

CISSELL 30 lb. SERVICE MANUAL

**D & G MODELS LAUNDRY DRYERS
J & P**

DIMENSION™

GAS FIRED

ENERGY SAVER GAS FIRED

**Installation
Operation
Trouble Analysis
Maintenance
Illustrated Parts**

**Refer to
Addendum A
for Updated
Information**



Cissell Manufacturing Company

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"Ask Your Distributor"

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Addendum A

L28DS30, L28GS30, L28JS30, L28PS30, L28RS30 Models

PART NO.	DESCRIPTION	COMMENTS	PAGE NO.
TU3240H	Thermostat	2 required; Hi & Safety; 185 degrees	
TU5150H	Thermostat	Medium; 150 degrees	
TU7244H	Thermostat	Low; 135 degrees	
TU1979H	Door Switch		
CM6760	Coin Meter	120 Volt; 25 cents; No cam	
CM6860	Coin Meter	240 Volt; 25 cents; No cam	
TU8930	Belt		
TU8905	Sheave	Motor; 60 Hertz	
TU8956	Sheave	Tension	
TU7019	Bearing	2 required; Includes locking collar	
TU7018	Bearing	4 required	
TU15621	Fan		
TU8206	Air Switch Kit		
TU14482	Switch		
TU6557	Gas Valve	Natural Gas	
TU8596	Ignitor	Glow bar	
TU8599	Relay	Ignition	
TU8598	Radiant Sensor		
TU15107	Door Glass		
TU15966	Door Glass Gasket		
TU2090	Door Gasket		
TU2874	Door Handle		
TU9029	Front Panel	Replaced by TU10763WH Front Panel with Catch; Add color	
TU9511	Lint Door	Add color	
TU9391	Burner Door	Replaced by TU9391WH	
TU8993	Spider		
TU8955	Lint Screen		
K665	Switch Replacement Kit		
TU9030	Temperature Selector Switch		

Obsolete Parts – No Longer Available

PART NO.	DESCRIPTION	COMMENTS	PAGE NO.
K373	Coin Replacement Kit		
TU7171	Loading Door and Hinge		
	Sheave	Motor; 50 Hertz	
	Basket		

- WARNING: The Dryer Must Be Used Only For Water Washed Fabrics.
- WARNING: To Avoid Fire Hazard, Do Not Dry Articles Containing Foam Rubber Or Similarly Textured Rubber-like Materials.
- CAUTION: A Clothes Dryer Produces Combustible Lint And Should Be Exhausted Outside.
- CAUTION: A Clothes Dryer Produces Combustible Lint And The Area Around The Clothes Dryer Should Be Kept Free Of Lint.
- CAUTION: Remove Clothes From Dryer As Soon As It Stops. This Keeps Wrinkles From Setting In And Reduces The Possibility Of Spontaneous Combustion.

CAUTION!

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE. NOTE! THE PURCHASER TO POST THE CAUTION IN A PROMINENT LOCATION.

For optimum efficiency and safety, we recommend that you read the owner's manual before operating your Cissell commercial clothes dryer.

RETAIN THIS MANUAL FOR FUTURE REFERENCE. STORE MANUAL IN A FILE OR BINDER.

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS MUST BE POSTED IN A PROMINENT LOCATION. INFORMATION TO BE POSTED CAN BE OBTAINED BY CONSULTING THE LOCAL GAS SUPPLIER.

CAUTION

"DO NOT PUT INTO THIS DRYER FLAMMABLE ITEMS SUCH AS: BABY BED MATTRESSES THROW RUGS, UNDERGARMENTS (BRASSIERES, ETC.) AND OTHER ITEMS WHICH USE RUBBER AS A PADDING OR BACKING." RUBBER EASILY OXIDIZES CAUSING EXCESSIVE HEAT AND POSSIBLE FIRE. FLAMMABLE ITEMS SHOULD BE AIR DRIED.

DO NOT DRY ITEMS CONTAINING FOAM RUBBER OR ANY RUBBER-LIKE MATERIALS IN THIS DRYER.

RUBBER EASILY OXIDIZES CAUSING EXCESSIVE HEAT AND POSSIBLE FIRE. ALL ITEMS CONTAINING RUBBER SHOULD BE AIR DRIED.

CAUTION

Synthetic solvent fumes from drycleaning machines create acids when drawn through the dryer. These acid fumes cause rusting of painted parts, pitting of bright plated parts and completely removes the zinc from galvanized metal parts, such as the tumbler basket.

If the drycleaning machines are in the same area as the tumbler, then the tumbler make-up air must come from a source free of solvent fumes.

NOTE

BE SAFE - SHUT MAIN POWER OFF EXTERNALLY TO MACHINE BEFORE SERVICING.

WARRANTY

Cissell Manufacturing Company (Cissell) warrants all new equipment (and the original parts thereof) to be free from defects in material or workmanship for a period of one (1) year from the date of sale thereof to an original purchaser for use, except as hereinafter provided. With respect to non-durable parts normally requiring replacement in less than one (1) year due to normal wear and tear, including, but not limited to, cloth goods, valve discs, hoses and iron cords, and with respect to all new repair or replacement parts for Cissell equipment for which the one (1) year warranty period has expired or for all new repair or replacement parts for equipment other than Cissell equipment, the warranty period is limited to ninety (90) days from date of sale. The warranty period on each new replacement part furnished by Cissell in fulfillment of the warranty on new equipment or parts shall be for the unexpired portion of the original warranty period on the part replaced.

With respect to electric motors, coin meters and other accessories furnished with the new equipment, but not manufactured by Cissell, the warranty is limited to that provided by the respective manufacturer.

Cissell's total liability arising out of the manufacture and sale of new equipment and parts, whether under the warranty or caused by Cissell's negligence or otherwise, shall be limited to Cissell repairing or replacing, at its option, any defective equipment or part returned f.o.b. Cissell's factory, transportation prepaid, within the applicable warranty period and found by Cissell to have been defective, and in no event shall Cissell be liable for damages of any kind, whether for any injury to persons or property or for any special or consequential damages. The liability of Cissell does not include furnishing (or paying for) any labor such as that required to service, remove or install; to diagnose troubles; to adjust, remove or replace defective equipment or a part; nor does it include any responsibility for transportation expense which is involved therein.

The warranty of Cissell is contingent upon installation and use of its equipment under normal operating conditions. The warranty is void on equipment or parts: that have been subjected to misuse, accident, or negligent damage; operated under loads, pressures, speeds, electrical connections, plumbing, or conditions other than those specified by Cissell; operated or repaired with other than genuine Cissell replacement parts; damaged by fire, flood, vandalism, or such other causes beyond the control of Cissell; altered or repaired in any way that effects the reliability or detracts from its performance, or; which have had the identification plate, or serial number, altered, effaced, or removed.

No defective equipment or part may be returned to Cissell for repair or replacement without prior written authorization from Cissell. Charges for unauthorized repairs will not be accepted or paid by Cissell.

CISSELL MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, STATUTORY OR OTHERWISE, CONCERNING THE EQUIPMENT OR PARTS INCLUDING, WITHOUT LIMITATION, A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OR A WARRANTY OF MERCHANTABILITY. THE WARRANTIES GIVEN ABOVE ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. CISSELL NEITHER ASSUMES, NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT, ANY OTHER WARRANTY OR LIABILITY IN CONNECTION WITH THE MANUFACTURE, USE OR SALE OF ITS EQUIPMENT OR PARTS.

For warranty service, contact the Distributor from whom the Cissell equipment or part was purchased. If the Distributor cannot be reached, contact Cissell.

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UNPACKING

All Cissell Dryers are packed in a protective (heavy-duty) plastic bag.

Upon arrival of the equipment, any damage in shipment should be reported to the carrier immediately.

Upon locating permanent location of unit (units), care should be taken in movement and placement of equipment.

See Outline Clearance drawings for correct dimensions.

Remove all packing material such as tape, skids, manuals, etc.

Leveling; Use spirit level on top of dryer. Adjust leveling bolts on dryer (See Maintenance Section for correct leveling procedure.).

Check voltage and amperes on rating plate before installing dryer.

GENERAL INSTALLATION - ALL DRYERS

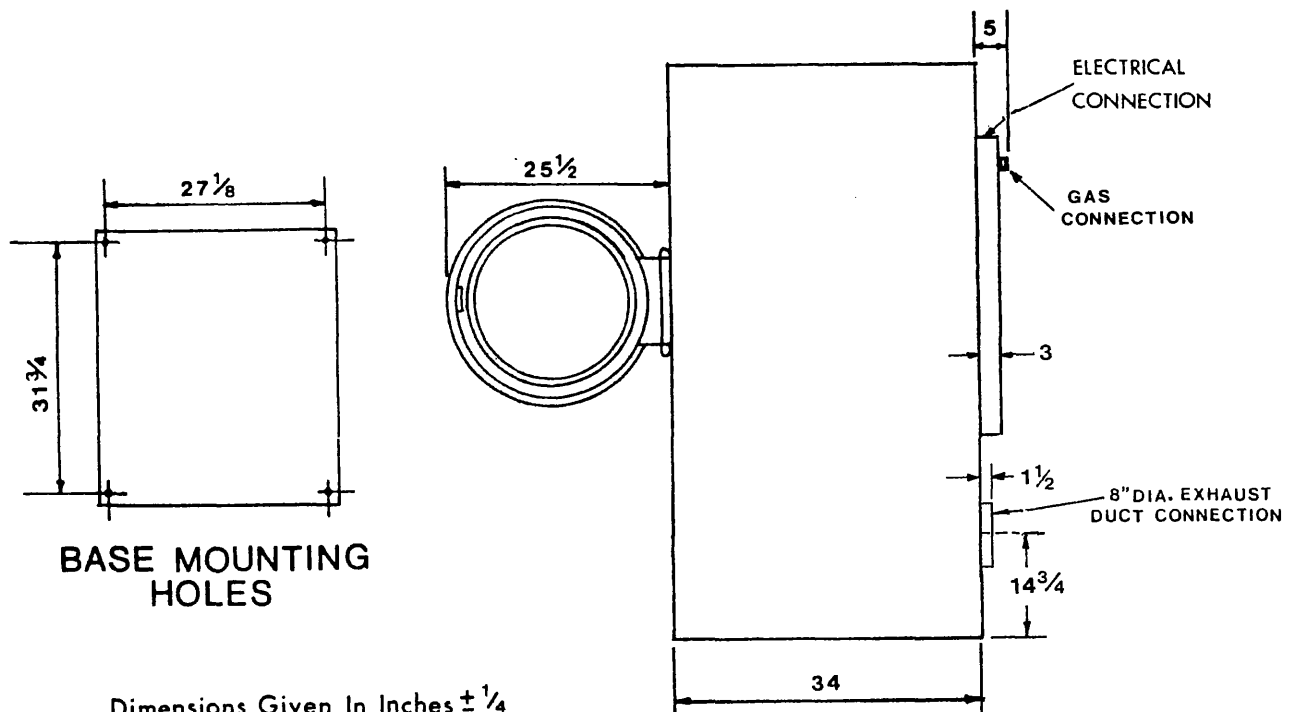
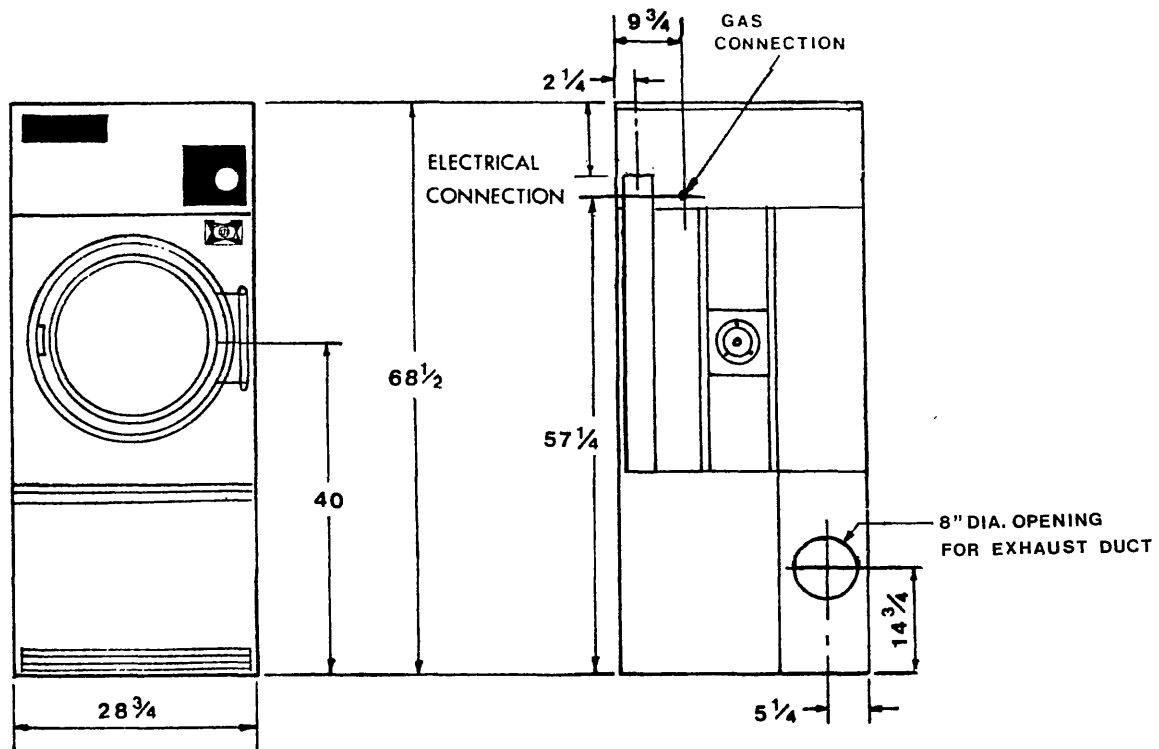
The construction of Cissell Dryers permits installation side by side to save space or to provide a wall arrangement. Position dryer for a least amount of exhaust piping and elbows, and allow free access to the rear of the dryer for future servicing of belts, pulleys, motors, etc. Installation clearance from all combustable material is 0" ceiling clearance, 0" rear clearance, and 0" sides clearance.

Before operating dryer, open basket door and remove blocking between the front panel and basket. Read all instruction tags, labels, etc.

- Important: Opening the clothes loading door will de-activate the door switch to shut off the fan, motor, and gas. To re-start the dryer, close the door and press the "Push-to Start" button for about two seconds.
- Important: This dryer is designed for a maximum capacity load. Overloading it will result in a longer drying time and damp spots on some clothes.
- Important: Maximum operating efficiency is dependant upon proper air circulation. The lint screen must be kept clean daily to insure proper air circulation throughout the dryer.
- Important: All ten (10) ribs of the drive belt must be engaged in the ten (10) grooves of the drive sheave and the belt must be seated between the two flanges of the idler sheave. OTHERWISE, BELT DAMAGE WILL OCCUR.

OUTLINE DIMENSIONS 30 LB. DRYERS

L28DS30G
L28JS30G

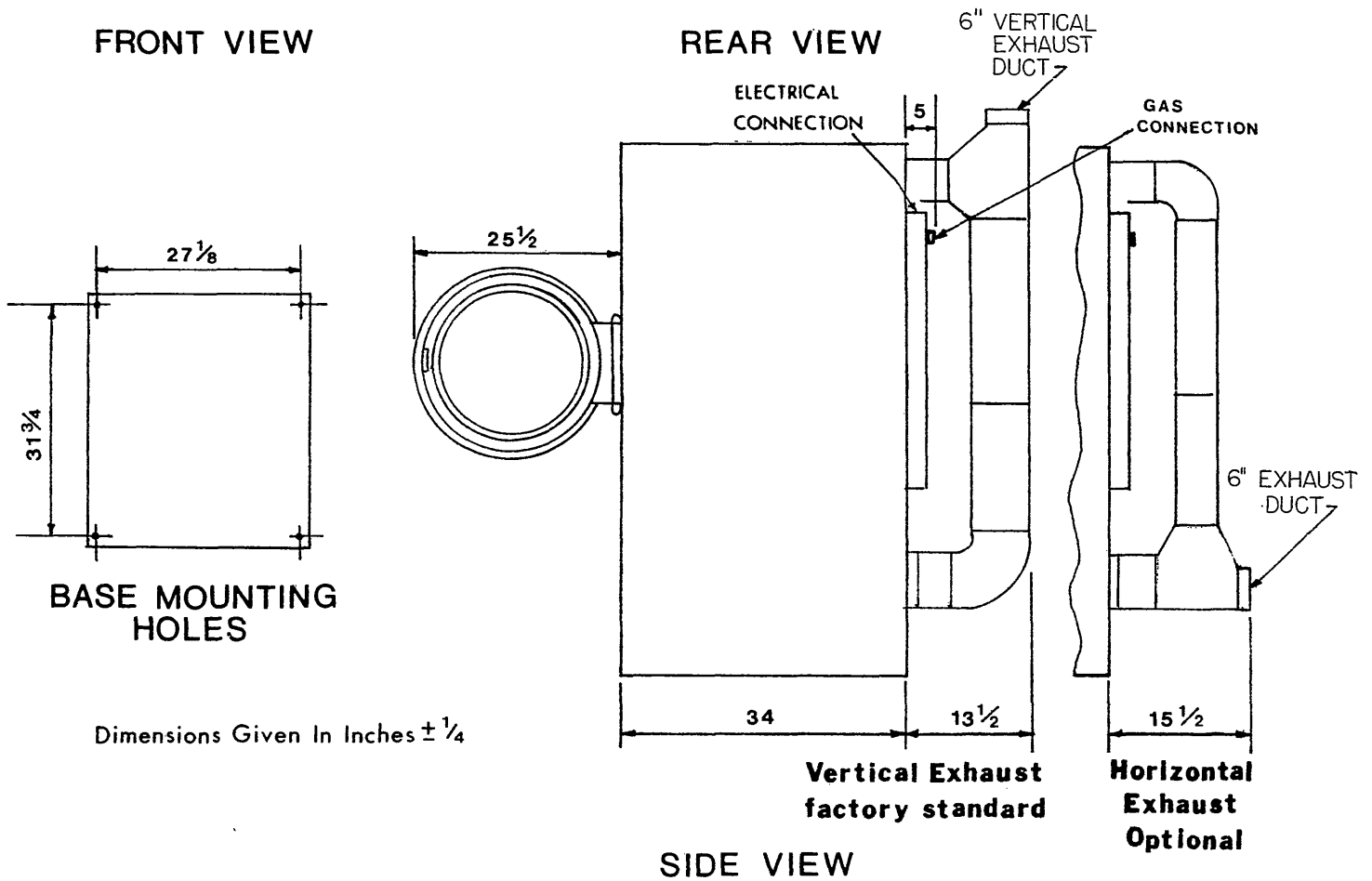
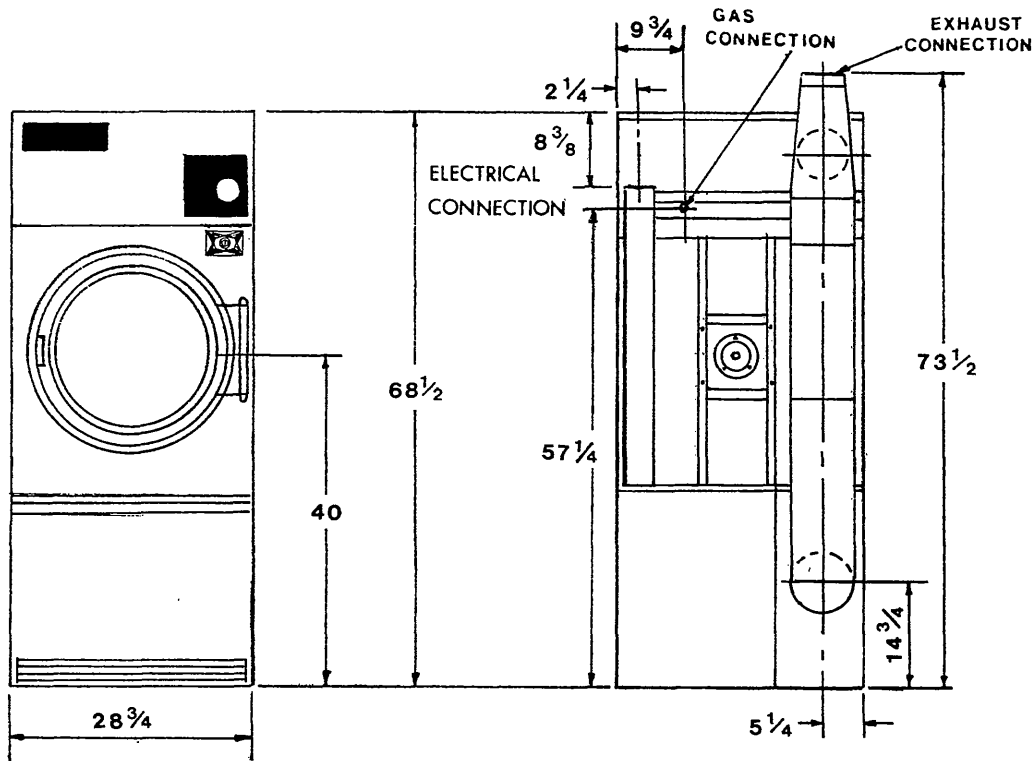


