

# Preliminary Installation Information

**Subject** 200 Pound Tumble Dryer  
**Use With** 70420801 Installation Manual

## Model Identification

	Gas			Steam/Thermal Oil	
<b>200 Pound</b>	DR200G2-BA200L	HA200N	UA200L	DR200S2-BT200S	HT200T
	DR200G2-BA200N	HT200L	UA200N	DR200S2-BT200T	HU200S
	DR200G2-BT200L	HT200N	UT200L	DR200S2-BU200S	HU200T
	DR200G2-BT200N	HU200L	UT200N	DR200S2-BU200T	IT200S
	DR200G2-BU200L	HU200N	UU200L	CT200S	IT200T
	DR200G2-BU200N	IT200L	UU200N	CT200T	ST200S
	CA200L	IT200N		CU200S	ST200T
	CA200N	SA200L		CU200T	SU200S
	CT200L	SA200N		HT200S	SU200T
	CT200N	ST200L			UT200S
	CU200L	ST200N			UT200T
	CU200N	SU200L			UU200S
	HA200L	SU200N			UU200T

Includes models with the following control suffixes:

R3 – reversing DX4 OPL

RE – reversing OPL Micro

RQ – reversing dual digital timer

RD – reversing DMP OPL

RM – reversing OPL Micro

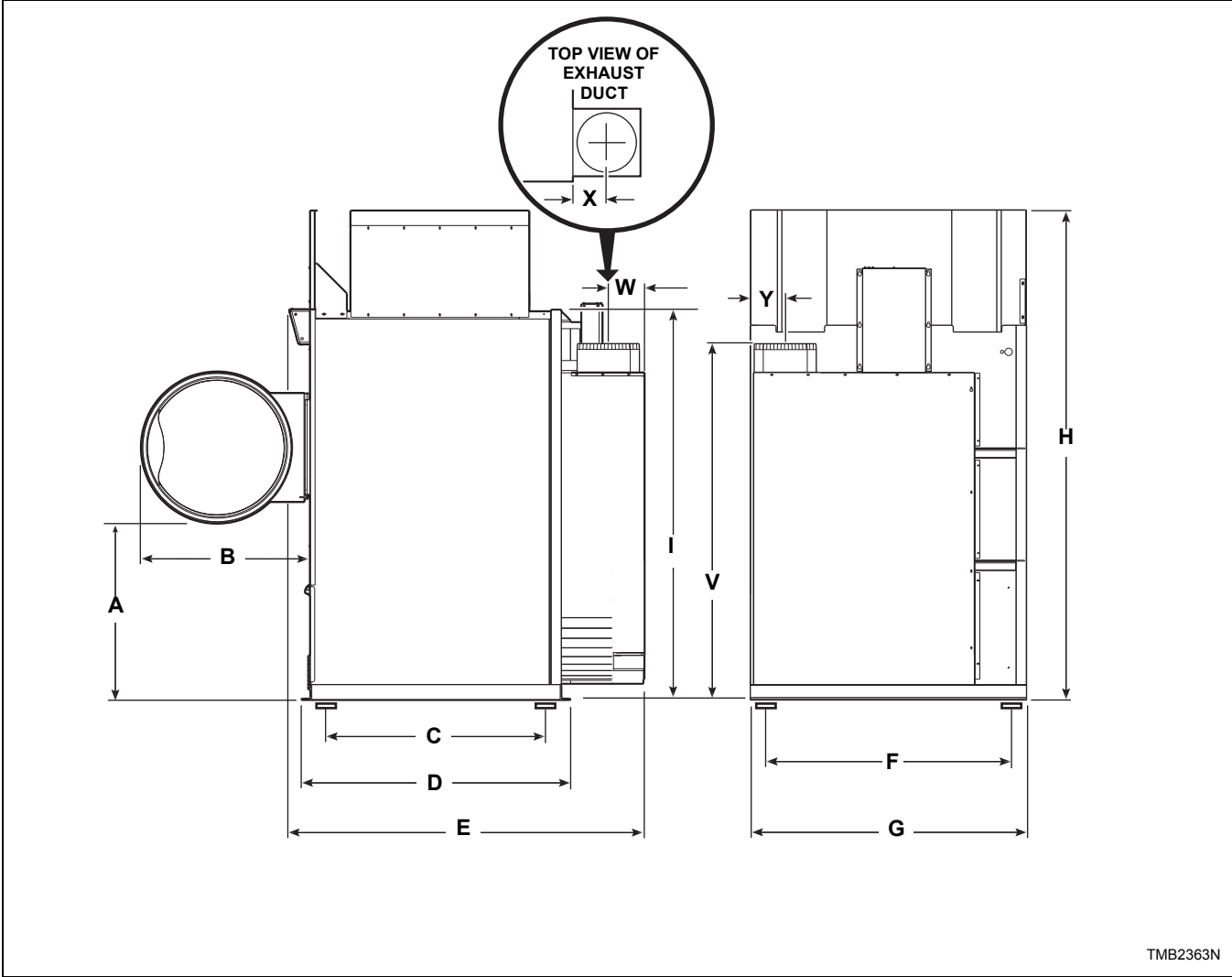
RU – reversing UniLinc OPL

# Specifications and Dimensions

Specifications	200 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.	66 dBA
Cylinder Size: Inches (mm)	50.75 x 50 (1289 x 1270)
Cylinder Capacity dry weight: Pounds (kg)	200 (90.7)
Cylinder Motor Horsepower	0.75
Fan Motor Horsepower	3
Air Outlet Diameter: Inches (mm)	12 (300)
Maximum Static Back Pressure: W.C.I. (mbar)	0.3 (0.8)
Maximum Airflow: C.F.M (L/sec.)	2450 (1156)
<b>Gas Models</b>	
Net Weight (approximate): Pounds (kg)	1707 (774)
Gas Connection	1 in. NPT
Gas Burner Rating: Btu/hr. (Mj/hr.)	425,000 (448)
<b>Steam Models</b>	
Net Weight (approximate): Pounds (kg)	1807 (820)
Steam Connection	3/4 in. NPT inlet 1 in. NPT outlet
Steam Coil Rating at 100 psig:Boiler Horsepower (Btu/hr.) (recommended operating pressure 80-100 psig)	18.8 (648,000)
<b>Electric Models</b>	
Heating Element Rating:Kilowatts (kW)	N/A

