Manual Number: MCDGAI01
Edition (ECN): 2025374

Installation
6450TG1L/R (RA)

PELLERIN MILNOR CORPORATION **Post Office Box 400, Kenner, Louisiana 70063–0400, U.S.A.**

Contents

Figures

Tables

1 Safety

BMP720097 / 25142 BRUUUM01.1 0000229985 B.2 E.2 3/31/25, 3:24 PM Released

PELLERIN MILNOR CORPORATION
LIMITED STANDARD WARRANTY

We warrant to the original purchaser that MILNOR machines including electronic hardware/software (hereafter referred to as "equipment"), will be free from defects in material and workmanship for a period of one year from the date of shipment (unless the time period is specifically extended for certain parts pursuant to a specific MILNOR published extended warranty) from our factory with no operating hour limitation. This warranty is contingent upon the equipment being installed, operated and serviced as specified in the operating manual supplied with the equipment, and operated under normal conditions by competent operators.

Providing we receive written notification of a warranted defect within 30 days of its discovery, we will—at our option—repair or replace the defective part or parts, EX Factory (labor and freight specifically NOT included). We retain the right to require inspection of the parts claimed defective in our factory prior to repairing or replacing same. We will not be responsible, or in any way liable, for unauthorized repairs or service to our equipment, and this warranty shall be void if the equipment is tampered with, modified, or abused, used for purposes not intended in the design and construction of the machine, or is altered in any way without MILNOR's written consent.

Parts damaged by exposure to weather, to aggressive water, or to chemical attack are not covered by this warranty. For parts which require routine replacement due to normal wear—such as gaskets, contact points, brake and clutch linings, belts, hoses, and similar parts—the warranty time period is 90 days.

We reserve the right to make changes in the design and/or construction of our equipment (including purchased components) without obligation to change any equipment previously supplied.

ANY SALE OR FURNISHING OF ANY EQUIPMENT BY MILNOR IS MADE ONLY UPON THE EXPRESS UNDERSTANDING THAT MILNOR MAKES NO EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE OR ANY OTHER WARRANTY IMPLIED BY LAW INCLUDING BUT NOT LIMITED TO REDHIBITION. MILNOR WILL NOT BE RESPONSIBLE FOR ANY COSTS OR DAMAGES ACTUALLY INCURRED OR REQUIRED AS A RESULT OF: THE FAILURE OF ANY OTHER PERSON OR ENTITY TO PERFORM ITS RESPONSIBILITIES, FIRE OR OTHER HAZARD, ACCIDENT, IMPROPER STORAGE, MIS-USE, NEGLECT, POWER OR ENVIRONMENTAL CONTROL MALFUNCTIONS, DAMAGE FROM LIQUIDS, OR ANY OTHER CAUSE BEYOND THE NORMAL RANGE OF USE. REGARDLESS OF HOW CAUSED, IN NO EVENT SHALL MILNOR BE LIABLE FOR SPECIAL, INDIRECT, PUNITIVE, LIQUIDATED, OR CONSEQUENTIAL COSTS OR DAMAGES, OR ANY COSTS OR DAMAGES WHATSOEVER WHICH EXCEED THE PRICE PAID TO MILNOR FOR THE EQUIPMENT IT SELLS OR FURNISHES.

THE PROVISIONS ON THIS PAGE REPRESENT THE ONLY WARRANTY FROM MILNOR AND NO OTHER WARRANTY OR CONDITIONS, STATUTORY OR OTHERWISE, SHALL BE IMPLIED.

WE NEITHER ASSUME, NOR AUTHORIZE ANY EMPLOYEE OR OTHER PERSON TO ASSUME FOR US, ANY OTHER RESPONSIBILITY AND/OR LIABILITY IN CONNECTION WITH THE SALE OR FURNISHING OF OUR EQUIPMENT TO ANY BUYER.

BMP720097/25142

BNUUUM01 / 2019342 BNUUUM01 0000250121 B.3 1/2/20, 2:14 PM Released

1.1 How to Get the Necessary Repair Components

BNUUUM01.C01 0000250120 A.3 B.2 B.3 1/2/20, 2:14 PM Released

You can get components to repair your machine from the approved supplier where you got this machine. Your supplier will usually have the necessary components in stock. You can also get components from the Milnor® factory.

Tell the supplier the machine model and serial number and this data for each necessary component:

- The component number from this manual
- The component name if known
- The necessary quantity
- The necessary transportation requirements
- If the component is an electrical component, give the schematic number if known.
- If the component is a motor or an electrical control, give the nameplate data from the used component.

To write to the Milnor® factory:

Pellerin Milnor Corporation
Post Office Box 400
Kenner, LA 70063-0400
UNITED STATES

Telephone: 504-712-7775
Fax: 504-469-9777
Email: parts@milnor.com

BNUUUU02 / 2023296 BNUUUU02 0000158094 G.2 7/20/23, 10:58 AM Released

1.2 Trademarks

BNUUUU02.R01 0000158093 B.2 G.2 F.2 7/20/23, 10:57 AM Released

These words are trademarks of Pellerin Milnor® Corporation and other entities:

Table 1. Trademarks

AutoSpot™	GreenFlex™	MilMetrix®	PulseFlow®
CBW®	GearTrace™	MilTouch™	RAM Command™
Drynet™	GreenTurn™	MilTouch-EX™	Recirc*ONE*®
E-P Express®	Hydro-cushion™	MilRAIL®	RinSave®
E-P OneTouch®	Mentor®	Miltrac™	SmoothCoil™

Table 1 Trademarks (cont'd.)

E-P Plus®	Mildata®	MilVision™	Staph Guard®
Gear Guardian®	Milnor®	PBW™	

BNDUUS06 / 2021243 BNDUUS06 0000349888 B.2 6/8/21, 4:02 PM Released

1.3 Safety — Pass Through Dryer

BNDUUS06.C01 0000349887 A.2 B.2 6/8/21, 4:02 PM Released

1.3.1 Safety Alert Messages—Internal Electrical and Mechanical Hazards

BNDUUS01.C03 0000239033 A.2 A.3 B.2 1/2/20, 1:40 PM Released

The following are instructions about hazards inside the machine and in electrical enclosures.

WARNING: Electrocution and Electrical Burn Hazards — Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Do not unlock or open electric box doors.
- Do not remove guards, covers, or panels.
- Do not reach into the machine housing or frame.
- Keep yourself and others off of machine.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.

WARNING: Entangle and Crush Hazards — Contact with moving components normally isolated by guards, covers, and panels, can entangle and crush your limbs. These components move automatically.

- Do not remove guards, covers, or panels.
- Do not reach into the machine housing or frame.
- Keep yourself and others off of machine.
- Know the location of all emergency stop switches, pull cords, and/or kick plates and use them in an emergency to stop machine motion.

CAUTION: Burn Hazards — Contact with hot goods or machine components can burn you.

- Do not remove guards, covers, or panels.
- Do not reach into the machine housing or frame.

1.3.2 Cylinder and Processing Hazards

BNDUUS02.C01 0000239083 A.2 B.2 1/2/20, 1:40 PM Released

1.3.3 Safety Alert Messages—Unsafe Conditions

BNDUUS03.C01 0000239106 A.2 B.2 1/2/20, 1:40 PM Released

1.3.3.1 Hazards Resulting from Inoperative Safety Devices

BNDUUS03.C03 0000239117 A.2 A.3 B.2 1/2/20, 1:40 PM Released

WARNING: Multiple Hazards — Operating the machine with an inoperative safety device can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.

- Do not tamper with or disable any safety device or operate the machine with a malfunctioning safety device. Request authorized service.

WARNING: Electrocution and Electrical Burn Hazards — Electric box doors—Operating the machine with any electric box door unlocked can expose high voltage conductors inside the box.

- Do not unlock or open electric box doors.

WARNING: Entangle and Crush Hazards — Guards, covers, and panels—Operating the machine with any guard, cover, or panel removed exposes moving components.

- Do not remove guards, covers, or panels.

WARNING: Fire Hazards — Sprinkler and overheat control—Failure to supply water to the sprinkler or to open the manual valve, or failure of the overheat control, eliminates the machine's internal fire protection. Normally the machine stops and water is sprayed into the cylinder if outlet temperature reaches 240 degrees Fahrenheit (116 degrees Celsius).

- Verify the overheat control system and plant fire extinguishers are functioning before operating the machine. Be sure to turn water supply on after testing.
- Keep the manual shut-off test valve open except when testing.
- Test or inspect the system after every automatic actuation, or monthly.

WARNING: Explosion and Fire Hazards — Gas train—Operating the machine with damaged or malfunctioning gas valves, safeties, controls, or piping can permit gas to escape into the fire box, cylinder, or laundry room. The enclosure will explode if gas comes in contact with any spark or flame.

- Do not operate the machine with any evidence of damage or malfunction.
- Stop the machine immediately and alert authorities if you smell gas.

1.3.3.2 Hazards Resulting from Damaged Mechanical Devices

BNDUUS03.C04 0000239116 A.2 A.3 B.2 1/2/20, 1:40 PM Released

WARNING: Multiple Hazards — Operating a damaged machine can kill or injure personnel, further damage or destroy the machine, damage property, and/or void the warranty.

- Do not operate a damaged or malfunctioning machine. Request authorized service.

1.3.4 Careless Use Hazards

BNDUUS03.C05 0000239115 A.2 B.2 1/2/20, 1:40 PM Released

1.3.4.1 Careless Operation Hazards—Vital Information for Operator Personnel (see also operator hazards throughout manual)

BNDUUS03.C06 0000239114 A.2 A.3 B.2 1/2/20, 1:40 PM Released

WARNING: Multiple Hazards — Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.

- Do not tamper with or disable any safety device or operate the machine with a malfunctioning safety device. Request authorized service.
- Do not operate a damaged or malfunctioning machine. Request authorized service.
- Do not attempt unauthorized servicing, repairs, or modification.
- Do not use the machine in any manner contrary to the factory instructions.
- Use the machine only for its customary and intended purpose.
- Understand the consequences of operating manually.

CAUTION: Goods Damage and Wasted Resources — Entering incorrect cake data can cause improper processing, routing, and accounting of batches.

- Understand the consequences of entering cake data.

1.3.4.2 Careless Servicing Hazards—Vital Information for Service Personnel (see also service hazards throughout manuals)

BNDUUS03.C07 0000239113 A.2 A.3 B.2 1/2/20, 1:40 PM Released

WARNING: Electrocution and Electrical Burn Hazards — Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.

- Abide by the current OSHA lockout/tagout standard when lockout/tagout is called for in the service instructions. Outside the USA, abide by the OSHA standard in the absence of any other overriding standard.

WARNING: Entangle and Crush Hazards — Contact with moving components normally isolated by guards, covers, and panels, can entangle and crush your limbs. These components move automatically.

- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.
- Abide by the current OSHA lockout/tagout standard when lockout/tagout is called for in the service instructions. Outside the USA, abide by the OSHA standard in the absence of any other overriding standard.

WARNING: Confined Space Hazards — Confinement in the cylinder can kill or injure you. Hazards include but are not limited to panic, burns, poisoning, suffocation, heat prostration, biological contamination, electrocution, and crushing.

- Do not enter the cylinder until it has been thoroughly purged, flushed, drained, cooled, and immobilized.

BNDGUI02 / 2025304 BNDGUI02 0000772390 B.2 7/23/25, 1:32 PM Released

1.4 Installation Tag Guidelines

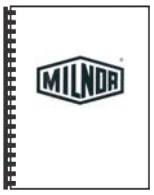
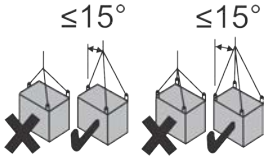
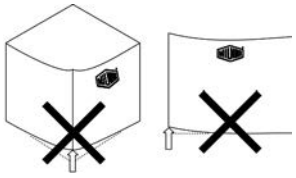
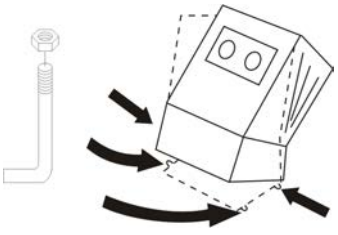
BNDGUI02.R01 0000772389 A.3 B.2 A.4 7/23/25, 1:32 PM Released

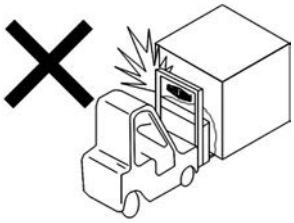
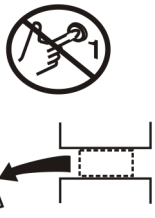
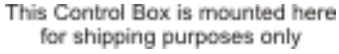
5050TG1L	5050TG1R	6450TG1L	6450TG1R	6458TG1L	6458TG1R	6464TG1L
6464TG1R	7676TG1L	7676TG1R	8282TG1L	8282TG1R	DRYVAC02	DRYVAC03

NOTICE: This information may apply to models in addition to those listed above. It applies to paper tags. It does not apply to the vinyl or metal safety placards, which must remain permanently affixed to the machine and replaced if no longer readable.

Paper tags on the machine provide installation guidelines and precautions. The tags can be tie-on or adhesive. You can remove tie-on tags and white, adhesive tags after installation. Yellow adhesive tags must remain on the machine.

The following entries explain the installation tags. Each entry includes: 1) the tag illustration, 2) the tag part number at the bottom of the tag, and 3) the meaning of the tag.

Symbol	Explanation
	Read the manuals before proceeding. This symbol appears on most tags. The machine ships with safety, operator, and routine maintenance guides for customer use. Milnor dealer manuals for installing, commissioning, and servicing the machine are also available from the Milnor Parts department.
	B2TAG88005: This carefully built product was tested and inspected to meet Milnor performance and quality standards by (identification mark of tester).
	B2TAG94078: Do not forklift here; do not jack here; do not step here—whichever applies.
	B2TAG94079: Rig for crane lifting (either 3-point or 4-point, depending on the number of lifting eyes provided) using a steep angle on the chains (closer to vertical than horizontal).
	B2TAG94081: Motor must rotate in this direction. On single motor washer-extractors and centrifugal extractors, the drive motor must turn in this direction during draining and extraction. This tag is usually wrapped around a motor housing. If the motor turns in the opposite direction when the machine is first tested, the electrical hookup is incorrect and must be reversed as explained in the schematic manual.
	B2TAG94084: Do not lift from one corner of the machine, as this can cause the frame to rack, damaging it.
	B2TAG94101: The dryer has a rearward center of gravity and must be firmly anchored to the floor at all four corners.

Symbol	Explanation
	B2TAG94102 shown—others similar: Match up the components with this number. These tags are used to pair up electrical or hose connections between major components of a machine shipped disassembled.
	B2TAG94118: Do not strike shipping container during fork-lifting. Fragile components inside.
	B2T2001017: Foam seal must be installed here before dryers are bolted together.
	B2T2002013: Do not start the machine until shipping restraints are removed. This tag will appear on the outside of the machine to alert you to the presence of internal shipping restraints. A tag will also appear on the restraint to help identify it. Most, but not all shipping restraints display the color red. Some shipping restraints are also safety stands. Do not discard these.
	B2T2007003: Install the shuttle rail in accordance with this instruction and the installation manual.
	B2T2014022: This control box is mounted here for shipping purposes only. (Only used on 64" and 76" gas and steam dryers with a blower inverter.)

BPDUUM07 / 2022484 BPDUUM07.1 0000538339 A.3 B.2 11/23/22, 9:26 AM Released

Guards and Covers

4 Sheets

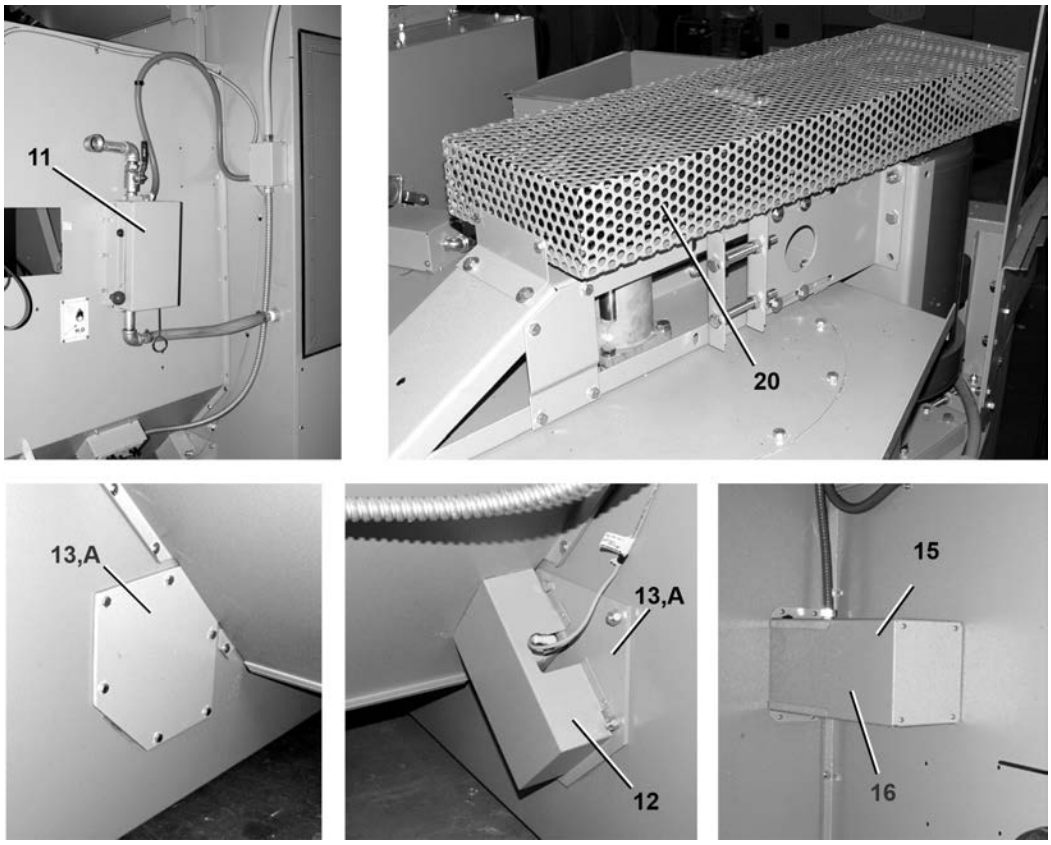
6450, 6458, 6464, 7676, 8282 Dryers

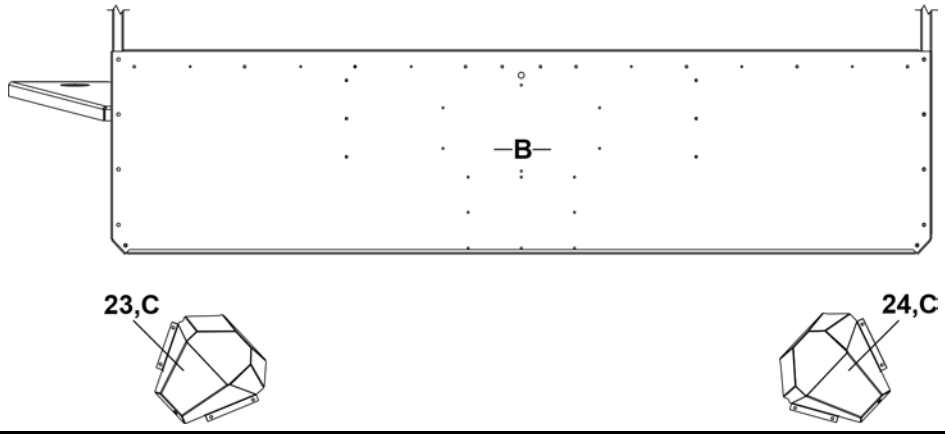
NOTE: Dryer side panels are only supplied on Stand-Alone Dryers and used on the side opposite the blower.

Guards and Covers

4 Sheets

6450, 6458, 6464, 7676, 8282 Dryers





Legend

A . . . Standard shroud bearing cover
B . . . Short shroud
C . . . Short shroud bearing

Guards and Covers

4 Sheets

6450, 6458, 6464, 7676, 8282 Dryers

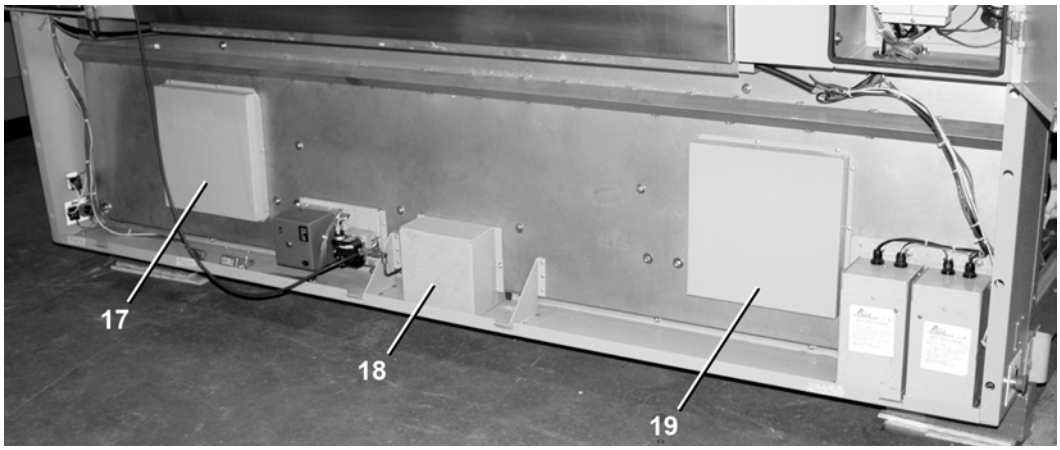


Table 2. Parts List—Guards and Covers

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.				
Used In	**Item**	**Part Number**	**Description/Nomenclature**	**Comments**
			Reference Assemblies	
	A			6450 Dryers
	B			6458 Dryers
	C			6464 Dryers
	E			7676 Dryers
	F			8282 Dryers
			Components	
B	3	A77SC001	6458 LOWER SIDE COVER ASSY	
C	3	A77SC010	6464 LOWER SIDE COVER ASSY	
E	3	A79SC001	7272 LOW CVR BLOWER SIDE	
B	4	07 71397	6458 HOUSE SIDE PLATE UPPER	
AC	4	07 72029	6464 HOUSE SIDE PLATE UPPER	
E	4	07 85397	7676 HOUSE SIDE PLATE	
F	4	07 88073	8282 HOUSE SIDE PANEL	
B	5	07 71435	6458 LINT SIDE LOWER COVER	
AC	5	07 72028	6464 LOWER SIDE COVER	
E	5	07 85397	7676 HOUSE SIDE PLATE	
F	5	07 88073	8282 HOUSE PANEL	
ABC	6	W7 71205A	64" DRYER FRONT COSMETIC LOWER DOOR WELD	
E	6	W7 85205	7676 FRONT COSMETIC LOWER DOOR HINGED WLMT	
F	6	W7 88102	8282 FRONT COSMETIC LOWER DOOR HINGED WLMT	
all	7	W3 D1356L	WELD:DOOR 6458TG1 DRYER LF LV	

Guards and Covers

4 Sheets

6450, 6458, 6464, 7676, 8282 Dryers

Table 2 Parts List—Guards and Covers (cont'd.)

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

Used In	Item	Part Number	Description/Nomenclature	Comments
A	8	07 71201A	6464 FRONT COSM UPPER	
BC	8	07 71201W	6458 FRONT COSM UPPER	
E	8	07 85201	7676 COSMETIC UPPER MID COVER	
F	8	W7 88111	8282 FRONT COSMETIC UPPER MID COVER WLMT	
all	9	03 D1356R	DOOR: 6458TG1L DRYER HV	
ABC	10	07 71204W	6458 COSM LOWER THRESHOLD	
EF	10	07 81204	7272 FRONT COS THRESHOLD	
all	11	07 50428	SPRINKLER VALVE COVER DRYER	
ABC	12	07 71317	6458 REAR BEARING COVER	STANDARD SHROUD
E	12	07 81317	64,72,76" DRYER REAR BEARING COVER	STANDARD SHROUD
F	12	07 88125	8282 REAR BEARING COVER	STANDARD SHROUD
all	13	07 81280	64-76" DRYER SUPPORT BEAR MTG PLT	
all	15	07 71306	6458 TEMP PROBE BOX	
all	16	07 71307	6458 TEMP PROBE BOX COVER	
ABCE	17	07 71231	COVER BRG NO HOLE LF END	
F	17	07 88110	8282 FRONT BEARING COVER	
ABCE	18	W7 50129	64" DRYER GUIDE ROLLER COVER	
F	18	07 88117	8282 GUIDE ROLLER COVER	
all	19	07 71231A	COVER BRG NO HOLE RT END	
A	20	A7 50268C	6450 LF BLWR BELT GUARD ASMBLY - ANGLED	LEFT
A	20	A7 50268CA	5050 LF BLOWER BELT GUARD- ANGLED ASMBLY	RIGHT
BC	20	A77BA002	64" DRYER BLOWER BELT GUARD ASSY	
EF	20	A79BA002	72/76/82"DRYER BLOWER BELT GUARD ASSY	
all	21	27A108A	HINGE LIFTOFF LH EMKA#1056-U62 BLACK	
all	22	27A108B	HINGE LIFTOFF RH EMKA#1056-U63 BLACK	
E	23	W7 71317B	50-76" DRYER BRNG CVR SHORT-LEFT	SHORT SHROUD
F	23	A82BC001	8282 BRNG COVER SHORT ASSEMBLY	SHORT SHROUD
E	24	W7 71317D	50-76" DRYER BRNG CVR SHORT-RIGHT	SHORT SHROUD
F	24	A82BC001	8282 BRNG COVER SHORT ASSEMBLY	SHORT SHROUD
all	25	60A114	SELF-GRIP GASKET EMKA 1011-17	

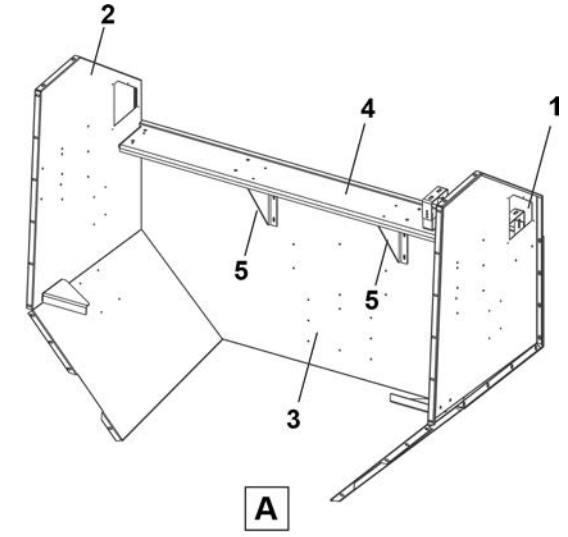
BPDD6M01 / 2022502 BPDD6M01.1 0000544522 B.2 A.5 12/7/22, 8:03 AM Released

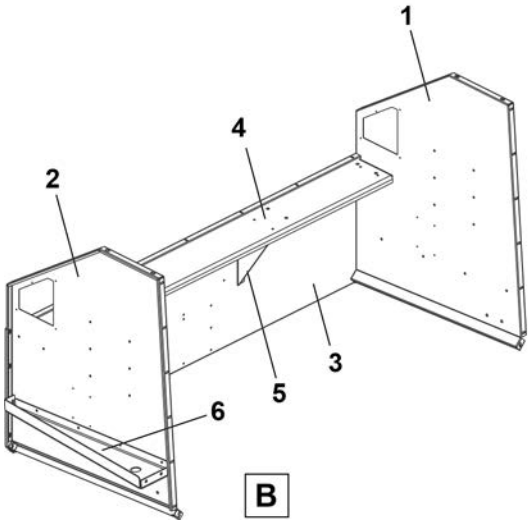
Unload Shrouds

3 Sheets

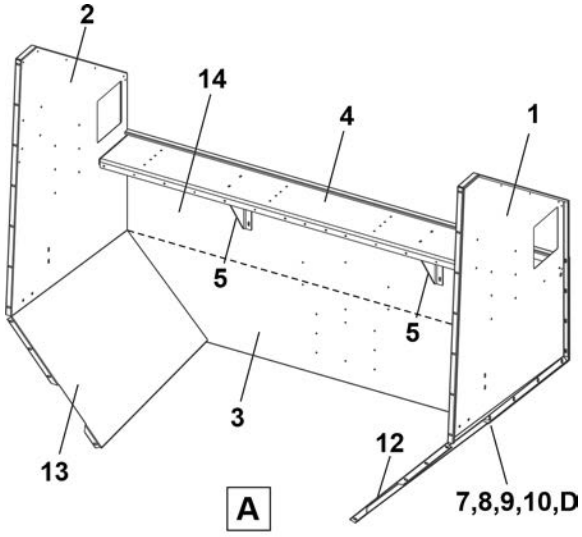
6458TG1L/R,TS1L/R; 6464TG1L/R,TS1L/R; 7676TG1L/R; 8282TG1IL/R

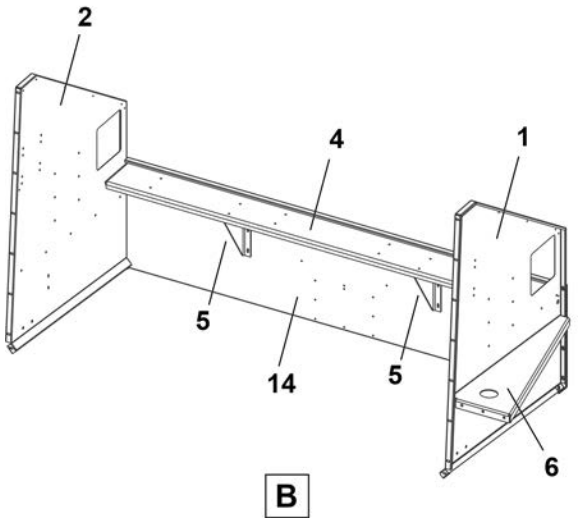
6458TG1L/R, TS1L/R; 6464TG1L/R, TS1L/R





7676TG1L/R; 8282TG1L/R





Legend

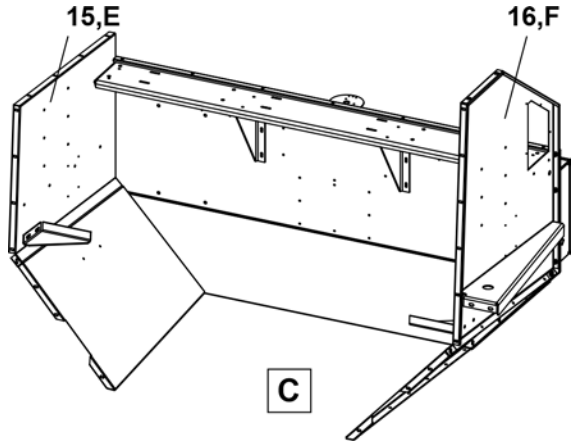
A . . . Standard shroud
B . . . Short shroud
D . . . Typical hardware all shrouds

Unload Shrouds

3 Sheets

6458TG1L/R,TS1L/R; 6464TG1L/R,TS1L/R; 7676TG1L/R; 8282TG1IL/R

6458TG1L/R, TS1L/R; 6464TG1L/R, TS1L/R



Legend

C . . . Shroud for vacuum loading
E . . . Blower side
F . . . Firebox side

Table 3. Parts List—Unload Shrouds

Used In	Item	Part Number	Description/Nomenclature	Comments
Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.				
			Reference Assemblies	
	A			6458/6464 STANDARD SHROUD
	B			7676 STANDARD SHROUD
	C			6458/6464 SHORT SHROUD
	D			7676 SHORT SHROUD
	E			8282 STANDARD SHROUD
	F			8282 SHORT SHROUD
	G			6458/6464 VACUUM LOADING SHROUD
			Components	
A	1	07 71150A	6458 UNLOAD SHROUD RIGHT	
B	1	07 71505C	64" DRYER SHROUD SHORT CHAMFER - RT	
C	1	07 85150	7676 UNLOAD SHROUD RIGHT	
D	1	07 81505	7272 UNLOAD SHROUD RT SHORT	
EF	1	07 88123	8282 SHROUD SHORT CHAMFER-RT	
A	2	07 71150B	6458 UNLOAD SHROUD LEFT	
B	2	07 71505D	64" DRYER SHROUD SHORT CHAMFER-LF	
C	2	07 85151	7676 UNLOAD SHROUD LEFT	
D	2	07 81505A	7272 UNLOAD SHROUD LF SHORT	

Unload Shrouds

3 Sheets

6458TG1L/R,TS1L/R; 6464TG1L/R,TS1L/R; 7676TG1L/R; 8282TG1IL/R

Table 3 Parts List—Unload Shrouds (cont'd.)

