



# **CE Gas Directive**

## **Installation Manual**

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**American Dryer Corporation**  
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Fall River MA 02720-4781  
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E-mail: techsupport@amdry.com

**RETAIN THIS MANUAL IN A SAFE, YET ACCESSIBLE PLACE, FOR FUTURE REFERENCE.**

This manual is an addendum only. For specific information regarding the proper installation and operation of this commercial laundry dryer, refer to the installation and operation manuals included in the dryer.

**WARNING:** For your safety the information included in this addendum, and the manuals included with the dryer ***must be*** followed to minimize the risk of fire or explosion or to prevent property damage, personal injury or death.

THE FOLLOWING INFORMATION **MUST BE** POSTED IN A PROMINENT LOCATION NEAR THE DRYER(S) WHERE IT IS EASILY VIEWED.

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**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 suppliers 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.

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**NOTE:** We have tried to make this manual as complete as possible and hope you will find it useful. **ADC** reserves the right to make changes from time to time, without notice or obligation.

# Table of Contents

## **SECTION I**

WARNINGS or IMPORTANT NOTES .....	3
-----------------------------------	---

## **SECTION II**

"MAJOR DRYER COMPONENTS" .....	6
--------------------------------	---

## **SECTION III**

CLEANING / MAINTENANCE .....	13
------------------------------	----

## **SECTION IV**

GAS INFORMATION .....	19
-----------------------	----

## **SECTION V**

GAS PRESSURE TESTING .....	48
----------------------------	----

## **SECTION VI**

EXHAUST (FLUE) INFORMATION .....	49
----------------------------------	----

## **SECTION VII**

PART INFORMATION .....	79
------------------------	----

## **SECTION VIII**

ELECTRICAL INFORMATION .....	82
------------------------------	----

## **SECTION IX**

MODEL / CAPACITY .....	88
------------------------	----

# SECTION I

## WARNINGS or IMPORTANT NOTES

WARNINGS and IMPORTANT NOTES INCLUDED IN THIS ADDENDUM AND THE INSTALLATION AND OPERATORS MANUALS INCLUDED WITH DRYER ARE NOT MEANT TO COVER SITUATIONS OR CONDITIONS WHICH MAY OCCUR. IT **MUST BE** UNDERSTOOD THAT CAUTION, CAREFULNESS AND COMMON SENSE ARE FACTORS WHICH **CANNOT** BE BUILT INTO THIS PRODUCT. THESE FACTORS **MUST BE** SUPPLIED BY THE PERSON(S) INSTALLING, MAINTAINING OR OPERATING THE DRYER.

**WARNING:** The dryer *must never be* operated with any of the back guards/panels, outer tops, or service panels removed. PERSONAL INJURY or FIRE COULD RESULT.

**DO NOT** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any appliance.

Installation and service **must be** performed by a qualified installer, service agency, or the gas supplier.

Dryer(s) **MUST BE** exhausted to the outdoors.

**WARNING:** Dryer *must not be* operated without the lint filter in place.

Although **ADC** produces a very versatile machine, there are some articles that, due to fabric composition or cleaning method, **should not be** dried in it.

**WARNING:** Dry only water-washed fabrics. **DO NOT** dry articles spotted or washed in dry cleaning solvents, a combustible detergent, or "all purpose" cleaner. EXPLOSION COULD RESULT.

**WARNING:** **DO NOT** dry rags or articles coated or contaminated with gasoline, kerosene, oil, paint, or wax. EXPLOSION COULD RESULT.

**WARNING:** **DO NOT** dry mop heads. Contamination by wax or flammable solvents will create a fire hazard.

**WARNING:** **DO NOT** use heat for drying articles that contain plastic, foam, sponge rubber, or similarly textured rubber-like materials. Drying in a heated basket (tumbler) may damage plastics or rubber and also may be a fire hazard.

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

**WARNING:** The collection of lint in the burner area and exhaust duct work can create a potential fire hazard. For personal safety, the dryer **MUST BE** grounded. *UNDER NO CIRCUMSTANCES* should the door switch, applicable lint drawer switch or heat circuit safety devices ever be disabled.

**WARNING: PERSONAL INJURY OR FIRE COULD RESULT!**

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

Remove articles from the dryer as soon as the drying cycle has been completed.

**WARNING:** Articles left in the dryer after the drying and cooling cycles have completed can create a fire hazard.

**DO NOT** operate steam dryers with more than 125 PSI (8.61 Bars). Excessive steam pressure can damage steam coil and/or harm personnel.

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

READ and FOLLOW **ALL** CAUTION and DIRECTION LABELS ATTACHED TO DRYER.

**WARNING:** Failure to properly install, maintain, and/or operate dryer according to this addendum, and the installation and operators manuals included with dryer may result in conditions which can cause serious injury, death and/or property damage.

**WARNING: DO NOT** allow children to play on or in the tumbler. Close supervision of children is necessary when the tumbler is used near children. This is a safety rule for all appliances.

**DO NOT** install or store dryer where it will be exposed to water and/or weather.

The operation of this appliance may effect the operation of other types of gas appliances which take their air for safe combustion from the same room. If in doubt, consult the appliance manufacturer(s).

**IMPORTANT:** This appliance must only be installed and operated in the country of destination indicated on the dryer's data plate. If the appliance is to be installed and operated in a country other than the one indicated on the data plate, a data plate amendment must be obtained from American Dryer Corporation.

**WARNING:** This appliance must only operate with the gas type indicated on the dryer's data plate. If the appliance is converted (gas type is changed), a data plate amendment must be obtained from American Dryer Corporation.

**WARNING:** This appliance may cause spillage of products of combustion from an open-flue appliance fitted in the same room, and that such an appliance shall be tested for clearance of products with the appliance in operation and all windows and doors closed.

Use this dryer only for its intended purpose, drying fabrics.

**WARNING:** To reduce the risk of personal injury, install lockable doors to prevent public access to the rear of the dryers.

Exhaust duct outlet **should be** checked periodically for blockages, and if any found, removed.

**IMPORTANT:** A means of restraint **must be** used to prevent straining of the gas supply when the appliance is moved.

**IMPORTANT:** An external means of power removal (disconnect device) must be provided by the installer.

Before installation, check that the local distribution conditions, nature of gas and pressure, and adjustment of the appliance are compatible.

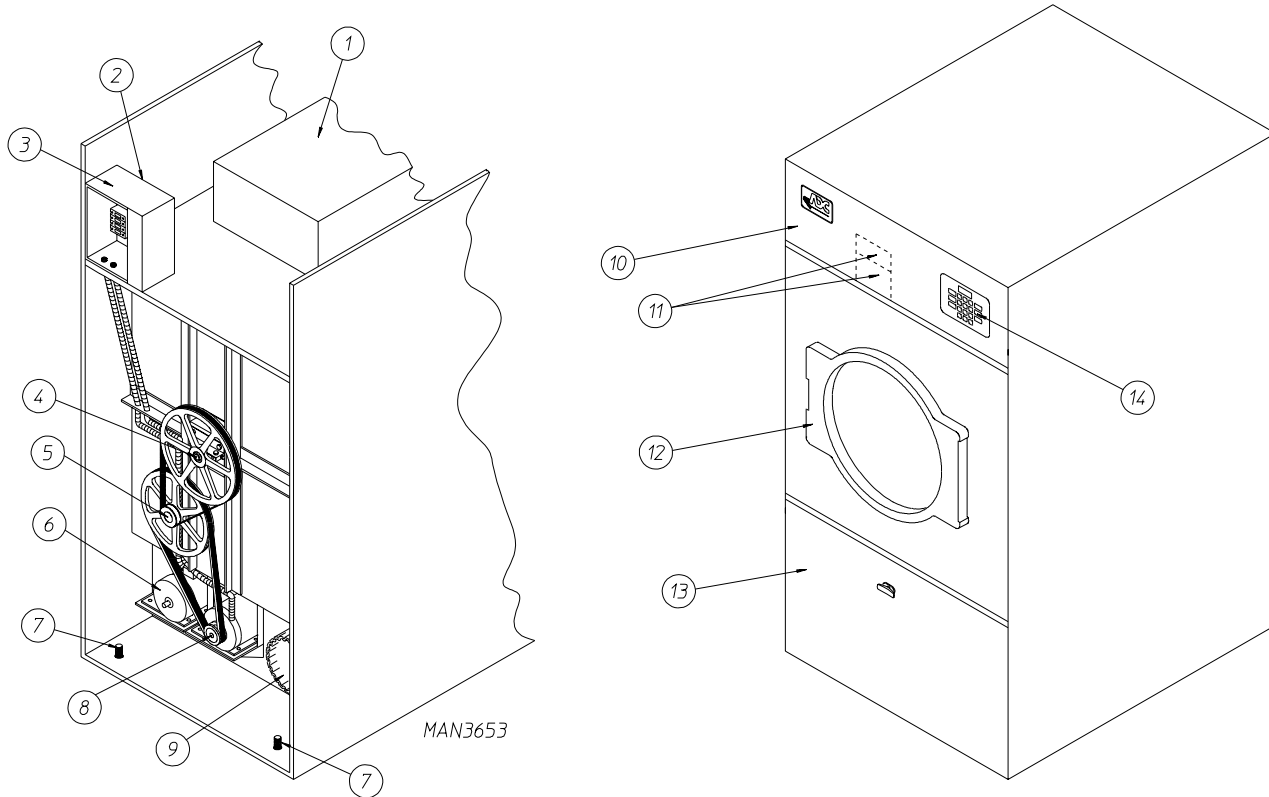
Always contact your dealer, distributor, or service agent for any conditions or problems you do not understand, or for replacement (spares) parts. If you **cannot** locate an **ADC** dealer or agent, contact the **ADC** factory.

ADC Telephone: 508-678-9000  
ADC FAX: 508-678-9447  
E-mail: techsupport@amdry.com

# SECTION II

## "MAJOR DRYER COMPONENTS"

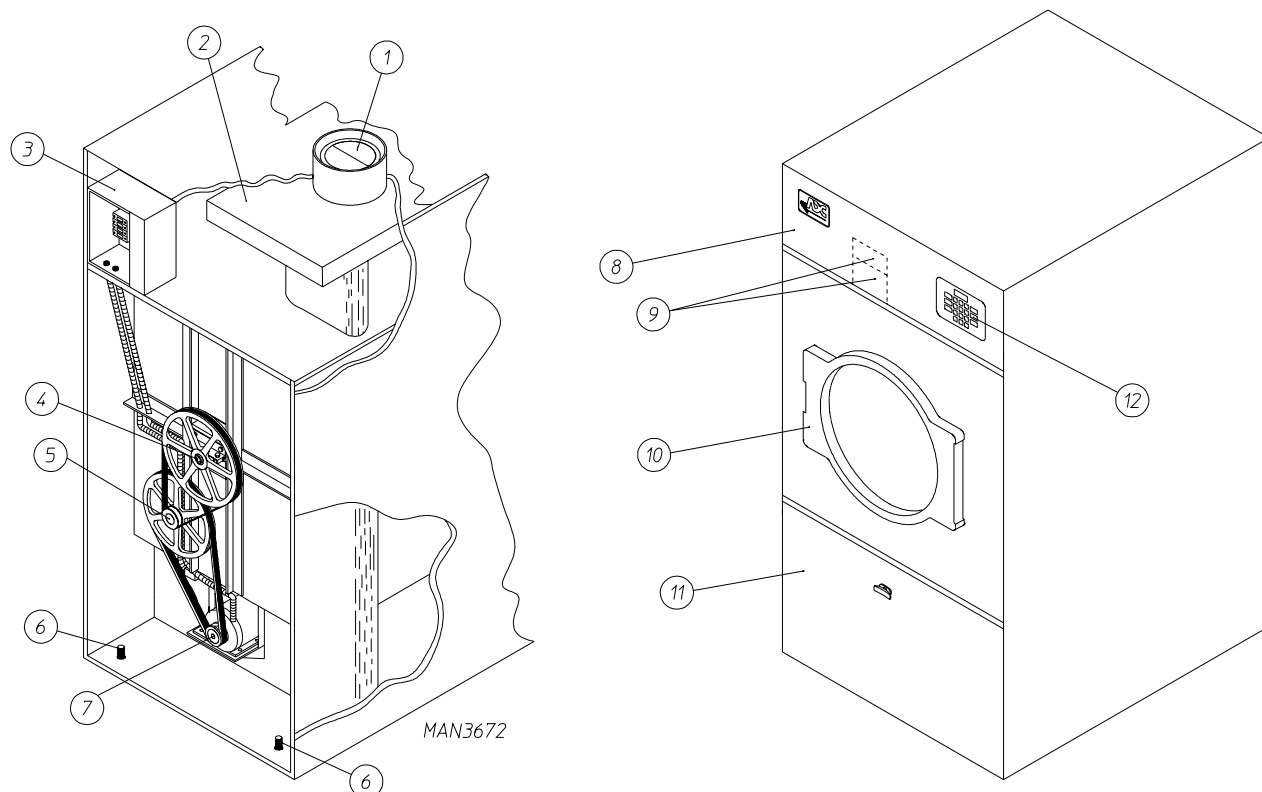
### A. AD-15, 25, 30, Super 30, 50, Super 50 and 75 MAJOR DRYER COMPONENTS



<u>Illus. No.</u>	<u>Description</u>
1	Heating Unit
2	1/8" Compressed Air Supply Inlet (behind Electric Relay Box for Air Damper Steam Units Only)
3*	Electric Service/Relay Box
4	Tumbler Bearing Mount Assembly
5	Idler Bearing Mount Assembly
6	Blower Motor Assembly (30, 50 and 75 Reversing Models Only)
7	Leveling Leg (rear)
8	Drive/Blower Motor Assembly (15, 25 and 30, 50 and 75 Non-Reversing Models)
9	Drive Motor Assembly for 30, 50 and 75 (Reversing Models ONLY)
10	Dryer Exhaust Duct Connection
11	Control (top access) Door Assembly
12	Data Label and Installation Label (located behind Control [servicing] Door)
13	Main (loading) Door
14	Lint Compartment Area (Lint Screen/Filter located behind Door)
15	Controls

\* Electric service connections are made in this box.

## B. **AD-285** MAJOR DRYER COMPONENTS



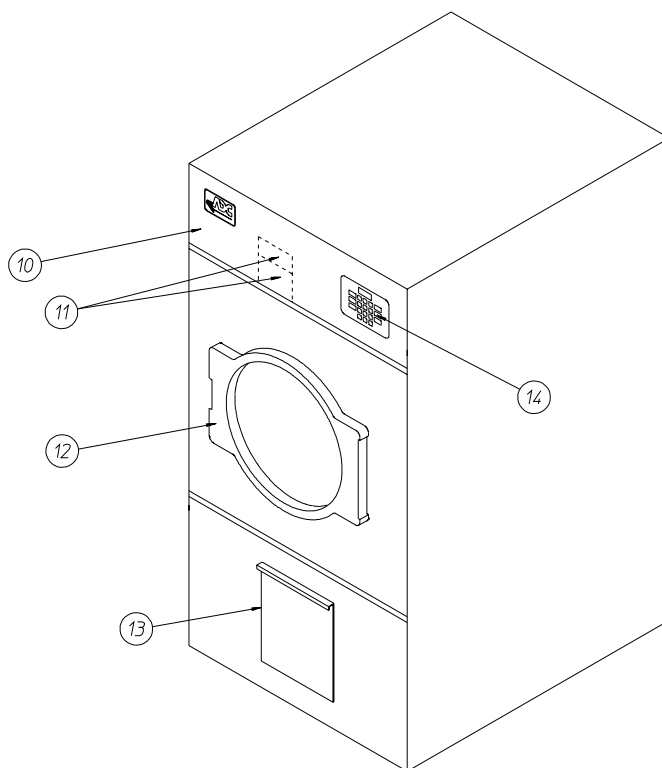
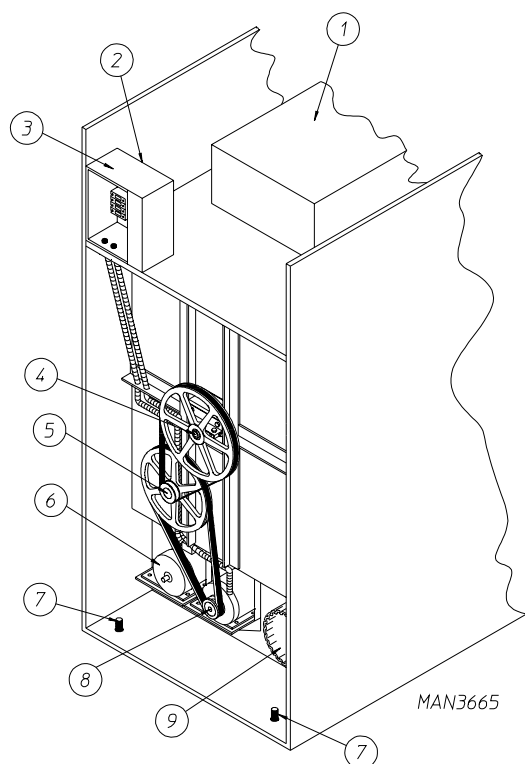
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<u>Illus. No.</u>	<u>Description</u>
1	Dryer Exhaust Duct Connection
2	Heating Unit
3*	Electric Service/Relay Box
4	Tumbler Bearing Mount Assembly
5	Idler Bearing Mount Assembly
6	Leveling Leg (rear)
7	Drive/Blower Motor Assembly
8	Control (top access) Door Assembly
9	Data Label and Installation Label (located behind Control [service] Door)
10	Main (Loading) Door
11	Lint Compartment Area (Lint Screen/Filter) located behind this door.

\* Electric service connections are made in this box.



### C. AD-295/81 MAJOR DRYER COMPONENTS

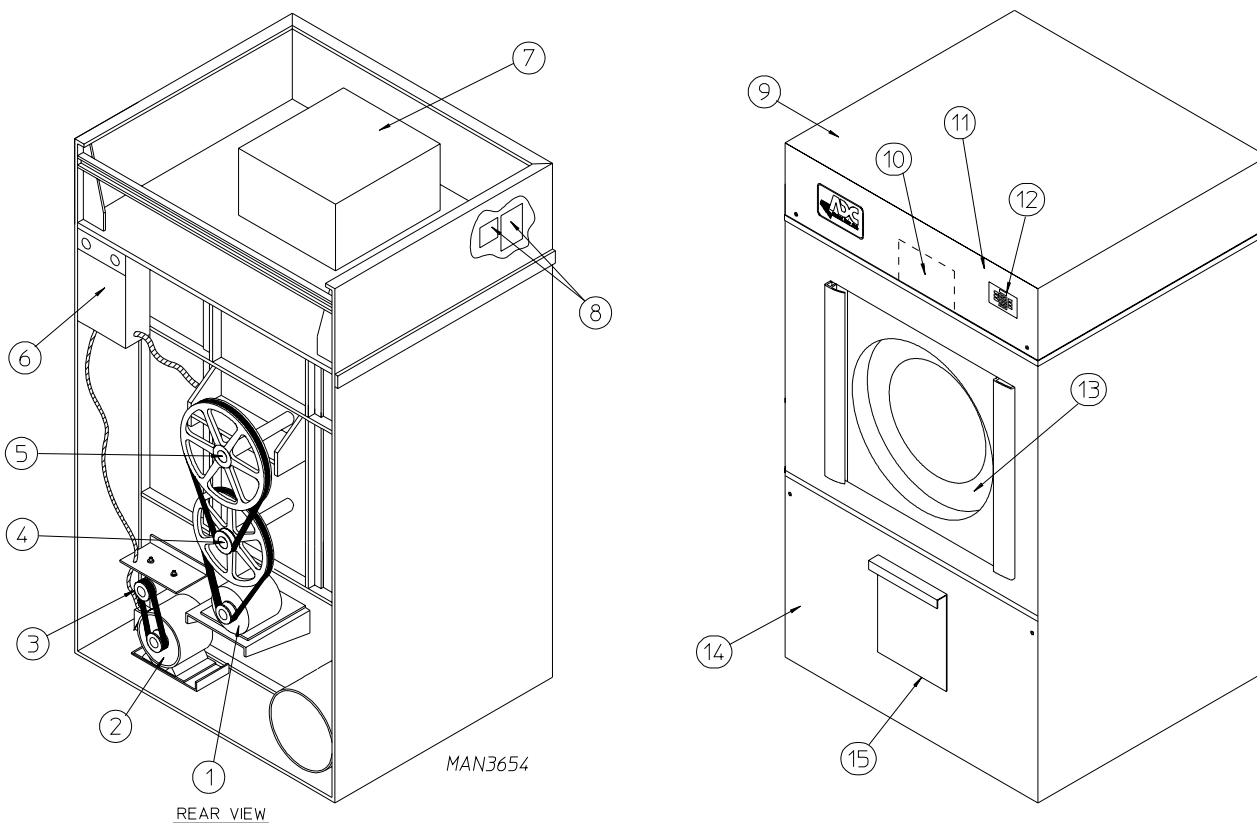



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<u>Illus. No.</u>	<u>Description</u>
1	Heating Unit
2	1/8" Compressed Air Supply Inlet (behind Electric Relay Box for AD-81 Steam Models Only)
3*	Electric Service/Relay Box
4	Tumbler Bearing Mount Assembly
5	Idler Bearing Mount Assembly
6	Blower/Fan Motor Assembly (AD-81 Only)
7	Leveling Leg (rear)
8	Drive Motor Assembly (AD-81 Only)
	NOTE: AD-295 Drive/Blower Motor Assembly located behind lint drawer (illus. 13)
9	Dryer Exhaust Duct Connection
10	Control (top access) Door Assembly
11	Data Label and Installation Label (located behind Control [servicing] Door)
12	Main (loading) Door
13	Lint Drawer

\* Electric service connections are made in this box.

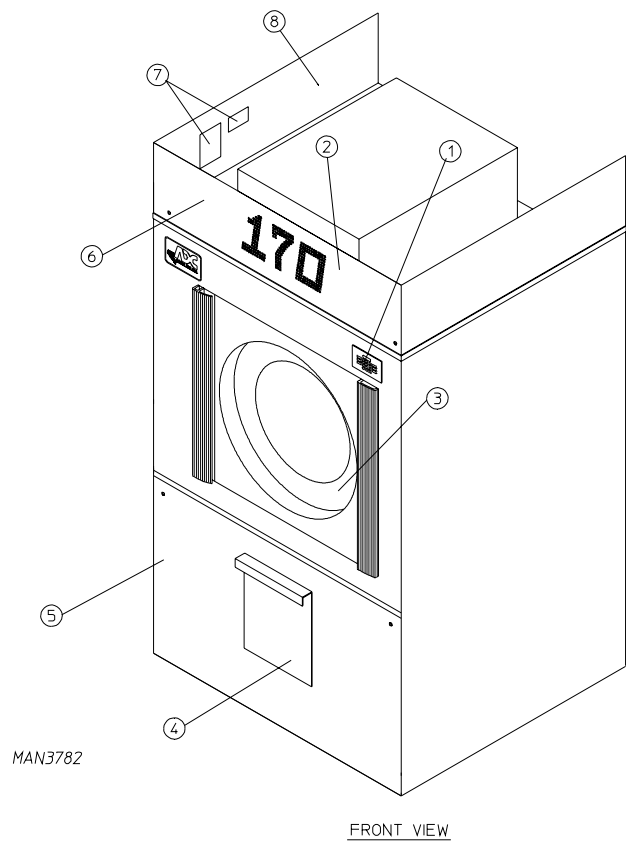
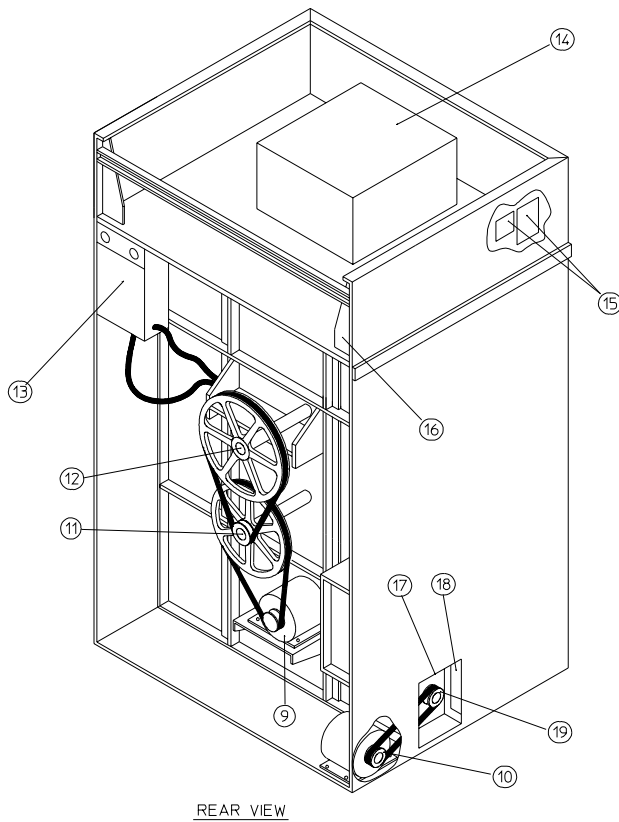
## D. AD-115/120 MAJOR DRYER COMPONENTS



<u>Illus. No.</u>	<u>Description</u>
1	Basket (Drive) Motor Assembly
2	Blower Motor Assembly
3	Impeller (fan/blower) Assembly
4	Idler Bearing Mount Assembly
5	Tumbler Bearing Mount Assembly
6*	Electric Service Relay Box
7	Heating Unit
8	Data Label and Installation Label
9	Top Console (Module) Assembly
10	Wire Diagram (located behind Control Door)
11	Control (top access) Door Assembly
12	Controls
13	Main (loading) Door
14	Lint Compartment Door Assembly
15	Lint (Filter) Drawer Assembly

\* Electric service connections are made in this box.

## E. **AD-170 MAJOR DRYER COMPONENTS**

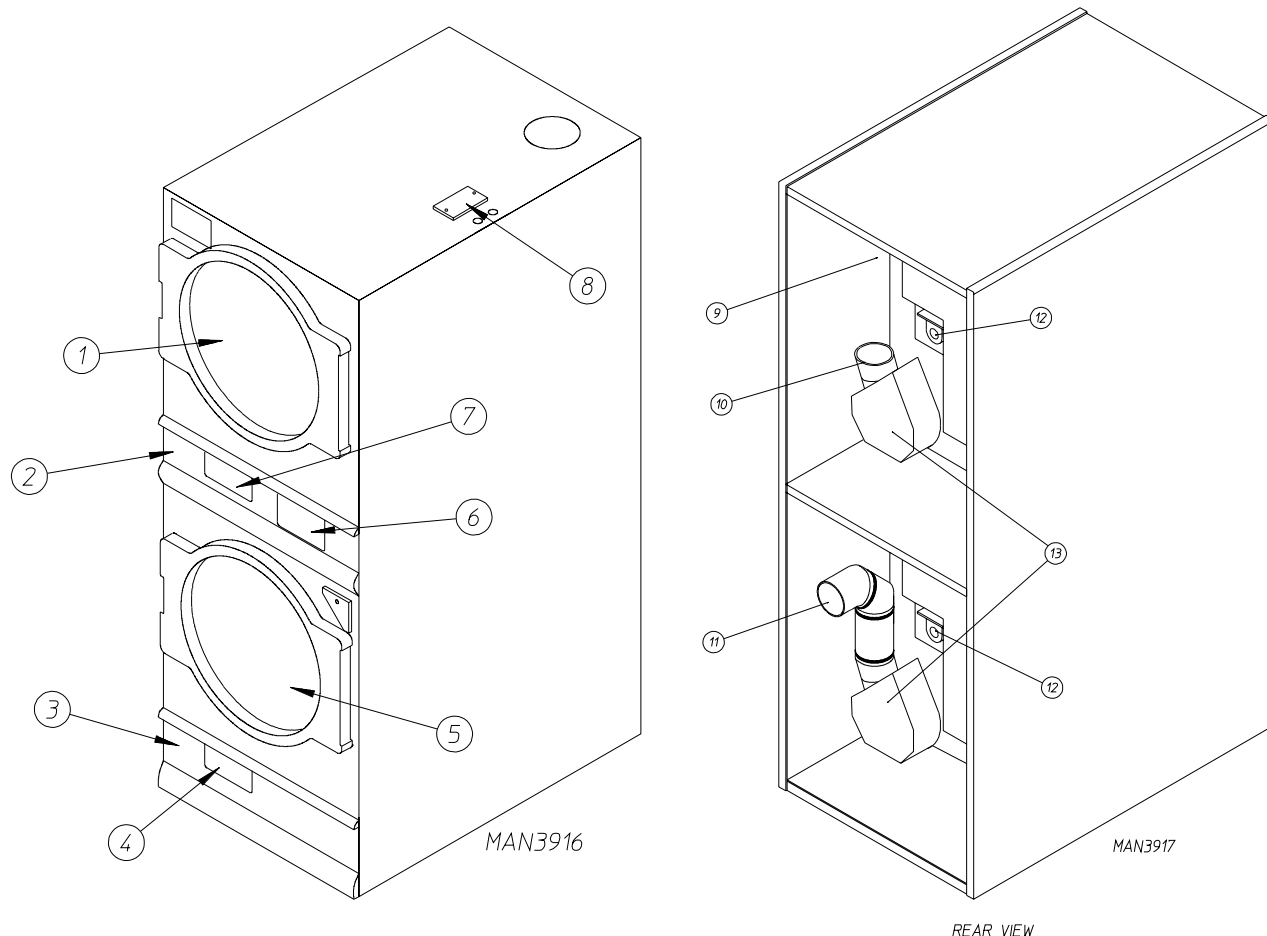


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<u>Illus. No.</u>	<u>Description</u>
1	Controls
2	Control (top access) Door Assembly
3	Main (Loading) Door Assembly
4	Lint (Filter) Drawer Assembly
5	Lint Compartment Door Assembly
6	Wire Diagram (Located Behind Control Door)
7	Data Label and Installation Label
8	Top Console (Module) Assembly
9	Basket (Drive) Motor Assembly
10	Blower Motor Assembly
11	Idler Bearing Mount Assembly
12	Tumbler Bearing Mount Assembly
13*	Electric Service Relay Box
14	Heating Unit
15	Data Label and Installation Label
16	1/8" Compressed Air Supply Inlet (Behind Gusset)
17	Side Access Opening
18	Front Access Opening
19	Impeller (Fan) Assembly

\* Electric service connections are made in this box.