N/A = Not Applicable

# **200 Pound Tumble Dryer** **Dimensions and Exhaust Outlet** **Locations**

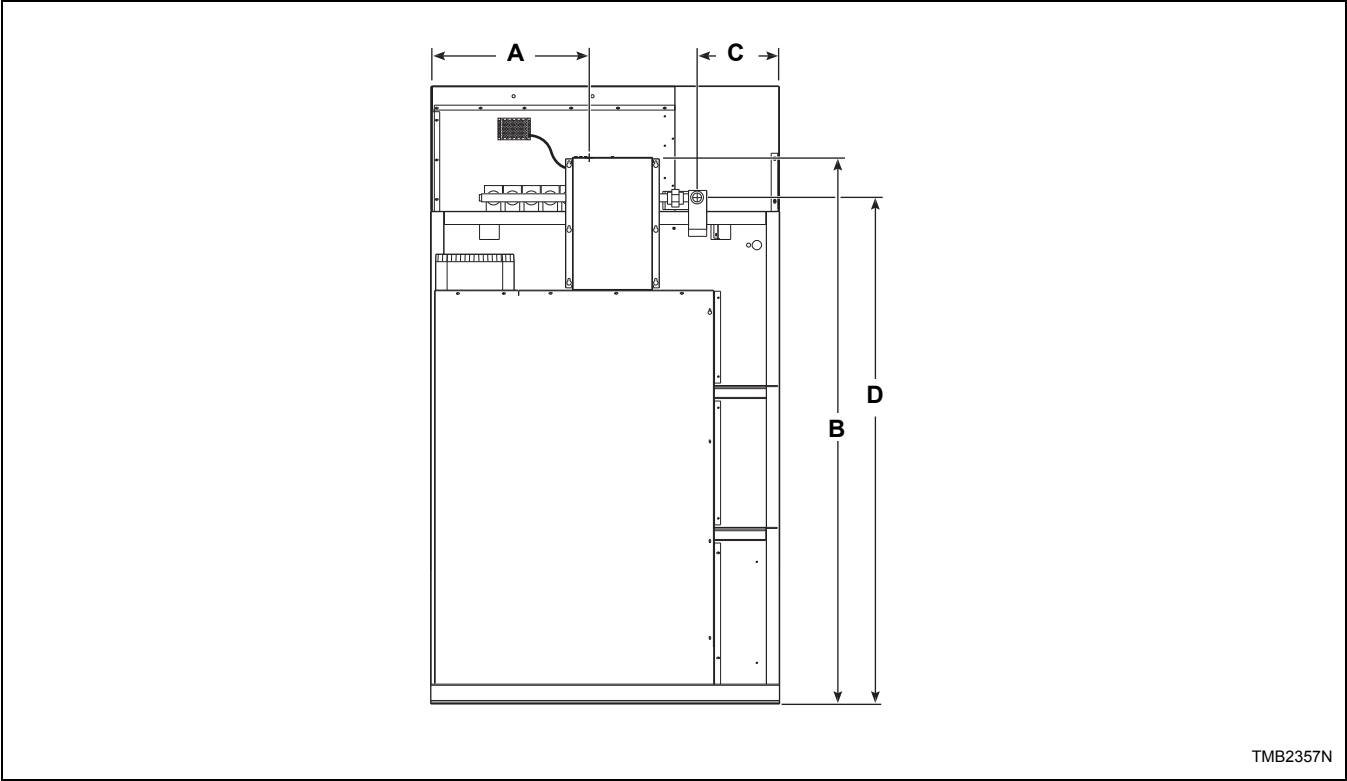


Cabinet Dimensions									
Models	A	B	C	D	E	F	G	H	I
<b>200L/N/S</b>	32.1 in. (815 mm)	35.6 in. (904 mm)	58 in. (1473 mm)	59.25 in. (1505 mm)	76.18 in. (1935 mm)	52.12 in. (1324 mm)	53.12 in. (1349 mm)	94 in. (2388 mm)	75.12 in. (1908 mm)

