

Tumble Dryers

25 Pound Capacity

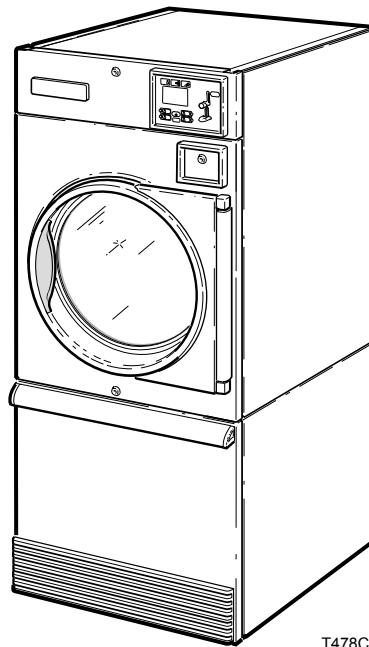
30 Pound Capacity

35 Pound Capacity

55 Pound Capacity

Starting Serial No. 0602004144

Refer to Page 5 for Model Identification



T478C

Keep These Instructions for Future Reference.

(If this machine changes ownership, this manual must accompany machine.)



Installation must conform with local codes or, in the absence of local codes, with:

In the U.S.A., installation must conform to the latest edition of the American National Standard Z223.1/ NFPA 54 “National Fuel Gas Code” and Standard ANSI/NFPA 70 “National Electric Code.”

In Canada, installation must comply with Standards CAN/CSA-B149.1 or Natural Gas and Propane Installation Code and CSA C22.1, latest edition, Canadian Electric Code, Part I.

In Australia and New Zealand, installation must comply with the Gas Installations Standard AS/NZS 5601 Part 1: General Installations.



WARNING

FOR YOUR SAFETY, the information in this manual must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or death.

W033

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS:**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Clear the room, building or area of all occupants.
 - Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

W052



AVERTISSEMENT

POUR VOTRE SÉCURITÉ, veuillez à bien respecter les indications de ce manuel afin de minimiser les risques d’incendie ou d’explosion ou d’écarter les dangers de dommages matériels, corporel ou de mort.

W033FR

- Ne pas entreposer ni utiliser d’essence ou autres gaz et liquides inflammables au voisinage de cet appareil ou de tout autre.
- **QUE FAIRE EN PRÉSENCE D’UNE ODEUR DE GAZ :**
 - Ne pas tenter d’allumer un quelconque appareil.
 - Ne toucher à aucun interrupteur électrique ; ne pas utiliser de téléphone dans le bâtiment.
 - Évacuer le local, la bâtiment ou la zone de tous ses occupants.
 - Téléphoner immédiatement à la compagnie de gaz depuis une maison voisine. Suivre les instructions de la compagnie de gaz.
 - Si la compagnie de gaz n’est pas joignable, appeler les pompiers.
- L’installation et l’entretien doivent être effectués par un installateur agréé, un service de réparation ou la compagnie de gaz.

W052R1FR

IMPORTANT: Information must be obtained from a local gas supplier on instructions to be followed if the user smells gas. These instructions must be posted in a prominent location. Step-by-step instructions of the above safety information must be posted in a prominent location near the tumble dryer for customer use.



WARNING

- Installation of unit must be performed by a qualified installer.
- Install tumble dryer according to manufacturer's instructions and local codes.
- **DO NOT** install a tumble dryer with flexible plastic venting materials. If flexible metal (foil type) duct is installed, it must be of a specific type identified by the appliance manufacturer as suitable for use with tumble dryer. Refer to section on connecting exhaust system. Flexible venting materials are known to collapse, be easily crushed, and trap lint. These conditions will obstruct tumble dryer airflow and increase the risk of fire.

W752R1

FOR YOUR SAFETY

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

W053



AVERTISSEMENT

- L'installation de l'unité doit être effectuée par un installateur qualifié.
- Installer le séchoir selon les instructions du fabricant et les codes locaux.
- **NE PAS** installer un séchoir avec des matériaux de mise à l'air libre en matière plastique flexible. Si un conduit métallique flexible (type en feuilles) est installé, il doit être d'un type spécifique identifié par le fabricant d'appareils ménagers comme pouvant être utilisé avec le séchoir. Se reporter à la section sur la connexion au dispositif d'échappement. Les matériaux flexibles de mise à l'air libre sont connus pour s'effondrer, pour être facilement écrasés et pour emprisonner les peluches. Ces conditions obstruent le débit d'air du séchoir et augmentent le risque d'incendie.

W752FR

POUR VOTRE SÉCURITÉ

Ne pas entreposer ni utiliser d'essence ou autres gaz et liquides inflammables au voisinage de cet appareil ou de tout autre.

W053FR

The following information applies to the state of Massachusetts, USA.

- This appliance can only be installed by a Massachusetts licensed plumber or gas fitter.
- This appliance must be installed with a 36 inch (91 cm) long flexible gas connector.
- A "T-Handle" type gas shut-off valve must be installed in the gas supply line to this appliance.
- This appliance must not be installed in a bedroom or bathroom.

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Introduction

Model Identification

Information in this manual is applicable to these models.

	Gas		Steam		Electric	
25 Pound	CHD25G2-CA025L	SA025L	CHD25S2-CT025S	ST025S	CHD25E2-CT025E	ST025E
	CHD25G2-CA025N	SA025N	CHD25S2-CU025S	SU025S	CHD25E2-CU025E	SU025E
	CHD25G2-CT025L	ST025L	DR25S2-BT025S	UT025S	DR25E2-BT025E	UT025E
	CHD25G2-CT025N	ST025N	DR25S2-BU025S	UU025S	DR25E2-BU025E	UU025E
	CHD25G2-CU025L	SU025L	HT025S	YT025S	HT025E	YT025E
	CHD25G2-CU025N	SU025N	HU025S	YU025S	HU025E	YU025E
	DR25G2-BA025L	UA025L	IPD25S2-IT025S		IPD25E2-IT025E	
	DR25G2-BA025N	UA025N				
	DR25G2-BT025L	UT025L				
	DR25G2-BT025N	UT025N				
	DR25G2-BU025L	UU025L				
	DR25G2-BU025N	UU025N				
	HA025L	YT025L				
	HA025N	YT025N				
	HT025L	YU025L				
	HT025N	YU025N				
	HU025L					
	HU025N					
	IPD25G2-IT025L					
	IPD25G2-IT025N					
30 Pound	CHD30G2-CA030L	SA030L	CHD30S2-CT030S	ST030S	CHD30E2-CT030E	ST030E
	CHD30G2-CA030N	SA030N	CHD30S2-CU030S	SU030S	CHD30E2-CU030E	SU030E
	CHD30G2-CT030L	ST030D	DR30S2-BT030S	UT030S	DR30E2-BT030E	UT030E
	CHD30G2-CT030N	ST030L	DR30S2-BU030S	UU030S	DR30E2-BU030E	UU030E
	CHD30G2-CU030L	ST030N	HT030S	YT030S	HT030E	YT030E
	CHD30G2-CU030N	SU030L	HU030S	YU030S	HU030E	YU030E
	DR30G2-BA030L	SU030N	IPD30S2-IT030S		IPD30E2-IT030E	
	DR30G2-BA030N	UA030L				
	DR30G2-BT030D	UA030N				
	DR30G2-BT030L	UT030L				
	DR30G2-BT030N	UT030N				
	DR30G2-BU030L	UU030L				
	DR30G2-BU030N	UU030N				
	HA030L	YT030L				
	HA030N	YT030N				
	HT030D	YU030L				
	HT030L	YU030N				
	HT030N					
	HU030L					
	HU030N					
IPD30G2-IT030L						
IPD30G2-IT030N						

(Continued)

Introduction

(Continued)

	Gas		Steam	Electric	
35 Pound	AT035L	SA035L	AT035S	AT035E	ST035E
	AT035N	SA035N	CHD35S2-CT035S	CHD35E2-CT035E	SU035E
	CHD35G2-CA035L	ST035L	CHD35S2-CU035S	CHD35E2-CU035E	UT035E
	CHD35G2-CA035N	ST035N	DR35S2-BT035S	DR35E2-BT035E	UU035E
	CHD35G2-CT035L	SU035L	DR35S2-BU035S	DR35E2-BU035E	YT035E
	CHD35G2-CT035N	SU035N	HT035S	HT035E	YU035E
	CHD35G2-CU035L	UA035L	HU035S	HU035E	
	CHD35G2-CU035N	UA035N	IPD35S2-IT035S	IPD35E2-IT035E	
	DR35G2-BA035L	UT035L	ST035S		
	DR35G2-BA035N	UT035N	SU035S		
	DR35G2-BT035L	UU035L	UT035S		
	DR35G2-BT035N	UU035N	UU035S		
	DR35G2-BU035L	YT035L	YT035S		
	DR35G2-BU035N	YT035N	YU035S		
	HA035L	YU035L			
	HA035N	YU035N			
	HT035L				
	HT035N				
	HU035L				
	HU035N				
IPD35G2-IT035L					
IPD35G2-IT035N					
55 Pound	CA055L	HU055L	Not Applicable	CT055E	ST055E
	CA055N	HU055N		CU055E	SU055E
	CT055L	IPD55G2-IT055L		DR55SE2-BT055E	UT055E
	CT055N	IPD55G2-IT055N		DR55SE2-BU055E	UU055E
	CU055L	SA055L		HT055E	
	CU055N	SA055N		HU055E	
	DR55SG2-BA055L	ST055D		IPD55E2-IT055E	
	DR55SG2-BA055N	ST055L			
	DR55SG2-BT055D	ST055N			
	DR55SG2-BT055L	SU055L			
	DR55SG2-BT055N	SU055N			
	DR55SG2-BU055L	UA055L			
	DR55SG2-BU055N	UA055N			
	HA055L	UT055L			
	HA055N	UT055N			
	HT055D	UU055L			
	HT055L	UU055N			
HT055N					

(see next page for suffixes)

Includes models with the following control suffixes:

3B – reversing DX4 vended	KX – prep for coin	RU – reversing UniLinc OPL
3O – DX4 OPL	KY – prep for card	SD – single drop
3V – DX4 vended	KZ – reversing prep for card	SX – single drop, prep for coin
3W – reversing DX4 prep for coin	LB – reversing network adaptable coin	UO – UniLinc OPL
3X – DX4 prep for coin	LC – network adaptable coin	WB – reversing network ready coin
BB – reversing basic electronic, coin	LW – reversing network adaptable, prep for coin	WC – network ready coin
BC – basic electronic, coin	LX – network adaptable, prep for coin	WW – reversing network ready, prep for coin
BL – basic electronic, central pay	LY – network adaptable, prep for card	WX – network ready, prep for coin
BW – reversing basic electronic, prep for coin	LZ – reversing network adaptable, prep for card	WY – network ready, prep for card
BX – basic electronic, prep for coin	NC – NetMaster coin	WZ – reversing network ready, prep for card
BY – basic electronic, prep for card	NR – NetMaster card	ZC – NetMaster network coin
BZ – reversing basic electronic, prep for card	NX – NetMaster, prep for coin	ZR – NetMaster network card
DO – DMP OPL	NY – NetMaster, prep for card	ZX – NetMaster network, prep for coin
DV – DMP vended	OM – OPL micro	ZY – NetMaster network, prep for card
DX – DMP prep for coin	QT – dual digital timer	
EO – LED OPL	R3 – reversing DX4 OPL	
KB – reversing single coin	RE – reversing LED OPL	
KC – single coin	RQ – reversing dual digital timer	
KW – reversing prep for coin		

Introduction

Customer Service

If literature or replacement parts are required, contact the source from which the machine was purchased or contact Alliance Laundry Systems at (920) 748-3950 for the name and address of the nearest authorized parts distributor.

For technical assistance, call (920) 748-3121.

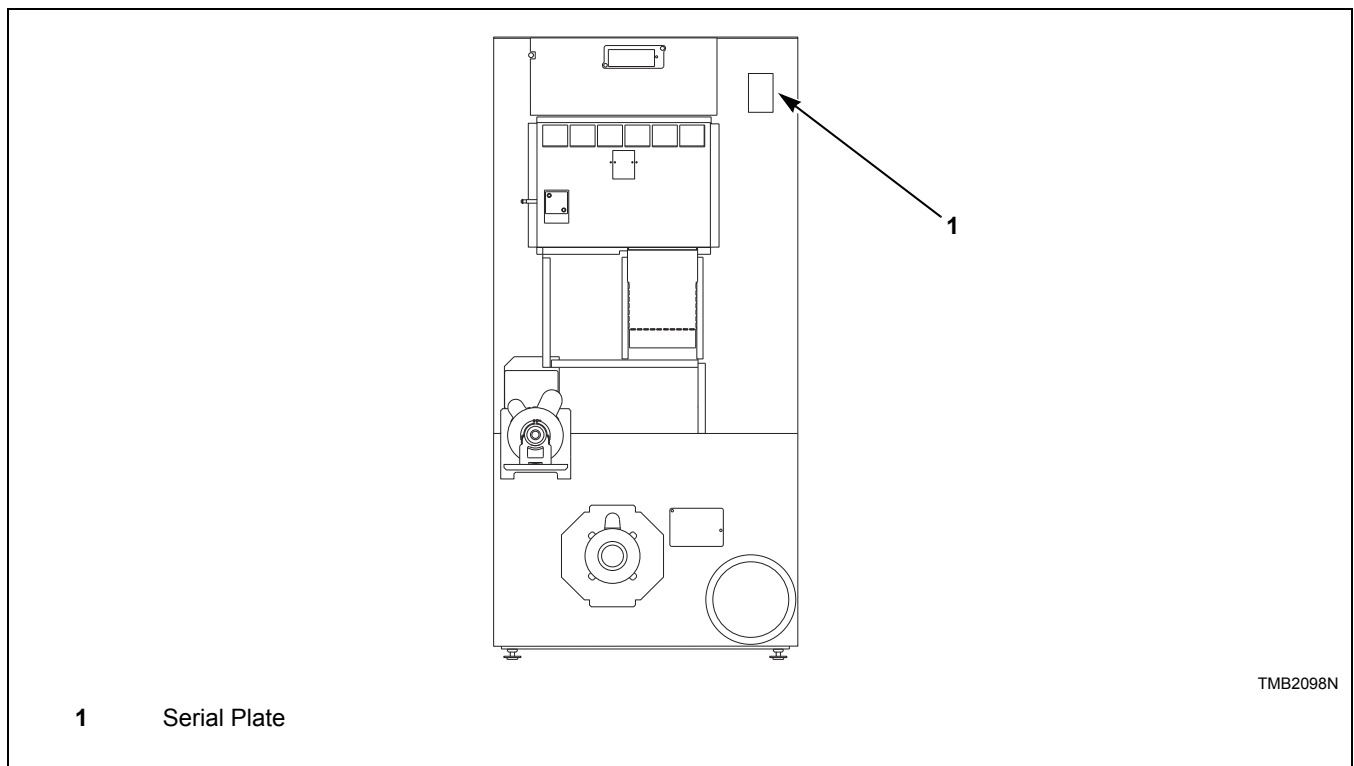
Serial Plate Location

When calling or writing for information about your product, be sure to mention model and serial numbers. Model and serial numbers are found on serial plate on rear of machine, and inside the loading door hinge.

Wiring Diagram

The wiring diagram is located inside the junction or contactor box.

The wiring diagram part number is in the lower portion of the electrical data on the serial plate.





Conversion Table


Multiply	By	To Obtain	Multiply	By	To Obtain
Btu	0.252	kCal	Pounds/sq. inch	0.06895	Bars
Btu	1055	Joules	Pounds/sq. inch	0.070	kg/sq. cm
Inch	25.4	Millimeters	Pounds (lbs.)	0.454	Kilograms
Inches W.C.	0.036	Pounds/sq. inch	Boiler Horsepower	33,479	Btu/hr.
Inches W.C.	0.249	kPa	Boiler Horsepower	34.5	lbs. steam/hr.
lb./inch ² (psi)	6.895	kPa	CFM	0.471	liters/second
ft ³	28.32	Liters	kW	3414	Btu/hr.

Safety Information

Precautionary statements (“DANGER,” “WARNING,” and “CAUTION”) followed by specific instructions, are found in this manual and on machine decals. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

	DANGER
Indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.	


	WARNING
Indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.	

	CAUTION
Indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.	

Additional precautionary statements (“IMPORTANT” and “NOTE”) are followed by specific instructions.

IMPORTANT: The word “IMPORTANT” is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE: The word “NOTE” is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.


	WARNING
Failure to install, maintain, and/or operate this machine according to manufacturer’s instructions may result in conditions which can produce serious injury, death and/or property damage.	
W051R1	

NOTE: The WARNING and IMPORTANT instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution and carefulness are factors which CANNOT be built into this tumble dryer. These factors MUST BE supplied by the person(s) installing, maintaining or operating the tumble dryer.

Always contact your dealer, distributor, service agent or the manufacturer on any problems or conditions you do not understand.


Save These Instructions

Important Safety Instructions

	WARNING
Hazardous Voltage. Can cause shock, burn or cause death. Allow machine power to remain off for two minutes prior to working in and around AC inverter drive.	
<small>W359</small>	

1. Read all instructions before using the tumble dryer.
2. Refer to the **Grounding Instructions** for the proper grounding of the tumble dryer.
3. Do not dry articles that have been previously cleaned in, washed in, soaked in, or spotted with gasoline, dry cleaning solvents, or other flammable or explosive substances as they give off vapors that could ignite or explode.
4. Do not allow children on or in the tumble dryer. This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
5. Before the tumble dryer is removed from service or discarded, remove the door to the drying compartment and the door to the lint compartment.
6. Do not reach into the tumble dryer if the cylinder is revolving.
7. Do not install or store the tumble dryer where it will be exposed to water and/or weather.
8. Do not tamper with the controls.
9. Do not repair or replace any part of the tumble dryer, or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that you understand and have the skills to carry out.
10. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
11. To reduce the risk of fire, **DO NOT DRY** plastics or articles containing foam rubber or similarly textured rubberlike materials.
12. Always clean the lint filter daily.
13. Keep area around the exhaust opening and adjacent surrounding area free from the accumulation of lint, dust, and dirt.
14. The interior of the tumble dryer and the exhaust duct should be cleaned periodically by qualified service personnel.
15. If not installed, operated and maintained in accordance with the manufacturer's instructions or if there is damage to or mishandling of this product's components, use of this product could expose you to substances in the fuel or from fuel combustion which can cause death or serious illness and which are known to the State of California to cause cancer, birth defects or other reproductive harm.
16. Tumble dryer will not operate with the loading door open. **DO NOT** bypass the door safety switch to permit the tumble dryer to operate with the door open. The tumble dryer will stop tumbling when the door is opened. Do not use the tumble dryer if it does not stop rotating when the door is opened or starts rotating without pressing or turning the START mechanism. Remove the tumble dryer from use and call the service person.
17. Tumble dryer will not operate with lint panel open. **DO NOT** bypass lint panel safety switch to permit the tumble dryer to operate with the lint panel open.
18. Do not put articles soiled with vegetable or cooking oil in the tumble dryer, as these oils may not be removed during washing. Due to the remaining oil, the fabric may catch on fire by itself.
19. To reduce the risk of fire, **DO NOT** put clothes which have traces of any flammable substances such as machine oil, flammable chemicals, thinner, etc. or anything containing wax or chemicals such as in mops and cleaning cloths, or anything dry-cleaned at home with dry-cleaning solvent in the tumble dryer.
20. Use the tumble dryer only for its intended purpose, drying water-washed fabrics.
21. **ALWAYS** disconnect the electrical power to the tumble dryer before servicing. Disconnect power by shutting off appropriate breaker or fuse.