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

Used In	Item	Part Number	Description/Nomenclature	Comments
EF	2	07 88123A	8282 SHROUD SHORT CHAMFER-LT	
A	3	07 71152	6458 UNLOAD SHROUD BACK PLT	
B	3	07 71506	6458 UNLOAD SHROUD BACK =SHT	
C	3	07 85152	7676 UNLOAD SHROUD BACK PLT	
D	3	07 85152A	7676 UNLD SHROUD BACK-SHORT	
EF	3	07 88121	8282 UNLOAD SHROUD EXTENSION BACK	
AB	4	07 71154	64"DRYER GAS PIPE SUPP PLT	
CD	4	07 85154	7676 SHROUD GAS PIPE SUPPORT PLATE	
EF	4	07 88122	8282 GAS PIPE SUPP PLT	
all	5	07 71156	6458 PIPE SUPP GUSSET BKT	
AB	E6	W7 71507	6458 SHORT SHROUD GUSSET LFT	
CD	6	W7 81507	7272 SHORT SHROUD GUSSET LF	
EF	6F	07 88126	8282 SHORT SHROUD GUSSET	
all	7	15K037	HEXCAPSCR 1/4-20UNC2AX5/8 GR5	
all	8	15U180	LOCKWASHER MEDIUM 1/4 ZINCPL	
all	9	15U185	FLATWASHER(USS STD) 1/4" ZNC P	
all	10	15G165	HXNUT 1/4-20UNC2BSAE ZC GR2	
all	11	09H026V37	BEACON ROTARY 90MM AMBER CE	
E	12	07 88120	8282 UNLOAD SHROUD EXTENSION RIGHT	
E	13	07 88120A	8282 UNLOAD SHROUD EXTENSION LEFT	
EF	14	07 88124	8282 UNLOAD SHROUD BACK PLT	
G	15	07 71505E	6458 RT VAC LOADING SHROUD BLOWER SIDE	
G	16	07 71505H	6458 RT VAC LOADING SHROUD FB SIDE	

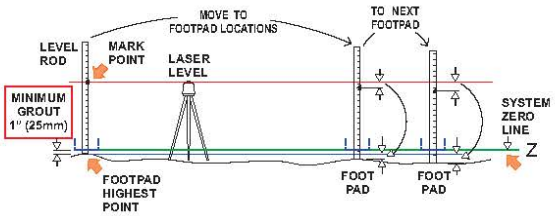
2 Installation

BRDUUI01 / 2019193 BRDUUI01.1 0000765222 A.2 B.2 5/28/25, 11:51 AM Released

ATTENTION INSTALLERS!

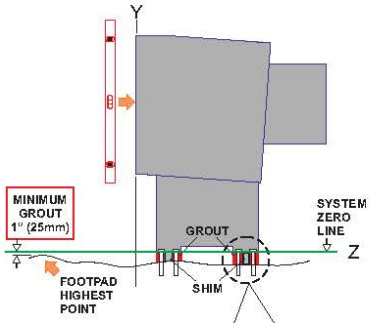
FLOOR IS UNEVEN

- Establish System Zero Line or Z.
- Find highest point in factory floor where footpads will be located.
- System Zero Line or Z is 1" above highest point.



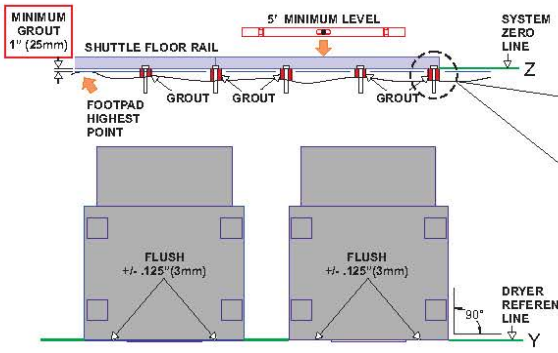
DRYER FEET MUST BE GROUTED

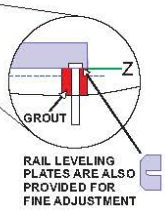
- Shim & level to System Zero Line or Z.
- Grout & anchor all brackets.

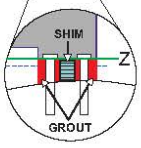


SHUTTLE RAIL BRACKETS MUST BE GROUTED TO Z

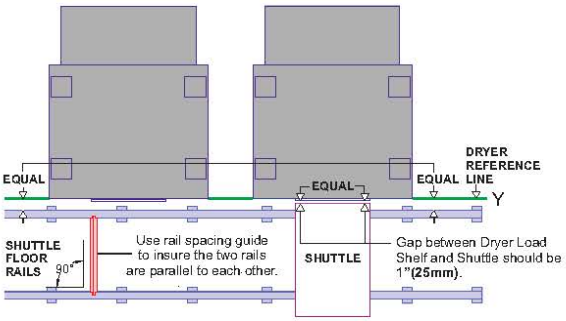
- Shim & level to System Zero Line or Z.
- Grout & anchor all brackets.

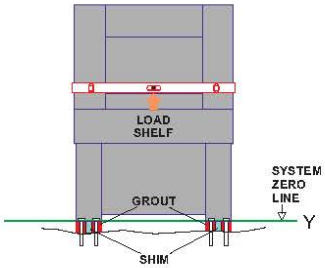






DRYER FACES MUST BE FLUSH





DRYER MUST BE LEVEL

SHUTTLE RAILS MUST BE PERFECTLY PARALLEL TO DRYER FACES

- Floor rails must be parallel, level, and square along entire length of rail.

B2T2007003/2019193A

BNDUUI02 / 2025226 BNDUUI02 0000765280 B.2 5/30/25, 3:13 PM Released

2.1 Dryer Assembly and Setting

BNDUUI02.C01 0000765279 A.2 B.2 5/30/25, 3:13 PM Released

This document gives general instructions for shippers and installers. Several other documents in the installation manual provide more detailed instructions on specific tasks related to installation. Review all of the installation-related documents before proceeding.

2.1.1 Handling Precautions

BNDUUI02.T01 0000765278 A.2 B.2 5/30/25, 3:13 PM Released

The machine is disassembled at the Milnor® factory in two or more assemblies: the main dryer housing, the pedestal base, and if necessary, one or more other assemblies. The machine is shipped from the Milnor® factory in three or more containers. Major assemblies are palletized or skidded and there are one or more boxes containing loose parts such as connecting brackets.

1. Remove the protective coverings (leaving the machine on its shipping skids) and examine the components carefully for possible shipping damage. If the machine is damaged, notify the transportation company immediately.

   NOTE: Once the machine is given to the **carrier** for delivery, it is the sole responsibility of the carrier to ensure that no damage occurs during transit. In addition to readily apparent damage, carriers are liable for concealed damage. **Do not hesitate to file a claim with the carrier if the machine has been damaged in any way during shipment.** Milnor® will be glad to assist you in filing your claim, but is not responsible for shipping damage to the machine once it has been delivered to the carrier in good condition.

2. Lifting brackets are provided on the top of the house and are tagged as such. Spreader bars are mounted between the lifting brackets. The lifting brackets must be used if lifting by crane.
3. Use the skids for fork lifting and, if possible, leave the machine on its shipping skids until it is about to be assembled and placed in its final position. Once the skids are removed, take care in placing forks under the machine. **Do not allow the forks to come in contact with valves, piping, etc., located on the machine.**
4. Never push, pull, or exert pressure on any components that protrude from the machine frame.
5. Consult the Milnor® factory if components such as the blower housing must be removed to fit machine through openings.

Some dryers are paired for installation immediately adjacent to each other. When installing these machines, the spreader bar mounting bolts (Figure 3: Spreader Bar Between Front Lifting Plates, page 24) are inaccessible once the machines are mounted side by side. Remove the spreader bar immediately after installing the legs, before setting or anchoring dryer. Do not remove the lift plates as they are used to tie machines together.

Figure 1. Front Lifting Bracket

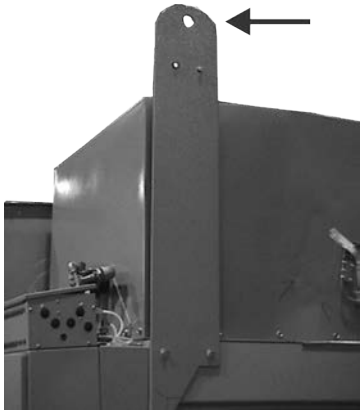


Figure 2. Rear Lifting Bracket

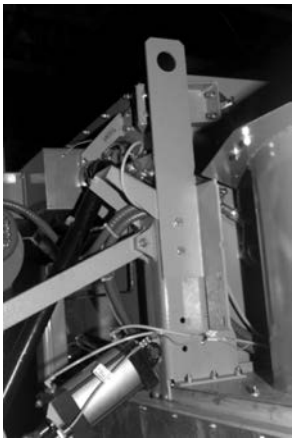
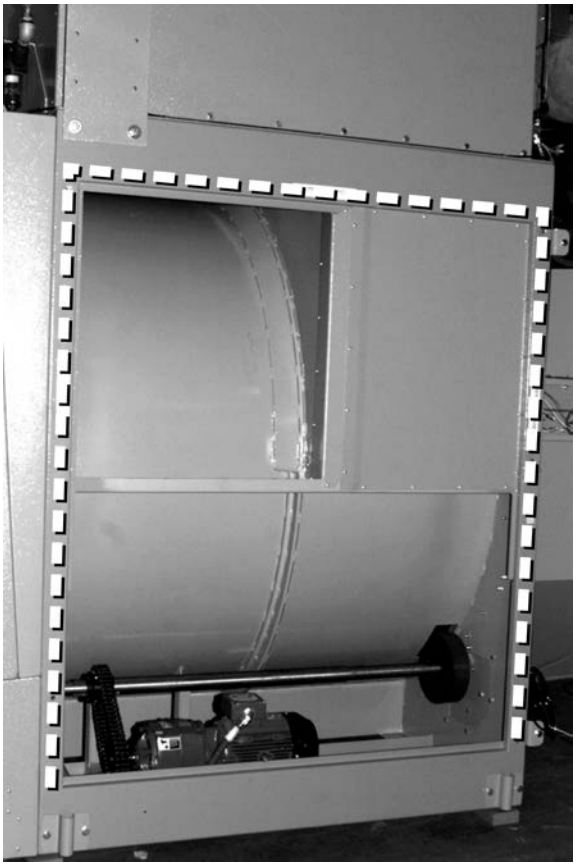


Figure 3. Spreader Bar Between Front Lifting Plates

Figure 4. Apply sealing foam to left house before setting into position



2.1.2 Site Requirements

BNDUUI02.C02 0000765276 A.2 B.2 5/30/25, 3:13 PM Released

2.1.2.1 Dryer Environment

BNDUUI02.C03 0000765275 A.2 B.2 5/30/25, 3:13 PM Released

The dryer must not be installed or stored in an area where it will be exposed to water and/or weather.

2.1.2.2 Clearances

BNDUUI02.C04 0000765591 A.2 B.2 5/30/25, 3:13 PM Released

Observe the following:

- Sufficient clearances must exist to move the machine into the laundry. All openings and corridors through which equipment must pass must be of sufficient size to accommodate the sizes of the skidded assemblies (see the dimensional drawing). It is occasionally possible to reduce the overall dimensions by removing piping and by other special modifications. Consult the Milnor® factory for more information.
- Provide sufficient clearance around machine for normal operation and maintenance procedures.
- Ensure sufficient clearance between hot surfaces, such as the dryer exhaust vent, and any combustible building materials.
- Ensure sufficient ventilation exists for the heat and vapors of normal operation to dissipate.
- Provide adequate airflow for optimum machine performance. Normally, this means connecting the machine to an outside air source.

2.1.2.3 Foundation

BNDUUI02.C05 0000765590 A.2 B.2 5/30/25, 3:13 PM Released

The machine must be anchored in accordance with the installation instructions. The floor and/or all other support components must have sufficient strength (and rigidity with due consideration for the natural or resonant frequency thereof) to withstand the fully loaded weight of the machine including the wet goods and any repeated sinusoidal (rotating) forces generated during its operation. Determining the suitability of floors, foundations, and other supporting structures normally requires analysis by a qualified structural engineer.

2.1.3 Assembly

BNDUUI02.C06 0000765589 A.2 B.2 5/30/25, 3:13 PM Released

2.1.3.1 Installing the Legs on the House

BNDUUI02.C07 0000765588 A.2 B.2 5/30/25, 3:13 PM Released

It is usually easiest to install the legs on the house then use a fork lift to set the machine in place.

1. Read all related tags prior to assembly.
2. Verify that the doors are closed and secured.
3. Unfasten house from the shipping skid. Once skids are removed, take care in placing forks under the machine. **Do not allow forks to come in contact with valves, piping, motors, etc., located under the machine.**

4. Install the provided foam seal along the path indicated by decals on the machine. This seal is only installed on the left side machine of a left and right pair (Figure 4: Apply sealing foam to left house before setting into position, page 24).
5. Raise the house using the three designated lifting plates located on the top of the machine.
6. Install the legs and filler plates on the house.
7. Remove the spreader bar (Figure 3: Spreader Bar Between Front Lifting Plates, page 24).
8. Carefully move the machine into place.
9. Repeat the assembly process as required for the adjacent machine (if paired).

2.1.3.2 Anchoring

BNDUUI02.C08 0000765587 A.2 B.2 5/30/25, 3:13 PM Released

WARNING: Crush and Machine Damage Hazards — This machine has a rearward center of mass.

- Install anchor bolts as soon as machine is in position and before making service connections. Install anchor bolts in accordance with the dimensional drawing.
- Keep bystanders clear of machine during installation.

Machines must be securely anchored to an adequate foundation. Anchor bolt locations and foundation specifications are provided on the dimensional drawing. However, do not install anchor bolts until the machine is on site so that the machine itself may be used to determine precise anchor bolt locations. Consult Milnor® if any obstruction prevents the installation of any anchor bolts. **Anchor bolts cannot be indiscriminately omitted.**

2.1.3.3 Leveling Procedures

BNDUUI02.C09 0000765586 A.2 B.2 5/30/25, 3:13 PM Released

1. Establish System Zero Line or Z. Find the highest point in the factory floor where footpads will be located. The system Zero Line or Z is 1"(25MM) above the highest point.
2. Install the anchor bolts.
3. Level with leveling bolts until the bottom of the pedestal feet are on System Zero Line or Z. **Level both left to right and front to back.**
4. Use a carpenter's level to verify that the machine is level.
5. Dryer feet must be grouted. Grout all footpads.
6. Tighten all foundation bolts until they contact the top of the base plates.
7. Tighten all the bolts evenly, **one-quarter of a turn each time on every bolt** until all bolts are uniformly tight. After tightening, check each fastener separately at least twice.

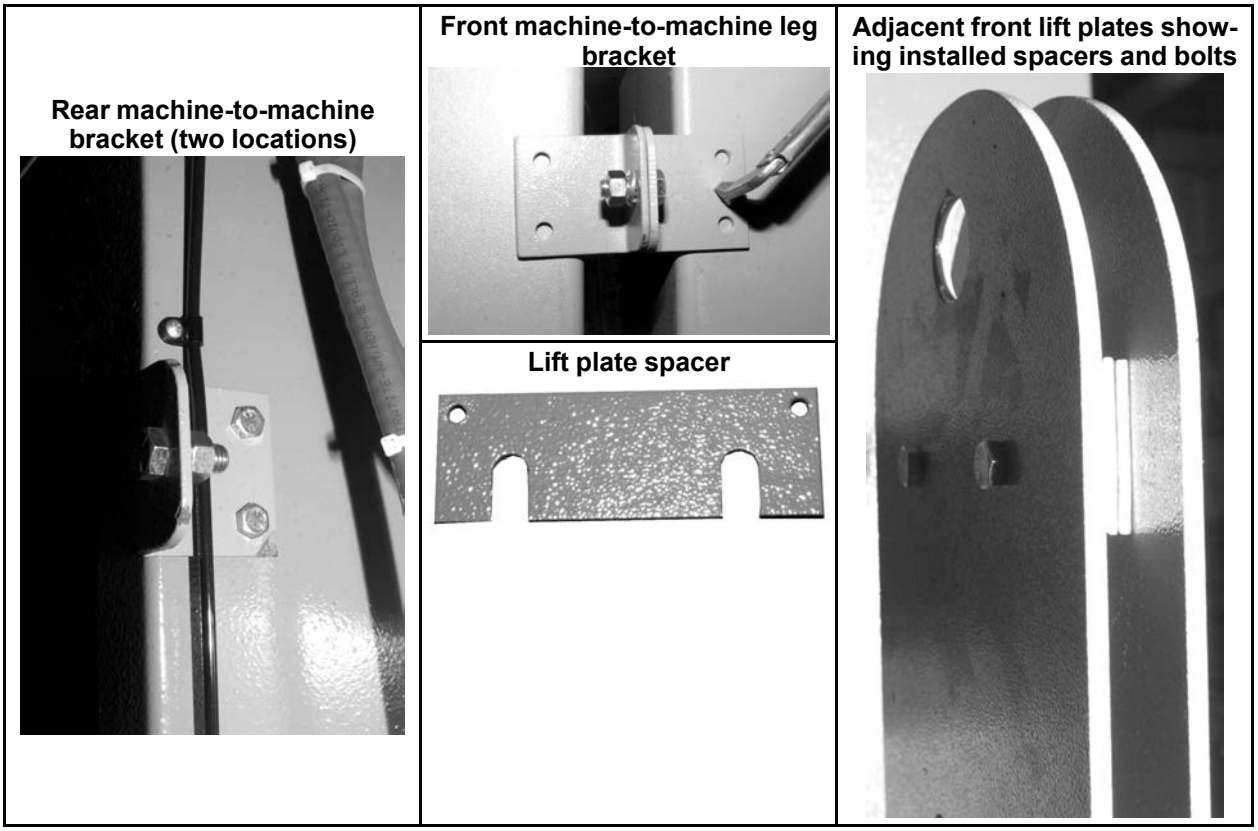
2.1.3.4 Machine-to-Machine Brackets

BNDUUI02.C10 0000765585 A.2 B.2 5/30/25, 3:13 PM Released

Machine to machine brackets hold paired dryers in place after each machine is anchored and leveled. Install these brackets as follows:

- Install the rear brackets (Figure 5: Machine-to-Machine Brackets and Spacers, page 27).
- Assemble front machine-to-machine leg bracket. Mark and drill mounting holes and install the leg bracket (Figure 5, page 27).
- Install bolts between the front lift plates of adjacent machine pairs. Do not tighten bolts at this time.
- Slide the lift plate spacers in between the front lift plates (Figure 5, page 27). Tighten bolts when done.

Figure 5. Machine-to-Machine Brackets and Spacers



2.1.3.5 Check Cylinder Interior

BNDUUI02.C11 0000765584 A.2 B.2 5/30/25, 3:13 PM Released

Check the interior of the perforated cylinder for smoothness before placing the machine in service. Milnor® cannot accept claims for damage to the cylinder's smooth finish after the machine has been placed in service.

BPDUUK01 / 2022245 BPDUUK01.1 0000481017 B.2 6/5/25, 10:01 AM Released

Lifting Brackets

2 Sheets

5050, 6450, 6458, 6464, 7676, 8282 Dryers

Figure 6. 5050, 6450, 6458, 6464, 7676, and 8282 Dryers (7676 Shown)

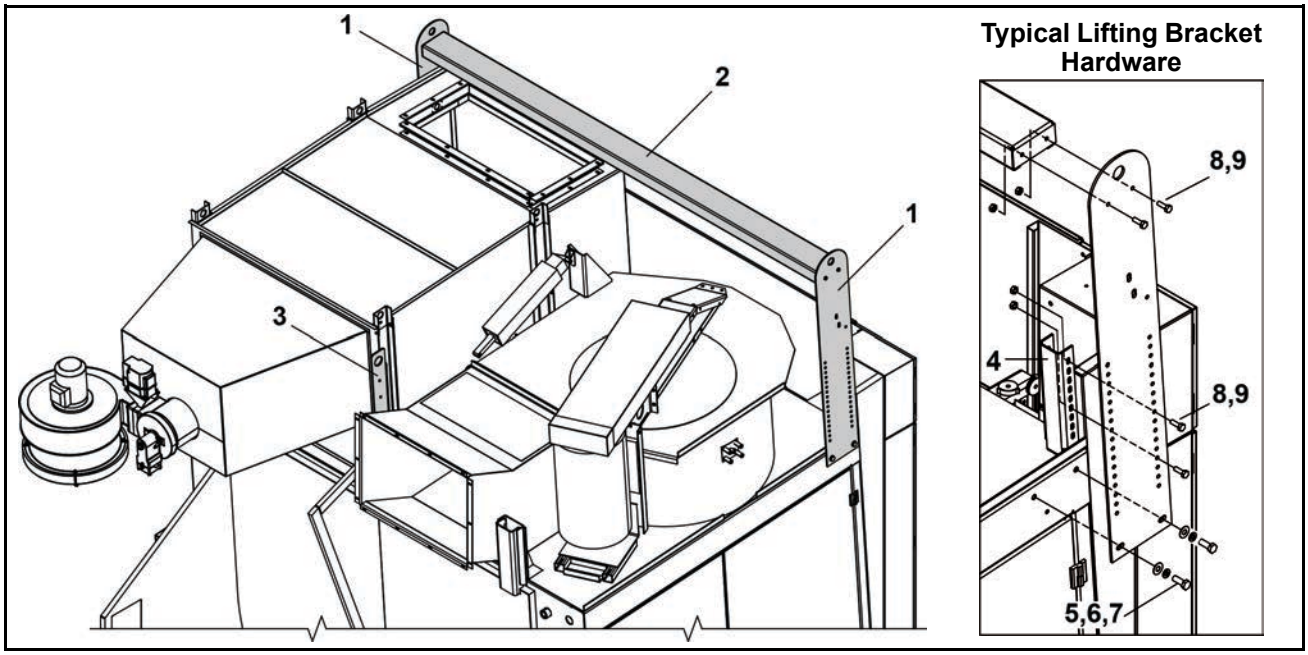
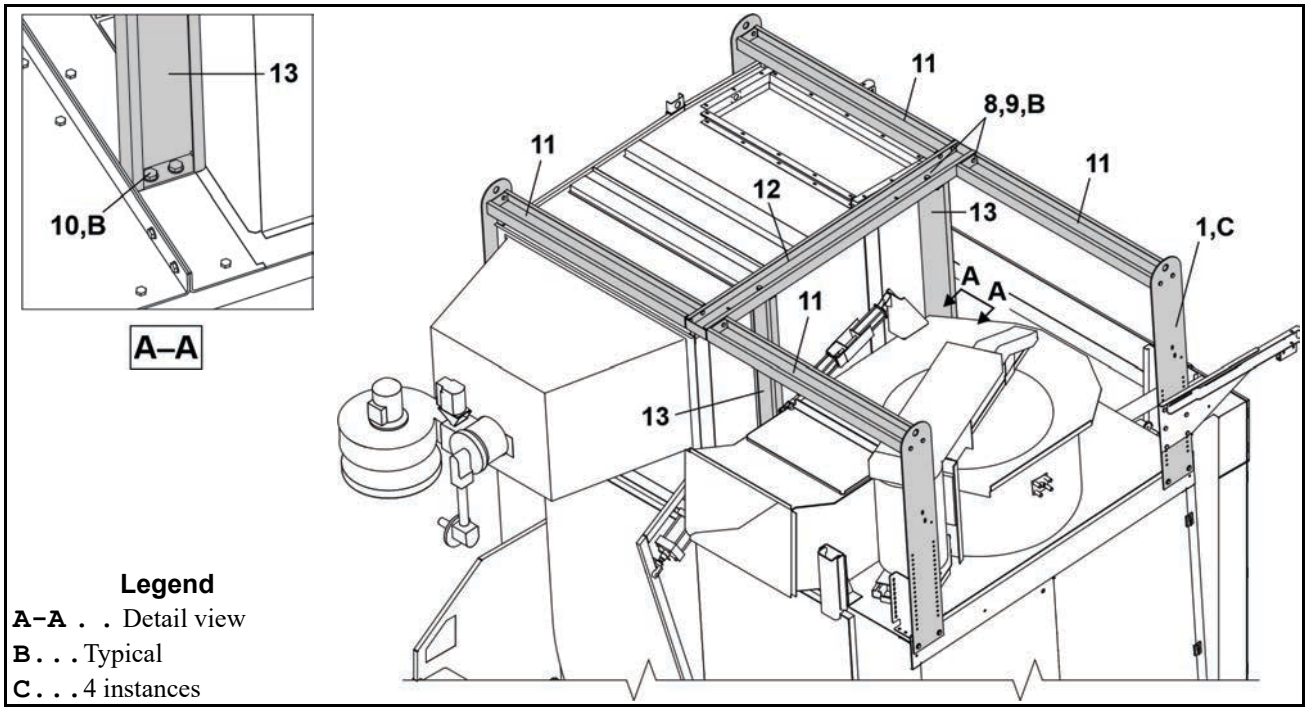


Figure 7. 8282 Dryers



Lifting Brackets

2 Sheets

5050, 6450, 6458, 6464, 7676, 8282 Dryers

Table 4. Parts List—Lifting Brackets

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

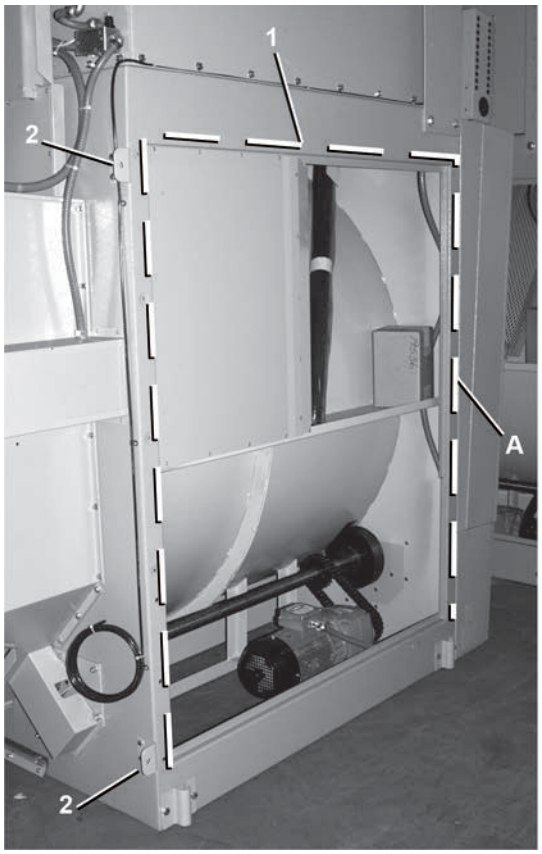
Used In	Item	Part Number	Description/Nomenclature	Comments
			Reference Assemblies	
B			5050 DRYERS	
C			6450 DRYERS	
D			6458 DRYERS	
E			6464 DRYERS	
G			7676 DRYERS	
H			8282 DRYERS	
			Components	
BDE	1	07 71315	DRYER LIFT BRKT STANDARD=41.50	
C	1	07 71315B	6450 DRYER LIFT BRKT=44.50	
G	1	07 85315A	DRYER LIFT BRKT TALL=51.50	
H	1	07 88092	8282 DRYER LIFT BRKT	
B	2	07 44075	5040 LIFT BRKT LONG SPREADER	
C	2	07 71316	6458 LIFT BRKT LONG SPREADER	
DE	2	07 81316	7272 LIFT BRKT LONG SPREADER	
H	2	07 88093	8282 SPREADER BAR CENTER STIFF	
B	3	07 44076	5040 REAR LIFTING BRACKET	
CDE	3	07 71183A	6458A REAR LIFTING BRACKET	
G	3	07 71183B	DRYER REAR CHANNEL LIFTING BRACKET	
H	3	07 88096	8282 VT LIFTING BRKT	
B-H	4	07 71439	6458 RAILSUPP CORNER BRKT	
all	5	15K173A	HXCAPSCR 1/2-13UNC2AX1.75 GR5	
all	6	15U280	FL+WASHER(USS STD)1/2 ZNC PL+D	
all	7	15U300	LOKWASHER REGULAR 1/2 ZINC PLT	
all	8	15K105	HXCAPSCR 3/8-16UNC2A1.25 GR5 P	
all	9	15G198	HXFLGNUT 3/8-16 ZINC	

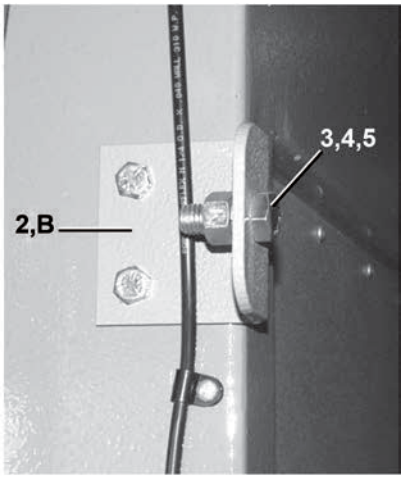
BPDUUM03 / 2022252 BPDUUM03.1 0000481076 B.2 A.7 6/14/22, 11:03 AM Released

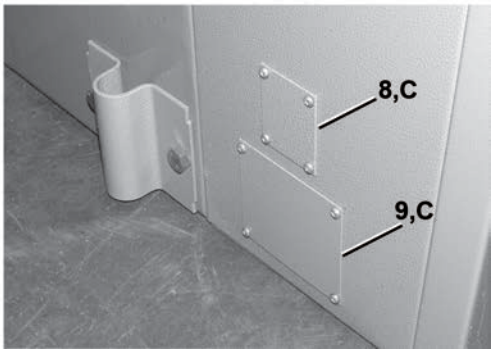
Dryer to Dryer Mounting Parts

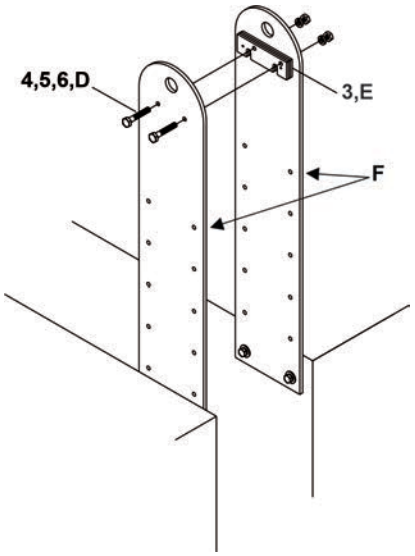
2 Sheets

5050, 6450, 6458, 6464, 7676, 8282 Dryers









Legend

A . . . Sealing foam is applied to the right side of the left machine of the pair only. The dashed line shows where to apply the foam. (“right machine” shown in photo)

B . . . Mounting brackets are used to join left and right machines on the rear of the house and to join the pedestal legs.