Dimensions Given In Inches $\pm \frac{1}{4}$

SIDE VIEW

OUTLINE DIMENSIONS 30 LB. DRYERS

L28GS30G
L28PS30G



Dimensions Given In Inches $\pm \frac{1}{4}$

GENERAL SPECIFICATIONS - MODELS D, G, J, & P

Basket Load Capacity.....30 lbs. (13.61 KG) dry weight
Floor Space.....Model "D" - 68½"H(174CM) x 28 3/4"W(73CM)
x 39"D (97CM)
Model "G" - 68½"H(174CM) x 28 3/4"W(73CM)
x 52"D (137CM)
Basket Size.....28"(72CM) diameter x 30"(76CM) deep
Exhaust Duct.....Model "D" 8"(20CM) diameter (exhaust air)
Model "G" 6"(15CM) diameter (exhaust air)
pressure maximum .3" static pressure
Motor Size.....1/3 H.P.
Total Amps.....See Electrical Rating Plate on Dryer
Voltage.....Can be designed for any voltage
50 or 60 Hz
1 or 3 Phase
Electrical wiring to dryer must comply with local electrical code requirements.

Motor Number List

<u>MOTOR NO.</u>	<u>VOLTAGE</u>	<u>CYCLE</u>	<u>RPM</u>	<u>PHASE</u>	<u>H.P.</u>	<u>AMPERES</u>
MTR221	115/208-230	60	1725	1	1/3	7.0/3.5
MTR226	240	50	1425	1	1/3	3.2
MTR225	208-230/460	60	1725	3	1/3	1.7/.85
MTR227	240/415	50	1425	3	1/3	1.6/.9

MODEL 28G30 ENERGY SAVER SPECIFICATIONS

Maximum Air Displacement.....350 C.F.M.(10 M³/Min.)
*B.T.U. Input.....80,000 B.T.U. per hour (Nat. & L.P. gases)
Dryer Gas Burners (set at factory) built-in 3.4 inches regulated pressure
(natural gas only).
Models can also be equipped for use with liquid petroleum (L.P.)
Gas Supply.....1/2"(1.27CM) Pipe Connection
Drying Time (approximate).....10 lbs.(4.5KG) dry weight (Indian Head)
70% moisture retention - 10 minutes.
Net Weight.....396 lbs. (179.6KG) (approximate)
Domestic Shipping Weight (1 carton).....451 lbs. (204KG) (approximate)
Export Shipping Weight (1 box).....538 lbs. (243KG) (approximate)

MODEL 28D30 - GAS FIRED - SPECIFICATIONS

Maximum Air Displacement.....700 C.F.M. (19.8 M³/Min.)
Recommended Operating Range.....530 - 630 C.F.M. (17.8 - 19.8 M³/Min.)
Gas Supply.....1/2" (1.27CM) Pipe Connection
*B.T.U. Input.....100,000 B.T.U. per hour (natural gas
and liquid petroleum gases)
Electronic Ignition.....Silicon Carbide Ignition System
Drying Time (approximate).....10 lbs. (4.5KG) dry weight (Indian Head)
70% moisture retention - 10 minutes.
Net Weight.....353 lbs. (160KG) (approximate)
Domestic Shipping Weight (1 carton).....398 lbs. (181KG) (approximate)
Export Shipping Weight (1 box).....495 lbs. (225KG) (approximate)
Export Shipping Dimensions.....74"L(188CM) x 35"W(82CM) x 55"H(141CM)

*Input ratings as shown are for elevations up to 2000 ft.(609.6M). For elevations
above 2000 ft., ratings should be reduced 4% for each 1000 ft.(304.8M) above sea
level.

GENERAL INFORMATION

The Cissell Dryer is so designed that when an operator opens the dryer door, the basket and exhaust fan stops. You can expect fast drying from a Cissell Laundry Dryer. Hot, dry air is properly and effectively moved through basket and exhausted through a lint trap to atmosphere. The Cissell Dryer comes equipped with an inclined self-cleaning lint screen. In this system, lint accumulates on the underside of the screen until a blanket approximately 1/4" thick is formed. This blanket of lint will fall from the screen to the bottom of the dryer cabinet, and should be removed daily, or as required, to prevent an over accumulation.

CISSELL "COOL-DOWN" CYCLE

Permanent press, durable press and other modern day fabrics require the care that your Cissell Laundry Dryers now provide.

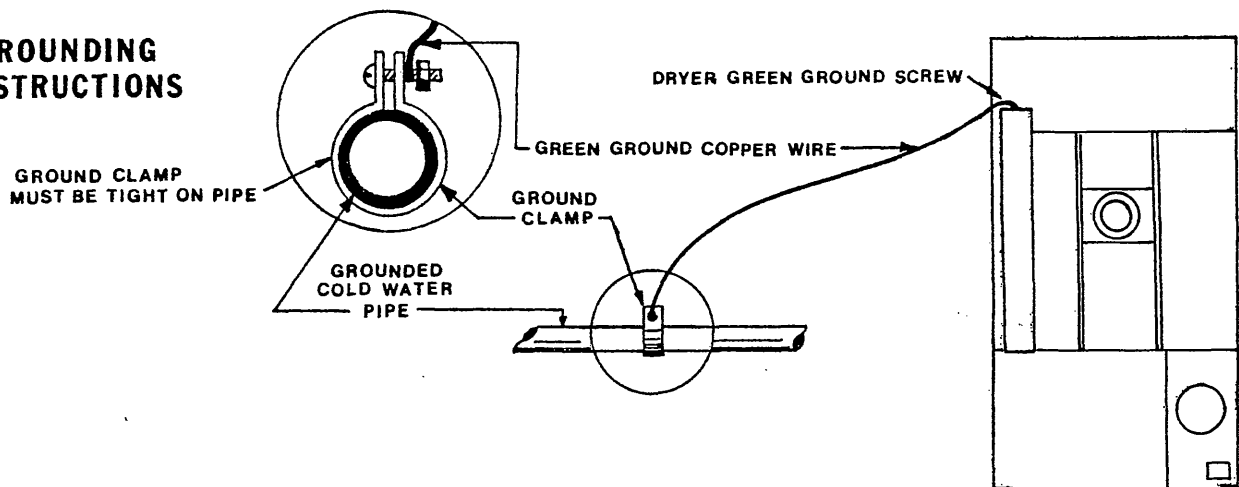
At the end of the drying cycle, a timed "cool-down" control automatically takes over and continues the rotation of the fan and basket without heat until the garment load reaches a safe cool temperature. This function is performed at the end of each drying cycle and continues for two minutes.

ELECTRICAL CONNECTIONS - ALL DRYERS

Dryers must be electrically grounded - by a separate #14 or larger green wire from the grounding terminal within the service connection box to a cold water pipe, or through the fourth green wire properly grounded and connected to the grounding terminal. In all cases, the grounding method must comply with local electrical code requirements; or in the absence of local codes, with the National Electrical Code as ANSI/NFPA No. 70-1981.

See wiring diagram furnished with dryer. Your Cissell dryer is completely wired at the factory and it is only necessary for the electrician to connect the power leads to the wire connectors within the service connection box on the rear of the dryer. Do not change wiring without consulting factory as you may void the factory warranty. Do not connect the dryer to any voltage or current other than that specified on the dryer rating plate. (Wiring diagram is located on rear wall of dryer).

GROUNDING INSTRUCTIONS



TOTAL BTU/HR (for L.P. gas correct total BTU/HR below by multiplying by .6)	GAS PIPE SIZE FOR 1000 BTU NATURAL GAS AT 7" W.C. PRESSURE					
	In figuring total length of pipe, make allowance for tees and elbows.					
	25 Ft.	50 Ft.	75 Ft.	100 Ft.	125 Ft.	150 Ft.
60,000	3/4	3/4	3/4	3/4	3/4	3/4
80,000	3/4	3/4	3/4	1	1	1
100,000	3/4	3/4	1	1	1	1
120,000	3/4	1	1	1	1	1
140,000	3/4	1	1	1	1	1 1/4
160,000	3/4	1	1	1 1/4	1 1/4	1 1/4
180,000	1	1	1	1 1/4	1 1/4	1 1/4
200,000	1	1	1 1/4	1 1/4	1 1/4	1 1/2
300,000	1	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2
400,000	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	2
500,000	1 1/4	1 1/2	1 1/2	2	2	2
600,000	1 1/2	1 1/2	2	2	2	2
700,000	1 1/2	2	2	2	2	2 1/2
800,000	1 1/2	2	2	2	2 1/2	2 1/2
900,000	2	2	2	2 1/2	2 1/2	2 1/2
1,000,000	2	2	2	2 1/2	2 1/2	2 1/2
1,100,000	2	2	2 1/2	2 1/2	2 1/2	2 1/2
1,200,000	2	2	2 1/2	2 1/2	2 1/2	2 1/2
1,300,000	2	2 1/2	2 1/2	2 1/2	2 1/2	3
1,400,000	2	2 1/2	2 1/2	2 1/2	3	3
1,500,000	2	2 1/2	2 1/2	2 1/2	3	3
1,600,000	2	2 1/2	2 1/2	3	3	3
1,700,000	2	2 1/2	2 1/2	3	3	3
1,800,000	2 1/2	2 1/2	3	3	3	3
1,900,000	2 1/2	2 1/2	3	3	3	3
2,000,000	2 1/2	2 1/2	3	3	3	3 1/2
2,200,000	2 1/2	3	3	3	3 1/2	3 1/2
2,400,000	2 1/2	3	3	3	3 1/2	3 1/2
2,600,000	2 1/2	3	3	3 1/2	3 1/2	3 1/2
2,800,000	2 1/2	3	3	3 1/2	3 1/2	3 1/2
3,000,000	2 1/2	3	3 1/2	3 1/2	3 1/2	4
3,200,000	3	3	3 1/2	3 1/2	3 1/2	4
3,400,000	3	3 1/2	3 1/2	3 1/2	4	4
3,600,000	3	3 1/2	3 1/2	3 1/2	4	4
3,800,000	3	3 1/2	3 1/2	4	4	4
4,000,000	3	3 1/2	3 1/2	4	4	4

GAS PIPING INSTALLATION

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code as ANSI Z223.1-1980.

Check gas rating plate for type of gas to equip the dryer.

Check for altitude elevation of the dryer.

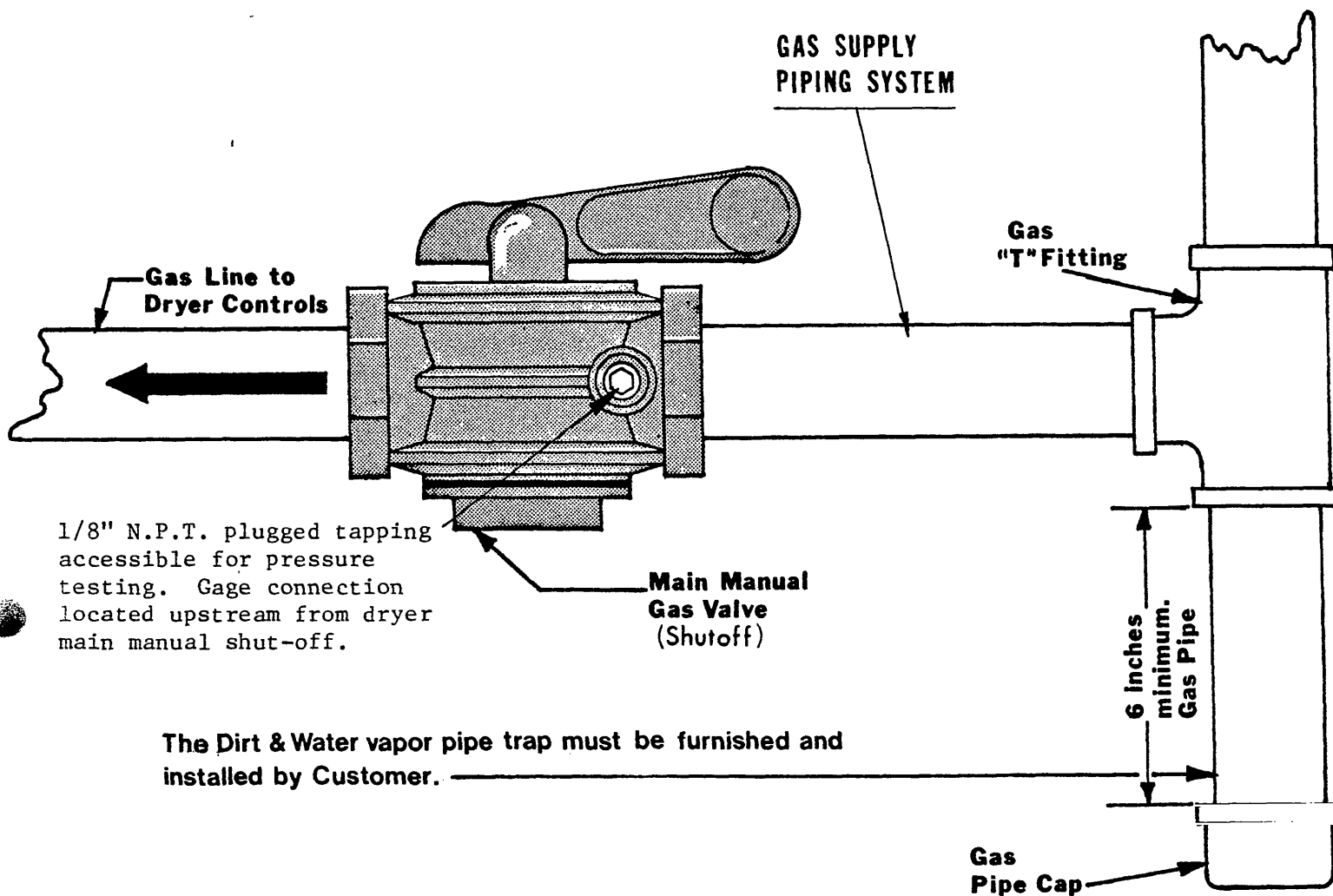
Check utilities for proper installation of gas supply line and gas pressure.

Natural Gas Only

Check the gas pressure inlet supply to dryer, 12 inches W. C. Pressure maximum.

Check the manifold pressure, 3.5 inches W.C. Pressure inside the dryer.

CAUTION: Low gas pressure and intermittent gas will cause gas ignition problems and inadequate drying of the clothes load.



The dryer and it's individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of $\frac{1}{2}$ psig.

The dryer must be isolated from the gas supply piping system by closing it's individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than $\frac{1}{2}$ psig.

EXHAUST DUCT INSTALLATION

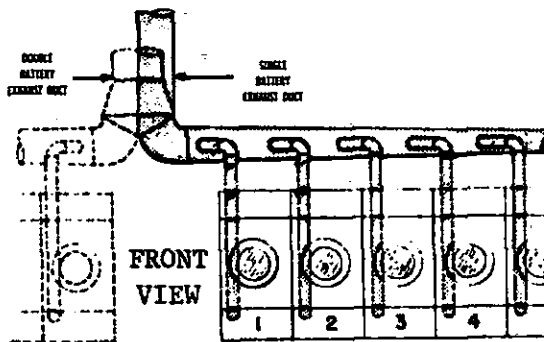
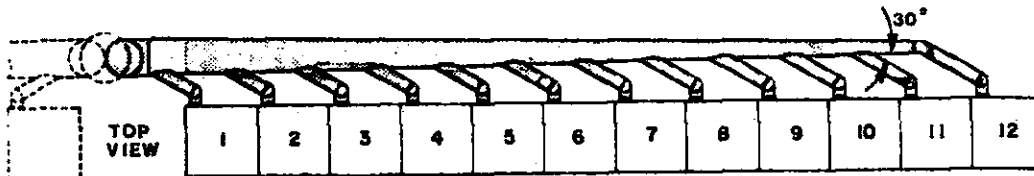
COMMERCIAL CLOTHES DRYER MODELS:

D, G, J, P Models

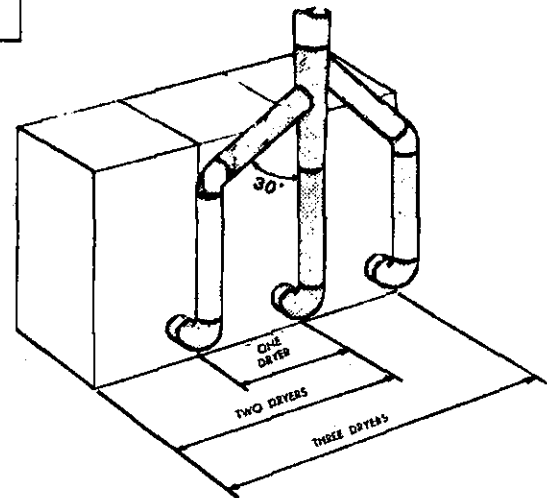
NUMBER OF DRYERS IN SINGLE BATTERY—REFER TO TABLE FOR DUCT DIAMETER AT EACH DRYER OUTLET CONNECTION. FOR DIAMETER OF EXHAUST, REFER TO TABLE USING TOTAL NUMBER OF DRYERS CONNECTED THERETO. (SINGLE OR DOUBLE BATTERY.)