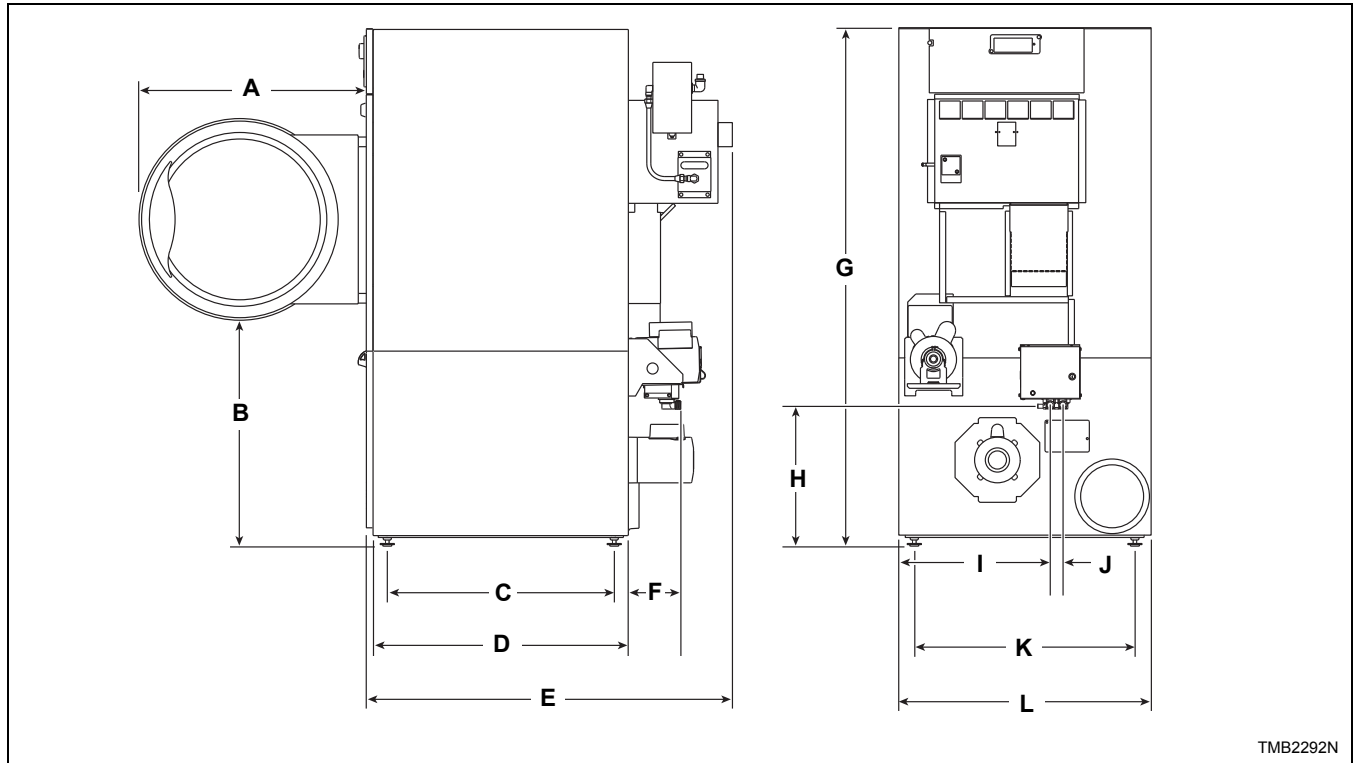
22. Install this tumble dryer according to these ***Installation Instructions***. All connections for electrical power, grounding, and gas supply must comply with local codes and be made by licensed personnel when required.
23. Remove laundry immediately after tumble dryer stops.
24. Always read and follow manufacturer's instructions on packages of laundry and cleaning aids. Heed all warnings or precautions. To reduce the risk of poisoning or chemical burns, keep them out of reach of children at all times (preferably in a locked cabinet).
25. Do not tumble fiberglass curtains and draperies unless the label says it can be done. If they are dried, wipe out the cylinder with a damp cloth to remove particles of fiberglass.
26. Always follow the fabric care instructions supplied by the garment manufacturer.
27. Never operate the tumble dryer with any guards and/or panels removed.
28. **DO NOT** operate the tumble dryer if it is smoking, grinding, or has missing or broken parts.
29. **DO NOT** bypass any safety devices.
30. Solvent vapors from dry-cleaning machines create acids when drawn through the heater of the drying unit. These acids are corrosive to the tumble dryer as well as to the laundry load being dried. Be sure make-up air is free of solvent vapors.
31. Failure to install, maintain, and/or operate this machine according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.

	WARNING
<p>To reduce the risk of serious injury, install lockable door(s) to prevent public access to rear of tumble dryers.</p>	
<p>W055R1</p>	

Specifications and Dimensions

Specifications		25 Pound	30 Pound	35 Pound	55 Pound
Noise level measured during operation at operator position of 3.3 feet (1 meter) in front of machine and 5.2 feet (1.6 meters) from floor		60 dBA	61 dBA	63 dBA	63 dBA
Net Weight (approximate): Pounds (kg)		300 (137)	330 (150)	360 (163)	435 (197)
Standard Packaging Weight: Pounds (kg)		332 (151)	364 (165)	394 (179)	476 (216)
Standard Packaging Shipping Dimensions: Inch (mm)		30 x 43 x 69 (762 x 1092 x 1753)	30 x 49 x 69 (762 x 1245 x 1753)	33 x 49 x 69 (838 x 1245 x 1753)	35.5 x 59 x 72 (902 x 1499 x 1829)
Slat Crate Packaging Weight: Pounds (kg)		406 (184)	446 (202)	480 (218)	506 (230)
Slat Crate Shipping Dimensions: Inch (mm)		34.5 x 46 x 87.75 (876 x 1168 x 2229)	34.5 x 52 x 87.75 (876 x 1321 x 2229)	37.5 x 52 x 87.75 (953 x 1321 x 2229)	40 x 60 x 87.25 (1016 x 1524 x 2216)
Cylinder Size: Inch (mm)		26.5 x 24 (673 x 610)	26.5 x 30 (673 x 762)	30 x 30 (762 x 762)	33 x 35 (838 x 889)
Cylinder Capacity (dry weight): Pounds (kg)		25 (11.3)	30 (13.6)	35 (15.9)	55 (24.9)
Drive Motor Horsepower		1/4	1/4	1/4	Nonreversing 1/2 Reversing 1/4
Fan Motor Horsepower		1/4	1/4	1/4	1/2
Maximum Airflow per Pocket: C.F.M. (l/sec)	50 Hertz	430 (203)	430 (203)	550 (260)	600 (283)
	60 Hertz	500 (236)	500 (236)	650 (307)	700 (330)
Maximum Static Back Pressure: Inch W.C. (mbar)	50 Hertz	0.6 (1.5)	0.6 (1.5)	0.5 (1.3)	0.5 (1.3)
	60 Hertz	0.8 (2.0)	0.8 (2.0)	0.6 (1.5)	0.6 (1.5)
Gas Models					
Gas Connection		1/2 in. NPT	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT
Gas Burner Rating: Btu/hr. (kW, Mj/hr.)	50 Hertz	64,000 (18.7, 67.5)	73,000 (21.4, 77)	90,000 (26.4, 95)	102,000 (29.9, 107.6)
	60 Hertz	64,000 (18.7, 67.5)	73,000 (21.4, 77)	90,000 (26.4, 95)	112,000 (32.8, 118.2)
Electric Models					
Heating Element Rating:	400/50/3	10 kW	21 kW	24 kW	27 kW
	Standard	12 kW			
Steam Models					
Steam Connection		3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	Not Applicable
Steam Coil Rating at 100 psig: Boiler Horsepower (Btu/hr.) (recommended operating pressure 80-100 psig)		3.9 (134,700)	3.9 (134,700)	4.8 (166,000)	Not Applicable

Cabinet Dimensions



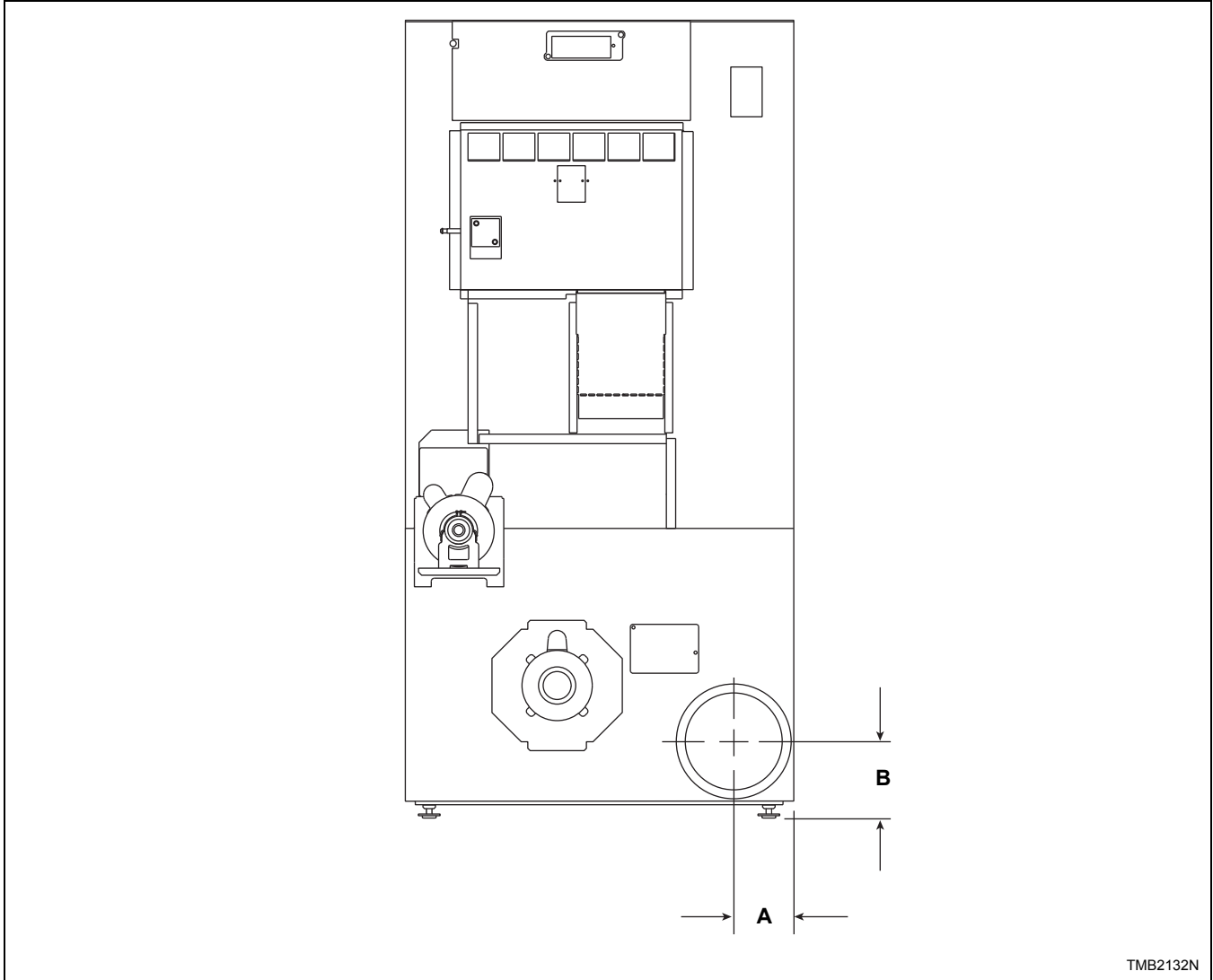
TMB2292N

Models	A	B	C	D	E	F*
25 Pound	26.25 in. (667 mm)	27.5 in. (669 mm)	23.35 in. (593 mm)	25.75 in. (654 mm)	40.875 in. (1038 mm)	6.53 in. (166 mm)
30 Pound	26.25 in. (667 mm)	27.5 in. (669 mm)	28.35 in. (720 mm)	31.75 in. (806 mm)	46.875 in. (1191 mm)	6.53 in. (166 mm)
35 Pound	28 in. (711 mm)	27.5 in. (669 mm)	28.35 in. (720 mm)	31.75 in. (806 mm)	46.875 in. (1191 mm)	6.53 in. (166 mm)
55 Pound	31.88 in. (810 mm)	26.87 in. (682.5 mm)	33.75 in. (857.25 mm)	38.25 in. (971.5 mm)	53.62 in. (1365 mm)	6.53 in. (166 mm)
Models	G	H*	I*	J*	K	L
25 Pound	63.875 in. (1622 mm)	16.48 in. (419 mm)	15.41 in. (391 mm)	1.59 in. (40 mm)	24.64 in. (626 mm)	28 in. (711 mm)
30 Pound	63.875 in. (1622 mm)	16.48 in. (419 mm)	15.41 in. (391 mm)	1.59 in. (40 mm)	24.64 in. (626 mm)	28 in. (711 mm)
35 Pound	63.875 in. (1622 mm)	16.48 in. (419 mm)	19.59 in. (497.5 mm)	1.59 in. (40 mm)	27.38 in. (695 mm)	31.5 in. (800 mm)
55 Pound	66.72 in. (1694.7 mm)	17.75 in. (451 mm)	18.65 in. (474 mm)	1.59 in. (40 mm)	30.5 in. (774.7 mm)	34.5 in. (876 mm)

* Fire suppression system optional - may not be on machine.

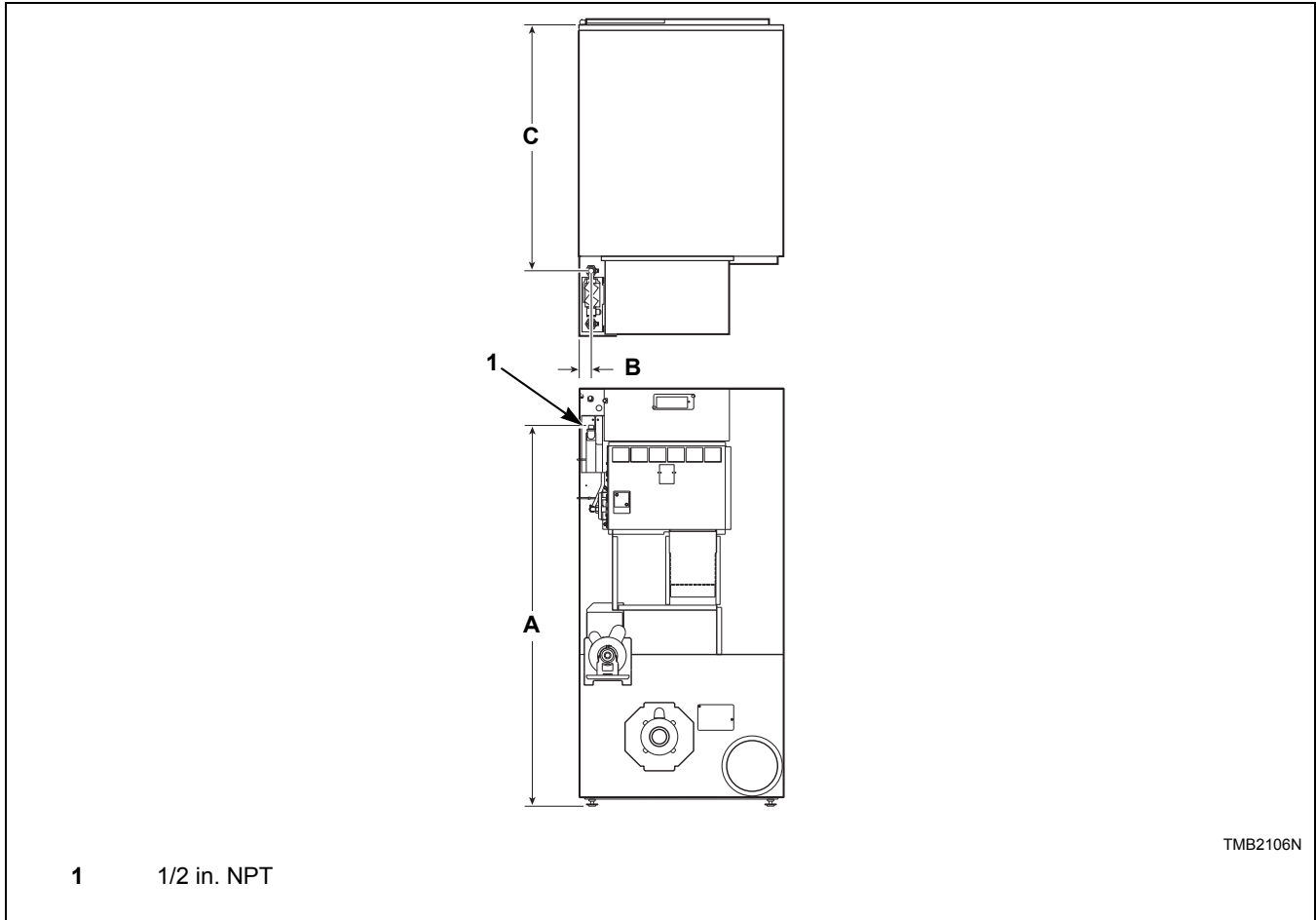
NOTE: Facia panels available to increase height of models to 72.25 inches (183 mm) and 76.25 inches (1938 mm).

Exhaust Outlet Locations



Models	Rear Exhaust		
	Diameter	A	B
25/30 Pound	6 in. (152 mm)	3.875 in. (99 mm)	4.625 in. (117 mm)
35 Pound	8 in. (203 mm)	4.875 in. (124 mm)	5.625 in. (143 mm)
55 Pound	8 in. (203 mm)	4.808 in. (122 mm)	6.156 in. (156.3 mm)

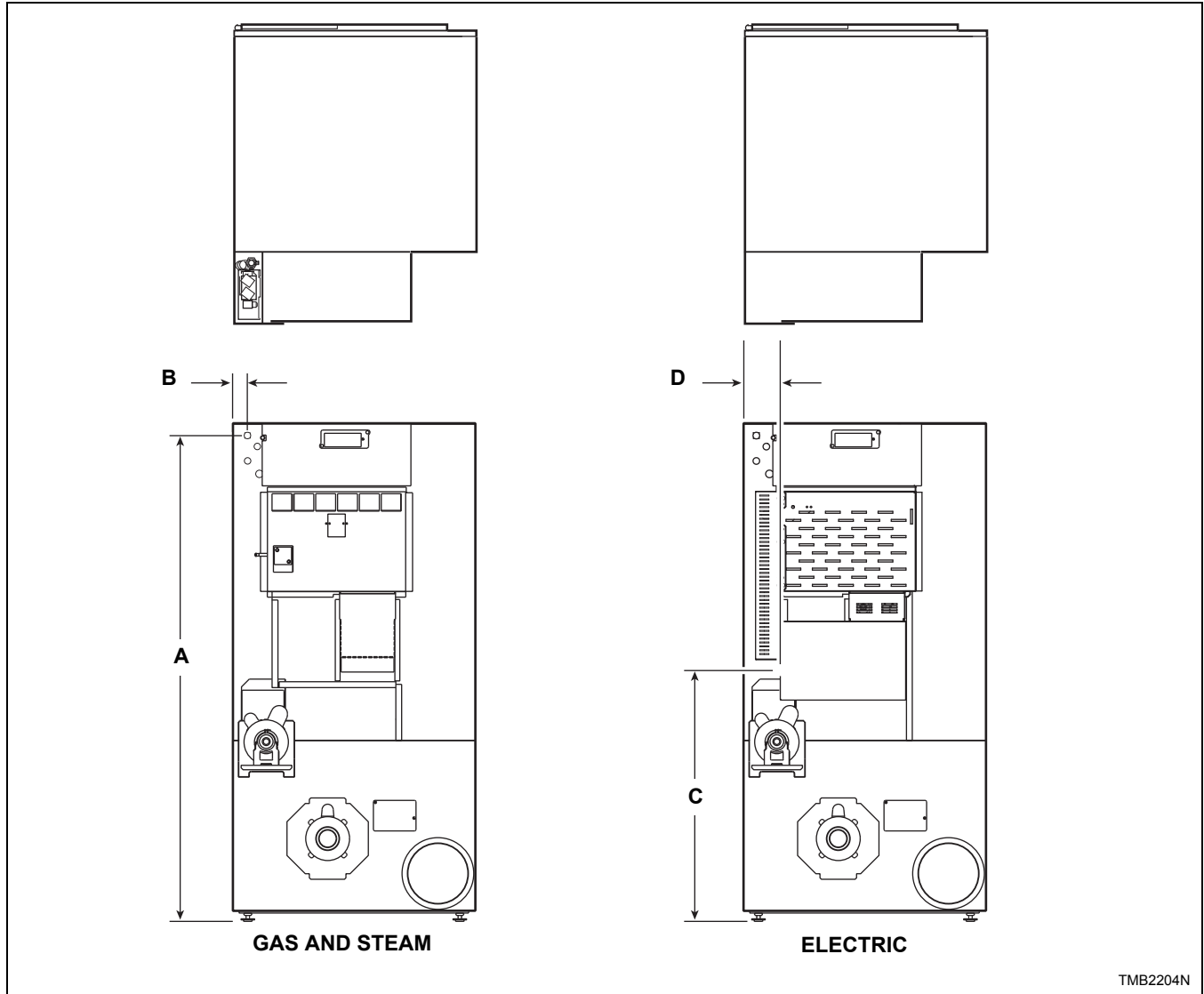
Gas Connection Locations



Models	Gas Connection – CE and Australian Units		
	A	B	C
25 Pound	59 in. (1500 mm)	1.5 in. (38.1 mm)	29 in. (737 mm)
30 Pound	59 in. (1500 mm)	1.5 in. (38.1 mm)	35 in. (889 mm)
35 Pound	59 in. (1500 mm)	2.5 in. (64 mm)	35 in. (889 mm)
55 Pound	59 in. (1500 mm)	2.5 in. (64 mm)	35 in. (889 mm)