C . . . Covers for nameplate and emergency stop replacement.

D . . . Typical

E . . . Shim

F . . . Lifting brackets on the left and right machines are joined using shims and bolts.

Dryer to Dryer Mounting Parts

2 Sheets

5050, 6450, 6458, 6464, 7676, 8282 Dryers

Table 5. Parts List—Dryer to Dryer Mounting Parts

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.				
Used In	**Item**	**Part Number**	**Description/Nomenclature**	**Comments**
Components				
all	1	60A008A	1" X 1" CLOSED CELL NEO SPONGE W/ADH.STRIP	
all	2	07 71309	6458 DRYER TO DRYER MNT BKT	
all	3	15K105	HXCAPSCR 3/8-16UNC2A1.25 GR5 P	
all	4	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	5	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	6	15K125	HEXCAPSCR 3/8-16UNC2AX2.5 GR5-	
all	7	07 71310	6458 DRYER TO DRYER MNT SHIM	
all	8	03 CC2X2	COVER PLT:DRYER NPLT REPLCMNT	
all	9	03 CC3X4	COVER PLT:DRYER E-STOP RPLCMNT	

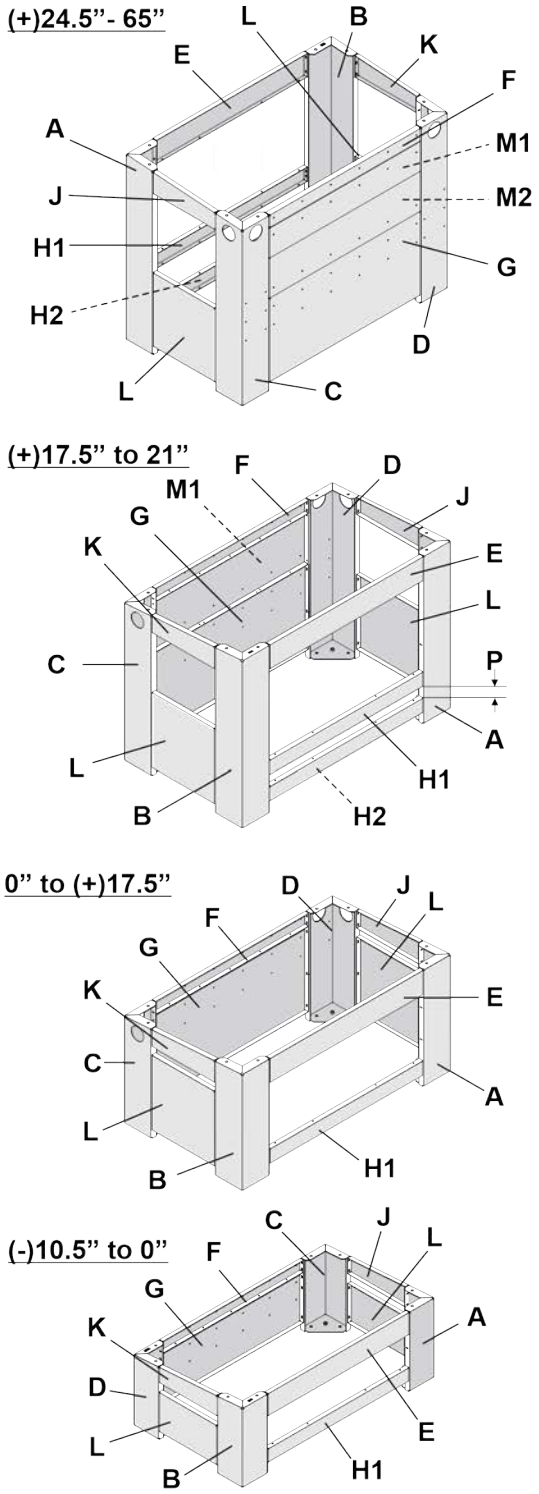
BPDDUL01 / 2022256A BPDDUL01.1 0000322253 C.2 B.2 6/17/22, 11:39 AM Released

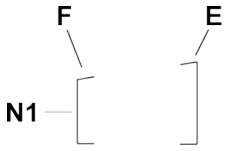
Pedestal Base Installation

4 Sheet

5050, 6450, 6458, 6464, 7676, & 8282 Dryers

Figure 8. Placement of Components with Regard to Pedestal Height





Legend

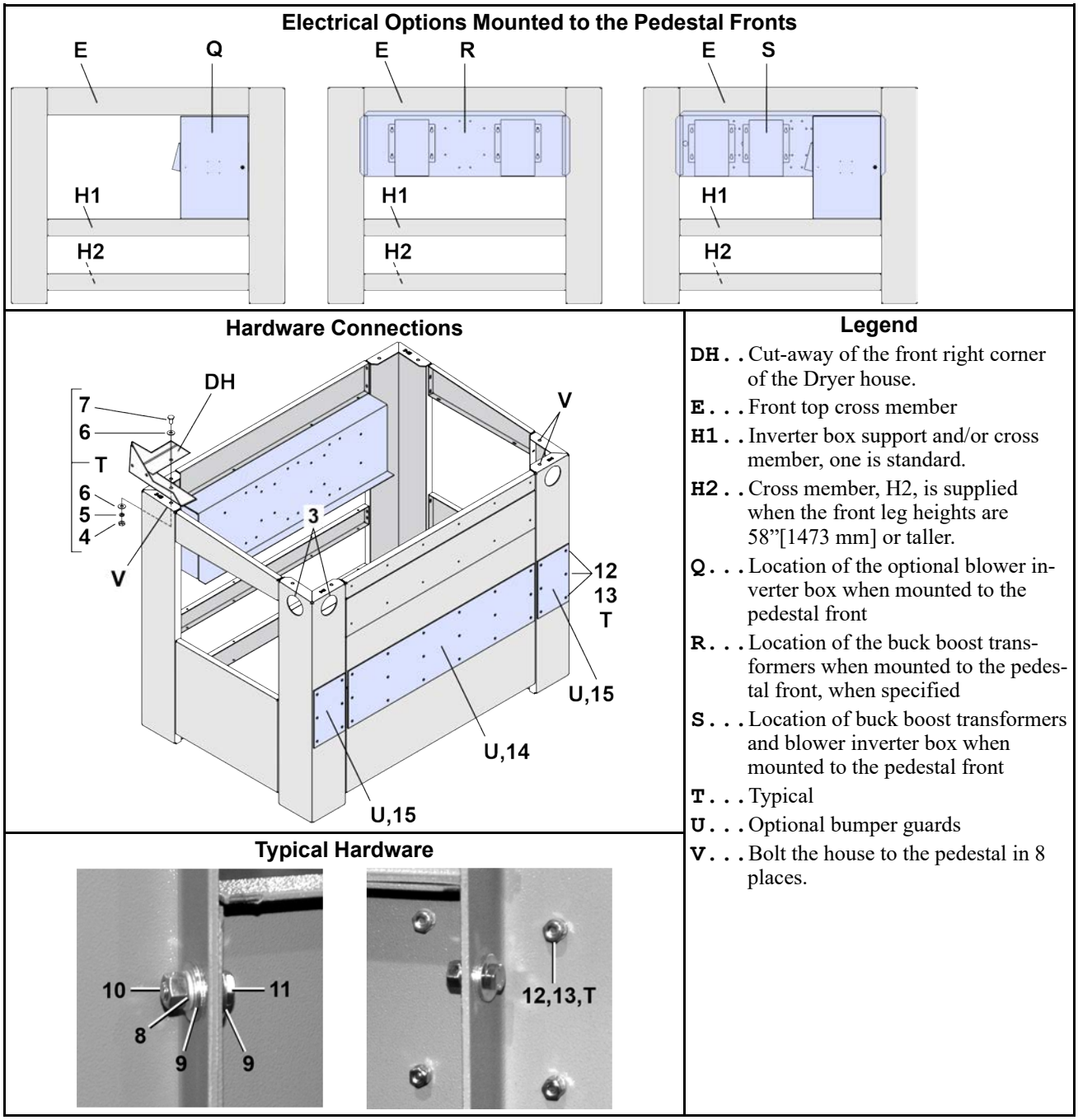
A . . . Front right leg
B . . . Front left leg
C . . . Rear right leg
D . . . Rear left leg
E . . . Front top cross member
F . . . Rear top cross member
G . . . Rear bottom panel
H1 . . Inverter box support or cross member, one is always supplied.
H2 . . Second cross member is supplied when the front leg heights are 58” [1473 mm] or taller.
J . . . Right side top angled panel
K . . . Left side top angled panel
L . . . Side bottom panels
M1 . . Rear filler panels, together M1 and M2 equal the positive pedestal height ordered.
M2 . . Second rear filler panel, if required
N1 . . Note: The front top cross member (item E) and the rear top cross member (item F) are angled to match the Dryer’s 4 degree rear tilt, this angle may not be immediately apparent. Use a level to identify the parts. Swapping these parts when assembling will cause the top flange to stick up above the rest of the pedestal and cause the dryer to sit incorrectly.
P . . . Varies

Pedestal Base Installation

4 Sheet

5050, 6450, 6458, 6464, 7676, & 8282 Dryers

Figure 9. Pedestal Options and Hardware Connections

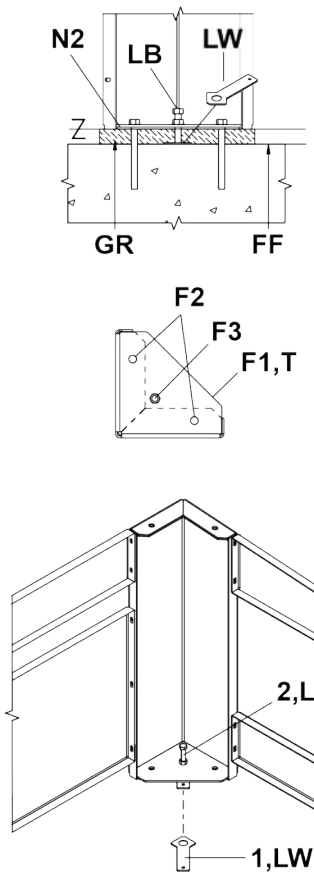


Pedestal Base Installation

4 Sheet

5050, 6450, 6458, 6464, 7676, & 8282 Dryers

Figure 10. Anchoring



Legend

FF . . Finished floor
F1 . . Pedestal leg base plates
F2 . . Anchor bolt holes
F3 . . Leveling bolt hole
GR . . Grout
LB . . Leveling bolt
LW . . Leveling bolt washer
N2 . . Note: Pedestal leg base plates (feet) provide substantial grouting surface between the pedestal leg and the finished floor. Shim and use the leveling bolts to level the Dryer to Baseline "Z" (or System Zero Line). Grout and anchor all base plates. See the Dryer model's dimensional drawing and the "Attention Installers" page in the manual and affixed to the machine.
T . . . Typical

Table 6. Parts List—Pedestal Base Installation

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.				
Used In	**Item**	**Part Number**	**Description/Nomenclature**	**Comments**
Reference Assemblies				
	A	G77PD030	DRYER PEDESTAL STANDARD HARDWARE	
Components				
all	1	07 71579	DRYER JACKING BOLT WASHER	
all	2	15K226	HXTAPSCR 5/8-11UNC2AX3 GR5 ZIN	
all	3	12P14KSB	SNAPBUSH 5.0" X 4.75" X .75	
all	4	15G230	HXNUT 1/2-13UNC2B SAE ZINC GR2	
all	5	15U300	LOKWASHER REGULAR 1/2 ZINC PLT	
all	6	15U490	FLTWASH 1+1/2X17/32X1/4 ZINC	
all	7	15K191	HXCAPSCR 1/2-13UNC2AX2.5 GR5 Z	
all	8	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	

Pedestal Base Installation

4 Sheet

5050, 6450, 6458, 6464, 7676, & 8282 Dryers

Table 6 Parts List—Pedestal Base Installation (cont'd.)

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

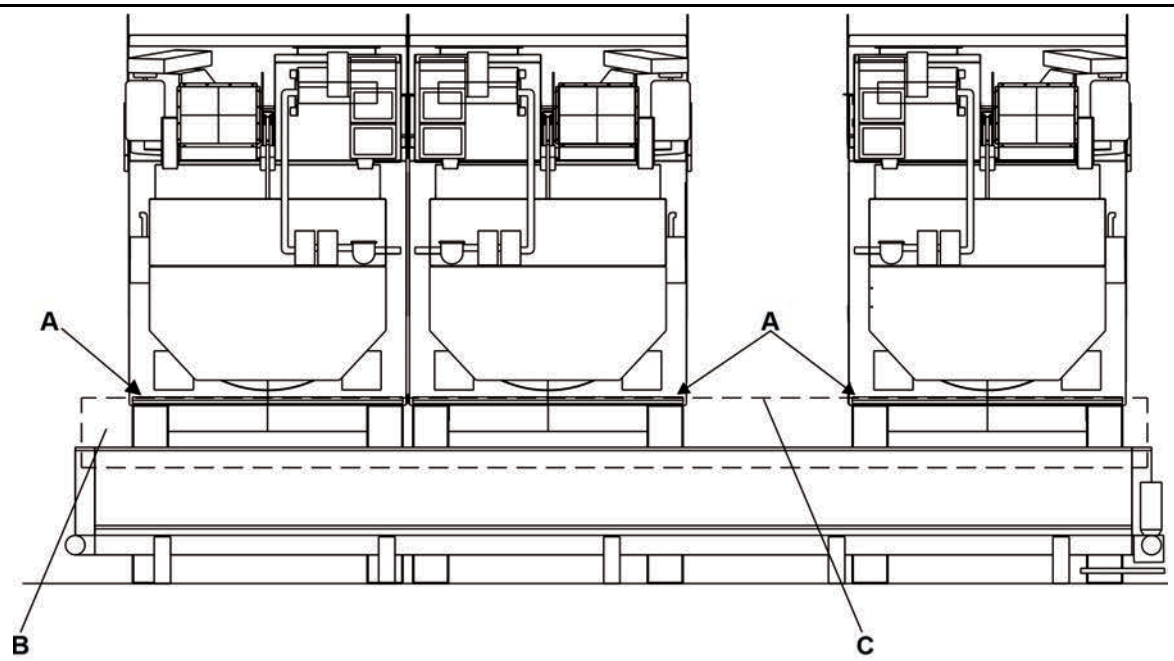
Used In	Item	Part Number	Description/Nomenclature	Comments
all	9	15U240	FLATWASHER(USS STD) 3/8" ZNC P	
all	10	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	11	15K095	HXCPSCR 3/8-16UNC2AX1 GR5 ZINC	
all	12	15N176	FLATMACSCR 1/4-20NCX3/4SS18-8	
all	13	15G164NE	HEXLOKNUT NYL 1/4-20 UNC2A SS.	
	14	07 71403	6458 BUMPER PAD-16"WX60"LG	5050, 6450, 6458, 6464 Dryers
	14	07 81403	7272 BUMPER PAD	7676 Dryers
all	15	07 71404	6458 BUMPER PAD-16"WX10"LG	

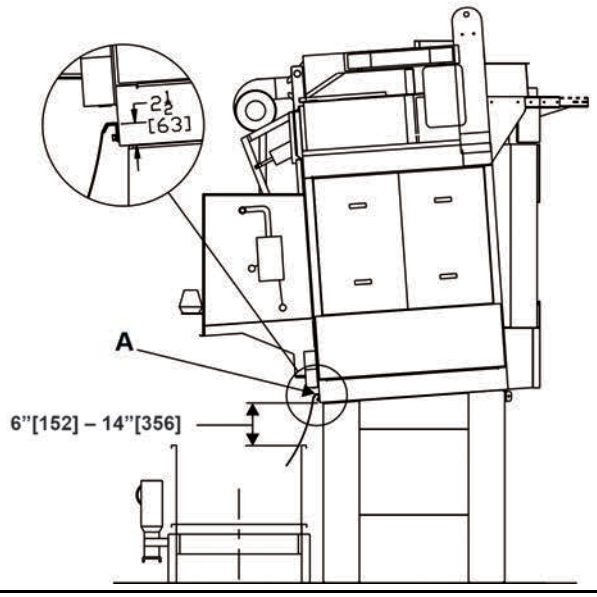
BPDUUM06 / 2022253 BPDUUM06.1 0000486687 B.2 A.5 6/16/22, 9:31 AM Released

Unload Bridge Installation

2 Sheets

5050, 6450, 6458, 6464, 7676, & 8282 Dryers





Legend

A . . . Mounting bracket 001
B . . . Plastic sheeting length as specified
C . . . Plastic sheeting requires field innovation to support it between dryers

Unload Bridge Installation

2 Sheets

5050, 6450, 6458, 6464, 7676, & 8282 Dryers

Table 7. Parts List—Unload Bridge Installation

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

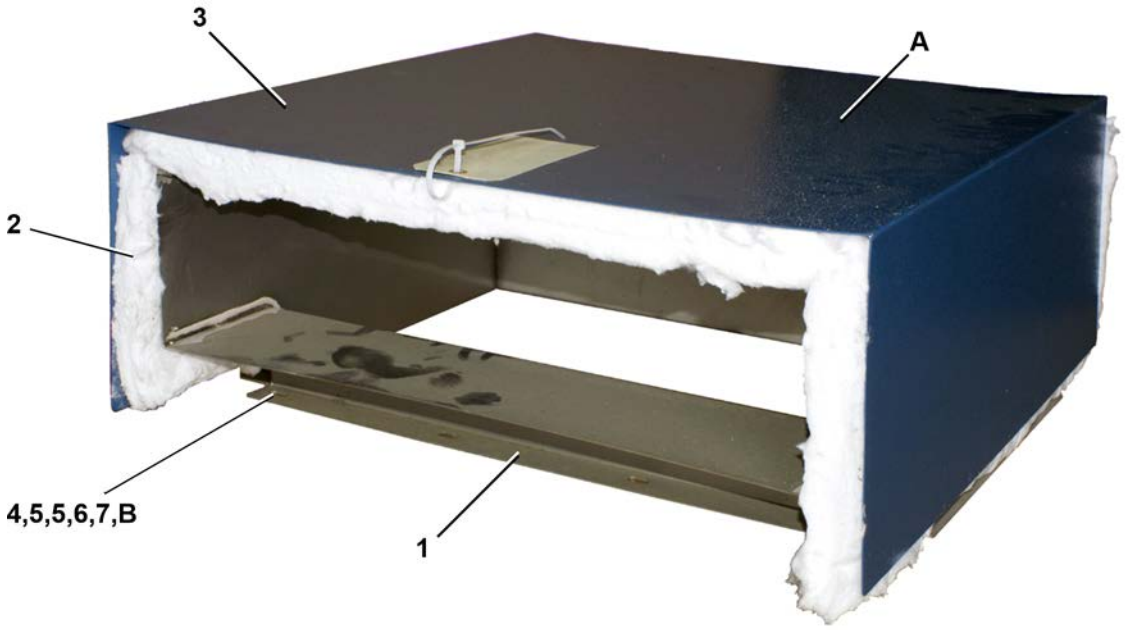
Used In	Item	Part Number	Description/Nomenclature	Comments
			Reference Assemblies	
	B			5050 DRYERS
	C			6450, 6458 DRYERS
	D			6464 DRYERS
	F			7676 DRYERS
	G			8282 DRYERS
			Components	
B	1	07 44230	5040 UNLOAD BRIDGE TO CONV	
CD	1	07 71568	6458 UNLOAD BRIDGE TO CONV	
F	1	07 71569	7272 UNLOAD BRIDGE TO CONV	
G	1	07 88094	8282 UNLOAD BRIDGE TO CONV	

BPDGUM01 / 2023213 BPDGUM01.1 0000575809 A.3 B.2 5/24/23, 8:19 AM Released

Firebox Air Duct Tee

2 Sheets

5050TG1L/R, 6450TG1L/R, 6458TG1L/R; 6464TG1L/R; 7676TG1L/R; 8282TG1L/R



Legend

A . . . The Firebox Air Duct Tee is used on the blower inlet if it is not ducted. See Dryer installation drawings.

B . . . Typical

Table 8. Parts List—Firebox Air Duct Tee

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

Used In	Item	Part Number	Description/Nomenclature	Comments
Reference Assemblies				
	A	A74AD001	5050 FB AIR DUCT TEE	5050
	B	A77AD001	6458 FB AIR DUCT TEE	6450, 6458, 6464
	C	A79AD001	7676 FB AIR DUCT TEE	7676
	D	A82AD001	8282 FB AIR DUCT TEE	8282
Components				
A	1	W7 44394	5050 FB AIR DUCT TEE WLMT	
B	1	W7 72197	6458 FB AIR DUCT TEE WLMT	
C	1	W7 85194	7676 FB AIR DUCT TEE	
D	1	W7 88230	8282 FB AIR DUCT TEE	
all	2	98P031	INSUL 1-1/2"X48"X12-1/2' 6LB DURABLANKET 2300F	

Firebox Air Duct Tee

2 Sheets

5050TG1L/R, 6450TG1L/R, 6458TG1L/R; 6464TG1L/R; 7676TG1L/R; 8282TG1L/R

Table 8 Parts List—Firebox Air Duct Tee (cont'd.)

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

Used In	Item	Part Number	Description/Nomenclature	Comments
A	3	07 44400	5050 FB AIR DUCT TEE COVER	
B	3	07 72213	6458 FB AIR DUCT TEE COVER	
C	3	07 85198	7676 FB AIR DUCT TEE COVER	
D	3	07 88233	8282 FB AIR DUCT TEE COVER	
all	4	15K095	HXCPSCR 3/8-16UNC2AX1 GR5 ZINC	
all	5	15U201	FLATWASH 7/80DX3/8IDX.062THK S	
all	6	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	7	15G198	HXFLGNUT 3/8-16 ZINC	

2.2 Air and Duct Requirements for Milnor® Pass-through Dryers

BNDDUI01.C01 0000086779 A.10 A.11 B.2 Released

NOTICE: This document, along with the document BNDUUI01 “Utility Requirements for Gas, Steam, and Thermal Oil Dryers” gives air and duct requirements for Milnor® pass-through dryers. It also provides limited guidance for the layout of ducts. Pellerin Milnor Corporation accepts no responsibility for duct design or liability for damage or injury caused by ducts.

2.2.1 Air Requirements

BNDDUI01.C02 0000086790 A.10 B.2 Released

CAUTION: Insufficient air will cause dryers to malfunction and/or greatly reduce drying efficiency. Excessive back-pressure will cause dryers to malfunction.

2.2.1.1 Air Flow

BNDDUI01.C03 0000086789 A.10 A.11 B.2 Released

All Milnor pass-through dryers move air, called main air, through the goods. The quantity of main air specified in document BNDUUI01 “Utility Requirements for Gas, Steam, and Thermal Oil Dryers” (in standard cubic feet per minute or scfm) must be available at the dryer main air inlet.

In addition, gas dryers use laundry room air for combustion. The quantity of combustion air specified in document BNDUUI01 “Utility Requirements for Gas, Steam, and Thermal Oil Dryers” (in standard cubic feet per minute or scfm) must be available at the dryer combustion air inlet.

2.2.1.2 Back Pressure

BNDDUI01.C04 0000086788 A.10 B.2 Released

The total pressure drop imposed by all external components that the main air must pass through (examples: ducts, lint filters, rooftop ventilators) must be between 0 (zero) and 0.5 inch water column (125 Pascals).

For gas dryers, it is necessary to supply a sufficient quantity of air to the room where the dryers are located to replenish the combustion air taken in by the dryers and to prevent a low pressure condition in the room.

NOTE: The internal pressure drop between the dryer main air inlet and exhaust outlet fluctuates during operation and can greatly exceed the allowable external pressure drop.

2.2.2 Duct Requirements

BNDDUI01.C05 0000086787 A.10 B.2 Released

You can connect a duct between the dryer main air inlet and outside air. You must connect a duct between the dryer air exhaust outlet and the exterior of the building.

2.2.2.1 Is an Inlet Duct Necessary?

BNDDUI01.C06 0000086786 A.10 A.11 B.2 Released

Use an inlet duct to avoid negative air or if hazardous or corrosive fumes are present that could be drawn in to the dryers. Otherwise, consider the facility layout, operational procedures, and climatic conditions. It may be possible to take main air from the room in which the dryers are located, especially if this room is dedicated to the dryers and physically separated from other laundry activities. If conditions permit this arrangement, the facility can use barometric dampers to admit the quantity of outside air necessary to replenish the air taken in by the dryers. The air in the dryer room must be sufficient to meet the air requirements explained in Section 2.2.1.1 , page 40 at all times that the dryers operate.

CAUTION: Negative air pressure — will draw heat from a dryer into the room it is in. Nearby objects such as roof beams can become very hot.

- ▶ Provide an inlet duct when negative air would otherwise occur.

If main air cannot be supplied from inside the room the dryers are in, use inlet ducts to connect the dryers to outside air. For gas dryers, use powered ventilation in the facility to replenish the combustion air taken in by the dryers.

2.2.2.2 Duct Durability

BNDDUI01.C07 0000086785 A.12 A.10 B.2 Released

CAUTION: Fluctuations in main air pressure — will cause thin-gauge steel ducts to quickly fail from metal fatigue. Ducts with a rectangular cross-section can be damaged by these forces even when heavy gauge material is used. A rectangular duct on the exhaust side of the dryer is likely to fail.

- ▶ Consult a duct design professional before you use rectangular duct.

The ducts must be able to withstand the large flexing forces imposed on it by the internal air pressure changes that occur during dryer operation. At minimum, straight sections fabricated from galvanized sheet steel must have the following material thickness:

- Round duct - 20 gauge
- Rectangular duct - 16 gauge

It can be necessary to increase material thickness and use stiffeners for long duct lengths, large duct sizes, transitions, and elbows. Duct material must be able to withstand any corrosive forces imposed by the laundry environment. Galvanized sheet steel is usually sufficient, but special conditions can occur.

2.2.2.3 Duct Functionality

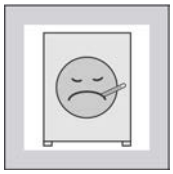
BNDDUI01.C08 0000086824 A.10 A.11 B.2 Released

WARNING: Incorrect duct design — can promote the buildup of flammable lint or cause flammable materials near a hot duct to ignite. It can also cause dryers to malfunction and greatly reduce productivity.

- Do not use any internal components in ducts (example: turning vanes).
- Obey codes that govern the clearances between hot ducts and flammable construction materials (example: roof sheathing).
- Do not connect ducts from different dryers together if you can avoid it. See Section 2.2.2.3.1 : Multiple Dryers and Lint Collection, page 42.
- Do not use abrupt transitions or elbows with less than three segments. See Section 2.2.2.3.2 : Transitions and Elbows, page 42
- Provide inspection covers as necessary to keep all ducts clean.

2.2.2.3.1 Multiple Dryers and Lint Collection

BNDDUI01.C09 0000086823 A.10 A.11 B.2 Released



CAUTION: Common (shared) ducts — can cause dryers to malfunction due to the fluctuation in pressure drop felt by each dryer as a result of the other dryers. This can occur even if the common duct is large enough to accommodate the combined output of all connected dryers.

- Consult a duct design professional if you must use a common duct.

If space limitations or other factors make the use of common ducts unavoidable, it will be necessary to provide a system to maintain back pressure within the range specified in Section 2.2.1.2 : Back Pressure, page 40 automatically. A system of this type could include pressure-sensing devices, a variable-speed booster fan, and a controller.

Today, facility designers generally prefer internal lint screens (a Milnor® option) or close-coupled lint collection systems installed on each dryer. However, if the facility uses a common, powered lint collection system, you can connect the air exhaust from two or more dryers to this system if you run separate ducts from each dryer. The system must be designed to:

- accommodate the maximum combined flow from all dryers connected to it.
- maintain a constant back pressure in the range given in Section 2.2.1.2 : Back Pressure, page 40.