CAUTION: The exhaust air should not be vented into a wall, a ceiling, or a concealed space of a building.

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



FOR BEST PERFORMANCE—
Provide an individual exhaust duct for each dryer. Do not install a hot water heater in a room containing dryers. It is better to have the water heater in a separate room with a separate air inlet.



EXHAUST DUCT TABLE FOR MODELS: D & J

NO. OF DRYERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DUCT DIAMETER in inches	6	9	11	12	14	15	16	17	18	19	20	21	22	23	23	24	25	26	26	27	28	28	29	30

EXHAUST DUCT TABLE FOR MODELS: G & P

NO. OF DRYERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DUCT DIAMETER in inches	8	12	14	16	18	20	22	23	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

CAUTION

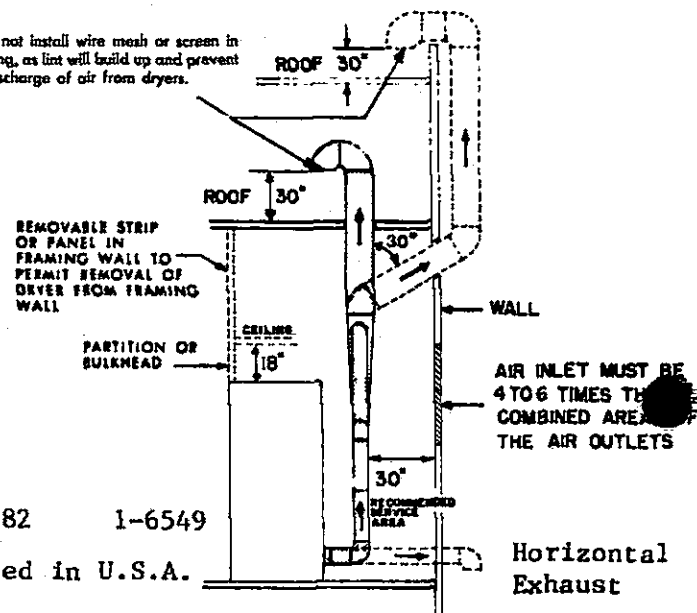
D & J models 30 lb.

Dryers are forced air exhausted and require provisions for air inlets to replace the air exhausted by the dryer. The air inlet openings into a room containing dryers should be a minimum of 1.3 sq. feet free area per dryer.

G & P models, the air inlet openings must be a minimum of 1 sq. foot of free area per dryer. The air inlet openings into a room containing gas fired hot water heaters or other gravity vented appliances must be increased sufficiently to prevent downdraft in any of the vents when all dryers are in operation. Do not install gravity vented appliances between dryers and air inlet openings.

CONSULT LOCAL BUILDING CODE REQUIREMENTS.

NOTE: Do not install wire mesh or screen in this opening, as lint will build up and prevent proper discharge of air from dryers.



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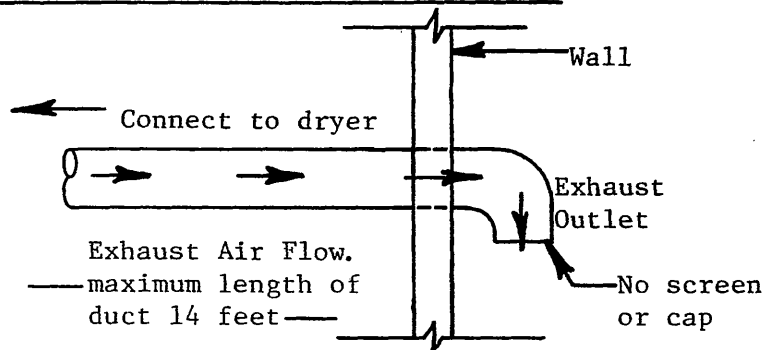
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EXHAUST DUCT INSTALLATION

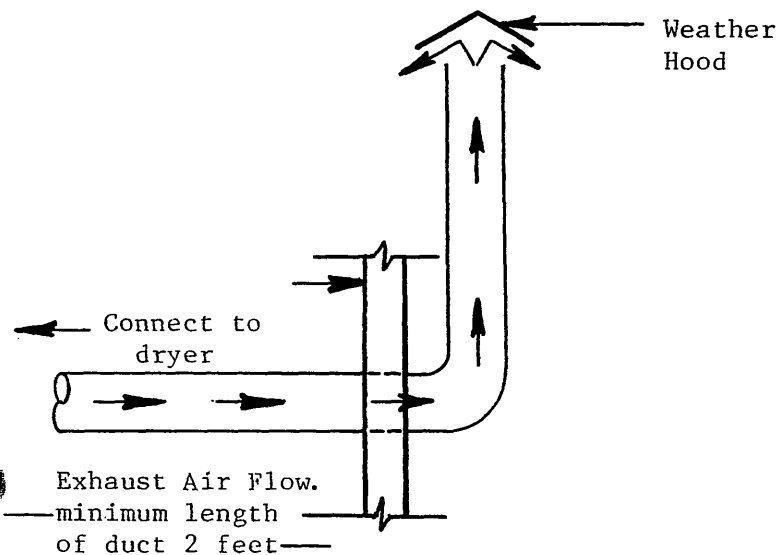
Caution:

Never connect elbow on dryer exhaust. Always have a minimum of 2 feet of straight duct then the elbow.

No more than 2 elbows.



HORIZONTAL EXHAUST INSTALLATION



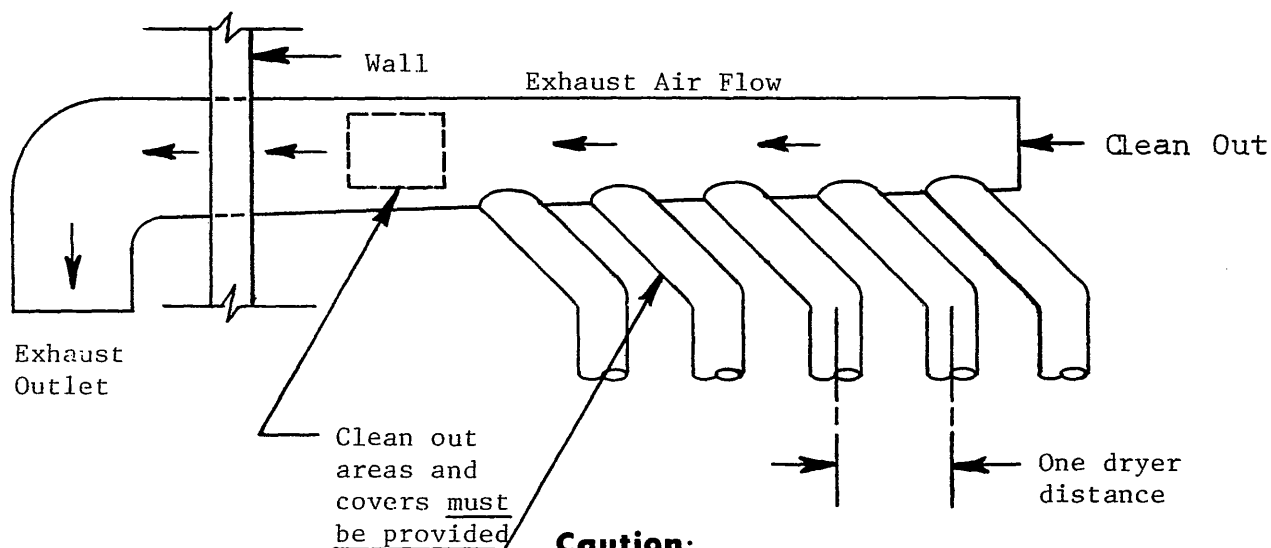
Caution:

Recommend maximum dryer exhausting- 14 feet of straight duct and 2 elbows for every 10 foot length; increase duct size 1 inch diameter.

Caution:

The exhaust air should not be vented into a wall, a ceiling, or a concealed space of a building.

VERTICAL EXHAUST INSTALLATION



Caution:

Dryer exhaust must meet main duct at 45° or 30° in direction of air flow. Multiple exhausting must never be 90° angle into main duct.

MULTIPLE HORIZONTAL EXHAUST INSTALLATION

DRYER AIR FLOW INSTALLATION

Nothing is more important than air flow for the proper operation of a clothes dryer. A dryer is a pump which draws make-up air from the out-of-doors, through the heater, through the clothes and then forces the air through the exhaust duct back to the out-of-doors. Just as in a fluid water pump, there must be a fluid air flow to the inlet of the dryer if there is to be the proper fluid air flow out of the exhaust duct. In summary, there must be the proper size out-of-doors inlet air opening (4 to 6 times the combined areas of the air outlet) and an exhaust duct size and length which allows flow through the dryer with no more than 0.3 inches water column static pressure in the exhaust duct.

Energy-saving dryer models require less inlet air area and smaller exhaust ducts than the regular dryers because there is about half as much air flow through the dryer. However, the importance of the proper inlet air area and the correct exhaust duct size is twice as important on energy saving models. The huge savings of an energy-saver dryer is offset only by the attention required to provide the proper air flow. Once this proper air flow is provided, it lasts for the life of the installation.

CISSELL WILL PROVIDE FREE ENGINEERING ADVICE FOR ANY SPECIFIED INSTALLATION.

In some instances, special fans are required to supply make-up air and/or boost exhaust fans are required for both regular and energy saving models.

EXHAUSTING DUCT

For best drying:

1. Exhaust duct maximum length 14 feet of straight duct and maximum of two 90 degree bends.
2. Use 45° & 30° elbows wherever possible.
3. Exhaust each dryer separately.
4. Use 2 feet of straight duct on dryer before installing an elbow.
5. Do not install wire mesh or other restrictions in the exhaust duct.
6. Use clean-outs in the exhaust duct and clean periodically when needed.
7. Never exceed 0.3 inches water column static pressure in the exhaust duct.
8. Inside surface of the duct must be smooth.
9. Recommend pop rivets for duct assembly.

MAKE-UP AIR

For best drying:

1. Provide opening to the out-of-doors in accordance with the following:
G & P Models: 100-150 sq. in. per dryer
D & J Models: 200-300 sq. in. per dryer
2. Use barometric shutters in the inlet air opening to control air when dryers are not running.

Other Recommendations

To assure compliance, consult local building code requirement.

FOR HELP, consult Cissell Engineering on tough installations.

Trouble shooting; hot dryer surfaces, scorched clothes, slow drying, lint accumulations, or air switch malfunction are indicators of exhaust duct and/or make-up air problems.

RULES FOR SAFE OPERATION OF YOUR CISSELL DRYER

- (1) Be sure your dryer is installed properly in accordance with the recommended instructions.
- (2) CAUTION: Be safe - Shut main electrical power supply and gas supply off externally before attempting service.
- (3) CAUTION:
 - (A) Never use drycleaning solvents: gasoline, kerosene, or other flammable liquids in the dryer. Fire and explosion will occur.
 - (B) Never put fabrics treated with these liquids into the dryer.
 - (C) Never use these liquids near the dryer.
 - (D) Always keep the lint screen clean; a full lint screen may be a fire hazard.
 - (E) Never use heat to dry items that contain plastic, foam or sponge rubber, or rags coated with oils, waxes or paints. The heat may damage the material or create a fire hazard. Rubber easily oxidizes causing excessive heat and possible fire. Never dry the above items in the dryer.
- (4) Never let children play near or operate the dryer. Serious injury will occur if a child should crawl inside and the dryer is turned on.
- (5) Never use dryer door opening and top as a step stool.
- (6) Read and follow manufacturer's instructions on packages of laundry and cleaning aids. Heed any warnings or precautions.
- (7) Never tumble fiberglass materials in the dryer unless the labels say they are machine dryable. Glass fibers break and can remain in the dryer and could cause skin irritation if they become mixed into other fabrics.
- (8) Reference - Lighting and shutdown instructions and wiring diagrams are located on the rear wall of the dryer cabinet.
- (9) Replacement parts are available from Distributors or:

**CISSELL
MANUFACTURING COMPANY**
831 South First Street
Louisville, KY 40203

Pacific Coast Office:
4823 W. Jefferson Blvd.
Los Angeles, CA 90016

Foreign Distributors
write Export Dept.
Cable Code "Cissell"

European Headquarters: PANTEX-CISSELL B.V.
P.O. BOX 53,9670 AB WINSCHOTEN, HOLLAND
TELEX: 53535

ENERGY SAVING TIPS:

1. Install dryer so that you can use short, straight venting. Turns, elbows and long vent tubing tend to increase drying time. Longer drying time means the use of more energy and higher operating costs.
2. Operate dryer using full-size loads. Very large loads use extra energy. Very small loads waste energy.
3. Dry light weight fabrics separately from heavy fabrics. You will use less energy and get more even drying results by drying fabrics of similar weight together.
4. Clean the lint screen area daily. A clean lint screen helps give faster, more economical drying.

5. Do not open the dryer door while drying, you let warm air escape from the dryer into the room.
6. Unload the dryer as soon as it stops. This saves having to re-start your dryer to remove wrinkles.

Service Savers

To help you trouble shoot the dryer, we list below the most common reasons for service calls...and some answers to the problems. Before you call service, please review the following items:

DRYER WON'T START:

1. Is the door completely closed?
2. Are the controls set to a drying position and not to off?
3. Did you push the start control?
4. Has a fuse blown or a circuit breaker tripped? Are fuses tight?
5. Check for low voltage.

DRYER WON'T HEAT:

1. Is the dryer set for a heat rather than an air only position?
2. Is the gas valve in the dryer and the valve on the main gas line turned on?
3. Check for low or intermittent gas pressure.

CLOTHES ARE NOT SATISFACTORILY DRY:

1. Timed cycle - Did you allow enough heating time before the cooldown part of the cycle?
2. Is the lint screen blocked?
3. Is the exhaust duct to the outside clean and not blocked? (A blocked exhaust will cause slow drying and other problems).
4. Venting, air switch closing and make up air for each dryer.

GAS DRYER IGNITION:

Refer to Norton Ignition System section of this manual, "Instructions for the Direct Ignition System Operation." Check and see if the manual gas valve is open. Then reset the dryer controls. If dryer still fails to heat call for service. All panels, covers and doors must be in place and closed before starting dryer.

VERY IMPORTANT:

When calling the factory for service, always refer to the model number and serial number.

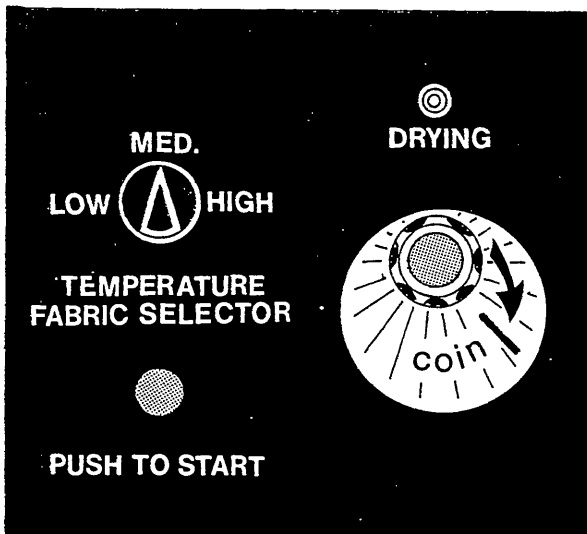
OPERATING INSTRUCTIONS - DIMENSION AND DIMENSION 1000 MODELS

After loading the dryer with water washed clothes, close the loading door.

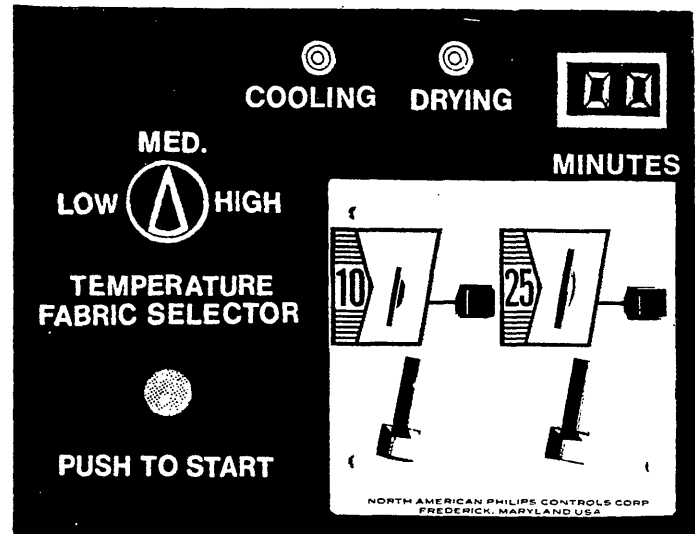
Insert proper coin(s) in slot and turn knob until it stops. For Dimension 1000 models, the amount of dry time will appear on the digital display. Maximum time is 99 minutes. Additional coins may be vended any time during the cycle.

Turn Temperature Fabric Selector to desired setting. "LOW" is for delicate, sheer, and easy dry fabrics. 130°-140°F exhaust temperature. "MEDIUM" is for synthetics and permanent press fabrics. 155°-165°F exhaust temperature. "HIGH" is for cottons, linens, and heavy fabrics. 170°-180°F exhaust temperature.

Press "PUSH TO START" button holding about 2 seconds until dryer is running.



DIMENSION - D & G Models



DIMENSION 1000 - J & P Models

What is happening after Step 4:

1. Digital Display will count down time remaining in cycle (Dimension 1000).
2. The fan motor and basket will revolve.
3. The heat source will be energized.
4. The heated air will mix with the wet clothes and evaporate the moisture.
5. The thermostats will operate at a safe temperature.
6. The heat will shut off and the cooling cycle will begin.

IMPORTANT

If the tumbler door is opened during the drying cycle, the fan and heat will shut off. Press "PUSH TO START" button to resume the cycle.

This dryer is designed for a capacity maximum load. Overloading it will result in longer drying time and damp spots on some of the load.

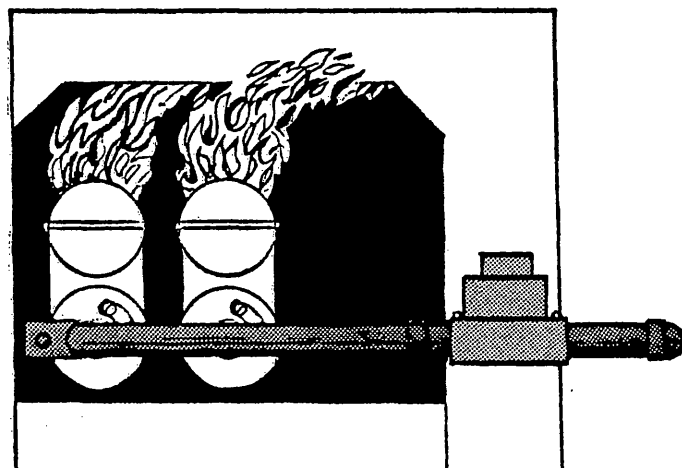
Maximum operating efficiency depends on proper air flow. The lint screen must be kept clean daily to insure proper circulation of air throughout the dryer.