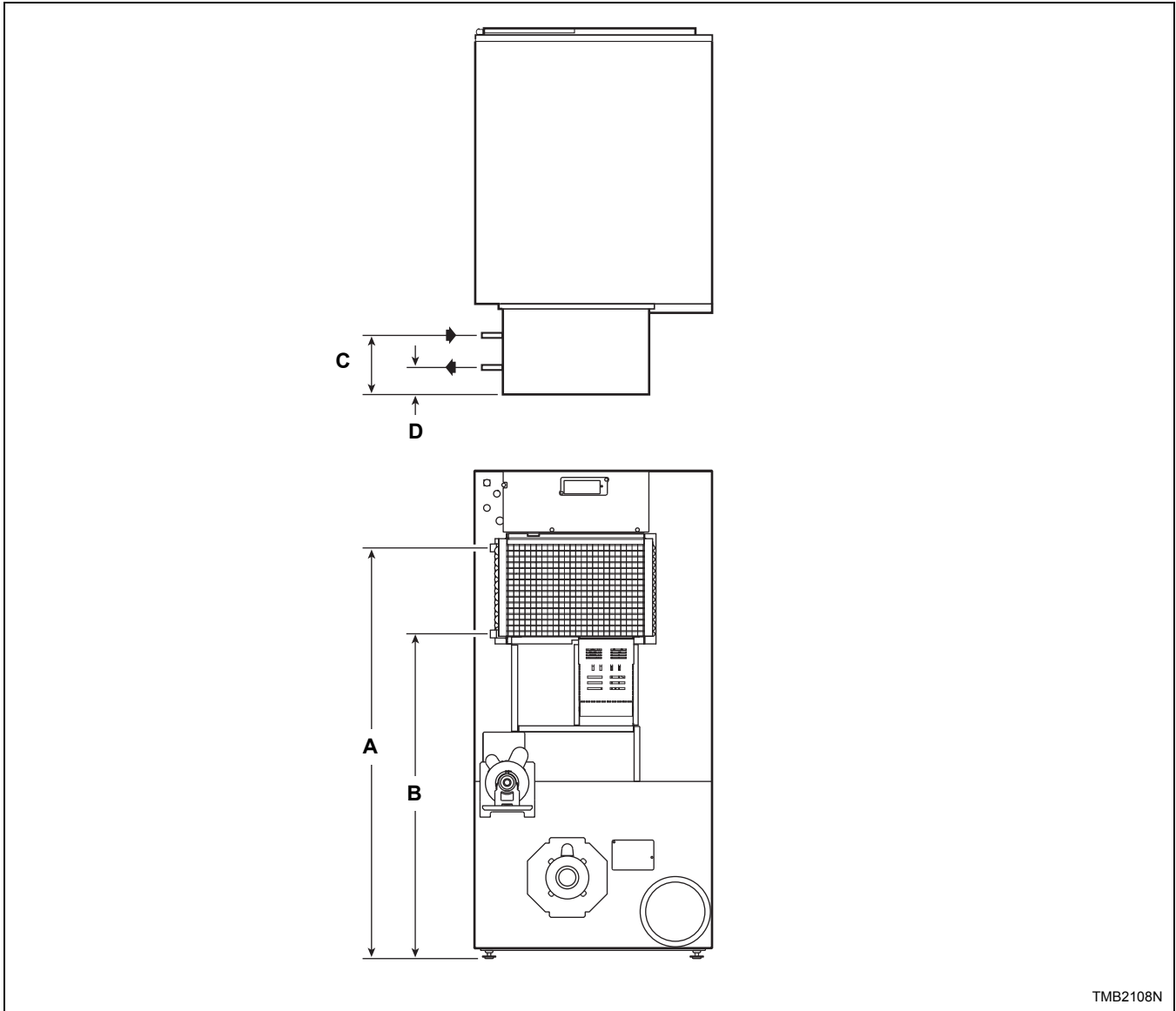
Models	Gas Connection – Non-CE and Non-Australian Units		
	A	B	C
25 Pound	57 in. (1450 mm)	2.5 in. (64 mm)	35.5 in. (927 mm)
30 Pound	57 in. (1450 mm)	2.5 in. (64 mm)	43 in. (1092 mm)
35 Pound	57 in. (1450 mm)	4 in. (101.6 mm)	43 in. (1092 mm)
55 Pound	55.285 in. (1404 mm)	1.621 in. (41.17 mm)	46.75 in. (1187.45 mm)

Electrical Connection Locations



Models	Electrical Service			
	Gas and Steam Models		Electric Models	
	A	B	C	D
25/30 Pound	62.25 in. (1581 mm)	2 in. (51 mm)	28 in. (711 mm)	3.25 in. (83 mm)
35 Pound	62.25 in. (1581 mm)	3 in. (76 mm)	28 in. (711 mm)	4.25 in. (108 mm)
55 Pound	65.187 in. (1655.75 mm)	1.765 in. (44.83 mm)	32.526 in. (826.16 mm)	6.547 in. (166.3 mm)

Steam Connection Locations



TMB2108N

Models	Inlet		Outlet	
	A	C	B	D
25/30/35 Pound	53.75 in. (1365 mm)	6.29 in. (160 mm)	42.5 in. (1080 mm)	2.39 in. (61 mm)

NOTE: All connections use 3/4 inch NPT pipe.

Installation

Pre-Installation Inspection

Upon delivery, visually inspect the crate, carton and parts for any visible shipping damage. If the crate, carton, or cover is damaged or signs of possible damage are evident, have the carrier note the condition on the shipping papers before the shipping receipt is signed, or advise the carrier of the condition as soon as it is discovered.

Remove the crate and protective cover as soon as possible and check the items listed on the packing list. Advise the carrier of any damaged or missing articles as soon as possible. A written claim should be filed with the carrier immediately if articles are damaged or missing.

IMPORTANT: Warranty is void unless tumble dryer is installed according to instructions in this manual. Installation should comply with minimum specifications and requirements detailed herein, and with applicable local gas fitting regulations, municipal building codes, water supply regulations, electrical wiring regulations, and any other relevant statutory regulations. Due to varied requirements, applicable local codes should be thoroughly understood and all pre-installation work arranged for accordingly.

Material Required (Obtain Locally)	
All Models	One single Pole fused disconnect switch or circuit breaker on 1 Phase models. Circuit breaker on 3 Phase models.
Gas Models	One gas shut-off valve for gas service line to each tumble dryer.
Steam Models	One steam shut-off valve for steam service line to be connected upstream of solenoid steam valve. Steam shut-off valve for each condensate return line. Flexible steam hoses with a 125 psig (pounds per square inch gauge) (8.78 kg/sq. cm) working pressure for connecting steam coils. Refer to <i>Figure 21</i> for sizing and connection configurations. Steam trap for steam coil outlet to condensate return line. Optional – Vacuum breaker for condensate return line.


Location Requirements

The tumble dryer must be installed on a level floor capable of supporting weight of tumble dryer fully loaded. Floor covering materials such as carpeting or tile should be removed.

To assure compliance, consult local building code requirements. The tumble dryer must not be installed or stored in an area where it will be exposed to water and/or weather.

IMPORTANT: DO NOT block the airflow at the rear of the tumble dryer with laundry or other articles. Doing so would prevent adequate air supply to the combustion chamber of the tumble dryer.


A typical tumble dryer enclosure is shown in *Figure 1*. Note the minimum and maximum dimensions. Local codes and ordinances must be complied with.

	WARNING
To reduce the risk of serious injury, install lockable door(s) to prevent public access to rear of tumble dryers.	
<small>W055R1</small>	

IMPORTANT: Install tumble dryers with sufficient clearance for servicing and operation. Refer to *Figure 1*.

IMPORTANT: Keep tumble dryer area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

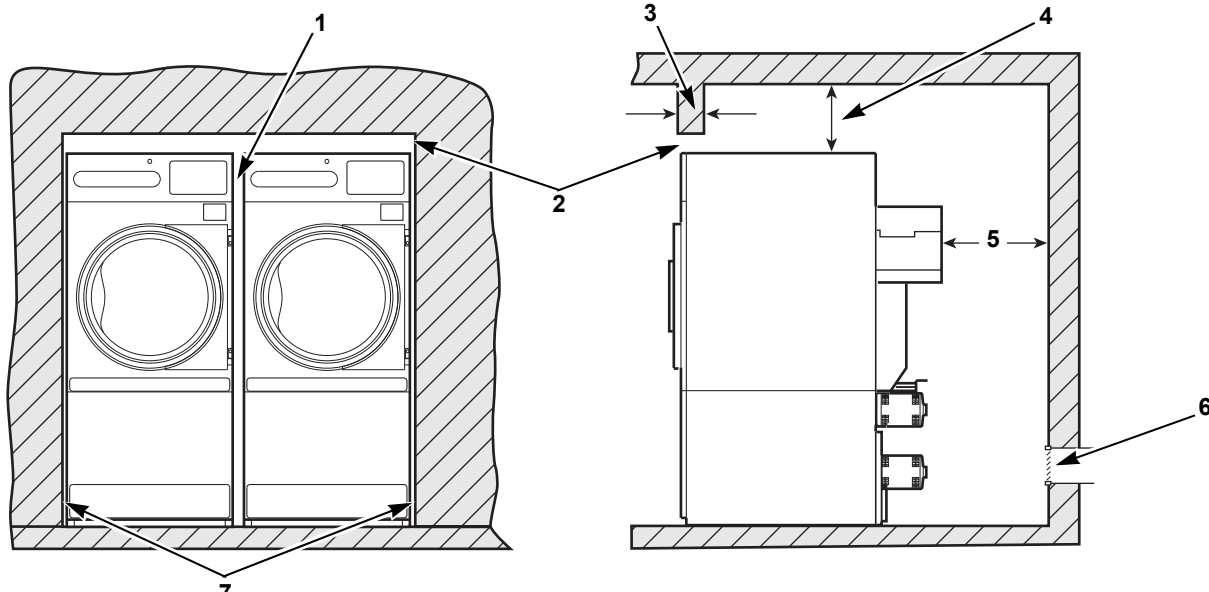
Tumble Dryer Enclosure



WARNING

To reduce the risk of severe injury, clearance of tumble dryer cabinet from combustible construction must conform to the minimum clearances.

W056R1



TMB2021N

NOTE: Shaded areas indicate adjacent structure.

- 1** 0.5 in. (13 mm) recommended between machines for removal or installations.
- 2** Allow 2-4 in. (51-102 mm) opening at top of machine to aid in removal or installation. A removable trim piece may be used to conceal the opening; zero clearance allowed for trim.
- 3** 4 in. (102 mm) Maximum Header Thickness.
- 4** 12 in. (305 mm) Minimum Clearance.
- 5** 24 in. (610 mm) minimum, 36 in. (914 mm) recommended for maintenance purposes.
- 6** Provision for make-up air: Minimum 1 square foot required per tumble dryer. Location for reference only. May be anywhere behind tumble dryer.
- 7** 0.25 in. (6 mm) recommended for removal or installation purposes, zero clearance allowed.

Figure 1

Installation

Position and Level the Tumble Dryer

Remove lint panel door, and unscrew the four shipping bolts (one at each corner). Remove tumble dryer from skid.

NOTE: Do not throw bolts away – they are the leveling legs.

Remove four nuts from the literature packet, and screw one fully onto each leveling leg.

Screw the four leveling legs (bolts) back into the level adjusting fittings from the bottom.

Slide tumble dryer to its permanent location. Adjust the leveling legs until the unit is level within 0.125 inch (3.18 mm). Refer to *Figure 2*. Tumble dryer must not rock. Lock leveling legs with nuts installed.

NOTE: The front of the tumble dryer should be slightly higher than the rear (approximately 0.125 inch [3.18 mm]). This will prevent the clothes, while tumbling, from wearing on the door glass gasket.

IMPORTANT: Keep tumble dryer as close to floor as possible. The unit must rest firmly on floor so weight of tumble dryer is evenly distributed.

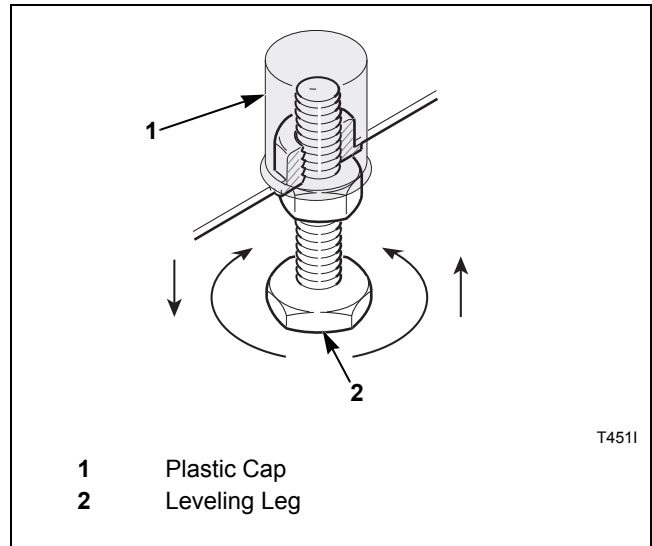



Figure 2

To Reverse the Loading Door

The tumble dryer is delivered with a right hinged door, but the door can be changed to a left hinged position.

	WARNING
<p>To reduce the risk of electric shock, fire, explosion, serious injury or death:</p> <ul style="list-style-type: none"> • Disconnect electric power to the tumble dryer before servicing. • Close gas shut-off valve to gas tumble dryer before servicing. • Close steam valve to steam tumble dryer before servicing. • Never start the tumble dryer with any guards/panels removed. • Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumble dryer is properly grounded. 	
<small>W002R1</small>	

1. Disconnect power supply to tumble dryer.
2. Unlock and remove control panel. Remove two control assembly screws from right side. Swing open control. Refer to *Figure 3*.
3. Remove lint panel.

IMPORTANT: Support door and hinge assembly securely to prevent it from dropping once side screws are removed from door hinge lug.

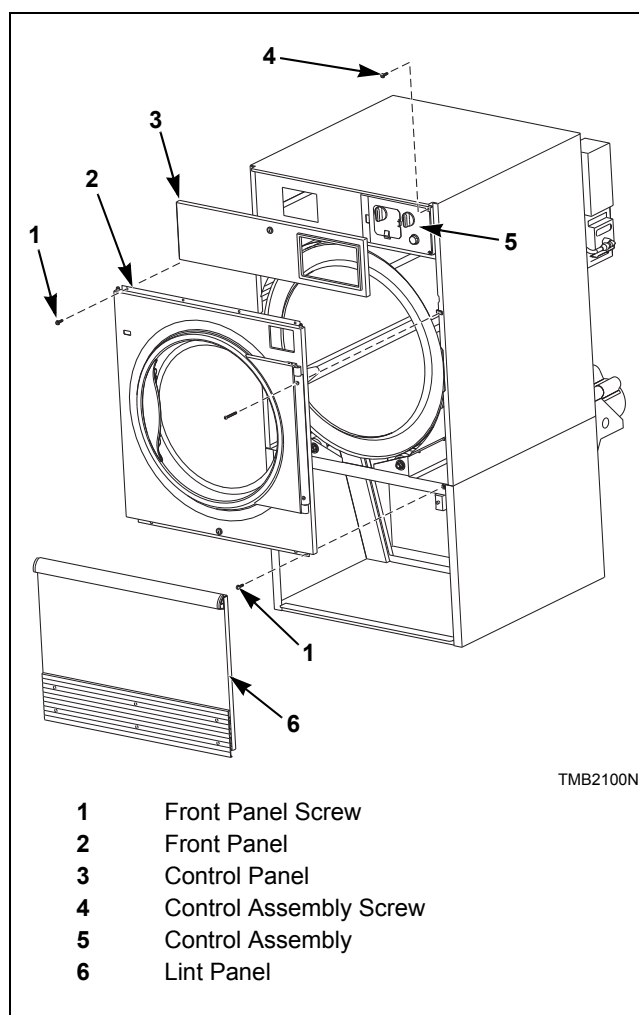


Figure 3

Installation

4. Remove four front panel screws. Refer to *Figure 3*. Keep door hinge cams in place on door hinge lug. Pull lug and door assembly off as one piece. Refer to *Figure 4*.
5. Remove remaining front panel screws, four on the top and four on the bottom. Refer to *Figure 3*. Disconnect door switch harness from switch. Take off front panel. Refer to *Figure 4*.
6. Exchange switch and plug locations. Depress tabs with an adjustable pliers to remove plug and switch from front panel. Reinstall switch, orienting button toward center of machine. Reinstall plug in switch's previous location. Refer to *Figure 4*.
7. Cut wire ties to remove door switch harness bundle. Be careful not to damage harness wires. Refer to *Figure 5*.
8. Reroute door switch harness up through the hole in the right side of the top panel. Use the panel cutout opening to then put harness down through the hole in the left side of the top panel and into the upper left corner of the cylinder enclosure.

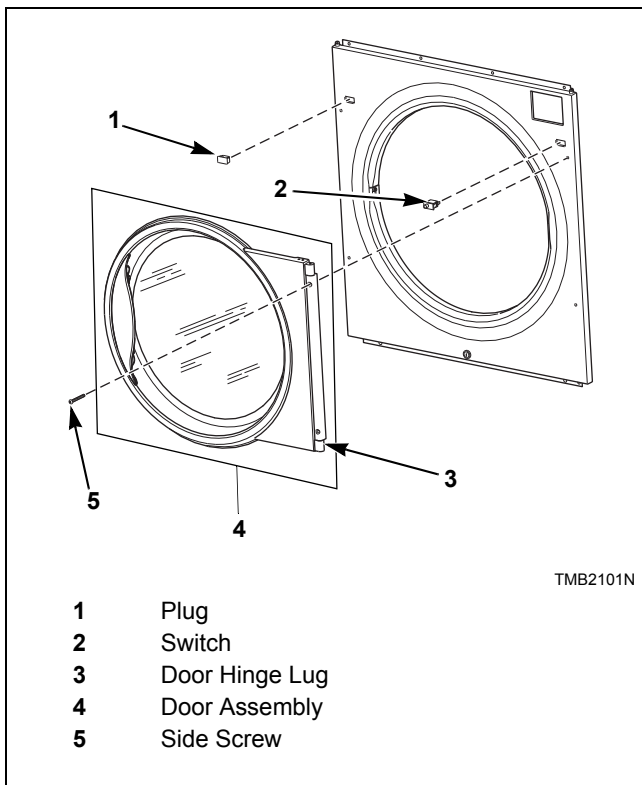


Figure 4

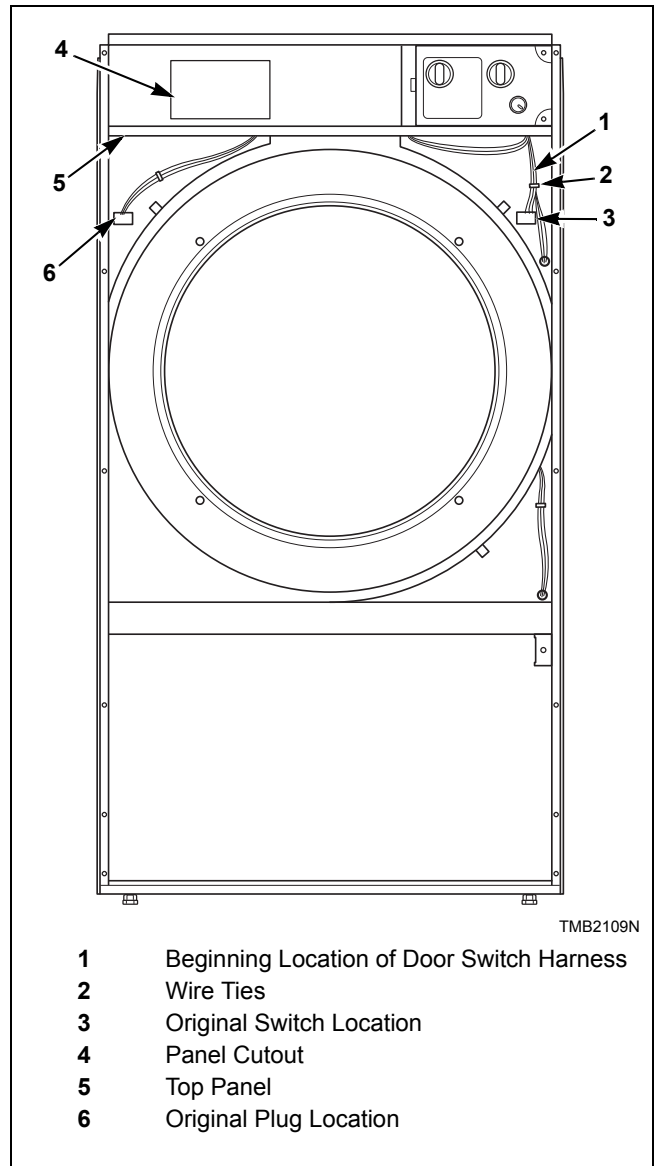


Figure 5

9. Place front panel on machine, loosely attach four bottom screws. Connect door switch harness to switch in new location.
10. Remove opposite door hinge cam. **DO NOT DISCARD CAM AND NUT.** Reattach door hinge cam to door hinge assembly securing with screw. Install door assembly and four door hinge side screws loosely. Refer to *Figure 6*.
11. Check lint panel fit, adjusting front panel up or down as required. Tighten four front panel side screws to maintain position of front panel for proper lint panel clearance.
12. Remove lint panel. Fully tighten bottom screws on front panel.
13. Reinstall top screws.
14. Adjust door catch if necessary to allow 7 – 15 pounds pull (0.48 – 1.03 bar) at center of handle.
15. Reinstall control assembly using mounting screws.
16. Reinstall control panel and lint panel.