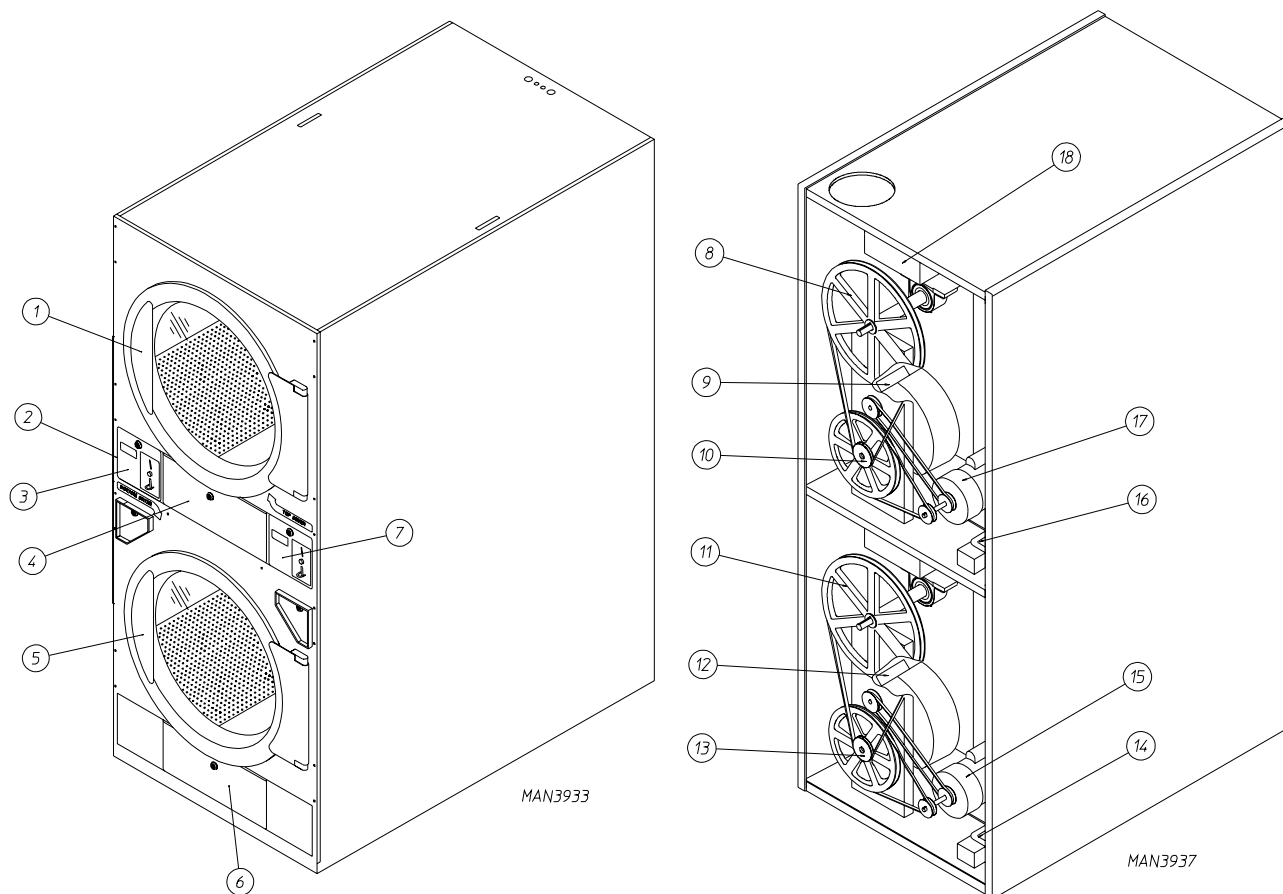
## F. **AD-330 MAJOR DRYER COMPONENTS**



<u>Illus. No.</u>	<u>Description</u>
1	Upper Main Loading Door
2	Heating Unit (Behind Control Door)
	Data Label and Wire Diagram (Behind Control Door)
3	Lower Tumbler Heating Unit (Behind Control Door)
4	Lower Lint (Filter) Basket Assembly
5	Lower Main Loading Door
6	Controls
7	Upper Lint (Filter) Basket Assembly
8*	Electric Service Box
9	Upper Relay/Transformer Box
10	Upper Duct (Flue) Connection
11	Lower Duct (Flue) Connection
12	Tumbler Blaring Assembly
13	Impeller (Fan/Blower) Assembly

\* Electric service connections are made in this box.

## G. **AD-531** MAJOR DRYER COMPONENTS



<u>Illus. No.</u>	<u>Description</u>
1	Upper Tumbler Loading Door
2	Data Label and Installation Label (Located Behind Control Door)
3	Lower Tumbler Controls
4	Upper Lint Drawer/Compartment (Lint Filter)
5	Lower Tumbler Loading Door
6	Lower Lint Drawer/Compartment (Lint Filter)
7	Upper Tumbler Controls
8	Upper Tumbler Bearing Mount Assembly
9	Upper Tumbler Exhaust Duct Connection
10	Upper Idler Bearing Mount Assembly
11	Lower Tumbler Bearing Mount Assembly
12	Lower Tumbler Exhaust Duct Connection
13	Lower Idler Bearing Mount Assembly
14	Lower Tumbler Heating Unit
15	Lower Drive/Blower Motor
16	Upper Tumbler Heating Unit
17	Upper Drive/Blower Motor
18*	Electric Service/Relay Box

\* Electric service connections are made in this box.

# SECTION III

## CLEANING / MAINTENANCE

### A. LINT CLEANING

1. A program and/or schedule **must be** established for periodic inspection, cleaning and removal of lint from various area's of the dryer, as well as throughout the exhaust duct work system. Refer to the installation operators manual included with the dryer for additional details or frequency of cleaning.

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

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

**WARNING:** Dryer *must not be* operated without the lint filter (screen) in place.

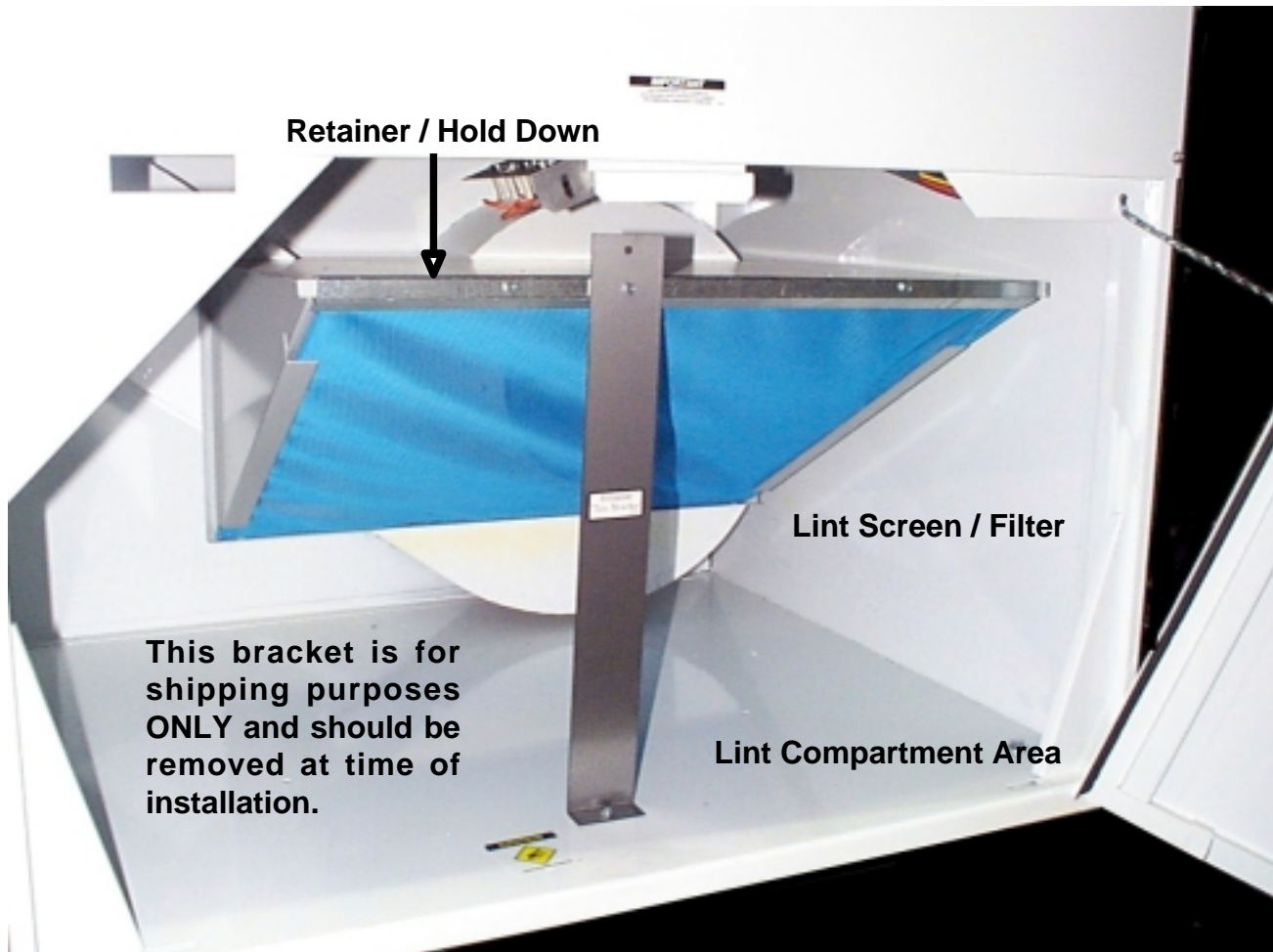
#### 2. Lint Screen/Drawer and Lint Compartment TIME TABLE:

MODEL NO.	LINT SCREEN OR DRAWER	LINT COMPARTMENT CHAMBER
AD-15, 25, 285, 295, 30, 50 and 75	DAILY or BEGINNING OF EACH SHIFT	DAILY
AD-30S, AD-50S, AD-81	EVERY THIRD or FOURTH LOAD	WEEKLY
AD-115, 120, and 170	EVERY THIRD or FOURTH LOAD	WEEKLY
AD-330, AD-531	DAILY or BEGINNING OF EACH SHIFT	DAILY

### 3. Lint Cleaning Procedure.

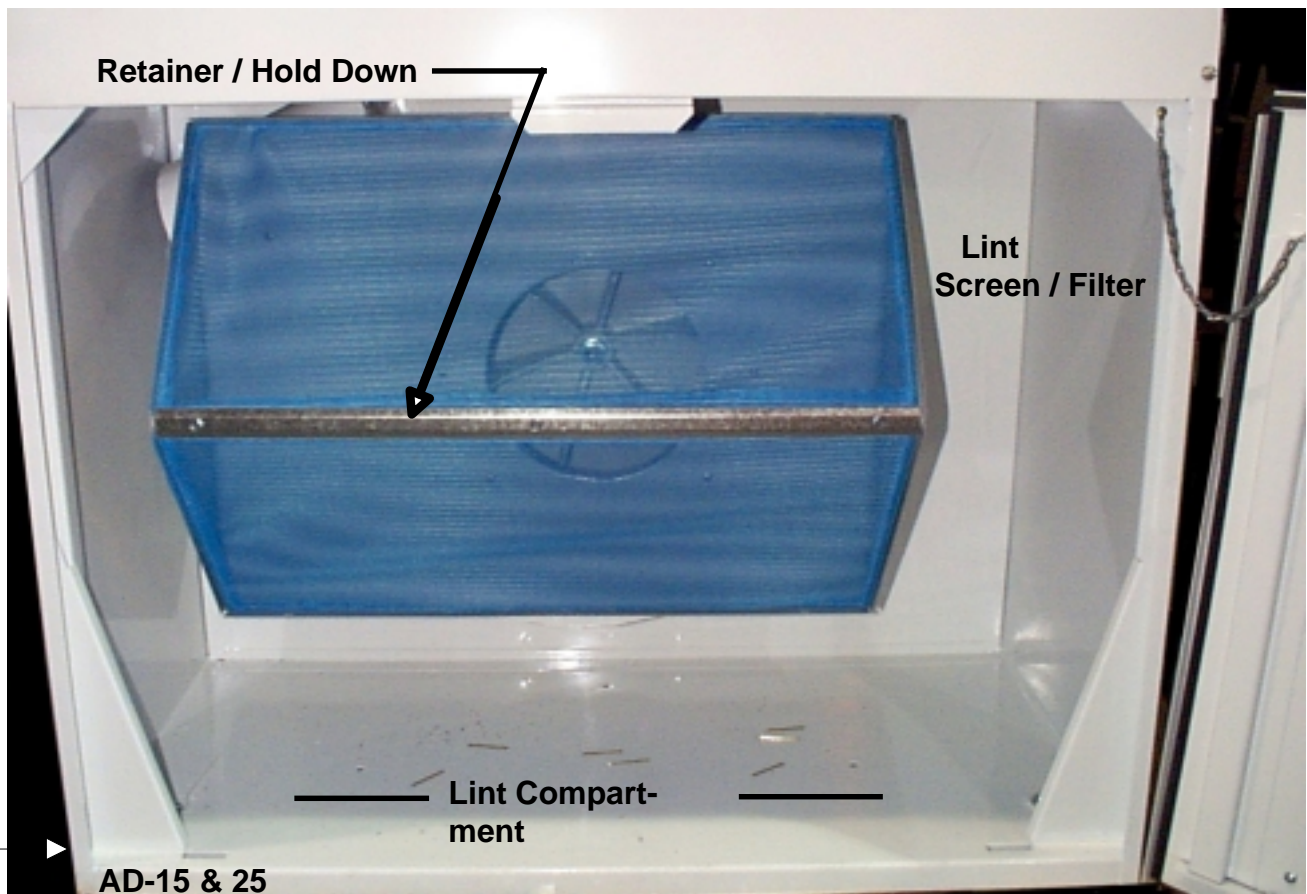
#### a. MODELS 15, 25, 285, 30, 50, Super 30, Super 50 and 75 with LINT SCREEN ...

- 1) Open the lint door.
- 2) Lightly brush or remove lint accumulation from lint screen located at the underside area of the lint trap as well as the top lint screen on models AD-15 and 25. Clean lint from bottom of lint compartment. Lint left in this compartment is drawn back into the screen and will restrict proper air flow.



- 3) Be sure lint screen is not torn. If it is, replace immediately. A torn lint screen allows lint to pass into the duct work system which can create an air restriction and a possible fire hazard.

- 4) To replace lint screen, remove retainer (hold down) and slide screen out. Reverse procedure for installing new screen.



**WARNING:** Dryer *must not be* operated with the lint filter (screen) removed.

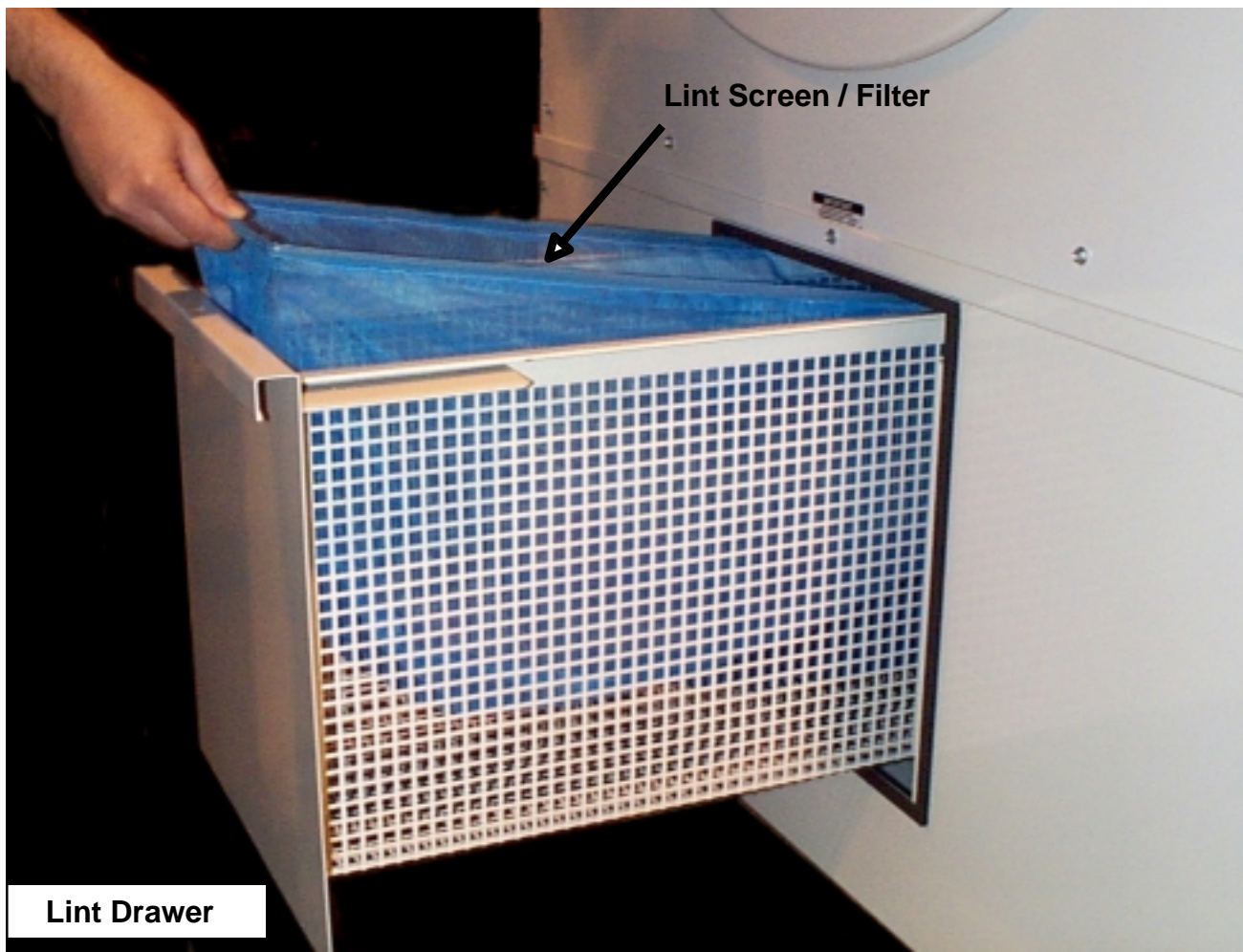
- 5) Close/secure lint door in place.

**NOTE:** Dryer lint door *must be* closed securely in place or heat *will not* activate.

b. MODELS 81, 115, 120, 170 and 295 with LINT DRAWER ...

- 1) Slide lint drawer open.
- 2) For all models other than the AD-295, remove lint screen by grasping front area of screen and lifting upward. Dispose of lint in appropriate receptacle.



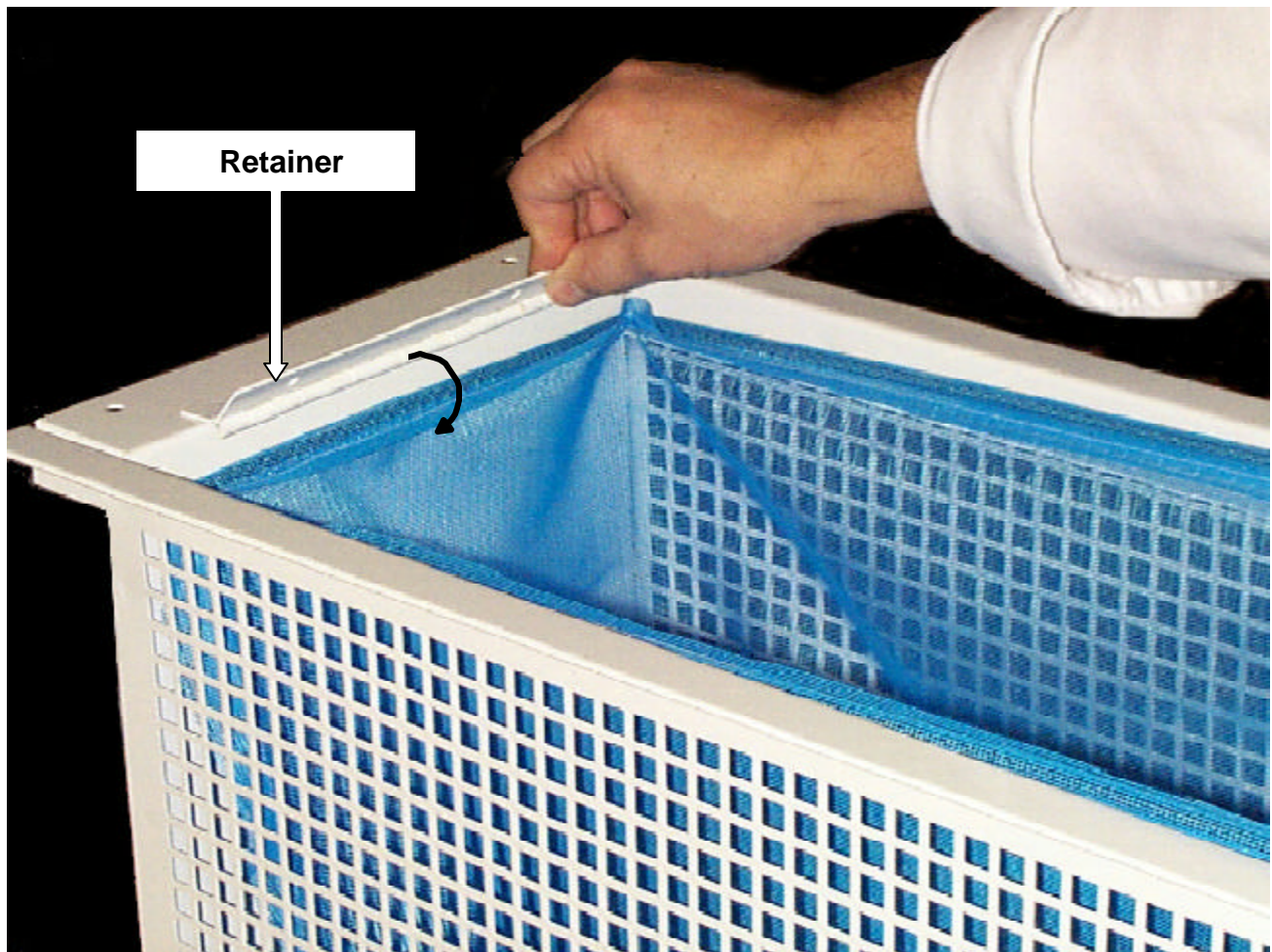


The model AD-295 has a lint drawer but no lint screen. Clean either by removing or vacuuming lint, or remove the lint drawer. Refer to 4 for lint drawer removal. Dispose of lint in appropriate receptacle.

- 3) Be sure lint screen or drawer is not torn. If it is, replace immediately. A torn lint screen allows lint to pass into the duct work system which can create an air restriction and a possible fire hazard.

**WARNING:** Dryer *must not be* operated with the lint filter (screen) removed.

- 4) To remove lint drawer, slide drawer out 2/3rds of the way. Locate retainer at rear top rail of drawer and push retainer towards you and downward. Slide drawer outward from dryer. Reverse procedure to reinstall lint drawer.



- 5) Clean lint from bottom of lint compartment. Lint left in this compartment will pass into the exhaust duct work system and will create a potential fire hazard.
- 6) Close/secure lint drawer in place.

**NOTE:** Dryer lint drawer/basket *must be* closed securely in place or dryer will not start.

c. MODELS with LINT BASKET (AD-330 & AD-531)....

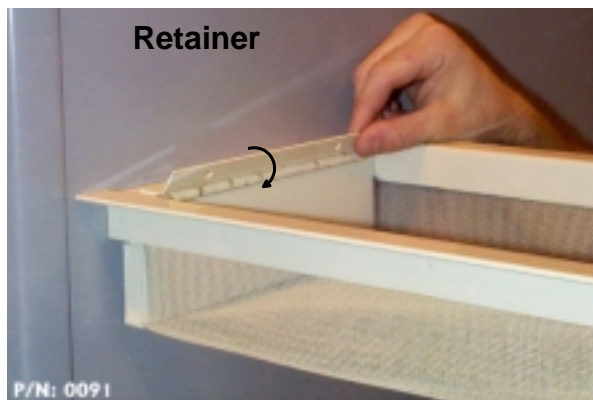
- 1) Slide lint drawer open.



- 2) Clean either by removing or vacuuming lint, or remove the lint basket. Refer to 4 for lint basket removal. Dispose of lint in appropriate receptacle.
- 3) Be sure lint screen or basket is not torn. If it is, replace immediately. A torn lint screen allows lint to pass into the duct work system which can create an air restriction and a possible fire hazard.

**WARNING:** Dryer *must not be* operated with the lint filter (screen) removed.

- 4) To remove lint basket, slide basket out 2/3rds of the way. Locate retainer at rear top rail of basket and push retainer towards you and downward. Slide basket outward from dryer. Reverse procedure to reinstall lint basket.



- 5) Clean lint from bottom of lint compartment. Lint left in this compartment will pass into the exhaust duct work system and will create a potential fire hazard.
- 6) Close/secure lint basket in place.

**NOTE:** Dryer lint basket *must be* closed securely in place or dryer will not start.

## SECTION IV

### GAS INFORMATION

A. Refer to installation/operators manual included with dryer for specific technical piping information etc.

**WARNING:** Failure to comply with the information stated in this addendum and in the installation manual included in the dryer can result in personal injury

**ALL** plumbing connections **must be** made by a competent professional to assure that the gas plumbing installation is adequate and conforms with local and national regulations or codes of the country of destination.

**IMPORTANT:** Dryers manufactured for Germany, Denmark, Iceland, Norway, Netherlands, Luxembourg, Belgium, Finland, Greece and Austria cannot be converted from one family of gas to another.

**IMPORTANT:** If connection to this appliance is made with flexible hose it **must be** suitable for the appliance category in accordance with national installation regulations of the country of destination, and if in doubt the installer must contact the supplier. The manufacturer of this appliance does not recommend the use of flexible gas supply line/hose.

**IMPORTANT:** The appliance **must be** installed in a room or area with an openable window or equivalent form of opening to provide a method of exhausting products of combustion and water vapor outside the dwelling. Each dryer must be provided with makeup air of 6.45 square centimeters per 1.054 megajoule.

The dryer and its individual shut-off valve **must be** disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 4 kPa (.58 psig). The dryer **must be** isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 4 kPa (.58 psig).

**IMPORTANT:** Failure to isolate or disconnect dryer from supply as noted can cause irreparable damage to the gas valves VOIDING THE WARRANTY.

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

The dryer **must be** connected to the type of heat or gas indicated on the dryer data label affixed to the dryer. If this information does not agree with the type of gas available, do not operate the dryer. Contact the **ADC** dealer who sold the dryer or the factory.

The input ratings shown on the dryer data label are for elevations of up to 609.6 meters (2,000 feet), unless elevation requirements of over 609.6 meters (2,000 feet) were specified at the time the dryer was manufactured by **ADC**. The adjustment or conversion of dryers in the field for elevations over 609.6 meters (2,000 feet) are made by changing each burner orifice to appropriate size determined by the exact location elevation. If this conversion is necessary, contact the dealer who sold you the dryer or the **ADC** factory.

## B. Gas Pressures

### 1. Natural Gas

Regulation is controlled by the dryer's gas valve's internal regulator.

### 2. Liquid Propane (L.P.) and Butane

Dryers made for use with L.P. or Butane gas have the gas valve's internal pressure regulator blocked open so that the gas pressure **must be** regulated upstream of the dryer. There is no regulator or regulation (ungoverned) provided and the supply pressure **must be** regulated at the source (i.e. L.P. tank) or an external regulator **must be** added to the dryer.

**WARNING:** This appliance must only be operated with the gas type indicated on the dryer's data plate. If the appliance is converted (gas type changed), a data plate amendment must be obtained from American Dryer Corporation.