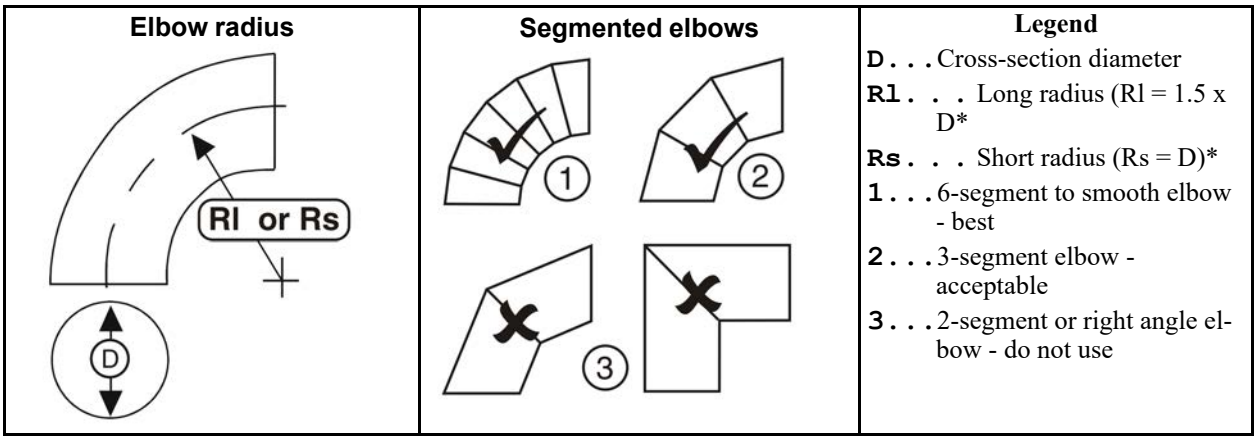
2.2.2.3.2 Transitions and Elbows

BNDDUI01.C10 0000086822 A.10 A.11 B.2 Released

Use smooth, gradual transitions. For calculations, consider any transition with a taper less than 7.5 degrees as straight duct. Consider a gradual transition that connects the main air inlet or exhaust outlet on the dryer to a larger size duct as the larger duct size.

See the figure below. For round duct, prefer elbows with radius Rl. Do not use a smaller radius than Rs. Prefer elbows with six or more segments. Do not use elbows with less than three segments.

Figure 11. Round duct elbow fabrication



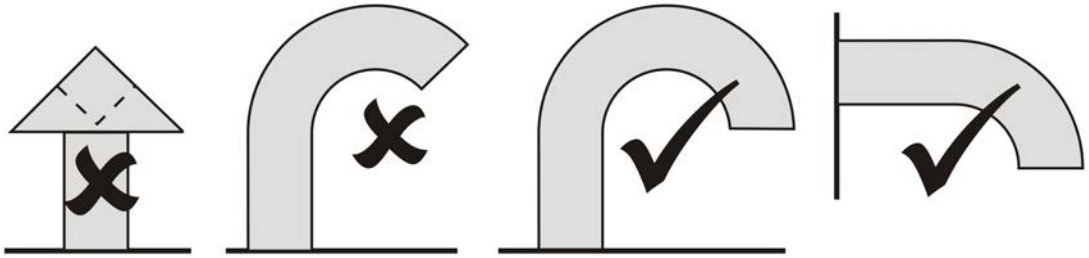
2.2.2.3.3 Vents

BNDDUI01.C11 0000086881 A.10 A.11 B.2 Released

Wind loads can contribute significantly to variations in the external pressure drop felt by dryers. Only the vent designs identified with a check mark in the figure below.adequately counteract the effect of wind load.

Do not use a screen in the vent for the main air inlet.

Figure 12. Vent Designs



2.2.3 Duct Layout and Pressure Drop Calculations

BNDDUI01.R01 0000086879 A.10 B.2 Released

2.2.3.1 Units of Measure Used in the Calculations

BNDDUI01.R02 0000086878 A.10 B.2 Released

Table 9. Units of Measure

Type of Measurement	English Unit		Metric Unit	
	Abbreviated	Term	Abbreviated	Term
Short length	in	inches	(mm)	millimeters
Long length	ft	feet	(M)	meters
Air flow	scfm	standard cubic feet per minute	(nlpm)	normal liters per minute

Table 9 Units of Measure (cont'd.)

Air velocity	fpm	feet per minute	(npm)	meters per minute
Pressure drop	iwc	inches water column	(Pa)	Pascals

2.2.3.2 Duct Components and Their Pressure Drops

BNDDUI01.R03 0000086877 A.10 A.11 B.2 Released

The table that follows, gives selected round and rectangular duct sizes for each dryer model, in straight lengths and 90 degree elbows. If it is necessary to use components not given in the table (examples: other duct cross-sections, elbows with other than 90 degree angles), it will be necessary to refer to other texts or consult a duct design professional.

Table 10. Duct Sizes and Pressure Drops for Dryer Models

Air Specifications			Duct components, sizes, and pressure drops									
			Equivalent** cross-sections			Pressure drop - iwc (Pa)						
			Round	Rectangular***		Straight	90 Degree Elbows					
							Smooth round		3-segment round		Rectangular	
Dryer Model Prefix	Air flow - scfm (nlpm)	Velocity* for given cross-section - fpm (mpm)	Diameter-in (mm)	Height-in (mm)	Width-in (mm)	iwc per 100 feet (or Pa per 100 meters)	Rs Short radius	Rl Long radius	Rs Short radius	Rl Long radius	Radius-in (mm)	iwc (Pa)
50040 5040 5050 58040	3600 (101941)	2034 (620)	18 (457)	14 (356)	20 (508)	0.31 (253)	0.1 (25)	0.07 (17)	0.13 (32)	0.11 (27)	15 (381)	0.09 (22)
				15 (381)	19 (483)						14.25 (362)	
				16 (406)	17 (432)						12.75 (324)	
				17 (432)	16 (406)						12 (305)	
				19 (483)	15 (381)						11.25 (286)	
				20 (508)	14 (356)						10.5 (267)	
58058	5200 (147248)	2384 (727)	20 (508)	16 (406)	22 (559)	0.37 (302)	0.13 (32)	0.09 (22)	0.17 (42)	0.14 (35)	16.5 (419)	0.12 (30)
				17 (432)	20 (508)						15 (381)	
				18 (457)	19 (483)						14.25 (362)	
				19 (483)	18 (457)						13.5 (343)	
				20 (508)	17 (432)						12.75 (324)	
				22 (559)	16 (406)						12 (305)	
58080	Contact factory											
6450	6000 (169901)	2400 (732)	22 (559)	20 (508)	19 (483)	0.30 (245)	0.09 (22)	0.06 (15)	0.18 (45)	0.14 (35)	14.25 (362)	0.12 (30)
6458 6464	8500 (240693)	2400 (732)	26 (660)	24 (610)	23 (584)	0.30 (245)	0.09 (22)	0.06 (15)	0.18 (45)	0.14 (35)	23 (584)	0.08 (20)

Table 10 Duct Sizes and Pressure Drops for Dryer Models (cont'd.)

Air Specifications			Duct components, sizes, and pressure drops									
			Equivalent** cross-sections			Pressure drop - iwc (Pa)						
			Round	Rectangular***		Straight	90 Degree Elbows					
							Smooth round		3-segment round		Rectangular	
Dryer Model Prefix	Air flow - scfm (nlpm)	Velocity* for given cross-section - fpm (mpm)	Diame-ter-in (mm)	Height-in (mm)	Width-in (mm)	iwc per 100 feet (or Pa per 100 meters)	Rs Short radius	Rl Long radius	Rs Short radius	Rl Long radius	Radius-in (mm)	iwc (Pa)
72072 (with tower)	10000 (283168)	2100 (640)	30 (762)	23 (584)	33 (838)	0.15 (123)	0.21 (52)	0.17 (42)	0.28 (70)	0.24 (60)	31 (787)	0.14 (35)
				24 (610)	31 (787)						30 (762)	
				25 (635)	30 (762)						28.75 (730)	
				26 (660)	28 (711)						28 (711)	
				27 (686)	27 (686)						27.25 (692)	
				28 (711)	26 (660)						26.75 (679)	
				30 (762)	25 (635)						24.5 (622)	
				31 (787)	24 (610)						23.75 (603)	
				33 (838)	23 (584)						22.75 (578)	
7272 7676 8282	14000 (396436)	2600 (792)	32 (813)	27 (686)	29 (737)	0.28 (229)	0.11 (27)	0.08 (20)	0.21 (52)	0.13 (32)	27 (686)	0.13 (32)

* A velocity of at least 2000 fpm (610 mpm) helps keep lint particles in suspension.
** Equivalent means that the rectangular cross sections have the same pressure drop as the round cross-section.
*** Field data determines the number of rectangular cross-sections shown for each dryer model.

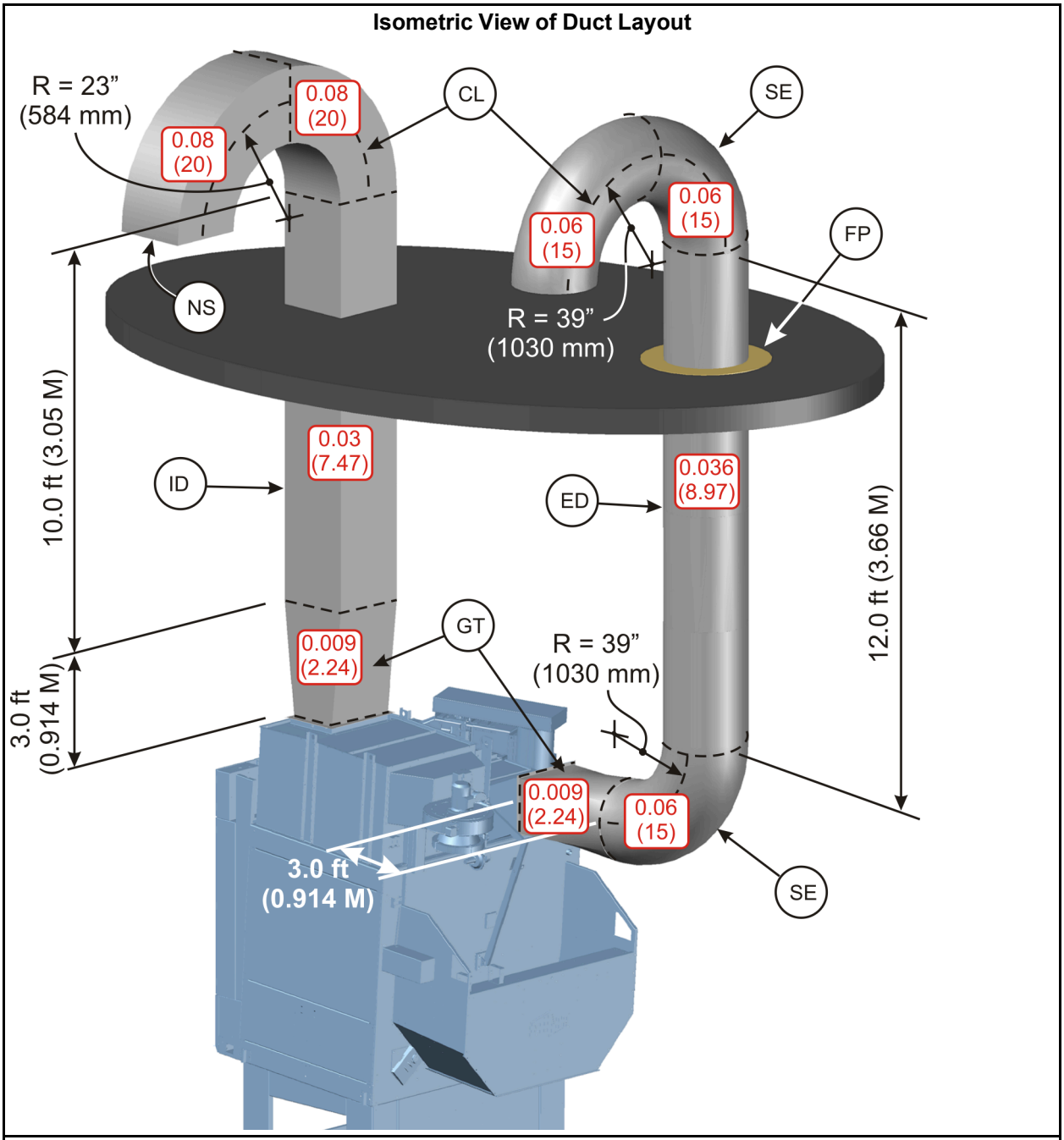
2.2.3.3 Example Layout

BNDDUI01.C12 0000087235 A.10 A.11 B.2 Released

To provide a more comprehensive example, the figure below shows both rectangular and round duct. However, avoid using rectangular duct if possible, especially for the exhaust duct.

The figure below shows the pressure drop values taken from Section 2.2.3.2 : Duct Components and Their Pressure Drops, page 44 and used in the example equations in Section 2.2.3.4 : Pressure Drop Equations and Examples, page 47 superimposed on each piece of duct.

Figure 13. Example Duct Layout for Model 6464TG1L Dryer



Legend

CL . . . Center line.
ED . . . Exhaust duct. This example uses 26 inch (660 mm) diameter round duct.
FP . . . Fire protection per construction codes.
GT . . . Gradual transitions. Treat as straight duct of the same size as their larger end.
ID . . . Inlet duct. This example uses 24 inch (610 mm) high by 23 inch (584 mm) wide rectangular duct.
NS . . . No screen on inlet duct fresh air intake.
SE . . . Smooth elbows (six or more segments). This example uses large radius elbows.

2.2.3.4 Pressure Drop Equations and Examples

BNDDUI01.C14 0000087352 A.10 A.11 B.2 Released

Calculate the pressure drop for each straight length of duct as follows:

$$PD_s = PD_{100} \times L / 100$$

Where:

PD_s = Pressure drop for a straight length

PD_{100} = Pressure drop per 100 feet (or 100 meters) as given in table

L = Length of straight section in feet (or meters)

The following examples calculate the pressure drop for the 10 ft (3.05 M) length of rectangular duct in Figure 3.

English example:

$$0.3 \times 10 / 100 = 0.03 \text{ iwc}$$

Metric example:

$$243 \times 3.05 / 100 = 7.47 \text{ Pa}$$

Calculate the total pressure drop as follows:

$$PD_T = PD_1 + PD_2 + PD_3 + \ldots + PD_n + PD_F$$

Where:

PD_T = Total external pressure drop

PD_1 = Pressure drop for the most upstream (inlet-end) component

PD_2, PD_3, ... = Pressure drop for each next duct component in sequence

PD_n = Pressure drop for the most downstream (exhaust-end) component

PD_F = Pressure drop contributed by the external lint collection system, if any.

The following examples calculate the total pressure drop for the layout shown in Figure 13, page 46 after the pressure drops for all straight sections have been calculated. The dryer in the example layout uses internal lint screens. The installation does not have a separate, external lint collection system.

English example:

$$0.08 + 0.08 + 0.03 + 0.009 + 0.009 + 0.06 + 0.036 + 0.06 + 0.06 = 0.424 \text{ iwc}$$

Metric example:

$$20 + 20 + 7.47 + 2.24 + 2.24 + 15 + 8.97 + 15 + 15 = 105.92 \text{ Pa}$$

BNDUUI01 / 2019285 BNDUUI01 0000243162 B.5 8/11/25, 2:58 PM Released

2.3 Utility Requirements For Gas, Steam and Thermal Oil Dryers

BNDUUI01.C01 0000243161 B.2 A.4 B.5 1/2/20, 1:40 PM Released

This document applies to all Milnor® pass-through dryer models. It specifies heating fuel and air intake requirements and gives general information on all utility connections. Additional information about utility connections is located in the following documents:

dimensional drawing for your machine gives pipe sizes, connection types, and connection locations

laundry layout drawings for your system gives the control connections, which are system-dependent

document BNDGUI01 "Air and Ductwork Requirements for Milnor®Pass-through Dryers" gives design criteria for customer-supplied inlet and outlet ductwork

external fuse and wire document for your machine gives customer-supplied fuse, circuit breaker, and wire sizes for the available machine voltages

machine nameplate gives the voltage for your machine

The connections which may be required depending on machine model and options are:

1. Piped inlets and outlets: heating fuel (natural gas, propane, steam, or thermal oil), sprinkler (cold) water, compressed air, gas line vent, gas test tap, steam condensate return, vacuum breaker drain.
2. Ducted inlets and outlets: main air intake, main air exhaust
3. Electric power connections and removal of related shipping restraint
4. Control connections
5. Bumper guard attachment

2.3.1 Plumbing and Other Mechanical Connections

BNDUUI01.C02 0000243238 A.3 B.2 B.5 1/2/20, 1:40 PM Released

2.3.1.1 Hazards and Precautions

BNDUUI01.C03 0000243237 A.3 B.2 B.5 1/2/20, 1:40 PM Released

2.3.1.1.1 All Models

BNDUUI01.C04 0000243236 A.3 B.2 B.5 1/2/20, 1:40 PM Released

WARNING: Fire Hazards — Sprinkler and overheat control—Failure to supply water to the sprinkler or to open the manual valve, or failure of the overheat control, eliminates the machine's internal fire protection. Normally the machine stops and water is sprayed into the cylinder if outlet temperature reaches 240 degrees Fahrenheit (116 degrees Celsius).

CAUTION: Machine Damage Hazards — Valve bodies have fragile components.

- Do not distort valve bodies. Hold tension against these valves with a wrench on the side of the valve onto which the pipe is being connected to prevent twist distorting the valve.
- Always install unions and shut off valves at the water and steam connection points to permit removal of the machine components for servicing.

2.3.1.1.2 Gas and Propane Models

BNDUUI01.C05 0000243235 A.3 B.2 B.5 1/2/20, 1:40 PM Released

WARNING: Explosion and Fire Hazards — Improperly installed gas-fired devices can release gas.

- Conform with local codes or, in their absence, with the **National Fuel Gas Code, ANSI Z223.1/NFPA 54** or the **Natural Gas and Propane Installation Code, CSA B149.1** or a superseding directive.
- Electrically ground the machine in accordance with local codes or, in their absence, with the **National Electric Code, ANSI/NFPA 70** or the **Canadian Electrical Code, CSA C22.1** or a superseding directive.
- Install a minimum 1/2 inch NPT plugged tap, accessible for test gauge connection, immediately upstream of the gas supply connections to the dryer.
- Install vent lines on any regulator vents and vent this gas to the outdoors.

WARNING: Explosion, Fire, and Machine Damage Hazards — Excessive gas pressure can damage gas train components, possibly resulting in the release of gas.

- Make sure that the pressure of gas entering the dryer is regulated to the maximum specified in this document.
- Isolate the dryer from the gas supply for any pressure testing of the incoming gas supply line.

2.3.1.1.3 Steam and Thermal Oil Models

BNDUUI01.C06 0000243234 A.3 B.2 B.5 1/2/20, 1:40 PM Released

CAUTION: Machine Malfunction Hazard — Steam traps rated at 85 to 180 psi (586 to 1241 kPa) will not operate properly below 60 psi (414 kPa). Steam traps rated at 160 to 225 psi (1103 to 1551 kPa) will not operate properly below 115 psi (793 kPa).

- Conform to the rated pressure of the steam coil as stated on the machine nameplate.
- Choose a steam trap with a pressure rating corresponding to the actual pressure supplied.

CAUTION: Machine Damage Hazards — Allow steam coil to preheat and purge condensate before operating dryer or conditioner.

- Verify that the facility boiler has operated at least 15 minutes before the dryer receives the first load each day.

CAUTION: Machine Damage Hazards — Steam coil antifreeze is drained at the factory but some residue may remain.

- Route the steam condensate return line to the sewer for the first hour of operation to prevent residual antifreeze from entering the boiler system.

2.3.1.2 Heating Fuel and Air Intake Requirements

BNDUUI01.C07 0000243233 B.2 A.4 B.5 1/2/20, 1:40 PM Released

These requirements are given in the following two tables. The first table covers models in production on or after January 1, 2016. The second table covers models that were no longer in production as of January 1, 2016.

The nameplate designations for certain newer dryer models (the first table) changed from a 5-digit numeric prefix to a 4-digit numeric prefix, but the specifications remain the same. If you have one of these models, your nameplate may show 5050_ or 50050_, 6450_ or 64050_, 6458_ or 64058_, 6464_ or 64064_.

Newer gas dryer models (the first table) include the 5050_ (or 50050_) models which are only available with the air heat burner design, the 6450_ (or 64050_), 7676_, and 8282_ models, which are only available with the ratio air burner design, and the 6458_ (or 64058_) and 6464_ (or 64064_) models, which are available with either burner design. Older dryer models (the second table) were only available with air heat or older burner design

Table 11. Gas, Steam, and Air Intake - Newer Dryer Models

Model number prefix	5050_ 50050_	6450_ 64050_	6458_ 64058_	6464_ 64064_	7676_	8282_
Capacity basis - lb (kg)	**150 (68)**	**220 (100)**	**250 (113)**	**300 (136)**	**500 (227)**	**630 (2860)**
Gas inlet with air heat burner (natural gas and propane models)						
Maximum Btu/hr (kcal/hr) at x" (mm) water column	950,000 (240,000) @ 13.5" (343)	1,500,000 (378,246) @ 13.5" (343)	1,800,000 (453,000) @ 13.5" (343)	1,800,000 (453,000) @ 13.5" (343)	n.a.	n.a.
Average Btu/hr (kcal/hr) at x" (mm) water column	495,000 (124,738) @ 13.5" (343)	725,000 (182,819) @ 13.5" (343)	825,000 (207,900) @ 13.5" (343)	990,000 (249,480) @ 13.5" (343)	n.a.	n.a.
Gas inlet with ratio air burner (natural gas and propane models)						
Maximum Btu/hr (kcal/hr) at x" (mm) water column	n.a.	1,300,000 (327,800) @ 25" (635)	1,800,000 (453,000) @ 25" (635)	1,800,000 (453,000) @ 25" (635)	3,000,000 (756,000) @ 40" (1016)	pending
Average Btu/hr (kcal/hr) at x" (mm) water column	n.a.	726,000 (182,952) @ 25" (635)	825,000 (207,900) @ 25" (635)	990,000 (249,480) @ 25" (635)	1,650,000 (415,793) @ 40" (1016)	2,079,000 (523,899) @ 40" (1016)
Steam inlet (steam models)						
Maximum Lb/Hr (kg/hr)	820 (372)	pending	1,990 (903)	1,990 (903)	3,223 (1462)	pending

Table 11 Gas, Steam, and Air Intake - Newer Dryer Models (cont'd.)

Model number prefix	5050_ 50050_	6450_ 64050_	6458_ 64058_	6464_ 64064_	7676_	8282_
Average Lb/Hr (kg/hr)	382 (173)	561 (254)	638 (289)	765 (347)	1,275 (578)	1,606 (728)
Maximum boiler horse-power (kw)	23.8 (10.8)	pending	57.7 (26.2)	57.7 (26.2)	93.4 (42.4)	pending
Average boiler horse-power (kw)	11.1 (8.3)	16.3 (12.1)	18.5 (13.8)	22.2 (16.5)	37.0 (27.6)	46.6 (34.7)
Thermal oil inlet (thermal oil models) - Consult Milnor® factory						
Main air intake						
Maximum scfm (cu m/ min)	3,600 (102)	6,000 (170)	8,500 (241)	8,500 (241)	14,000 (396)	14,000 (396)
Maximum allowable back pressure	0.5" water column					
Combustion (non-ducted, ambient) air intake with air heat burner (natural gas and propane models)						
Maximum scfm (cu m/ min) to blower	250 (7)	715 (20)	715 (20)	715 (20)	n.a.	n.a.
Maximum scfm (cu m/ min) to fire box	400 (11)	500 (14)	500 (14)	500 (14)	n.a.	n.a.
Total	650 (18)	1,215 (34)	1215 (34)	1215 (34)	n.a.	n.a.
Combustion (non-ducted, ambient) air intake with ratio air burner (natural gas and propane models)						
Maximum scfm (cu m/ min) to blower	n.a.	400 (11)	400 (11)	400 (11)	600 (17)	pending

Table 12. Gas, Steam, and Air Intake - Older Dryer Models

Model number prefix	5040_ 50040_	58040_	58058_	58080_	72072_ with tower	72072_ no tower
Capacity basis - lb (kg)	**110 (50)**	**150 (68)**	**220 (100)**	**300 (136)**	**425 (193)**	**425 (193)**
Gas inlet (natural gas and propane models)						
Maximum Btu/hr (kcal/ hr) at x" (mm) water column	950,000 (240,000) @ 13.5" (343)	950,000 (240,000) @ 13.5" (343)	1,400,000 (350,000) @ 13.5" (343)	1,800,000 (453,000) @ 13.5" (343)	2,700,000 (680,000) @ 18" (457)	2,700,000 (680,000) @ 18" (457)
Average Btu/hr (kcal/hr) at x" (mm) water column	363,000 (91,476) @ 13.5" (343)	495,000 (124,738) @ 13.5" (343)	726,000 (182,952) @ 13.5" (343)	990,000 (249,480) @ 13.5" (343)	1,402,500 (353,430) @ 18" (457)	1,402,500 (353,430) @ 18" (457)
Steam inlet (steam models)						
Maximum lb/hr (kg/hr)	600 (272)	600 (272)	950 (431)	1300 (590)	n.a.	n.a.
Average lb/hr (kg/hr)	127 (280)	173 (382)	561 (254)	765 (347)	n.a.	n.a.
Maximum boiler horse-power (kw)	17.4 (7.9)	17.4 (7.9)	27.5 (12.5)	37.7 (17.1)	n.a.	n.a.
Average boiler horse-power (kw)	8.1 (3.7)	11.1 (5.0)	16.3 (7.4)	22.2 (10.1)	n.a.	n.a.

Table 12 Gas, Steam, and Air Intake - Older Dryer Models (cont'd.)

Model number prefix	5040_ 50040_	58040_	58058_	58080_	72072_ with tower	72072_ no tower
Thermal oil inlet (thermal oil models) - Consult Milnor® factory						
Main air intake						
Maximum scfm (cu m/ min)	3,600 (102)	3,600 (102)	5,000 (142)	6,800 (193)	10,000 (283)	14,000 (396)
Maximum allowable back pressure	0.5" (water column)					
Combustion (non-ducted, ambient) air intake (natural gas and propane models)						
Maximum scfm (cu m/ min) to blower	250 (7)	250 (7)	400 (11)	500 (14)	715 (20)	715 (20)
Maximum scfm (cu m/ min) to fire box	400 (11)	n.a.	n.a.	n.a.	900 (25)	900 (25)

2.3.1.3 Other Mechanical Requirements

BNDUUI01.C08 0000243305 B.2 A.4 B.5 1/2/20, 1:40 PM Released

Main air intake and exhaust ducting Per document BNDGUI01 “Air and Ductwork Requirements for Milnor® Pass-through Dryers.”

Sprinkler water inlet Minimum 35 PSI (2.4 ATU). Must reliably provide 60 USg (227 liters) per minute for fire safety.

Compressed air inlet Clean and dry 85 PSI (5.8 ATU) to 110 PSI (7.5 ATU)

Compressed air inlet for optional internal lint filter 85 PSI (5.8 ATU) to 110 PSI (7.5 ATU). Air usage estimate: 110 scf (3.1 cubic meter) in 15 seconds when activated.

Customer-supplied connector between the gas inlet and the gas supply piping a listed connector in compliance with ANSI Z21.24 CSA 6.10 “Standard for Connectors for Gas Appliances”

Customer-supplied tap (gas/propane models) 1/2" NPT plugged tap, accessible for test gauge connection. Install immediately upstream of the gas supply connections to the dryer.

Gas line vent (gas/propane models) 1/4" stainless steel. Must be vented from the regulator vent to the exterior of the building.

Steam condensate outlet (steam models) Per plumbing code. Return condensate to boiler through a steam trap of the correct size. Two steam traps are available from Milnor®: One for 85 - 180 PSI (6 - 12 ATU) and one for 160 - 225 PSI (11 - 15 ATU).

Vacuum breaker (steam models) Vent the tube to the sewer.

2.3.2 Electrical Connections

BNDUUI01.C09 0000243304 A.3 B.2 B.5 1/2/20, 1:40 PM Released

2.3.2.1 Hazards and Precautions

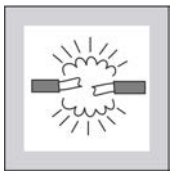
BNDUUI01.C10 0000243303 B.2 A.4 B.5 1/2/20, 1:40 PM Released

 **WARNING: Severe injury and machine damage hazards —** Electric power can shock or electrocute you. Incorrect electrical connections can damage machine components.

- Do not attempt electric power connections unless qualified and authorized.
- Prior to making power connections, read the instructions on all related tags.
- Connect the “stinger leg” if any, only to terminal L3, never to terminals L1 or L2.
- Verify all motor rotation. If the cylinder turns in the wrong direction, interchange the wires connected to L1 and L2. Never move L3.

CAUTION: Machine Damage Hazards — The blower motor or other drive components can be destroyed if the blower bearing shipping restraint is incorrectly handled.

- Perform the steps given in Section 2.3.2.2 : Remove Blower Shipping Bracket and Reconnect Motor Contactor Coil, page 53.



CAUTION: Risk of malfunction and damage — Wiring errors can cause damage and incorrect operation.

- Label all wires if you must disconnect them to service the control.

2.3.2.2 Remove Blower Shipping Bracket and Reconnect Motor Contactor Coil

BNDUUI01.C11 0000243300 A.3 B.2 B.5 1/2/20, 1:40 PM Released

The machine was shipped with a blower shipping restraint (Figure 14: Blower Shipping Restraint, page 53). This bracket immobilizes the blower bearing, preventing bearing damage during shipping. Connections to one side of the blower motor contactor coil (Figure 15: Reconnect Blower Contactor Coil Wires, page 54), are removed after testing, to prevent blower operation with bracket in place. When the machine is in its final position, remove the restraint and reconnect the contactor coil as follows:

1. Unbolt and remove red restraint.
2. Install the belt guard.
3. Locate the blower contactor inside the high voltage electric box.
4. Match the tagged coil wire with the tagged contactor coil terminal and reconnect.

Figure 14. Blower Shipping Restraint

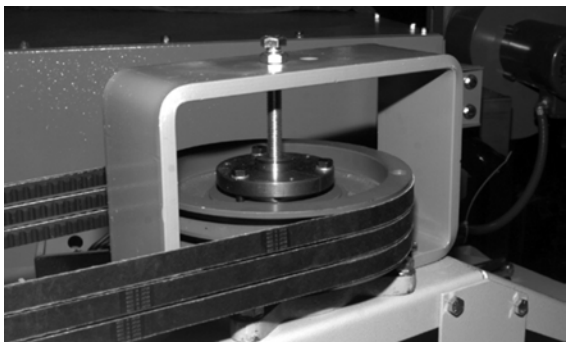


Figure 15. Reconnect Blower Contactor Coil Wires

2.3.2.3 Electric Power Connection Capacities

BNDUUI01.C12 0000243297 A.3 B.2 B.5 1/2/20, 1:40 PM Released

The customer must furnish a remotely mounted disconnect switch with lag type fuses or circuit breakers, and wiring between this box and the fuse box on the machine. Refer to the machine nameplate and the external fuse and wire document for your machine to determine the sizes of these fuses or circuit breakers, and wires.