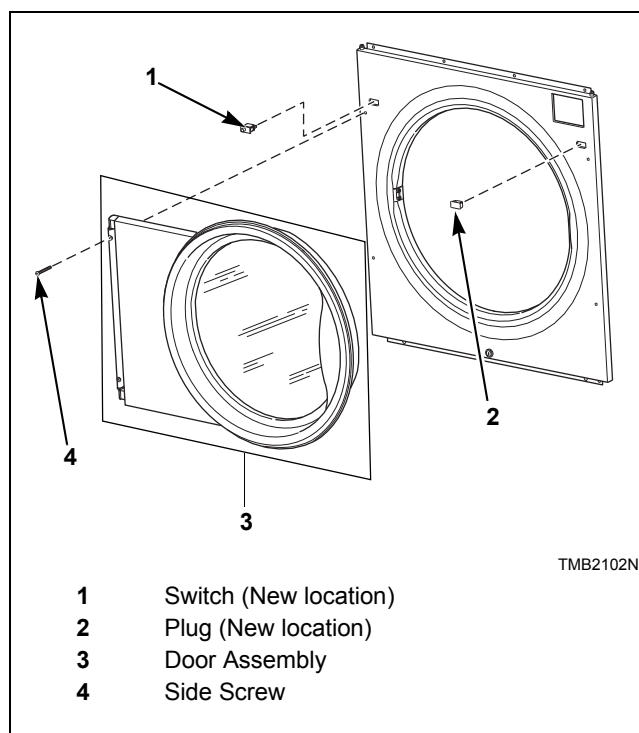


Figure 6

IMPORTANT: Restore power to tumble dryer and test for proper operation of loading door switch. Tumble Dryer should not start with door open; an operating tumble dryer should stop when door is opened.

NOTE: If machine is converted back to right hand hinge operation, the door switch harness must be rerouted and rebundled with the lint panel switch harness. Wire ties must be used to secure harnesses. Wire ties (Part No. 55881) can be ordered from Genuine Parts.

Installation

Before Placing Tumble Dryer into Service

1. Remove or open all panels, and check accessible bolts, nuts, screws, terminals and fittings for tightness.
2. Replace all panels and guards.
3. Remove and discard wire tie from the airflow switch so it can swing freely. Refer to *Figure 7*.

IMPORTANT: Airflow switch operation may be affected by:

- Clogged lint screen.
- Failure to remove wire tie from rear of machine. Refer to *Figure 7*.
- Lack of make-up air. Refer to *Exhaust Requirements* section.
- Obstruction in exhaust duct. Refer to *Exhaust Requirements* section.

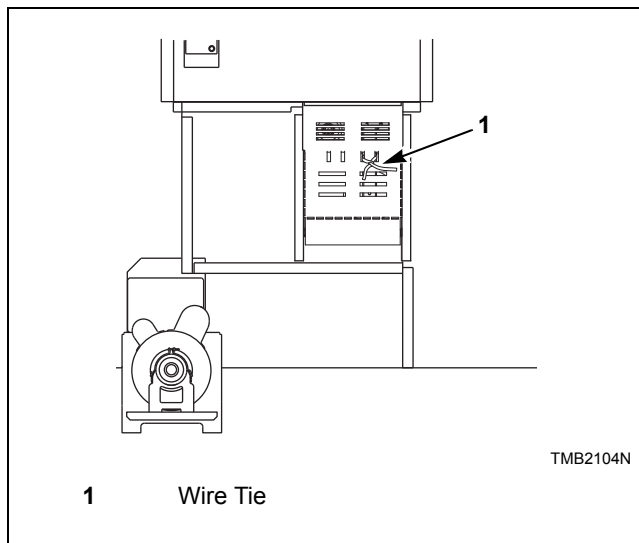


Figure 7

4. Turn on electrical supply to tumble dryer.
5. Open the supply valve for gas or steam heated tumble dryers.
6. After performing the previous checks, start the tumble dryer by pressing START. (Refer to the *Operating Manual* for detailed instructions.) Release the start button and open the loading door. The cylinder should stop rotating within seven seconds after the door is opened a maximum of 2 inches (51 mm). If it does not, adjust the loading door switch. Refer to *Adjustments* section.

7. **Gas tumble dryers:** Start the tumble dryer and check the burner flame. Adjust the air inlet shutter as required. Refer to the *Adjustments* section.

IMPORTANT: The electronic ignition system will attempt to light the gas by sparking for the “trial for ignition” period. Refer to *Table 1*. If gas does not ignite within this period, the ignition control will go into a safety lockout and the valve will no longer open until the control is reset. It may be necessary to retry several times to bleed air from the gas lines. To reset, open and close the loading door and restart tumble dryer.

Location	Prepurge Time (seconds)	Trial for Ignition (seconds)	To Reset Lockout Condition:
CE and Australia	18	10	Press reset button on rear of machine
All others	1-3	10	Open loading door

Table 1

If lockout condition persists, check that the manual gas shut-off valve is in the “ON” position and that the gas service is properly connected. If condition still persists, remove tumble dryer from service.

8. Load the cylinder with a full load of clean rags and run to remove oil or dirt from cylinder.
9. Wipe out the cylinder using an all-purpose cleaner or detergent and water solution. Refer to *Figure 8*.

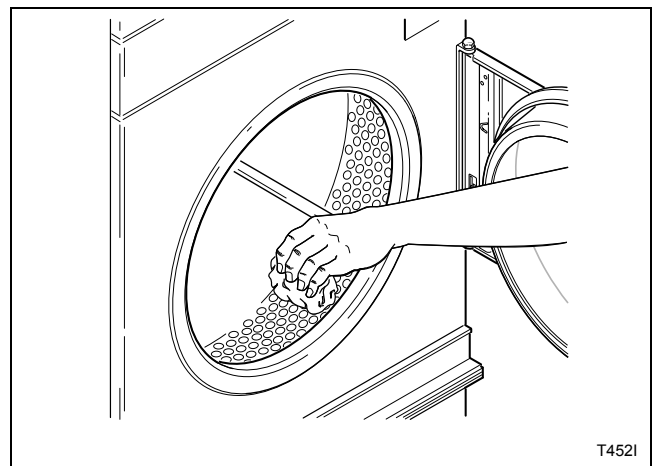


Figure 8


If the tumble dryer does not meet ANY of the listed requirements, remove tumble dryer from use. Refer to *Removing Tumble Dryer from Service* section.

Required for CE Models Only

Once machine is installed, please be sure to complete the following items:

- Review and verify machine operation with customer.
- Leave all literature and a signed Declaration of Conformity with customer.
- Review machine warranty information with customer.
- Apply warning sticker on front panel of machine, in language appropriate to country of sale (included in literature packet).

Installing CE Gas Drying Tumble Dryers

	WARNING
<p>To reduce the risk of electric shock, fire, explosion, serious injury or death:</p> <ul style="list-style-type: none"> • Disconnect electric power to the tumble dryer before servicing. • Close gas shut-off valve to gas tumble dryer before servicing. • Close steam valve to steam tumble dryer before servicing. • Never start the tumble dryer with any guards/panels removed. • Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumble dryer is properly grounded. 	
<small>W002R1</small>	

General Information

This information is to be used when installing gas tumble dryers in countries, and/or on gases, different than the machine's factory configuration. Tumble dryers are supplied from the factory for operation on Natural Gas 1000 Btu/cu ft. (8914 kcal/m³), or L.P. Gas 2500 Btu/cu ft. (22,250 kcal/m³) in the countries of GB/IE/PT/ES/IT/GR/LU/CH. To install machines in any other country, or on any other gas, requires some level of modification.

Burner orifices, stickers, block-open kits, regulator springs and other parts needed for conversions are to be ordered separately.

Models are built in two different configurations:

- **Regulated Natural Gas** – Burner orifice is sized for Natural Gas, second family, group H (E) at 20 mbar inlet pressure. Regulator/governor is operational. Gas valve CAN be field-converted to a non-regulating type.
- **Unregulated L.P. (Liquefied Petroleum) Gas** – Burner orifice is sized for L.P., third family, group 3+ at 28.37 mbar inlet pressure. Regulator/governor is blocked open. Gas valve CANNOT be field-converted to a regulating type.

Serial plates supplied from the factory are configured for the countries of GB/IE/PT/ES/IT/GR/LU/CH. These instructions pertain to the situations when the country of use or gas supply is different than that on the serial plate.

Table 2 describes the different gases that are available in different CE countries, and how the machines need to be configured to operate with those gases. In the CE, there are Natural Gas configurations that do not allow for machine regulation, and L.P. Gas configurations that must be regulated. For L.P. Gas, third family B/P at 50 mbar, order Regulated Natural Gas machines and convert according to *Table 2*.

Installation

Gases and Configurations

Country Code	Gas Type	Group	Supply Pressure, mbar	Burner Orifice Pressure, mbar	Capacity/ Model	Diameter, mm	Quantity	Burner Orifice Part No.
DK/NO/ SE/FI/CZ/ EE/LV/LT/ SI/SK	Natural Gas	H	20	7.6 8.0 8.0 8.0	25 30 35 55	3.9 4.0 4.6 5.2	1	M402980 M402992 M411511 M402993
	L.P. Gas	B/P	30	No Governor	25 30 35 55	2.1 2.2 2.5 3.0	1	M401003 M401011 M406361 M401017
DE	Natural Gas	E	20	7.6 8.0 8.0 8.0	25 30 35 55	3.9 4.0 4.6 5.2	1	M402980 M402992 M411511 M402993
	L.P. Gas	LL	30	No Governor	25 30 35 55	2.1 2.2 2.5 3.0	1	M401003 M401011 M406361 M401017
NL	Natural Gas	L	25	11.0	25 30 35 55	3.9 4.0 4.6 4.8	1	M402980 M402992 M411511 M411372
	L.P. Gas	B/P	30	No Governor	25 30 35 55	2.1 2.2 2.5 3.0	1	M401003 M401011 M406361 M401017
BE/FR*	Natural Gas	E+	20 or 25	No Governor	25 30 35 55	3.9 3.3 3.7 4.0	1	M402980 M401021 M400998 M401012
	L.P. Gas	3+	28 or 37	No Governor	25 30 35 55	2.1 2.2 2.5 2.8	1	M401003 M401011 M406361 M411512

Burner orifice information at 0-2000 feet (0-600 meters) altitude.

* For Natural Gas, Group E+ applications, convert using L.P. Gas model and replace burner orifice(s).

Table 2 (Continued)

Table 2 (Continued)

Country Code	Gas Type	Group	Supply Pressure, mbar	Burner Orifice Pressure, mbar	Capacity/ Model	Diameter, mm	Quantity	Burner Orifice Part No.
GB/IE/PT/ES/IT/GR/LU/CH	Natural Gas	H	20	7.6 8.0 8.0 8.0	25 30 35 55	3.9 4.0 4.6 5.2	1	M402980 M402992 M411511 M402993
	L.P. Gas	3+	28 or 37	No Governor	25 30 35 55	2.1 2.2 2.5 2.8	1	M401003 M401011 M406361 M411512
AT	Natural Gas	H	20	7.6 8.0 8.0 8.0	25 30 35 55	3.9 4.0 4.6 5.2	1	M402980 M402992 M411511 M402993
	L.P. Gas	B/P	30	No Governor	25 30 35 55	2.1 2.2 2.5 3.0	1	M401003 M401011 M406361 M401017
CY/IS/MT	L.P. Gas	B/P	30	No Governor	25 30 35 55	2.1 2.2 2.5 3.0	1	M401003 M401011 M406361 M401017
HU	Natural Gas	H	25	7.6 8.0 8.0 8.0	25 30 35 55	3.9 4.0 4.6 5.2	1	M402980 M402992 M411511 M402993
	L.P. Gas	B/P	30	No Governor	25 30 35 55	2.1 2.2 2.5 3.0	1	M401003 M401011 M406361 M401017
PL	Natural Gas	H	20	7.6 8.0 8.0 8.0	25 30 35 55	3.9 4.0 4.6 5.2	1	M402980 M402992 M411511 M402993
	L.P. Gas	3P	37	No Governor	25 30 35 55	2.1 2.2 2.5 2.8	1	M401003 M401011 M406361 M411512

Burner orifice information at 0-2000 feet (0-600 meters) altitude.

Table 2

Installation

Basic Configuration

1. Determine the necessary conversion operations to convert from the factory-supplied configuration to the desired configuration.
2. Perform the conversions required so the machine is properly configured for the desired country and gas (refer to *Specific Conversion Procedures* section):
 - How to Convert Gas Valve from Regulated to Unregulated

NOTE: Conversion from regulated to unregulated is only needed when regulated tumble dryers were ordered, but unregulated tumble dryers were needed or if gas supply type is changed at a later date.

- How to Change Burner Orifice Size
 - How to Adjust Gas Valve Governor/Regulator
 - How to Change Regulator Spring, DE/AT Only
3. If applicable, peel off the appropriate country sticker (included with machine) and apply it to the serial plate over the existing country information.
 4. If applicable, peel off the appropriate conversion sticker (included with machine) and apply it to the data plate over the “ADJUSTED FOR _____ GAS: _____” information.
 5. Commission tumble dryer for use.

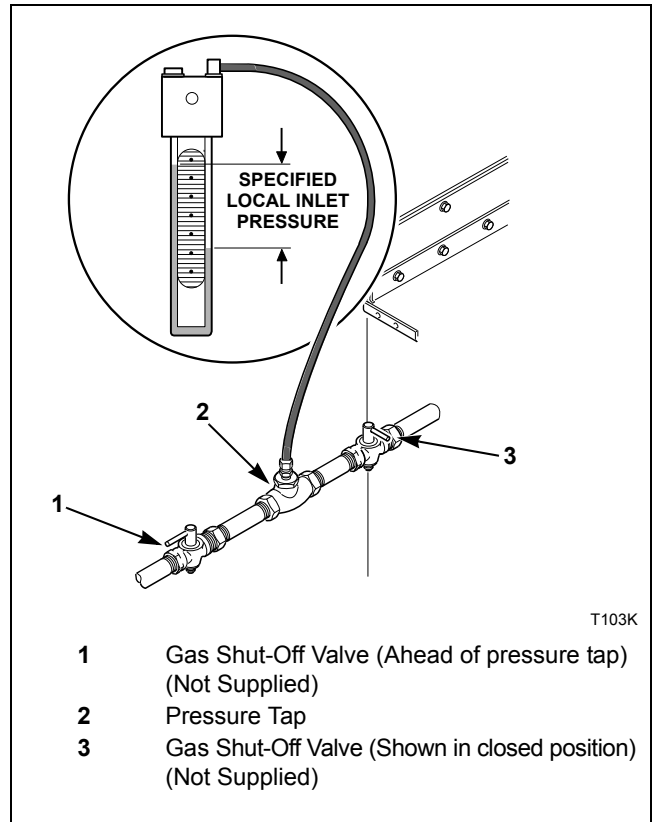


Figure 9

	WARNING
<p>When converting the tumble dryer to a different gas or pressure, first verify that the supply inlet pressure is equipped with a pressure regulator (located ahead of the tumble dryer) that will maintain the gas supply at the inlet pressure specified.</p>	
<small>W430R1</small>	

Specific Conversion Procedures

How to Convert Gas Valve from Regulated to Unregulated

NOTE: Conversion from regulated to unregulated is only needed when regulated tumble dryers were ordered, but unregulated tumble dryers were needed.

Johnson GM7000 gas valve:

1. Disconnect electrical power from tumble dryer. Close gas shut-off valve to tumble dryer. Refer to *Figure 10*.
2. Follow instructions in Conversion Kit, Part No. 431485 (Johnson Part No. GM-70 CBP).

NOTE: This kit does not contain any burner orifices.

3. Change burner orifice size as required by the appropriate table according to *How to Change Burner Orifice Size*.
4. For 25 pound Natural Gas models, L.P. Gas only. Install 25 pound L.P. orifice plate (Part No. 70201901) onto gas valve bracket. Refer to *Figure 10*.
5. Commission tumble dryer for use.

Installation

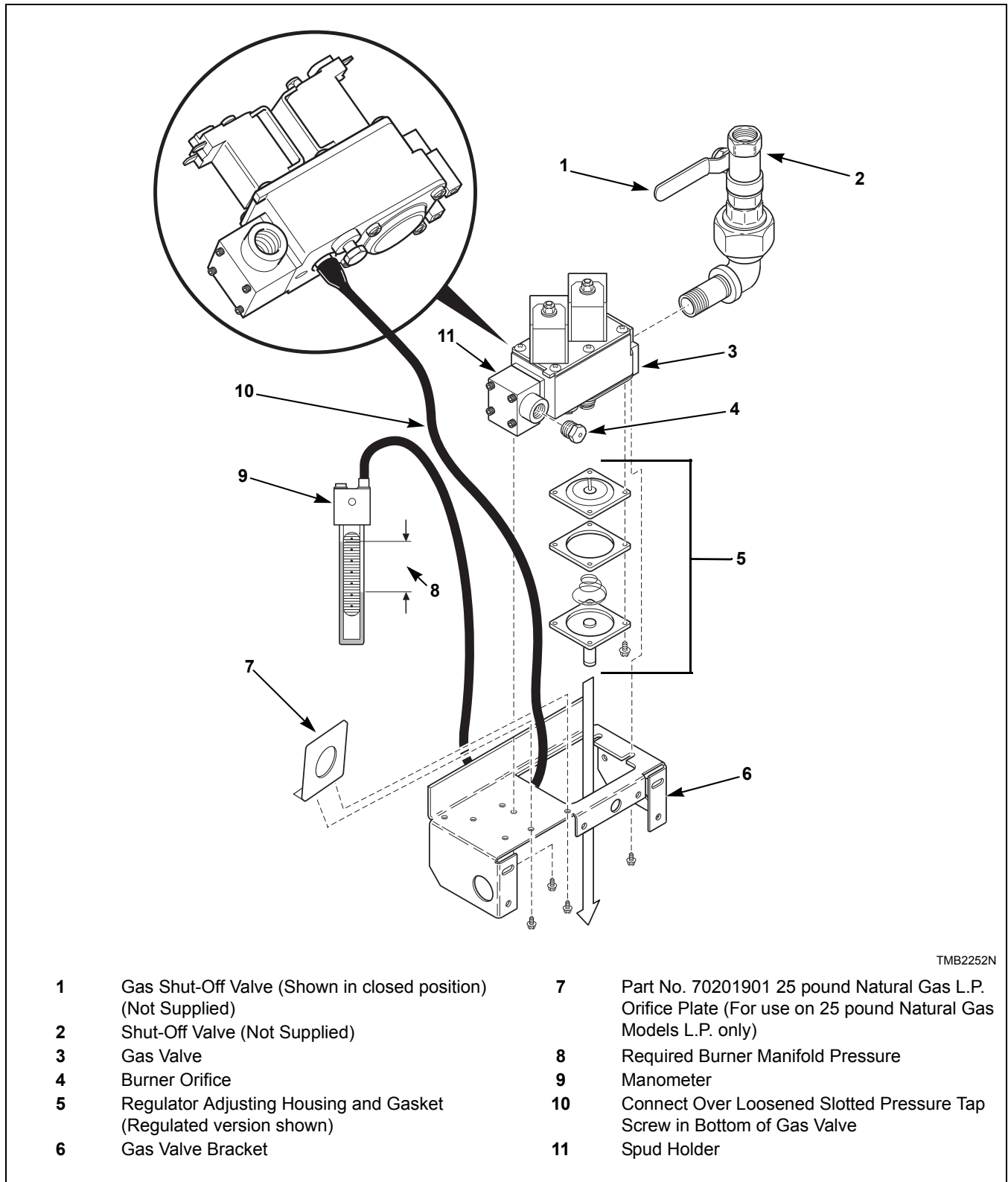


Figure 10

How to Change Burner Orifice Size

1. Disconnect electrical power from tumble dryer. Close gas shut-off valve to tumble dryer. Refer to *Figure 9*.
2. For Johnson GM7000 gas valve: Refer to *Figure 10*.
Remove burner orifice(s) from the spud holder. Refer to *Figure 10*.
3. Install the new, correct burner orifices. Refer to *Figure 11*. Torque each to 9 – 10 Nm.
4. Commission tumble dryer for use.

NOTE: Blank burner orifices are available as Part No. M400995.

How to Adjust Gas Valve Governor/Regulator

1. Check gas burner orifice (manifold) pressure as follows. Refer to *Figure 10*.
2. Loosen screw plug inside pressure tap located on underside of valve. Refer to *Figure 10*.
3. Connect a “U”-tube manometer (or similar pressure gauge) to the tap.
4. Start tumble dryer and note pressure once flame is burning. Remove regulator cap and adjust regulator screw until the burner orifice pressure per applicable table is achieved. Replace regulator cap and close needle valve (pressure tap).
5. Commission tumble dryer for use.

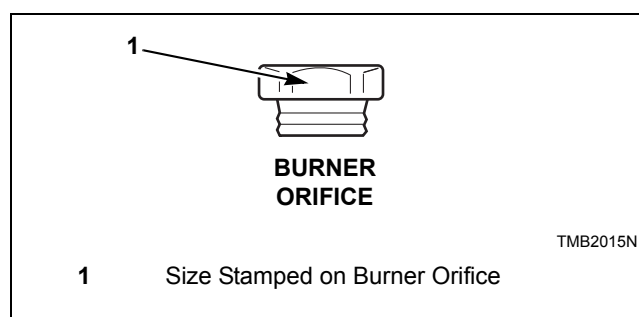



Figure 11

Exhaust Requirements

	WARNING
<p>A drying tumble dryer produces combustible lint. To reduce the risk of fire, the tumble dryer must be exhausted to the outdoors.</p> <p style="text-align: right;">W057R1</p>	
<p>To reduce the risk of fire and accumulation of combustible gases, DO NOT exhaust tumble dryer air into a window well, gas vent, chimney or enclosed, unventilated area such as an attic wall, ceiling, crawl space under a building, or concealed space of a building.</p> <p style="text-align: right;">W059R1</p>	

Layout

Whenever possible, install tumble dryers along an outside wall where duct length can be kept to a minimum, and make-up air can be easily accessed. Elbows and long vents tend to increase drying time. Construction must not block the airflow at the rear of the tumble dryer. Doing so would prevent adequate air supply to the tumble dryer's combustion chamber.

