-S225-030-2	2	Roller 38x20x15.02 mm.
4	A2-S225-031-2	1	Shaft lower basket door, Rear (Color : PU-0121)
5	A2-S225-028-2	1	Shaft for upper basket door, Rear
6	A2-SDI1-022	1	Shoulder bolt (Dai 28 mm. L 52 mm.)
	A0-TSA01-253	2	Bushing (Dub 28.15)
7	A2-SDI1-023	1	Shoulder bolt (Dai 28 mm. L 50 mm.)
	A0-TSA01-254	3	Bushing (Dub 28.20)
8	A2-SDI1-024	1	Shoulder bolt (Dai 28 mm. L 40 mm.)
	A0-TSA01-253	2	Bushing (Dub 28.15)
	A2-SDI1-025	1	Super lean bushing (OD 50 mm. ID 28 mm. L 5 mm.)