### C. Heat Input / Gas Consumption / Orifice (injector) Data

#### 1. NATURAL GAS (G20 - SUPPLY PRESSURE 20 mBAR)

Heating Value:  
1000 (BTU/ft<sup>3</sup>)

Model	Heat Input (±5%)			Gas Consumption (M <sup>3</sup> /H)	Orifice Size		# Of Orifice	Burner Pressure (mBAR)
	(BTU/HR)	(MJ/HR)	(Kw)		(DMS)	(MM)		
15	50,000	52.7	14.65	1.415	41	2.438	2	9.0
25	78,000	82.2	22.85	2.208	31	3.048	2	9.0
285	72,000	75.9	21.10	2.037	33	2.870	2	9.0
295	56,000	59.0	16.41	1.585	28	3.569	1	9.0
30	90,000	94.9	26.37	2.547	30	3.264	2	9.0
SUPER 30	146,000	153.9	42.78	4.132	29	3.454	3	9.0
50	150,000	158.2	43.95	4.245	19	4.216	2	9.0
SUPER 50	165,000	173.9	48.35	4.670	28	3.569	3	9.0
75	200,000	210.9	58.60	5.659	29	3.454	4	9.0
81	270,000	284.7	79.11	7.641	23	3.912	4	9.5
115	343,000	361.6	100.50	9.707	8	5.055	3	9.5
120	375,000	395.4	109.88	10.612	4	5.309	3	9.5
170	550,000	579.9	161.33	15.58	2	5.6	4	9.5
330*	68,000	71.7	19.92	1.924	22	3.988	1	9.0
531*	102,000	107.5	29.89	2.887	10	4.915	1	9.0

\* Information shown is per pocket/basket.

080798EL/cj

#### 2. NATURAL GAS (G25 - SUPPLY PRESSURE 25 mBAR)

Heating Value:  
830 (BTU/ft<sup>3</sup>)

Model	Heat Input (±5%)			Gas Consumption (M <sup>3</sup> /H)	Orifice Size		# Of Orifice	Burner Pressure (mBAR)
	(BTU/HR)	(MJ/HR)	(Kw)		(DMS)	(MM)		
15	50,000	52.7	14.65	1.706	41	2.438	2	12.0
25	78,000	82.2	22.85	2.661	31	3.048	2	12.0
285	72,000	75.9	21.10	2.457	33	2.870	2	12.0
295	56,000	59.0	16.41	1.911	28	3.569	1	12.0
30	90,000	94.9	26.37	3.071	30	3.264	2	12.0
SUPER 30	146,000	153.9	42.78	4.982	29	3.454	3	12.0
50	150,000	158.2	43.95	5.118	19	4.216	2	12.0
SUPER 50	165,000	173.9	48.35	5.630	28	3.569	3	12.0
75	200,000	210.9	58.60	6.824	29	3.454	4	12.0
81	270,000	284.7	79.11	9.213	23	3.912	4	13.7
115	343,000	361.6	100.50	11.703	8	5.055	3	13.7
120	375,000	395.4	109.88	12.795	4	5.309	3	13.7
170	550,000	579.9	161.33	18.766	2	5.6	4	13.7
330*	68,000	71.7	19.92	2.320	22	3.988	1	12.0
531*	102,000	107.5	29.89	3.480	10	4.915	1	12.0

\* Information shown is per pocket/basket.

080798EL/cj

3. BUTANE GAS (G30 - SUPPLY PRESSURE 28-30 mBAR)  
PROPANE GAS (G31 - SUPPLY PRESSURE 37.0 mBAR)

Heating Value:  
G30: 3175 BTU  
G31: 2500 ft<sup>3</sup>

Model	Heat Input (±5%)			Gas Consumption		Orifice Size		# Of Orifice
	(BTU/HR)	(MJ/HR)	(Kw)	G30 (M <sup>3</sup> /H)	G31 (M <sup>3</sup> /H)	(DMS)	(MM)	
15	50,000	52.7	14.65	0.446	0.566	54	1.397	2
25	78,000	82.2	22.85	0.696	0.884	51	1.702	2
285	72,000	75.9	21.10	0.642	0.816	52	1.613	2
295	56,000	59.0	16.41	0.499	0.634	46	2.057	1
30	90,000	94.9	26.37	0.803	1.020	49	1.854	2
SUPER 30	146,000	153.9	42.78	1.302	1.654	48	1.93	3
50	150,000	158.2	43.95	1.338	1.699	42	2.375	2
SUPER 50	165,000	173.9	48.35	1.516	1.869	46	2.057	3
75	200,000	210.9	58.60	1.784	2.266	48	1.93	4
81	270,000	284.7	79.11	2.408	3.059	43	2.261	4
115	343,000	361.6	100.50	3.059	3.886	32	2.946	3
120	375,000	395.4	109.88	3.344	4.248	31	3.048	3
170	550,000	579.9	161.33	4.906	6.230	30	3.264	4
330*	68,000	71.7	19.92	0.607	0.770	43	2.261	1
531*	102,000	107.5	29.89	0.910	1.155	35	2.794	1

\* Information shown is per pocket/basket.

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4 CITY GAS 1a (G110 - SUPPLY PRESSURE 8mBAR) Heating Value 426 (BTU/ft<sup>3</sup>)

MODEL	HEAT INPUT +/- 7-1/2%			GAS CONSUMPTION (M <sup>3</sup> /H)	ORIFICE SIZE		# OF ORIFICE	BURNER PRESSURE (mBAR)
	(BTU/HR)	(MJ/HR)	(Kw)		(DMS)	(MM)		
15	50,000	52.7	14.65	3.324	18	4.305	2	3.0
30	90,000	94.9	26.37	5.983	1	5.791	2	3.0
50	150,000	158.2	43.95	9.972	M	7.493	2	3.0
115	343,000	361.6	100.5	22.803	U	9.347	3	3.0

5 CITY GAS 1b (G120 - SUPPLY PRESSURE 8mBAR) Heating Value 477 (BTU/ft<sup>3</sup>)

Model	Heat Input +/- 7-1/2%			Gas Consumption (M <sup>3</sup> /H)	Orifice Size		# Of Orifice	Burner Pressure (mBAR)
	(BTU/HR)	(MJ/HR)	(Kw)		(DMS)	(MM)		
15	50,000	52.7	14.65	2.969	20	4.089	2	3.0
30	90,000	94.9	26.37	5.344	2	5.613	2	3.0
50	150,000	158.2	43.95	8.906	K	7.137	2	3.0
115	343,000	361.6	100.5	20.365	S	8.839	3	3.0



#### D. Piping / Connections

**ALL** components/materials **must conform** to applicable national installation regulations of the country of destination. It is important that the gas pressure regulators meet applicable pressure requirements and that the gas meters be rated for the total amount of all appliance Btu's being supplied.

The minimum pipe size connection must not be smaller than the size shown in the ***GAS CONNECTION SIZE CHART*** shown in this section. For ease of servicing, the gas supply line of each dryer must have its own shut-off valve.

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

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

**IMPORTANT:** Pipe joint compounds that resist the action of natural and L.P. gases **must be** used.

**IMPORTANT:** Test **ALL** connections for leaks by brushing on a soapy water solution (liquid detergent works well) or a product that is intended for this purpose.

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

GAS CONNECTION SIZE CHART		
MODEL	INCHES	MM
15	.5000	12.70
25	.5000	12.70
285	.5000	12.70
295	.5000	12.70
30	.5000	12.70
SUPER 30	.7500	19.05
50	.5000	12.70
SUPER 50	.7500	19.05
75	.7500	19.05
81	1.0000	25.4001
115	1.0000	25.4001
120	1.0000	25.4001
170	1.5000	38.1000
330*	.5000	12.70
531*	.7500	19.05

\* 2 Connections required (one for each tumbler/basket)

## E. Converting from One Family of Gas to Another

The following pages include information from converting from one type of gas to another. ALL conversions must be performed by a competent professional.

**WARNING:** This appliance must only be operated with the gas type indicated on the dryer's data plate. If the appliance is converted (gas type changed), a data plate amendment must be obtained from American Dryer Corporation.

**IMPORTANT:** Dryers manufactured for Germany, Denmark, Iceland, Norway, Netherlands, Luxembourg, Belgium, Finland, Greece and Austria cannot be converted from one family of gas to another.

**WARNING:** Conversions done improperly can result in a **FIRE or EXPLOSION!**

### 1. Conversion from Natural Gas to Propane (L.P.) or Butane Gas

#### a. Models ADG-15, 25, 30, 50, Super 30, Super 50 and 75.

The following conversion allows the dryer to be operated with either Propane (L.P.) Gas or Butane Gas. The use of gas valve kit (**ADC** P/N 140413) disables the internal regulator of the gas valve. Therefore, the gas supply is ungoverned and an external regulator **must be** provided at the source of the supply (example L.P. tank) or the dryer. The P/N: 140411 Kit includes all the parts necessary for conversion (of the gas valve only) as well as related instructions.

#### Parts required for conversion:

<u>Description</u>	<u>ADC P/N</u>	<u>QTY.</u>
Valve conversion kit	140413	1
Burner orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.	
L.P. (Propane) Conversion label	112011	1

#### Instructions:

- 1) Disconnect electrical power to the dryer.
- 2) Close all shut-off valves in dryer gas supply line.
- 3) Disconnect gas valve wiring.

**NOTE:** Identify location of each wire for correct reinstallation.

- 4) Break union connection (nut) between union shut-off and gas valve.
- 5) Loosen and remove screws from brackets holding the gas valve/manifold assembly to the burner box.
- 6) Remove gas valve/manifold assembly from dryer.
- 7) Unscrew main burner orifices (injectors) and replace with correct size and quantity of orifice (injector) as noted in **Section IV, C** of this addendum.

**NOTE:** Use extreme care when removing and replacing orifices (injectors). These orifices (injectors) are made of brass which are easily damaged.

8) Convert gas valve using kit **ADC** P/N: 140413 which includes the following instructions.

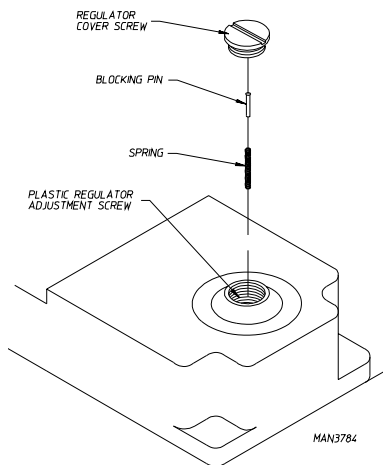


FIGURE 1. 36C MODEL

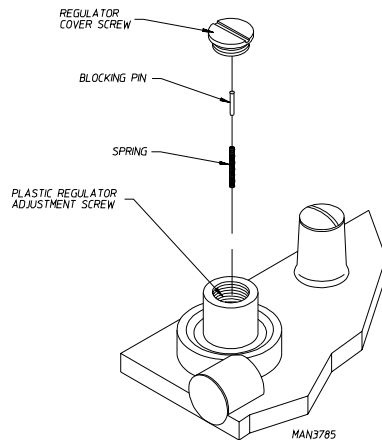


FIGURE 2. 36E MODEL

- a) Remove regulator cover screw.
- b) Insert the spring (provided in kit) through the hole in the center of the plastic regulator adjustment screw.
- c) Insert the blocking pin (provided in kit) down into the center of the spring.
- d) Replace the regulator cover screw.
- e) Attach the **WARNING** label (provided in kit) to the gas valve where it can be readily seen. Also attach the small round L.P. label to the top of the regulator cover screw.

9) Reverse procedure for reinstalling valve manifold assembly to dryer.

10) Regulate (govern) gas externally to correct gas pressure ....

#### TYPE OF GAS:

	BUTANE	PROPANE
Supply Pressure (mbar)	28.0 - 30.0	37.0

11) Open **ALL** shut-off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

12) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.

13) Affix Conversion label (**ADC** P/N: 112011) to the dryers Data Label.

b. Models ADG-115 and ADG-120ES Only.

The following conversion allows the dryer to be operated with either Propane (L.P.) Gas or Butane Gas. The use of gas valve kit (**ADC** P/N: 140029) disables the internal regulator of the gas valve. Therefore, the gas supply is ungoverned and an external regulator **must be** provided at the source of the supply (example L.P. tank) or the dryer. The P/N: 140029 Kit includes all the parts necessary for conversion (of the gas valve only) as well as related instructions.

Parts required for conversion:

<u>Description</u>	<u>ADC P/N</u>	<u>QTY.</u>
Valve conversion kit	140029	1
Burner orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size.	3
Burner Baffle	332256	1
Baffle mounting screws	150309	5
L.P. (Propane) Conversion label	112011	1

Instructions:

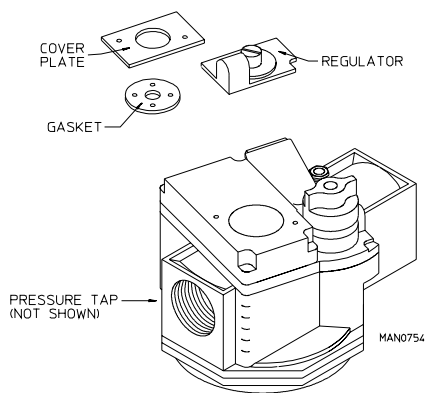
- 1) Disconnect electrical power to the dryer.
- 2) Close **ALL** shut-off valves in dryer gas supply line.
- 3) Disconnect gas valve wiring.

**NOTE:** Identify location of each wire for correct reinstallation.

- 4) Remove HSI Module/Mounting Bracket from console base.
- 5) Break union connection (nut) between union shut off and gas valve assembly.
- 6) Loosen and remove screws from brackets holding the gas valve/manifold assembly to the burner box.
- 7) Remove gas valve/manifold assembly from dryer.
- 8) Unscrew main burner orifice (injector) and replace with correct size orifices (injectors) as noted in **Section IV, C** of this addendum.

**NOTE:** Use extreme care when removing and replacing orifices (injectors). These orifices (injectors) are made of brass which are easily damaged.

- 9) Convert gas valve using kit **ADC P/N: 140029** which includes the following instructions.
  - a) Partially depress and turn Gas Cock Dial to “OFF”



b) Remove:

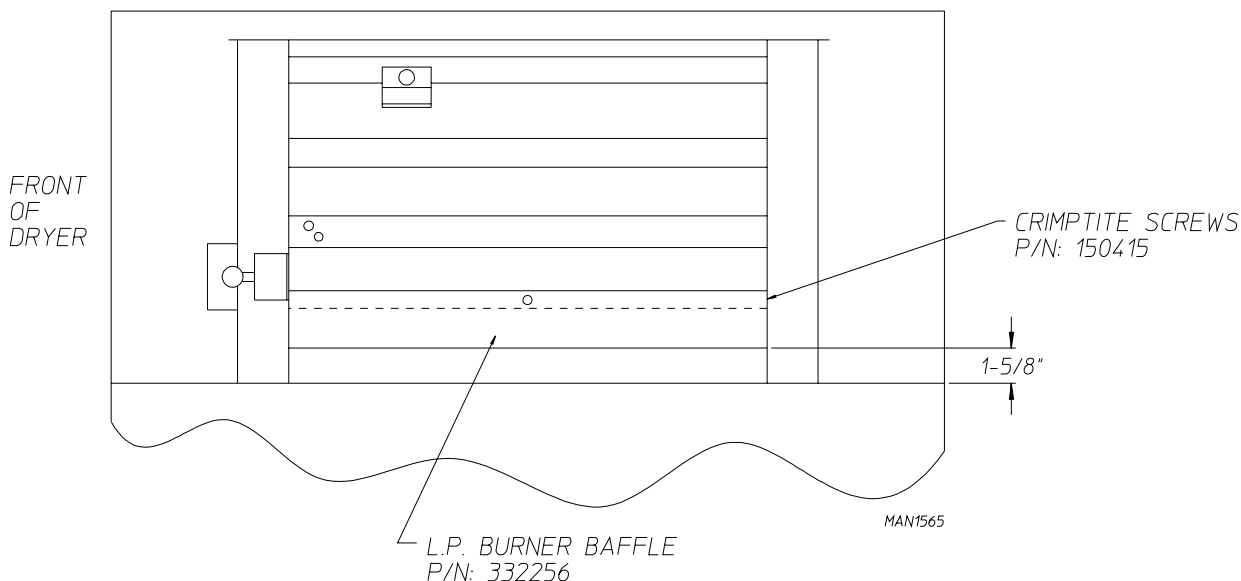
1. Two screws through regulator.
2. Regulator.
3. Gasket.

c) Install gasket, cover plate and 2 screws from kit provided.

d) Turn gas cock to "ON" position.

10) Reverse procedure for reinstalling valve manifold assembly to dryer.

11) Install Burner Baffle (ADC P/N: 332256). To install Baffle, position the baffle on the lower right hand side of the burner. Position the baffle so that there is approximately 1-5/8 inches from the



bottom of the baffle to the inner top (refer to illustration below). Secure the baffle using five (5) ADC P/N: 150414 screws through the holes in the baffle into the burner box.

12) Open **ALL** shut off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

13) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.

14) Affix Conversion label (ADC P/N: 112011) to the dryers Data Label.

c. Models ADG-170SE Only.

The following conversion allows the dryer to be operated with either Propane (L.P.) Gas or Butane Gas. The use of gas valve kit (ADC P/N: 140029) disables the internal regulator of the gas valve. Therefore, the gas supply is ungoverned and an external regulator **must be** provided at the source of the supply (example L.P. tank) or the dryer. The P/N: 140029 Kit includes all the parts necessary for conversion (of the gas valve only) as well as related instructions.

Parts required for conversion:

<u>Description</u>	<u>ADC P/N</u>	<u>QTY.</u>
Valve conversion kit	140029	1
Burner orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size.	4
Burner Baffle	332256	1
Baffle mounting screws	150309	5
L.P. (Propane) Conversion label	112011	1

Instructions:

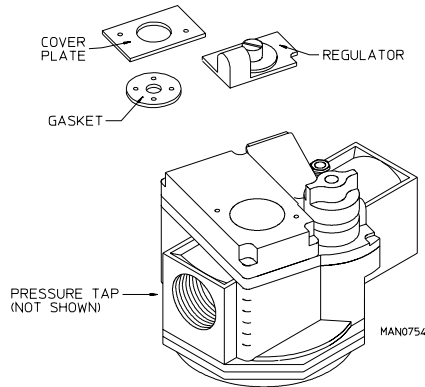
- 1) Disconnect electrical power to the dryer.
- 2) Close **ALL** shut-off valves in dryer gas supply line.
- 3) Disconnect gas valve wiring.

**NOTE:** Identify location of each wire for correct reinstallation.

- 4) Remove HSI Module/Mounting Bracket from console base.
- 5) Break union connection (nut) between union shut off and gas valve assembly.
- 6) Loosen and remove screws from brackets holding the gas valve/manifold assembly to the burner box.
- 7) Remove gas valve/manifold assembly from dryer.
- 8) Unscrew main burner orifice (injector) and replace with correct size orifices (injectors) as noted in **Section IV, C** of this addendum.

**NOTE:** Use extreme care when removing and replacing orifices (injectors). These orifices (injectors) are made of brass which are easily damaged.

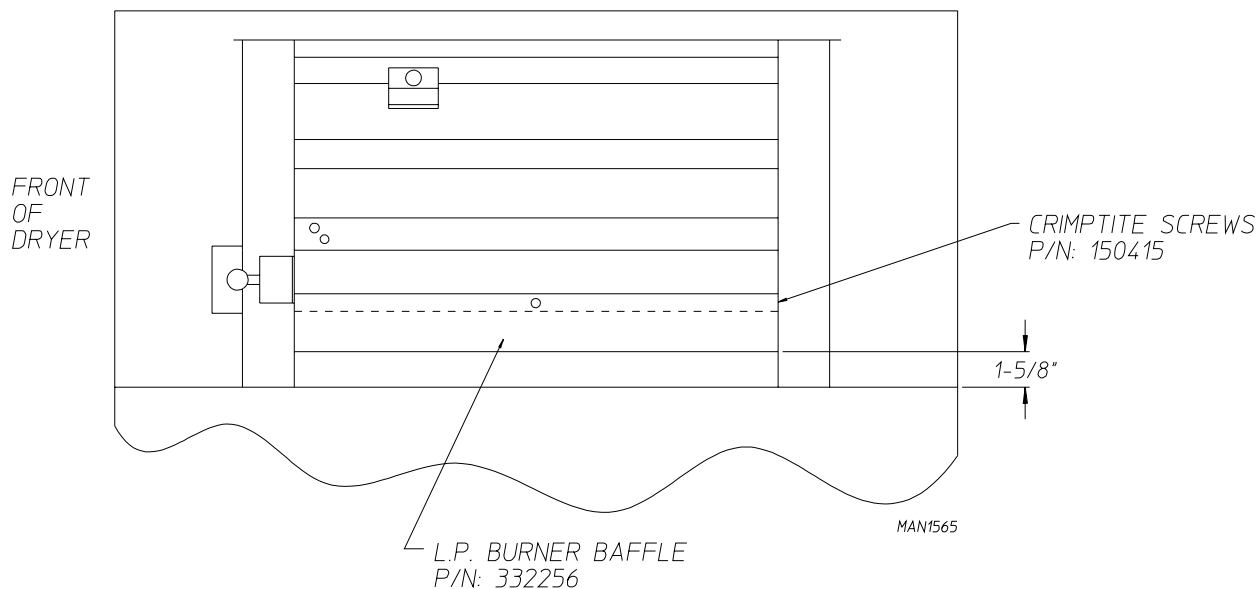
9) Convert gas valve using kit **ADC P/N: 140029** which includes the following instructions.



- a) Partially depress and turn Gas Cock Dial to "OFF"
- b) Remove:
  1. Two screws through regulator.
  2. Regulator.
  3. Gasket.
- c) Install gasket, cover plate and 2 screws from kit provided.
- d) Turn gas cock to "ON" position.

10) Reverse procedure for reinstalling valve manifold assembly to dryer.

11) Install Burner Baffle (**ADC P/N: 332256**). To install Baffle, position the baffle on the lower right hand side of the burner. Position the baffle so that there is approximately 1-5/8 inches from the bottom of the baffle to the inner top (refer to illustration below). Secure the baffle using five (5) **ADC P/N: 150414** screws through the holes in the baffle into the burner box.



12) Open **ALL** shut off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

13) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.

14) Affix Conversion label (**ADC P/N: 112011**) to the dryers Data Label.

d. Models ADG-330

The following conversion allows the dryer to be operated with either L.P. Gas or Butane Gas. The use of gas valve kit (**ADC** P/N: 140413) disables the internal regulator of the gas valve. Therefore, the gas supply is ungoverned and an external regulator **must be** provided at the source of the supply (example L.P. tank) or the dryer. The P/N: 140413 Kit includes all the parts necessary for conversion (of the gas valve only) as well as related instructions.

Parts required for conversion:

<u>Description</u>	<u>ADC P/N</u>	<u>QTY.</u>
Valve conversion kit	140413	2*
Burner orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.	
L.P. (Propane) Conversion label	112011	2

\* This includes one for each pocket/tumbler

Instructions:

- 1) Disconnect electrical power to the dryer.
- 2) Close **ALL** shut-off valves (for both top and bottom basket/tumbler) in dryer gas supply line.

<b>IMPORTANT:</b> The following procedures must be performed on both top and bottom tumblers/baskets.
---

- 3) Break union connection (nut) between union shut off and gas valve assembly.
- 4) Pull out gas valve train assembly a 1/4 of the way out. Disconnect the gas valve harness power connector at the top of the assembly.
- 5) Gently pull/remove the gas valve train assembly from the dryer.

<b>IMPORTANT:</b> When removing the gas valve train assembly, be careful not to snag or damage the gas valve train wiring disconnected in step 4.
---

- 6) With the gas train assembly removed from the dryer, remove the two (2) sets of nuts securing the manifold bracket to the gas valve train slide.
- 7) Pull manifold/valve assembly back slightly so the burner orifice (injector) is exposed.



- 8) Unscrew burner orifice (injector) and replace with the correct size L.P. orifice (injector) as noted in **Section IV, C** of this addendum.

**IMPORTANT:** Use extreme care when removing and replacing orifice (injector). This orifice is made of brass and is easily damaged.

- 9) Reinstall the valve/manifold assembly by reversing steps 6 through 8.
- 10) Convert gas valve using kit **ADC P/N: 140413** which includes the following instructions.

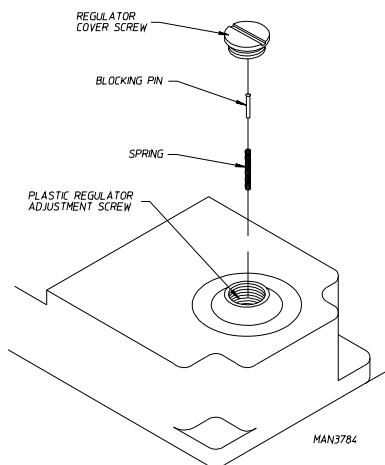


FIGURE 1 36C MODEL

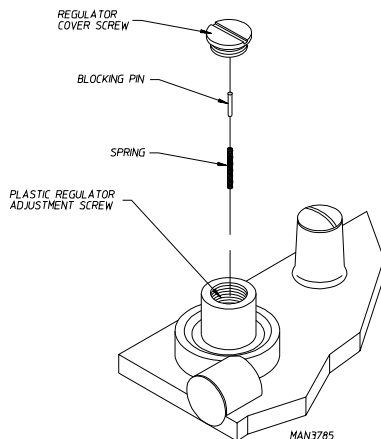


FIGURE 2 36E MODEL

- Remove regulator cover screw.
- Insert the spring (provided in kit) through the hole in the center of the plastic regulator adjustment screw.
- Insert the blocking pin (provided in kit) down into the center of the spring.
- Replace the regulator cover screw.
- Attach the **WARNING** label (provided in kit) to the gas valve where it can be readily seen. Also, attach the small round L.P. label to the top of the regulator cover screw.

- 11) Reverse procedure for reinstalling gas valve train assembly to dryer.
- 12) Regulate (govern) gas externally to correct gas pressure ...

*Type of Gas:*

	BUTANE	PROPANE
Supply Pressure (mBAR)	28.0 - 30.0	37.0

- 13) Open **ALL** shut-off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

- 14) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.
- 15) Affix Conversion label (**ADC P/N: 112011**) to the dryers Data Label.

e. Models ADG-531

The following conversion allows the dryer to be operated with either L.P. Gas or Butane Gas. The use of gas valve kit (**ADC** P/N: 140413) disables the internal regulator of the gas valve. Therefore, the gas supply is ungoverned and an external regulator **must be** provided at the source of the supply (example L.P. tank) or the dryer. The P/N: 140413 Kit includes all the parts necessary for conversion (of the gas valve only) as well as related instructions.

Parts required for conversion:

<u>Description</u>	<u>ADC P/N</u>	<u>QTY.</u>
Valve conversion kit	140413	2*
Burner orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.	
L.P. (Propane) Conversion label	112011	2

\* This includes one for each pocket/tumbler

Instructions:

- 1) Disconnect electrical power to the dryer.
- 2) Close **ALL** shut-off valves (for both top and bottom basket/tumbler) in dryer gas supply line.

<b>IMPORTANT:</b> The following procedures must be performed on both top and bottom tumblers/ baskets.
--

- 3) Break union connection (nut) between union shut off and gas valve.
- 4) Remove screws and nuts securing gas train to the dryer cabinet.
- 5) Gently pull/remove the gas valve train assembly from the burner tube just enough to expose the burner orifice (injector).
- 6) Unscrew burner orifice (injector) and replace with the correct size L.P. orifice (injector) as noted in **Section IV, C** of this addendum.

<b>IMPORTANT:</b> Use extreme care when removing and replacing orifice (injectors). This orifice (injector) is made of brass and is easily damaged.
---

7) Convert gas valve using kit **ADC P/N: 140413** which includes the following instructions.

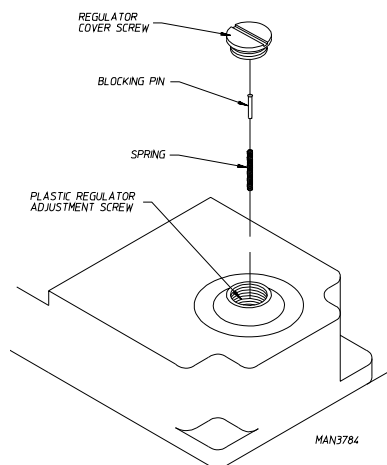


FIGURE 1. 36C MODEL

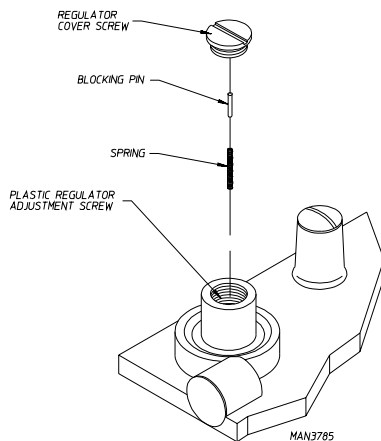


FIGURE 2. 36E MODEL

- a) Remove regulator cover screw.
- b) Insert the spring (provided in kit) through the hole in the center of the plastic regulator adjustment screw.
- c) Insert the blocking pin (provided in kit) down into the center of the spring.
- d) Replace the regulator cover screw.
- e) Attach the **WARNING** label (provided in kit) to the gas valve where it can be readily seen. Also, attach the small round L.P. label to the top of the regulator cover screw.

8) Reverse procedure for reinstalling gas valve train assembly to dryer.

9) Regulate (govern) gas externally to correct gas pressure ...