Make-Up Air

A tumble dryer is forced air exhausted and requires provisions for make-up air to replace the air exhausted by the tumble dryer.

IMPORTANT: Do not obstruct the flow of combustion and ventilation air.

Make-up air openings should be as close to the tumble dryer(s) as possible.

The required make-up air opening to the outside for each tumble dryer is:


110 square inches (709 sq. cm)
for 25 and 30 pound models

144 square inches (928 sq. cm)
for 35 and 55 pound models

Make-up air openings with louvers will restrict airflow. The opening must be increased to compensate for area taken up by louvers.

Make-up air openings for a room containing tumble dryer(s) and/or gas fired hot water heater or other gravity vented appliances must be increased sufficiently to prevent downdrafts in any of the vents when all tumble dryers are in operation. Do not locate gravity vented appliances between tumble dryer(s) and make-up air openings. If it is necessary to duct make-up air to the tumble dryer(s), increase the area of the ductwork by 25% to compensate for any restriction in air movement.

Venting


	WARNING
<p>To reduce the risk of fire due to increased static pressure, we do not recommend installation of in-line secondary lint filters or lint collectors. If secondary systems are mandated, frequently clean the system to assure safe operation.</p> <p style="text-align: right;">W749</p>	

IMPORTANT: Installing in-line filters or lint collectors will cause increased static pressure. Failure to maintain the secondary lint system will decrease tumble dryer efficiency and may void machine warranty.

For maximum efficiency and minimum lint accumulation, tumble dryer air must be exhausted to the outdoors by the shortest possible route.

Proper sized exhaust ducts are essential for proper operation. All elbows should be sweep type. Exhaust ducts must be assembled so the interior surfaces are smooth, so the joints do not permit the accumulation of lint. DO NOT use plastic, thin foil or Type B ducts - rigid metal ducts are recommended. Use exhaust ducts made of sheet metal or other noncombustible material. DO NOT use sheet metal screws or fasteners on exhaust pipe joints which extend into the duct and catch lint. Use of duct tape or pop-rivets on all seams and joints is recommended, if allowed by local codes.

Verify that old ducts are thoroughly cleaned out before installing new tumble dryer(s).

	WARNING
<p>Improperly sized or assembled ductwork causes excess back pressure which results in slow drying, lint collecting in the duct, lint blowing back into the room, and increased fire hazard.</p>	
W355	

NOTE: Exhaust ducts must be constructed of sheet metal or other noncombustible material. Such ducts must be equivalent in strength and corrosion resistance to ducts made of galvanized sheet steel not less than 0.0195 inches (0.495 mm) thick. Local codes may require additional thickness.

Where the exhaust duct pierces a combustible wall or ceiling the opening must be sized per local codes. The space around the duct may be sealed with noncombustible material. Refer to *Figure 12*.

IMPORTANT: For best performance provide an individual exhaust duct for each tumble dryer. Do not install a hot water heater in a room containing tumble dryers. It is better to have the water heater in a separate room with a separate air inlet.

Individual Venting

For maximum efficiency and performance, it is preferred to exhaust tumble dryer(s) individually to the outdoors.

IMPORTANT: At no point may the cross sectional area of installed venting be less than the cross sectional area of the exhaust outlet of the tumble dryer.

The exhaust duct must be designed so the static back pressure measured 12 inches (305 mm) from the exhaust outlet does not exceed the maximum allowable pressure specified on the installation sticker on the rear of the tumble dryer.

NOTE: Static back pressure must be measured with the tumble dryer running.

The maximum allowable length venting of the same diameter as the exhaust thimble is 14 feet (4.3 m) and two 90° elbows or equivalent. If the equivalent length of a duct required for an installation exceeds the maximum allowable equivalent length, the diameter of a round duct must be increased by 10% for each additional 20 feet (6.1 m). Cross section area of a rectangular duct must be increased by 20% for each additional 20 feet (6.1 m). Refer to *Table 3* to determine equivalent venting.

NOTE: The maximum length of a flexible metal duct must not exceed 7.87 ft. (2.4 m) as required to meet UL2158, clause 7.3.2A.

Duct Diameter	Equivalent Length of Rigid Straight Duct
6 in. (152 mm)	One 90° elbow = 7 ft. (2.1 m)
8 in. (203 mm)	One 90° elbow = 9.3 ft. (2.83 m)
10 in. (254 mm)	One 90° elbow = 11.6 ft. (3.5 m)
12 in. (305 mm)	One 90° elbow = 14 ft. (4.3 m)
14 in. (356 mm)	One 90° elbow = 16 ft. (4.9 m)
16 in. (406 mm)	One 90° elbow = 18.7 ft. (5.7 m)
18 in. (457 mm)	One 90° elbow = 21 ft. (6.4 m)
Equivalent Length (feet) = 1.17 x Duct Diameter (inches)	

Table 3

Example: A 12 inch (305 mm) diameter duct's equivalent length of 14 feet (4.3 m) of duct and two 90° elbows is:

$$\begin{aligned}
 \text{Equivalent Length} &= 14 \text{ feet} + (2) 90^\circ \text{ elbows} \\
 &= 14 \text{ feet} + 14 \text{ feet} + 14 \text{ feet} \\
 &= 42 \text{ feet (12.8 meters)}
 \end{aligned}$$

With the tumble dryer in operation, airflow at any point in the duct should be at least 1200 feet per minute (366 meters per minute) to ensure that lint remains airborne. If 1200 feet per minute (366 meters per minute) cannot be maintained, schedule monthly inspections and cleaning of the ductwork.

Exhaust Requirements

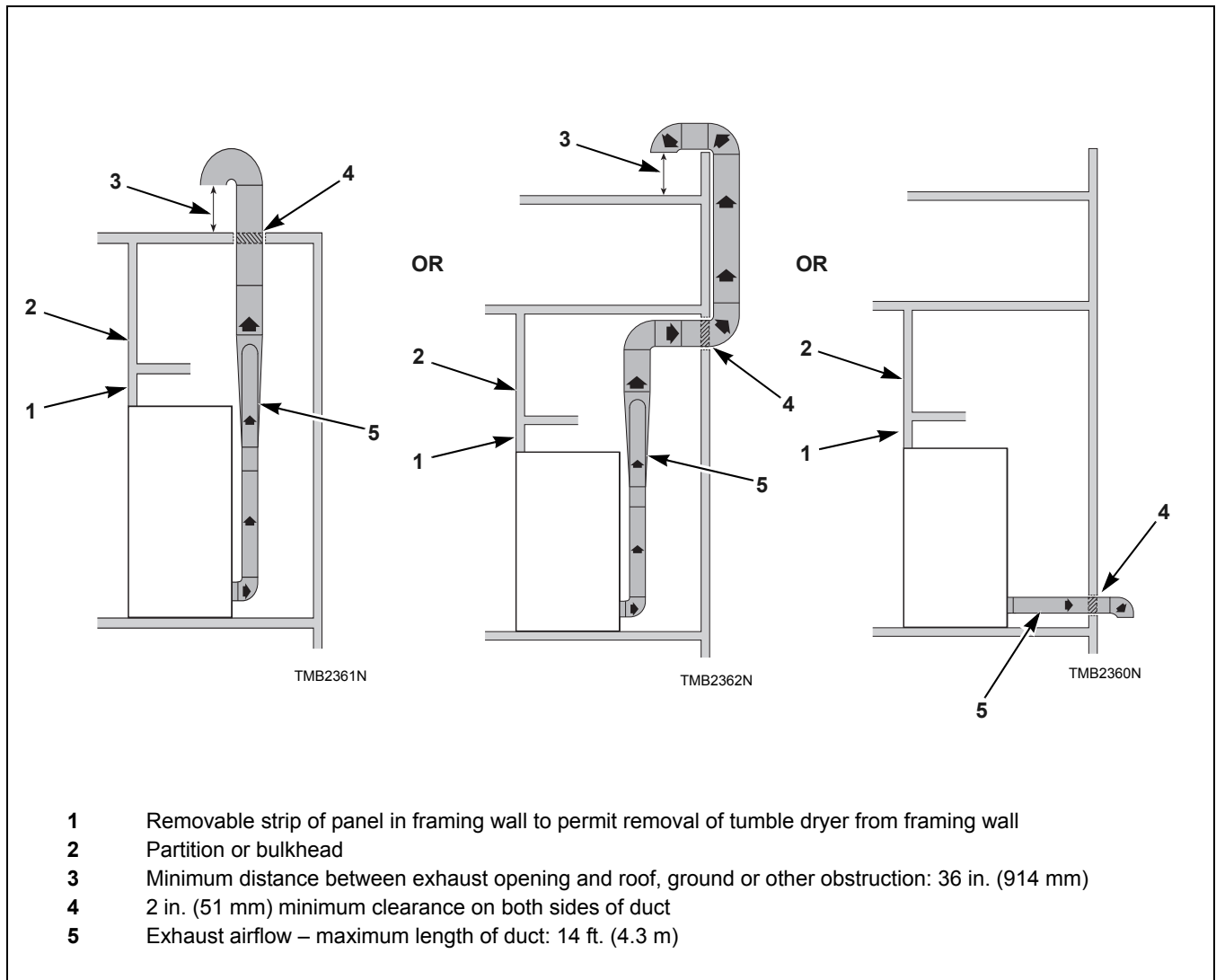


Figure 12

NOTE: Do not install wire mesh or screen in exhaust duct opening to avoid lint build-up or impacting proper discharge of air from tumble dryers.

NOTE: Where exhaust duct pierces a combustible wall or ceiling, the opening must be sized per local codes.

NOTE: Inside of duct must be smooth. Do not use sheet metal screws to join sections.

Consult your local building code for regulations which may also apply.

Manifold Venting

While it is preferable to exhaust tumble dryers individually to the outdoors, a main collector duct may be used if it is sized according to *Figure 14* or *Figure 15*. This illustration indicates minimum diameters, which should be increased if the collector length exceeds 14 feet (4.3 meters) and two 90° elbows. The diameter of a round duct must be increased by 10% for each additional 20 feet (6.1 meters). Cross sectional area of a rectangular or square duct must be increased 20% for each additional 20 feet (6.1 meters). Refer to *Table 4* or *Table 5* to determine equivalent ducting sizing. The collector duct may be rectangular or square in cross section, as long as the area is not reduced. Provisions **MUST** be made for lint removal and cleaning of the collector duct.

The vent collector system must be designed so the static back pressure measured 12 inches (305 mm) from the exhaust outlet does not exceed the maximum allowable pressure specified on the installation sticker on the rear of tumble dryer. Static back pressure must be measured with all tumble dryers vented into the collector operating.

NOTE: Never connect a tumble dryer duct at a 90° angle to the collector duct. Refer to *Figure 13*. Doing so will cause excessive back pressure, resulting in poor performance. Never connect two tumble dryer exhaust ducts directly across from each other at the point of entry to the collector duct.

With the tumble dryer in operation, airflow at any point in the duct should be at least 1200 feet per minute (366 meters per minute) to ensure that lint remains airborne. If 1200 feet per minute (366 meters per minute) cannot be maintained, schedule monthly inspections and cleaning of the ductwork.

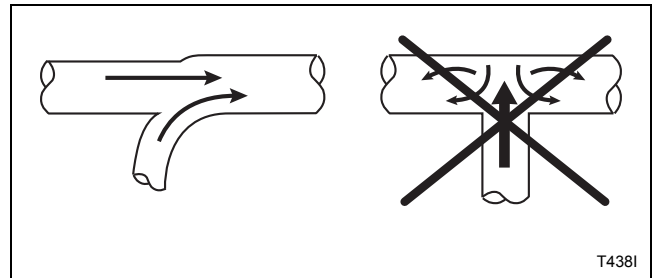


Figure 13

T4381

Exhaust Requirements

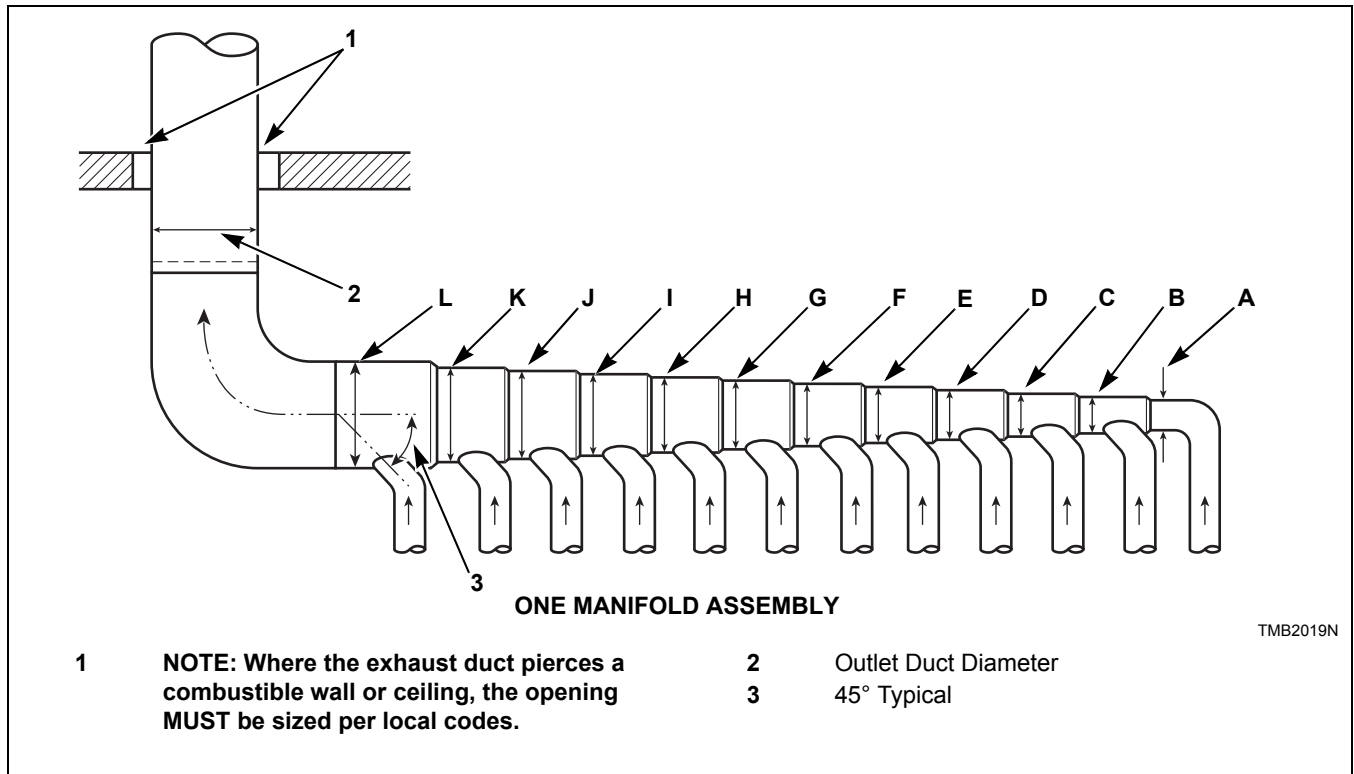


Figure 14

Duct Station	25 and 30 Pound	35 and 55 Pound
	6 in. (152 mm) Duct	8 in. (203 mm) Duct
A	6 in. (152 mm)	8 in. (203 mm)
B	10 in. (254 mm)	12 in. (305 mm)
C	12 in. (305 mm)	15 in. (381 mm)
D	14 in. (356 mm)	17 in. (432 mm)
E	16 in. (406 mm)	19 in. (483 mm)
F	18 in. (457 mm)	21 in. (533 mm)
G	19 in. (483 mm)	23 in. (584 mm)
H	20 in. (508 mm)	24 in. (610 mm)
I	22 in. (559 mm)	26 in. (660 mm)
J	23 in. (584 mm)	27 in. (686 mm)
K	24 in. (610 mm)	28 in. (711 mm)
L	25 in. (635 mm)	30 in. (762 mm)

Table 4

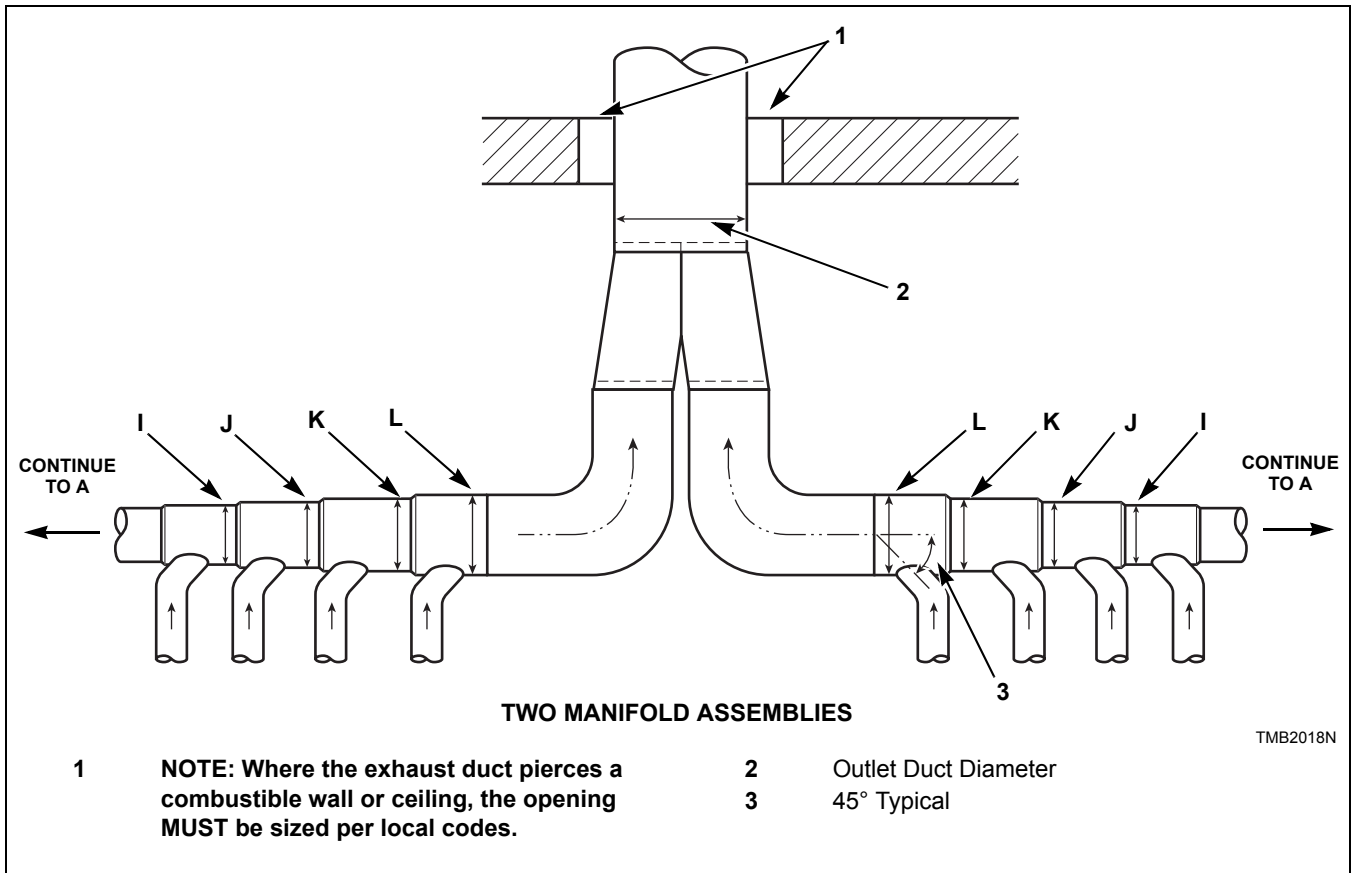



Figure 15

Duct Station	25 and 30 Pound	35 and 55 Pound
	6 in. (152 mm) Duct	8 in. (203 mm) Duct
A	10 in. (254 mm)	12 in. (305 mm)
B	15 in. (381 mm)	17 in. (432 mm)
C	18 in. (457 mm)	22 in. (559 mm)
D	20 in. (508 mm)	25 in. (635 mm)
E	23 in. (584 mm)	27 in. (686 mm)
F	26 in. (660 mm)	30 in. (762 mm)
G	27 in. (686 mm)	33 in. (838 mm)
H	29 in. (737 mm)	34 in. (864 mm)
I	32 in. (813 mm)	37 in. (940 mm)
J	33 in. (838 mm)	39 in. (991 mm)
K	34 in. (864 mm)	40 in. (1016 mm)
L	36 in. (914 mm)	43 in. (1092 mm)

Table 5

Gas Requirements

	WARNING
<p>To reduce the risk of fire or explosion, DO NOT CONNECT THE GAS LINE TO THE TUMBLE DRYER IF THE GAS SERVICE IS NOT THE SAME AS THAT SPECIFIED ON THE TUMBLE DRYER SERIAL PLATE! It will first be necessary to convert the gas burner orifice and gas valve. Appropriate conversion kits are available.</p>	
<small>W060R1</small>	

IMPORTANT: Any product revisions or conversions must be made by the manufacturer's authorized dealers, distributors, or local service personnel.