Refer to *Position and Level the Tumble Dryer* to temporarily reduce the heights of these models.

Exhaust Outlet Dimensions and Locations				
Models	V	W	X	Y
<b>200L/N/S</b>	67.19 in. (1707 mm)	7.03 in. (179 mm)	9 in. (229 mm)	7 in. (178 mm)

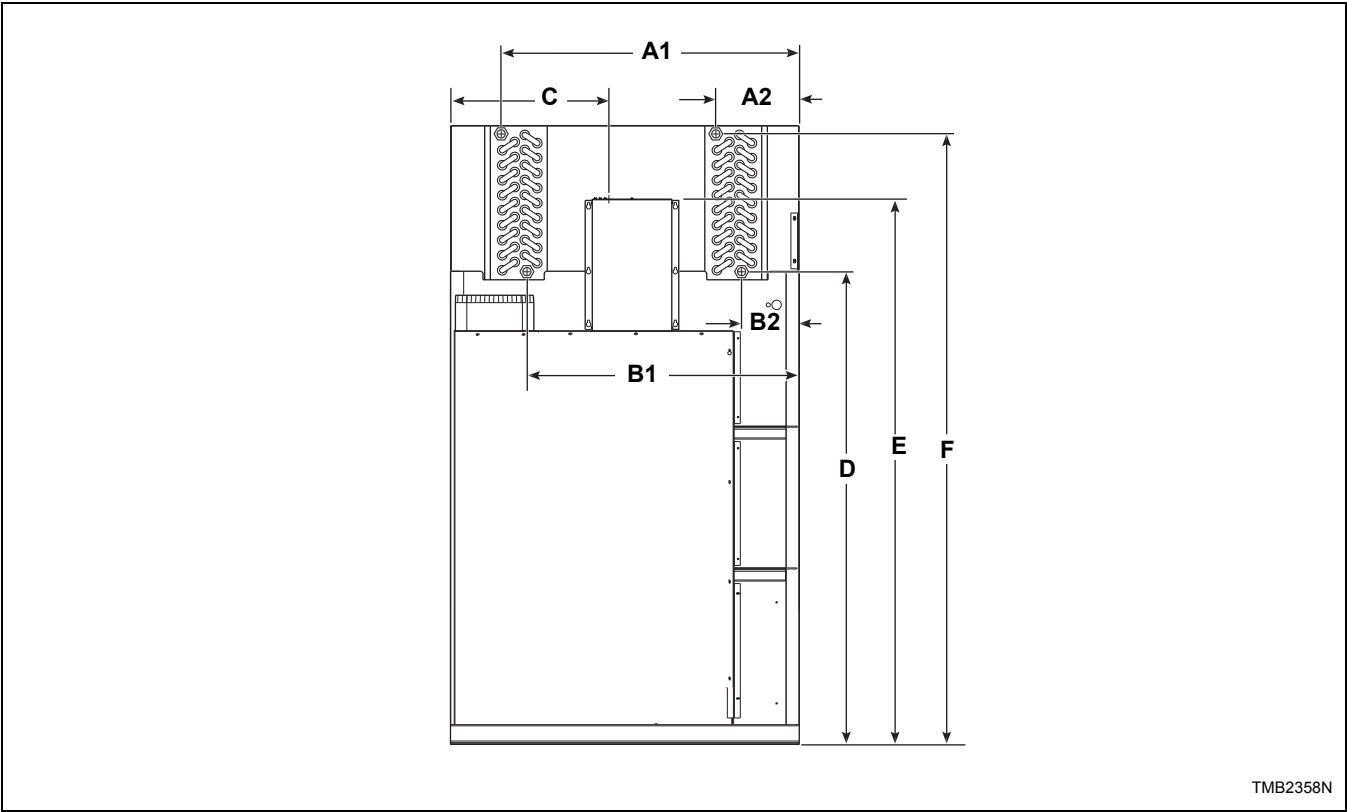
# Electric and Gas Connection Locations for Gas Models