2.3.2.4 Control Connections

BNDUUI01.C13 0000243296 A.3 B.2 B.5 1/2/20, 1:40 PM Released

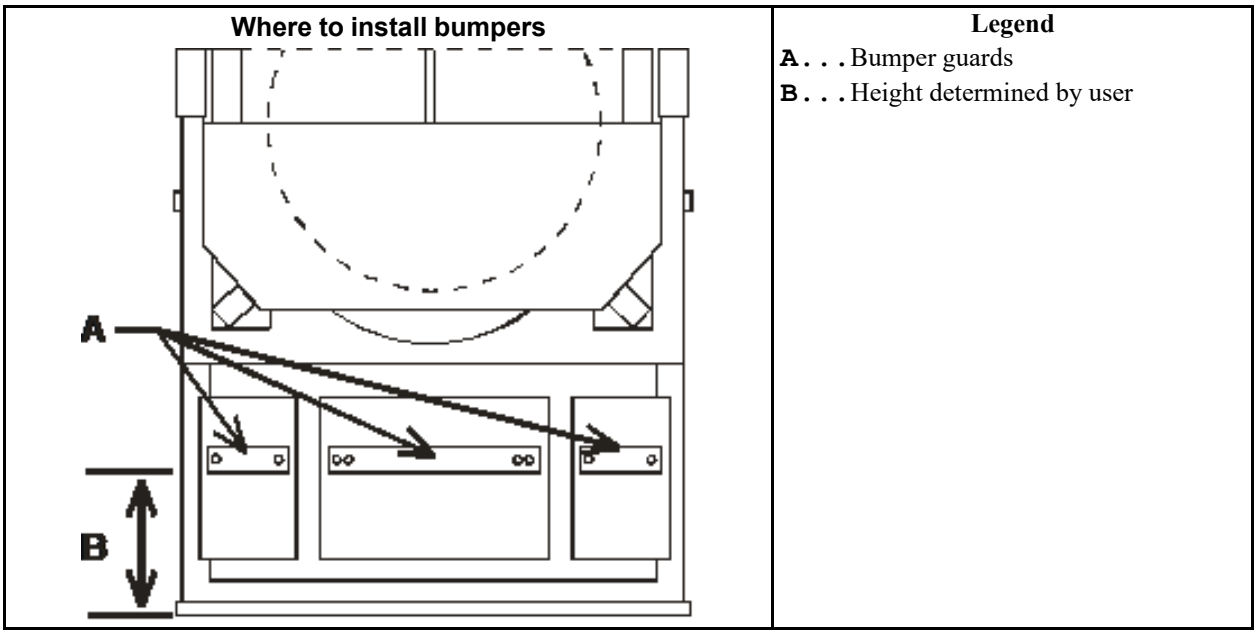
Refer to the layout drawings for your laundering system.

2.3.3 Bumper Guard Installation

BNDUUI01.C15 0000841722 A.3 B.2 B.5 8/11/25, 2:47 PM Released

The machine is supplied with bumper guards which must be installed on the rear of the machine when the machine is on site. The guards protect the machine from the constant impact of laundry carts placed under the discharge door. Hence the height at which the guards are installed must match the height of the carts used. See Figure 16, page 55.

Figure 16. Bumper Guard Installation



BNDGUM02 / 2023393 BNDGUM02 0000341366 E.2 9/26/23, 9:40 AM Released

2.4 Set the Heating System—Ratio Air Dryer

BNDGUM02.C01 0000341365 A.3 B.2 E.2 4/29/21, 8:48 AM Released

This document applies to dryers with a *ratio air* burner. See document BNDGUM01 for gas dryer models with an *air heat* burner.

2.4.1 About the Procedure

BNDGUM01.C10 0000344550 C.2 B.2 E.2 9/26/23, 9:36 AM Released

The differences between an *air heat* burner and a *ratio air* burner are important with regard to replacement parts and the procedure you use to set or confirm the correct gas and air flows.

Table 13. Current Dryer Models and Burner Types

Burner Type / Dryer Model	5050TG1_	6450TG1_	6458TG1_	6464TG1_	7676TG1_	8282TG1_
Air Heat	only	optional	standard	standard		
Ratio Air		standard	optional	optional	only	only

It can be necessary to set the heating system when the dryer is installed and when components of the gas train are replaced. You must be a technician trained to do work on gas trains and familiar with gas train components.

Necessary test equipment includes:

- A manometer such as Dwyer model 3T294.
- Tubes and fittings to connect to the taps (test ports) shown herein.

- In some cases, a fitting with a valve to control the gas released from the tap.

When you set the heating system, you will do a sequence of steps. In most steps you will make the necessary adjustments to change a measured pressure to match a specified value. Some terms used in this instruction are:

gas train the group of valves and related components that controls the flow of natural gas or propane into the dryer

flame control an electronic module that monitors and maintains a safe flame. Milnor® system dryers use two brands of flame control: **Fireye** (primarily for the USA and Canada) and **Landis + Gyr** (primarily for Europe).

setup mode a method of performing adjustments that activates the appropriate components for a given adjustment step. If your machine has the Fireye flame control, you must use the setup mode to make adjustments.

manual method a method of performing adjustments that runs a dry code manually and permits you to specify certain conditions for a given adjustment step. If your machine has the Landis + Gyr flame control, you must use the manual method to make adjustments.

manometer an instrument to measure fluid pressure

Reset button symbolized in this procedure, refers to both the physical push button used to cancel a blinking light on the dryer status light panel and to the reset button on the flame control (Fireye or Landis + Gyr). In this procedure, use whichever reset component applies to the task.

Signal Cancel button symbolized in this procedure, refers to the button on the dryer controller screen used to cancel the operator alarm.

Several types of **Dungs** gas train and the two types of flame control stated above are available to meet different local codes. Applicable models will use one of the types of gas train, corresponding flame control, and corresponding setup method listed in the following table. This instruction describes one general procedure, but indicates where you will do something one way or the other, depending on which of the two setup methods you use (which type of flame control you have).

Table 14. Gas Train and Flame Control Options

Type of Gas Train	Brand of Flame Control	Setup method
Natural Gas, CSA	Fireye	Setup Mode
Propane, CSA	Fireye	Setup Mode
Natural Gas, IRI	Fireye	Setup Mode
Natural Gas, Europe	Landis + Gyr	Manual (dry code) method
Propane, Europe	Landis + Gyr	Manual (dry code) method
Natural Gas, Australia	Landis + Gyr	Manual (dry code) method
Propane, Australia	Landis + Gyr	Manual (dry code) method
Natural Gas, Holland	Landis + Gyr	Manual (dry code) method

2.4.2 Summary of Steps and Required Values (Ratio Air)

BNDGUM02.C02 0000341364 B.2 C.4 E.2 9/25/23, 2:52 PM Released

Values are displayed in inches of water (and millibar) except where indicated otherwise.

Table 15. Applicable Models

Step		Gauge Points [1]	6450TG_		6458TG_, 6464TG_		7676TG_		8282TG_	
			Fireye	L+G	Fireye	L+G	Fireye	L+G	Fireye	L+G
1	**Starting conditions**	n. a.	See Section 2.4.7.1 : Step 1: Set the starting conditions, page 64							
2	**Static (incoming) gas pressure [2]**	GGS	30 (75)	30 (75)	25 (62)	25 (62)	40 (100)	40 (100)	40 (100)	40 (100)
3	**Pilot gas regulator**	GGP	3.0 (7.5)	1.3 (3.2)	3 (7.5)	3 (7.5)	3 (7.5)	3 (7.5)	3 (7.5)	3 (7.5)
4	**Pilot flame**	GGP	2.5 (6.2)	2.5 (6.2)	2.5 (6.2)	2.5 (6.2)	2.5 (6.2)	2.5 (6.2)	2.5 (6.2)	2.5 (6.2)
5	**Enable heating**	n. a.	n. a.							
6	**Differential air pressure range**	GRH and GRL	n. a.							
7g	**Differential gas pressure — natural gas (standard)**									
	Range with manual butterfly valve full open	CFH and GFL	5.6 (13.9) to 6.0 (14.9)	5.6 (13.9) to 6.0 (14.9)	5.6 (13.9) to 6.0 (14.9)	5.6 (13.9) to 6.0 (14.9)	Record the value measured as explained in the instructions.			
	Acceptable range		4.7 (11.7) to 5.0 (12.4)	4.7 (11.7) to 5.0 (12.4)	4.5 (11.2) to 4.9 (12.2)	4.5 (11.2) to 4.9 (12.2)	5.4 (13.5) to 5.8 (14.4)	5.4 (13.5) to 5.8 (14.4)	5.4 (13.5) to 5.8 (14.4)	5.4 (13.5) to 5.8 (14.4)
	Target		4.9 (12.2)	4.9 (12.2)	4.7 (11.7)	4.7 (11.7)	5.6 (13.9)	5.6 (13.9)	5.6 (13.9)	5.6 (13.9)
7p	**Differential gas pressure — propane (optional)**									
	Range with manual butterfly valve full open	CFH and GFL	7.0 (17.4) to 7.5 (18.7)	7.0 (17.4) to 7.5 (18.7)	7.0 (17.4) to 7.5 (18.7)	7.0 (17.4) to 7.5 (18.7)	pending	pending	pending	pending
	Acceptable range		4.6 (11.4) to 5.0 (12.4)	4.6 (11.4) to 5.0 (12.4)	4.6 (11.4) to 5.0 (12.4)	4.6 (11.4) to 5.0 (12.4)	pending	pending	pending	pending
	Target		4.8 (12)	4.8 (12)	4.8 (12)	4.8 (12)	pending	pending	pending	pending
8	**Minimum fire temperature ABOVE AMBIENT**	n. a.	70º F (21º C) to 80º F (27º C)(view on display)							
	Damper setting	n. a.	Set damper position to 2							
9	**Minimum main air pressure**	GAM	1.2 (3)	1.2 (3)	1.2 (3)	1.2 (3)	1.7 (4.2)	1.7 (4.2)	1.5 (3.7)	1.5 (3.7)
—	**Maximum main gas pressure**	none	40 (100)	40 (100)	35 (87)	35 (87)	50 (124)	50 (124)	50 (124)	50 (124)
10	**Minimum main gas pressure**	GGL	8 (20)	8 (20)	15 (37)	15 (37)	17 (42)	17 (42)	17 (42)	17 (42)
11	**Combustion air pressure switch**	GRC	4.5 (11.2)	4.5 (11.2)	10 (25)	10 (25)	6 (15)	6 (15)	6 (15)	6 (15)
12	**Maximum back (air) pressure**	n. a.	0.8 (2)	0.8 (2)	0.8 (2)	0.8 (2)	0.8 (2)	0.8 (2)	0.8 (2)	0.8 (2)

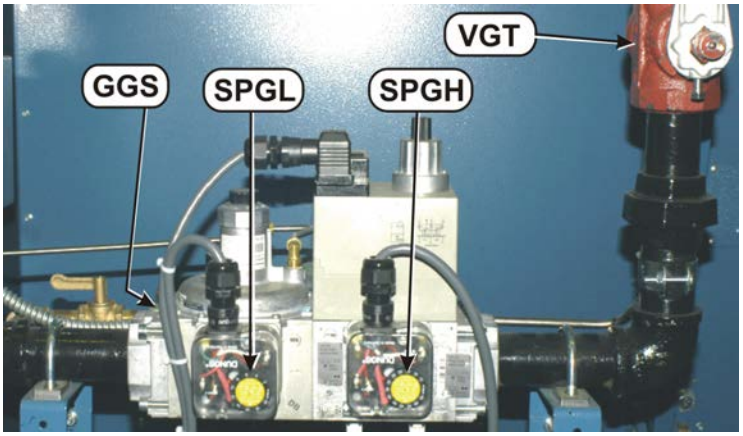
1. The reference point is atmosphere unless two values are shown for the gauge point.
2. Must not exceed. A pressure that exceeds the maximum can damage the regulator.

2.4.3 Adjustment Components

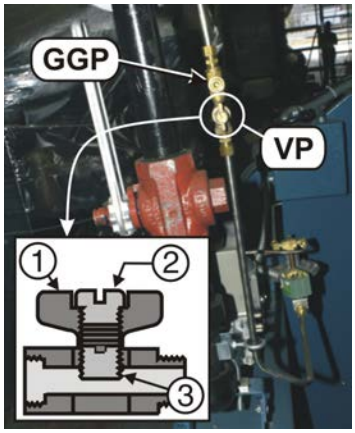
BNDGUM02.C03 0000341363 B.2 E.2 A.6 5/24/22, 8:47 AM Released

Figure 17. Gas Adjustment Components (6464TG1_ shown. 7676TG1_ models are similar.)

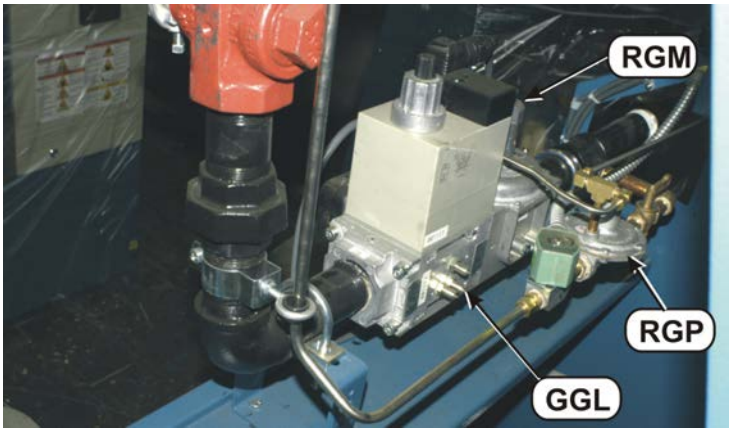
Main Gas Valve and Reguator



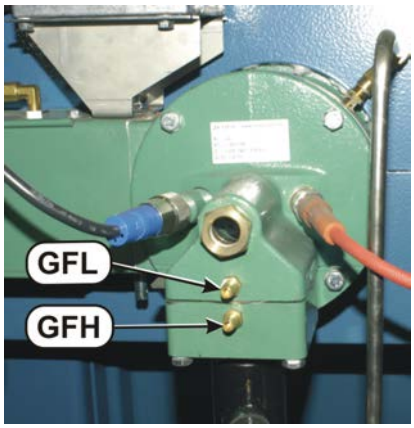
Pilot Line



Main Gas Valve - Rear



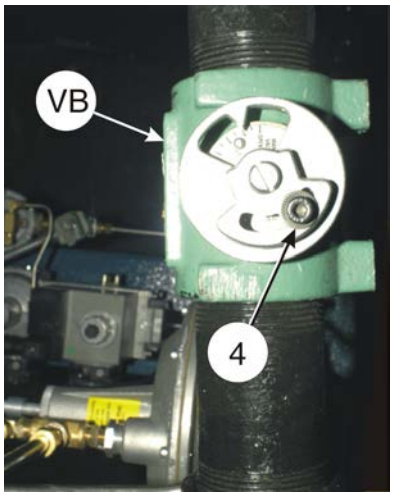
Ratio Gas Pressure Taps



Legend

1. Handle (shown in open position)
2. Cover screw
3. Adjustment screw
4. Locking screw
5. GFH — Ratio gas pressure high tap
6. GFL — Ratio gas pressure low tap
7. GGL — Main gas pressure low tap
8. GGP — Pilot gas pressure tap
9. GGS — Static (incoming) gas pressure tap. 6458TG_ and 6464TG_ models are as shown. On 7676TG_ and 8282TG_ models, GGS is the upper of two plugs on RGM.
10. RGM — Main gas regulator
11. RGP — Pilot gas regulator
12. SPGH — High gas pressure switch
13. SPGL — Low gas pressure switch

Butterfly Valve

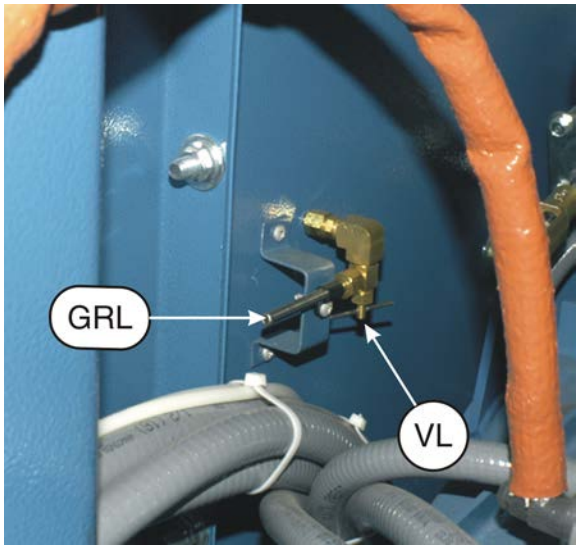


Gas Adjustment Components (6464TG1_ shown. 7676TG1_ models are similar.) (cont'd.)

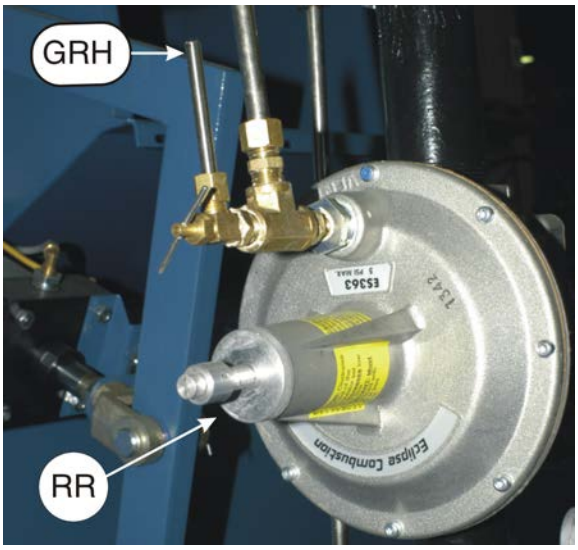
14. VGT — Manual test valve 15. VP — Pilot gas cock 16. VB — Butterfly valve	

Figure 18. Air Adjustment Components (6464TG1_ shown. Other models are similar.)

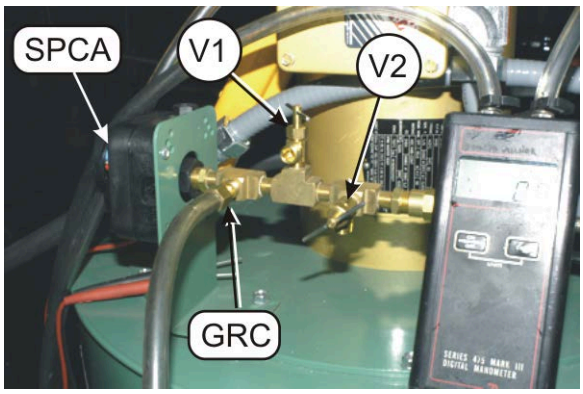
Ratio Air Pressure Low Tap



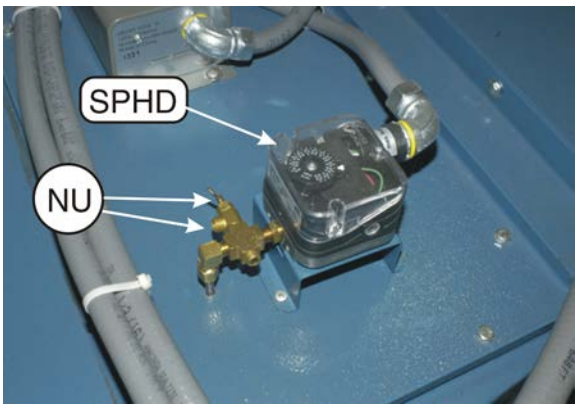
Ratio Air Pressure High Tap



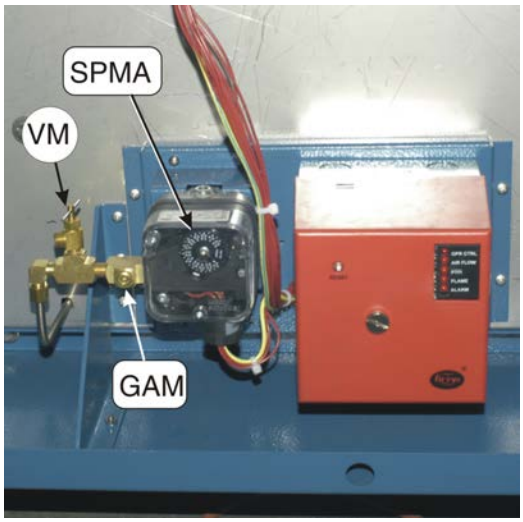
Combustion Air Pressure Switch



Back Pressure Switch



Main Air Pressure Switch

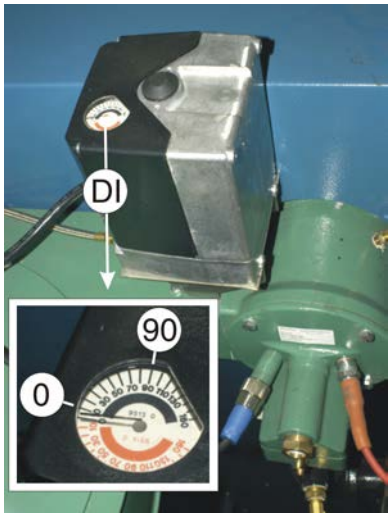


Legend

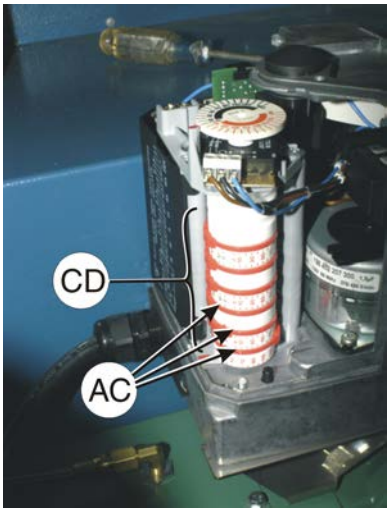
1. GAM — Main air tap
2. GRC — Combustion air pressure tap
3. GRH — Ratio air pressure high tap
4. GRL — Ratio air pressure low tap
5. NU — Not used
6. RR — Ratio air regulator
7. SPCA — Combustion air pressure switch
8. SPHD — Back pressure switch
9. SPMA — Main air pressure switch (lower front of dryer)
10. VL — Ratio air low needle valve
11. VM — Main air needle valve
12. V1 — Combustion air primary needle valve
13. V2 — Combustion air secondary needle valve

Figure 19. Ratio Air Actuator

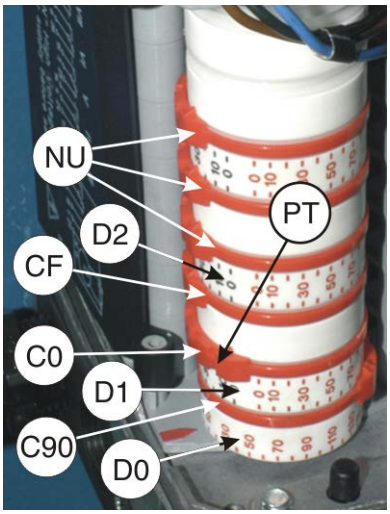
Actuator with Cover On



Actuator with Cover Off



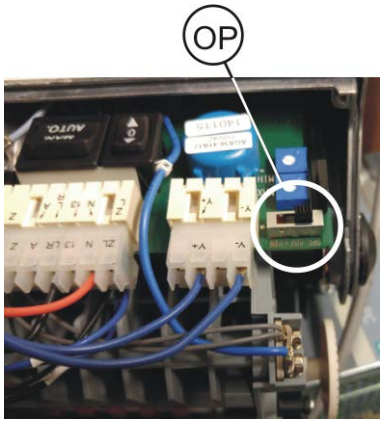
Adjustable Rings on Drum



Legend

1. DI — Dial indicator shows the rotational position of the damper in degrees.
2. 0 — Position 0 (zero): damper fully closed.
3. 90 — Position 90: damper fully open (open 90°). See Section 2.4.4 : When To Use Black Versus Red Numbers on the Ratio Air Actuator, page 61.
4. CD — Cam drum. The drum rotates as the damper position changes.
5. AC — Adjustable cams.
6. PT — Pointer on adjustable cam.
7. CF — Cam to set minimum fire temperature. See Section 2.4.4 , page 61. Min fire is normally set to 70° F (21° C) above ambient temperature. As a starting point, set this cam to 40. A small change to this setting will usually cause a large change to the min fire temperature.
8. C0 — Cam to set closed position. Must remain set at 0°.
9. C90 — Cam to set fully open position. Must remain set at 90°.
10. D2 — Set CF off of these numbers.
11. D1 — Set C0 and C90 off of these numbers.
12. D0 — Shows drum rotation degrees. Do not use to set cams.
13. OP — 3-position switch. **Must be set to the "OPE" position**.
14. NU — Not used.

3-position Switch set to OPE



2.4.4 When To Use Black Versus Red Numbers on the Ratio Air Actuator

BNDGUM02.C04 0000341429 A.2 B.2 E.2 4/15/21, 4:07 PM Released

Each cam on the drum has two sets of numbers—one black and one red. You must use the color that corresponds to a left-hand or right-hand dryer. If the eighth character of your dryer model (see your nameplate) is "L" use only the red numbers. If it is an "R" use only the black numbers.

For example, for dryer model 6464TG1L, use the red numbers. For model 6464TG1R, use the black numbers.

2.4.5 How to Access Setup Mode A to Test SPCA and Mode C to Ignite the Pilot

BNDGUM02.C05 0000342200 A.2 B.2 E.2 4/15/21, 4:07 PM Released

Display or Action	Explanation
WAITING FOR LOAD **********	The display after the power up sequence
MANUAL	Accesses **manual mode** menu (press CANCEL to return to automatic).
RETURN TO AUTOMATIC 00	Shows the display in **manual mode**
1 2	Selects the **setup procedure**
SETUP PROCEDURE 12	The display with the setup procedure accessed.
ENTER	Advances to **setup mode A** (Set Combustion Air)
ENTER, ENTER	Advances to **setup mode C** (Set Pilot Valve)
0, 0	Selects "RETURN TO AUTOMATIC"

2.4.6 How to Manually Control the Main Air Damper and Modulating Gas Valve

BNDGUM02.C06 0000342199 A.2 B.2 E.2 4/15/21, 4:07 PM Released

Display or Action	Explanation
WAITING FOR LOAD **********	The display after the power up sequence.
MANUAL	Accesses the **manual load** menu
SELECT DRY CODE 00 REDRY	
ENTER	Accepts the selected dry code and prompts for load size
ENTER LOAD SIZE 0 FULL LOAD	
ENTER	Consequences of this action
LOAD DRYER WITH REDRY	Ignore this prompt.
ENTER	Starts the cycle.

LOADING	This display appears.
00F TIC TOC 000 VP xx xxxAxxx xxx xxx	This display appears. The VP value alternates with an air value.

Wait for the burner to ignite and for outlet temperature to rise to the programmed value.

MANUAL	Stops the timer and accesses the manual control panel for temperature, damper and basket rotation.
TICHTOC LDA MVP BSPD xxx+xxx x0x 0x xxxx	
DAMPER + ↑ or DAMPER + ↓	Sets the damper position. Hold the keys until the desired damper position appears. Example: D = 2.
TICHTOC LDA MVP BSPD xxx+xxx x2x xxx 000	
MOD VALVE POSITION + ↑ or MOD VALVE POSITION + ↓	Sets the modulating gas valve (position). Hold the keys until the desired valve position appears. Example: MVP = 255
TICHTOC LDA MVP BSPD xxx+xxx x2x 255 xxxx	You can quickly move between minimum fire and maximum fire. The modulating valve position wraps from 000 to 255 and the reverse.
CANCEL	Returns to automatic.

2.4.7 Adjustment Steps

BNDGUM02.C07 0000342346 A.3 B.2 E.2 4/20/21, 3:19 PM Released

Refer to Section 2.4.2 : Summary of Steps and Required Values (Ratio Air), page 56 while you do these procedures. In these steps, mount the manometer vertically and use the high pressure scale, except where stated otherwise.

WARNING: Explosion hazard — Improper maintenance procedures can cause the rapid release of gas.

- You must be an approved technician.
- Make sure you can quickly shut off gas at the external valve.
- Do not open gas taps (test ports) until you are ready with the condition and materials necessary to avoid the hazardous release of gas.

WARNING: Crush and entangle hazard — Moving components can crush and entangle body parts.

- Use extreme caution when you work near moving components.

2.4.7.1 Step 1: Set the starting conditions

BNDGUM02.T01 0000342345 B.2 E.2 2/14/22, 2:16 PM Released

Most of these are temporary adjustments to make sure that you can achieve the subsequent settings

Main gas regulator (RGM in Figure 17, page 58) Turn the top adjustment screw fully clockwise (fully open). **This is the final adjustment. RGM remains at this setting.**

Ratio regulator (RRM in Figure 18, page 60) Set the top adjustment screw as stated below.

- 6450TG_ models—turn full counter-clockwise then 7.5 turns clockwise
- 6464TG_ models—turn full counter-clockwise then 2.75 turns clockwise
- 7676TG_ models—turn full counter-clockwise then 24 turns clockwise

Manual butterfly valve (VB in Figure 17, page 58) Release the locking screw (item 4), open the valve fully then tighten the locking screw.

Minimum fire cam (CF) on ratio air actuator (Figure 19, page 61) Set the pointer to 40º open.

Low gas pressure switch (SPGL in Figure 17, page 58) Set the dial to the lowest value.

High gas pressure switch (SPGH in Figure 17, page 58) Set the dial as stated below. **This is the final adjustment. SPGH remains at this setting.**

- 6464TG1_ models, set the dial to 35
- 7676TG1_ models, set the dial to 50

Combustion air pressure switch (SPCA in Figure 18, page 60) Set the dial to the lowest value.

Main air pressure switch (SPMA in Figure 18, page 60) Set the dial to the lowest value.

2.4.7.2 Step 2: Set static (incoming) gas pressure

BNDGUM02.T02 0000342344 A.2 B.2 E.2 4/15/21, 4:07 PM Released

1. Shut off the gas supply to the machine.
2. See Figure 17, page 58. Attach one side of the manometer to **GGS**. Leave the other side open to the atmosphere.
3. Supply gas to the machine.
4. Adjust the incoming gas (upstream from the dryer) as close as possible to the maximum static gas pressure listed in Table 15, page 57. This pressure is necessary for further adjustments. Pressures higher than specified can damage the regulator.