IMPORTANT: The tumble dryer must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressure equal to or less than **0.5 psig (3.45 kPa, 34.5 mbar)**.

NOTE: For gas valves with a manual shut-off switch on the gas valve, the shut-off switch does not protect the valve from this pressure test. Use the individual manual shut-off valve from the gas supply piping system to protect the gas valve.

IMPORTANT: The tumble dryer and its manually operated appliance gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 0.5 psi (3.45 kPa, 34.5 mbar).

IMPORTANT: The installation must comply with local codes or, in the absence of local codes:


- with the latest edition of the "National Fuel Gas Code," ANSI Z223.1/NFPA 54 in the U.S.A.
- with CAN/CSA-B149.1 or Natural Gas and Propane Installation Code in Canada
- and Gas Installations Standard AS/NZS 5601 Part 1: General Installations in Australia and New Zealand

Obtain specific gas service pipe size from the gas supplier. Refer to *Table 6* for general pipe size.

The following must be furnished and installed by the customer for the gas service line to each tumble dryer. Refer to *Figure 16*.

- Sediment traps
- Shut-off valves
- Supply pressure taps

It is important that equal pressure be maintained at all tumble dryer gas connections. This can best be done by installing a 1 inch (25 mm) pipe gas loop. Refer to *Figure 17*.

	WARNING
<p>To reduce the risk of fire or explosion, if the tumble dryer is to be connected to Liquefied Petroleum (L.P.) gas, a vent to the outdoors must be provided in the room where the tumble dryer is installed.</p>	
<small>W062R1</small>	

NATURAL GAS pressures with all gas appliances running (tumble dryers, water heaters, space heaters, furnace, etc.):

Maximum gas pressure – 10.5 water column inches (2.61 kPa)
Recommended gas pressure – 6.5 water column inches (1.62 kPa)
Minimum gas pressure – 5 water column inches (1.24 kPa)

An in-line pressure regulator may be required if the line pressure exceeds 10.5 water column inches (2.61 kPa) with all gas appliances running.

LIQUID PETROLEUM GAS (L.P.) pressures with all gas appliances running (tumble dryers, water heaters, space heaters, furnace, etc.):


Maximum gas pressure – 13 water column inches (3.23 kPa)
Recommended gas pressure – 11 water column inches (2.74 kPa)
Minimum gas pressure – 10 water column inches (2.49 kPa)

For converting Non-CE models from Natural Gas to L.P. Gas:

25 Pound – M4699P3
30 Pound – M4703P3
35 Pound – M4711P3
55 Pound – M4924P3

CE GASES refer to *Installing CE Gas Drying Tumble Dryers* section, the above data does not apply to the CE.

Turn on gas and check all pipe connections (internal and external) for gas leaks with a non-corrosive detection fluid. Purge air in gas service line by operating the tumble dryer in the drying mode. If burner does not light and unit goes into lockout, open and close the door and restart. Repeat these steps until burner ignites. **Use pipe compound, resistant to actions of L.P. Gas, on all pipe threads.**

	<h2>WARNING</h2>
<p>Check all pipe connections, internal and external, for gas leaks using a non-corrosive leak detection fluid. To reduce the risk of explosion or fire, DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS! Gas connections should be checked twice a year for leakage.</p>	
<small>W635</small>	

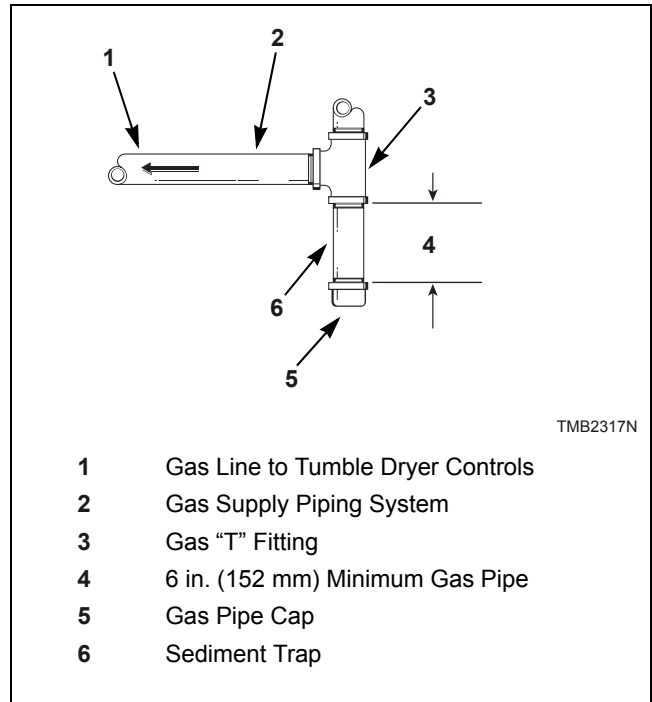
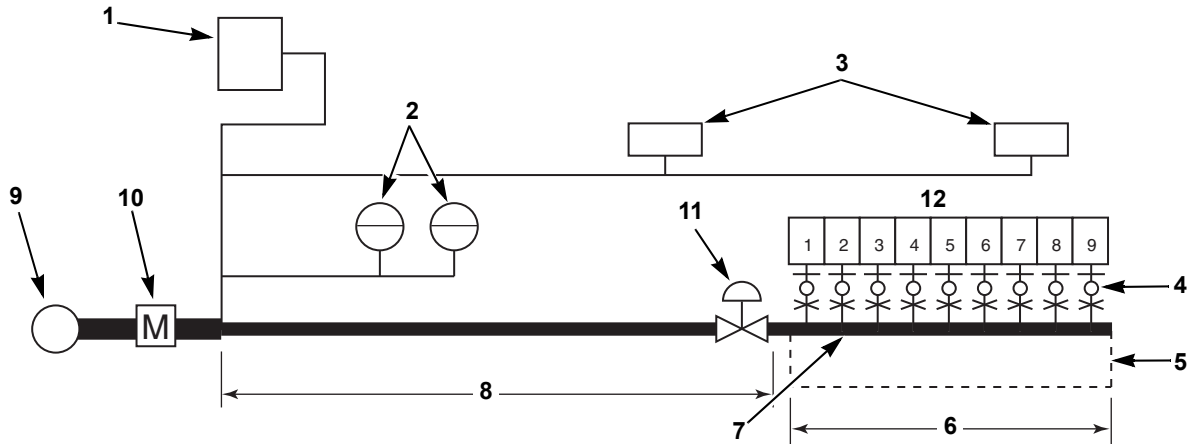


Figure 16

Gas Requirements

Gas Supply Pipe Sizing and Looping



TMB2126N

- | | | | |
|---|---|----|---|
| 1 | Gas Furnace (120,000 Btu/hr.) | 8 | 25 ft. (7.6 m) |
| 2 | Gas Water Heaters (400,000 Btu/hr. each) | 9 | Main Regulator |
| 3 | Gas Space Heaters (70,000 Btu/hr. each) | 10 | Gas Meter |
| 4 | Sediment Traps, Supply Pressure Taps and Shut-Off Valves. Refer to <i>Figure 16</i> . | 11 | Pressure Regulator (If required) |
| 5 | 1 in. (25.4 mm) Pipe for Gas Loop | 12 | 25 Pound Tumble Dryers (64,000 Btu/hr. each) |
| 6 | 19 ft. (5.8 m) | | 30 Pound Tumble Dryers (73,000 Btu/hr. each) |
| 7 | Minimum pipe size to tumble dryer is 0.5 in. (12.7 mm). | | 35 Pound Tumble Dryers (90,000 Btu/hr. each) |
| | | | 55 Pound Tumble Dryers (112,000 Btu/hr. each) |

SAMPLE CALCULATIONS:

Equivalent length = Total length of main gas supply pipe to the far end of the tumble dryers.
 = 25 ft. + 19 ft. (7.6 m + 5.8 m) gas supply pipe
 = 44 ft. (13.4 m) Total Gas Line

Total Btu/hr. = The sum of the Btu/hr. of all 30 pound tumble dryers being fed by the main gas supply pipe.
 = 9 x 73,000
 = 657,000 Btu/hr.

Using *Table 6*, the main supply pipe diameter should be 2 in. (51 mm).

IMPORTANT: Gas pipe loop must be installed as illustrated to equalize gas pressure for all tumble dryers connected to single gas service. Other gas using appliances should be connected upstream from loop.

Figure 17

Gas Pipe Size Required for 1000 Btu Natural Gas — 0.64 Specific Gravity at 7 ± 1.5 inches (17.4 ± 4 mbar, 1.74 ± 0.37 kPa) Water Column Pressure						
Gas Appliances Total Btu/hr.	Equivalent Length					
	25 feet (7.63 m)	50 feet (15.25 m)	75 feet (22.88 m)	100 feet (30.50 m)	125 feet (38.13 m)	150 feet (45.75 m)
Based on 0.3 in. Water Column Pressure Drop for Length Given Sizes shown in inches (mm)						
100,000	0.75 (19.05)	0.75 (19.05)	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)
120,000	0.75 (19.05)	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)
140,000	0.75 (19.05)	1 (25.40)	1 (25.40)	1 (25.40)	1 (25.40)	1.25 (31.75)
160,000	0.75 (19.05)	1 (25.40)	1 (25.40)	1.25 (31.75)	1.25 (31.75)	1.25 (31.75)
180,000	1 (25.40)	1 (25.40)	1 (25.40)	1.25 (31.75)	1.25 (31.75)	1.25 (31.75)
200,000	1 (25.40)	1 (25.40)	1.25 (31.75)	1.25 (31.75)	1.25 (31.75)	1.5 (38.10)
300,000	1 (25.40)	1.25 (31.75)	1.25 (31.75)	1.5 (38.10)	1.5 (38.10)	1.5 (38.10)
400,000	1.25 (31.75)	1.25 (31.75)	1.5 (38.10)	1.5 (38.10)	1.5 (38.10)	2 (50.80)
500,000	1.25 (31.75)	1.5 (38.10)	1.5 (38.10)	2 (50.80)	2 (50.80)	2 (50.80)
600,000	1.5 (38.10)	1.5 (38.10)	2 (50.80)	2 (50.80)	2 (50.80)	2 (50.80)
700,000	1.5 (38.10)	2 (50.80)	2 (50.80)	2 (50.80)	2 (50.80)	2.5 (63.50)
800,000	1.5 (38.10)	2 (50.80)	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)
900,000	2 (50.80)	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)
1,000,000	2 (50.80)	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)
1,100,000	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)
1,200,000	2 (50.80)	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)
1,300,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	3 (76.20)
1,400,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)
1,500,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)
1,600,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)
1,700,000	2 (50.80)	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)
1,800,000	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3 (76.20)
1,900,000	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3 (76.20)
2,000,000	2.5 (63.50)	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3.5 (88.90)
2,200,000	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3.5 (88.90)	3.5 (88.90)
2,400,000	2.5 (63.50)	3 (76.20)	3 (76.20)	3 (76.20)	3.5 (88.90)	3.5 (88.90)
2,600,000	2.5 (63.50)	3 (76.20)	3 (76.20)	3.5 (88.90)	3.5 (88.90)	3.5 (88.90)
2,800,000	2.5 (63.50)	3 (76.20)	3 (76.20)	3.5 (88.90)	3.5 (88.90)	3.5 (88.90)
3,000,000	2.5 (63.50)	3 (76.20)	3.5 (88.90)	3.5 (88.90)	3.5 (88.90)	4 (101.60)

For L.P. Gas, correct the total Btu/hr. by multiplying it by 0.6. The answer is the equivalent Btu on the above chart.

Table 6

Gas Requirements

High Altitude Burner Orifice Sizing

For proper operation at altitudes above 2000 feet (610 m), the gas burner orifice size must be reduced to ensure complete combustion. Refer to *Table 7*.


For CE models, consult local gas supplier.

Model	Gas	Altitude		Burner Orifice				New Rate (Btu/hr.)*	
		feet	meters	#	inches	mm	Quantity		Part No.
25 Pound	Natural Gas	2001-4000	610-1220	26	0.1470	3.7	1	M401000	58,880
		4001-6000	1221-1830	27	0.1440	3.7		M400998	53,760
		6001-8000	1831-2440	28	0.1405	3.6		M401014	48,640
		8001-10,000	2441-3050	29	0.1360	3.4		M400997	43,520
	L.P. Gas	2001-6000	610-1830	43	0.0890	2.3		M406184	58,880
		6001-8000	1831-2440	44	0.0860	2.2		M401011	48,640
		8001-10,000	2441-3050	46	0.0810	2.1		M401003	43,520
30 Pound	Natural Gas	2001-4000	610-1220	22	0.1570	4.0	1	M402996	67,160
		4001-6000	1221-1830	24	0.1520	3.9		M402980	61,320
		6001-8000	1831-2440	26	0.1470	3.7		M401000	55,480
		8001-10,000	2441-3050	28	0.1405	3.6		M401014	49,640
	L.P. Gas	2001-6000	610-1830	42	0.0935	2.4		M403017	67,160
		6001-8000	1831-2440	43	0.0890	2.3		M406184	55,480
		8001-10,000	2441-3050	44	0.0860	2.2		M401011	49,640
35 Pound	Natural Gas	2001-4000	610-1220	17	0.1730	4.4	1	M411374	82,800
		4001-6000	1221-1830	18	0.1695	4.3		M402988	75,600
		6001-8000	1831-2440	20	0.1610	4.1		M401002	68,400
		8001-10,000	2441-3050	22	0.1570	4.0		M402996	61,200
	L.P. Gas	2001-4000	610-1220	38	0.1015	2.6		M411376	82,800
		4001-6000	1221-1830	39	0.0995	2.5		M401007	75,600
		6001-8000	1831-2440	41	0.0960	2.4		M401015	68,400
		8001-10,000	2441-3050	42	0.0935	2.4		M403017	61,200
55 Pound	Natural Gas	2001-4000	610-1220	10	0.1929	4.9	1	M402994	104,360
		4001-6000	1221-1830	12	0.1890	4.8		M411372	99,562
		6001-8000	1831-2440	14	0.1811	4.6		M411371	92,324
		8001-10,000	2441-3050	16	0.1772	4.5		M411373	87,321
	L.P. Gas	2001-4000	610-1220	32	0.1142	2.9		M402444	104,354
		4001-6000	1221-1830	33	0.1142	2.9		M401022	99,027
		6001-8000	1831-2440	35	0.1102	2.8		M402487	93,838
		8001-10,000	2441-3050	36	0.1063	2.7		M411375	87,630

*Btu/hr. derate of 4% per 1000 feet (305 meters) of altitude.

Table 7

Electrical Requirements

	WARNING
<p>To reduce the risk of electric shock, fire, explosion, serious injury or death:</p> <ul style="list-style-type: none">• Disconnect electric power to the tumble dryer before servicing.• Close gas shut-off valve to gas tumble dryer before servicing.• Close steam valve to steam tumble dryer before servicing.• Never start the tumble dryer with any guards/panels removed.• Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the tumble dryer is properly grounded. <p style="text-align: right;">W002R1</p>	
<p>To reduce the risk of fire and electric shock, check with a qualified serviceman for proper grounding procedures. Improper connection of the equipment grounding conductor may result in a risk of electric shock.</p> <p style="text-align: right;">W068</p>	
<p>To reduce the risk of fire and electric shock, if electrical supply is coming from a three phase service, DO NOT connect a “High Leg” or “Stinger Leg” to a single phase machine. On a three phase machine, if there is a “High Leg” or “Stinger Leg” it should be connected to L3.</p> <p style="text-align: right;">W069</p>	

Grounding Instructions


NOTE: To ensure protection against shock, this tumble dryer **MUST** be electrically grounded in accordance with the local codes or, in the absence of local codes, with the latest edition of the National Electrical Code ANSI/NFPA No. 70. In Canada the electrical connections are to be made in accordance with CSA C22.1 latest edition Canadian Electrical Code, Part I, and/or local codes.

IMPORTANT: Electrical connections must be made by a qualified electrician using data on serial plate, installation manuals and wiring diagram provided with machine and according to local codes. Install a circuit breaker as close to the tumble dryer as possible. If more than one tumble dryer is being installed, a circuit breaker must be provided for each.

NOTE: Connect machine to an individual branch circuit not shared with lighting or other equipment.


NOTE: 3 Phase Machines Only - Do not use fuses to avoid the possibility of “single phasing” and causing premature failure of the motors.


Electrical Requirements

	WARNING
<p>In case of servicing (or putting the tumble dryer out of order), disconnect the tumble dryer from the main supply by switching off the circuit breaker.</p>	
<small>W796</small>	

This tumble dryer must be grounded. In the event of malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for electric current. This tumble dryer must be connected to a grounded metal, permanent wiring system; or an equipment grounding conductor must be run with the circuit conductors and connected to the appropriate ground location.

- Metal conduit and/or BX cable is not considered ground.
- Connecting the Neutral from the electrical service box to the tumble dryer ground screw does not constitute a ground.
- A dedicated ground conduit (wire) must be connected between the electrical service box ground bar and the tumble dryer ground screw.

	WARNING
<p>All electrical connections should be made by a qualified electrician.</p> <p>To reduce the risk of electrical shock, de-energize the electrical circuit being connected to the tumble dryer before making any electrical connections. Never attempt to connect a live circuit.</p>	
<small>W070R1</small>	

	CAUTION
<p>Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.</p>	
<small>W071</small>	

For CE Models Only

All manually operated models are factory-equipped with an emergency stop button on the front panel. If the emergency stop function is desired on coin-operated models, an external emergency stop button may be installed as specified on the machine wiring diagram.

NOTE: Activation of the emergency stop button stops all machine control circuit functions, but DOES NOT remove all electrical power from machine.

Service/Ground Location

Models Through 7/9/12

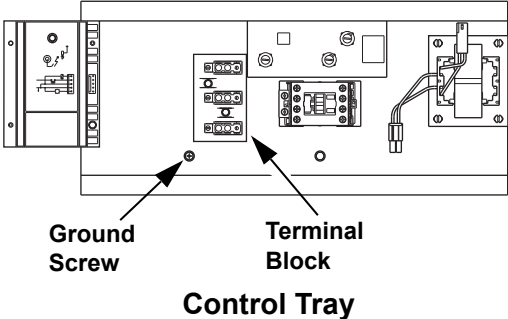
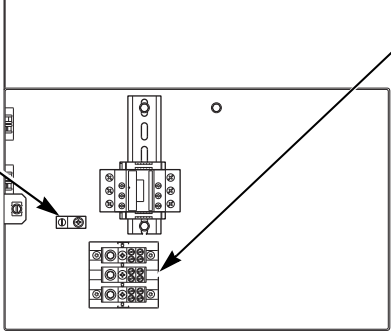
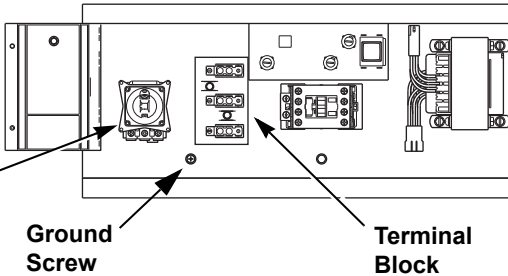
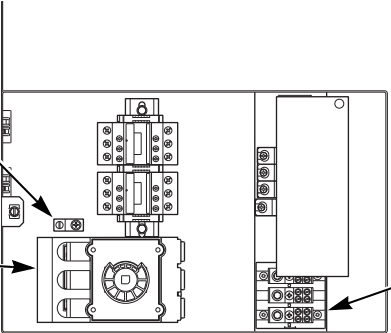
Model	Heat Source	Ground and Terminal Block Locations
Non-CE	Gas or Steam	 <p style="text-align: center;">Control Tray</p> <p style="text-align: right;">TMB2127N</p>
Non-CE	Electric	 <p style="text-align: center;">Accessory Box (located below control tray)</p> <p>NOTE: Do not make service connections in control tray.</p> <p style="text-align: right;">TMB2128N</p>
CE	Gas or Steam	 <p style="text-align: right;">TMB2129N</p>
CE	Electric	 <p style="text-align: right;">TMB2130N</p>

Figure 18

Electrical Requirements

Models Starting 7/10/12

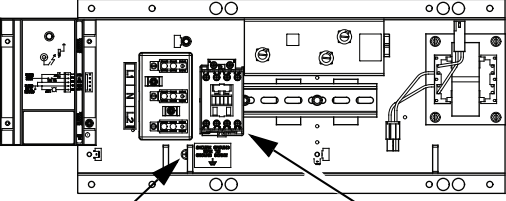
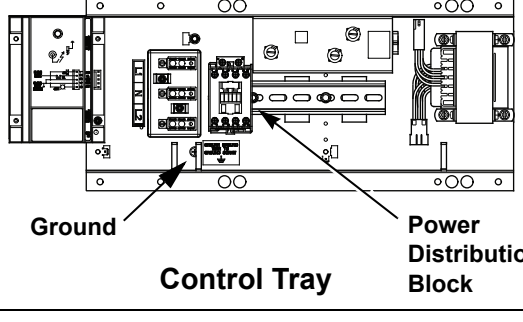
Model	Ground and Terminal Block Locations
Non-CE	 <p data-bbox="683 512 769 541">Ground</p> <p data-bbox="1024 512 1159 594">Power Distribution Block</p> <p data-bbox="818 583 987 617">Control Tray</p> <p data-bbox="1385 604 1468 625">TMB2377N</p>
CE	 <p data-bbox="670 865 756 894">Ground</p> <p data-bbox="1040 865 1175 947">Power Distribution Block</p> <p data-bbox="797 915 966 949">Control Tray</p> <p data-bbox="1385 936 1468 957">TMB2379N</p>

Figure 19

Connecting Electrical Service

The following steps outline the procedure for connecting electrical service to the tumble dryer.