Models	Electrical Connection		Gas Connection		
	A	B	C	D	Diameter
200L/N	21 in. (533 mm)	81 in. (2057 mm)	13.7 in. (348 mm)	77.4 in. (1966 mm)	1 in. NPT

**NOTE:** These figures are approximate dimensions only.

# Electric and Steam Connection Locations for Steam Models



TMB2358N

Models	Steam Inlet			
	Diameter	A1	A2	F
200S	3/4 in. NPT	37.625 in. (956 mm)	15.25 in. (387 mm)	88 in. (2235 mm)

Models	Steam Outlet			
	Diameter	B1	B2	D
200S	1 in. NPT	44.625 in. (1133 mm)	8.75 in. (222 mm)	71.75 in. (1822 mm)

Models	Electrical Connection	
	C	E
200S	21 in. (533 mm)	81 in. (2057 mm)

## Position and Level the Tumble Dryer

The tumble dryer may be moved with or without the skid. To remove the skid, unscrew the four shipping bolts, and discard them.

To fit a 200 pound tumble dryer (with shipping skid) through an 8 foot (2.43 meters) high door, you must remove the front access panel. The upper 3 inches (76 mm) of the stove must also be removed on 200 pound gas tumble dryers. Removing the entire gas or steam heater assembly and the shipping skid will reduce the height to 75 inches (1905 mm).

Level the tumble dryer to within 0.125 inch (3 mm) from front-to-rear (level on cylinder rib), and side-to-side (level on top panel). Shim under corners to level and stabilize unit. Tumble dryer must not rock.

## Make-Up Air

Required Make-Up Air Opening (to the outside) for Each Tumble Dryer	
Models	Opening
200 Pound	525 in. <sup>2</sup> (3710 cm <sup>2</sup> ) <i>free air</i>