This commercial dryer has keys for the lint door and access door to burners and controls. This is for the safety of the user.

BURNER AIR INLET SHUTTERS ADJUSTMENT MAIN GAS BURNER FLAME PATTERN

Burners Air Inlet Shutters are correctly adjusted when the flame is primarily blue.

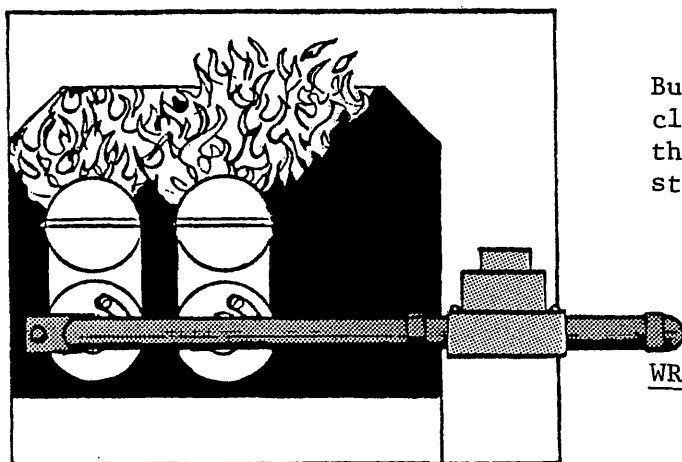
TYPE OF GAS	BURNER AIR INLET SHUTTERS ADJUSTMENT
Natural Gas	1/2 Open
Liquid Petroleum	1/4 Open
Manufactured Gas	1/16 Open



CORRECT

AIR SHUTTERS ADJUSTMENT

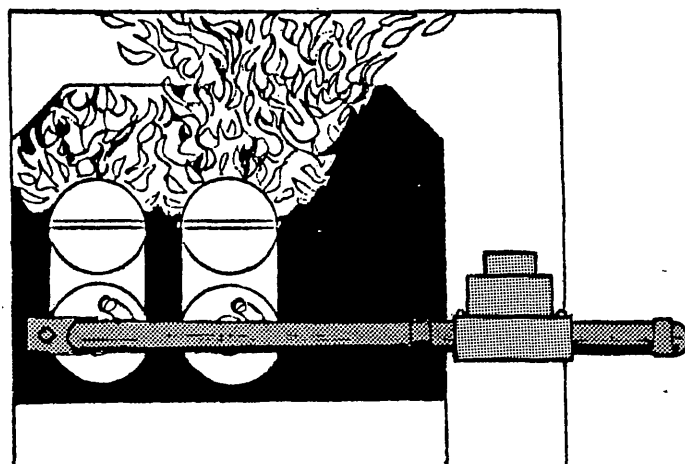
Proper Method: Close air shutters to yellow tip, then open air shutters to blue flame tip. Orange tips are impurities in the air such as lint, dust, etc.



Burners Air Inlet Shutters are adjusted closed. Insufficient air is admitted through the burner. Flame pattern is straight up and flame is yellow.

WRONG NEED TO ADJUST SHUTTER

This flame pattern indicates the burner air inlet shutters are correctly adjusted, but air through the dryer is insufficient. This condition indicates excessive lint in the lint compartment, lack of make-up air in the room, restricted exhaust duct, or a vacuum in the room caused by a exhaust fan.

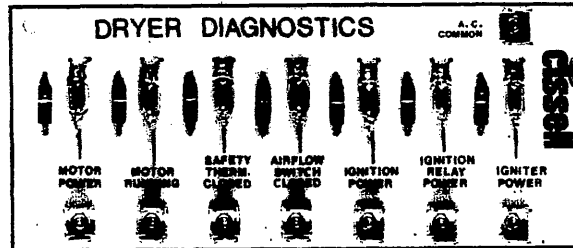


WRONG
NEED TO PROVIDE CORRECT
AIRFLOW THROUGH THE DRYER

DRYER DIAGNOSTICS

The lamps on the Dryer Diagnostics Board are a valuable aid in detecting problems in the dryer. You can tell at a glance whether motor, safety and/or ignition circuits are malfunctioning.

The Diagnostic lamps are sequenced from left to right. If a lamp is not lit, no lamp to the right of that lamp should be lit.



A. DRYING (on panel, visible to user)

This light glows whenever the coin meter is properly vended and indicates that the main coin meter switch is closed. The coin meter has been vended and dryer is ready for use.

1. Motor Power

This light glows when the door is closed. Power is available to start the dryer.

2. Motor Running

This light glows when the push-to-start switch has been pushed the motor is running and a centrifically operated back contact switch in the motor is closed.

The motor is running and power to the safety-control circuit is available.

3. Safety Thermostat Closed

This light glows when the safety thermostat is closed which is the first element in the safety-control circuit. Power is available to the air-flow switch.

4. Air-Flow Switch Closed

This light glows when the air-flow switch is closed and it blinks when the air-flow switch is fluttering.

Power is available to the control thermostats when the air-flow switch is closed.

5. Ignition Power

The light glows when a control thermostats circuit is closed and whenever the timer is not in the cool-down cycle.

The control thermostat circuit is either low, medium or high and is control by the setting of the Temperature Fabric Selector.

Power is flowing through all of the previous elements as indicated by the lights and power is flowing to the safety gas valve and power is available for ignition.

6. Ignition Relay Power

This light glows when the ignition relay coil is energized.

This light is the key to trouble shooting of the ignition components.

First, when the radiant sensor is cool, it indicates that the radiant sensor switch is closed and that the normally closed (NC) contacts of the relay are now open and that the normally open (NO) contacts of the relay are now closed.

Which indicates that the relay coil is o.k, and the relay is operating.

At this time, when radiant sensor is cool, the igniter should be glowing and the Igniter Power light should be lit. Second, when the radiant sensor is hot, it indicates that the NO contacts of the relay are now closed and power is available for the operating gas valve. At this time, when the radiant sensor is hot, the operating gas valve should be energized and the gas should be burning.

7. Igniter Power

This light indicates that power is flowing to the igniter through the radiant sensor and the igniter should be glowing red hot.

If this light is not lit and the Ignition Relay Power light is lit, then the gas should be burning which means that the operating gas valve has been energized by means of a circuit through the non-glowing igniter.

Proper Operation of Diagnostic (● - off, 0 - On)

●	●	●	●	●	●	●	Dryer Off
0	●	●	●	●	●	●	Coin Meter Energized - (Dryer Off)
0	0	0	0	0	0	0	Dryer Started (Glo-Bar On)
0	0	0	0	0	0	●	Dryer Running (Gas On)
0	0	0	0	●	●	●	Thermostat Cycled (Gas Off)
0	0	0	0	●	●	●	Thermocool (Gas Off)
●	●	●	●	●	●	●	Dryer Off

TROUBLE	DIAGNOSTICS*	CAUSE	REMEDY
Motor will not start (panel light off)	● ● ● ● ● ● ●	No Power	Check fuses or circuit breakers. Make sure main control switch is on
		Coin Meter Off	Deposit coin and rotate knob CW
		Loose Wire Connection	Check wire connections in electrical box on rear of dryer.
Motor will not start (panel light on)	● ● ● ● ● ● ●	Loading Door Open	Close door.
		Door Switch Out Of Adjustment	Adjust switch by removing front panel and bend actuator lever to clear switch button 3/8" with panel in place.
		Defective Door Switch	Replace door switch.
	⊗ ● ● ● ● ● ● ●	Defective Motor	Replace Motor
Motor Tripping on thermal protector (motor runs for short time.)	⊗ ● ● ● ● ● ● ●	Basket Overloaded	Remove some of the heavy load.
		Low Voltage	Check voltage at motor terminals. Voltage must be within + 10% of voltage shown on motor rating plate. If not, check with local power company.
		Inadequate Wiring	Check with local power company to insure that wiring is adequately sized for load.
		Poor Housekeeping	Clean lint accumulated on and around motor.
Motor runs but basket will not revolve.	⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗	Belt Broken	Replace Basket Drive Belt
		Belt Loose	Adjust Belt Tension
		Idler Wheel Broken	Replace Idler Wheel
		Idler Wheel Spring Broken	Replace Idler Wheel Spring

* ⊗ On

● Off

⊗ Cycling

TROUBLE	DIAGNOSTICS*	CAUSE	REMEDY
Dryer does not stop at end of cycle.		Defective Coin Meter	Replace Coin Meter
		Defective Coin Meter	" " "
Dryer runs but no heat		Defective Safety Thermostat	Replace safety thermostat
		Defective Centrifugal Switch In Motor	Replace or repair motor.
		Air Switch Open Or Teetering.	Clean out lint compartment daily. Check back draft damper for foreign objects, lint accumulation or other causes that may prevent damper from opening. Check duct work for lint build-up. Check installation sheet to insure that duct work and make-up air openings are adequately sized. Check exhaust outlet. If a screen has been improperly installed on the outlet, it may be clogged with lint or frozen over in winter. Never install a screen on the exhaust outlet. Vacuum within dryer drops to .09 inches of water column, or less, for normal operation of dryer, vacuum reading (in inches of water column) should range between .15 and .3 inches. Vacuum reading can be made with a vacuum U-gauge by removing a sheet metal screw in the front panel of dryer, and inserting the rubber tube of the vacuum gauge into screw opening.
		Air Switch Out Of Adjustment	See air switch adjustment sheet in service manual.
		Air Switch Defective	Replace Air Switch
		Defective Thermostat or Coin Meter	Check each temperature to determine defective thermostat. If ignition power light does not light on all temperature selections, replace coin meter.







* On Off Cycling

TROUBLE	DIAGNOSTICS*	CAUSE	REMEDY
Dryer runs but no heat	⊗ ⊗ ⊗ ⊗ ⊗ ● ●	Defective Radiant Sensor	Replace Radiant Sensor
	⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗	Defective Ignition Relay (Ignition Relay & Igniter Power Light Cycle On & Off At Same Time.	Replace Ignition Relay
	⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗	Defective Igniter (Igniter Does Not Glow)	Replace Igniter (Check for 120V. to ignition system).
		Defective Radiant Sensor (Igniter Does Not Go Off)	Replace Radiant Sensor
	⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗	Defective Gas Valve (Igniter Cycles)	Replace Gas Valve (Check if gas is turned "on").
Silicon Carbide Igniter Not Igniting Gas.	⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗	Low Gas Pressure	Adjust gas pressure as specified on rating plate.
		Incorrect Main Burner Orifices.	Replace orifices - check factory for correct size.
Main Burner cycling on & off.	⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗	Radiant Sensor	Clean window or move sensor 1/4" closer to ignitor.
		Defective Thermostat	Replace Thermostat
Dryer too hot	⊗ ⊗ ● ● ● ● ●	Incorrect Main Burner Orifice.	Replace orifices--check factory for correct size
		Inadequate Make-up Air	Make-up air must be 4 to 6 times the exhaust area of the dryer.
		Lint Accumulated	Remove Lint.

* ⊗ On

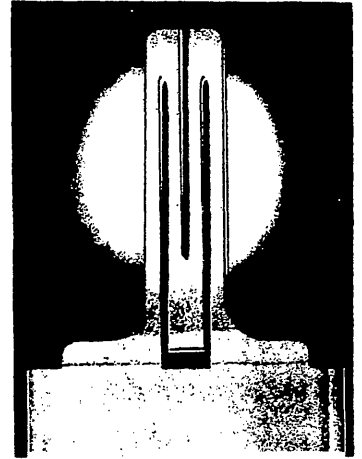
● Off

⊗ Cycling

TROUBLE	DIAGNOSTICS*	CAUSE	REMEDY
Dryer too hot	     	Exhaust Duct Dampers	Must be full open or replace
		Gas Pressure Too High	Adjust gas pressure as specified on rating plate.
		Partially Restricted Or Inadequately Sized Exhaust System.	Check installation sheet in service manual for recommended sizes. Check for and remove obstructions or lint build-up from duct work. Never use smaller size exhaust duct. Always use larger size exhaust duct.
Dryer noisy or vibrating	N/A	Not Leveled	Check manual for proper leveling procedure.
		Fan Out of Balance	Damage to the fan blade can change the dynamic balance. Damaged fans should be replaced.
		Basket Rubbing	Align basket (check manual instructions).
		Foreign Objects	Occasionally screws, nails, etc. may hang in the basket perforations and drag against the sweep sheets around the basket. Such foreign objects should be removed immediately.
		Belt	Check belt alignment and Tension
Main burners burning improperly	N/A	Burner Air Shutters Closed	Open for blue flame
		Dirt in Burner	Blow out.
		Gas Pressure Too High	Check rating plate for correct gas pressure.
		Orifice Too Large	Check factory for correct orifice size.
		Restricted or Blocked Exhaust	Clean exhaust.

*  On  Off  Cycling

The **NEW** **Cissell** Silicon Carbide Ignition System



- New radiant sensor.
- TWO gas valves and pressure regulator provide additional safety.
- New igniter
 - Combines unique HIGH PHYSICAL and THERMAL Strength with stable electrical properties.
 - Can be relied upon to give premium performance at operating temperatures up to 2600° F and respond on command.
 - Clean, straightforward design insures easy handling, minimum chance of breakage; dependable, trouble-free operation.

Cissell's NEW Silicon Carbide Ignition System is better than ever!

- More reliable
- Less costly to replace
- Easier to service

Cissell's system reduces gas consumption 6% on the average over dryers with standing pilots based on 40-hour per week usage. There's no standing pilot to burn constantly; no electronic pilot to consume gas before burner ignites. . . either/both of which add high energy costs to your operation.

CISSELL's silicon carbide ignition system saves you up to 53% (dependent upon model dryer and other factors) additional gas costs over certain previous Cissell and competitive dryers of the same type WITHOUT sacrificing drying rate! A MUST — in times of fuel shortages/high costs.

LOOK TO CISSELL for better energy-saving features!

The NEW Silicon Carbide Ignition System is the latest HOT NEWS from Cissell!

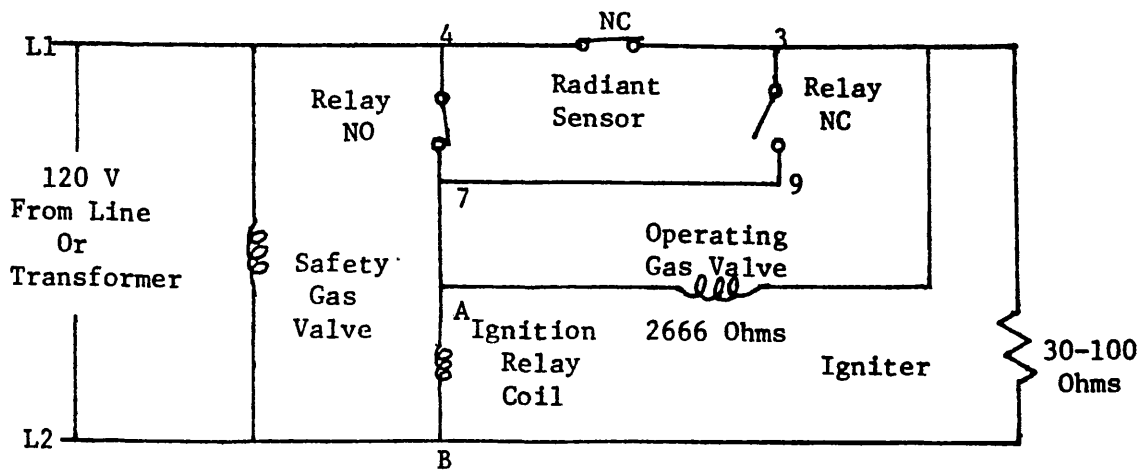

ASK YOUR DISTRIBUTOR

CISSELL MANUFACTURING COMPANY
831 South First St., Louisville, Kentucky 40203
Pacific Coast Office: 4823 W. Jefferson Blvd., Los Angeles. Foreign Distributors write Export Dept., Cable Code "Cissell".

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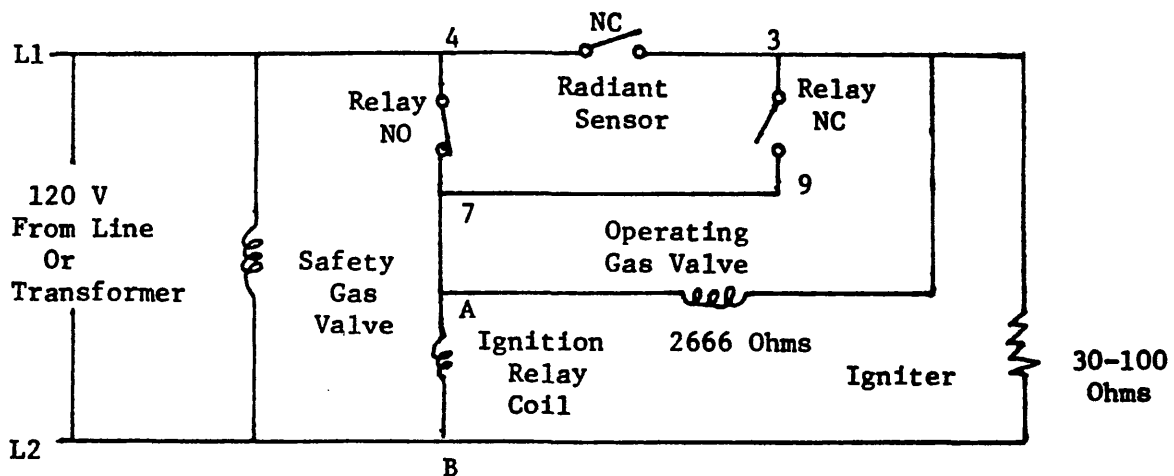


NEW NORTON SILICON CARBIDE IGNITION SYSTEM

Fig. 2 (An Instant Later)

Step #2 (A moment after Step #1), see Fig. 2

- The ignition relay closes now and the relay coil stays energized by being powered through the normally open (NO) contacts of the ignition relay which close before the NC contacts open.
- The operating gas valve still has the 120 volts applied to both sides of the gas valve and the valve stays closed:



NEW NORTON SILICON CARBIDE IGNITION SYSTEM

Fig. 3 (About 20 Seconds Later)

Step #3 (About 20 seconds after Step #2), see Fig. 3

- The igniter glows red hot which causes the radiant sensor to open its NC contacts which de-energizes the igniter.
- As the radiant sensor NC contacts open, the 120 volt to one side of the operating gas valve coil is removed and an electrical circuit is formed through the NO contacts of the ignition relay,

through the gas valve and through the igniter, and the gas valve opens. The relatively low resistance of the igniter allows nearby full voltage to be applied to the operating gas valve and nearby zero voltage to the igniter and the igniter is de-energized for all practical purposes.

- c. As the raw gas flows against the red hot igniter, ignition takes place. The radiant gas flame replaces the radiant glowing of the igniter and the radiant sensor NC contacts remain open.

The flame will burn until the thermostat opens the circuit or until the time on the timer or coin meter expires.

The following summarizes the ignition operation.

Start machine drying cycle. Carbide igniter will get red hot. Then gas valve will open. The gas burners are ignited by the carbide igniter. Igniter will shut off and burners will remain on during drying cycle.