- **3 Phase Models – Each tumble dryer must be connected to its own individual branch circuit breaker, not fuses, to avoid the possibility of “single phasing” and causing premature failure of the motor(s).**
- **Electrical service must be connected using the appropriate permanent rigid metal conduit system.**
- **Service conductors must be copper only.**

For an existing service, determine your service voltage and conductor amperage. Carefully review the tumble dryer serial plate ratings and *Electrical Requirements* section of this manual. If service is inadequate it must be upgraded by a qualified electrical contractor. Never connect an improper or inadequate service to any machine.

Configuring Your Tumble Dryer for Other Service Voltages

Several gas and steam tumble dryer models have been designed to be field convertible to other service voltages. Refer to *Table 8* for these models:

If your Serial Plate voltage is:	Your tumble dryer can be converted to the following voltages:
120 Volt/60 Hertz/ 1 Phase	208-240 Volt/60 Hertz/ 1 Phase
200-220 Volt/60 Hertz/ 1 Phase	100 Volt/60 Hertz/ 1 Phase
200 Volt/50 Hertz/ 1 Phase	100 Volt/50 Hertz/ 1 Phase
240 Volt/60 Hertz/ 3 Phase	200-208 Volt/60 Hertz/ 3 Phase
380 Volt/50 Hertz/ 3 Phase	400-415 Volt/50 Hertz/ 3 Phase

Table 8

NOTE: Electric models are not field convertible and must be connected to service specified on serial plate.

If tumble dryer requires conversion for use on another service voltage, complete the steps detailed in the *Conversion Instructions* section **prior to connecting service to machine.**

If tumble dryer does not require conversion or has been converted according to the *Conversion Instructions* section of this manual, continue with step 1.

NOTE: The wiring diagram is located inside the junction or contactor box.

1. For new service, install a circuit breaker of proper voltage and current rating as close to each tumble dryer as possible.
2. Route service conduit from service breaker panel to tumble dryer service connection box. Conduit routing should not obstruct access for maintenance or servicing. Refer to *Service/ Ground Location*.
3. Pull conductors through conduit and attach to circuit breaker and ground connection. Secure service ground wire to the grounding screw or lug. Attach service conductors to appropriately labeled positions on the terminal block. Make sure all connections are secure.
4. Complete ferrite installation instructions for all gas and steam OPL Micro.
5. Check electrical service phase sequence (3 Phase models only) as follows:
 - a. Energize the electrical service and momentarily start the tumble dryer. Check the direction of cylinder rotation. If the cylinder rotates clockwise as viewed from the front, the phase sequence is correct. If the cylinder rotates counterclockwise, proceed with step b.
 - b. Disconnect power to machine, disconnect and reverse the L1 and L2 connections on the terminal block.

Conversion Instructions

If serial plate voltage is:	Tumble Dryer can be converted to the following voltages:
<p>120 Volt/60 Hertz/ 1 Phase</p> <p>2W&G</p>	<p>208-240 Volt/60 Hertz/1 Phase Models: 3W&G</p> <ol style="list-style-type: none"> Prior to connecting service, locate the red or black with red stripe wire which runs between terminal block and the fan motor relay or contactor. Refer to figure below. <div data-bbox="581 520 1421 871" style="text-align: center;"> </div> <ol style="list-style-type: none"> Disconnect the red or black with red stripe wire from L1 of the terminal block and connect to L2 of the terminal block. Sign and date conversion sticker located on back of tumble dryer. Follow the instructions covered in <i>Connecting Electrical Service</i> section. <p>NOTE: Motors operate on 120 Volt power regardless of input voltage configuration.</p>
<p>240 Volt/60 Hertz/ 3 Phase</p> <p>3W&G</p>	<p>200-208 Volt/60 Hertz/3 Phase Models: 3W&G</p> <ol style="list-style-type: none"> Prior to connecting electric service, locate transformer configuration jumper in junction box area. Remove the 240 Volt jumper and replace it with the 208 Volt jumper located in the literature packet in cylinder. Sign and date conversion sticker located on back of tumble dryer. Follow the instructions covered in <i>Connecting Electrical Service</i> section.

If serial plate voltage is:	Tumble Dryer can be converted to the following voltages:
<p>200-220 Volt/60 Hertz/ 1 Phase 2W&G</p> <p>200 Volt/50 Hertz/ 1 Phase 2W&G</p>	<p>100 Volt/60 Hertz/1 Phase INTERNATIONAL Models: 2W&G</p> <p>100 Volt/50 Hertz/1 Phase INTERNATIONAL Models: 2W&G</p> <ol style="list-style-type: none"> 1. Prior to connecting electric service, locate transformer configuration jumper in junction box area. 2. Remove the 208 Volt jumper and replace it with the 100 Volt jumper located in the literature packet from cylinder. 3. Remove small access cover from back of the fan motor. Locate the two internal jumper wires, brown and blue connected to motor terminals #6 and #2. Move brown wire from terminal #6 to terminal #2 and blue wire from terminal #2 to terminal #4. Be careful not to confuse light blue motor harness wire with the dark blue internal jumper. 4. Carefully check motor wire connections with wiring diagram and verify that the motors are configured for low voltage operation before replacing covers. 5. Sign and date conversion sticker located on back of tumble dryer. 6. Follow the instructions covered in <i>Connecting Electrical Service</i> section.
<p>380 Volt/50 Hertz/ 3 Phase 3W&G</p>	<p>400-415 Volt/50 Hertz/3 Phase Models: 3W&G</p> <ol style="list-style-type: none"> 1. Prior to connecting electric service, locate transformer configuration jumper in junction box area. 2. Remove the 380 Volt jumper and replace it with the 415 Volt jumper located in the literature packet from cylinder. 3. Sign and date conversion sticker located on back of tumble dryer. 4. Follow the instructions covered in <i>Connecting Electrical Service</i> section.

Electrical Requirements

Ferrite Ring Installation

Gas and Steam Models with OM Control Suffix Only (Models Through 7/31/11)

The ferrite ring provided in the literature packet must be installed over the power leads during connection of electrical service. The ferrite protects the sensitive electronic controls from destructive electrical disturbances which may be present on power lines to the machine. Failure to properly install the ferrite ring may result in damage to the electronic controls and will void control warranty.

To Install:

1. Immediately after connection of power leads and before applying power to machine, locate each of the incoming service leads including ground.
2. Snap the ferrite ring closed over all of the service leads inside of the control tray as shown. It is important that the ferrite ring be installed inside the control tray. Refer to *Figure 20*. Do not install the ferrite outside of the box or other area. Make sure that service leads are in the center of the ferrite before closing the ring so as not to pinch or damage leads.

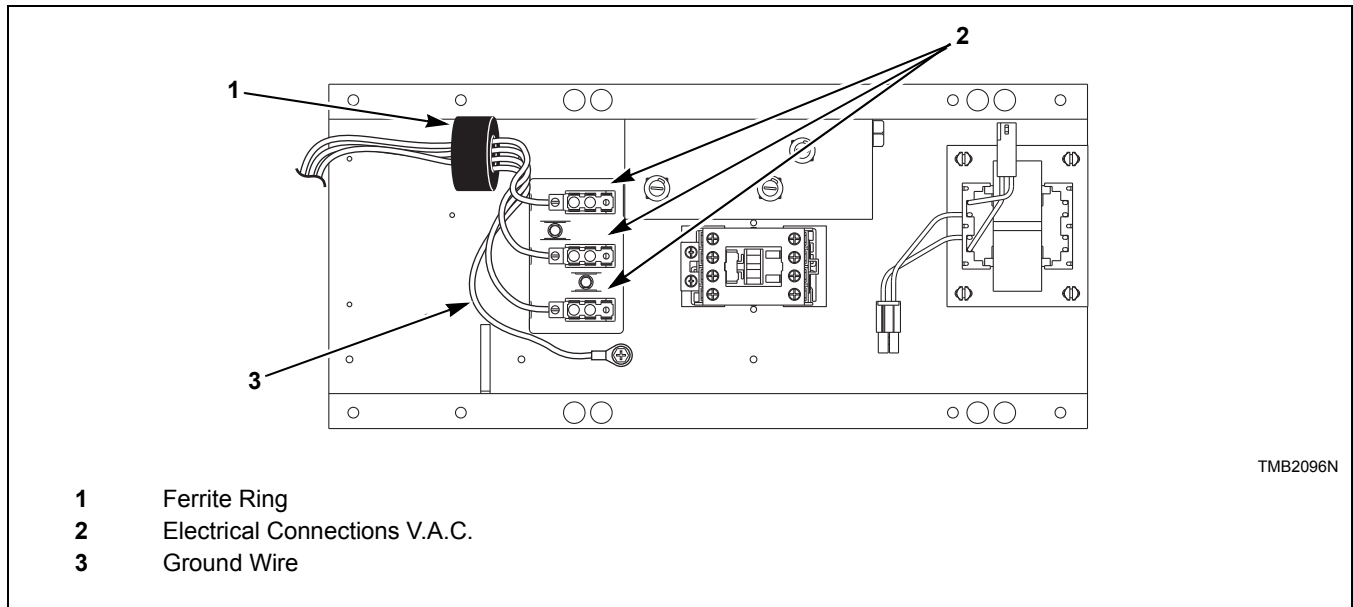


Figure 20

Electrical Requirements for Gas and Steam Models

Refer to *Table 9* and *Table 10*.

NOTE: Minimum wire sizes are obtained from Canadian Electrical Code for 75°C Conductors and are intended for use as a guideline only. Electrical connections should be made only by a qualified electrical contractor in accordance with all applicable local and national requirements.

For 25, 30 and 35 Pound Gas and Steam Models:

NOTE: Electrical specifications below are subject to change without notice. Always refer to product serial plate for most current specifications of product being installed.

NOTE: Use copper conductors only.

NOTE: 3 Phase Only – Each tumble dryer must be connected to its own individual branch circuit breaker, not fuses, to avoid the possibility of “single phasing” and causing premature failure of the motor(s).

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm ²)
120V/60Hz/1ph	L1, Neutral, and ground	12.0	N/A	15A – 1 pole	14 (2.08)
208-240V/60Hz/1ph	L1, L2, Neutral, and ground	6.7	N/A	10A – 2 pole	14 (2.08)
120V/60Hz/1ph	L1, Neutral, and ground	7.5**	N/A	10A – 1 pole	14 (2.08)
208-240V/60Hz/1ph	L1, L2, Neutral, and ground	4.5**	N/A	10A – 2 pole	14 (2.08)
100V/60Hz/1ph	L1, Neutral, and ground	11.0	N/A	15A – 1 pole	14 (2.08)
200-220V/60Hz/1ph	L1, Neutral, and ground	5.8	N/A	10A – 1 pole	14 (2.08)
100V/50Hz/1ph	L1, Neutral, and ground	12.1	N/A	20A – 1 pole	12 (3.31)
200V/50Hz/1ph	L1, Neutral, and ground	7.5	N/A	10A – 1 pole	14 (2.08)
230-240V/50Hz/1ph	L1, Neutral, and ground	7.5	N/A	10A – 1 pole	14 (2.08)
200-208V/60Hz/3ph	L1, L2, L3, and ground	3.2	4.0	10A* – 3 pole	14 (2.08)
240V/60Hz/3ph	L1, L2, L3, and ground	3.2	4.0	10A* – 3 pole	14 (2.08)
200V/50Hz/3ph	L1, L2, L3, and ground	2.9	3.5	10A* – 3 pole	14 (2.08)
230-240V/50Hz/3ph	L1, L2, L3, and ground	3.5	N/A	10A* – 3 pole	14 (2.08)
380V/50 or 60Hz/3ph	L1, L2, L3, and ground	1.5	2.0	10A* – 3 pole	14 (2.08)
400-415V/50Hz/3ph	L1, L2, L3, and ground	1.6	2.0	10A* – 3 pole	14 (2.08)
440V/60Hz/3ph	L1, L2, L3, and ground	1.6	N/A	10A* – 3 pole	14 (2.08)
460-480V/60Hz/3ph	L1, L2, L3, and ground	1.6	2.0	10A* – 3 pole	14 (2.08)

* 3 Phase machines should not have fuses, breakers only.

** Special low Amp blower model, 25 Pound only

N/A = Not Applicable

Table 9

Electrical Requirements

For 55 Pound Gas Models:

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm ²)
120V/60Hz/1ph	L1, Neutral, and ground	9.2	N/A	15A – 1 pole	14 (2.08)
208-240V/60Hz/1ph	L1, L2, Neutral, and ground	6.5	N/A	10A – 2 pole	14 (2.08)
100V/60Hz/1ph	L1, Neutral, and ground	9.8	N/A	15A – 1 pole	14 (2.08)
100V/50Hz/1ph	L1, Neutral, and ground	10	N/A	15A – 1 pole	14 (2.08)
200V/50Hz/1ph	L1, Neutral, and ground	6.2	N/A	15A – 1 pole	14 (2.08)
230-240V/50Hz/1ph	L1, Neutral, and ground	5.5	N/A	10A – 1 pole	14 (2.08)
200-208V/60Hz/3ph	L1, L2, L3, and ground	4.0	4.0	10A* – 3 pole	14 (2.08)
240V/60Hz/3ph	L1, L2, L3, and ground	4.0	4.5	10A* – 3 pole	14 (2.08)
380V/50Hz/3ph	L1, L2, L3, and ground	2.0	2.5	10A* – 3 pole	14 (2.08)
400-415V/50Hz/3ph	L1, L2, L3, and ground	2.0	2.5	10A* – 3 pole	14 (2.08)

* 3 Phase machines should not have fuses, breakers only.

N/A = Not Applicable

Table 10

Electrical Requirements for Electric Models

Refer to *Table 10, 11, 12, 13 and 14.*

NOTE: Minimum wire sizes are obtained from Canadian Electrical Code Table 2 for 75°C Conductors and are intended for use as a guideline only. Electrical connections should be made only by a qualified electrical contractor in accordance with all applicable local and national requirements.

NOTE: Electrical specifications below are subject to change without notice. Always refer to product serial plate for most current specifications of product being installed.

NOTE: Use copper conductors only.

NOTE: 3 Phase Only – Each tumble dryer must be connected to its own individual branch circuit breaker, not fuses, to avoid the possibility of “single phasing” and causing premature failure of the motor(s).

For 9 kW 25 Pound Electric Models:

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm ²)
400V/50Hz/3ph	L1, L2, L3, and ground	16	N/A	20A* – 3 pole	12 (3.31)

* 3 Phase machines should not have fuses, breakers only.
N/A = Not Applicable

Table 11

For 12 kW 25 Pound Electric Models:

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm ²)
208V/60Hz/1ph	L1, L2, Neutral, and ground	64	N/A	80A – 2 pole	4 (21.2)
240V/60Hz/1ph	L1, L2, Neutral, and ground	57	N/A	80A – 2 pole	4 (21.2)
200V/50Hz/1ph	L1, Neutral, and ground	63	N/A	80A – 1 pole	4 (21.2)
200V/60Hz/1ph	L1, L2 and ground	64	N/A	80A – 2 pole	4 (21.2)
230-240V/50Hz/1ph	L1, Neutral, and ground	58	N/A	80A – 1 pole	4 (21.2)
200-208V/60Hz/3ph	L1, L2, L3, and ground	37	37	50A* – 3 pole	6 (13.3)
200V/50Hz/3ph	L1, L2, L3, and ground	36	36	50A* – 3 pole	6 (13.3)
230-240V/50Hz/3ph	L1, L2, L3, and ground	33	N/A	50A* – 3 pole	6 (13.3)
240V/60Hz/3ph	L1, L2, L3, and ground	33	33	50A* – 3 pole	6 (13.3)
380V/50 or 60Hz/3ph	L1, L2, L3, and ground	20	20	25A* – 3 pole	10 (5.26)
400-415V/50Hz/3ph	L1, L2, L3, and ground	18	18	25A* – 3 pole	10 (5.26)
440V/60Hz/3ph	L1, L2, L3, and ground	17	N/A	25A* – 3 pole	10 (5.26)
460-480V/60Hz/3ph	L1, L2, L3, and ground	16	16	25A* – 3 pole	10 (5.26)

* 3 Phase machines should not have fuses, breakers only.
N/A = Not Applicable

Table 12

Electrical Requirements

For 21 kW 30 Pound Electric Models:

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm ²)
208V/60Hz/1ph	L1, L2, Neutral, and ground	108	N/A	150A – 2 pole	1/0 (53.5)
240V/60Hz/1ph	L1, L2, Neutral, and ground	94	N/A	125A – 2 pole	1 (42.4)
200V/60Hz/1ph	L1, Neutral, and ground	108	N/A	150A – 1 pole	1/0 (53.5)
200V/50Hz/1ph	L1, Neutral, and ground	105	N/A	150A – 1 pole	1/0 (53.5)
230-240V/50Hz/1ph	L1, Neutral, and ground	95	N/A	125A – 2 pole	1 (42.4)
200-208V/60Hz/3ph**	L1, L2, L3, and ground	62	62	80A* – 3 pole	4 (21.2)
200V/50Hz/3ph**	L1, L2, L3, and ground	60	60	80A* – 3 pole	4 (21.2)
230-240V/50Hz/3ph**	L1, L2, L3, and ground	55	N/A	70A* – 3 pole	4 (21.2)
240V/60Hz/3ph**	L1, L2, L3, and ground	54	54	70A* – 3 pole	4 (21.2)
380V/50 or 60Hz/3ph**	L1, L2, L3, and ground	33	33	45A* – 3 pole	8 (8.37)
400-415V/50Hz/3ph**	L1, L2, L3, and ground	31	31	40A* – 3 pole	8 (8.37)
440V/60Hz/3ph	L1, L2, L3, and ground	29	N/A	40A* – 3 pole	8 (8.37)
460-480V/60Hz/3ph**	L1, L2, L3, and ground	27	27	35A* – 3 pole	8 (8.37)

* 3 Phase machines should not have fuses, breakers only.

** These serial plate voltages are only options available on the 30 pound electric models.

N/A = Not Applicable

Table 13

For 24 kW 35 Pound Electric Models:

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm ²)
208V/60Hz/1ph	L1, L2, Neutral, and ground	122	N/A	175A – 2 pole	2/0 (67.5)
240V/60Hz/1ph	L1, L2, Neutral, and ground	107	N/A	150A – 2 pole	1/0 (53.5)
200V/60Hz/1ph	L1, Neutral, and ground	122	N/A	175A – 1 pole	2/0 (67.5)
200V/50Hz/1ph	L1, Neutral, and ground	119	N/A	150A – 1 pole	1/0 (53.5)
230-240V/50Hz/1ph	L1, Neutral, and ground	108	N/A	150A – 1 pole	1/0 (53.5)
200-208V/60Hz/3ph	L1, L2, L3, and ground	71	71	90A* – 3 pole	3 (26.7)
200V/50Hz/3ph	L1, L2, L3, and ground	65	65	90A* – 3 pole	3 (26.7)
230-240V/50Hz/3ph	L1, L2, L3, and ground	62	N/A	80A* – 3 pole	4 (21.2)
240V/60Hz/3ph	L1, L2, L3, and ground	62	62	80A* – 3 pole	4 (21.2)
380V/50 or 60Hz/3ph	L1, L2, L3, and ground	38	38	50A* – 3 pole	6 (13.3)
400-415V/50Hz/3ph	L1, L2, L3, and ground	35	35	45A* – 3 pole	8 (8.37)
440V/60Hz/3ph	L1, L2, L3, and ground	33	N/A	45A* – 3 pole	8 (8.37)
460-480V/60Hz/3ph	L1, L2, L3, and ground	31	31	40A* – 3 pole	8 (8.37)

* 3 Phase machines should not have fuses, breakers only.