2.4.7.3 Step 3: Set regulated pilot gas pressure

BNDGUM02.T03 0000342550 A.3 B.2 E.2 4/20/21, 3:19 PM Released

1. Use SETUP MODE C (see Section 2.4.5 : How to Access Setup Mode A to Test SPCA and Mode C to Ignite the Pilot, page 62) to turn on the **pilot gas valve**. If this is the first time the dryer has been fired, it can be necessary to exit the SETUP MODE and return to SETUP MODE C up to six times before the pilot line fills with gas and the pilot ignites.
2. See Figure 17, page 58. Attach one side of the manometer to **GGP**. Leave the other side open to the atmosphere.

3. Remove the cover screw (2) from **VP**.
4. Turn the set screw (3) counterclockwise until the top of the screw is about 1/8 inch (3 mm) below the top of the valve handle. **Do not allow the set screw to come out of the valve. Gas will escape.**
5. Adjust **RGP** until the manometer displays the value specified in Table 15, page 57.

2.4.7.4 Step 4: Set pilot flame gas pressure

BNDGUM02.T04 0000342549 A.2 B.2 E.2 4/15/21, 4:07 PM Released

If the flame control trips during this step, press , and to reset it.

1. Look at Figure 17, page 58. Leave the manometer connected to **GGP** and to the atmosphere.
2. Close **VGT**.
3. Remove the center screw (item 2) from **VP**.
4. Turn the adjustment screw (3) on **VP** clockwise, until the manometer shows the value specified in Table 15, page 57.
5. Replace the cover screw (2) in **VP**.
6. Open **VGT.**

2.4.7.5 Step 5: Enable heating

BNDGUM02.T05 0000342548 A.3 B.2 E.2 4/20/21, 3:19 PM Released

1. See Section 2.4.6 : How to Manually Control the Main Air Damper and Modulating Gas Valve, page 62. Run a drycode.
2. Verify ignition. Watch for the Main Gas status light ( ) to illuminate.
3. Watch the display for the programmed temperature to be achieved.
4. Command minimum fire (MVP = 001) and the main air damper to position 2 (D = 2)

CAUTION: Risk of over-heating — Two of the subsequent steps must be performed at maximum fire (MVP = 255). If the dryer is already hot, safety apparatuses can trip and cause the sprinkler to actuate in as little as 15 seconds at maximum fire.

- Be prepared to return to minimum fire (MVP = 001) and allow the dryer to cool down if you cannot complete the step quickly. See note below.
- Restart the step several times, if necessary, until you can accomplish it quickly.

NOTE: Technically, minimum fire is the value 000 (MVP = 000). However, this instruction sometimes calls for the value 001, which achieves minimum fire without the risk that the controller will skip to the discharge sequence at the end of the drycode. This happens if the controller detects MVP = 000 in an over-heat condition.

2.4.7.6 Step 7: Set the maximum fire differential gas pressure

BNDGUM02.T07 0000342546 B.2 A.4 E.2 5/13/21, 8:47 AM Released

1. See Figure 17, page 58. Connect the manometer across **GFH** and **GFL**.
2. Loosen the locking screw (item 4) on **VB**.
3. See caution statement above and Section 2.4.6 , page 62. Command maximum fire (MVP = 255) and main air damper fully open (D = 0).
4. Take note of the manometer pressure reading.
5. Command minimum fire (MVP = 001) and main air damper position 2 (D = 2).
6. In Step 1, you set the manual butterfly valve fully open. On any 64_TG1 model, confirm that the differential pressure is within or above the range given in Table 15, page 57. If not, see below notice. On any 76_TG1 or 82_TG1 model, record the value read on the manometer and continue.
7. On any 64_TG1 model, if the measured pressure is **above** the specified range, command maximum fire (MVP = 255) and main air damper fully open (D = 0). Adjust VB until the differential pressure is within the acceptable range specified in Table 15, page 57.
8. On any 76_TG1 or 82_TG1 model, command maximum fire (MVP = 255) and main air damper fully open (D = 0). Attempt to adjust VB until the differential pressure is within the acceptable range specified in Table 15, page 57. If it is not possible to achieve the acceptable range, see the below notice.
9. Command minimum fire (MVP = 001) and main air damper position 2 (D = 2).
10. Tighten the locking screw (item 4) on **VB**.

NOTICE: Insufficient gas pressure.—If the differential gas pressure is below the range given in Table 15, page 57 with the butterfly valve fully open, go no further. There is a problem with the gas supply. It will not be possible to make the subsequent adjustments.

- On any 64_TG1 model, troubleshoot then restart the adjustment steps. If the differential pressure is close to the required range, you can open the ratio regulator (RR in Figure 18, page 60) an additional amount, not to exceed 2 additional turns. On any 76_TG1 or 82_TG1 model, contact the Milnor factory for assistance. You may need to provide the value recorded in Step 6, above.

2.4.7.7 Step 8: Set the minimum fire temperature

BNDGUM02.T08 0000342545 A.2 B.2 E.2 4/15/21, 4:07 PM Released

Minimum fire temperature is the lowest inlet temperature that will sustain a good quality (blue) flame. The rule of thumb is 70° F (21° C) above the ambient temperature in the laundry.

1. Determine the minimum fire temperature for your laundry: ambient temperature + 70° F (21° C).
2. With minimum fire (MVP = 001) commanded, observe the inlet temperature on the display.
3. See Figure 19, page 61. In small increments, adjust the minimum fire cam **CF** on the damper actuator to a higher (hotter) or lower (cooler) number as required. The system will adjust to a lower (cooler) setting. If you set the cam higher (hotter), you must command maximum fire (MVP = 255) for 15 seconds then return to minimum fire (MVP = 001) and let the system settle to the new temperature.

4. With each change, observe the inlet temperature on the display. Allowing time for the temperature to react to the change.

2.4.7.8 Step 9: Test the main air pressure switch and set minimum main air pressure

BNDGUM02.T09 0000342544 A.3 B.2 E.2 4/20/21, 3:19 PM Released

The Main Air Pressure Switch (SPMA) must extinguish the gas flame when main air pressure falls below the value specified in Table 15, page 57. This should occur when the dial on the switch is set to the this value (in Inches H_2O). However, it is necessary to confirm, with a manometer, that the switch trips at this actual pressure.

1. See Section 2.4.6 , page 62. Command the main air damper fully open (D = 0).
2. See Figure 18, page 60. Turn the dial on **SPMA** counterclockwise, to the lowest value (____ Inches H_2O).
3. Attach one side of the manometer to **GAM** (the lower pressure). Leave the other side open to the atmosphere (the higher pressure).
4. Open needle valve **VM**, which will divert air pressure away from SPMA, simulating a low main air condition. Adjust **VM** until the manometer displays the value shown in Table 15, page 57. You will likely see the reading fluctuate. Just get the reading to stay as close to the required value as possible.
5. Have a helper observe the main air low light () on the status light panel, which should be off. **Very slowly** turn the dial on **SPMA** clockwise until the light illuminates. Again, because of the fluctuating air pressure, the light will probably start to blink on and off. It is sufficient to stop turning the switch dial at this point.

TIP: Instead of observing the main air low light, you can place a volt meter across the common and normally open terminals of SPMA. When the reading drops from 120VAC to zero (or starts to fluctuate between the two), stop turning the dial.

6. Observe the dial setting on **SPMA**. It must be within 1 Inch H_2O of the value shown in Section 2.4.2 , page 56. If not, suspect a bad pressure switch.
7. Close **VM** fully.

2.4.7.9 Maximum main gas pressure

BNDGUM02.C08 0000342543 A.2 B.2 E.2 4/15/21, 4:07 PM Released

High main gas pressure was set on the high gas pressure switch (SPGH) in Step 1. No other action is necessary.

2.4.7.10 Step 10: Set minimum main gas pressure

BNDGUM02.T10 0000342542 A.3 B.2 E.2 4/20/21, 3:19 PM Released

The Low Gas Pressure Switch (SPGL) must extinguish the gas flame when gas pressure falls below the value specified in Table 15, page 57. This should occur when the dial on the switch is set to the this value (in Inches H_2O). However, it is necessary to confirm, with a manometer, that the switch trips at this actual pressure.

1. See Section 2.4.5 , page 62 Command minimum fire (MVP = 000).

2. See Figure 17, page 58. Turn the dial on **SPGL** counterclockwise to the lowest value (_____ Inches H_2O).
3. Attach one side of the manometer to **GGL** (main gas pressure low tap). Leave the other side open to the atmosphere.
4. Start with the **external gas shut-off valve** open. Slowly close this valve to simulate a low gas pressure condition. Stop when the manometer displays the value specified in Table 15, page 57.
5. Have a helper observe the gas pressure low light ( ) on the status light panel, which should be off. Slowly turn the dial on **SPGL** clockwise (higher) until the light illuminates.

TIP: Instead of observing the combustion air low light, you can place a volt meter across the common and normally open terminals of SPGL. When the reading drops from 120VAC to zero (or starts to fluctuate between the two), stop turning the dial.

6. Observe the dial setting on **SPGL**. It must be within 1 Inch H_2O of the value shown in Section 2.4.2 , page 56. If not, suspect a bad pressure switch.
7. Open the external gas shut-off valve fully.
8. The status light illuminates briefly, then blinks. The burner should ignite as soon as pressure is restored. Press and and to extinguish the status light.

2.4.7.11 Step 11: Test the combustion air pressure switch and set the switch

BNDGUM02.T11 0000342632 A.3 B.2 E.2 4/20/21, 3:19 PM Released

The Combustion Air Pressure Switch (SPCA) must extinguish the gas flame when combustion air pressure falls below the value specified in Table 15, page 57. This should occur when the dial on the switch is set to the this value (in Inches H_2O). However, it is necessary to confirm, with a manometer, that the switch trips at this actual pressure.

1. Access Setup Mode A (see Section 2.4.5 , page 62) on the controller.
2. See Figure 18, page 60. Turn the dial on **SPCA** counterclockwise to the lowest value (2 Inches H_2O).
3. Attach one end of the manometer to **GRC** and the other side to atmosphere (see Figure 18, page 60).
4. There are two needle valves (**V1** and **V2**) in the line that supplies air pressure to **SPCA**. When you open either or both of these valves, this diverts some of the pressure away from SPCA and simulates a low combustion air condition. Open the valve(s) until the manometer displays the value shown in Section 2.4.2 , page 56. You will likely see the reading fluctuate. Just get the reading to stay as close to the required value as possible.
5. Have a helper observe the combustion air low light ( ) on the status light panel, which should be off. Slowly turn the dial on **SPCA** clockwise until the light illuminates. Again, because of the fluctuating air pressure, the light will probably start to blink on and off. It is sufficient to stop turning the switch dial at this point.

TIP: Instead of observing the combustion air low light, you can place a volt meter across the common and normally open terminals of SPCA. When the reading drops from 120VAC to zero (or starts to fluctuate between the two), stop turning the dial.

6. Observe the dial setting on **SPCA**. It must be within 1 Inch H_2O of the value shown in Section 2.4.2 , page 56. If not, suspect a bad pressure switch.
7. Close **V1** and **V2** fully.

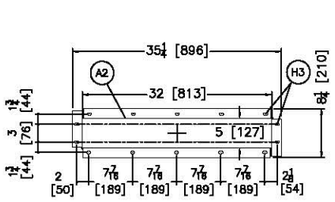
2.4.7.12 Step 12: Set maximum main air back pressure

BNDGUM02.C09 0000342631 A.2 B.2 E.2 4/15/21, 4:07 PM Released

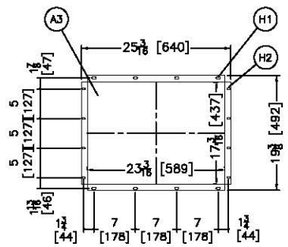
See Figure 18, page 60. The dial on **SPHD** is set at the factory to the value specified in Table 15, page 57. If the maximum back pressure is exceeded, this switch trips. This causes the message "Back pressure high" or "Clean the lint screen" to appear on the controller display to indicate that a lint screen may be blocked. It does not stop dryer operation. It may be necessary to adjust this switch slightly once the machine is connected to the laundry ductwork. Air pressure in the plenum for this dryer may be affected by the ductwork configuration and by adjacent dryers.

It is difficult to adjust **SPHD** with a manometer. Initially, this switch was set with the dial alone (the marks on the dial show the specified value). If the message appears too frequently, turn the dial to a higher value. If the message does not appear when it should (when a lint screen is blocked) turn the dial to a lower value.

3 Dimensional Drawings

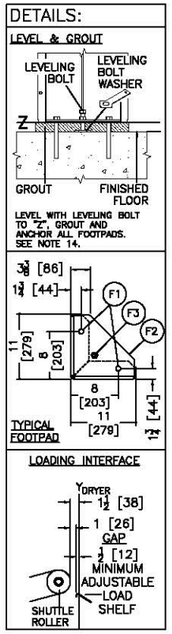


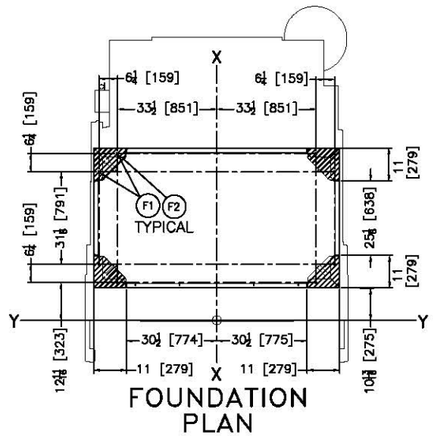
BLOWER INTAKE
DUCT DETAIL
VIEW A–A



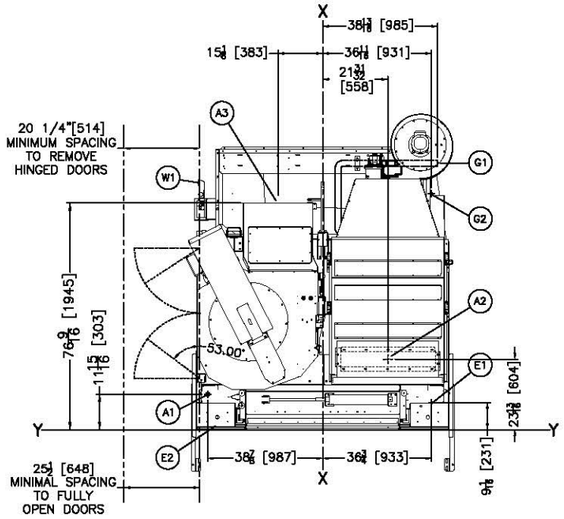
BLOWER EXHAUST

DETAILS:

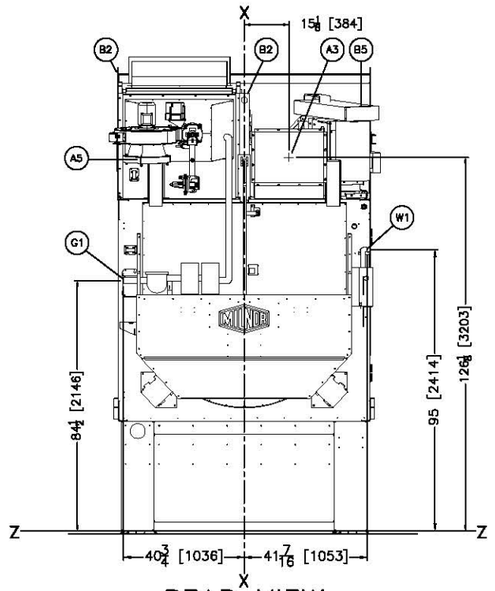




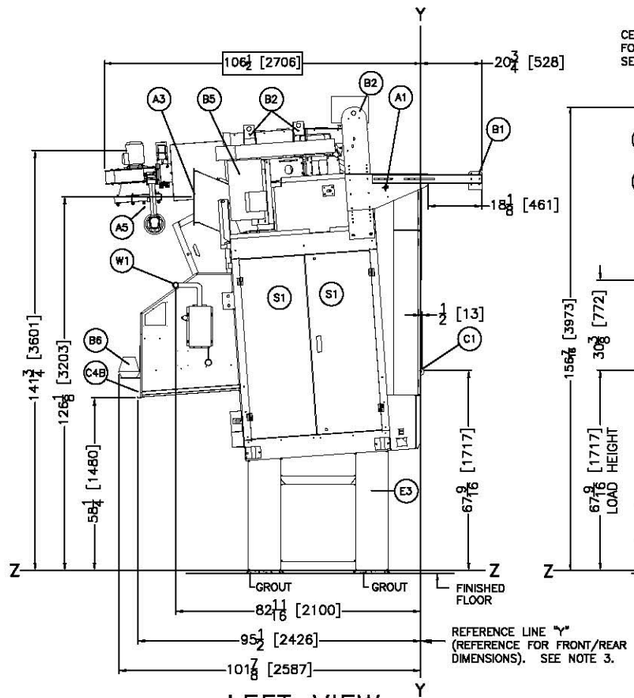
FOUNDATION
PLAN



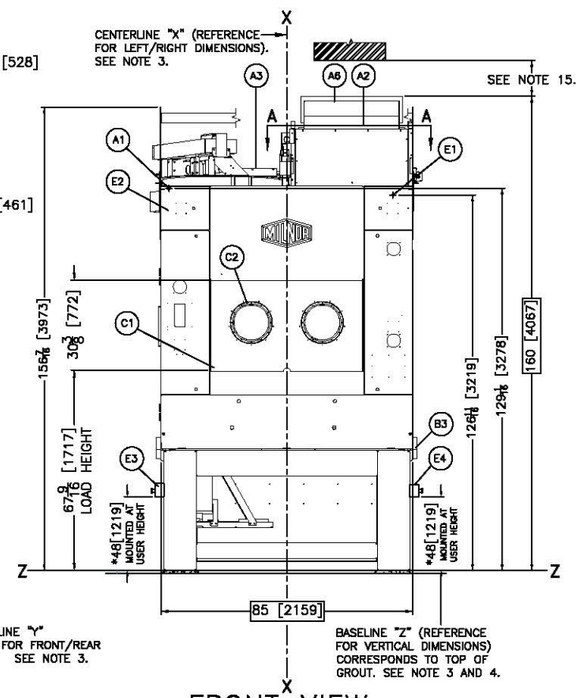
PLAN VIEW



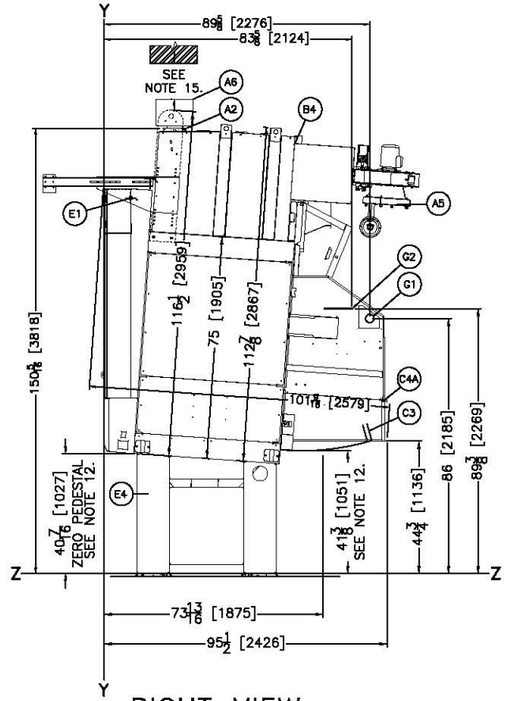
REAR VIEW



LEFT VIEW



FRONT VIEW



RIGHT VIEW

G2	GAS LINE VENT, 1/4" STAINLESS STEEL TUBING
W1	SPRINKLER WATER INLET , 1–1/4" NPT
S1	REMOVABLE ACCESS DOORS
H3	.406"[10] DIA. X 3/4"[19] SLOTS, 14 PLACES
H2	.31 "[8] DIA. X 1/2"[13] SLOTS, 8 PLACES
H1	.31 "[8] DIA. X 3/4"[19] SLOTS, 8 PLACES

ZERO PEDESTAL SHOWN
ADJUST ALL VERTICAL DIMENSIONS
TO THE PEDESTAL SPECIFIED.

ITEM	LEGEND
G1	GAS INLET, 1" NPT CONNECTION
F3	LEVELING BOLT (5/8"–11 X 3") SUPPLIED.
F2	DRYER FOOT SUPPORT PLATES, SEE NOTE 14.
F1	ANCHOR BOLT HOLES, 13/16"[21] DIA, 8 PLACES
E4	EMERGENCY STOP
E3	EMERGENCY STOP & DOOR OPEN CONTROLS
E2	MICROPROCESSOR BOX
E1	MAIN ELECTRICAL CONNECTION
C4B	OPTIONAL SHORT SHROUD
C4A	STANDARD DISCHARGE SHROUD
C3	DISCHARGE DOOR
C2	LOAD DOOR, 52" WIDE
C1	LOAD HEIGHT, ADJUSTABLE LOAD SHELF
B6	OPTIONAL BEACON
B5	BLOWER MOTOR
B4	BURNER
B3	DRYER TO DRYER MOUNTING BRACKET
B2	SHIPPING BRACKET ONLY
B1	DRYER MOUNT FESTOON RAIL SUPPORT
A6	BLOWER AIR INTAKE TEE, REMOVE ONLY WHEN DUCTING THE INTAKE
A5	COMBUSTION AIR INTAKE BOX WITH FILTERS
A3	BLOWER EXHAUST TO REAR, STANDARD, SEE DETAIL.
A2	BLOWER INTAKE, SEE DETAIL
A1	COMPRESSED AIR, 1"NPT

NOTES

16 FOR UTILITY REQUIREMENTS FOR GAS, STEAM, THERMAL OIL, AIR INTAKE, AND WATER SUPPLY, SEE DOCUMENT BIPDUI01/20160505 OR LATER.

15 IF THE BLOWER INTAKE IS NOT DUCTED THERE MUST BE 8 FEET [2438] OF UNOBSTRUCTED VERTICAL CLEARANCE BETWEEN THE INLET AND ANY OBJECT ABOVE IT.

14 DRYER FOOT SUPPORT PLATES ARE WELDED TO THE BOTTOM OF PEDESTAL LEGS TO ALLOW A GREATER GROUTING SURFACE BETWEEN PEDESTAL LEGS AND FINISHED FLOOR. USE LEVELING BOLTS TO LEVEL THE DRYER TO BASELINE "Z" (COINCIDES WITH BOTTOM OF LEGS.) DRYER FEET MUST BE GROUTED & ANCHORED TO FLOOR.

13 EXHAUST DUCTING: DRYER OPERATES UP TO 7000 SCFM WITH PRESSURE CHANGES OF UP TO 4" DURING THE CYCLE. THESE CYCLES ARE NUMEROUS AND VARYING THUS FATIGUE OF THE EXHAUST DUCTING NEEDS TO BE CONSIDERED. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 20 GAUGE GALVANIZED SHEET STEEL SPIRAL DUCT WORKS WELL. IF SQUARE DUCTING IS USED, MATERIAL THICKNESS MUST BE CONSIDERED TO PREVENT OIL CANNING AND VIBRATION. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 16 GAUGE GALVANIZED SHEET STEEL IS REQUIRED. HEAVIER GAUGE AND OR STIFFENERS MAY BE REQUIRED GIVEN THE SIZE AND LENGTH OF THE DUCT. ELBOWS AND TRANSITIONS LIKELY WILL REQUIRE DOUBLING THE GAUGE.

12 THIS DRAWING SHOWS THE 6450TG1L DRYER WITH A 41–3/8[1051] DISCHARGE HEIGHT. WE CALL THE PEDESTAL BASE TO DO THIS A "ZERO PEDESTAL". "ZERO PEDESTAL" IS STANDARD HEIGHT FOR CONVEYOR DISCHARGE.

DRYERS MAY BE ORDERED WITH A PEDESTAL TO INCREASE OR DECREASE THE MACHINE HEIGHT IN (+/–)1.75"[44] INCREMENTS. ALL VERTICAL DIMENSIONS MUST BE ADJUSTED FOR THE SPECIFIED PEDESTAL. FOR ANYTHING UNDER A ZERO PEDESTAL, RIGHT AND LEFT DRYERS CANNOT BE CONNECTED, AND YOU MUST ALLOW A MINIMUM 18"[458] FOR SERVICING BETWEEN DRYERS, SEE NOTE 10.

11 DO NOT USE ANY TYPE OF TURNING VANE IN THE DRYER EXHAUST DUCTING AS THESE WILL IMMEDIATELY PLUG WITH LINT.

10 A MINIMUM CLEARANCE OF 20 1/4"[514] IS REQUIRED FROM THE REMOVABLE ACCESS DOORS TO WALL. THIS DISTANCE IS REQUIRED TO OPEN THE DOORS 60 DEGREES TO BE LIFTED OFF THE HINGES. THE DOORS MAY BE FULLY OPENED REQUIRING 25 1/2"[648] OF CLEARANCE.

9 DRYER IS DISASSEMBLED INTO TWO MAJOR COMPONENTS FOR SHIPPING, THE BASE AND THE FRAME. CONSULT MILNOR FACTORY IF COMPONENTS SUCH AS BLOWER HOUSING MUST BE REMOVED TO FIT MACHINE THROUGH OPENING.

8 DO NOT RUN PIPING OR CONDUIT OVER BLOWER HOUSING, SO THAT THE BLOWER MAY BE REMOVED FOR SERVICING, IF NEEDED.

7 CONTROL PANEL FOR DRYER MAY BE INSTALLED IN ANY CONVENIENT LOCATION. CONTROL CABLE FROM DRYER TO PANEL IS SUPPLIED BY MILNOR AND PRICED SEPARATELY.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL. (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL, AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

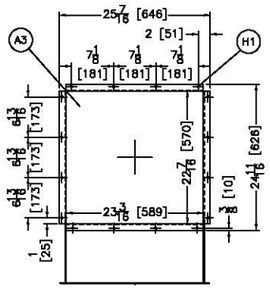
6450TG1L RA

DM 0 0.5M
INCHES 0 12 24

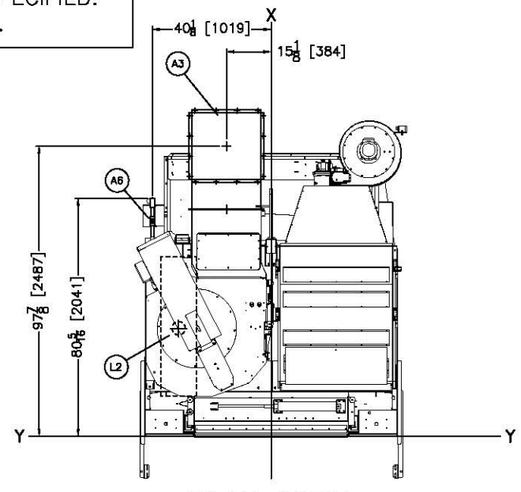
DWG# BD6450TG1LR1BE
2018212D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467–9591,
FAX 504/468–3094, Email: milnorinfo@milnor.com

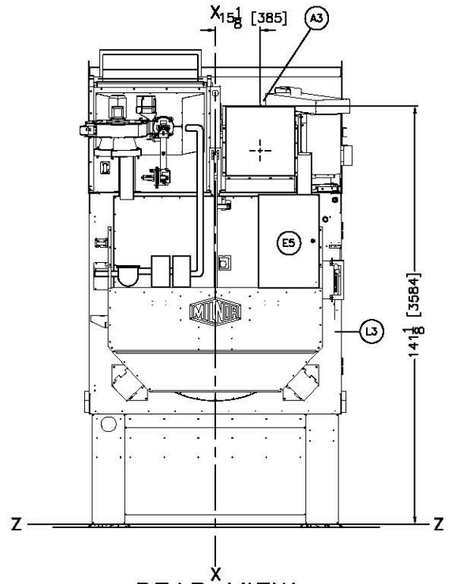
ZERO PEDESTAL SHOWN
ADJUST ALL VERTICAL DIMENSIONS
TO THE PEDESTAL SPECIFIED.
SEE NOTE 7.



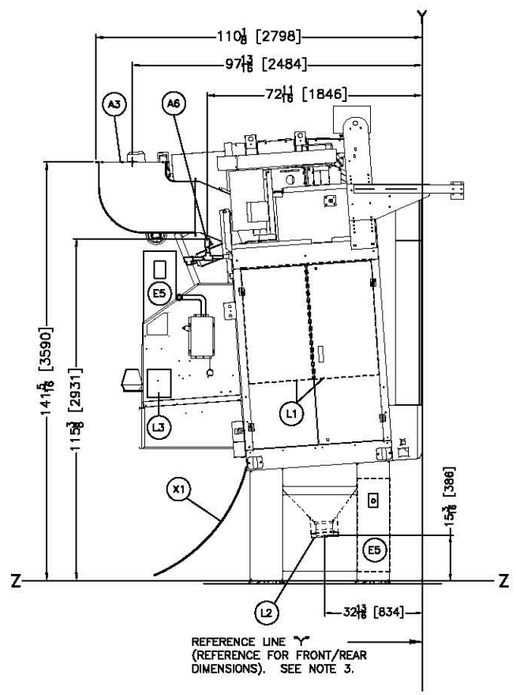
BLOWER EXHAUST
DUCT UP OPTION



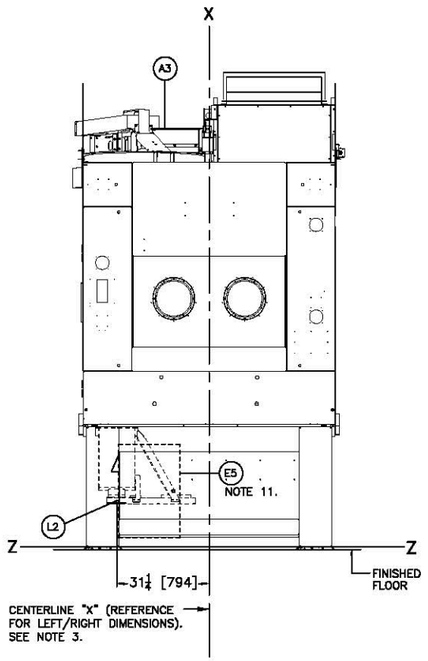
PLAN VIEW



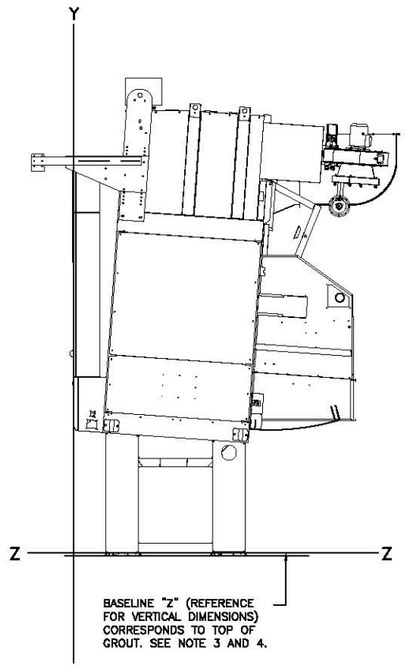
REAR VIEW



LEFT VIEW



FRONT VIEW



RIGHT VIEW

ITEM	LEGEND
X1	OPTIONAL UNLOAD BRIDGE, 48" PLASTIC SHEETING
L3	INTERNAL LINT SCREENS AIR VALVE BOX.
L2	LINT OUTLET (6" FLEX HOSE CONNECTION) FOR OPTIONAL
	INTERNAL LINT SCREEN. PIPES TO DRYVAC01, DRYVAC02 OR
	LINT COLLECTOR BY OTHERS. SEE NOTES 9 & 10 AND
	DRAWING BD6458DLCPBE FOR RECOMMENDED PIPING.
L1	OPTIONAL INTERNAL LINT SCREENS, BEHIND PANELS
H1	BOLT SLOTS, 5/16"[7] DIA.
E5	OPTIONAL INVERTER BOX IS LOCATED AS SPECIFIED ON THE
	DISCHARGE SHROUD, PEDESTAL FRONT, OR FOR REMOTE
	MOUNTING.
A6	1" NPT AIR CONNECTION/OPTIONAL INTERNAL LINT SCREENS
A3	BLOWER EXHAUST DUCTING UP OPTION, SEE DETAIL.