Opening tumbler door will cause gas to extinguish. Shut door and gas will not light until flame sensor cools and normal ignition cycle begins.

Note! Push start switch after door is shut.

If gas does not light, then the sensor will cool down and restart the ignition cycle.

Safety Features

Power Interruptions During Burning of the Gas

Both gas valves are de-energized and the gas is shut off. The ignition relay is also de-energized and returns the contacts to the NO and NC positions. Even with resumption of power, the operating gas valve stays closed until the NC contacts of the radiant sensor close (about 30 seconds from time of power interruption). A normal ignition cycle begins at this time.

Burner Doesn't Light Because of Low Voltage or Low Gas Pressure

The operating gas valve will be energized for about 30 seconds and then the NC contacts of the radiant sensor will be closed. 120 volts is applied to both sides of the operating gas valve and it closes to shut off the gas. A normal ignition cycle begins at this time.

NORTON IGNITION SYSTEM

Test Procedure

- 1) Igniter will glow red.

If Igniter does not glow red, then check the following:

- (a) Disconnect Igniter wiring from dryer - test with separate 120V. Replace if it does not glow red.
 - (b) Also replace Igniter if cracked, broken or does not light burner in 25 seconds.
- 2) Unit must be wired correctly.
 - (a) Front gas valve must always be wired to "A" and "3" on the relay.
 - (b) Side or rear gas valve must be wired to "B" and "4" on the relay.
 - 3) Rear or side gas valve must open (click) when dryer is energized.
 - 4) Front gas valve will open and gas will flow to burners after 12 to 25 seconds, when Igniter is glowing red. Red Igniter will light gas from burners.
 - 5) Igniter will go out when flame is burning.
 - (a) If both gas valves do not open (click), then replace.
 - (b) If unit does not operate correctly, then replace the relay.
 - (c) If Igniter does not shut-off, then replace radiant sensor. Also, if the radiant glass is broken, replace.

NORTON IGNITION SYSTEM

- 6) Parts in unit:

Norton Igniter TU8596
Ignition Radiant Sensor TU8598
Ignition Relays TU8599
Two Gas Valves TU6557
Wiring Diagram TWL713

- 7) Open and close loading door after gas is burning and Igniter is shut-off. Gas should not flow when door is reclosed until radiant sensor has cooled and Igniter recycles.

TROUBLE SHOOTING ON EACH NORTON IGNITION PART

- A) Igniter TU8596.

- 1) No Igniter red - Check voltage (120V)
 - Cracked or broken, replace
 - Check wiring TWL713. Must be connected to No. "B" and No. "3" on relay.

Radiant Sensor TU8598

- 1) No Igniter red - Contacts failed open position, replace.
 - Sensor N.C. (cold position)
 - Sensor open (hot position)
 - Glass broken, replace.
- 2) Fails to open after 25 seconds
 - Low voltage on Igniter
 - Not in correct location
 - Glass broken, replace
 - Failure of contacts to open, replace.

C) Relay (Igniter) TU8599

- 1) Front gas valve does not turn on.
 - Relay is wired incorrectly
 - Relay solenoid not operating
 - Relay contacts not operating correctly
- 2) Relay contacts should make before break - when the relay coil is energized, the contacts "4 & 7" should close before contacts "3 & 9" open.

D) Gas Valve TU6557

- 1) If valve does not open when 120V is applied to it, then replace the coil assembly TU3832 (120V).
- 2) The two gas valves must be wired correctly TWL 713. Front gas valve wires connected to "A and 3" on relay. Side or rear gas valve wires connected to "B and 4" on relay.

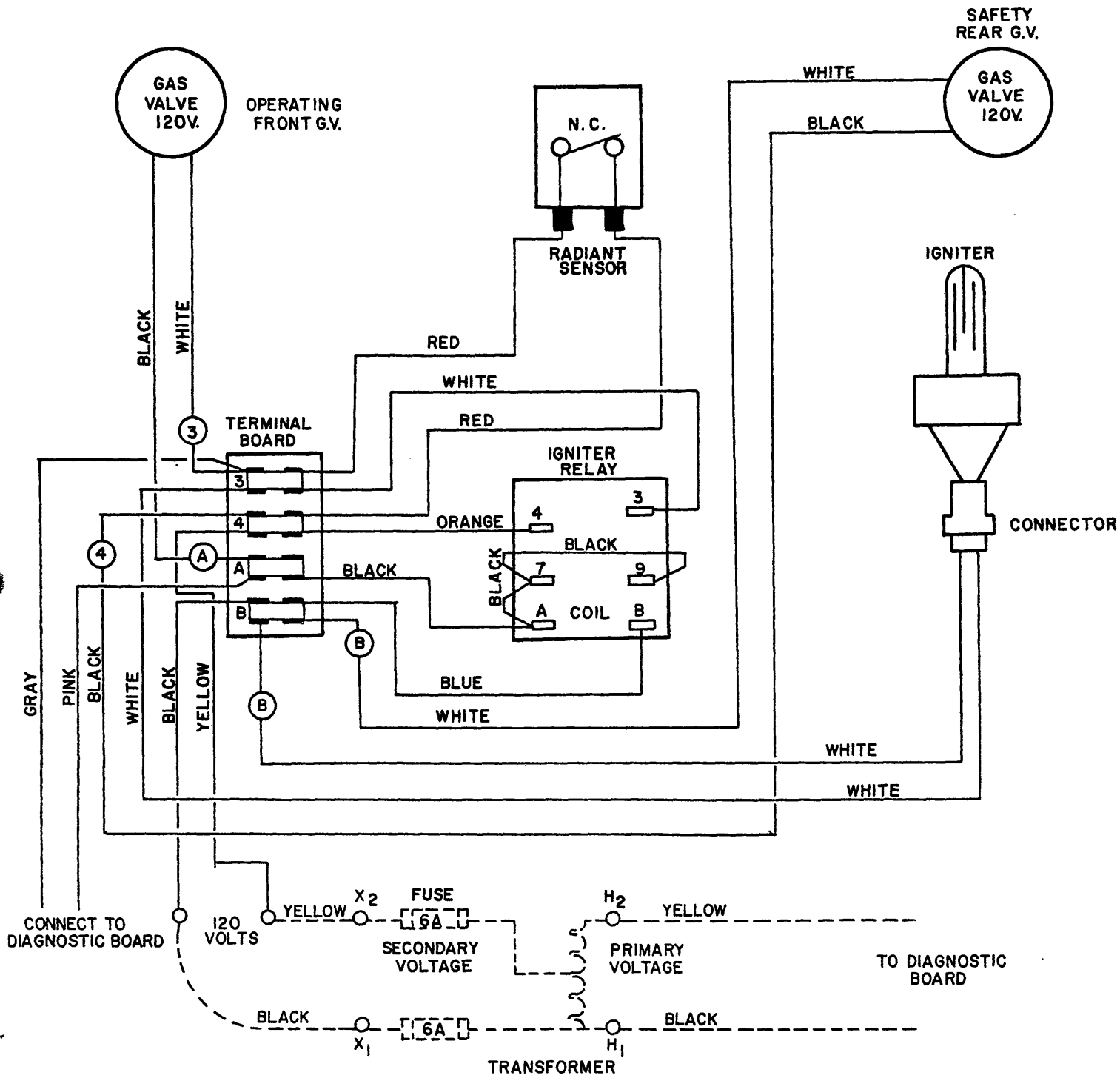
INSTRUCTIONS FOR THE DIRECT IGNITION SYSTEM OPERATION

1. Turn on manual gas valve; handle should be parallel with gas line.
2. Start machine's drying cycle. Carbide igniter will get red hot; then gas valve will open. The gas burners are ignited by the carbide igniter. Igniter will shut off and burners remain on during heat cycle.
3. Opening tumbler door will cause gas to extinguish. Shut door and gas will not flow until flame sensor cools and normal cycle begins.
NOTE! Push start button after door is closed.
4. If gas does not light, the sensor will cool down and restart the ignition cycle.
5. To shut off dryer, turn off manual gas valve. Handle should be at right angle to pipe. Turn off main electrical supply switch.
6. If gas burners fail to ignite, please wait 5 minutes for a complete shut-off period before next attempt.

WIRING DIAGRAM

TWL 713

NORTON SILICON CARBIDE GAS IGNITION SYSTEM
120 VOLTS: 50/60 HZ: 1 PHASE
GAS DRYERS



8-30-83

Maintenance

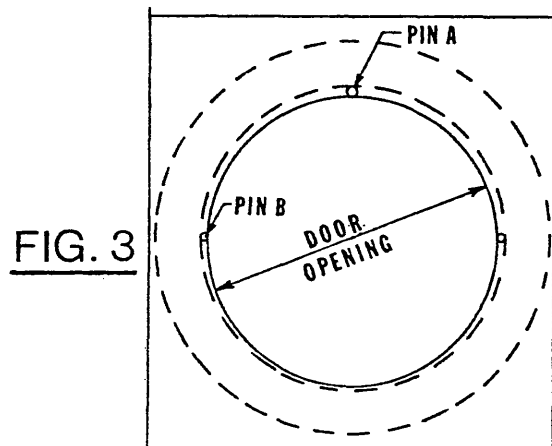
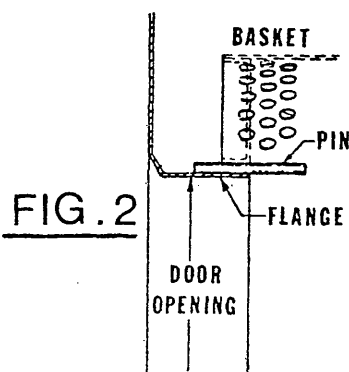
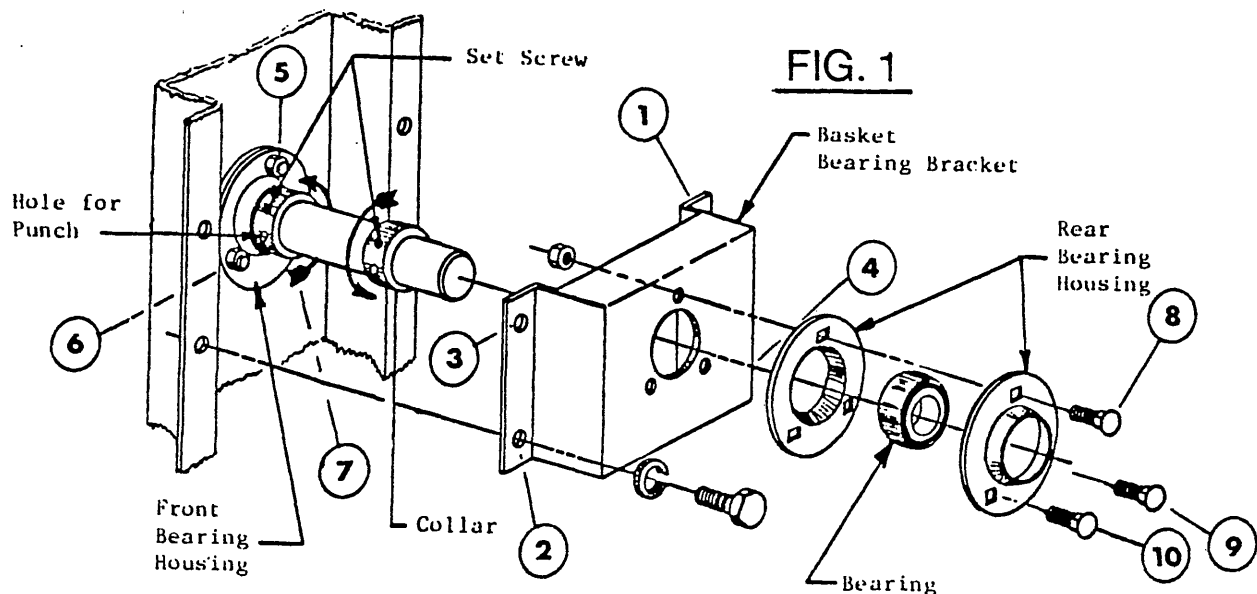
1. Clean lint trap daily: Remove lint before starting day's operation. A clean lint trap will increase the efficiency of the dryer, as the moisture laden air will be exhausted to the atmosphere more quickly.
2. Keep basket and sweep sheets clean: Clean periodically and/or as often as required. The basket and sweep sheets within the dryer are easily accessible for cleaning by removing the front panel of the dryer.
3. Gas burners: Keep gas burners clean. Check periodically and clean often.
4. Pulleys and belts: Keep belts clean. Oil and dirt will shorten the useful life of a belt. Check periodically for alignment. Instructions for replacing the belt are in the "Maintenance" section of this service manual. All ten belt ribs must be seated in drive sheave grooves.
5. Electric motors: Keep motors clean and dry. Motors are oiled at the factory for one year's normal operation. After one year's normal operation, add annually one-half teaspoon electric motor oil or S.A.E. #10 to each bearing. For 24 hour per day operation, add one teaspoon of oil annually.

If motors overheat, check voltage and wiring. Low voltage, inadequate wiring, and loose connections are the principle causes of motor failure.
6. Adjustable leveling bolts: One at each corner inside of dryer front and rear, permits accurate alignment of dryer.

To adjust: Block corner of dryer off floor, loosen hex nut. With wrench, turn bolt clockwise to raise dryer, counter-clockwise to lower.
7. Periodically examine and clean the exhaust system.
8. Keep dryer area clean and free from combustible materials, gasoline and other flammable vapors and liquids.
9. Do not obstruct the flow of combustion (make-up) air and ventilating air.
10. Periodically check gas pressure.
11. Periodically check dryer voltage per dryer rating plate.
12. Gas burners air inlet shutters can be adjusted for proper flame pattern by following instructions on page 47 of this manual.

INSTRUCTIONS FOR ALIGNING BASKETS ON CISSELL DRYERS - SINGLE MOTOR

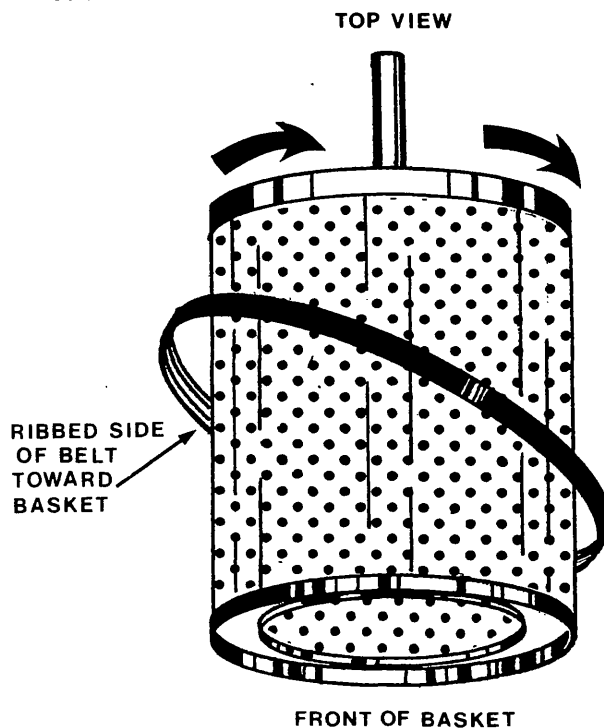
1. Loosen four basket bearing bracket bolts 1,2,3, & 4 (Fig.1) on rear of dryer. Loosen 3 nuts 5,6,7 holding FRONT bearing housing and 3 bolts 8,9,10 holding REAR bearing housing. Loosen both front and rear bearing collars. NOTE: All fasteners must be loose enough to permit free movement of each bearing in its housing.
2. Push basket to rear or pull to front (whichever is required) to bring basket approximately flush with edge of door opening flange. (plus or minus 1/8")
3. Place FRONT bearing collar (nearest to cabinet) in position and tighten.
4. Place the "A" pin (7/16" diameter) at top and the two "B" pins (5/16" diameter) at the sides of the door opening as shown in Figures 2 & 3. (Inside the dryer compartment between the rim of the basket opening and the rim of the door opening.) NOTE: For pins, use drill bits or short sections of round steel rods.
5. With pins in position, tighten FRONT bearing housing nuts 5,6,7 in 3 step sequence:
First Step- Tighten nuts 5,6,7 lightly (just enough to remove slack).
Second Step- Tighten nuts 5,6,7 half tight.
Third Step- Tighten nuts 5,6,7, securely.
6. Tighten REAR bearing housing bolts 8,9,10 lightly (just enough to remove slack in bearing and housing.)
7. Fully tighten bearing bracket bolts 1,2,3,4 securely.
8. Loosen REAR bearing bracket bolts 8,9,10, then tighten using the 3 step sequence in step 5 above.
9. Remove pins and check the space between basket and door opening at "B" pin position(Fig.3). If gap is not approximately the same on both sides, repeat steps 1 through 8.
10. Place REAR bearing collar in position and tighten.



BELT REPLACEMENT

To replace the belt, the following procedure should be followed:

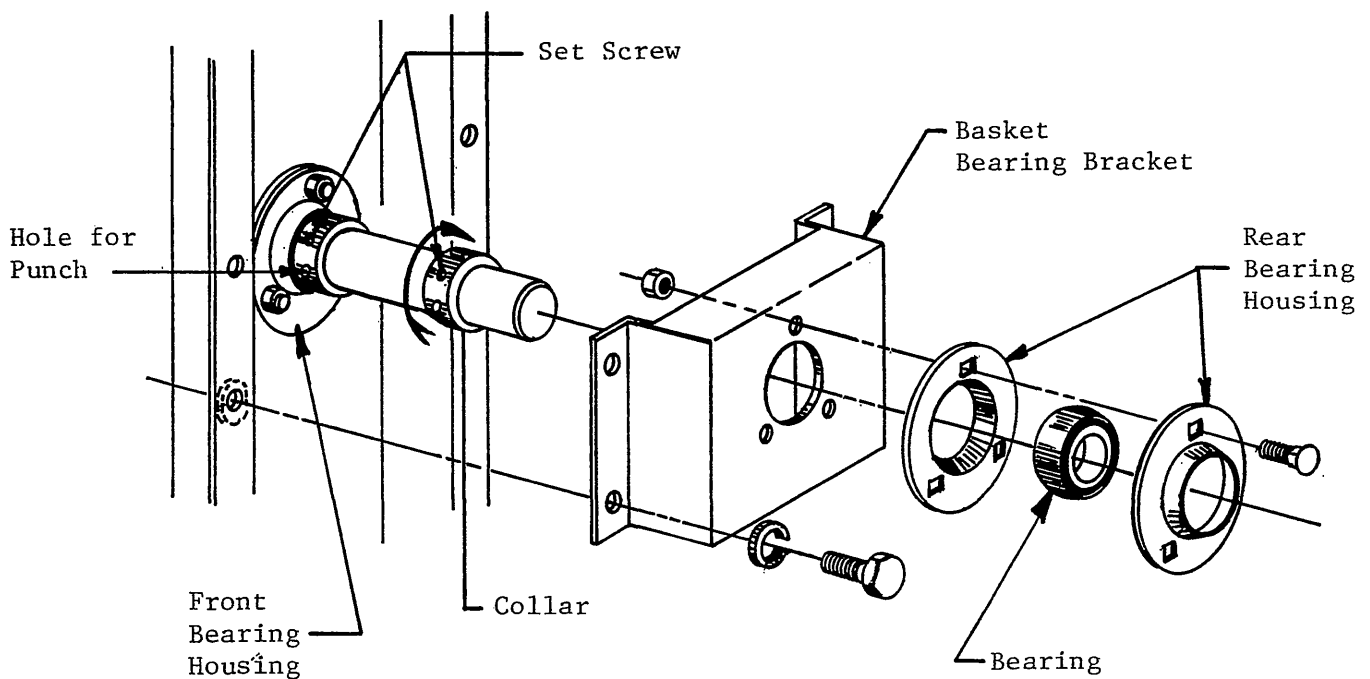
1. Remove motor access cover on rear of dryer.
2. Remove spring from idler yoke and rotate idler assembly counter-clockwise.
3. Remove broken or damaged belt. (Cut if necessary).
4. Remove front door panel and lint compartment door.
5. Remove lint screen and lint screen housing.
6. Place new belt around cylinder with ribbed side of belt against cylinder. Drop excess loop through bottom opening of sweep sheets into lint compartment.
7. Work one side of belt toward rear of cylinder so belt is on cylinder at an angle (see illustration).
8. Rotate cylinder by hand in required direction to "walk" belt to rear (see illustration).
9. When belt is at rear of cylinder drop loop through belt slot.
10. At rear of machine rotate cylinder by pulling belt until belt is properly seated on cylinder.
11. Rotate idler assembly clockwise with belt in idler sheave.
12. Put belt on drive sheave making sure all ribs are seated in drive sheave grooves.
13. Replace spring on idler yoke.
14. Replace motor access cover, lint screen housing, lint screen, front panel and lint compartment door.