N/A = Not Applicable

Table 14

For 27 kW 55 Pound Electric Models:

Serial Plate Voltage	Terminal Block Connections Required	Serial Plate Amps		Recommended Circuit	
		Nonreversing	Reversing	Breaker Rating	Wire Size AWG (mm ²)
208V/60Hz/1ph	L1, L2, Neutral, and ground	129	N/A	175A – 2 pole	2/0 (67.5)
240V/60Hz/1ph	L1, L2, Neutral, and ground	115	N/A	150A – 2 pole	1/0 (53.5)
200V/60Hz/1ph	L1, Neutral, and ground	122	N/A	175A – 1 pole	2/0 (67.5)
200V/50Hz/1ph	L1, Neutral, and ground	131	N/A	175A – 1 pole	2/0 (67.5)
230-240V/50Hz/1ph	L1, Neutral, and ground	119	N/A	150A – 1 pole	1/0 (53.5)
200-208V/60Hz/3ph	L1, L2, L3, and ground	79	79	100A* – 3 pole	3 (26.7)
240V/60Hz/3ph	L1, L2, L3, and ground	65	65	80A* – 3 pole	4 (21.2)
380V/50Hz/3ph	L1, L2, L3, and ground	43	43	60A* – 3 pole	8 (8.37)
400-415V/50Hz/3ph	L1, L2, L3, and ground	38	38	50A* – 3 pole	8 (8.37)

* 3 Phase machines should not have fuses, breakers only.
 N/A = Not Applicable

Table 15

Steam Requirements

NOTE: Machines require a constant 80 to 100 psig (5.62 to 7.03 kg/sq cm) steam service for optimum operation. The maximum allowable steam pressure for use with 60 Hertz or 50 Hertz tumble dryers is 125 psig (8.6 bar). In no case may the pressure exceed the above value. Drying performance is significantly reduced at lower steam pressures.

Obtain specific steam service pipe sizes from the steam system supplier or a qualified steam fitter.

- Refer to *Figure 21* for proper steam pipe configurations.
- To prevent condensate draining from headers to tumble dryer, piping should have a minimum 12 inch (305 mm) rise above respective header. Do not make steam connection to header with a horizontal or downward facing tee or elbow.
- Whenever possible, horizontal runs of steam lines must drain, by gravity, to respective steam header. Water pockets, or an improperly drained steam header, will provide wet steam, causing improper operation of tumble dryer. If pockets or improper drainage cannot be eliminated, install a bypass trap to drain condensate from the low point in the steam header to the return.
- In both steam supply and steam return line, it is recommended that each have a pipe union and shut-off valve. This will enable you to disconnect the steam connections and service the tumble dryer while your laundry facility is in operation.
- Connect the steam solenoid valve to the related steam coil inlet connection with nipples, flex hoses, unions and tee.
- Strainers may require cleaning due to materials from hoses or pipes.
- Install vacuum breaker (optional), bucket trap with built-in strainer and check valve. For successful operation of tumble dryer, install trap 18 inches (457 mm) below coil and as near to the tumble dryer as possible. Inspect trap carefully for inlet and outlet markings and install according to trap manufacturer's instructions. If steam is gravity returned to boiler, omit trap but install optional vacuum breaker and check valve in return line near tumble dryer. Gravity return requires entire return plumbing be below steam coil outlet.
- Install union and shut-off valve in return line and make final pipe connections to return header.

NOTE: To prevent water hammering, route return lines below outlets of steam coils.

Piping Recommendations

- Trap each steam coil individually. Always keep the trap clean and in good working condition.
- When tumble dryer is on the end of a line of equipment, extend header at least 4 feet (1.2 m) beyond tumble dryer. Install shut-off valve, union, check valve and bypass trap at end of line. If gravity return to boiler, omit trap.
- Insulate steam supply and return line for safety of operator and safety while servicing tumble dryer.
- Keep tumble dryer in good working condition. Repair or replace any worn or defective parts.



WARNING

All system components must have a 125 psig (8.6 bar) working pressure. Shut-off valves must be installed upstream of the steam solenoid valve and downstream of each steam trap so components can be isolated for maintenance or emergency purposes.

All components (solenoid valve, traps) must be supported to minimize loads on the tumble dryer steam coil connections.

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Installing Steam Trap and Making Condensate Return Connections

The steam trap must be installed and the coil outlet connections must be connected to the condensate return lines. The following steps outline the procedure for installing the steam trap and connecting the condensate return lines. Refer to *Figure 21* for typical installations.

1. Use flexible lines between steam inlet solenoid and steam coils, as well as outlet between steam coil and traps.
2. If necessary, install a strainer at the end of each flexible hose.
3. Install a steam trap to each strainer.

IMPORTANT: Steam trap must be installed a minimum of 18 inches (457 mm) below the steam coil outlet connections.

4. Install a shut-off valve to each steam trap.
5. Connect to the condensate return lines.
6. For steam solenoid valve wiring connections, refer to Wiring Diagram supplied with tumble dryer.



WARNING

The flexible steam hoses connecting the coil outlet connections and steam traps must have a minimum of 125 psig (pounds per square inch gauge) (8.79 kg/sq. cm.) working pressure. A shut-off valve must be installed downstream from each steam trap so the condensate return line can be isolated in event a steam trap requires maintenance.

Each steam trap must be supported so minimum load is exerted on the coil outlet connection.

W066

Steam Requirements

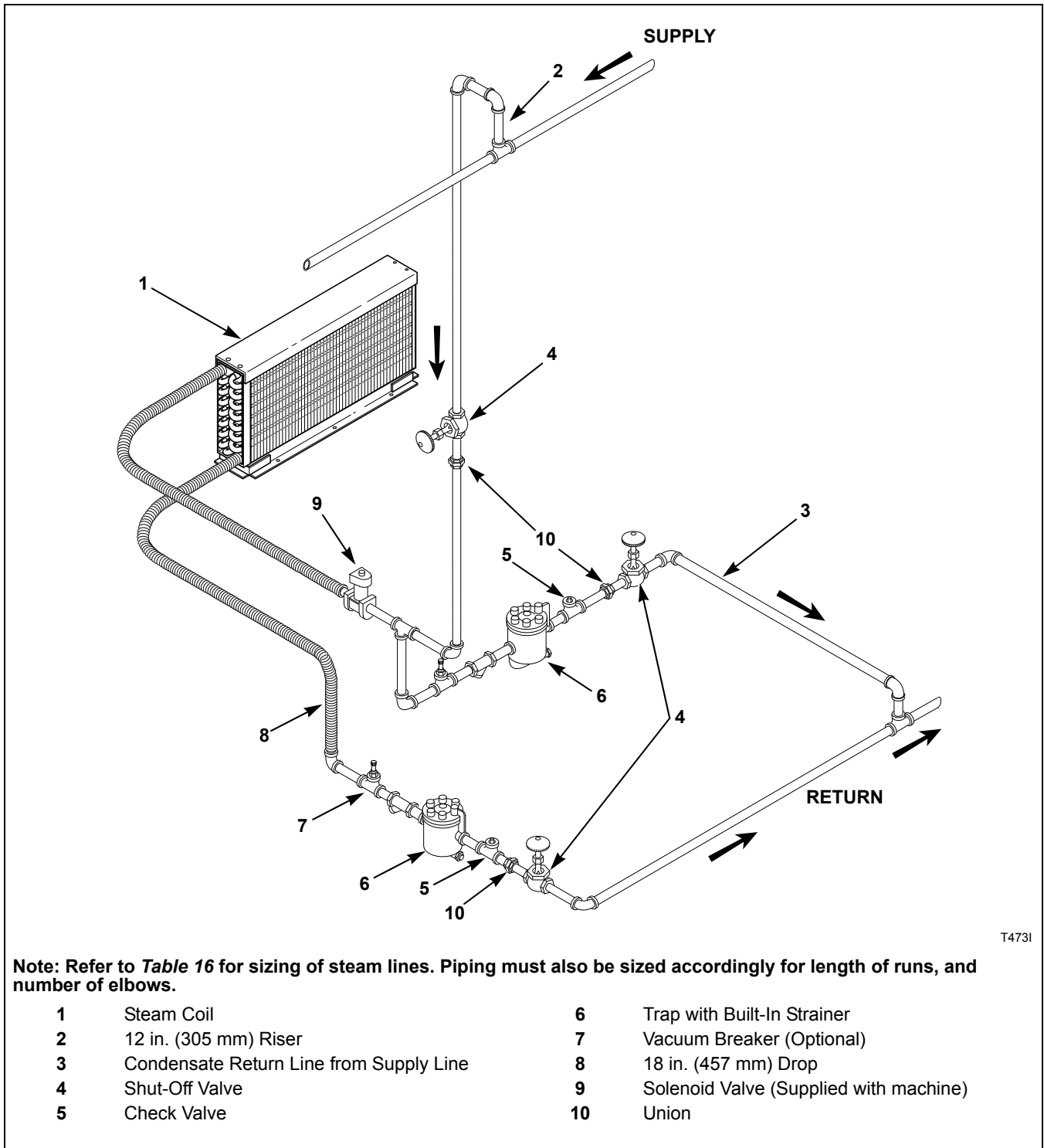


Figure 21

Model	Steam Pressure PSI (bar)	Minimum Supply Pipe Diameter	Steam Trap Size * (Pounds Condensate/Hour)
25/30 Pound	80-100 (5.3-6.9)	3/4 in. NPT	134
35 Pound	80-100 (5.3-6.9)	3/4 in. NPT	166

* Based on 100 psi.

Table 16

Single Drop Timer

NOTE: The following information is for models with an SD control suffix only.

Power-Up Mode

When power is applied to the tumble dryer, the *IN USE* light flashes factory status information. Following this, the control goes into READY Mode (light off) or RUN Mode if power was interrupted during a cycle (light on, time remaining unchanged).

Ready Mode

In READY Mode (light off), the control waits for the vend to be satisfied. When vend is satisfied the control goes into START Mode.

Start Mode

In START Mode (light on), the vend has been satisfied but the start button has not been pressed. Time remaining in the cycle will not change until the start button is pressed. When the start button is pressed the machine goes into RUN Mode.

Run Mode

In RUN Mode (light on), the machine is running a cycle and the time remaining is counting down. When time remaining counts down to zero, the control goes into READY Mode.

Setting Dry Time Dipswitches

To change the dry time on the tumble dryer, combinations of dipswitches can be set on the control.

There are eight dipswitches on the tumble dryer control. The first six switches are used to program the amount of additional heat time given for each coin pulse. The additional drying time is added to the factory default minimum heat time of one minute. A valve of 1 to 64 minutes of additional drying time is available for each coin drop pulse.

Models Through Serial No. 0908xxxxx

The last two switches are used to program the amount of additional cool down time. The additional cool down time is added to the factory default minimum cool down time of 1 minute. A value of 1 to 3 additional minutes is available. The control is shipped from the factory programmed with 1 minute of minimum heat time, preset with 7 additional minutes of drying time (dipswitches 1, 2 and 3 in ON position) and 1 minute of minimum

cool down time for a total time of 9 minutes for a coin pulse. For dipswitch settings refer to *Table 17*.

Models Starting Serial No. 0909xxxxx

The seventh switch is used to program the amount of additional cool down time. The additional cool down time is added to the factory default minimum cool down time of 1 minute. A value of 3 additional minutes is available. The control is shipped from the factory programmed with 1 minute of minimum heat time, preset with 7 additional minutes of drying time (dipswitches 1, 2 and 3 in ON position) and 1 minute of minimum cool down time for a total time of 9 minutes for a coin pulse. For dipswitch settings refer to *Table 17*.

The eight switch is used for the cycle reset. If the switch is OFF (default), the control will save the time left on a cycle in case of a power failure. If the switch is ON, the control will clear the cycle and go back to Ready Mode if there is a power failure.

The control reads the dipswitch settings at power-up. The control must be powered down to change the dipswitch settings.

To change the time for a coin pulse, the desired dry time dipswitches must be set to ON position. All other dipswitches must be in OFF position.

NOTE: The control must be powered down for 10 seconds before the dipswitches can be changed.

Resetting Cycle Time to Zero

(Models Starting Serial No.0909xxxxx)

To remove any cycle time that may have accumulated on the control during setup, the cycle time on the control can be reset to zero.

To reset the time, unplug the tumble dryer and set dipswitch 8 to ON position. Restore power to the tumble dryer for 10 seconds and once again unplug tumble dryer. Set dipswitch 8 to OFF position and restore power to the tumble dryer.

Single Drop Timer

Dipswitch Settings

Heat Time Per Coin Pulse (in minutes)	Heat Switch Number					
	1	2	3	4	5	6
1	OFF	OFF	OFF	OFF	OFF	OFF
2	ON	OFF	OFF	OFF	OFF	OFF
3	OFF	ON	OFF	OFF	OFF	OFF
4	ON	ON	OFF	OFF	OFF	OFF
5	OFF	OFF	ON	OFF	OFF	OFF
6	ON	OFF	ON	OFF	OFF	OFF
7	OFF	ON	ON	OFF	OFF	OFF
8 (factory default)	ON	ON	ON	OFF	OFF	OFF
9	OFF	OFF	OFF	ON	OFF	OFF
10	ON	OFF	OFF	ON	OFF	OFF
11	OFF	ON	OFF	ON	OFF	OFF
12	ON	ON	OFF	ON	OFF	OFF
13	OFF	OFF	ON	ON	OFF	OFF
14	ON	OFF	ON	ON	OFF	OFF
15	OFF	ON	ON	ON	OFF	OFF
16	ON	ON	ON	ON	OFF	OFF
17	OFF	OFF	OFF	OFF	ON	OFF
18	ON	OFF	OFF	OFF	ON	OFF
19	OFF	ON	OFF	OFF	ON	OFF
20	ON	ON	OFF	OFF	ON	OFF
21	OFF	OFF	ON	OFF	ON	OFF
22	ON	OFF	ON	OFF	ON	OFF
23	OFF	ON	ON	OFF	ON	OFF
24	ON	ON	ON	OFF	ON	OFF
25	OFF	OFF	OFF	ON	ON	OFF
26	ON	OFF	OFF	ON	ON	OFF
27	OFF	ON	OFF	ON	ON	OFF
28	ON	ON	OFF	ON	ON	OFF
29	OFF	OFF	ON	ON	ON	OFF
30	ON	OFF	ON	ON	ON	OFF
31	OFF	ON	ON	ON	ON	OFF
32	ON	ON	ON	ON	ON	OFF
33	OFF	OFF	OFF	OFF	OFF	ON
34	ON	OFF	OFF	OFF	OFF	ON
35	OFF	ON	OFF	OFF	OFF	ON
36	ON	ON	OFF	OFF	OFF	ON
37	OFF	OFF	ON	OFF	OFF	ON

Table 17 (continued)

Table 17 (continued)

Heat Time Per Coin Pulse (in minutes)	Heat Switch Number					
	1	2	3	4	5	6
38	ON	OFF	ON	OFF	OFF	ON
39	OFF	ON	ON	OFF	OFF	ON
40	ON	ON	ON	OFF	OFF	ON
41	OFF	OFF	OFF	ON	OFF	ON
42	ON	OFF	OFF	ON	OFF	ON
43	OFF	ON	OFF	ON	OFF	ON
44	ON	ON	OFF	ON	OFF	ON
45	OFF	OFF	ON	ON	OFF	ON
46	ON	OFF	ON	ON	OFF	ON
47	OFF	ON	ON	ON	OFF	ON
48	ON	ON	ON	ON	OFF	ON
49	OFF	OFF	OFF	OFF	ON	ON
50	ON	OFF	OFF	OFF	ON	ON
51	OFF	ON	OFF	OFF	ON	ON
52	ON	ON	OFF	OFF	ON	ON
53	OFF	OFF	ON	OFF	ON	ON
54	ON	OFF	ON	OFF	ON	ON
55	OFF	ON	ON	OFF	ON	ON
56	ON	ON	ON	OFF	ON	ON
57	OFF	OFF	OFF	ON	ON	ON
58	ON	OFF	OFF	ON	ON	ON
59	OFF	ON	OFF	ON	ON	ON
60	ON	ON	OFF	ON	ON	ON
61	OFF	OFF	ON	ON	ON	ON
62	ON	OFF	ON	ON	ON	ON
63	OFF	ON	ON	ON	ON	ON
64	ON	ON	ON	ON	ON	ON

Models Through Serial No. 0908xxxxx

Cool Down Per Cycle (in minutes)	Cool Down Switch Number	
	7	8
1 (factory default)	OFF	OFF
2	ON	OFF
3	OFF	ON
4	ON	ON

Models Starting Serial No. 0909xxxxx

Cool Down Per Cycle (in minutes)	Cool Down Switch Number	Cycle Reset Switch Number
	7	
1 (factory default)	OFF	8
3	ON	OFF
		ON

Total Cycle Time = Heat Time + Cool Down Time

Table 17

Adjustments

Loading Door Switch

The door switch should be adjusted so the cylinder stops when door is opened 2 inches (51 mm) plus or minus 0.25 inch (6 mm). This switch is a normally open switch and is closed by the hinge cam when the door is closed. If adjustment is required, refer to *Figure 22* and proceed as follows:

1. Close door and start tumble dryer, slowly open loading door. Cylinder and heat system should shut off when door is open 2 inches (51 mm) plus or minus 0.25 inch (6 mm).
2. Slowly close the loading door. When door is 2 inches (51 mm) from being fully closed, the door switch actuating bracket (located on the door) should depress the button and the switch arm with an audible “click.”
3. If the actuating bracket does not operate the switch at the appropriate door closure, bend the actuating switch arm in or out to achieve proper actuation.

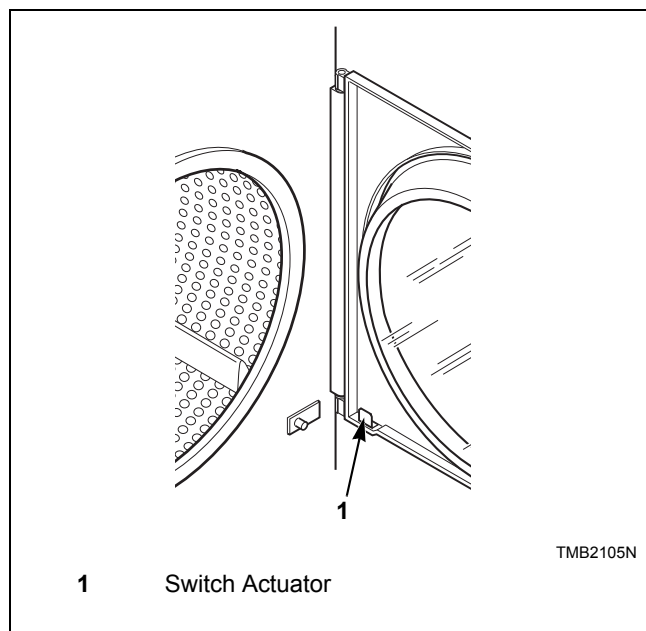


Figure 22

Airflow Switch

The airflow switch is set at the factory for proper operation. No adjustment necessary.

The airflow switch operation may be affected by shipping tape still in place, lack of make-up air, or an obstruction in the exhaust duct. These should be checked and the required corrective action taken.

	WARNING
The tumble dryer must not be operated if the airflow switch does not operate properly. Faulty airflow switch operation may cause an explosive gas mixture to collect in the tumble dryer.	
<small>W072R1</small>	

IMPORTANT: Airflow switch vane must remain closed during operation. If it opens and closes during the drying cycle, this indicates insufficient airflow through the tumble dryer. If switch remains open, or pops open and closed during the cycle, the heating system will shut off. The cylinder and fan will continue to operate even though the airflow switch is indicating insufficient airflow.

NOTE: To properly mount the airflow switch bracket, or in case of a load not drying, the airflow switch bracket may need to be checked for proper alignment. Be sure the locator pins are securely in their respective holes before tightening the bracket mounting screws. This will assure proper alignment of the airflow switch arm in the channel of the airflow switch bracket and prevent binding of the arm.

Door Strike

The door strike must be adjusted to have sufficient tension to hold loading door closed against force of the load tumbling against it. There is proper adjustment of pull force when 8 to 15 pounds (35.6 N – 66.7 N) is required to open door.

If adjustment is required, refer to *Figure 23* and proceed as follows:

To adjust, open door, loosen acorn nut, and turn door strike screw in or out as required. Retighten acorn nut.

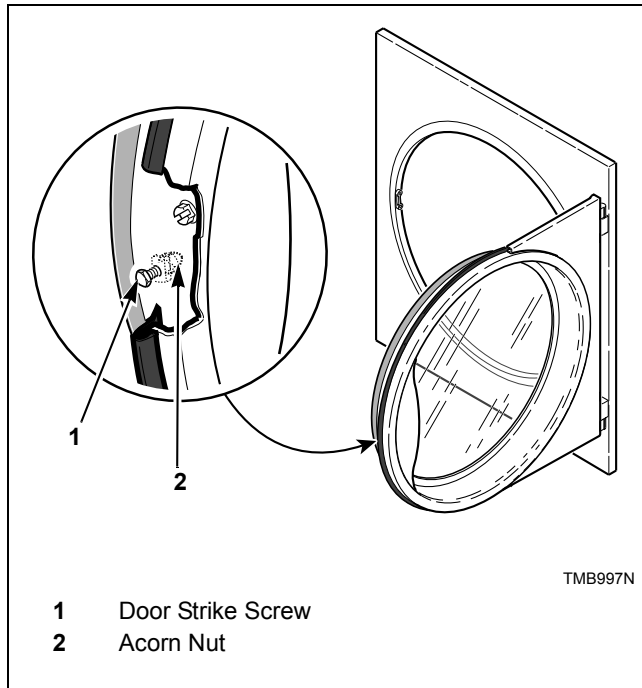


Figure 23

Removing Tumble Dryer from Service

If the tumble dryer is to be removed from service, perform the following steps where applicable:

- Turn off electrical supply external to machine.
- Turn off electrical disconnect on machine.
- Turn off gas supply external to machine.
- Turn off manual gas shut-off valve on machine.
- Turn off steam supply external to machine.
- Remove all electric, gas and steam connections.