NOTES

13 FOR UTILITY REQUIREMENTS FOR GAS, STEAM, THERMAL OIL, AIR INTAKE, AND WATER SUPPLY, SEE DOCUMENT BIPDUI01/20160505 OR LATER.

12 A WATER SEPARATOR (NOT SUPPLIED BY PMC) IS REQUIRED FOR THE INCOMING AIR TO THE INTERNAL LINT SYSTEM.

11 OPTIONAL INVERTER BOX MAY BE SPECIFIED FOR PEDESTAL MOUNT ON 48"[1219] (ZERO PEDESTAL PLUS 7"[178]) AND TALLER PEDESTALS ONLY.

10 OPTIONAL INTERNAL LINT SCREENS IS AVAILABLE FOR DRYERS WITH 41"[1041] AND TALLER PEDESTALS ONLY.

9 FOR OPTIONAL INTERNAL LINT FILTERS, IT IS RECOMMENDED TO HAVE A 60 GALLON COMPRESSED AIR BOOSTER TANK FOR EVERY 5 DRYERS.

8 EXHAUST DUCTING: DRYER OPERATES UP TO 8500SCFM WITH PRESSURE CHANGES OF UP TO 4" DURING THE CYCLE. THESE CYCLES ARE NUMEROUS AND VARYING THUS FATIGUE OF THE EXHAUST DUCTING NEEDS TO BE CONSIDERED. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 20 GAUGE GALVANIZED SHEET STEEL SPIRAL DUCT WORKS WELL. IF SQUARE DUCTING IS USED, MATERIAL THICKNESS MUST BE CONSIDERED TO PREVENT OIL CANNING AND VIBRATION. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 16 GAUGE GALVANIZED SHEET STEEL IS REQUIRED. HEAVIER GAUGE AND OR STIFFENERS MAY BE REQUIRED GIVEN THE SIZE AND LENGTH OF THE DUCT. ELBOWS AND TRANSITIONS LIKELY WILL REQUIRE DOUBLING THE GAUGE.

7 THIS DRAWING SHOWS THE 6450TG1 DRYER USING A 41"[1041] PEDESTAL BASE. WHICH IS EQUAL TO ZERO PEDESTAL STANDARD HEIGHT FOR CONVEYOR DISCHARGE. PEDESTALS MAY BE ORDERED TO INCREASE OR DECREASE THE MACHINE HEIGHT. ALL VERTICAL DIMENSIONS MUST BE ADJUSTED FOR THE SPECIFIED PEDESTAL.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE SAME FOR ALL MILNOR MACHINES AND IS SHOWN ON ALL DIMENSIONAL DRAWINGS. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR MAY VARY (WITH CHANGES IN FLOOR HEIGHT) AS REQUIRED TO INSURE THAT BASELINE "Z" IS HORIZONTAL AND ALL COMPONENTS REQUIRING GROUT ARE SET ON A MINIMUM 1" [25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

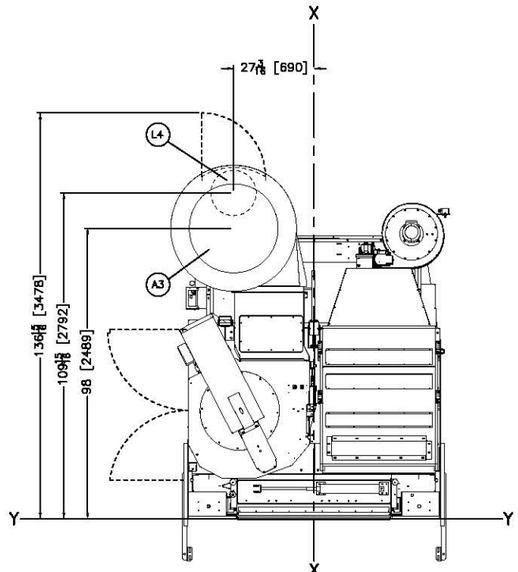
ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

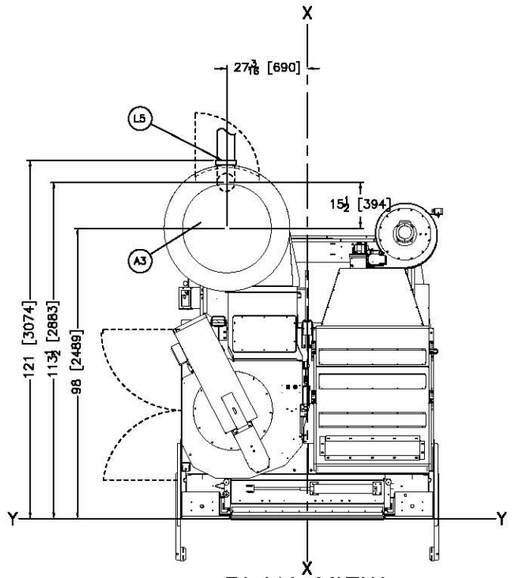
6450TG1L OPTIONS

DWG# BD6450TG1LR1BB
2017366D

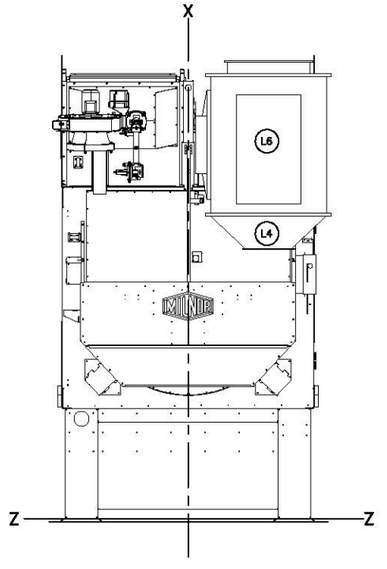
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com



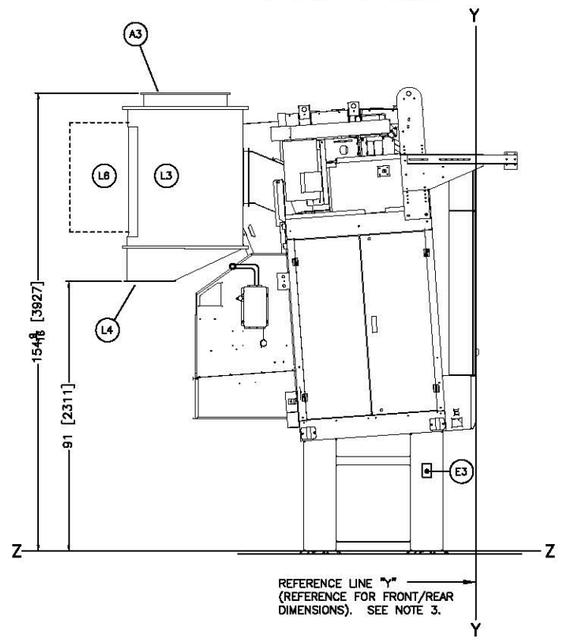
PLAN VIEW
LINT OUTLET TO BAG COLLECTOR



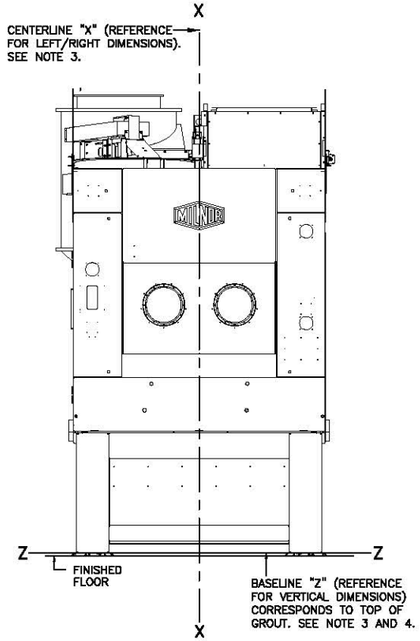
PLAN VIEW
LINT OUTLET TO VACUUM COLLECTOR



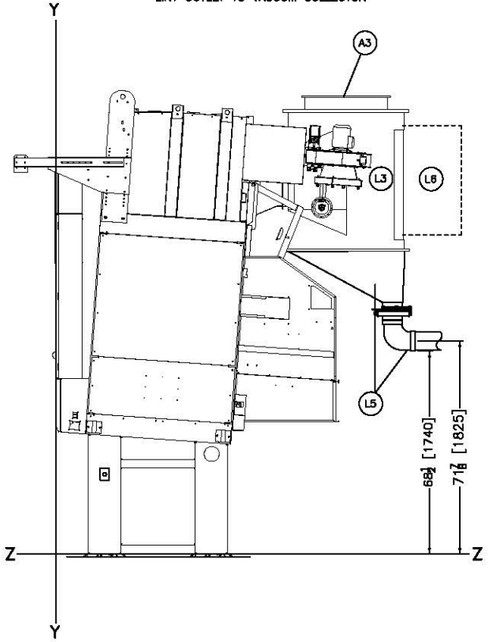
REAR VIEW
LINT OUTLET TO BAG COLLECTOR



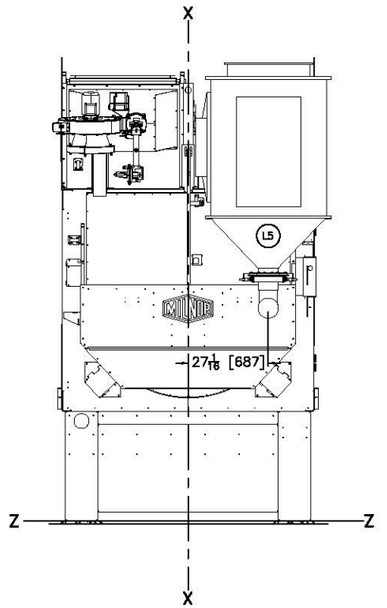
LEFT VIEW



FRONT VIEW



RIGHT VIEW



REAR VIEW
LINT OUTLET TO VACUUM COLLECTOR

ITEM	LEGEND
L6	HINGED ACCESS DOOR
L5	CONE, LINT COLLECTION OUTLET TO VACUUM COLLECTOR DISCHARGE, 6" PIPE CONNECTION
L4	CONE, LINT COLLECTION OUTLET TO BAG, DISCHARGE 15-1/2" ID FLANGED OUTLET
L3	MLF1010 LINT FILTER (LINT FILTER SUPPORTED BY OTHERS)
A3	EXHAUST DUCT, 28"[711] DIAMETER

NOTES

13 EXHAUST DUCTING: DRYER OPERATES UP TO 7000 SCFM WITH PRESSURE CHANGES OF UP TO 4" DURING THE CYCLE. THESE CYCLES ARE NUMEROUS AND VARYING THUS FATIGUE OF THE EXHAUST DUCTING NEEDS TO BE CONSIDERED. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 20 GAUGE GALVANIZED SHEET STEEL SPIRAL DUCT WORKS WELL. IF SQUARE DUCTING IS USED, MATERIAL THICKNESS MUST BE CONSIDERED TO PREVENT OIL CANNING AND VIBRATION. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 16 GAUGE GALVANIZED SHEET STEEL IS REQUIRED. HEAVIER GAUGE AND OR STIFFENERS MAY BE REQUIRED GIVEN THE SIZE AND LENGTH OF THE DUCT. ELBOWS AND TRANSITIONS LIKELY WILL REQUIRE DOUBLING THE GAUGE.

12 THIS DRAWING SHOWS THE 6450TG1L DRYER WITH A 41-3/8[1051] DISCHARGE HEIGHT. WE CALL THE PEDESTAL BASE TO DO THIS A "ZERO PEDESTAL". "ZERO PEDESTAL" IS STANDARD HEIGHT FOR CONVEYOR DISCHARGE.

DRYERS MAY BE ORDERED WITH A PEDESTAL TO INCREASE OR DECREASE THE MACHINE HEIGHT IN (+/-)1.75"[44] INCREMENTS. ALL VERTICAL DIMENSIONS MUST BE ADJUSTED FOR THE SPECIFIED PEDESTAL. FOR ANYTHING UNDER A ZERO PEDESTAL, RIGHT AND LEFT DRYERS CANNOT BE CONNECTED, AND YOU MUST ALLOW A MINIMUM 18"[458] FOR SERVICING BETWEEN DRYERS, SEE NOTE 10.

11 DO NOT USE ANY TYPE OF TURNING VANE IN THE DRYER EXHAUST DUCTING AS THESE WILL IMMEDIATELY PLUG WITH LINT.

10 A MINIMUM CLEARANCE OF 20 1/4"[514] IS REQUIRED FROM THE REMOVABLE ACCESS DOORS TO WALL. THIS DISTANCE IS REQUIRED TO OPEN THE DOORS 80 DEGREES TO BE LIFTED OFF THE HINGES. THE DOORS MAY BE FULLY OPENED REQUIRING 25 1/2"[648] OF CLEARANCE.

9 DRYER IS DISASSEMBLED INTO TWO MAJOR COMPONENTS FOR SHIPPING. THE BASE AND THE FRAME. CONSULT MILNOR FACTORY IF COMPONENTS SUCH AS BLOWER HOUSING MUST BE REMOVED TO FIT MACHINE THROUGH OPENING.

8 DO NOT RUN PIPING OR CONDUIT OVER BLOWER HOUSING, SO THAT THE BLOWER MAY BE REMOVED FOR SERVICING, IF NEEDED.

7 CONTROL PANEL FOR DRYER MAY BE INSTALLED IN ANY CONVENIENT LOCATION. CONTROL CABLE FROM DRYER TO PANEL IS SUPPLIED BY MILNOR AND PRICED SEPARATELY.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL. (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

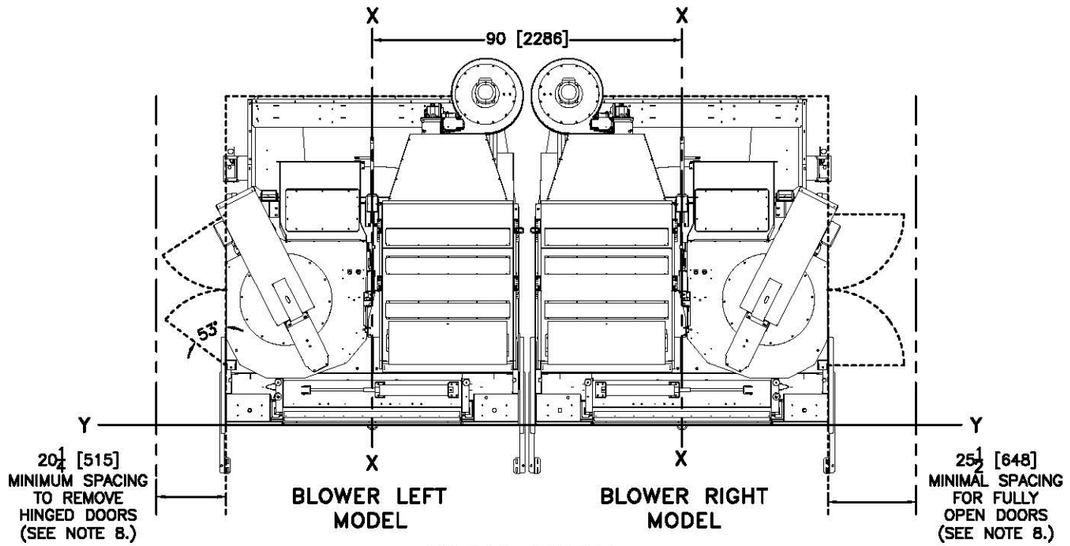
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

6450TG1L RA + MLF1010

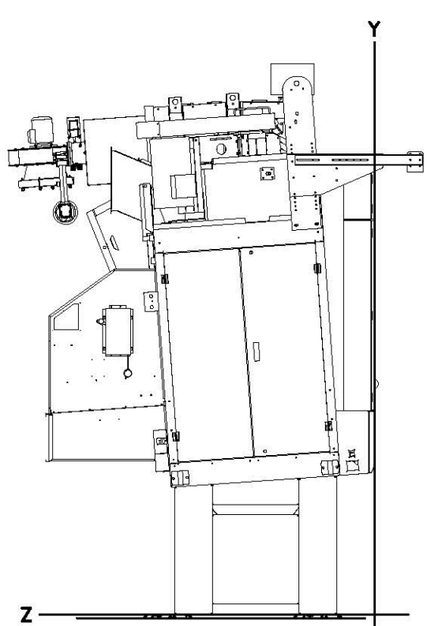
DM 0 0.5M 1M
INCHES 0 12 24 36

DWG# BD6450TG1LR1BC
2017366D

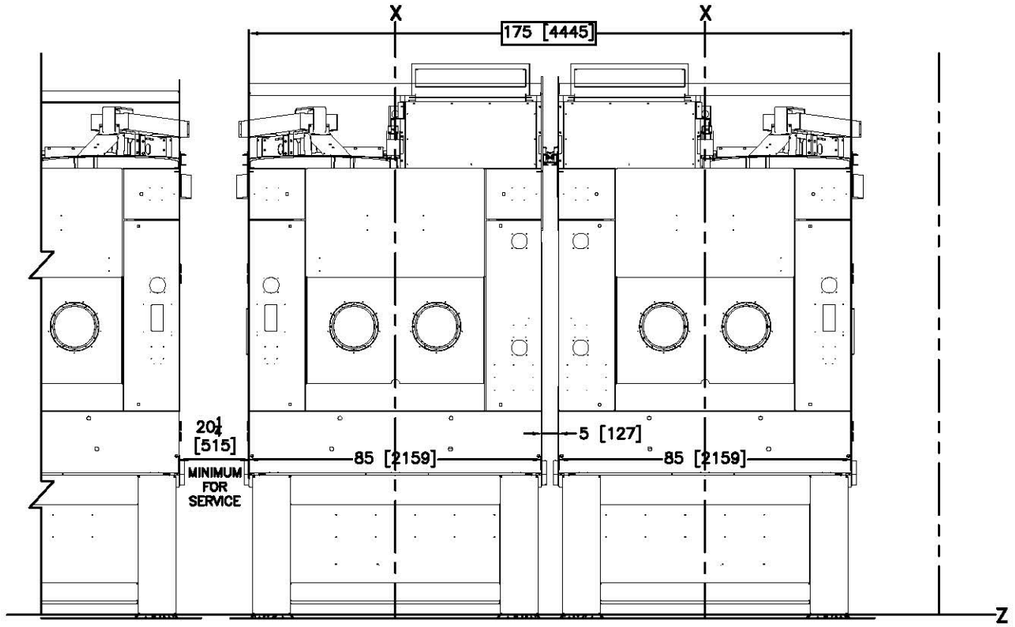
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA. Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com



PLAN VIEW



TYPICAL
SERVICE SIDE
(BLOWER LEFT
MODEL SHOWN)
LEFT VIEW



FRONT VIEW
MIRRORED INSTALLATION

NOTES

8 A MINIMUM CLEARANCE OF 20 1/4"[515] IS REQUIRED FROM THE REMOVABLE ACCESS DOORS TO WALL. THIS DISTANCE IS REQUIRED TO OPEN THE DOORS 53 DEGREES TO BE LIFTED OFF THE HINGES. THE DOORS MAY BE FULLY OPENED REQUIRING 25 1/2"[648] OF CLEARANCE.

7 THIS DRAWING SHOWS THE 64050TG1 DRYER USING A 41"[1041] PEDESTAL BASE. WHICH IS EQUAL TO ZERO PEDESTAL, STANDARD HEIGHT FOR CONVEYOR DISCHARGE. PEDESTALS MAY BE ORDERED TO INCREASE OR DECREASE THE MACHINE HEIGHT. ALL VERTICAL DIMENSIONS MUST BE ADJUSTED FOR THE SPECIFIED PEDESTAL.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL. (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE SAME FOR ALL MILNOR MACHINES AND IS SHOWN ON ALL DIMENSIONAL DRAWINGS. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR MAY VARY (WITH CHANGES IN FLOOR HEIGHT) AS REQUIRED TO INSURE THAT BASELINE "Z" IS HORIZONTAL AND ALL COMPONENTS REQUIRING GROUT ARE SET ON A MINIMUM 1" [25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

64050TG1L,TG1R RA PAIRED

DWG# BD6450TG1PR1BE
2017366D

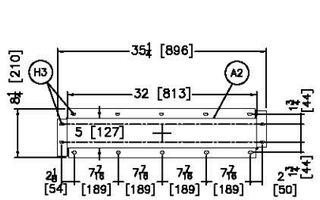
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA Phone 504/467-9591,
FAX 504/468-3004, Email: milnerinfo@milnor.com

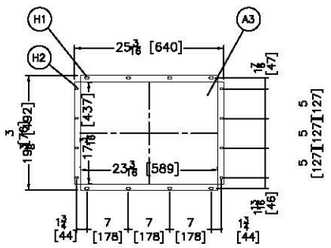
G2	GAS LINE VENT, 1/4" STAINLESS STEEL TUBING
W1	SPRINKLER WATER INLET , 1-1/4" NPT
S1	REMOVABLE ACCESS DOORS
H3	.406"[10] DIA. X 3/4"[19] SLOTS, 14 PLACES
H2	.31 "[8] DIA. X 1/2"[13] SLOTS, 8 PLACES
H1	.31 "[8] DIA. X 3/4"[19] SLOTS, 8 PLACES

ZERO PEDESTAL SHOWN
ADJUST ALL VERTICAL DIMENSIONS
TO THE PEDESTAL SPECIFIED.

ITEM	LEGEND
G1	GAS INLET, 1" NPT CONNECTION
F3	LEVELING BOLT (5/8"-11 X 3") SUPPLIED.
F2	DRYER FOOT SUPPORT PLATES, SEE NOTE 14.
F1	ANCHOR BOLT HOLES, 13/16"[21] DIA, 8 PLACES
E4	EMERGENCY STOP
E3	EMERGENCY STOP & DOOR OPEN CONTROLS
E2	MICROPROCESSOR BOX
E1	MAIN ELECTRICAL CONNECTION
C4B	OPTIONAL SHORT SHROUD
C4A	STANDARD DISCHARGE SHROUD
C3	DISCHARGE DOOR
C2	LOAD DOOR, 52" WIDE
C1	LOAD HEIGHT, ADJUSTABLE LOAD SHELF
B6	OPTIONAL BEACON
B5	BLOWER MOTOR
B4	BURNER
B3	DRYER TO DRYER MOUNTING BRACKET
B2	SHIPPING BRACKET ONLY
B1	DRYER MOUNT FESTOON RAIL SUPPORT
A6	BLOWER AIR INTAKE TEE, REMOVE ONLY WHEN DUCTING THE INTAKE
A5	COMBUSTION AIR INTAKE BOX WITH FILTERS
A3	BLOWER EXHAUST TO REAR, STANDARD, SEE DETAIL.
A2	BLOWER INTAKE, SEE DETAIL
A1	COMPRESSED AIR, 1"NPT

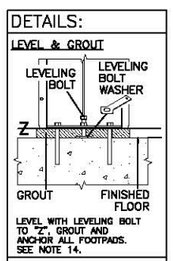
BLOWER INTAKE
DUCT DETAIL
VIEW A-A

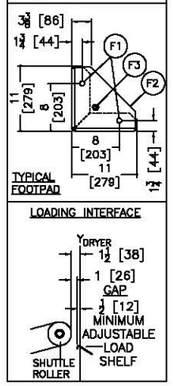


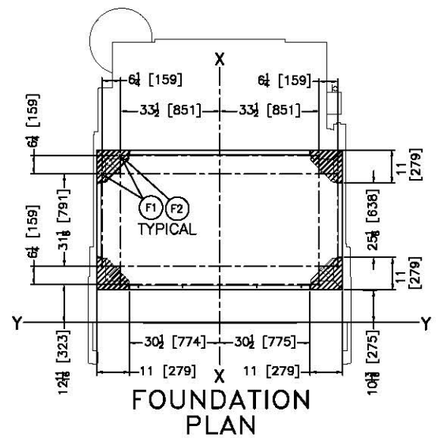


BLOWER EXHAUST

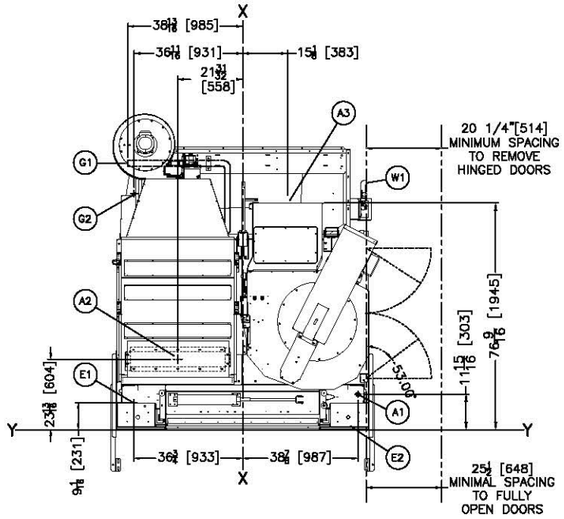
DETAILS:



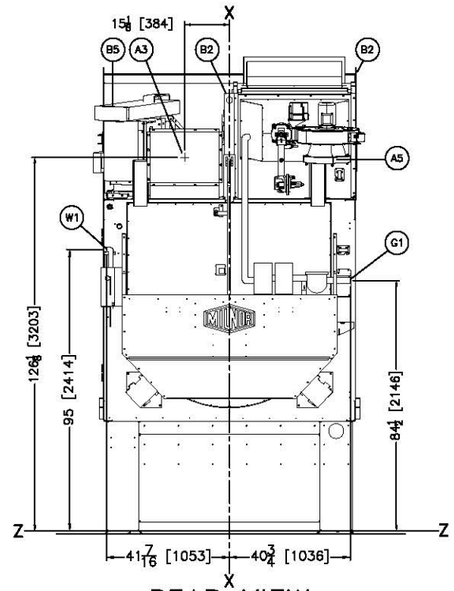




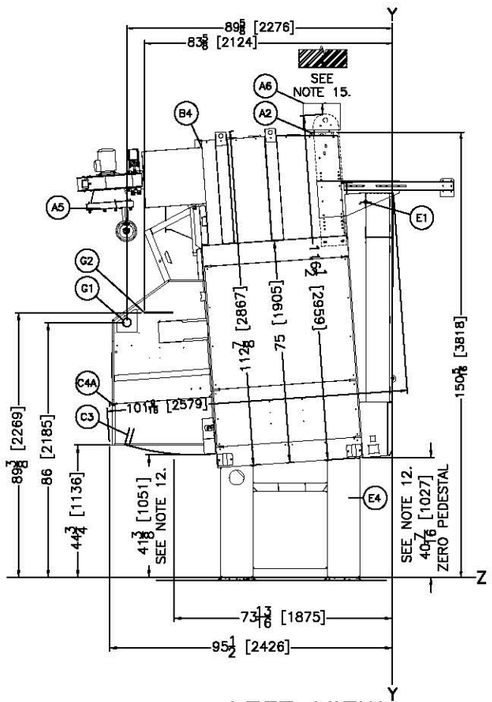
FOUNDATION
PLAN



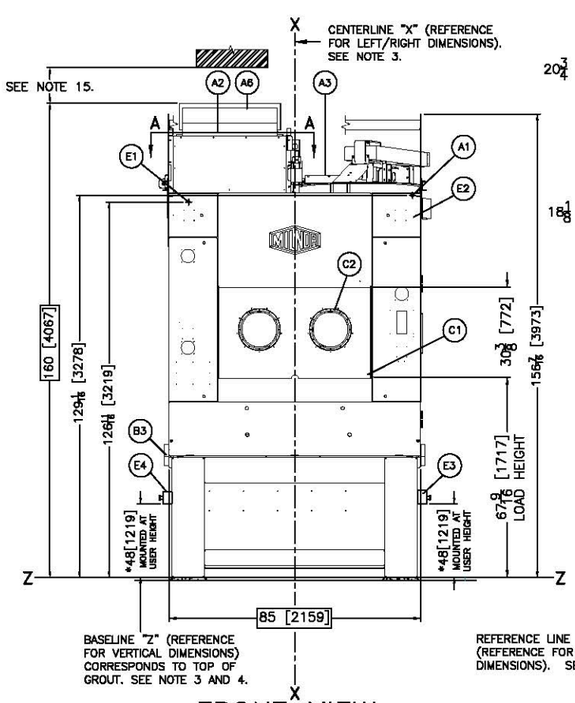
PLAN VIEW



REAR VIEW

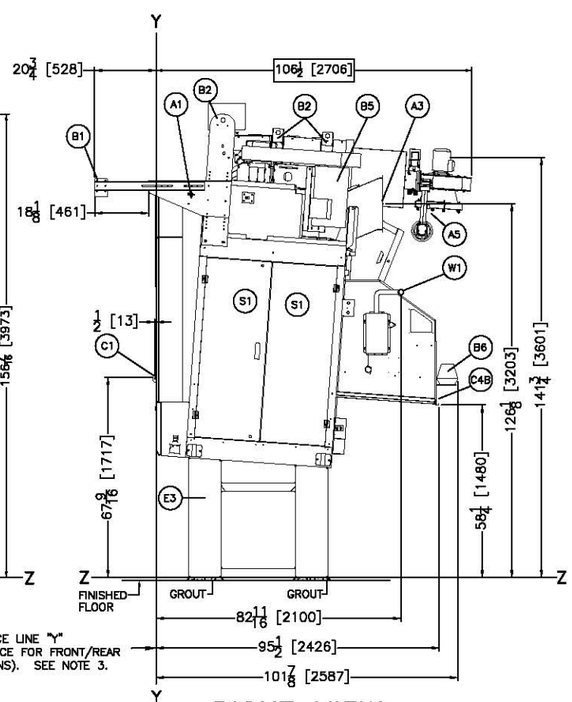


LEFT VIEW



BASELINE "Z" (REFERENCE FOR VERTICAL DIMENSIONS) CORRESPONDS TO TOP OF GROUT. SEE NOTE 3 AND 4.