*Type of Gas:*

	BUTANE	PROPANE
Supply Pressure (mBAR)	28.0 - 30.0	37.0

10) Open **ALL** shut-off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

11) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.

12) Affix Conversion label (**ADC P/N: 112011**) to the dryers Data Label.

f. Models ADG-81 ONLY

The following conversion allows the dryer to be operated with either Propane (L.P.) Gas or Butane Gas. The use of gas valve kit (ADC P/N: 140029) disables the internal regulator of the gas valve. Therefore, the gas supply is ungoverned and an external regulator **must be** provided at the source of the supply (example L.P. tank) or the dryer. The P/N: 140029 Kit includes all the parts necessary for conversion (of the gas valve only) as well as related instructions.

Parts required for conversion:

<u>Description</u>	<u>ADC P/N</u>	<u>QTY.</u>
Valve conversion kit	140029	1
Burner orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.	
Burner Baffle	332256	1
L.P. (Propane) Conversion label	112011	1

Instructions:

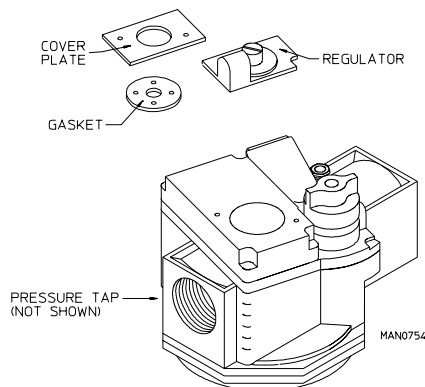
- 1) Disconnect electrical power to the dryer.
- 2) Close **ALL** shut-off valves in dryer gas supply line.
- 3) Disconnect gas valve wiring.

**NOTE:** Identify location of each wire for correct reinstallation.

- 4) Break union connection (nut) between union shut off and gas valve assembly.
- 5) Loosen and remove screws from brackets holding the gas valve/manifold assembly to the burner box.
- 6) Remove gas valve/manifold assembly from dryer.
- 7) Unscrew main burner orifice (injector) and replace with correct size orifices (injectors) as noted in **Section IV, C** of this addendum.

**NOTE:** Use extreme care when removing and replacing orifices (injectors). These orifices (injectors) are made of brass which are easily damaged.

8) Convert gas valve using kit **ADC** P/N: 140029 which includes the following instructions.



- a) Partially depress and turn Gas Cock Dial to “OFF”
- b) Remove:
  1. Two screws through regulator.
  2. Regulator.
  3. Gasket.
- c) Install gasket, cover plate and 2 screws from kit provided.
- d) Turn gas cock to “ON” position.

9) Reverse procedure for reinstalling valve manifold assembly to dryer.

10) Regulate (govern) gas externally to correct gas pressure ...

*Type of Gas:*

	BUTANE	PROPANE
Supply Pressure (mBAR)	28.0 - 30.0	37.0

11) Open **ALL** shut-off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

12) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.

13) Affix Conversion label (**ADC** P/N: 112011) to the dryers Data Label.

## 2. Conversion from Propane (L.P.) or Butane gas to Natural gas

When converting from propane (G31) or butane (G30) gas to natural (G20 or G25) gas, the supply and manifold pressures must be changed to the pressures as outlined in Section IV, items C 1 and 2 of this manual.

**WARNING:** If the appliance is converted (gas type changed), a data plate amendment must be obtained from American Dryer Corporation.

### a. Models ADG-15, 25, 30, 50, Super 30, Super 50 and 75.

The following conversion allows the dryer to be operated with Natural Gas. A slight modification has to be done to the gas valve so that the internal regulator is operatable.

#### Parts required for conversion:

<u>Description</u>	<u>ADC P/N</u>	<u>QTY.</u>
Burner orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.	

#### Instructions:

- 1) Disconnect electrical power to the dryer.
- 2) Close **ALL** shut-off valves in dryer gas supply line.
- 3) Disconnect gas valve wiring.

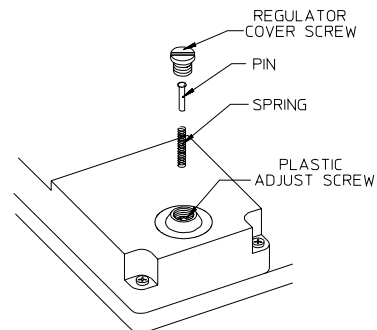
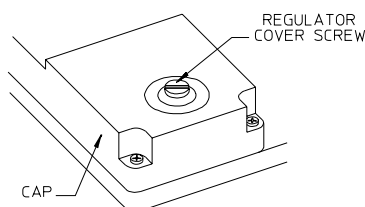
**NOTE:** Identify location of each wire for correct reinstallation.

- 4) Break union connection (nut) between union shut off and gas valve.
- 5) Loosen and remove screws from brackets holding the gas valve/manifold assembly to the burner box.
- 6) Remove gas valve/manifold assembly from dryer.
- 7) Unscrew main burner orifices (injectors) and replace with correct size and quantity of orifice (injector) as noted in **Section IV, C** of this addendum.

**NOTE:** Use extreme care when removing and replacing orifices (injectors). These orifices (injectors) are made of brass which are easily damaged.

### 8) Convert gas valve

- a) Remove regulator cover screw (Refer to illustration).
- b) Remove the spring and pin from the regulator (Refer to illustration).
- c) Install regulator cover screw.
- d) Remove the "L.P. Caution label" from the gas valve.



MAN0753

- 9) Reverse procedure for reinstalling valve manifold assembly to dryer.

- 10) Open all shut-off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

- 11) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to ensure proper operation.
- 12) With dryer operating, check the manifold gas pressure at the outlet (manifold) side of the gas valve.

**TYPE OF GAS NATURAL:**

Supply Pressure (mbar)      See Section IV, items C 1 and 2.  
 Manifold Pressure (mbar)

To adjust gas valve internal regulator, remove regulator cover screw. With a small slotted screw driver adjust regulator plastic adjustment screw. Clockwise to increase manifold pressure. Counterclockwise to decrease manifold pressure.

**b. Models ADG-115 and ADG-120ES Only.**

The following conversion allows the dryer to be operated with Natural Gas. The existing L.P. gas valve cannot be converted and must be replaced with a Natural gas valve.

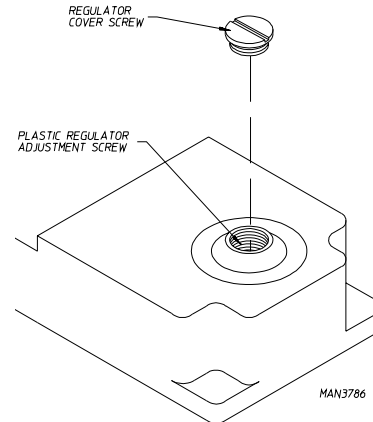
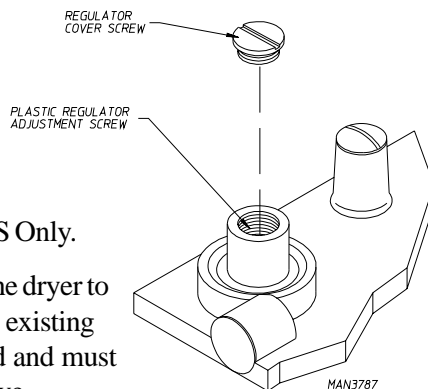


FIGURE 2 36E MODEL AND ROBERT SHAW UNITROL 7000

FIGURE 1 36C MODEL

**Parts required for conversion:**

<u>Description</u>	<u>ADC P/N:</u>	<u>QTY.</u>
Gas Valve	140028	1
Burner orifices (Injectors) See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.		

**Instructions:**

- 1) Disconnect electrical power to the dryer.
- 2) Close all shut-off valves in dryer gas supply line.
- 3) Disconnect gas valve wiring.

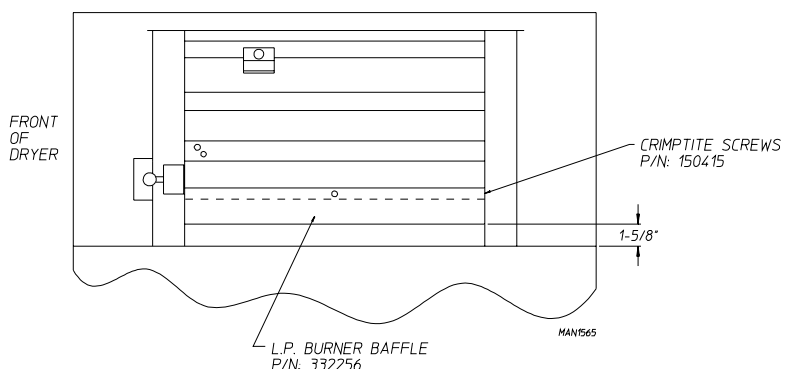
**NOTE:** Identify location of each wire for correct reinstallation.

- 4) Remove HSI Module/Mounting Bracket from console base.
- 5) Break union connection (nut) between union shut off and gas valve assembly.
- 6) Loosen and remove screws from brackets holding the gas valve/manifold assembly to the burner box.
- 7) Remove gas valve/manifold assembly from dryer.
- 8) Remove plumbing and manifold from L.P. gas valve and installation on to Natural gas valve provided.

- 9) Unscrew main burner orifice (injector) and replace with correct size orifices (injectors) as noted in **Section IV, C** of this addendum.

**NOTE:** Use extreme care when removing and replacing orifices (injectors). These orifices (injectors) are made of brass which are easily damaged.

- 10) Reverse procedure for reinstalling valve manifold assembly to dryer.
- 11) Remove Burner Baffle (**ADC** P/N: 332256) by removing the five (5) screws securing the baffle to the burner box (Refer to illustration).



- 12) Open all shut off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

- 13) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.
- 14) With the dryer operating, check the manifold gas pressure at the outlet (manifold) side of the gas valve.

TYPE OF GAS NATURAL:

Supply Pressure (mbar)

Manifold Pressure (mbar)

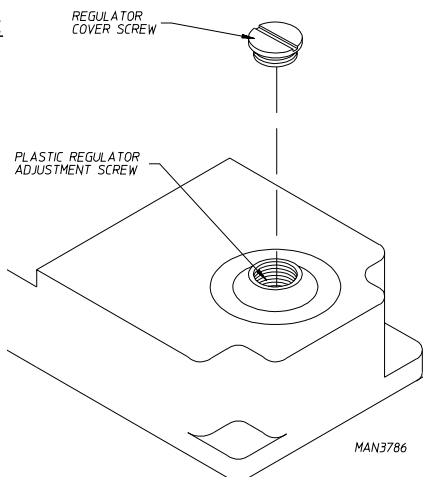


FIGURE 1. 36C MODEL

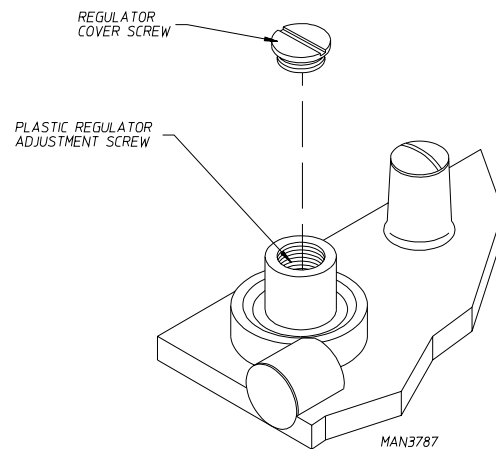


FIGURE 2. 36E MODEL AND  
ROBERT SHAW UNITROL 7000

To adjust gas valve internal regulator, remove regulator cover screw. With a small slotted screw driver adjust regulator plastic adjustment screw. Clockwise to increase manifold pressure. Counterclockwise to decrease manifold pressure.



c. Model ADG-170 Only.

The following conversion allows the dryer to be operated with Natural Gas. The existing L.P. gas valve cannot be converted and **must be** replaced with a Natural gas valve.

Parts required for conversion:

<u>Description</u>	<u>ADC P/N:</u>	<u>QTY.</u>
Gas Valve (Natural)	140028	1
Burner Orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.	

Instructions:

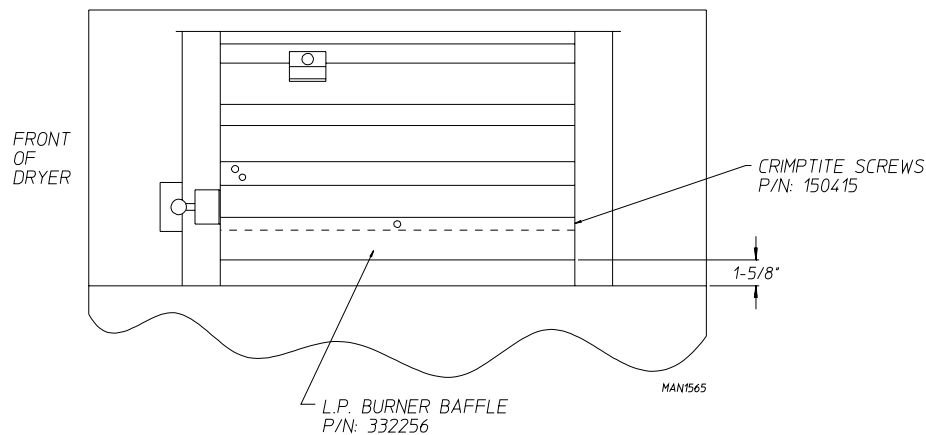
- 1) Disconnect electrical power to the dryer.
- 2) Close all shut-off valves in dryer gas supply line.
- 3) Disconnect gas valve wiring.

**NOTE:** Identify location of each wire for correct reinstallation.

- 4) Remove HSI Module/Mounting Bracket from console base.
- 5) Break union connection (nut) between union shut off and gas valve assembly.
- 6) Remove gas valve and manifold assembly from dryer. To do so, loosen and remove screws from mounting brackets securing assembly to burner box.
- 7) Remove plumbing and manifold from L.P. gas valve and install on to Natural gas valve provided.
- 8) Unscrew main burner orifice (injector) and replace with correct size orifices (injectors) as noted in **Section IV, C** of this addendum.

**NOTE:** Use extreme care when removing and replacing orifices (injectors). These orifices (injectors) are made of brass which are easily damaged.

- 9) Reverse procedure for reinstalling valve/manifold assembly to dryer.
- 10) Remove Burner Baffle (ADC P/N: 332256 by removing the five (5) screws securing the baffle to the burner box (Refer to illustration).
- 11) Open all shut-off valves and test for leaks.



**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

- 12) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.
- 13) With the dryer operating, check the manifold pressure with a manometer at the outlet (manifold) side of the gas valve.

TYPE OF GAS NATURAL:

Supply Pressure (mbar)  
Manifold Pressure (mbar)

See Section IV, items C 1 and 2.

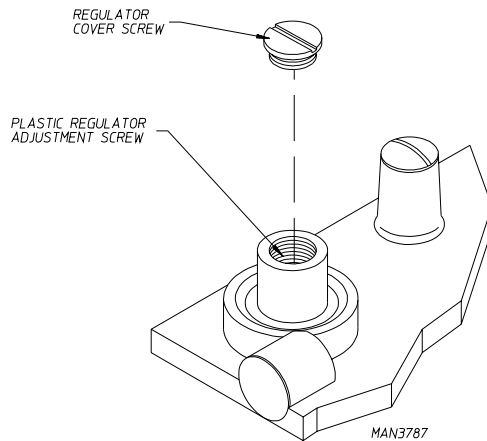


FIGURE 2. 36E MODEL AND  
ROBERT SHAW UNITROL 7000

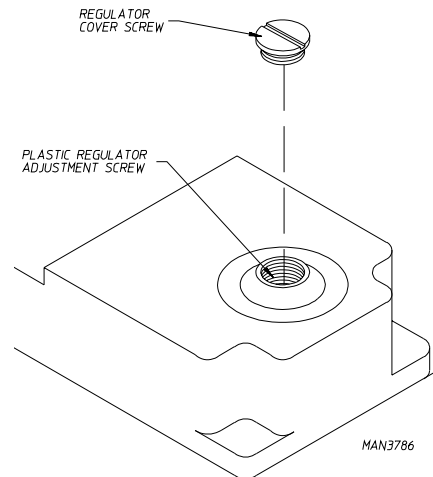


FIGURE 1. 36C MODEL

**Regulator Adjustment:**

Regulators are factory set. When required, readjust as follows:

- a. Turn gas cock "OFF". Remove pressure tap plug and attach manometer.
- b. Turn gas cock to "ON". Remove regulator cap, turn adjusting screw with blade screwdriver to change pressure (clockwise to increase).
- c. Turn gas cock "OFF". Remove manometer, replace pressure tap plug.
- d. Turn gas cock "ON".

d. Models ADG-330

The following conversion allows the dryer to be operated with Natural Gas. A slight modification has to be done to the gas valve so that the internal regulator is operational.

Parts required for conversion:

<u>Description</u>	<u>ADC P/N</u>	<u>QTY.</u>
Burner orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.	

Instructions:

- 1) Disconnect electrical power to the dryer.
- 2) Close **ALL** shut-off valves (for both top and bottom basket/tumbler) in dryer gas supply line.

**IMPORTANT:** The following procedures *must be* performed on both top and bottom tumblers/baskets.

- 3) Break union connection (nut) between union shut off and gas valve.
- 4) Pull out gas valve train assembly a 1/4 of the way out. Disconnect the gas valve harness power connector at the top of the assembly.
- 5) Gently pull/remove the gas valve train assembly from the dryer.

**IMPORTANT:** When removing the gas valve train assembly, be careful not to snag or damage the gas valve train wiring disconnected in step 4.

- 6) With the gas train assembly removed from the dryer, remove the two (2) sets of nuts securing the manifold bracket to the gas valve train slide.
- 7) Pull manifold/valve assembly back slightly so the burner orifice (injector) is exposed.
- 8) Unscrew burner orifice (injector) and replace with the correct size Natural Gas orifice (injector) as noted in **Section IV, C** of this addendum.

**IMPORTANT:** Use extreme care when removing and replacing orifice (injectors). This orifice (injector) is made of brass and is easily damaged.

- 9) Reinstall the valve/manifold assembly by reversing steps 6 through 8.

10) Convert gas valve ...

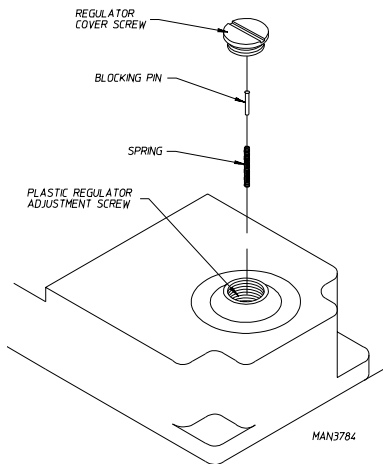


FIGURE 1. 36C MODEL

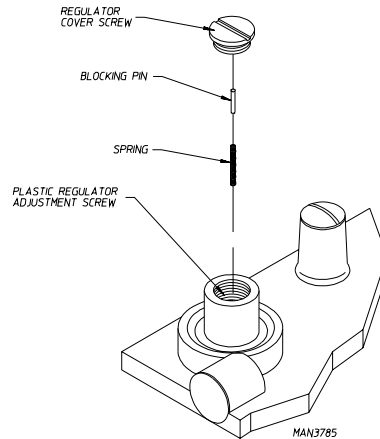


FIGURE 2. 36E MODEL

- Remove regulator cover screw. (refer to illustration)
- Remove the spring and pin from the regulator (refer to illustration).
- Replace the regulator cover screw.
- Remove the "L.P. Caution Label" from the gas valve.

11) Reverse procedure for reinstalling gas valve train assembly to dryer.

12) Open **ALL** shut-off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

13) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.

14) With dryer operating, check the manifold pressure at the outlet (manifold) side of the gas valve to insure proper operation.

Type of Gas:

Supply Pressure (mbar)

Manifold Pressure (mbar)

See Section IV, items C 1 and 2.

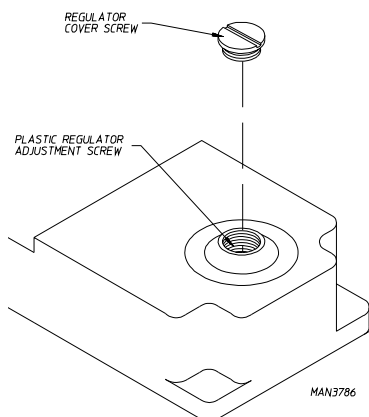


FIGURE 1. 36C MODEL

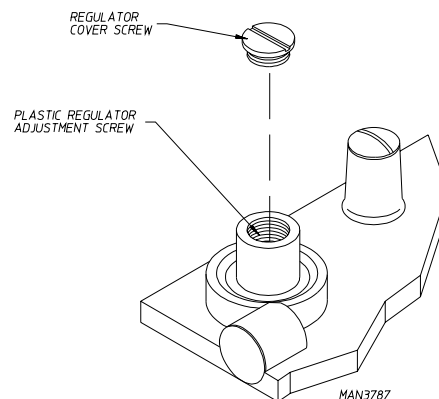


FIGURE 2. 36E MODEL AND ROBERT SHAW UNITROL 7000

To adjust gas valve internal regulator, remove regulator cover screw. With a small slotted screw driver adjust regulator plastic adjustment screw. Clockwise to increase manifold pressure. Counter clockwise to decrease manifold pressure.

e. Models ADG-531

The following conversion allows the dryer to be operated with Natural Gas. A slight modification has to be done to the gas valve so that the internal regulator is operational.

Parts required for conversion:

<u>Description</u>	<u>ADC P/N</u>	<u>QTY.</u>
Burner orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.	

Instructions:

- 1) Disconnect electrical power to the dryer.
- 2) Close **ALL** shut-off valves (for both top and bottom basket/tumbler) in dryer gas supply line.

**IMPORTANT:** The following procedures *must be* performed on both top and bottom tumblers/ baskets.

- 3) Break union connection (nut) between union shut off and gas valve.
- 4) Remove screws and nuts securing gas train to the dryer cabinet.
- 5) Gently pull/remove the gas valve train assembly from the burner tube just enough to expose the burner orifice (injector).
- 6) Unscrew burner orifice (injector) and replace with the correct size Natural Gas orifice (injector) as noted in **Section IV, C** of this addendum.

**IMPORTANT:** Use extreme care when removing and replacing orifice (injectors). This orifice (injector) is made of brass and is easily damaged.

## 7) Convert gas valve ...

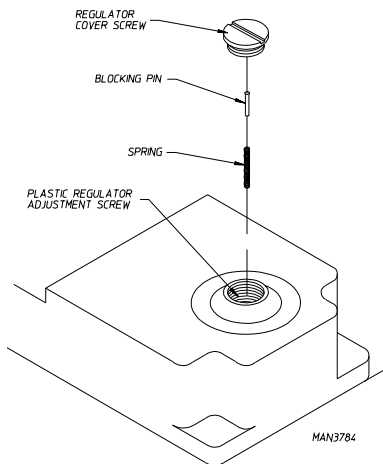


FIGURE 1 36C MODEL

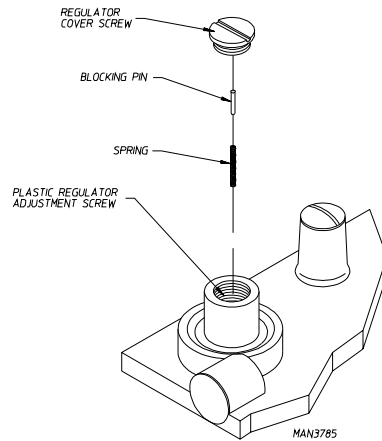


FIGURE 2 36E MODEL

- Remove regulator cover screw. (refer to illustration)
- Remove the spring and pin from the regulator (refer to illustration).
- Replace the regulator cover screw.
- Remove the "L.P. Caution Label" from the gas valve.

8) Reverse procedure for reinstalling gas valve train assembly to dryer.

9) Open **ALL** shut-off valves and test for leaks.

**IMPORTANT: DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.** Use a soapy water solution or product intended for that purpose.

10) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.

11) With dryer operating, check the manifold pressure at the outlet (manifold) side of the gas valve to insure proper operation.

Type of Gas:

Supply Pressure (mbar) See Section IV, items C 1 and 2.  
Manifold Pressure (mbar)

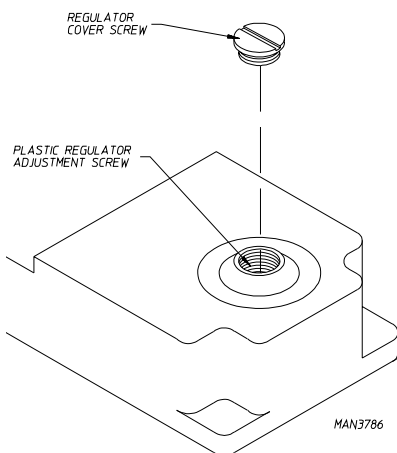


FIGURE 1 36C MODEL

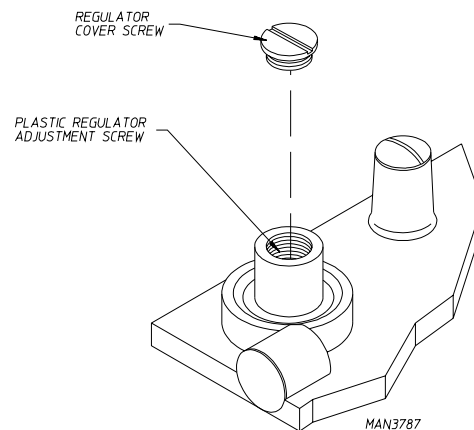


FIGURE 2 36E MODEL AND  
ROBERT SHAW UNITROL 7000

To adjust gas valve internal regulator, remove regulator cover screw. With a small slotted screw driver adjust regulator plastic adjustment screw. Clockwise to increase manifold pressure. Counter clockwise to decrease manifold pressure.

f. Model ADG-81 ONLY

The following conversion allows the dryer to be operated with Natural Gas. The existing L.P. gas valve cannot be converted and **must be** replaced with a L.P. gas valve.

Parts required for conversion:

<u>Description</u>	<u>ADC P/N:</u>	<u>QTY.</u>
Gas Valve (Natural)	140028	1
Burner Orifices (Injectors)	See <b>Section IV, C</b> of this addendum for orifice (injector) size and quantity.	

Instructions:

- 1) Disconnect electrical power to the dryer.
- 2) Close **ALL** shut-off valves in dryer gas supply line.
- 3) Disconnect gas valve wiring.

**NOTE:** Identify location of each wire for correct reinstallation.

- 4) Break union connection (nut) between union shut off and gas valve assembly.
- 5) Loosen and remove screws from brackets holding the gas valve/manifold assembly to the burner box and remove assembly from dryer.
- 6) Remove plumbing and manifold from L.P. gas valve and install on to Natural gas valve provided.
- 7) Unscrew main burner orifice (injector) and replace with correct size orifices (injectors) as noted in **Section IV, C** of this addendum.

**NOTE:** Use extreme care when removing and replacing orifices (injectors). These orifices (injectors) are made of brass which are easily damaged.

- 8) Reverse procedure for reinstalling valve/manifold assembly to dryer.
- 9) Open all shut-off valves and test for leaks.

**IMPORTANT:** ***DO NOT TEST FOR LEAKS WITH AN OPEN FLAME.*** Use a soapy water solution or product intended for that purpose.

- 10) Reestablish electrical power to dryer. Operate dryer through one (1) complete cycle to insure proper operation.
- 11) With dryer operating, check the manifold pressure at the outlet (manifold) side of the gas valve to insure proper operation.

Type of Gas:

Supply Pressure (mbar)

See Section IV, items C 1 and 2.

Manifold Pressure (mbar)

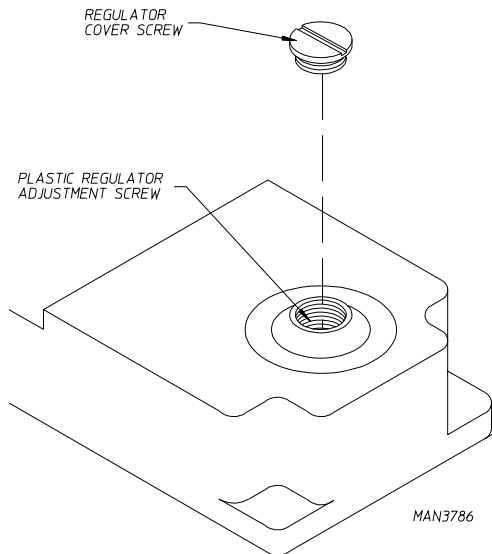


FIGURE 1. 36C MODEL

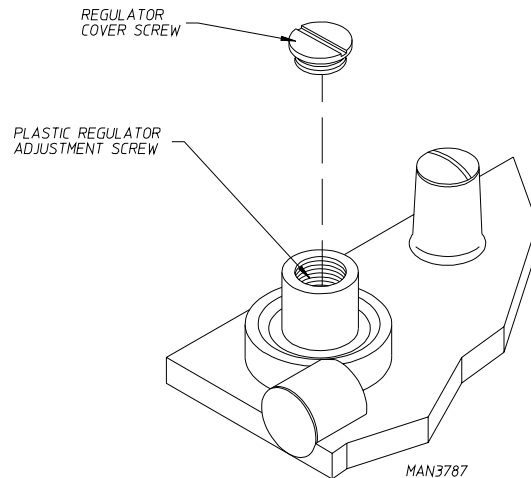


FIGURE 2. 36E MODEL AND  
ROBERT SHAW UNITROL 7000

To adjust gas valve internal regulator, remove regulator cover screw. With a small slotted screw driver adjust regulator plastic adjustment screw. Clockwise to increase manifold pressure. Counter clockwise to decrease manifold pressure.