Table 1

# Exhaust Requirements

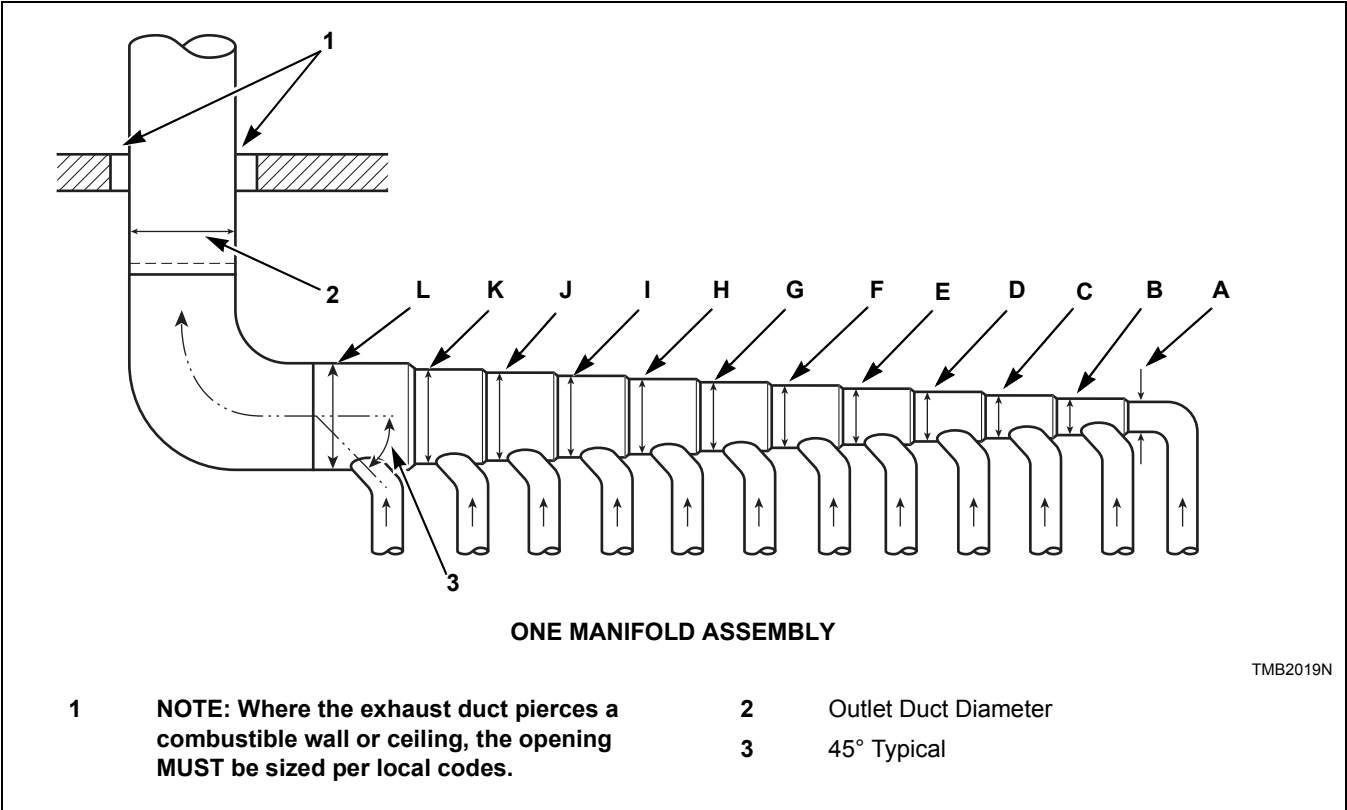


Figure 1

Duct Stations	200 Pound
	12 in. (305 mm) Duct
A	12 in. (305 mm)
B	17 in. (432 mm)
C	21 in. (533 mm)
D	24 in. (610 mm)
E	27 in. (686 mm)
F	30 in. (762 mm)
G	32 in. (813 mm)
H	34 in. (864 mm)
I	36 in. (914 mm)
J	38 in. (965 mm)
K	40 in. (1016 mm)
L	42 in. (1067 mm)