IMPORTANT
All ten (10) ribs of the drive belt must be engaged in the ten (10) grooves of the drive sheave and the belt must be seated between the two flanges of the idler sheave. OTHERWISE, BELT DAMAGE WILL OCCUR.

INSTRUCTIONS FOR REPLACING BEARING

1. Remove idler spring and slip belt off poly-v motor sheave. Rotate idler counter-clockwise to clear belt.
2. Loosen and remove set screws in bearing collar.
3. Release bearing collar by rotating as indicated in illustration. If necessary, use punch and mallet to break collar loose. Rotate in direction indicated, until bearing collar can be removed from bearing.
4. Loosen (3) bolts in rear bearing housing. Remove (4) bolts in basket bearing bracket and remove bracket.
5. Remove (3) nuts on front bearing housing. Remove old bearing and collar and replace with new bearing and collar.
6. Remove old bearing in basket bearing bracket and replace with new bearing and collar. Place basket bearing bracket on shaft and lightly tighten (4) mounting bolts.
7. Replace belt on motor sheave. Rotate idler assembly clockwise and replace spring.
8. Re-align basket following instructions on page 32.

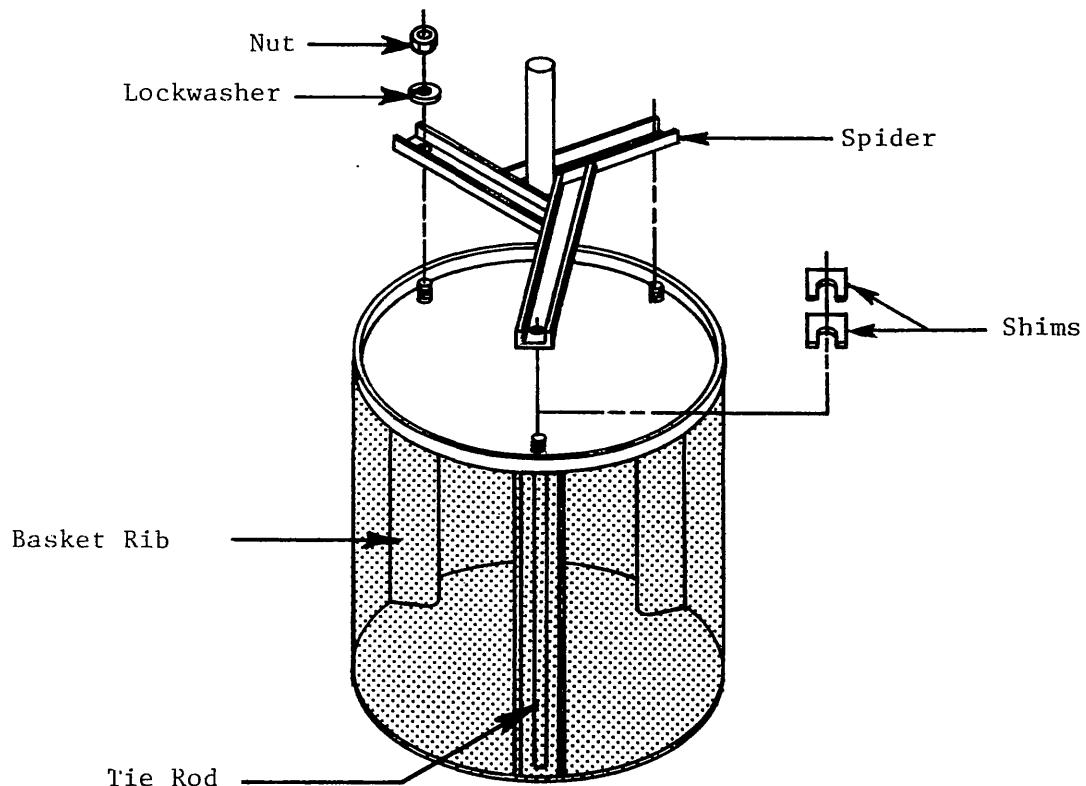


INSTRUCTIONS ON THE SHIMMING OF A CISSELL
BASKET AND SPIDER ASSEMBLY

This procedure is normally necessary when replacing either the basket or the spider assembly on any Cissell tumbler. The alignment of these two parts are crucial in assuring a true running basket.

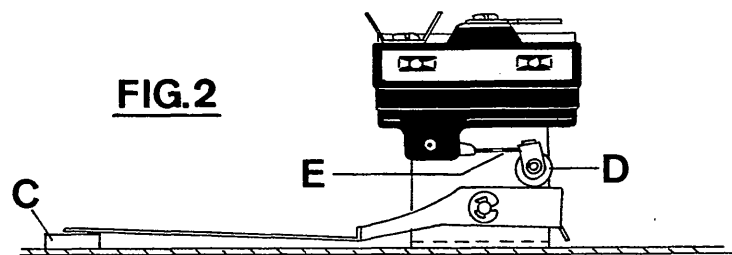
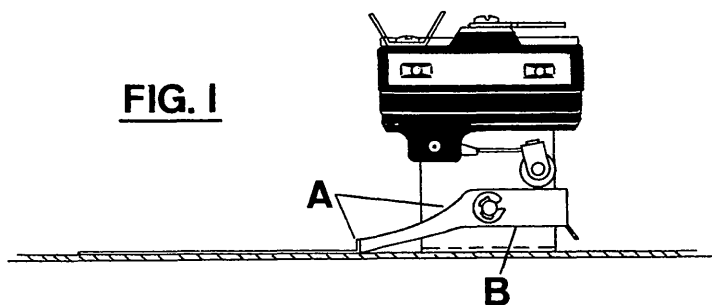
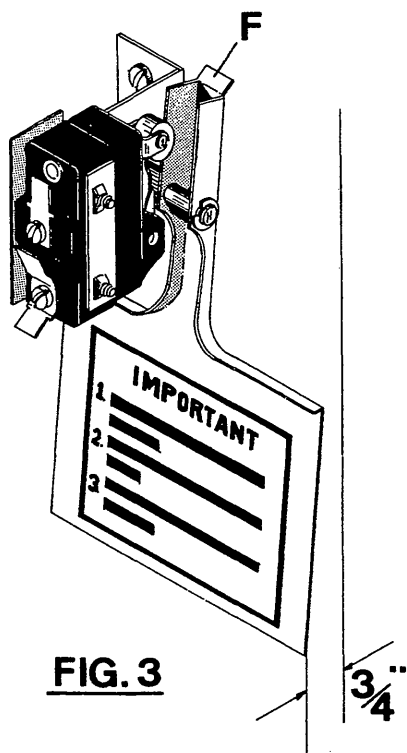
- A. Align the basket as per instructions in manual.
- B. Rotate the basket to determine where the most out of round point is (where the basket scrapes or comes closest to scraping the sweep sheet).
- C. Mark this position and the nearest rib to this position.
- D. Remove the basket (do not loosen the alignment bolts).
- E. With the basket on the floor (spider up), place one or two shims between the spider leg and the back of the basket at the marked rib position. (See drawing)
- F. Re-insert spider and basket assembly and re-check cylinder.
- G. If at this point, basket is still out of round, procedure must be repeated starting with step "B".
- H. Upon completion of shimming process, re-alignment of basket is necessary.

NOTE: If the point mentioned in step #B is between two ribs, both ribs might have to be shimmed.



AIR SWITCH ADJUSTMENT

1. Shut off current; disconnect leads and remove air switch.
2. Lay air switch assembly on flat surface. Adjust air blade at "A" (fig. 1) so that air blade lays flat and surface "B" is parallel to the flat surface.
3. Place 3/8" x 5/8" spacer bar or equivalent "C" (fig. 2) under air blade in position shown; hold switch mounting bracket firmly and adjust switch actuator "D" with needle nose pliers at "E" by twisting actuator right or left whichever is needed so that switch closes when end of air blade engages bar "C".
4. Maximum opening of air switch must be no greater than 3/4" (fig.3). Bend tab "F" in or out to maintain this dimension.
5. Re-install air switch assembly on rear of dryer.
6. Re-check operation of air blade. Switch must close before air blade engages face of opening and re-open before stop "F" engages.



SINGLE PHASE MOTOR REPLACEMENT PROCEDURE

DIMENSION DRYERS

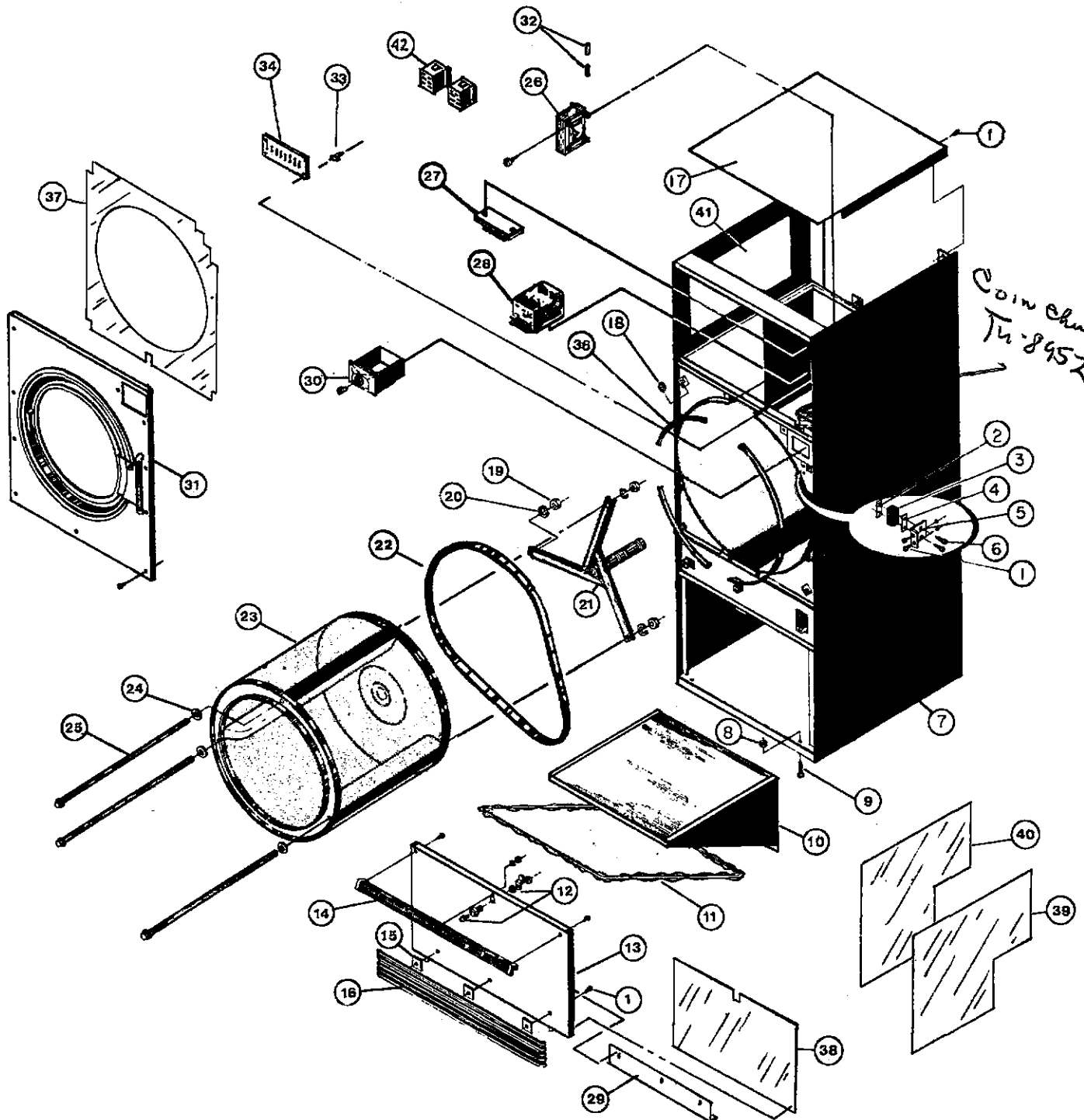
The following procedure must be carefully followed to assure correct alignment of the motor, fan, and belt drive system. No shortcuts are permitted.

The complete motor, motor mount, and fan assembly must be removed as a unit. Do not loosen the bolts securing the motor to the motor mount until directed to do so by the instructions.

1. Disconnect electrical power to the dryer.
2. Loosen and remove the two (2) control box cover screws and remove the control box cover.
3. Remove the six (6) sheet metal screws securing the motor access cover to the dryer and remove the motor access cover.
4. The motor harness consists of four (4) wires leading from a junction box on the motor to the control box. The wire colors are: red, red/black, red/white, and white (black if 208 or 240 volts). Disconnect these four wires from the dryer harness wires in the control box leaving the cigarette connectors (line splices) attached to the dryer harness. Carefully pull the loose ends of the motor harness into the motor compartment.
5. Remove the idler tension spring.
6. Remove the belt from the poly-v sheave and rotate idler assembly counter-clockwise.
7. Remove five (5) sheet metal screws securing the fan closure plate to the fan housing.
8. Remove the two (2) bolts, nuts, and lockwashers securing the top of the motor mount bracket to the angle bracket at the top of the motor compartment.
9. Remove the two (2) bolts and lockwashers securing the motor mount bracket to the bottom of the motor compartment.
10. Remove motor, motor mount bracket, and fan by sliding complete assembly to the rear. Place the assembly on blocks high enough to clear fan closure plate.
11. With a sharp instrument, scribe completely around the motor base to clearly mark the position of the motor on the motor mount bracket.
12. Hold fan securely and unscrew the poly-v sheave from the threaded motor shaft by turning sheave counter-clockwise.
13. Loosen the two (2) 1/4-20 socket head set screws securing fan to keyed motor shaft and remove fan.
14. Remove the four (4) bolts, nuts, and lockwashers securing the motor to the motor mount bracket and remove the motor.
15. Remove the felt washer from the old motor shaft and place it on the shaft of the replacement motor.
16. Place the replacement motor on the motor mount bracket and align carefully with the lines scribed in step 11. Secure with the four (4) bolts, nuts, and lockwashers removed in step 14.

17. Slide fan and key onto keyed motor shaft. Using a 1/8" thick metal gauge, space rear of fan 1/8" from fan closure plate and tighten set screws securely.
18. Holding fan securely, screw poly-v sheave onto threaded motor shaft by turning sheave clockwise.
19. Position the motor, motor mount bracket, and fan assembly in the motor compartment. Secure to the angle bracket at the top of the compartment with the bolts, nuts and lockwashers removed on step 8.
20. Secure the fan closure plate to the rear of the fan housing with the sheet metal screws removed in step 7.
21. Secure the motor mount bracket to the bottom of the motor compartment with the bolts and lockwashers removed in step 9.
22. Place belt in groove of idler sheave and rotate idler assembly clockwise.
23. Place belt on poly-v sheave (on motor shaft). All ten (10) belt ribs must be engaged in sheave grooves. Replace idler tension spring.
24. Thread the loose ends of the motor harness wires through the two holes into the control box.
25. Connect the motor harness to the dryer harness in the control box as follows:
 - Red to red
 - Red/black to red/black
 - Red/white to red/white
 - White to white (black to black if 208 or 240 volts)Use the cigarette connectors (line splices) left in step 4.
26. Replace the motor access cover using the sheet metal screws removed in step 3.
27. Replace the control box cover removed in step 2 and tighten the control box cover screws.
28. Reconnect the electrical power and check dryer operation.

Front Section of Dryer



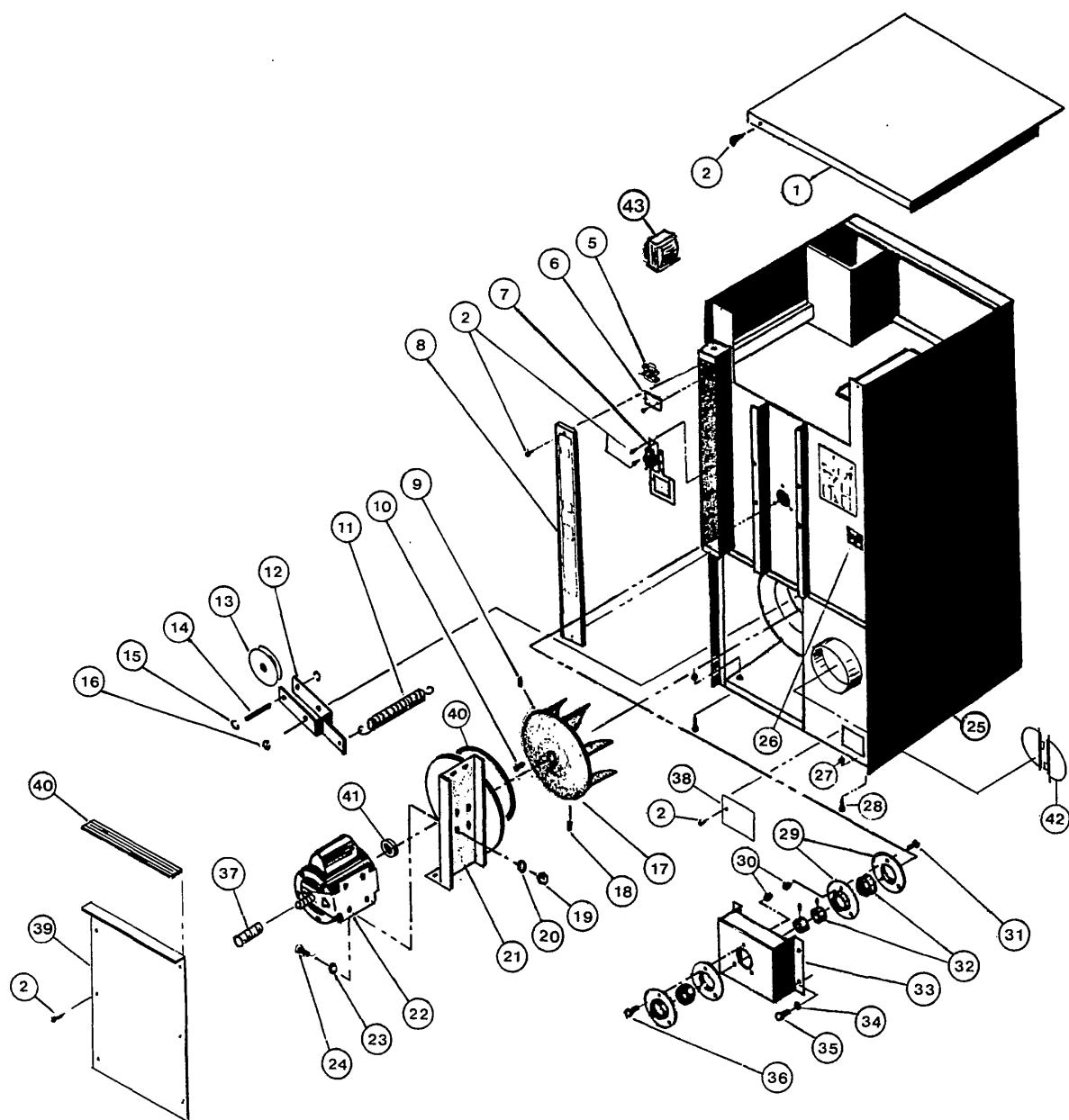
Grease to be applied to all bearing shafts
 #42-032-6015 grease Lubriplate #310-1 lb. can
 OR
 14½ Oz. Tubes - Lubriplate No. 930-2 multi-
 purpose grease #10098.