# SECTION V

## GAS PRESSURE TESTING

For proper operation, the gas pressure **must be** correct, consistent and maintained at the gas pressure rates shown in Section IV, C, Heat Input, Gas Consumption and Orifice Injector Data; of this booklet.

Provisions are made at the outlet (manifold) side of each gas valve for taking gas pressure readings. Gas pressure readings **should be** made by the use of a manometer.

There are two (2) types of devices used to measure gas pressure. They are the spring/mechanical type gauge and the manometer. The use of the spring/mechanical type gauge is **NOT RECOMMENDED** because they are very easily damaged and are not always accurate. The preferred type of gauge is the manometer because it is a simple device to use and is highly accurate. A manometer is simply a glass or transparent plastic tube with a scale graduated in inches or mbar. When it is filled with water and pressure applied, the water in the tube rises, showing the exact gas pressure.

1. Gas pressure test procedure.
  - a. Turn gas cock to “OFF” position.
  - b. Remove pressure tap plug (located at outlet/manifold side of gas valve) and attach manometer (see illustration).
  - c. Turn gas cock to “ON” position.
  - d. Start dryer. Gas manifold pressure **should be** as shown in Section IV, C of this booklet.
  - e. Once test is complete, turn gas cock to” OFF” position. Remove manometer. Replace pressure tap plug.
  - f. Turn gas cock to “ON” position and check for leaks with soap solution with main burner “ON”.

# SECTION VI

## EXHAUST (FLUE) INFORMATION

### A. General Exhaust (Flue) Duct Work Information (for Both Individual and Common).

Exhaust duct work **should be** designed and installed by a qualified professional. Improperly sized duct work will create excessive back pressure which results in slow drying, increased use of energy, overheating of the dryer, and shutdown of the burner by the airflow (sail) switch, burner hi-limit, or basket (tumbler) hi-heat thermostat.

**CAUTION:** DRYER ***MUST BE*** EXHAUSTED TO THE OUTDOORS.

**CAUTION:** IMPROPERLY SIZED OR INSTALLED EXHAUST (FLUE) DUCT WORK CAN CREATE A POTENTIAL FIRE HAZARD.

The duct work **must be** laid out in such a way that the duct work travels as directly as possible to the outdoors with as few turns as possible. It's important that where the exhaust duct work ends outside that it is not located directly near the make up air openings. Otherwise, flue fumes can be drawn back into the facility.

Independent dryer venting is recommended.

**IMPORTANT:** Exhaust back pressure measured by a manometer in the exhaust (flue) duct work must not exceed .817 mbar (0.3 inches of water column).

The shape of the duct work is not critical so long as the minimum cross sectional area is provided. It is suggested that the use of 90 degree turns be avoided; use 30 degree and/or 45 degree instead. The radius of the elbows should preferably be 1-1/2 times the diameter of the duct.

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

**NOTE:** Where the exhaust duct passes through a wall, ceiling or roof made of combustible materials, the opening must be 2 inches (5.08 cm) larger (all the way around) than the duct. The duct must be centered within this opening.

**IMPORTANT:** The duct work for this appliance must be suitable for the appliance category in accordance with national installation regulations of the county of destination.

Under no circumstances should the size of the duct work (flue) connected to the dryer be smaller than the dryer's exhaust duct. With single or independent venting, in many cases the duct work (flue) **must be** larger than the dryers exhaust duct. In almost every case where common duct work is used, the duct work (flue) connection to the dryer **must be** larger than the dryers exhaust duct. For specific information regarding various dryer model exhaust (flue) duct size limits, refer to the single and common exhaust examples shown in this section.

**IMPORTANT:** For extended duct work runs, the cross section area of the duct work can only be increased to an extent. When the duct work approaches the maximum limits noted in this manual, a professional Heating Venting Air Conditioning (HVAC) firm *should be* consulted for proper venting information.

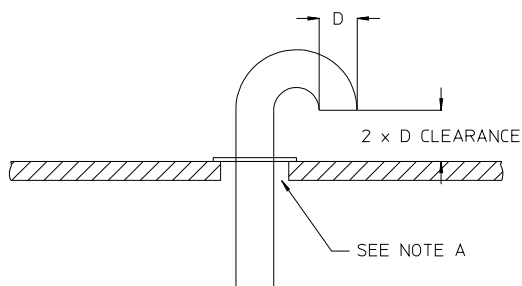
**NOTE:** The use of external booster fans in the location duct work to compensate for inadequate venting size is NOT RECOMMENDED.

**IMPORTANT:** THE DUCT WORK SIZE **MUST NOT BE REDUCED ANYWHERE** DOWN STREAM OF DRYER.

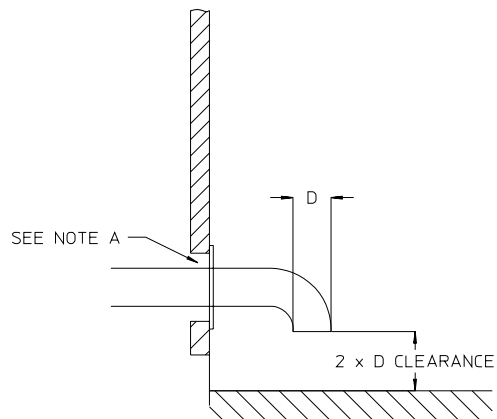
#### B. Exhaust Venting Outside Protection (for Both Individual and Common).

To prevent the outside end of horizontal duct work from the weather, a 90 degree elbow bent downward **should be** installed where the exhaust exits the building. If the duct work travels vertically up through the roof, it **should be** protected from the weather by using a 180 degree turn to point the opening downward. In either case, allow at least twice the diameter of the duct between the duct opening and the nearest obstruction.

##### VERTICAL DUCTING



##### HORIZONTAL DUCTING



NOTE "A": OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

MAN0731

**IMPORTANT: *DO NOT*** use screens or caps on the outside opening of exhaust duct work.

It's important that where the exhaust duct work ends outside that it is not located directly near the makeup air openings. Otherwise, flue fumes can be drawn back into the facility.

### C. Single Dryer Venting.

#### 1. Individual dryer venting.

Where possible, it is suggested to provide a separate exhaust duct for each dryer. The exhaust duct **should be** laid out in such a way that the duct work travels as directly as possible to the outdoors with as few turns as possible. Keep in mind when calculating the dryer exhaust duct work, the elbows used for outside protection **must be** included. Refer to Section V, A & B for specific details.

Refer to the duct work chart and examples in this section for specific venting information. When the duct work approaches the maximum limits noted in this manual, a professional HVAC firm **should be** consulted for proper venting information.

**IMPORTANT:** Exhaust back pressure measured by a manometer in the exhaust (flue) duct work must not exceed .817 mbar (0.3 inches of water column).

#### a. Horizontal Venting

Under no circumstances should the size of the duct work (flue) connected to the dryer be smaller than the dryer's exhaust duct. With Horizontal single or independent venting, in many cases the duct work (flue) **must be** larger than the dryers exhaust duct.

#### b. Vertical Venting

Being that more elbows are usually necessary for vertical venting, in most cases the duct work (flue) **must be** larger than the dryers exhaust duct work.

c. Individually Vented Duct Work (Flue) Chart

<b>INDIVIDUALLY VENTED DUCT WORK CHART</b> <i>(50 Hz &amp; 60 Hz)</i>												
DRYER MODEL	DRYER DUCT SIZE		HORIZONTAL VENTING					VERTICAL VENTING				
			MINIMUM VENT SIZE		MAXIMUM ELBOWS*	MAXIMUM RUN		MINIMUM VENT SIZE		MAXIMUM ELBOWS*	MAXIMUM RUN	
			INCHES	CM		FEET	M	INCHES	CM		FEET	M
15	6	15.24	6	15.24	1	5	1.52	8	20.32	3	20	6.1
	6	15.24	8	20.32	1	35	10.66					
25	8	20.32	8	20.32	1	35	10.66	8	20.32	3	20	6.1
285	6	15.24	6	15.24	2	10	3.9	6	15.24	2	13	3.9
295	6	15.24	6	15.24	1	20	6.1	6	15.24	2	10	3.04
30 (not SUPER)	8	20.32	8	20.32	1	35	10.66	8	20.32	3	20	6.1
30 (SUPER)	8	20.32	10	25.4	1	50	15.2	10	25.4	3	20	6.1
50 (not SUPER)	8	20.32	8	20.32	1	35	10.66	8	20.32	3	20	6.1
50 (SUPER)	8	20.32	10	25.4	1	30	9.1	12	30.48	3	75	22.86
75	8	20.32	10	25.4	1	15	4.6	12	30.48	3	20	6.1
81	12	30.48	14	35.56	1	15	4.6	14	35.56	3	15	4.75
115	12	30.48	14	35.56	1	20	6.1	14	35.56	3	20	6.1
120	12	30.48	14	35.56	1	20	6.1	14	35.56	3	20	6.1
170	18	45.72	18	45.72	1	20	6.1	18	45.72	3	20	6.1
330	6	15.24	Refer to illustrations in <b>Item D</b> of this section for maximum limits.									
531	6	15.24										

\* INCLUDES OUTSIDE PROTECTION.

#### d. Individually Vented Duct Work Examples

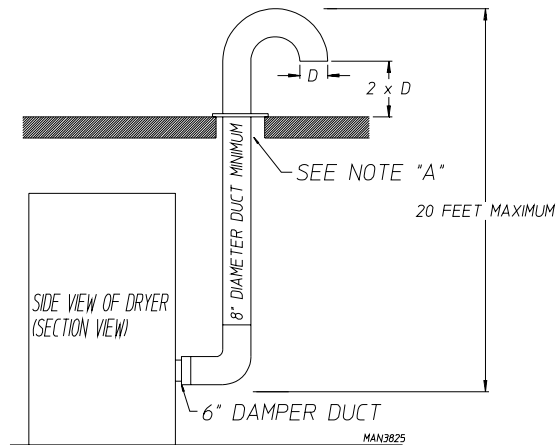
The illustrations included in this section are for dryers individually vented/exhausted to the out doors. For dryers where the length of exhaust duct work or the amount of allowable elbows is exceeded, a Heating Venting Air Conditioning (HVAC) firm **must be** consulted for proper venting (flue) information.

ADC Model	Method of Venting	Illus.
AD-15	horizontal	2 & 3
AD-15	vertical	1
AD-25	horizontal	4
AD-25	vertical	5
AD-285	horizontal	6
AD-285	vertical	7
AD-295	horizontal	8
AD-295	vertical	9
AD-30	horizontal	4
AD-30	vertical	5
AD-30 SUPER	horizontal	10
AD-30 SUPER	vertical	11
AD-330	horizontal	-
AD-330	vertical	-
AD-531	horizontal	-
AD-531	vertical	-
AD-50	horizontal	4
AD-50	vertical	5
AD-50 SUPER	horizontal	12
AD-50 SUPER	vertical	13
AD-75	horizontal	14
AD-75	vertical	15
AD-81	horizontal	16
AD-81	vertical	17
AD-115	horizontal	18
AD115	vertical	19
AD-120	horizontal	18
AD-120	vertical	19
AD-170	horizontal	20
AD-170	vertical	21

# SINGLE VENTING

**Illus. No. 1**

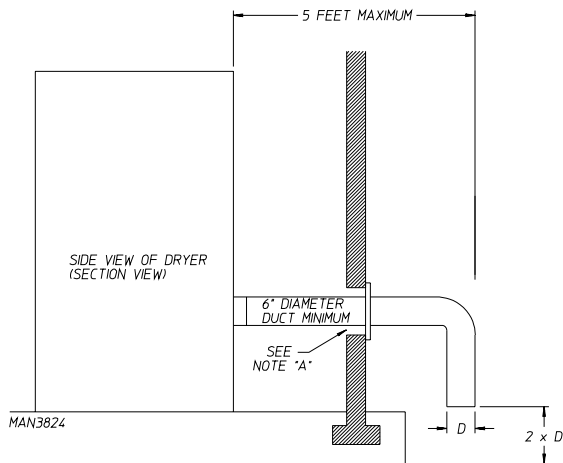
AD - 15  
VERTICAL SINGLE DRYER VENTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

**Illus. No. 2**

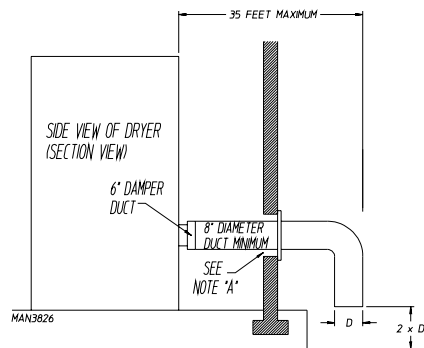
AD - 15  
HORIZONTAL SINGLE DRYER  
VENTING 6 INCH DUCTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

**Illus. No. 3**

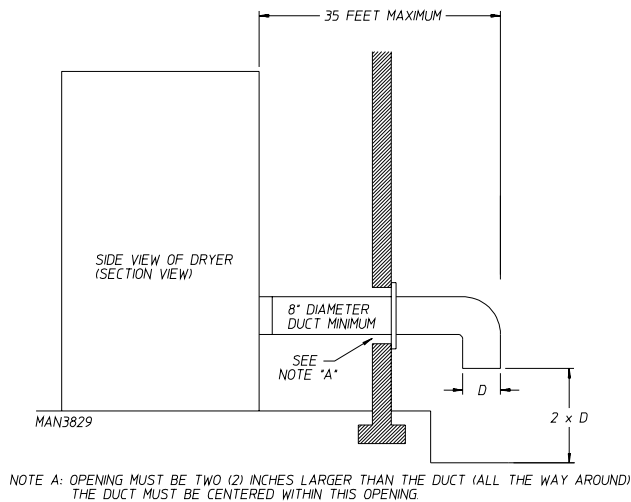
AD - 15  
HORIZONTAL SINGLE DRYER  
VENTING 8 INCH DUCTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

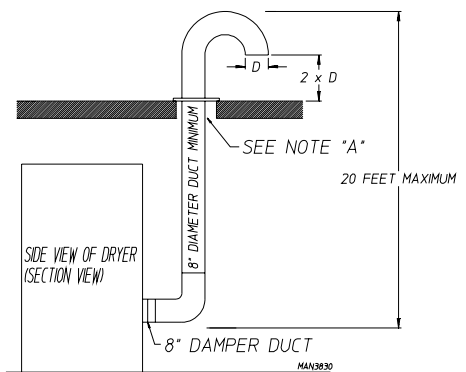
### Illus. No. 4

AD - 25, AD - 30 (STANDARD), AD - 50  
HORIZONTAL SINGLE DRYER  
VENTING 8 INCH DUCTING



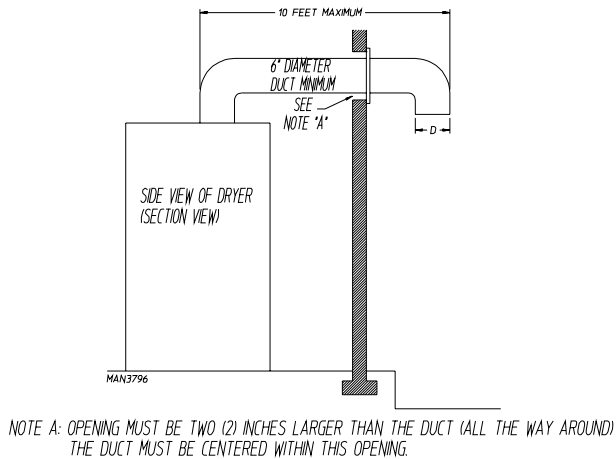
### Illus. No. 5

AD - 25, AD - 30 (STANDARD), AD - 50  
VERTICAL SINGLE DRYER VENTING



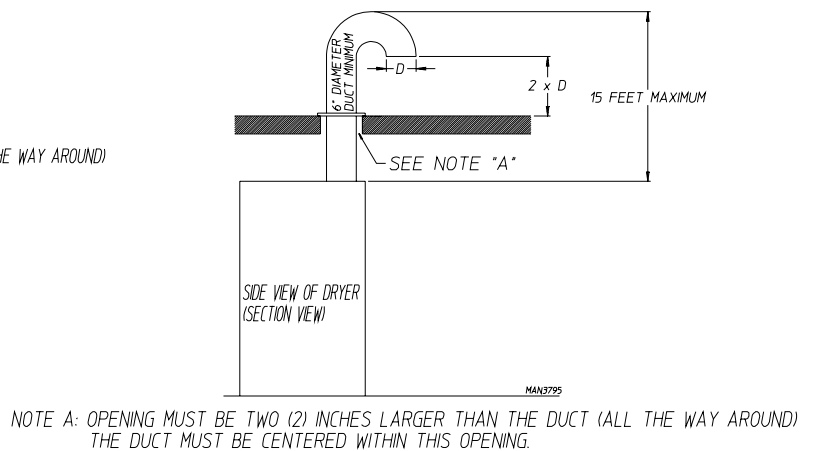
### Illus. No. 6

AD - 285  
HORIZONTAL SINGLE DRYER VENTING



### Illus. No. 7

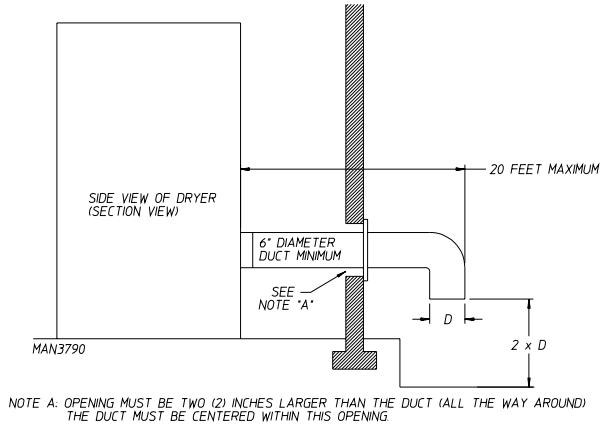
AD - 285  
VERTICAL SINGLE DRYER VENTING





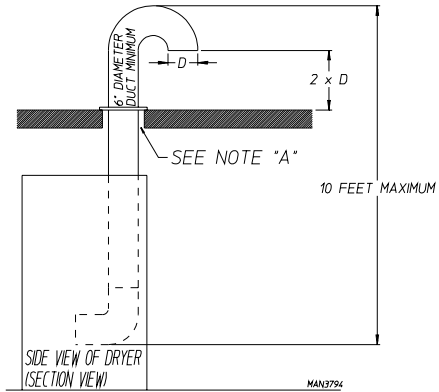
## Illus. No. 8

### AD - 295 HORIZONTAL SINGLE DRYER VENTING



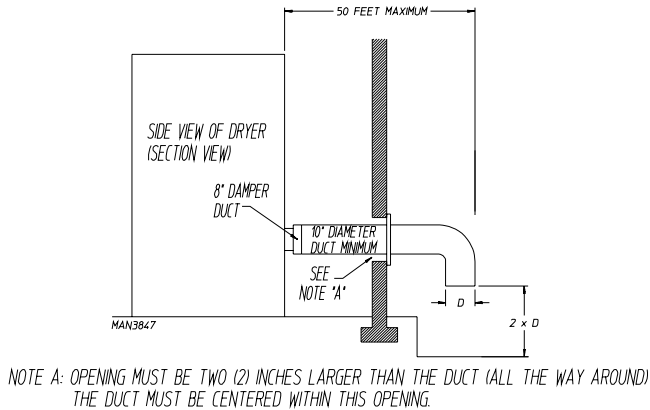
## Illus. No. 9

### AD - 295 VERTICAL SINGLE DRYER VENTING



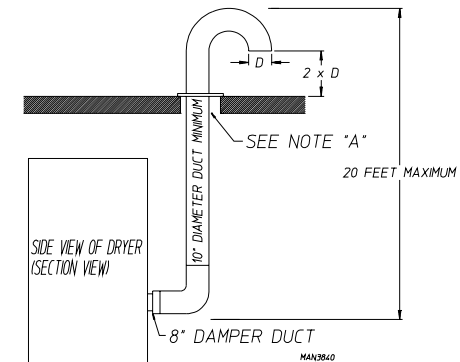
## Illus. No. 10

### AD - 30 (SUPER) HORIZONTAL SINGLE DRYER VENTING 8 INCH DUCTING



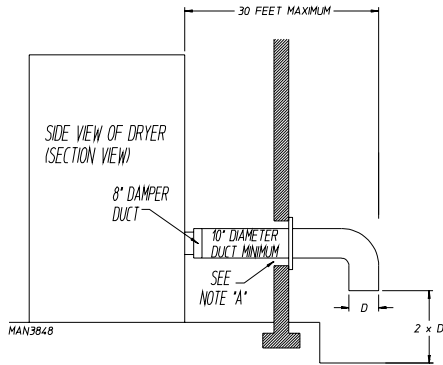
## Illus. No. 11

### AD - 30 (SUPER) VERTICAL SINGLE DRYER VENTING



## Illus. No. 12

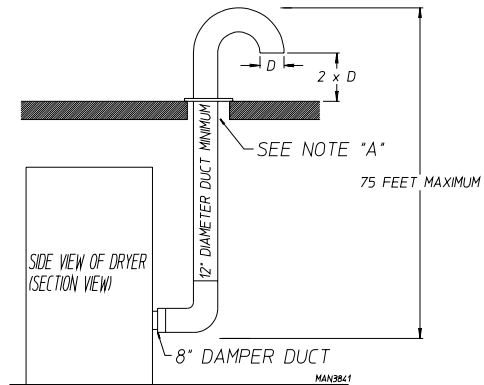
AD - 50 (SUPER)  
HORIZONTAL SINGLE DRYER  
VENTING 8 INCH DUCTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## Illus. No. 13

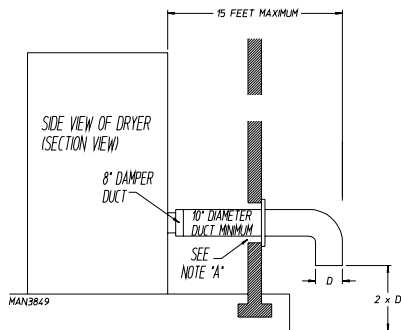
AD - 50 (SUPER)  
VERTICAL SINGLE DRYER VENTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## Illus. No. 14

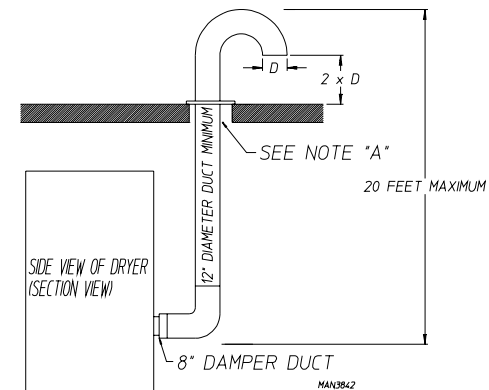
AD - 75D  
HORIZONTAL SINGLE DRYER  
VENTING 8 INCH DUCTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## Illus. No. 15

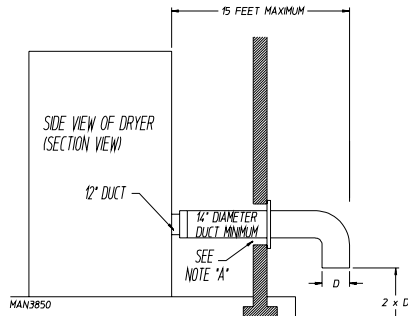
AD - 75D  
VERTICAL SINGLE DRYER VENTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## Illus. No. 16

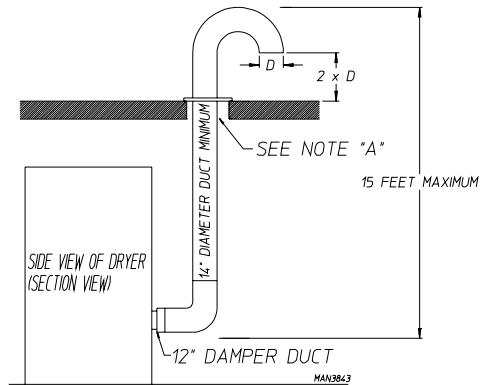
AD - 81  
HORIZONTAL SINGLE DRYER  
VENTING 12 INCH DUCTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## Illus. No. 17

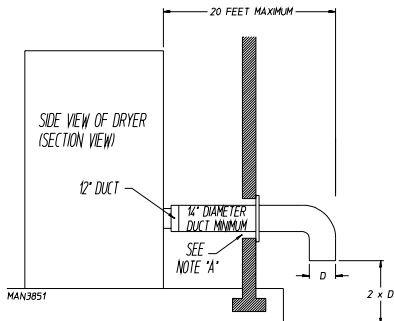
AD - 81  
VERTICAL SINGLE DRYER VENTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## Illus. No. 18

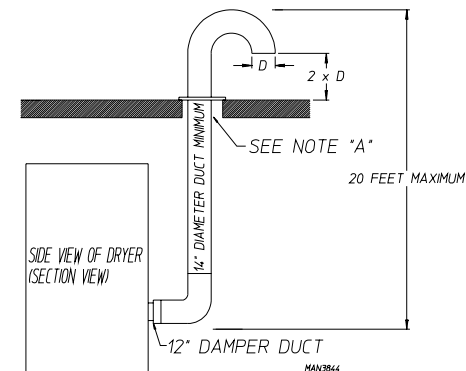
AD - 115 AND AD - 120  
HORIZONTAL SINGLE DRYER  
VENTING 12 INCH DUCTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## Illus. No. 19

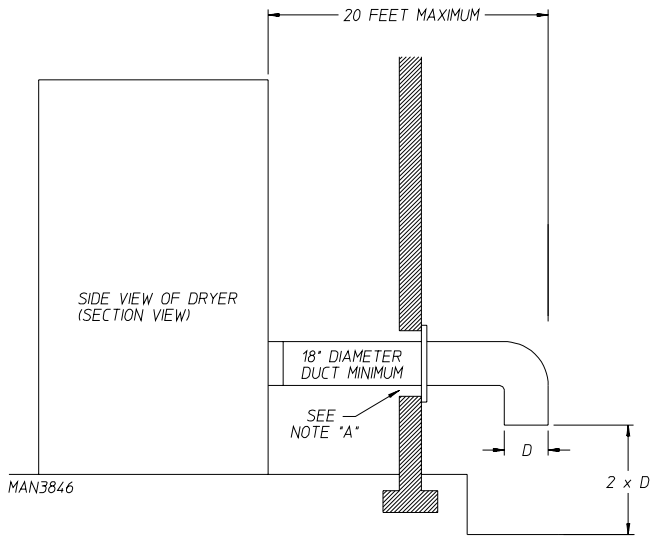
AD - 115 AND AD - 120  
VERTICAL SINGLE DRYER VENTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## Illus. No. 20

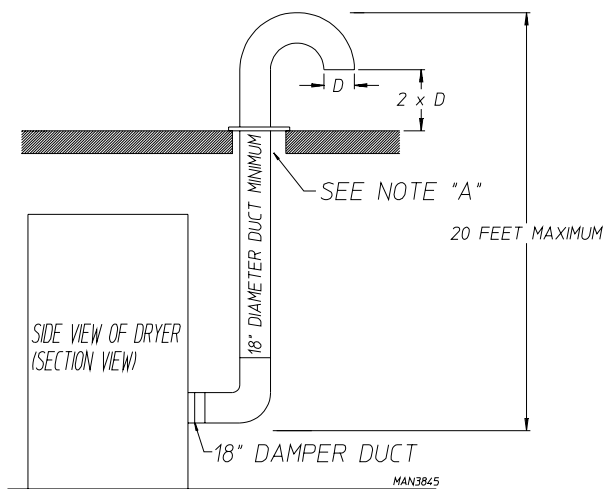
### AD - 170 HORIZONTAL SINGLE DRYER



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## Illus. No. 21

### AD - 170 VERTICAL SINGLE DRYER VENTING



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND)  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## 2. Multiple Dryer (common) Venting.

- a. If it is not feasible to provide separate exhaust ducts for each dryer, ducts from individual dryers may be channeled into a “common main duct”. The individual ducts should enter the bottom or side of the main duct at angle not more than 45 degrees in the direction of flow and **should be** spaced at least the width of the dryer being installed. The duct **should be** tapered, with diameter increasing before each individual duct is added.

**IMPORTANT:** No more than four (4) dryers **should be** connected to main common duct.

In almost every case where common duct work is used, the duct work (flue) connection to the dryer **must be** larger than the dryers exhaust duct.

**IMPORTANT:** Exhaust back pressure measured by a manometer in the exhaust (flue) duct work **must not** exceed .817 mbar (0.3 inches of water column).