FRONT VIEW



REFERENCE LINE "Y" (REFERENCE FOR FRONT/REAR DIMENSIONS). SEE NOTE 3.

RIGHT VIEW

NOTES

16 FOR UTILITY REQUIREMENTS FOR GAS, STEAM, THERMAL OIL, AIR INTAKE, AND WATER SUPPLY, SEE DOCUMENT BIPDUI01/20160505 OR LATER.

15 IF THE BLOWER INTAKE IS NOT DUCTED THERE MUST BE 8 FEET [2438] OF UNOBSTRUCTED VERTICAL CLEARANCE BETWEEN THE INLET AND ANY OBJECT ABOVE IT.

14 DRYER FOOT SUPPORT PLATES ARE WELDED TO THE BOTTOM OF PEDESTAL LEGS TO ALLOW A GREATER GROUTING SURFACE BETWEEN PEDESTAL LEGS AND FINISHED FLOOR. USE LEVELING BOLTS TO LEVEL THE DRYER TO BASELINE "Z" (COINCIDES WITH BOTTOM OF LEGS.) DRYER FEET MUST BE GROUTED & ANCHORED TO FLOOR.

13 EXHAUST DUCTING: DRYER OPERATES UP TO 7000 SCFM WITH PRESSURE CHANGES OF UP TO 4" DURING THE CYCLE. THESE CYCLES ARE NUMEROUS AND VARYING THUS FATIGUE OF THE EXHAUST DUCTING NEEDS TO BE CONSIDERED. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 20 GAUGE GALVANIZED SHEET STEEL SPIRAL DUCT WORKS WELL. IF SQUARE DUCTING IS USED, MATERIAL THICKNESS MUST BE CONSIDERED TO PREVENT OIL CANNING AND VIBRATION. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 16 GAUGE GALVANIZED SHEET STEEL IS REQUIRED. HEAVIER GAUGE AND OR STIFFENERS MAY BE REQUIRED GIVEN THE SIZE AND LENGTH OF THE DUCT. ELBOWS AND TRANSITIONS LIKELY WILL REQUIRE DOUBLING THE GAUGE.

12 THIS DRAWING SHOWS THE 6450TG1L DRYER WITH A 41-3/8[1051] DISCHARGE HEIGHT. WE CALL THE PEDESTAL BASE TO DO THIS A "ZERO PEDESTAL". "ZERO PEDESTAL" IS STANDARD HEIGHT FOR CONVEYOR DISCHARGE.

DRYERS MAY BE ORDERED WITH A PEDESTAL TO INCREASE OR DECREASE THE MACHINE HEIGHT IN (+/-)1.75"[44] INCREMENTS. ALL VERTICAL DIMENSIONS MUST BE ADJUSTED FOR THE SPECIFIED PEDESTAL. FOR ANYTHING UNDER A ZERO PEDESTAL, RIGHT AND LEFT DRYERS CANNOT BE CONNECTED, AND YOU MUST ALLOW A MINIMUM 18"[458] FOR SERVICING BETWEEN DRYERS, SEE NOTE 10.

11 DO NOT USE ANY TYPE OF TURNING VANE IN THE DRYER EXHAUST DUCTING AS THESE WILL IMMEDIATELY PLUG WITH LINT.

10 A MINIMUM CLEARANCE OF 20 1/4"[514] IS REQUIRED FROM THE REMOVABLE ACCESS DOORS TO WALL. THIS DISTANCE IS REQUIRED TO OPEN THE DOORS 60 DEGREES TO BE LIFTED OFF THE HINGES. THE DOORS MAY BE FULLY OPENED REQUIRING 25 1/2"[648] OF CLEARANCE.

9 DRYER IS DISASSEMBLED INTO TWO MAJOR COMPONENTS FOR SHIPPING, THE BASE AND THE FRAME. CONSULT MILNOR FACTORY IF COMPONENTS SUCH AS BLOWER HOUSING MUST BE REMOVED TO FIT MACHINE THROUGH OPENING.

8 DO NOT RUN PIPING OR CONDUIT OVER BLOWER HOUSING, SO THAT THE BLOWER MAY BE REMOVED FOR SERVICING, IF NEEDED.

7 CONTROL PANEL FOR DRYER MAY BE INSTALLED IN ANY CONVENIENT LOCATION. CONTROL CABLE FROM DRYER TO PANEL IS SUPPLIED BY MILNOR AND PRICED SEPARATELY.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL. (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL, AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

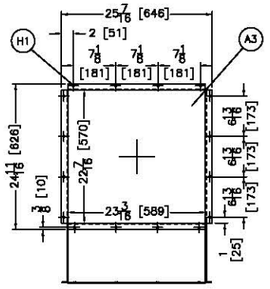
6450TG1R RA

DM 0 0.5M
INCHES 0 12 24

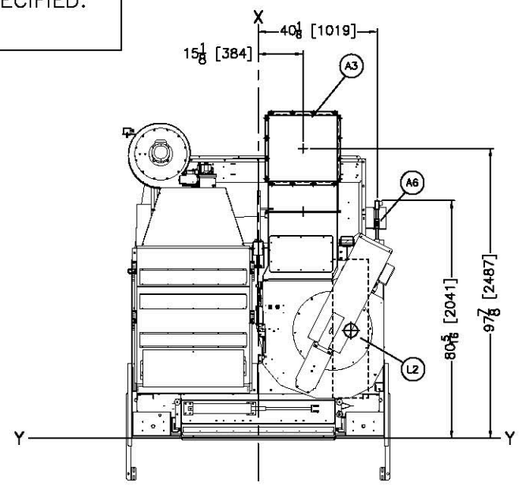
DWG# BD6450TG1RR1BE
2018212D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com

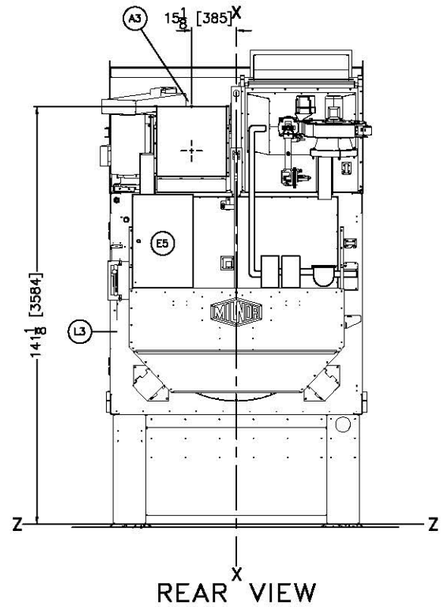
ZERO PEDESTAL SHOWN
ADJUST ALL VERTICAL DIMENSIONS
TO THE PEDESTAL SPECIFIED.
SEE NOTE 7.



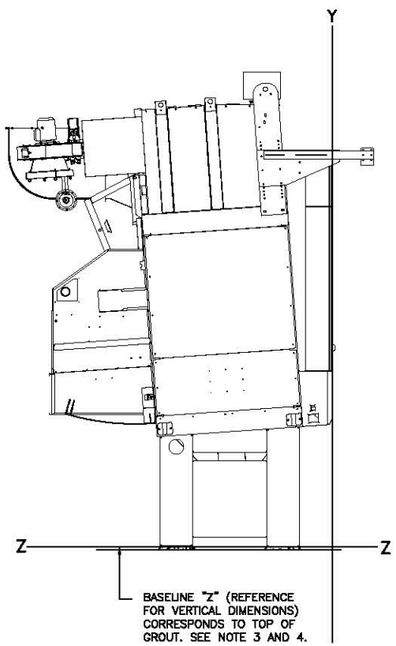
BLOWER EXHAUST
DUCT UP OPTION



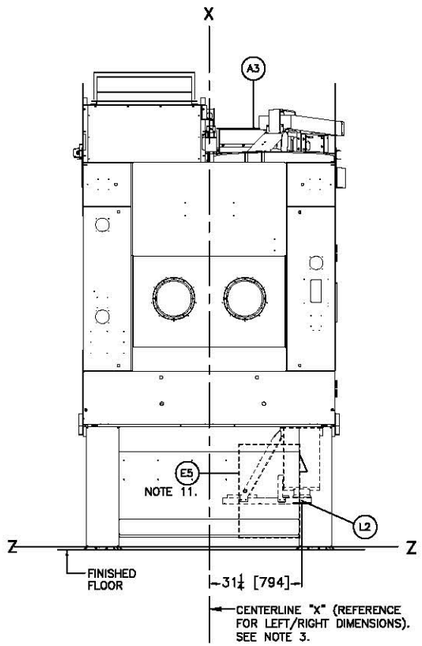
PLAN VIEW



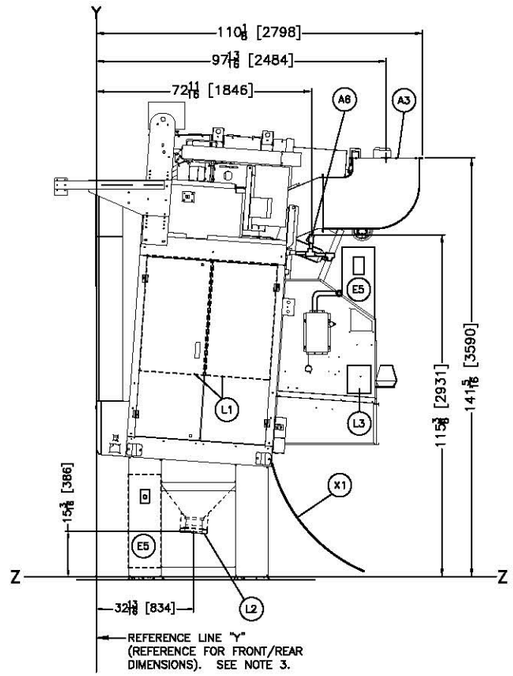
REAR VIEW



LEFT VIEW



FRONT VIEW



RIGHT VIEW

ITEM	LEGEND
X1	OPTIONAL UNLOAD BRIDGE, 48" PLASTIC SHEETING
L3	INTERNAL LINT SCREENS AIR VALVE BOX.
L2	LINT OUTLET (6" FLEX HOSE CONNECTION) FOR OPTIONAL
	INTERNAL LINT SCREEN. PIPES TO DRYVAC01, DRYVAC02 OR
	LINT COLLECTOR BY OTHERS. SEE NOTES 9 & 10 AND
	DRAWING BD6458DLCPBE FOR RECOMMENDED PIPING.
L1	OPTIONAL INTERNAL LINT SCREENS, BEHIND PANELS
H1	BOLT SLOTS, 5/16"[7] DIA.
E5	OPTIONAL INVERTER BOX IS LOCATED AS SPECIFIED ON THE
	DISCHARGE SHROUD, PEDESTAL FRONT, OR FOR REMOTE
	MOUNTING.
A6	1" NPT AIR CONNECTION/OPTIONAL INTERNAL LINT SCREENS
A3	BLOWER EXHAUST DUCTING UP OPTION, SEE DETAIL.

NOTES

13 FOR UTILITY REQUIREMENTS FOR GAS, STEAM, THERMAL OIL, AIR INTAKE, AND WATER SUPPLY, SEE DOCUMENT BIPDUI01/20160505 OR LATER.

12 A WATER SEPARATOR (NOT SUPPLIED BY PMC) IS REQUIRED FOR THE INCOMING AIR TO THE INTERNAL LINT SYSTEM.

11 OPTIONAL INVERTER BOX MAY BE SPECIFIED FOR PEDESTAL MOUNT ON 48"[1219] (ZERO PEDESTAL PLUS 7"[178]) AND TALLER PEDESTALS ONLY.

10 OPTIONAL INTERNAL LINT SCREENS IS AVAILABLE FOR DRYERS WITH 41"[1041] AND TALLER PEDESTALS ONLY.

9 FOR OPTIONAL INTERNAL LINT FILTERS, IT IS RECOMMENDED TO HAVE A 60 GALLON COMPRESSED AIR BOOSTER TANK FOR EVERY 5 DRYERS.

8 EXHAUST DUCTING: DRYER OPERATES UP TO 8500SCFM WITH PRESSURE CHANGES OF UP TO 4" DURING THE CYCLE. THESE CYCLES ARE NUMEROUS AND VARYING THUS FATIGUE OF THE EXHAUST DUCTING NEEDS TO BE CONSIDERED. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 20 GAUGE GALVANIZED SHEET STEEL SPIRAL DUCT WORKS WELL. IF SQUARE DUCTING IS USED, MATERIAL THICKNESS MUST BE CONSIDERED TO PREVENT OIL CANNING AND VIBRATION. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 16 GAUGE GALVANIZED SHEET STEEL IS REQUIRED. HEAVIER GAUGE AND OR STIFFENERS MAY BE REQUIRED GIVEN THE SIZE AND LENGTH OF THE DUCT. ELBOWS AND TRANSITIONS LIKELY WILL REQUIRE DOUBLING THE GAUGE.

7 THIS DRAWING SHOWS THE 6450TG1 DRYER USING A 41"[1041] PEDESTAL BASE. WHICH IS EQUAL TO ZERO PEDESTAL STANDARD HEIGHT FOR CONVEYOR DISCHARGE. PEDESTALS MAY BE ORDERED TO INCREASE OR DECREASE THE MACHINE HEIGHT. ALL VERTICAL DIMENSIONS MUST BE ADJUSTED FOR THE SPECIFIED PEDESTAL.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE SAME FOR ALL MILNOR MACHINES AND IS SHOWN ON ALL DIMENSIONAL DRAWINGS. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR MAY VARY (WITH CHANGES IN FLOOR HEIGHT) AS REQUIRED TO INSURE THAT BASELINE "Z" IS HORIZONTAL AND ALL COMPONENTS REQUIRING GROUT ARE SET ON A MINIMUM 1" [25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

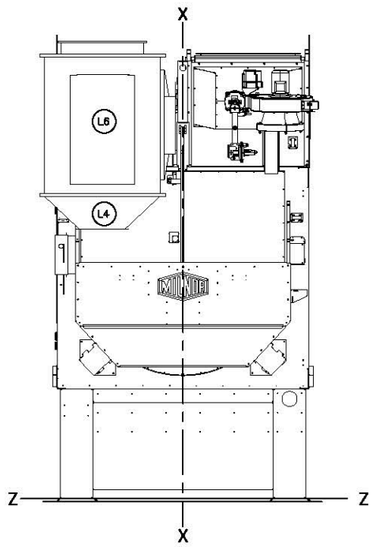
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

6450TG1R OPTIONS

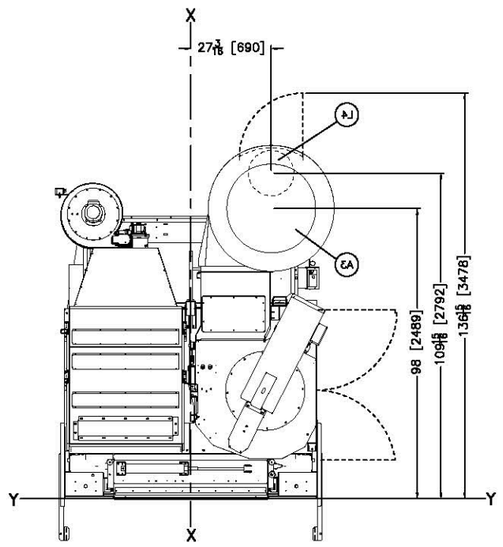
DM 0 0.5DM 1M
MM
INCHES 0 12 24 36

DWG# BD6450TG1RR1BB
2017366D

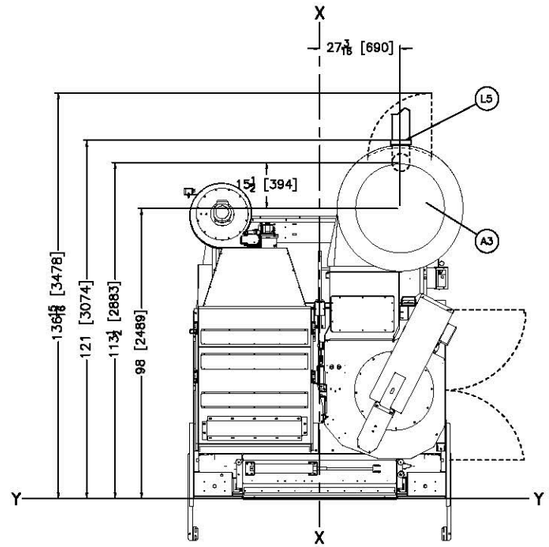
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com



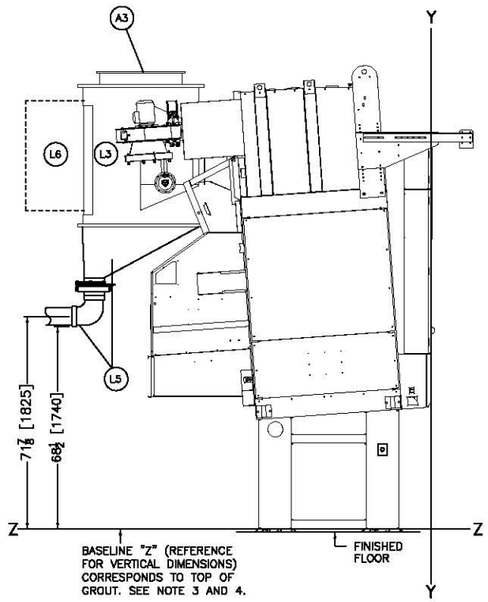
REAR VIEW
LINT OUTLET TO BAG COLLECTOR



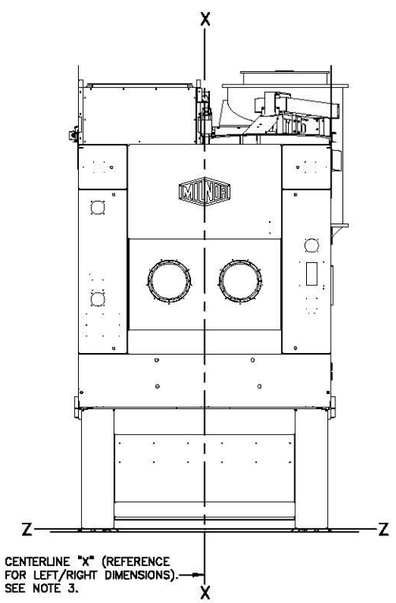
PLAN VIEW
LINT OUTLET TO BAG COLLECTOR



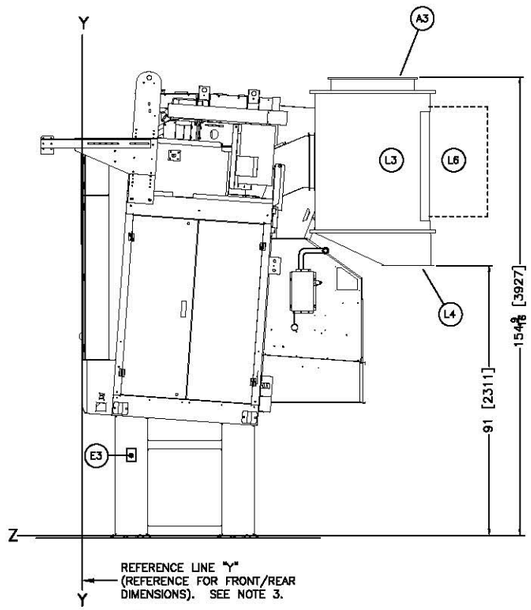
PLAN VIEW
LINT OUTLET TO VACUUM COLLECTOR



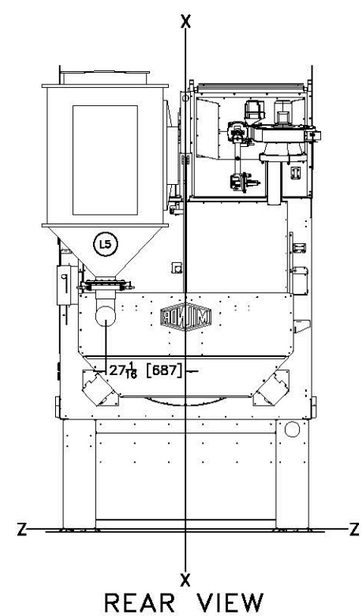
LEFT VIEW



FRONT VIEW



RIGHT VIEW



REAR VIEW
LINT OUTLET TO VACUUM COLLECTOR

ITEM	LEGEND
L6	HINGED ACCESS DOOR
L5	CONE, LINT COLLECTION OUTLET TO VACUUM COLLECTOR
	DISCHARGE, 6" PIPE CONNECTION
L4	CONE, LINT COLLECTION OUTLET TO BAG, DISCHARGE
	15-1/2" ID FLANGED OUTLET
L3	MLF1010 LINT FILTER (LINT FILTER SUPPORTED BY OTHERS)
A3	EXHAUST DUCT, 28"[711] DIAMETER

NOTES

13 EXHAUST DUCTING: DRYER OPERATES UP TO 7000 SCFM WITH PRESSURE CHANGES OF UP TO 4" DURING THE CYCLE. THESE CYCLES ARE NUMEROUS AND VARYING THUS FATIGUE OF THE EXHAUST DUCTING NEEDS TO BE CONSIDERED. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 20 GAUGE GALVANIZED SHEET STEEL SPIRAL DUCT WORKS WELL. IF SQUARE DUCTING IS USED, MATERIAL THICKNESS MUST BE CONSIDERED TO PREVENT OIL CANNING AND VIBRATION. FIELD EXPERIENCE HAS SHOWN THAT A MINIMUM THICKNESS OF 16 GAUGE GALVANIZED SHEET STEEL IS REQUIRED. HEAVIER GAUGE AND OR STIFFENERS MAY BE REQUIRED GIVEN THE SIZE AND LENGTH OF THE DUCT. ELBOWS AND TRANSITIONS LIKELY WILL REQUIRE DOUBLING THE GAUGE.

12 THIS DRAWING SHOWS THE 6450TG1L DRYER WITH A 41-3/8[1051] DISCHARGE HEIGHT. WE CALL THE PEDESTAL BASE TO DO THIS A "ZERO PEDESTAL". "ZERO PEDESTAL" IS STANDARD HEIGHT FOR CONVEYOR DISCHARGE.

DRYERS MAY BE ORDERED WITH A PEDESTAL TO INCREASE OR DECREASE THE MACHINE HEIGHT IN (+/-)1.75"[44] INCREMENTS. ALL VERTICAL DIMENSIONS MUST BE ADJUSTED FOR THE SPECIFIED PEDESTAL. FOR ANYTHING UNDER A ZERO PEDESTAL, RIGHT AND LEFT DRYERS CANNOT BE CONNECTED, AND YOU MUST ALLOW A MINIMUM 18"[458] FOR SERVICING BETWEEN DRYERS, SEE NOTE 10.

11 DO NOT USE ANY TYPE OF TURNING VANE IN THE DRYER EXHAUST DUCTING AS THESE WILL IMMEDIATELY PLUG WITH LINT.

10 A MINIMUM CLEARANCE OF 20 1/4"[514] IS REQUIRED FROM THE REMOVABLE ACCESS DOORS TO WALL. THIS DISTANCE IS REQUIRED TO OPEN THE DOORS 80 DEGREES TO BE LIFTED OFF THE HINGES. THE DOORS MAY BE FULLY OPENED REQUIRING 25 1/2"[648] OF CLEARANCE.

9 DRYER IS DISASSEMBLED INTO TWO MAJOR COMPONENTS FOR SHIPPING. THE BASE AND THE FRAME. CONSULT MILNOR FACTORY IF COMPONENTS SUCH AS BLOWER HOUSING MUST BE REMOVED TO FIT MACHINE THROUGH OPENING.

8 DO NOT RUN PIPING OR CONDUIT OVER BLOWER HOUSING, SO THAT THE BLOWER MAY BE REMOVED FOR SERVICING, IF NEEDED.

7 CONTROL PANEL FOR DRYER MAY BE INSTALLED IN ANY CONVENIENT LOCATION. CONTROL CABLE FROM DRYER TO PANEL IS SUPPLIED BY MILNOR AND PRICED SEPARATELY.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRO CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL. (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

6450TG1R RA + MLF1010

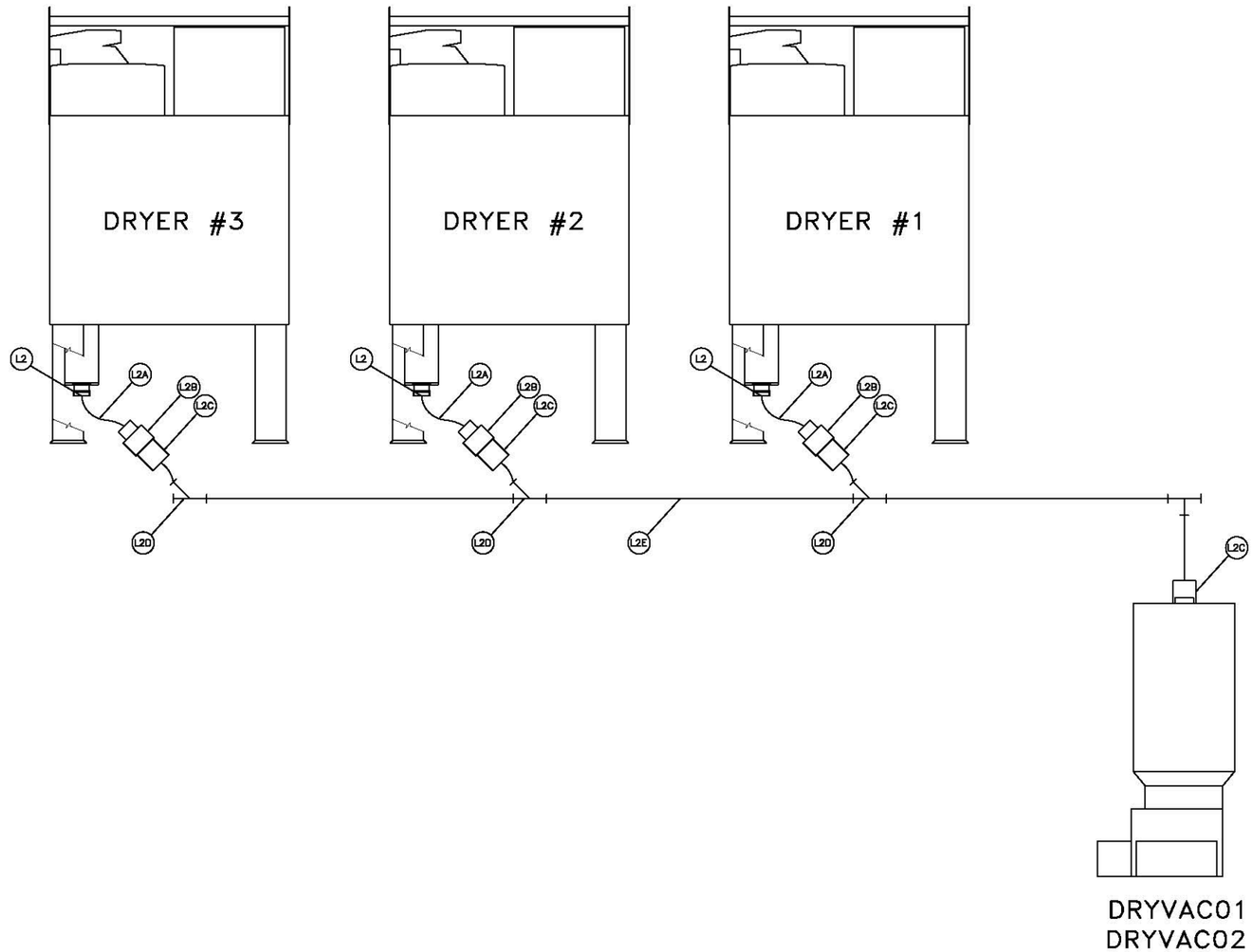
DM 0 0.5M 1M
INCHES 0 12 24 36

DWG# BD6450TG1RR1BC
2017366D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA. Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com

ADDITIONAL AIR REQUIREMENTS FOR (L1)– OPTIONAL INTERNAL LINT FILTERS (SEE NOTE 7.)

AIR PRESSURE REQUIREMENTS: 85–110 PSI
CONNECTION (A2): 1"NPT
AIR USAGE (ESTIMATED):
110 SCF IN 15 SECONDS WHEN ACTIVATED



ITEM	LEGEND
L2E	6" SHC40 PVC (NOT SUPPLIED PMC.)
L2D	6" Y – PVC (NOT SUPPLIED PMC.)
L2C	6" NO HUB CONNECTOR (NOT SUPPLIED PMC.)
L2B	REDUCER 6" X 6", (PART W7–71865, SUPPLIED PMC)
L2A	6" FLEX HOSE (NOT SUPPLIED PMC.)
L2	LINT OUTLET (6" FLEX HOSE CONNECTION) FOR OPTIONAL INTERNAL LINT SCREEN. PIPES TO DRYVAC01, DRYVAC02 OR LINT COLLECTOR BY OTHERS.

NOTES

8 SEE DRYER OPTION PAGES FOR ADDITIONAL DIMENSIONAL INFORMATION FOR OPTIONAL INTERNAL LINT SCREENS.

7 FOR OPTIONAL INTERNAL LINT FILTERS, IT IS RECOMMENDED TO HAVE A 60 GALLON COMPRESSED AIR BOOSTER TANK FOR EVERY 5 DRYERS.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL. (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE SAME FOR ALL MILNOR MACHINES AND IS SHOWN ON ALL DIMENSIONAL DRAWINGS. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR MAY VARY (WITH CHANGES IN FLOOR HEIGHT) AS REQUIRED TO INSURE THAT BASELINE "Z" IS HORIZONTAL AND ALL COMPONENTS REQUIRING GROUT ARE SET ON A MINIMUM 1" [25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

RECOMMENDED LINT COLLECTOR PIPING

DM 0 0.5M 1M
INCHES 0 12 24 36

DWG# BD6458DLCPBE
2014453D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnerinfo@milnor.com