FRONT VIEW - ILLUSTRATED PARTS

Ref. No.	Part No.	Description
1	TU7733	#8x½ Self-Drilling Screw
2	TU1771	#6 Tinnerman Twin Nut
3	TU1979	Door Switch
4	TU1770	Insulator
5	TU2373	Door Switch Bracket
6	TU3219	#6x1" Sheet Metal Screw
7	TU8900	Jacket Welded Assembly
8	TU4937	3/8"-16 Jam Nut
9	TU3211	3/8"-16x2½ Leveling Bolt
10	TU9038	Lint Screen Housing
11	TU8954	Lint Screen Frame
	TU8955	Lint Sreen Only
12	TU9035	Lock-JWC2
	TU2844	Key-JWC2
	TU8928	Cam
13	TU9511	Lint Door W/A
14	TU7472	Lint Door Handle w/hardware
15	TU2710	Trim Holder
16	TU2384	Bottom Trim
17	TU2620	Solid Top
18	TU2877	#10 Speed Nut
19	TU2882	½"-20 Hex Nut
20	TU2831	½" Split Lockwasher
21	TU8993	Spider Welded Assembly
22	TU8930	Belt
23	TU8964	Basket Welded Assembly
24	TU2883	½" Cut Washer
25	TU2313	Tie Rod
26	TU8737	Transformer (208 or 230 Volt Primary, 120 Volt Secondary
27	TU8629	Terminal Board (Igniter)
28	TU8599	Relay (Igniter)
29	TU9512	Adjustment Strip
30	TU9225	Coin Vault Assembly
31	TU9033	Front Panel & Door Assembly
32	TU8738	Fuses
33	TU9347	P.C. Board Support
34	TU8933	Diagnostic Board
36	TU2483	Sweep Sheet Gaskets
37	TU9156	*Front Panel Insulation
38	TU9153	*Lint Trap Insulation
39	TU9154	*Right Side Panel Insulation
40	TU9155	*Left Side Panel Insulation
41	TU7793	*Upper Side Bonnet Insulation
42	TU9325	Relays (2 ea.) Dimension 1000 Only

* G & P Models Only

Rear Section of Dryer

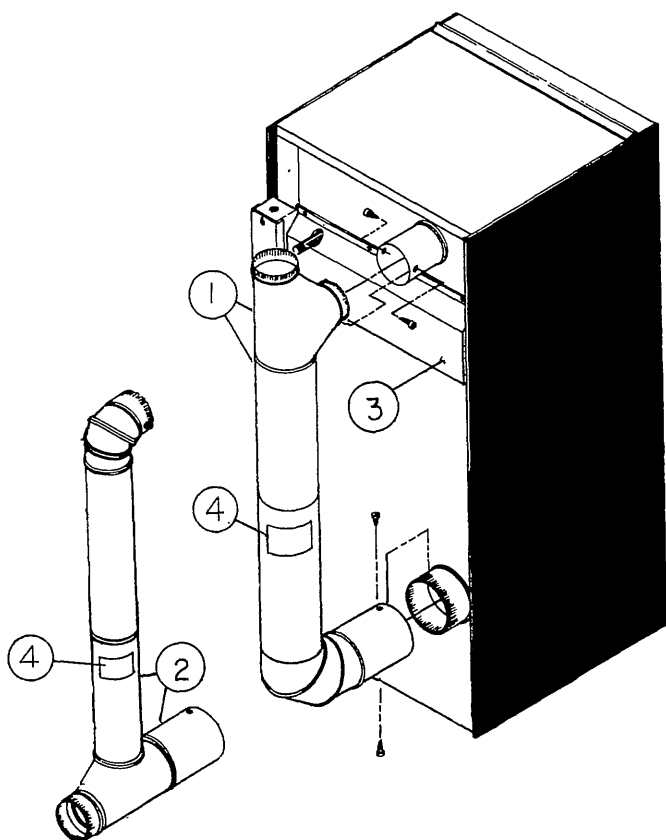


Grease to be applied to all bearing shafts
 #42-032-6015 grease Lubriplate #310-1 lb. can
 OR
 14½ Oz. Tubes - Lubriplate No. 930-2 multi-
 purpose grease #10098.

REAR SECTION - EXPLODED VIEW

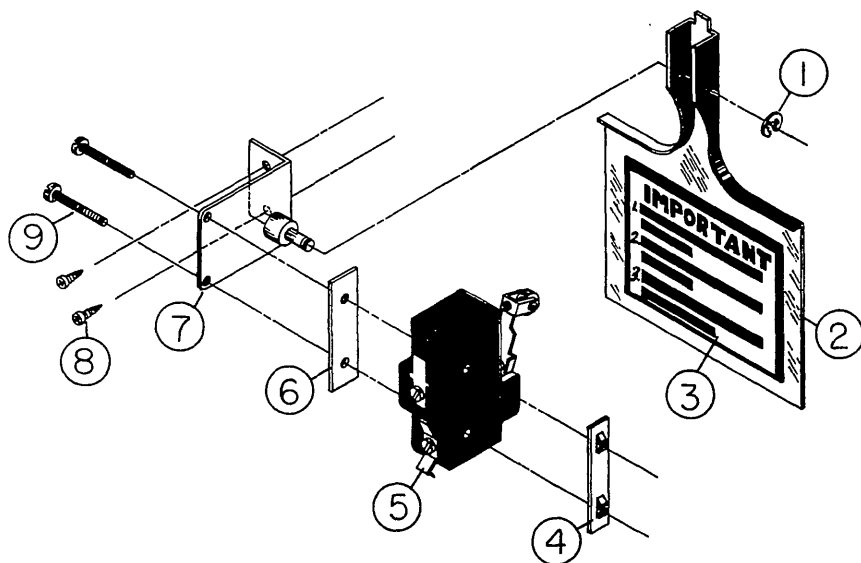
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	TU2620	Solid Top
2	TU7733	#8x $\frac{1}{2}$ " Self Drill Screw
5	M155	Wire Harness Clamp
6	TU2726	Strain Relief Plate
7	TU8206	Air Switch Assembly
8	TU8980	Junction Box Cover
9	TU9272	5/16-18x3/8 Set Screw
10	TU5241	Key
11	CB19	Spring
12	TU8922	Yoke
13	TU8956	Tension Sheave
14	TU8931	Idler Shaft
15	TU8932	Retaining Ring
16	F489	"E" Ring
17	TU9233	Fan - 50 Cyc.
	TU9001	Fan - 60 Cyc.
18	TU9272	5/16-18x3/8 Set Screw
19	C249	5/16-18 Hex Nut
20	TU2814	5/16 Split Lock Washer
21	TU8983	Motor Bracket
22		Motor - See Page 7
23	VS8130	5/16 Cut Washer
24	TU5439	5/16-18x3/4 Hex Head Screw
25	TU8900	Jacket Welded Assembly
26	F1116	Serial No. Plate
27	TU4937	3/8-16 Jam Nut
28	Tu3211	3/8-16x2 $\frac{1}{2}$ Leveling Bolts
29	TU7018	Bearing Housing
30	TU4787	3/8-16x9/16 Hex Nut
	TU3243	3/8 Internal Tooth Washer
31	TU7178	3/8-16x3/4 Rib Neck Bolt
32	TU7019	Bearing & Collar Assembly
33	TU7162	Basket Bearing Bracket
34	IB140	3/8 Cut Washer (4)
35	TU3246	3/8-16x1 Hex Hd. Screw (4)
36	TU4936	3/8-15x3/4 Carriage Bolt
37	TU9162	Drive Sheave - 50 Cyc.
	TU8905	Drive Sheave - 60 Cyc.
38	TU9010	Cover Plate
39	TU9819	Motor Access Cover Assembly
40	TU2853	Gaskets
41	TU9300	Felt Washer
42	TU9189	Damper Blade W/A (2) "D" Model Only
43	TU9760	Transformer - 50 Hz. Only or 60 Hz. (2 wire) 240V. Primary/120V Secondary

Duct Work Assembly



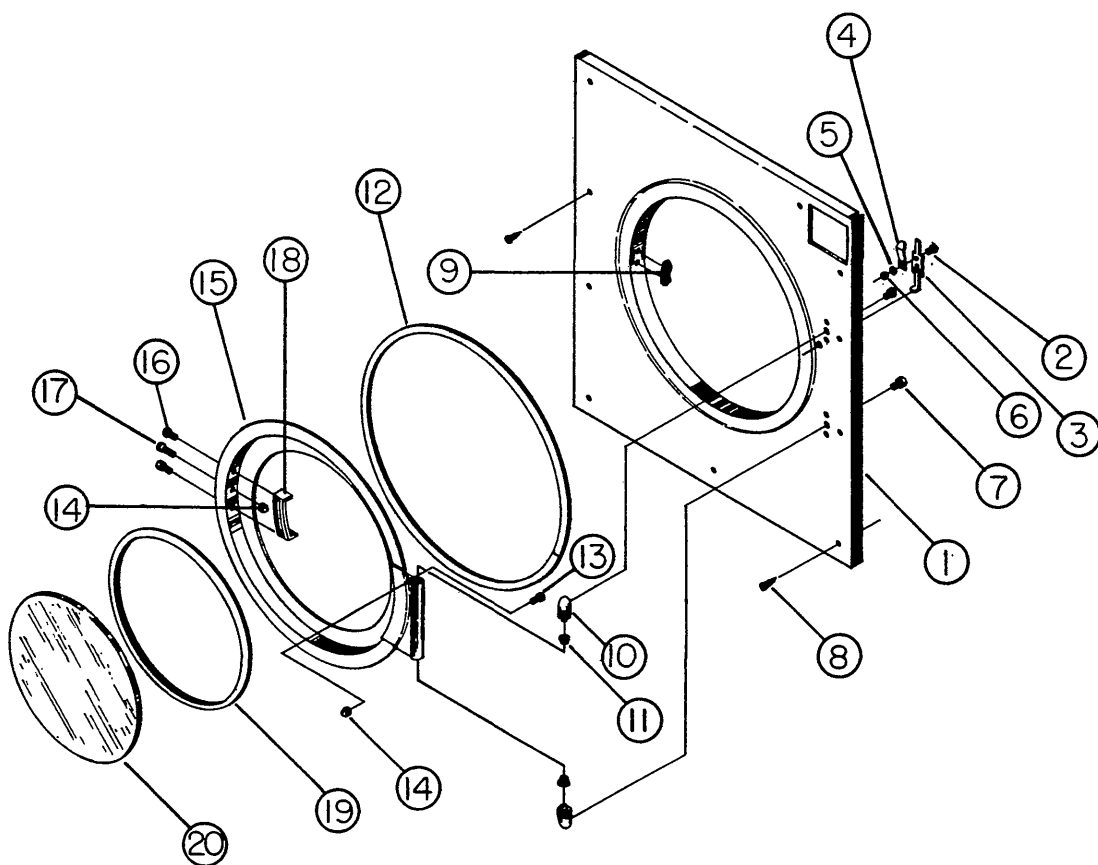
DUCT WORK ASSEMBLY		
Vertical Or Horizontal		
Ref.	Part	
No.	No.	Description
1.	TU9159	Vertical Assembly
2.	TU9160	Horizontal Assembly
3.	TU7297	Rear Air Guide Welded Assembly
4.	TU9161	Duct Work Decal "G" Model Only

Air Switch Assembly



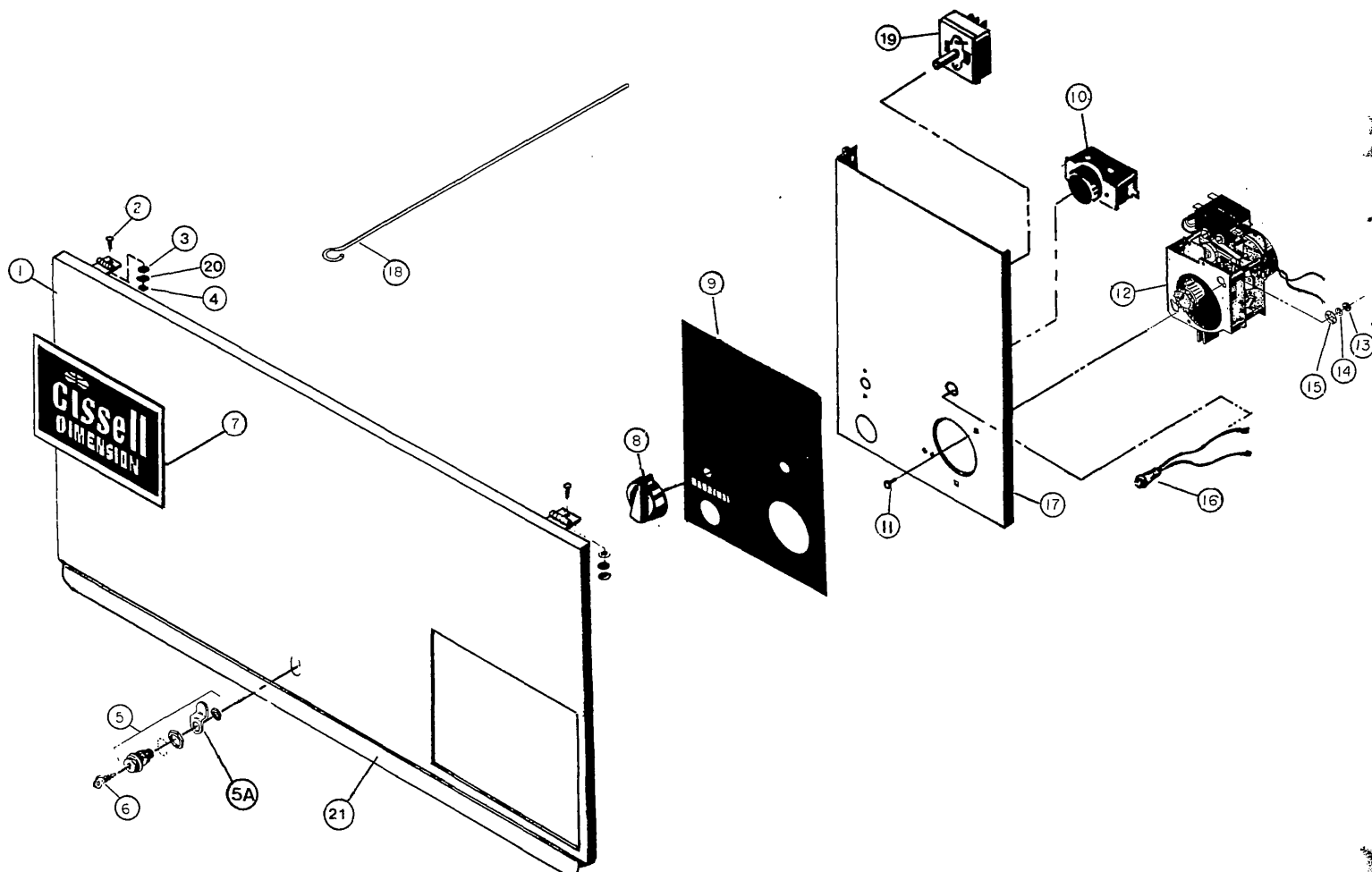
TU8206 AIR SWITCH ASSEMBLY

Ref.	Part	
No.	No.	Description
1	F888	"E" Ring
2	TU2463	Actuator Arm
3	TU3476	Air Switch Decal
4	TU1771	#6 Tinnerman Nut
5	TU8155	Air Switch
6	TU1770	Insulator
7	TU8171	Air Switch Bracket
8	TU7733	#8-18x $\frac{1}{2}$ " Self. Drill Screw
9.	TU3219	#6x1" Round Head Sheet Metal Screw