The main duct may be any shape so long as the minimum cross sectional area is provided. The illustrations of common venting in this section show the minimum cross section area for multiple dryer round or square venting. These figures **must be** increased 10 square inches when rectangular main ducting is used, and the ratio of duct width to depth should not be greater than 3-1/2 to 1. These figures **must be** increased in proportion if the main duct run at last dryer to where it exhausts to the outdoors is unusually long (fifteen [15] feet), or has numerous (more than two [2] elbows; including outside protection). In calculating duct work size, the cross sectional area of a square or rectangular duct **must be** increased twenty (20) percent for each additional fifteen (15) feet. The diameter of a round exhaust duct **must be** increased ten (10) percent for each additional fifteen (15) feet. Each 90 degree elbow is equivalent to an additional thirty (30) feet and each 45 degree elbow is equivalent to an additional (15) feet.

Refer to the duct work chart and examples in this section for specific venting information. When the duct work approaches the maximum limits noted in this manual, a professional HVAC firm **should be** consulted for proper venting information.

### b. Multiple Dryer (Common) Vented Examples

The illustrations included in this section are for single pocket dryers connected to a common exhaust duct system. For dryers where the length of the exhaust duct work or the amount of allowable elbows is exceeded, a Heating Venting Air Conditioning (HVAC) firm **must be** consulted for proper venting (flue) information.

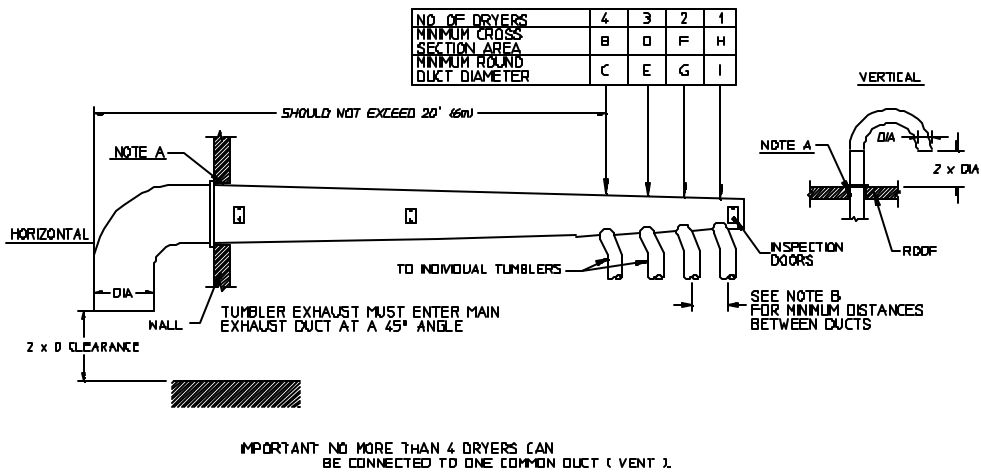
Multiple Dryer (Common) Vented Examples (continued)

<b>ADC Model No.</b>	<b>Illus. No.</b>
AD-15	1
AD-25	3
AD-285	2
AD-295	2
AD-30 (not SUPER)	3
AD-30 SUPER	4
AD-50 (not SUPER)	3
AD-50 SUPER	5
AD-75	6
AD-81	7
AD-115	8
AD-120	8
AD-170	9

For models ADG-330 and ADG-531, refer to page 76.

Illus. No. 1

MULTIPLE DRYER VENTING FOR THE ADG-15  
WITH AN "A" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING

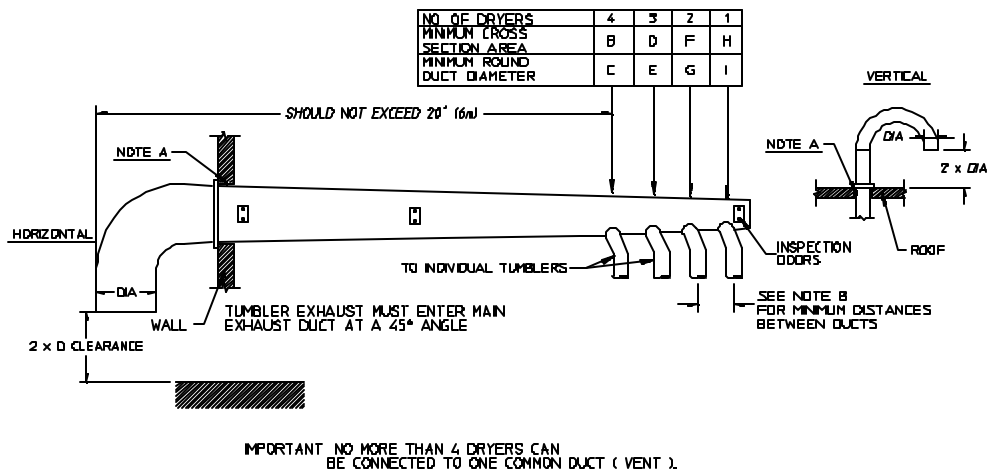
NOTE B AD-15 .31 3/8" (79.69 cm)

MAN3B35

A	B	C	D	E	F	G	H	I
8 in	200 in <sup>2</sup>	16 in	155 in <sup>2</sup>	14 in	115 in <sup>2</sup>	12 in	80 in <sup>2</sup>	10 in
15.24 cm	1290.4 cm <sup>2</sup>	40.64 cm	1000.06 cm <sup>2</sup>	35.56 cm	741.98 cm <sup>2</sup>	30.48 cm	516.16 cm <sup>2</sup>	25.40 cm

Illus. No. 2

MULTIPLE DRYER VENTING FOR THE ADG-285, ADG-295  
WITH AN "A" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



NOTE A OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING

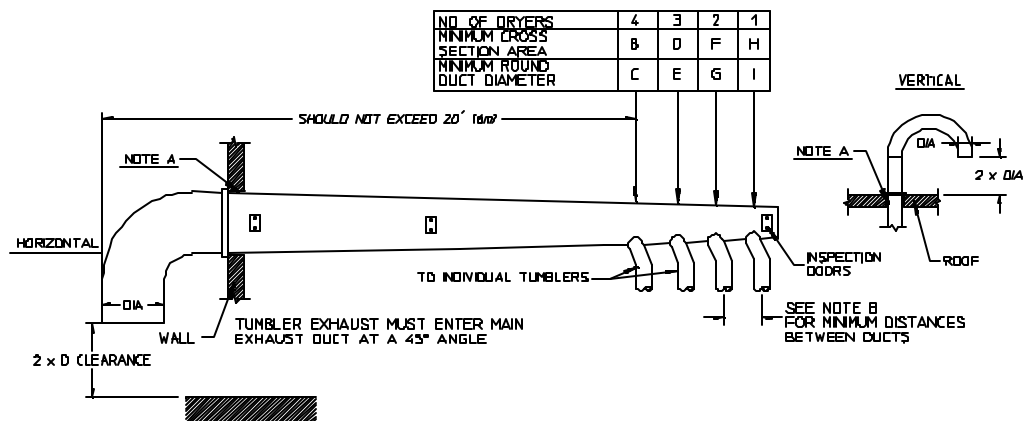
NOTE B AD-24, AD-285, .31 3/8" (79.69 cm)  
AD-295, .29 5/8" (75.25 cm)

MAN3B36

A	B	C	D	E	F	G	H	I
6 in	155 in <sup>2</sup>	14 in	115 in <sup>2</sup>	12 in	80 in <sup>2</sup>	10 in	50 in <sup>2</sup>	8 in
15.24 cm	787.40 cm <sup>2</sup>	35.56 cm	584.20 cm <sup>2</sup>	30.48 cm	406.40 cm <sup>2</sup>	25.40 cm	254 cm <sup>2</sup>	20.32 cm

### Illus. No. 3

#### MULTIPLE DRYER VENTING FOR THE AD-25, AD-30, AD-50 WITH AN "A" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



IMPORTANT NO MORE THAN 4 DRYERS CAN  
BE CONNECTED TO ONE COMMON DUCT (VENT)

NOTE A OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND) THE DUCT  
MUST BE CENTERED WITHIN THIS OPENING

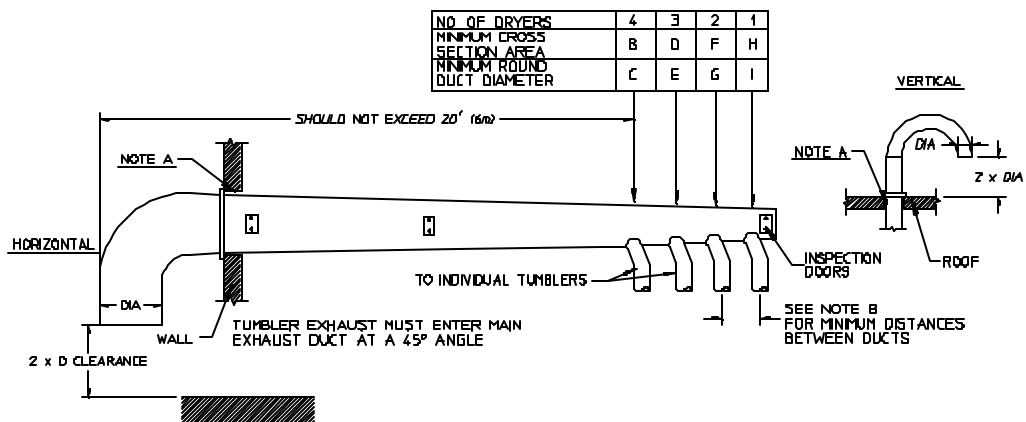
NOTE B: AD-25, AD-50 34 1/4" (87 cm)  
AD-30 31 3/8" (79.69 cm)

MAN3632

A	B	C	D	E	F	G	H	I
8 in	200 in <sup>2</sup>	16 in	155 in <sup>2</sup>	14 in	115 in <sup>2</sup>	12 in	80 in <sup>2</sup>	10 in
20.32 cm	1290.4 cm <sup>2</sup>	40.64 cm	1000.06 cm <sup>2</sup>	35.56 cm	741.98 cm <sup>2</sup>	30.48 cm	516.16 cm <sup>2</sup>	25.40 cm

### Illus. No. 4

#### MULTIPLE DRYER VENTING FOR THE ADG-30 SUPER WITH AN "A" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



IMPORTANT NO MORE THAN 4 DRYERS CAN  
BE CONNECTED TO ONE COMMON DUCT (VENT)

NOTE A OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND) THE DUCT  
MUST BE CENTERED WITHIN THIS OPENING

NOTE B AD-30 SUPER 31 3/8" (79.69 cm)

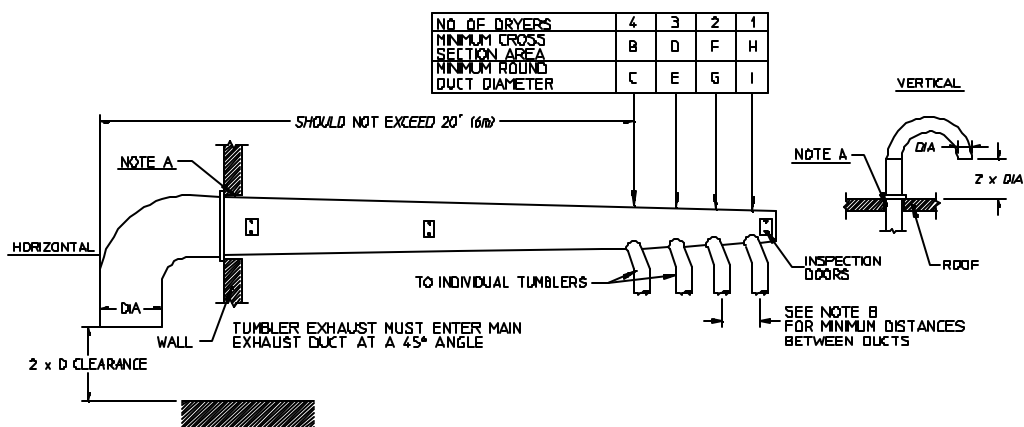
MAN3633

A	B	C	D	E	F	G	H	I
8 in	200 in <sup>2</sup>	16 in	155 in <sup>2</sup>	14 in	115 in <sup>2</sup>	12 in	80 in <sup>2</sup>	10 in
20.32 cm	1290.4 cm <sup>2</sup>	40.64 cm	1000.06 cm <sup>2</sup>	35.56 cm	741.98 cm <sup>2</sup>	30.48 cm	516.16 cm <sup>2</sup>	25.40 cm



Illus. No. 5

MULTIPLE DRYER VENTING FOR THE ADG-50 SUPER  
WITH AN "A" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



IMPORTANT NO MORE THAN 4 DRYERS CAN  
BE CONNECTED TO ONE COMMON DUCT ( VENT ).

NOTE A OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND) THE DUCT  
MUST BE CENTERED WITHIN THIS OPENING.

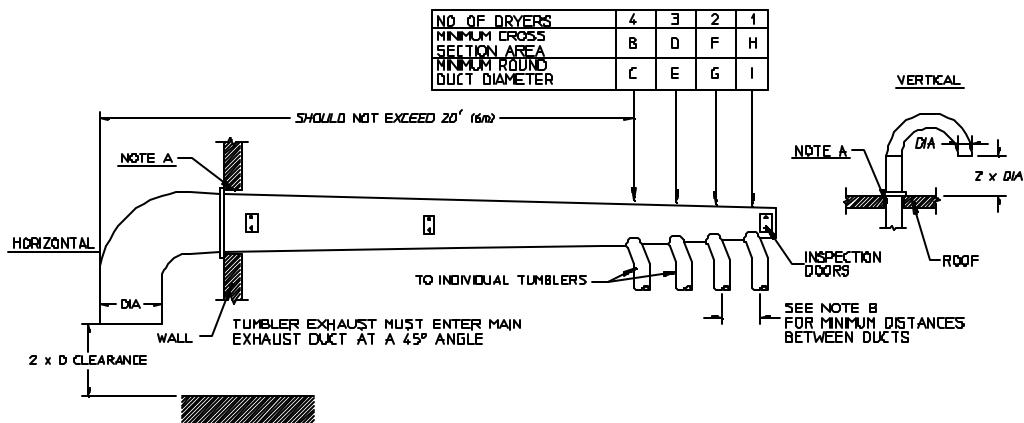
NOTE B AD-50 SUPER 3/4 1/4" (87 cm)

MAN3834

A	B	C	D	E	F	G	H	I
10 in	200 in <sup>2</sup>	16 in	155 in <sup>2</sup>	14 in	115 in <sup>2</sup>	12 in	80 in <sup>2</sup>	10 in
25.40 cm	1645.26 cm <sup>2</sup>	45.72 cm	1290.4 cm <sup>2</sup>	40.64 cm	1000.06 cm <sup>2</sup>	35.56 cm	741.98 cm <sup>2</sup>	30.48 cm

Illus. No. 6

MULTIPLE DRYER VENTING FOR THE ADG-75  
WITH AN "A" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



IMPORTANT NO MORE THAN 4 DRYERS CAN  
BE CONNECTED TO ONE COMMON DUCT ( VENT ).

NOTE A OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND) THE DUCT  
MUST BE CENTERED WITHIN THIS OPENING.

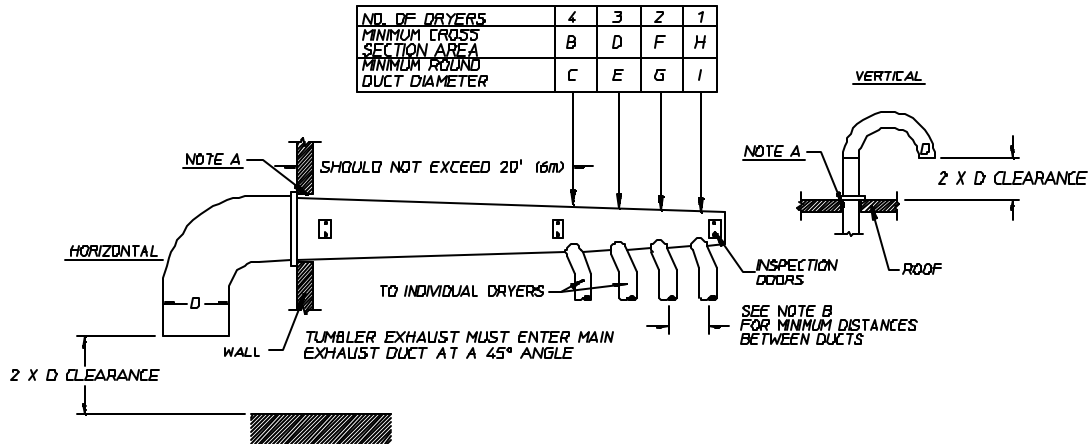
NOTE B AD-75 3/8 1/4" (97.16 cm)

MAN3831

A	B	C	D	E	F	G	H	I
10 in	315 in <sup>2</sup>	20 in	255 in <sup>2</sup>	18 in	200 in <sup>2</sup>	16 in	115 in <sup>2</sup>	12 in
25.40 cm	2032.38 cm <sup>2</sup>	50.8 cm	1645.26 cm <sup>2</sup>	45.72 cm	1290.40 cm <sup>2</sup>	40.64 cm	741.98 cm <sup>2</sup>	30.48 cm

Illus. No. 7

MULTIPLE DRYER VENTING (ADG-81) WITH AN "A" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND) THE DUCT MUST BE CENTERED WITHIN THIS OPENING

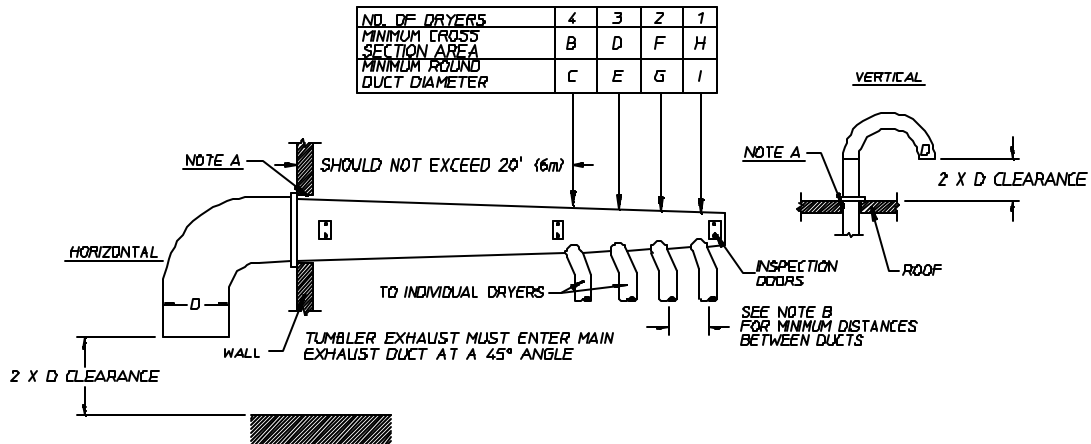
NOTE B: ADG-81 - 30 1/4" (97.16 cm)

A	B	C	D	E	F	G	H	I
14 in	380 in <sup>2</sup>	22 in	315 in <sup>2</sup>	20 in	255 in <sup>2</sup>	18 in	155 in <sup>2</sup>	14 in
35.56 cm	245176 cm <sup>2</sup>	55.88 cm	203238 cm <sup>2</sup>	50.80 cm	164526 cm <sup>2</sup>	45.72 cm	100006 cm <sup>2</sup>	35.56 cm

MAN837

Illus. No. 8

MULTIPLE DRYER VENTING (ADG-115, ADG-120) WITH AN "A" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND) THE DUCT MUST BE CENTERED WITHIN THIS OPENING

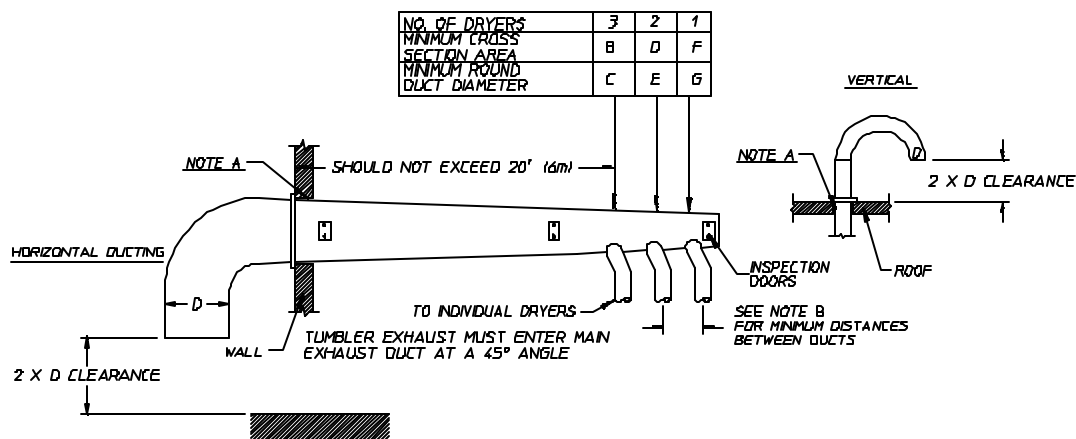
NOTE B: ADG-115 - 46 1/8" (117.12 cm)  
ADG-120 - 48 3/8" (122.87 cm)

A	B	C	D	E	F	G	H	I
14 in	530 in <sup>2</sup>	26 in	455 in <sup>2</sup>	24 in	315 in <sup>2</sup>	20 in	155 in <sup>2</sup>	14 in
35.56 cm	341956 cm <sup>2</sup>	66.04 cm	293566 cm <sup>2</sup>	60.96 cm	203238 cm <sup>2</sup>	50.80 cm	100006 cm <sup>2</sup>	35.56 cm

MAN838

**Illus. No. 9**

**MULTIPLE DRYER VENTING (ADG-17D) WITH AN "A" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT**



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

**NOTE A. OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING**

**NOTE B. ADG-17D .55 5/8" (141.29 cm)**

A	B	C	D	E	F	G
18 in	615 in <sup>2</sup>	28 in	455 in <sup>2</sup>	24 in	255 in <sup>2</sup>	18 in
45.72 cm	3967.98 cm <sup>2</sup>	68.60 cm	2935.66 cm <sup>2</sup>	58.80 cm	1645.26 cm <sup>2</sup>	45.72 cm

MAN3839

## D. Dual Pocket (AD-330 & AD-531) Venting.

### 1. Individual Dryer Venting.

Where possible, it is suggested to provide a separate exhaust duct for each dryer. The duct work (flue) can be laid out so that the top and bottom pockets/tumblers are “Y” together, or each tumbler duct can be vented independently. The exhaust duct work should be laid out in such a way that the duct work travels as directly as possible to the outdoors with as few turns as possible. Keep in mind when calculating the dryer exhaust duct work, the elbows used for outside protection **must be** included. Refer to **Section V, A & B** for specific details.

Refer to the duct work examples in this section for specific venting information. When the duct work approaches the maximum limits noted in this manual, a professional HVAC firm **must be** consulted for proper venting information.

**NOTE:** Exhaust back pressure measured by a manometer in the exhaust (flue) duct work must not exceed .817 mbar (0.3 inches of water column).

Under no circumstances should the size of the duct work (flue) connected to the dryer be smaller than the dryer’s exhaust duct. In many cases the duct work (flue) must be larger (than the dryer’s exhaust duct) and increased just outside of the dryer where the duct work (flue) exits.

#### a. AD-330 Individually Vented Examples ...

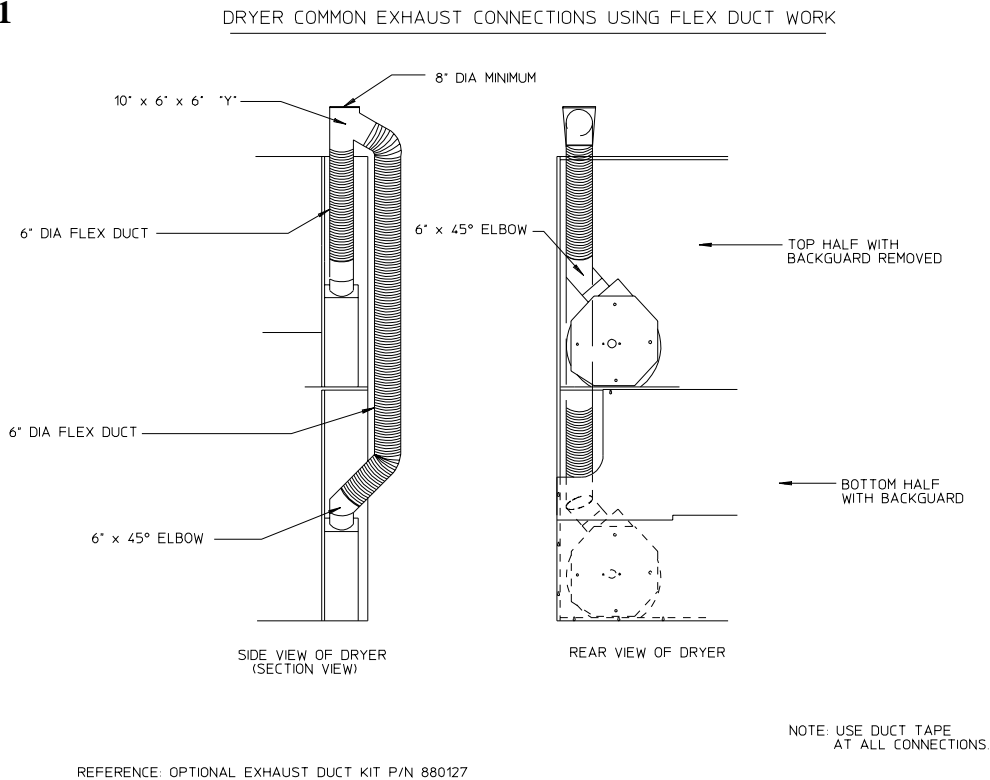
The illustrations included in this section are for dryers individually vented/exhausted to the outdoors. For dryers where the length of exhaust duct work or the amount of allowable elbows is exceeded, a Heating Venting Air Conditioning (HVAC) firm must be consulted for proper venting (flue) information.

Venting Option	Illus. No.
Internal Common Vent Connection (Flex Duct Work)	1
Internal Common Vent Connection (Hand Duct Work)	2
Individual Pocket Venting	3
Top & Bottom Pocket Connection	4 & 5

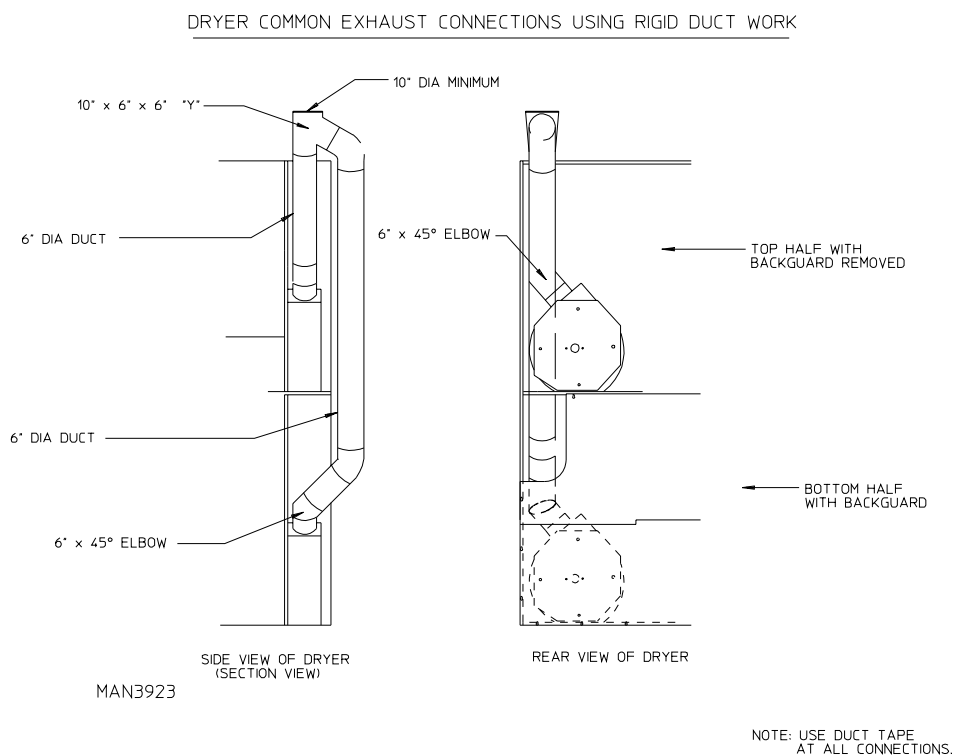
To protect the outside end of horizontal duct work from the weather, a 90° elbow bent downward **should be** installed where the exhaust exits the building. If the exhaust duct work travels vertically up through the roof, it should be protected from the weather by using a 180° turn to point the opening downward. In either case, allow at least twice the diameter of the duct between the duct opening and nearest obstruction.