Table 2

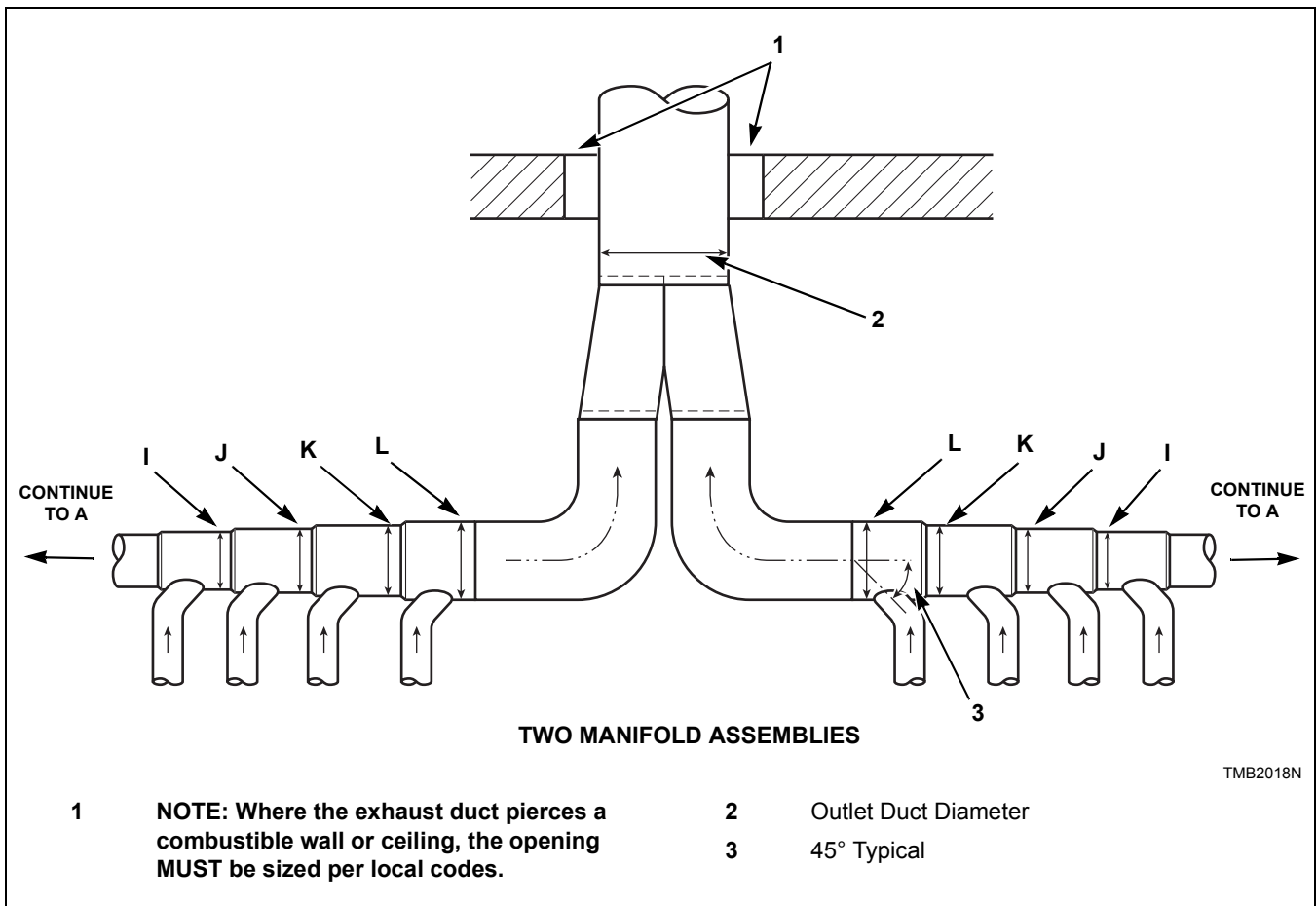


Figure 2

Duct Stations	200 Pound
	12 in. (305 mm) Duct
A	17 in. (432 mm)
B	24 in. (610 mm)
C	30 in. (762 mm)
D	34 in. (864 mm)
E	38 in. (965 mm)
F	42 in. (1067 mm)
G	45 in. (1143 mm)
H	45 in. (1143 mm)
I	52 in. (1321 mm)
J	54 in. (1372 mm)
K	57 in. (1448 mm)
L	60 in. (1524 mm)

Table 3



## Gas Requirements

For converting Non-CE Models from Natural Gas to

L.P. Gas:

200 Pound Models - M4975P3

## High Altitude Orifice Sizing

For proper operation at altitudes above 2000 feet (610 meters), the gas orifice size must be reduced to ensure complete combustion. Refer to *Table 4*.

For CE models, consult local gas supplier.

Non-CE Models									
Model	Gas	Altitude		Orifice					New Rate
		feet	m	No.	inches	mm	Quantity	Part No.	(Btu/hr.)*
200L/N	Natural Gas	2001 – 4000	610 – 1220	19	.1660	4.2	5	M402995	391,000
		4001 – 6000	1221 – 1830	20	.1610	4.1		M401002	357,000
		6001 – 8000	1831 – 2440	22	.1570	4.0		M402996	323,000
		8001 – 10,000	2441 – 3050	24	.1520	3.9		M402980	289,000
	L.P. Gas	2001 – 4000	610 – 1220	33	.1130	2.9	4	M401022	391,000
		4001 – 6000	1221 – 1830	34	.1110	2.8		M411512	357,000
		6001 – 8000	1831 – 2440	7/64	.1094	2.8		70070902	323,000
		8001 – 10,000	2441 – 3050	37	.1040	2.6		M401024	289,000
* Btu/hr. derate of 4% per 1000 ft. (305 m) of altitude.									