**IMPORTANT: *DO NOT* use screens or caps on the outside opening of exhaust duct work.**

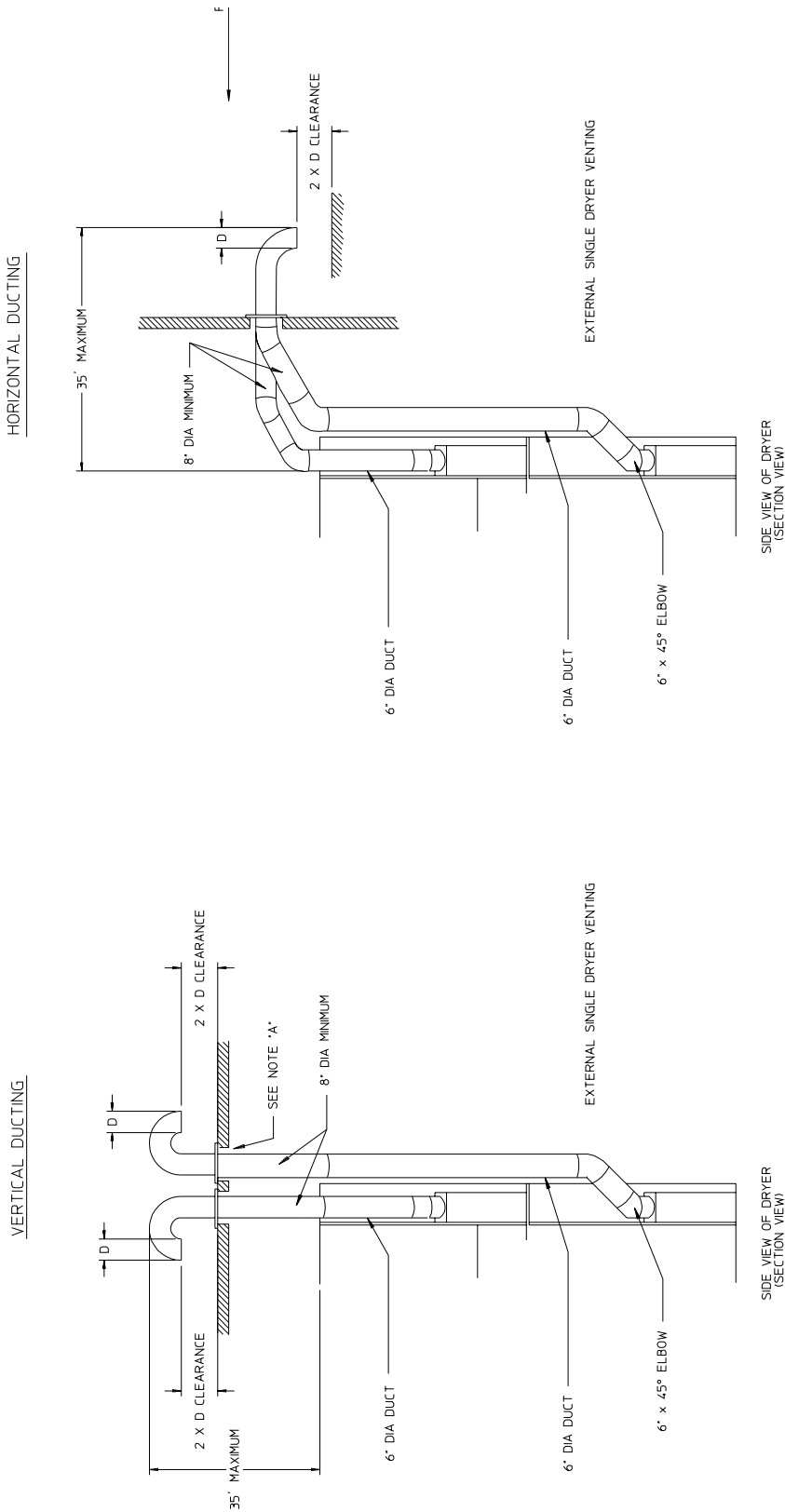
**Illus. No. 1**  
**(AD-330)**



**Illus. No. 2**  
**(AD-330)**



EXTERNAL SINGLE DRYER VENTING CONNECTIONS  
( WITH DRYER INDEPENDENT EXHAUST )

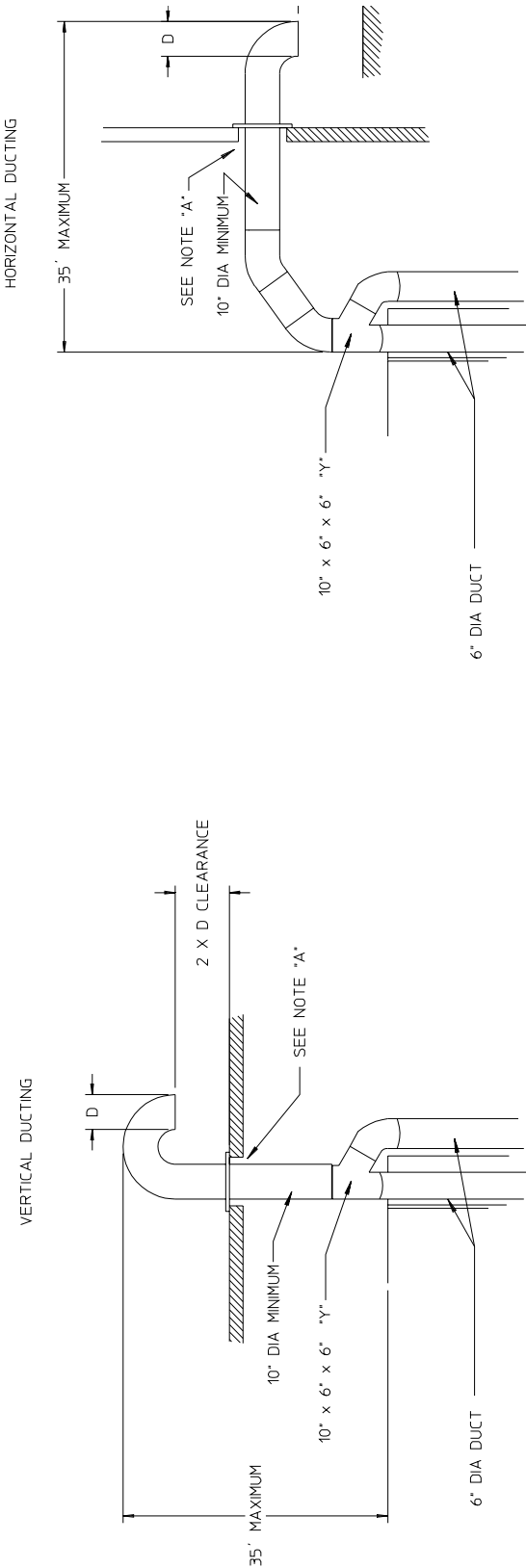


MAN3925

NOTE 'A': OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT ( ALL THE WAY AROUND ).  
THE DUCT MUST BE CENTERED WITHIN THE OPENING.

**Illus. No. 4**  
**(AD-330)**

EXTERNAL SINGLE DRYER VENTING CONNECTIONS  
( WITH DRYER COMMON EXHAUST )

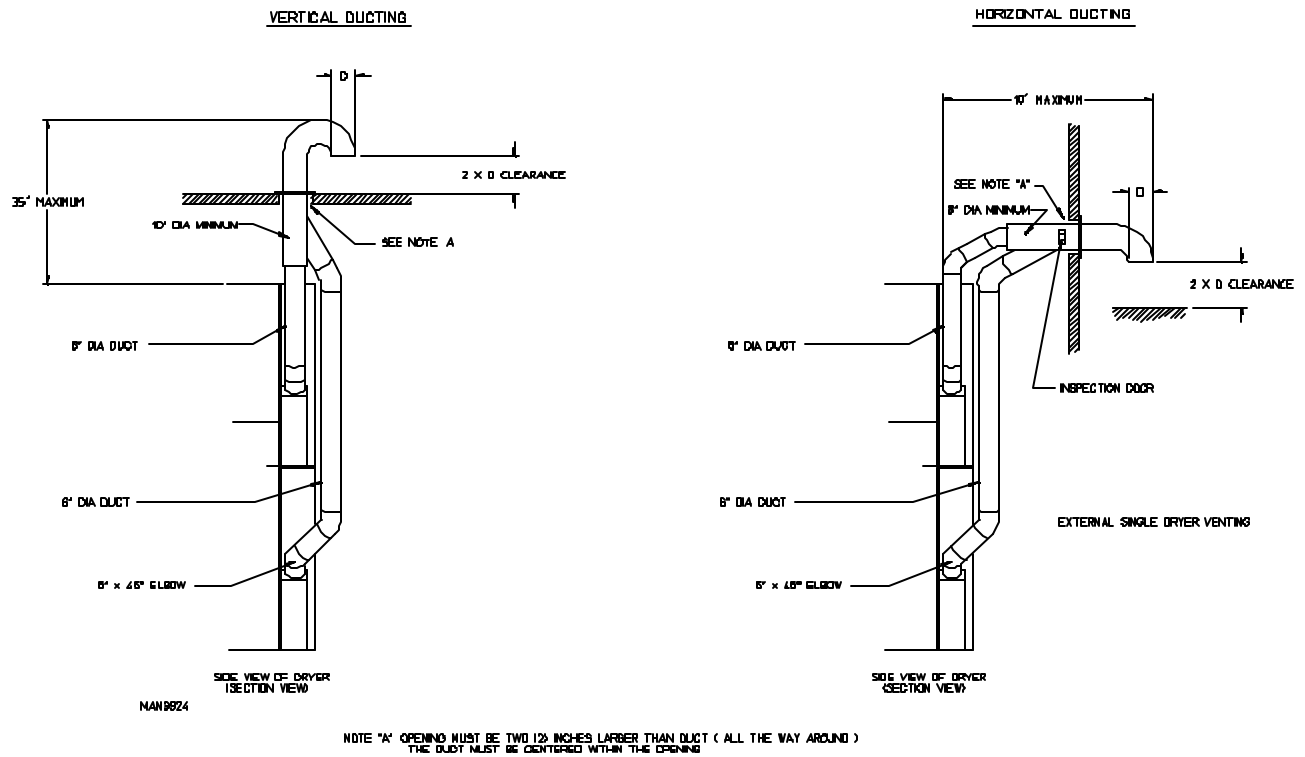


MAN3926

NOTE "A": OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT ( ALL THE WAY AROUND ).  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING

**Illus. No. 5**  
**(AD-330)**

EXTERNAL SINGLE DRYER VENTING CONNECTIONS  
 ( WITH DRYER COMMON EXHAUST )



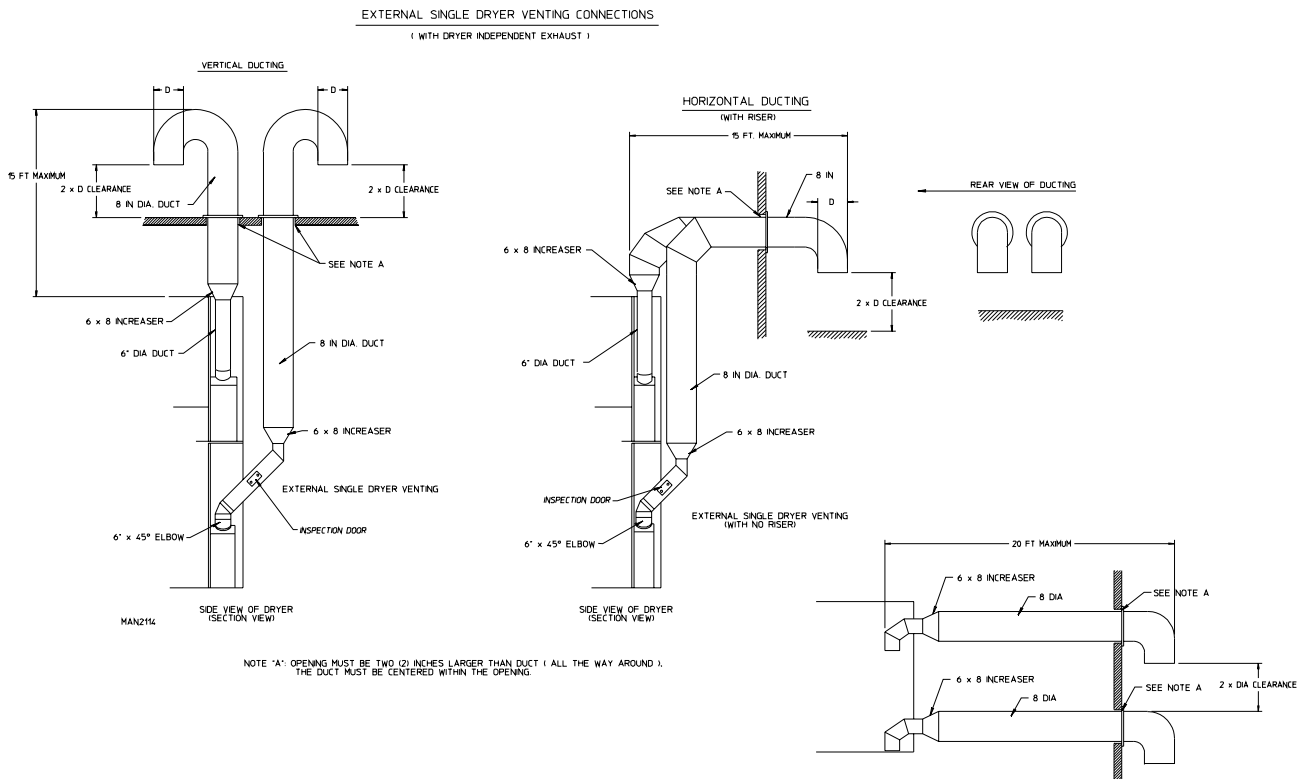


## b. AD-531 Individually Vented Examples

The illustrations included in this section are for dryers individually vented/exhausted to the outdoors. For dryers where the length of exhaust duct work or the amount of allowable elbows is exceeded, a Heating Venting Air Conditioning (HVAC) firm must be consulted for proper venting (flue) information.

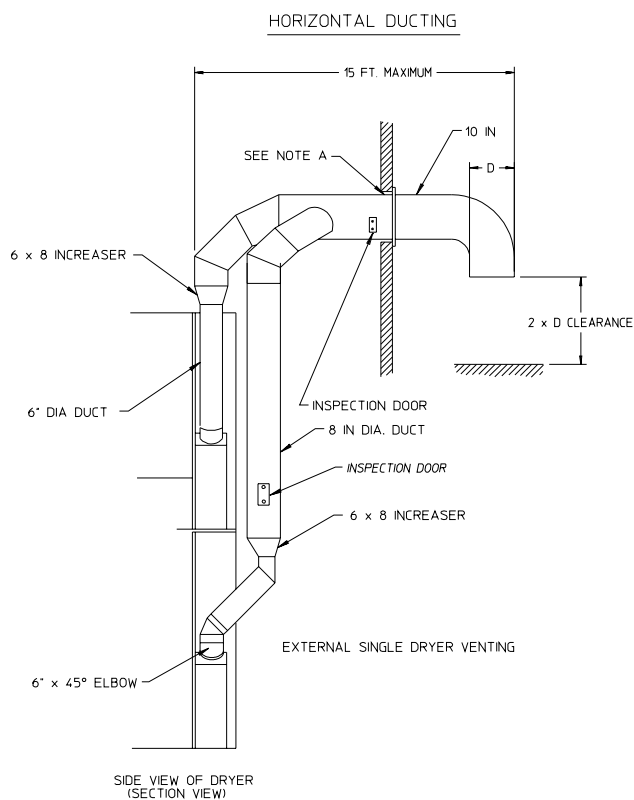
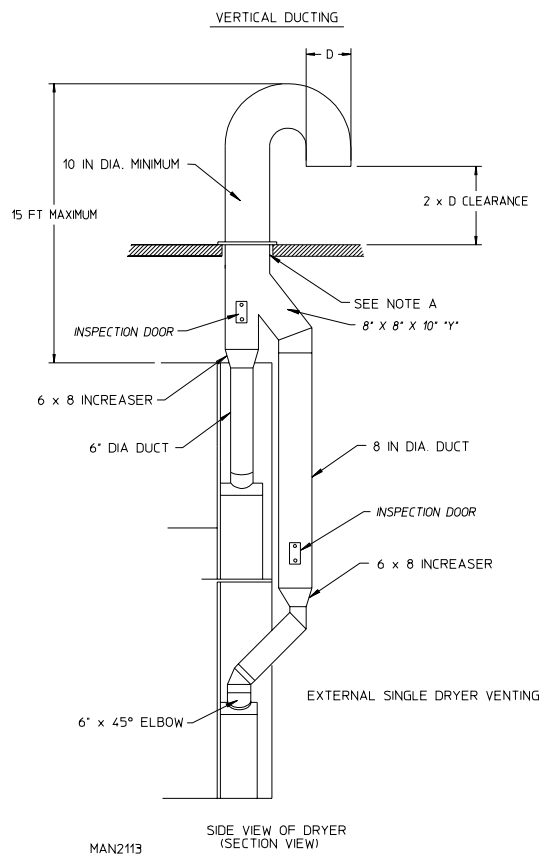
Venting Option	Illus. No.
Each Pocket/Tumbler Independently Vented	1
Top/Bottom Pocket “4” Together (Version 1)	2
Top/Bottom Pocket “4” Together (Version 2)	3

**Illus. No. 1**  
**(AD-531)**



**Illus. No. 2**  
**(AD-531)**

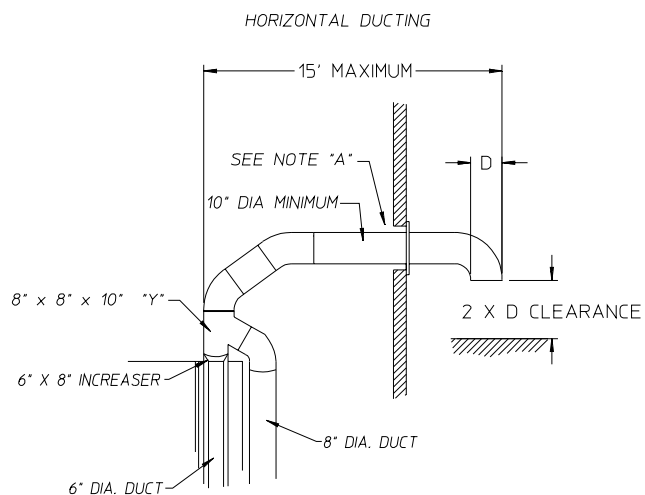
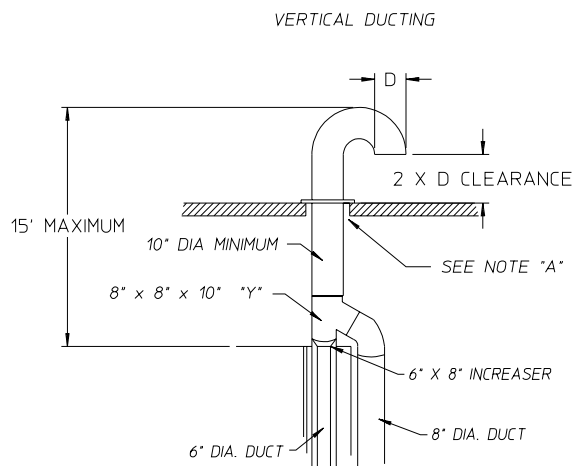
EXTERNAL SINGLE DRYER VENTING CONNECTIONS  
( WITH DRYER COMMON EXHAUST )



NOTE "A": OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT ( ALL THE WAY AROUND ).  
THE DUCT MUST BE CENTERED WITHIN THE OPENING.

**Illus. No. 3**  
**(AD-531)**

EXTERNAL SINGLE DRYER VENTING CONNECTIONS  
( WITH DRYER COMMON EXHAUST )



NOTE "A": OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT ( ALL THE WAY AROUND ).  
THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

## 2. AD-330/AD-530 Multiple Dryer (Common) Venting

If it is not feasible to provide separate exhaust ducts for each dryer, ducts from individual dryers may be channeled into a “common main duct”. The individual ducts should enter the bottom or side of the main duct at an angle not more than 45 degrees in the direction of airflow. The main duct **should be** tapered, with the diameter increasing before each individual.

**IMPORTANT:** Even though the dryer’s individual exhaust outlet is six (6) inches in diameter, the minimum connections at the point of exit from the dryer in many cases **MUST BE INCREASED**. The amount of increase in diameter will depend on the venting application/layout. See examples in this section for specific details.

The connections between the dryer and the common duct, and the overall length of the common main duct **should be** laid out in such a way that the duct travels as directly as possible to the outdoors with as few turns as possible. Keep in mind when calculating the dryer exhaust duct work, the elbows used for outside protection must be included. Refer to **Section V, A & B** for specific details.

**IMPORTANT:** WHEN TOP and BOTTOM BASKETS (Tumblers) ARE “Y” TOGETHER, **UNDER NO CIRCUMSTANCES** CAN THE DRYER BE VENTED TO THE OUTDOORS, OR MORE SPECIFIC VENTED INTO A COMMON DUCT USING A 6-INCH DIAMETER EXHAUST DUCT (FLUE)!!!

Refer to the duct work examples in this section for specific venting information. When the duct work approaches the maximum limits noted in this manual, a professional HVAC firm **must be** consulted for proper venting information.

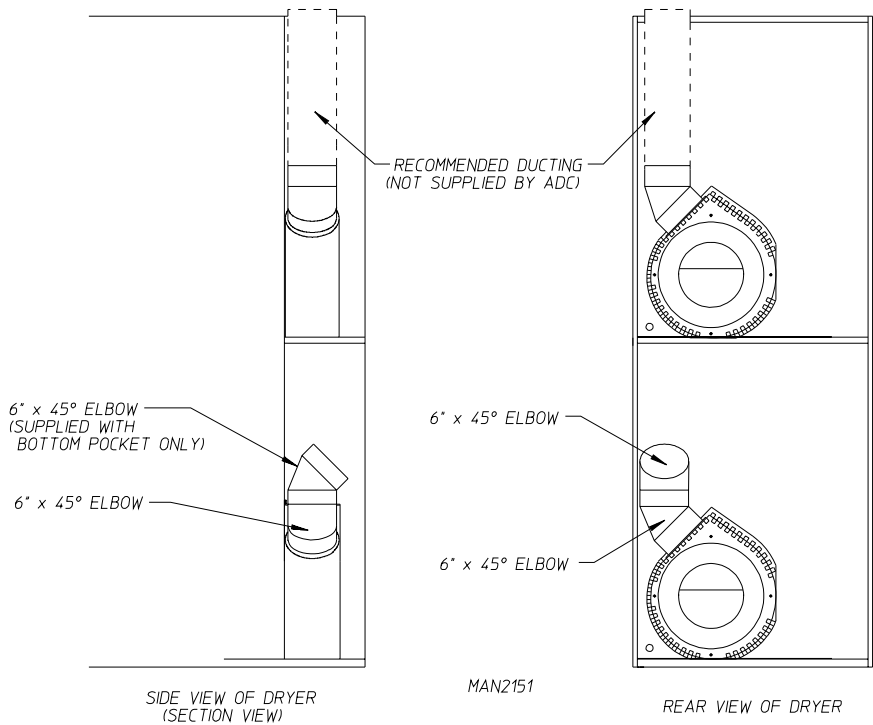
**IMPORTANT:** Exhaust back pressure measured by a manometer at the dryer exhaust duct area must not exceed .817 mbar (0.3 inches of water column).

**NOTE:** No more than four (4) dryers or eight (8) pockets/tumblers total should be connected to one (1) main common duct.

### a. Exhaust Connections of Top and Bottom Baskets (Tumblers)

There is no common venting connection provided with the dryer. Each basket (tumbler) can be connected to the common main duct independently or top and bottom tumblers connected together commonly (“Y”) together. Both independent or common “Y” duct work can be rigid or flexible.

The illustration below shows the duct work connection points and what internal duct work is included in the dryer.



The exhaust connection at the top basket (tumbler) **must be** made at the blower duct inside the cabinet. No internal duct work is included for the top basket/tumbler. Depending on the external duct work layout, the installer has the option of the duct work coming out the top of the back of the dryer. The duct work used inside of the dryer, from the blower duct to where it exits the dryer, **must be** a minimum of 6-inches in diameter (30 square inches cross sectional area). At this point (where the internal ducting ends) the diameter **must be** increased to meet the application as described in this manual.

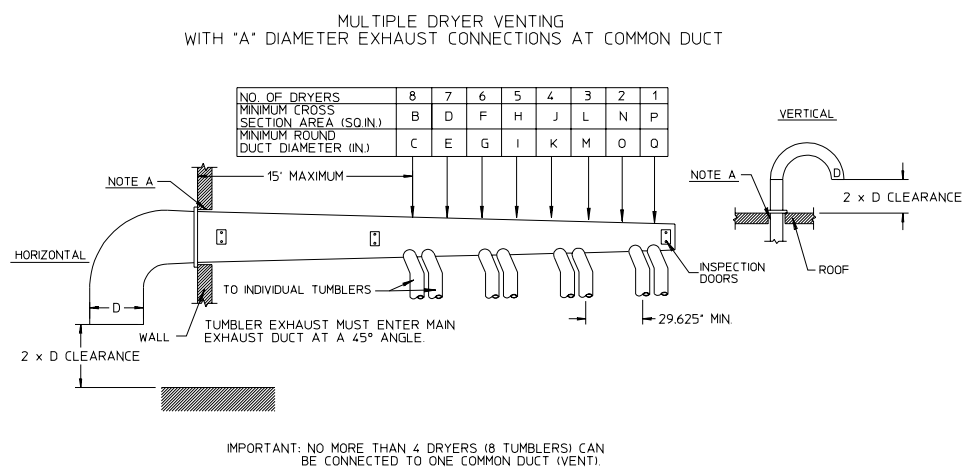
The bottom basket (tumbler) includes 6-inch duct work which extends from the dryer blower duct to the lower back guard/panel area. At this point the diameter **must be** increased to meet the application as described in this manual.

b. AD-330 Common (Multiple Dryer) Vented Examples

The illustrations included in this section are for AD-330 dryers commonly vented/exhausted to the outdoors. For dryers where the length of the exhaust duct work or the amount of allowable elbows is exceeded, a Heating Venting Air Conditioning (HVAC) firm **must be** consulted for proper venting (flue) information.

Venting Option	Illus. No.
Each Pocket/Tumbler Individually connected to a common duct.	1
Each Dryer (Top and Bottom Pockets "Y" Together) To Common Duct.	2

**Illus. No. 1**  
**(AD-330)**



MAN3922

FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA

CROSS SECTIONAL AREA OF A ROUND DUCT = .785 x D<sup>2</sup> WHERE D = DIAMETER OF THE DUCT.

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

NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
6"	210	16	210	16	164	14	164	14	120	12	120	12	80	10	54	8

DRYER EXHAUST DUCT SIZE: 6

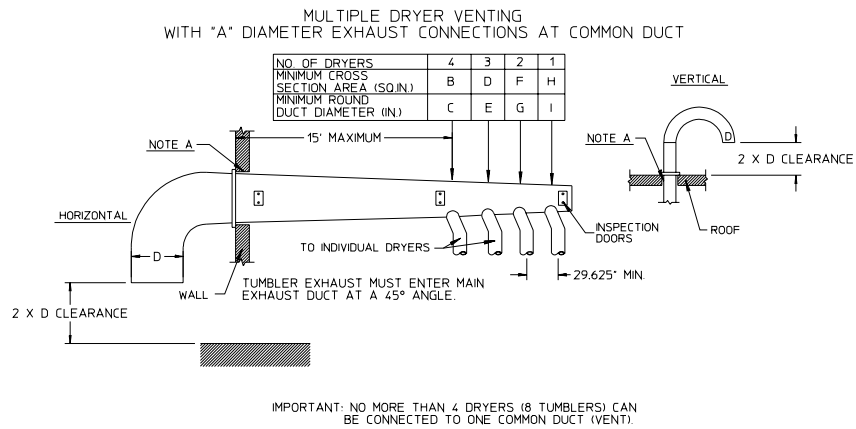
DRYER AIR FLOW: 400 CFM

MODEL NO.(S): AD - 330

HEAT RECLAIMER: YES NO ✓

CONTROLS: COIN ✓ OPL

**Illus. No. 2**  
**(AD-330)**



MAN3921

FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA

CROSS SECTIONAL AREA OF A ROUND DUCT = .785 x D<sup>2</sup> WHERE D = DIAMETER OF THE DUCT.

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

NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

A	B	C	D	E	F	G	H	I
10"	210	16	164	14	120	12	80	10

DRYER EXHAUST DUCT SIZE: 10

DRYER AIR FLOW: 800 CFM

MODEL NO.(S): AD - 330

HEAT RECLAIMER: YES NO ✓

CONTROLS: COIN ✓ OPL

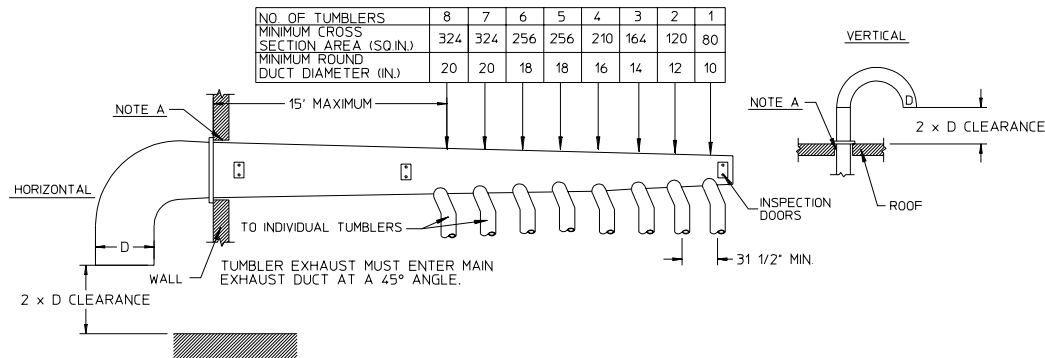
### c. AD-531 Common (Multiple Dryer) Vented Examples ...

The illustrations included in this section are for AD-330 dryers commonly vented/exhausted to the outdoors. For dryers where the length of the exhaust duct work or the amount of allowable elbows is exceeded, a Heating Venting Air Conditioning (HVAC) firm **must be** consulted for proper venting (flue) information.



Venting Option	Illus. No.
Each Pocket/Tumbler Individually connected to a common duct.	1
Each Dryer (Top and Bottom Pockets “Y” Together) To Common Duct.	2

**Illus. No. 1**  
**(AD-531)**

MULTIPLE DRYER VENTING  
WITH 8" DIAMETER EXHAUST CONNECTIONS AT COMMON DUCT



IMPORTANT: NO MORE THAN 4 DRYERS (8 TUMBLERS) CAN BE CONNECTED TO ONE COMMON DUCT (VENT).

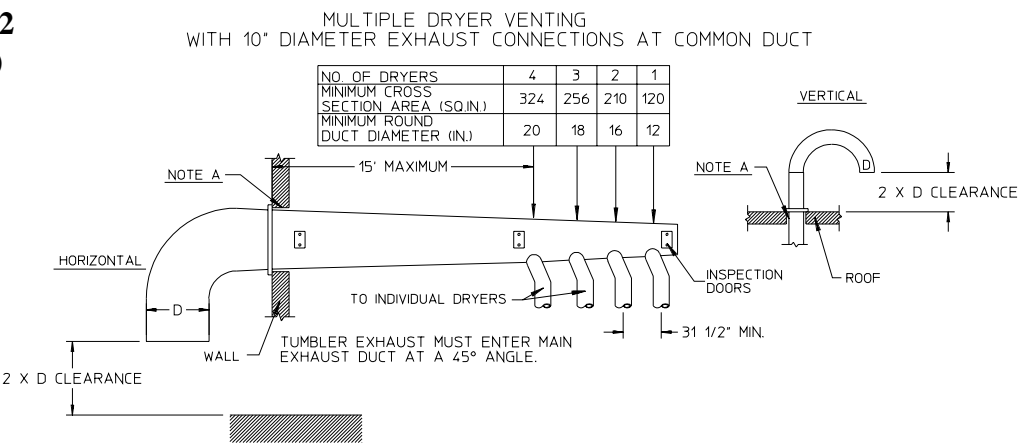
<p><u>FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA</u></p>	
<p>CROSS SECTIONAL AREA OF A ROUND DUCT = <math>.785 \times D^2</math> WHERE D = DIAMETER OF THE DUCT.</p>	
<p>CROSS SECTIONAL AREA OF A RECTANGULAR DUCT = <math>W \times H</math> WHERE W = WIDTH AND H = HEIGHT.</p>	

NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

DRYER EXHAUST DUCT SIZE: 8  
 DRYER AIR FLOW: 550 CFM  
 MODEL NO.(S): AD - 531  
 HEAT RECLAIMER: YES NO ☒  
 CONTROLS: COIN ☒ OPL     

MAN3611

**Illus. No. 2**  
**(AD-531)**



IMPORTANT: NO MORE THAN 4 DRYERS (8 TUMBLERS) CAN  
 BE CONNECTED TO ONE COMMON DUCT (VENT).

MAN3612

FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA  
 CROSS SECTIONAL AREA OF A ROUND DUCT = .785 x D<sup>2</sup> WHERE D = DIAMETER OF THE DUCT.  
 CROSS SECTIONAL AREA OF A RECTANGULAR DUCT = W x H WHERE W = WIDTH AND H = HEIGHT.

NOTE A: OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT  
 MUST BE CENTERED WITHIN THIS OPENING.

DRYER EXHAUST DUCT SIZE: 10  
 DRYER AIR FLOW: 1100 \* CFM  
 MODEL NO.(S): AD - 531  
 HEAT RECLAIMER: YES ☐ NO ☒  
 CONTROLS: COIN ☒ OPL ☐  
 \*TOTAL FOR BOTH POCKETS

# SECTION VII

## PART INFORMATION

Always contact your dealer, distributor, or service agent for parts. When doing so, always supply the complete dryer model number and serial number to insure that the correct parts are provided. If you **cannot** locate an **ADC** dealer or agent, or if you require technical parts information, contact the **ADC** factory (U.S.A.).

**ADC Telephone:** 508-678-9000 (Hours are 8:00 a.m. to 5:00 p.m. Eastern Standard Time)  
**ADC Fax:** 508-678-9447  
**E-mail:** techsupport@amdry.com

### A. Spare Parts Listing

1. Due to the amount of various models, options, vintage of the dryer etc. **ALL** the spares/parts possibly required for the life of the dryer **cannot** be listed.

Included are two (2) parts listings. One is a listing of common parts which includes description and part numbers.

The second list includes items which have many various versions and the description does not include the part number. Should these parts be needed in the far future, the **ADC** dealer or agent **should be** contacted with the **exact** dryer **model** and **serial number** for correct part identification. If dealer or agent is unknown or for whatever the reason **cannot** be found, contact the **ADC** factory as noted previously at the beginning of this section.

Most major components used in the **ADC** product line are labeled with the **ADC** part number. When replacing parts, be sure to check to insure the part number of the item being replaced is the same as that on the new part.

A complete illustrated parts manual is available for each model dryer from the **ADC** factory upon request.

### 2. Common spare parts listing ..

<u>Description</u>	<u>ADC Part No.</u>
Coin keypad assembly. (Coin Microprocessor models only)	112526
Non-Coin keypad assembly (OPL - Non coin Micro models)	112535
Coin Phase 5 Microprocessor controller	137213
OPL Phase 5 non-reverse Microprocessor controller	137222
OPL phase 5 reversing Microprocessor controller	137231
60 minute heat timer	124025
15 minute cool down timer	124030
Dual Timer 24v. Relay (Dual Timer Models Only)	131931
Timer Knobs (Dual Timer Models Only)	124103
Push To Start Relay 24v. (non-Microprocessor models)	131917
Heat Selection Rocker Switch (non-Microprocessor models)	122400
Indicator Light 24v (non-Microprocessor models)	123005
1/8 amp slo blo fuse (for Micro controller)	136048



DescriptionADC Part No.

1/2 amp slo blo fuse (all 24v circuits)	136057
Plastic (Gray) Main Door Assembly	881421
Plastic (Black) Main Door Assembly	881422
CRS Metal (Black) Main Door Assembly	881150
115/120/170 Main door Assembly (color <b>must be</b> specified)	800127
AD-15 & 25 Tumbler Inner 1 1/4" flange bearing	880213
AD-15 & 25 Tumbler Outer 1" flange bearing	880201
AD-285, 295, 30 Tumbler Inner 1 3/8" flange bearing	880203
AD-50, 75 & 81 Tumbler Inner 1 3/4" flange bearing	880220
AD-285 through 81 Tumbler Outer 1 3/8" pillow block bearing	880779
AD-115 & 120 2 1/4" Tumbler bearing	880204
AD-170 Tumbler Bearing	100242
18" Tumbler Pulley (15 through 75 Non-reverse models)	101100
18" Tumbler Pulley (30 through 81 Reverse models)	101118
Idler Pulley (AD-15 through 30)	101129
Idler Pulley (AD-50 through 81)	101140
Idler bearing assembly (AD-15 through 81)	801007
Microprocessor temperature sensor	880251
225 degree F thermostat (Lint chamber Hi-limit)	130103
330 degree F Burner Hi-limit (gas models only)	130401
290 degree F Oven Hi-limit (electric models only)	130400
130 degree F Low Temp Thermostat (non micro models)	130111
150 degree F Med Temp Thermostat (non micro models)	130100
180 degree F High Temp thermostat (non micro models)	130101
Air Flow (Sail) Switch (all gas and electric models)	122200
Gas Valve 24v. (Natural Gas)	128927
Gas Valve 24v (L.P.)	880960
Gas Valve (170)	140017
Hot Surface Ignition (HSI) Module	128976
Hot Surface Ignitor	881797
Motor Contactor 24v. (single phase models)	132451
Motor Contactor 24v. ( 3 phase non-reverse models)	132430
3 phase Arc Suppressor	137060
Lint Screen/Filter (AD-15, 25, and 30 super)	800500
Lint Screen/Filter (AD-50)	800501
Lint Screen/Filter (AD-285, and 30)	800503
Lint Screen/Filter (AD-50 Super, AD-75)	800506
Lint Screen/Filter (AD-81)	802205
Lint Screen/Filter (AD-115 and AD-120)	820017
Lint Screen Filter (AD-170)	820925

3. This secondary list includes items that have many various versions and the description does not include the part number. Should these parts be needed in the far future, the **ADC** dealer or agent **should be** contacted with the exact dryer model and serial number for correct part identification.

Description

Tumbler to Idler Drive Belt(s)  
Motor to Idler Drive Belt(s)  
Electric Oven Elements  
Electric Oven Contactor  
Controls Step Down Transformer  
Micro-Processor Coin Acceptor  
Micro-Processor Optic Switch  
Mechanical Coin Meter 24v.  
Main Door Switch  
Lint Drawer/Door Switch  
Tumbler Support  
Basket Only  
Tumbler/Basket Tie Rod  
Reversing Drive Contactor  
3 Phase Blower Contactor  
Drive Motor  
Blower Motor  
Blower/Fan  
Steam Coil (battery)

# SECTION VIII

## ELECTRICAL INFORMATION

### 1. Electrical Requirements

It is the responsibility of the purchaser to have all electrical connections made by a properly licensed and competent electrician to assure that the installation is suitable for the appliance category in accordance with national installation regulations of the country of destination.

**IMPORTANT:** Failure to comply with these codes or ordinances, and/or the requirements stipulated in this manual can result in personal injury or component failure.

**NOTE:** Component failure due to improper installation will *VOID THE WARRANTY*.

Each dryer **must be** connected to an independently protected branch circuit. The dryer **must be** connected with copper wire only. **DO NOT** use aluminum wire which could cause a fire hazard. The copper conductor wire/cable **must be** of proper ampacity and insulation in accordance with electric codes for making all service connections.

**NOTE:** The use of aluminum wire will *VOID THE WARRANTY*.

**IMPORTANT:** A separate circuit servicing each dryer **must be** provided.

### 2. Electrical Service Specifications

Electric Specification Chart						
Gas Non-Reversing Models ONLY						
	SERVICE VOLTAGE 50 Hz	PHASE	WIRE SERVICE	APPROX. AMP DRAW	FUSING DUAL ELEMENT TIME DELAY	CIRCUIT BREAKER
15, 25, 30 285	240V	1Ø	2	5A	8A	15A
	240V	3Ø	3, 4	4A	8A	15A
	380-416V	3Ø	3, 4	2A	3.2A	15A
295	240V	1Ø	2	5A	8A	15A
50	240V	1Ø	2	4.2A	8A	15A
	240V	3Ø	3, 4	4A	8A	15A
	380-416V	3Ø	3, 4	2.2A	4A	15A
SUPER 30, 50 STD 75	240V	1Ø	2	5A	8A	15A
	240V	3Ø	3, 4	5A	8A	15A
	380-416V	3Ø	3, 4	3A	5.6A	15A
330	240V	1Ø	2	3.6	5A	15
531	240V	1Ø	2	5	8A	15

continued on next page

Electric Specification Chart						
Gas Reversing Models ONLY						
MODEL	SERVICE VOLTAGE 50 Hz	PHASE	WIRE SERVICE	APPROX. AMP DRAW	FUSING DUAL ELEMENT TIME DELAY	CIRCUIT BREAKER
30, 50	240V 380-416V	3Ø 3Ø	3, 4	7A 5A	12A 8A	15A 15A
SUPER 30, 50 STD 75	240V 380-416V	3Ø 3Ø	3, 4	8.5A 5A	12A 8A	15A 15A
81	240V 380-416V	3Ø 3Ø	3, 4	15A 7.5A	25A 15A	30A 15A
115	240V 380-416V	3Ø 3Ø	3, 4	15.5A 8A	25A 12A	30A 15A
120	240V 380-416V	3Ø 3Ø	3, 4	15.5A 8A	25A 12A	30A 15A
170	240V 380-416V	3Ø 3Ø	3, 4	28A 14A	40A 20A	60A 25A

**IMPORTANT:** The dryer *must be* connected to the electric supply shown on the dryers data label

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

**IMPORTANT:** The wire size *must be* properly sized to handle the related current.

### 3. Grounding

A ground (earth) connection must be provided and installed in accordance with local or regional codes. In the absence of these codes, grounding must be suitable for the appliance category in accordance with national installation regulations of the country of destination.

**WARNING:** For personal safety and proper operation, the dryer must be grounded.

Provisions are made for ground connection in each dryer at the electrical service connection area.

#### Electrical Connections

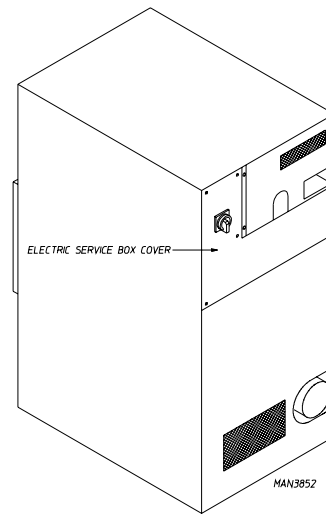
**NOTE:** A wire diagram is provided with this booklet and a copy is also included in the dryer's electrical box.

#### 4. Single Pocket Wiring Connections

**IMPORTANT:** A separate circuit servicing each dryer *must be* provided.

##### a. Single Phase Wiring Connections (Hookup)

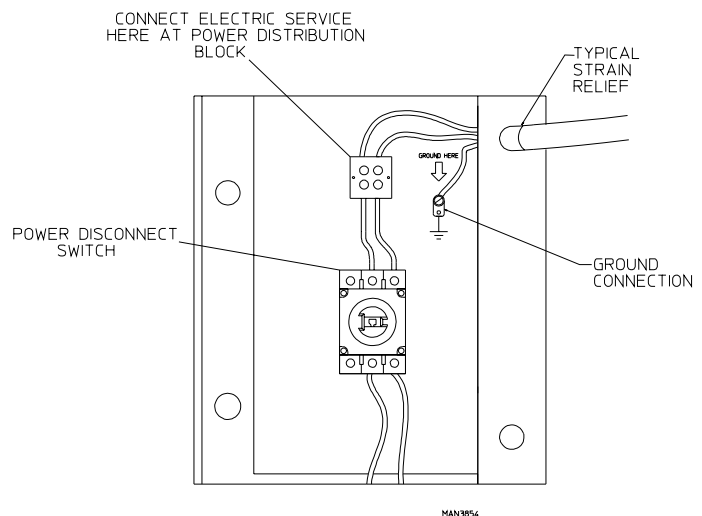
The electrical connections on all Single-Phase dryers are made into the rear service box located at the upper left area of the dryer.



Actual electrical wire connections are made to the L1 and L2 terminals of the power distribution block located in the rear service box mentioned above. The ground connection is also made to the copper lug also provided in this box.

Single-Phase Electrical Connections Leads		
Black + Positive	Red - Neutral	Green Ground

If local codes permit, power to the dryer can be made by the use of a flexible power cord/pigtail (wire size **must conform** to rating of dryer), or the dryer can be hard wired directly to the service breaker panel. In all cases, a strain relief **must be** installed where the wiring enters the dryer.

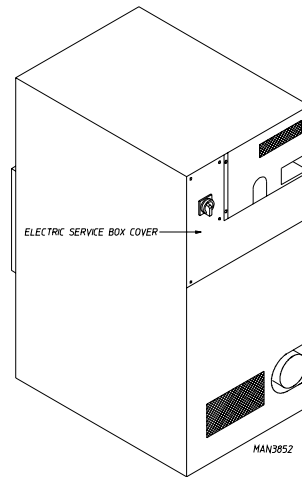
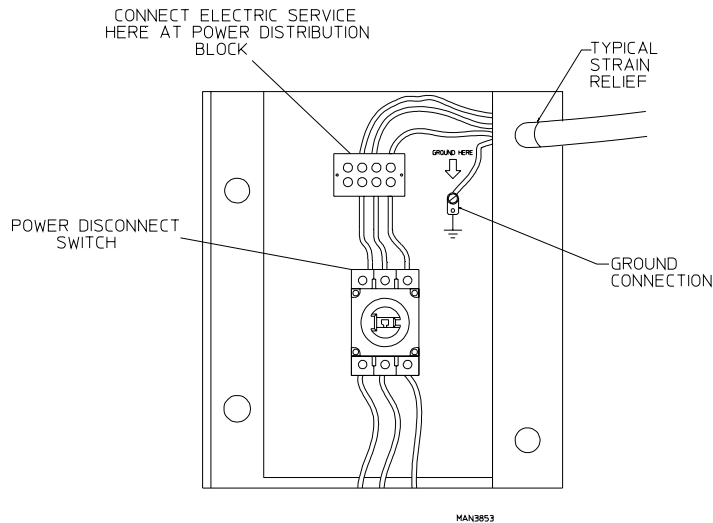


b. Three (3) Phase Connections

The electrical connections on all Three (3) Phase dryers (including reversing models) are made into the rear service box located at the upper left area of the dryer. To gain access to the service box power distribution block, the service box cover **must be** removed.

**NOTE:** A circuit serving each dryer *must be* provided.

Wiring size **must conform** to rating of dryer.  
A strain relief **must be** installed where the wiring enters the dryer.



The only electrical connections to the dryer are the 3-Phase power leads (L1, L2, L3 and Ground) made to the power distribution block in the electric service box. The ground connection is made to a copper lug also provided in this box. Single phase power for the control circuit is done internally to the dryer. No single phase connection is required on a three phase dryer.

Three (3) phase models are polarity sensitive. To verify proper polarity, when dryer is first started the basket (tumbler) should turn in the clockwise direction. If it does not, then reverse any two of the three phase lead connections made at the power distribution block.

## 5. Dual Pocket Wiring Connection

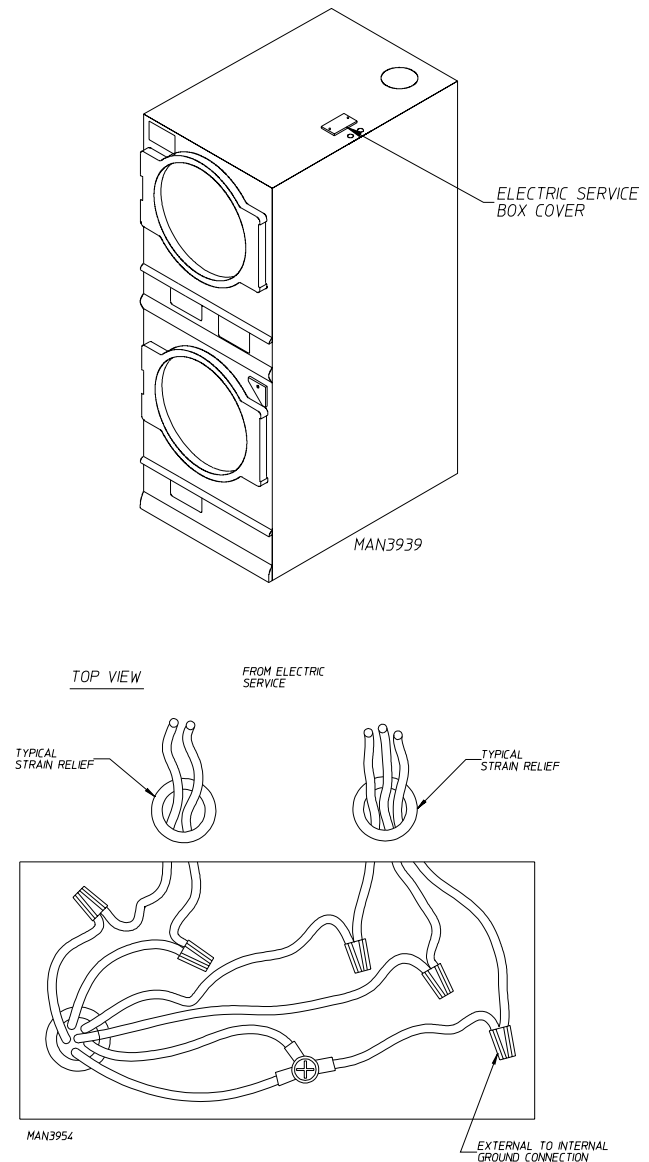
### a. AD-330 Single Phase Wiring Connections (Hookup)

**IMPORTANT:** A separate circuit (power source) servicing each pocket tumbler/basket *must be* provided.

The electrical connections (for both top and bottom pockets) for the AD-330 are made into the electric service box located at the top of the dryer (see illustration).

Actual electrical wire connections are made to the five (5) leads in this box. There are two (2) black, two (2) red, and one (1) green. Connect one power source Line 1 to one black lead, Line 2 to one red lead, and ground to the green lead. The other power source connections (Line 1, Line 2, and Ground) are made to the other black and red leads, and the ground to the common ground lead. See illustration.

Again, a separate circuit servicing each pocket tumbler/basket **must be** provided.



If local codes permit, power to the dryer can be made by the use of a flexible power cord/pigtail (wire size must conform to rating of dryer), or they can be hard wired directly to the service breaker panel. In all cases, a strain relief **must be** installed where the wiring enters the dryer.

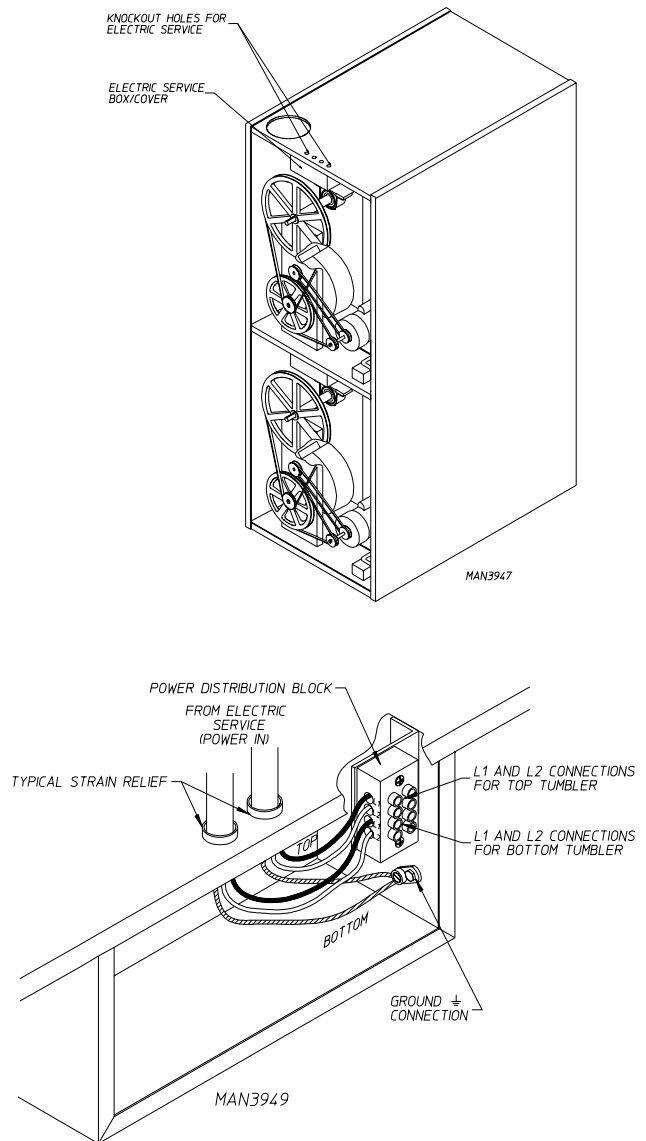
b. AD-531 Single Phase Wiring Connections (Hookup)

**IMPORTANT:** A separate circuit (power source) servicing each pocket tumbler/basket *must be* provided.

The electrical connections (for both top and bottom pockets) for the AD-531 are made into the electric service box located at the rear top area of the dryer (see illustration).

Actual electrical wire connections are made at the 4 position power distribution block located in the above mentioned electric service box. The top two positions are for the top pocket/tumbler L1 and L2 service connections, and the bottom two are for the lower pocket tumbler L1 and L2 service connections. The ground connections are made to the copper lug also provided in this box.

Again, a separate circuit servicing each pocket tumbler/basket **must be** provided.



If local codes permit, power to the dryer can be made by the use of a flexible power cord/pigtail (wire size must conform to rating of dryer), or they can be hard wired directly to the service breaker panel. In all cases, a strain relief **must be** installed where the wiring enters the dryer.



# SECTION IX

## DRYER MODEL/CAPACITY

<b>ADC DRYER MODEL NUMBER</b>	<b>CAPACITY* IN POUNDS</b>	<b>MAXIMUM LOAD IN KILOGRAMS</b>	<b>MINIMUM LOAD IN KILOGRAMS</b>
ADG-15	15 lbs	6.8 kg	3.4 kg
ADG-25	25 lbs	11.3 kg	5.7 kg
ADG-285	30 lbs	13.6 kg	6.8 kg
ADG-295	30 lbs	13.6 kg	6.8 kg
ADG-531	30 lbs **	13.6 kg **	6.8 kg **
ADG-30	30 lbs	13.6 kg	6.8 kg
ADG-30 SUPER	30 lbs	13.6 kg	6.8 kg
ADG-330	30 lbs **	13.6 kg **	6.8 kg **
ADG-50	50 lbs	22.7 kg	11.4 kg
ADG-50 SUPER	50 lbs	22.7 kg	11.4 kg
ADG-75	75 lbs	34.0 kg	17.0 kg
ADG-81	80 lbs	36.4 kg	18.2 kg
ADG-115	115 lbs	52.2 kg	26.1 kg
ADG-120	120 lbs	54.4 kg	27.2 kg
ADG-170	170 lbs	77.0 kg	38.5 kg

\* DRY WEIGHT

\*\* EACH POCKET/TUMBLER BASKET



## *Declaration of Conformity*

In accordance with article 10 of European Directive 89/336/EEC (Electromagnetic Compatibility) and article 10 of European Directive 73/23/EEC (Low Voltage Directive), as amended by Directive 93/68/EEC (CE marking), it is declared that the CE marked products listed below have been designed and manufactured in conformity with the following harmonized European Standards:

EN50081-1:1992	EMC-Generic Emission Standard
EN55022:1987	RFI Radiated Emission
EN55022:1987	Terminal Interference Voltage
EN55014	Discontinuous Interference
EN50082-1:1992	EMC-Generic Immunity Standard
IEC 801-3:1984	RFI Radiated Susceptibility
IEC 801-2:1984	Electrostatic Discharge
IEC 801-4:1988	Electrical Fast Transients

Product	Dryers
Brand	ADC
Model/Description	ADG-15, ADG-25, ADG-235, ADG-295, ADG-30, ADG-30 Super, ADG-330, ADG-531, ADG-50, ADG-50 Super, ADG-75, ADG-81, ADG-115, ADG-120, ADG-170
Year of first CE mark	

Authorized representative in Europe	
Name of signatory	
Position	
Company	
Company address in EEC	

Signature of Manufacturer's

Authorized representative in EEC: \_\_\_\_\_ Date: \_\_\_\_\_

Manufacturer	
Name	George Silvia
Position	Director of Engineering
Company	American Dryer Corporation
Company Address	88 Currant Road, Fall River, MA 02720

Signature: George Silvia 11-2-98



## **DECLARATION OF CONFORMITY TO TYPE**

We: American Dryer Corporation  
88 Currant Road  
Fall River, Mass. 02720-4781

### **Declare that**

Product Group: Dryers

Model Number/Description:

ADG-15, ADG-25, ADG-285, ADG-295, ADG-30, ADG-30 Super, ADG-330, ADG-531,  
ADG-50, ADG-50 Super, ADG-75, ADG-81, ADG-115, ADG-120, ADG-170

**SATISFIES THE ESSENTIAL REQUIREMENTS OF THE GAS APPLIANCE DIRECTIVE 90/  
396/EEC AS AMENDED BY 93/68/EEC AND IS MANUFACTURED IN ACCORDANCE WITH  
THE HARMONIZED EUROPEAN STANDARDS:**

Standards Numbers:

prEN1458 and prEN1020

We also declare that production of each specific model will be in conformity with the type as described in the  
EC type-examination certificate:

NUMBER: BG/EC-87/98/87 issued by BG Tech

Name: George Silvia

Title/Position: Director of Engineering

Place and date of issue:

Signature:

A handwritten signature in cursive script, reading 'George Silvia', is written over a horizontal line. The signature is written in dark ink and is positioned to the right of the 'Signature:' label.

080698GS/cj

<b>ADC 113007</b>	<b>1-</b> 12/05/97-3	<b>2*</b> 03/20/98-5	<b>3*</b> 06/03/98-5
	<b>4*</b> 07/14/98-100	<b>5-</b> 07/31/98-500	<b>6-</b> 08/05/98-2
	<b>7-</b> 10/08/98-0	<b>8*</b> 10/23/98-0	<b>9*</b> 10/29/98-0
	<b>10*</b> 11/03/98-500	<b>11*</b> 04/23/99-250	<b>12-</b> 08/09/99-250
	<b>13-</b> 10/20/99-250	<b>14-</b> 10/03/00-250	<b>15*</b> 12/04/00-300