Table 4

# Electrical Requirements

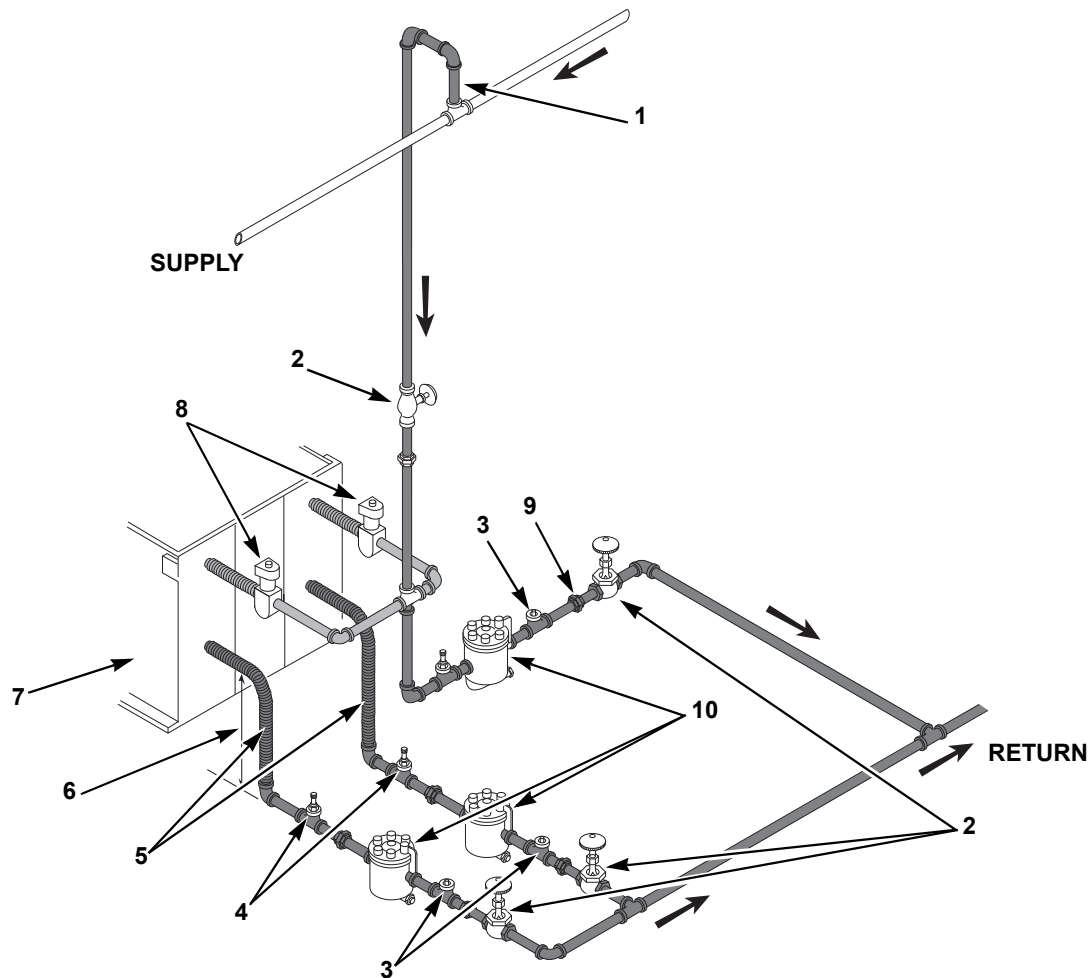
## For 200 Pound Tumble Dryer Models

Serial Plate Rating	Terminal Block Connections Required	Rated Current*	Breaker Rating	Recommended Wire Size
200-208V/60Hz/3ph	L1, L2, L3 and ground	14	20A - 3 pole	12 AWG (3.31 mm <sup>2</sup> )
240V/60Hz/3ph	L1, L2, L3 and ground	14	20A - 3 pole	12 AWG (3.31 mm <sup>2</sup> )
380V/50 or 60Hz/3ph	L1, L2, L3 and ground	8	15A - 3 pole	14 AWG (2.08 mm <sup>2</sup> )
400-415V/50Hz/3ph	L1, L2, L3 and ground	8	15A - 3 pole	14 AWG (2.08 mm <sup>2</sup> )
440V/60Hz/3ph	L1, L2, L3 and ground	7	15A - 3 pole	14 AWG (2.08 mm <sup>2</sup> )
460-480V/60Hz/3ph	L1, L2, L3 and ground	7	15A - 3 pole	14 AWG (2.08 mm <sup>2</sup> )

\* Current ratings vary slightly depending on model; refer to serial plate.

Table 5

## Steam Requirements



TMB2024N

**NOTE: Refer to Table 6 for sizing of steam lines. Piping must also be sized accordingly for length of runs and number of elbows.**

- |          |   |           |  |
|----------|---|-----------|--|
| <b>1</b> | Risers 12 in. (305 mm)                  | <b>6</b>  | 18 in. Drop (457 mm)                   |
| <b>2</b> | Shut-Off Valve                          | <b>7</b>  | Steam Bonnet                           |
| <b>3</b> | Check Valve                             | <b>8</b>  | Solenoid Valve (Supplied with machine) |
| <b>4</b> | Vacuum Breaker (optional)               | <b>9</b>  | Union                                  |
| <b>5</b> | Condensate Return Line from Supply Line | <b>10</b> | Trap with Built-In Strainer            |

Figure 3

Model	Steam Pressure PSI (bar)	Minimum Supply Pipe Diameter	Steam Trap Size * (Pounds Condensate/Hour)
200S	80-100 (5.3-6.9)	1-1/4 in. NPT	517

\* Based on maximum psi.

Table 6

## Loading Door Strike

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

If adjustment is required, refer to *Figure 4* and proceed as follows:

To adjust, open door, loosen adjustment screws and position strike for desired magnet engagement. retighten screws.

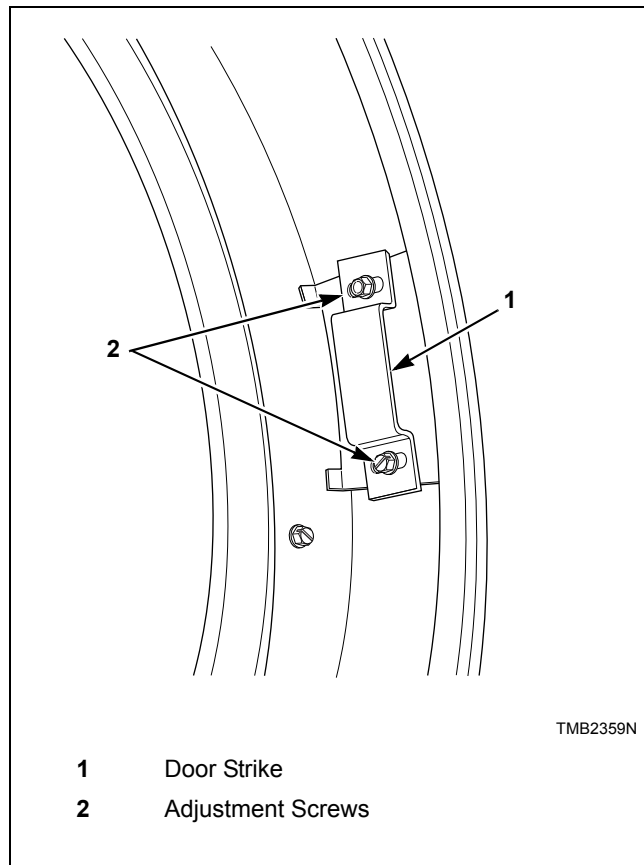


Figure 4

## Belt Drive

**NOTE:** Proper tensions for new belts are 45-55 pounds for the motor belt, 55-65 pounds for the final drive and 65-70 pounds for 200 pound blower, measured with a Borroughs Belt Tension Gauge. Using a Browning Belt Tension Gauge, the motor belt deflection should be 0.31 inch at five pounds pressure, and final drive belt deflection should be 0.25 inch at five pounds pressure.