FRONT PANEL & DOOR ASSEMBLY

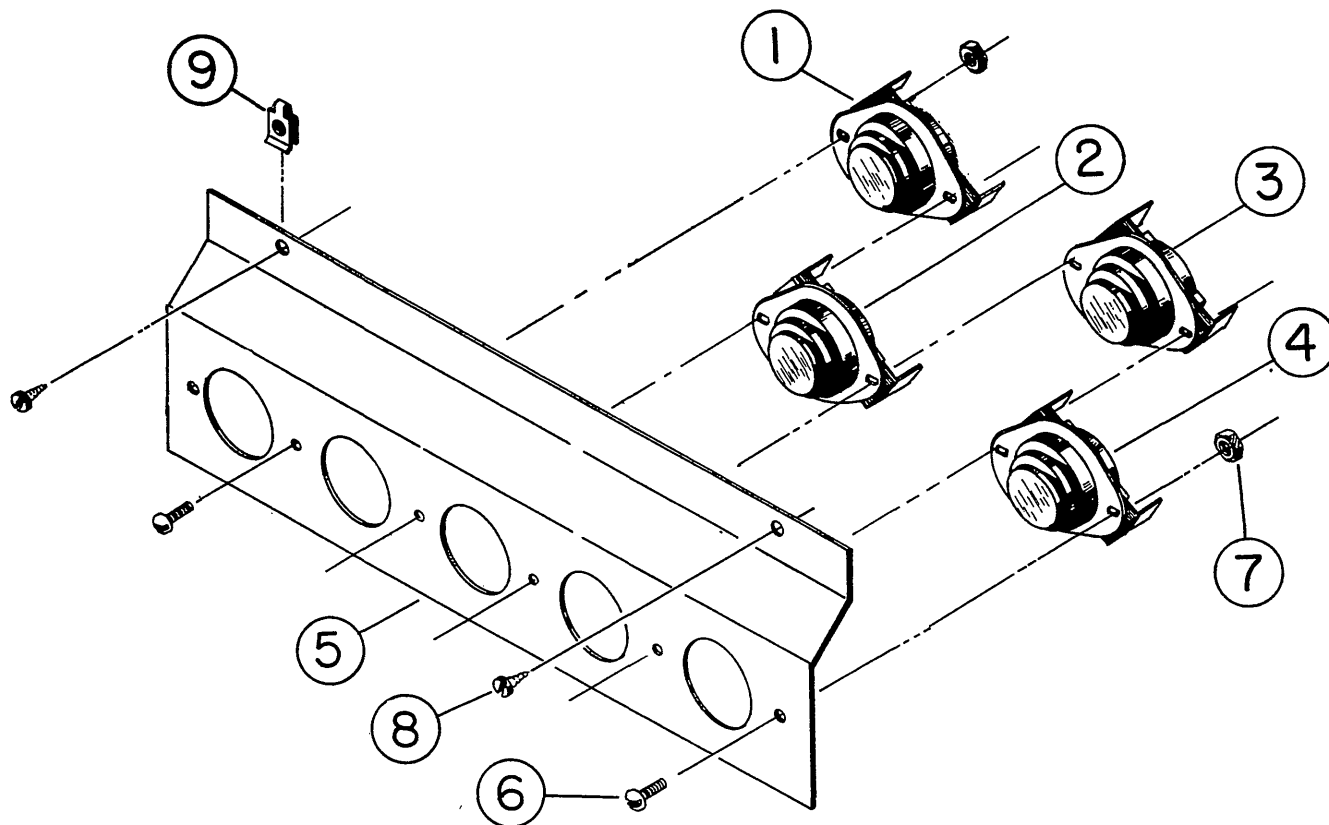
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
1	TU9029	Front Panel Welded Assembly
2	M262	#8-32 x 3/8" Truss Head Screw
3	TU2194	Door Switch Actuator
4	TU2105	Door Switch Spring
5	FB187	#8 Split Lock Washer
6	TU3266	#8-32 Hex Nut
7	TU2836	5/16" - 18 x 1/2" Hex Head Cap Screw
8	TU2878	#10 x 5/8" Sheet Metal Screw
9	TU7456	Door Catch Assy. (With Rivets)
10	TU2236	Hinge Post (2 required)
11	PIF172	Delrin Bearing (2 required)
12	TU8994	Basket Door Seal
13	TU4839	#10 - 32 x 3/8" Machine Screw
14	TU4840	#10-32 Hex Crown Nut
15	TU7171	Basket Door Welded Assy.
16	TU3215	#10-32 x 3/7 Taptite Screw
17	TU3163	Catch Pin
18	TU2874	Basket Door Handle
19	TU8943	Rubber Gasket
20	TU7862	Door Glass (20 1/4" Standard-No. Printing)
	TU4827	Actuator Assy. (No's. 2, 3, 4, 5, 6)
	TU9040	Door Assy. (No's. 11, 12, 13, 14, 15, 16, 17, 18, 19, 20).
21.	TU9156	Insulation(illustrated on page 39)



COIN METER CONTROL PANEL & ACCESS DOOR

All Hardware Sold Only in Packages of 6

Ref. No.	Part No.	Description
1	TU9391	Access Door Welded Assembly
2	TU3479	#10-32 x 7/16" Truss Head Screw
3	P104	1/4" Cut Washer
4	TU2842	#10-32 Hex Nut
5	TU9035	Lock JWC2
6	TU2844	Key JWC2
7	TU9389	Cissell "Dimension" Nameplate
8	TU8935	Knob Assembly
9	TU9034	Control Panel Nameplate
10	TU9028	Push Button Switch
11	TU4958	#8-32 x 3/8 Machine Screw
12		Coin Meter (Specify Voltage, Coin Denomination, Single or Double Slot)
13	TU3266	#8-32 x 11/32 Hex Nut
14	FB187	#10 Lock Washer
15	P104	1/4" Cut Washer
16	TU5421	Indicator Light - 120V.
	TU5639	Indicator Light - 240V.
17	TU8941	Coin Meter Control Panel Weldment
18	TU5739	Support Rod
19	TU9030	Temp. Selector Switch
20	FB187	#10 Lock Washer
21	TU7959	Chrome Trim
5A	TU8995	Cam

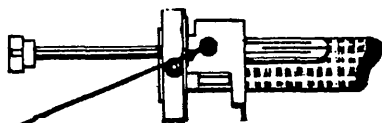


THERMOSTAT ASSEMBLY-TU9111

ALL HARDWARE SOLD ONLY IN PACKAGES OF 6

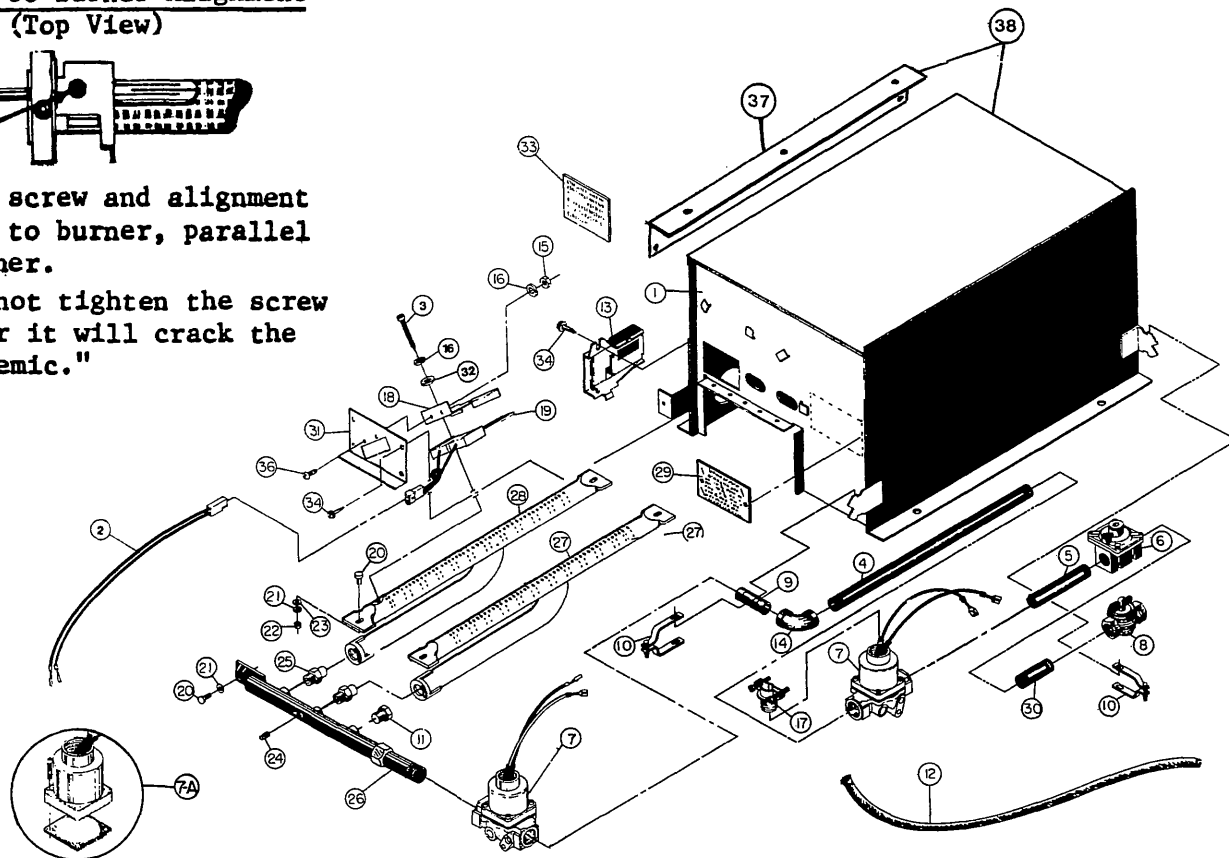
<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	TU3240	Safety High Limit Thermostat
2	TU3240	185 F. Thermostat - High Heat
3	TU5150	150 F. Thermostat - Medium Heat
4	TU7244	135 F. Thermostat - Low Heat
5	TU5143	Mounting Bracket
6	TU3624	#6-32 x 1/4" Round Head Machine Screw (6 req'd.)
7	TU3400	#6-32 Hex Nut
8	TU7733	#8 x 1/2" Self Drilling Screw
9	TU6067	#8 Tinnerman Clip (2 req'd.)

Igniter to Burner Alignment
(Top View)



Snug tight screw and alignment of igniter to burner, parallel to each other.

"Please do not tighten the screw too tight or it will crack the igniter ceramic."



GAS BONNET & BURNER ASSEMBLY- TU9598 (Natural Gas)

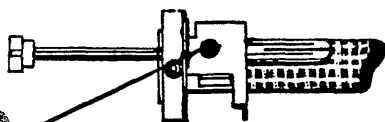
GAS BONNET & BURNER ASSEMBLY- TU9599 (L.P. Gas)

Model - L28DS30G

ALL HARDWARE SOLD ONLY IN PACKAGES OF 6

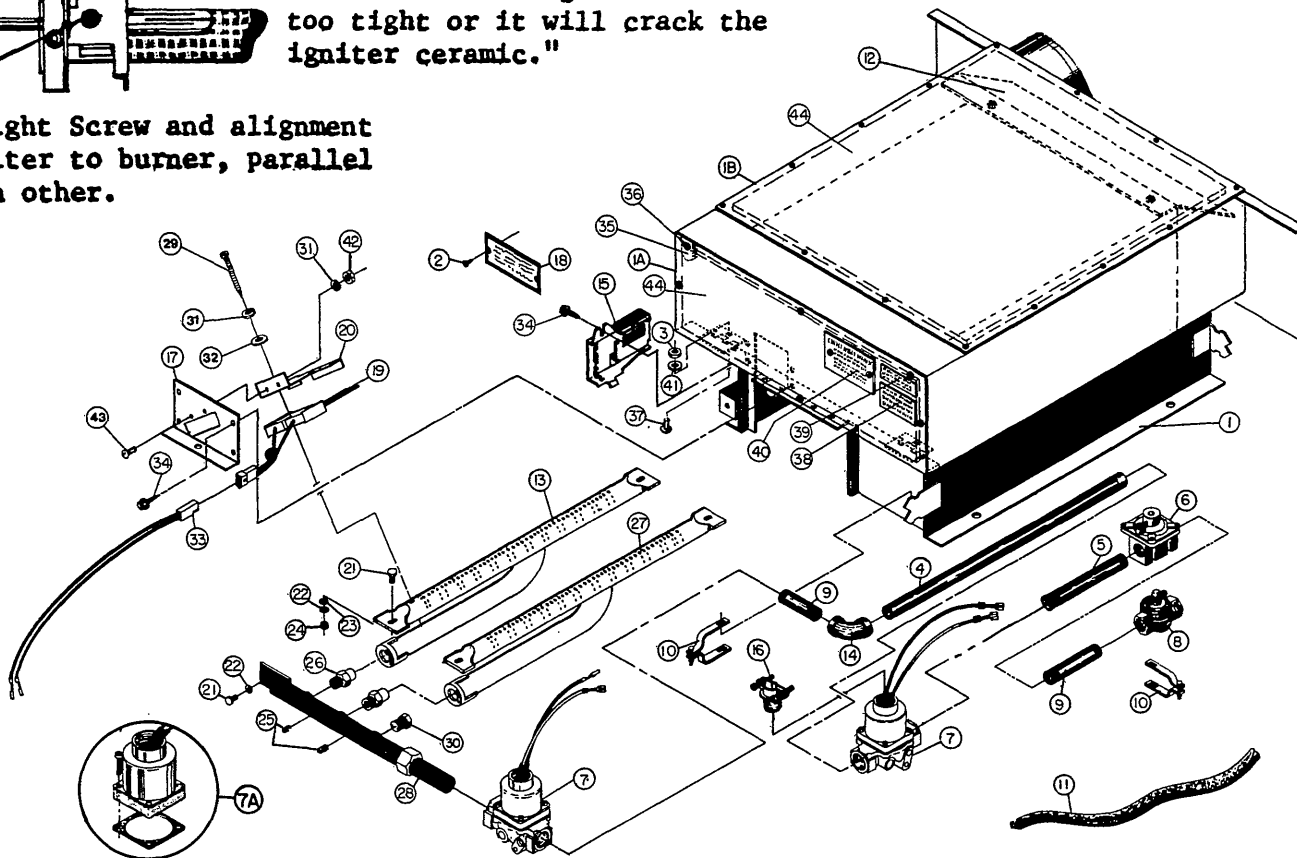
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU8631	Bonnet Welded Assy.	20	CB36	1/4"-20 x 1/2" Hex Head Screw
2	TU8605	Molex Connector	21	TU2846	1/4" Split Lock Washer
3	TU8736	#8x1 Sheet Metal Scr. Brass	22	TU4934	1/2" - 20 Hex Nut
4	TU2724	1/2" Pipe Nipple 25" Lg.	23	TU2847	1/4" Flat Washer
5	OP308	1/2" Pipe Nipple 4" Lg.	24	TU2224	1/8" Pipe Plug (For Manifold Test Hole)
6	TU7935	Regulator Gas (nat'l gas only)	25	TU3539	Gas Burner Orifice (Specify Size)
7	TU6557	Baso Gas Valve	26	TU7979	Manifold Assembly
7A	TU3832	Baso Gas Valve Coil Assy.	27	TU7840	Burner Assy. (Right Hand)
8	TU6321	Gas Cock	28	TU8760	Burner Ignition (Left Hand)
9	OP290	Nipple 1/2 x 2" Long	29	TU8613	Norton Igniter Instructions
10	TU2226	Manifold Mounting Bracket	30	OP290	1/2" Pipe Nipple 2" Long
11	XI72	Manifold Plug	31	TU8690	Norton Igniter Plate
12	136067752	Fiberglass Tubing	32	P104	1/4" Washer Brass
13	TU8598	Radiant Sensor	33	TU8645	Installation Instruction
14	390501053	1/2" Elbow	34	602102180	8 x 1/2 Hex Head Slot Screw
15	TU3266	8-32 Hex Nut	35		Gas Rating Plate
16	M271	Brass Lock Washer	36	SV332	Screw Machine Round Head 8-32x 1"
17	CI365	Connector T & B	37	TU9596	Air Baffle
18	TU8601	Norton Igniter Bracket	38	TU9597	Bonnet Assembly
19	TU8596	Norton Igniter			

Igniter to Burner Alignment (Top View)



"Please do not tighten the screw too tight or it will crack the igniter ceramic."

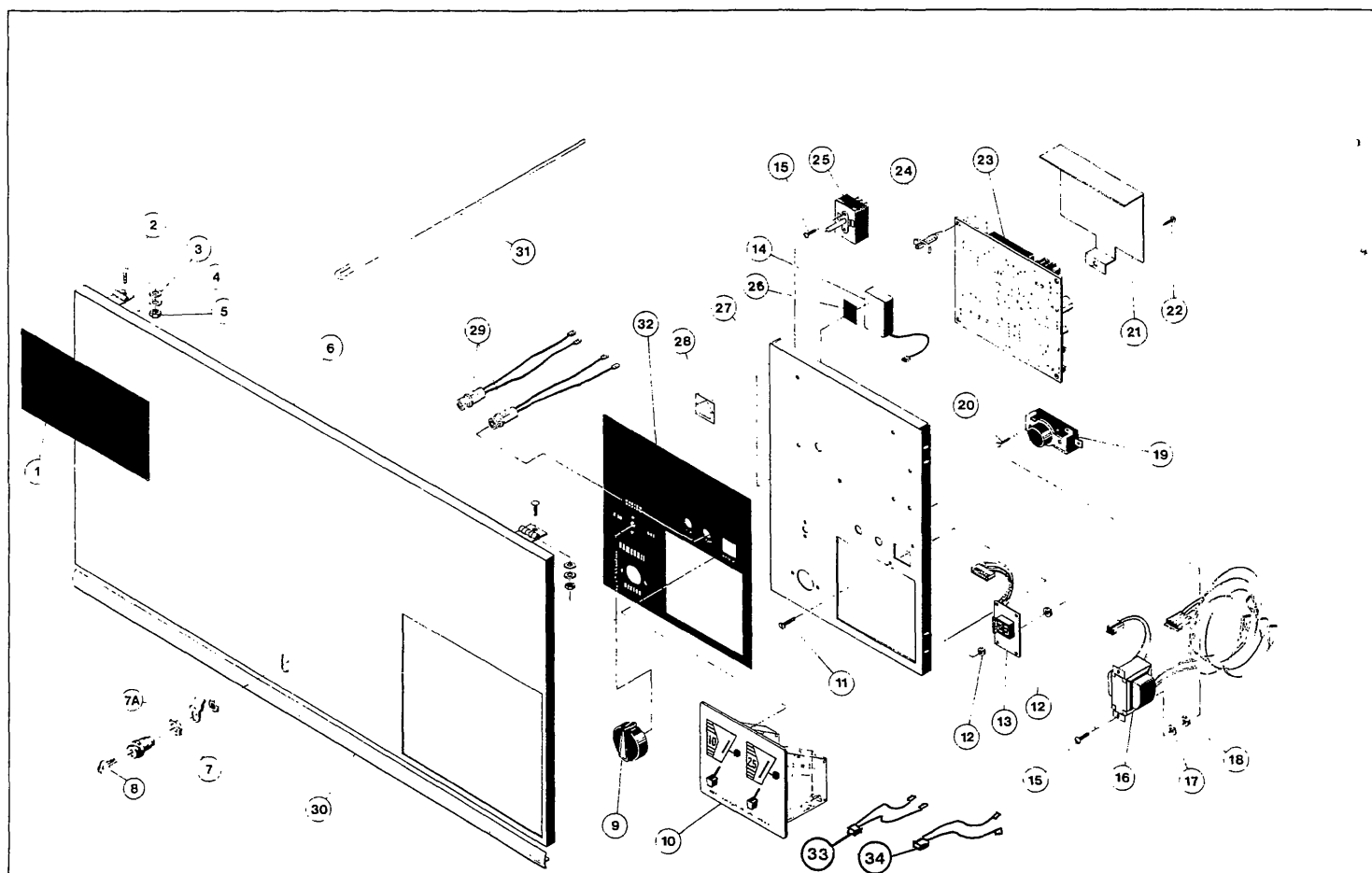
Snug Tight Screw and alignment of igniter to burner, parallel to each other.



GAS BONNET & BURNER ASSEMBLY- TU9110 (Natural Gas)
GAS BONNET & BURNER ASSEMBLY- TU9157 (L. P. Gas)

Model - L28GS30G

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU9048	"F" Bonnet Welded Assy.	21	CB36	1/2"-20 x 1/2" Hex Head Screw
1A	TU8651	Door & Hinge W/A	22	TU2846	1/2" Split Lock Washer
1B	TU7775	Top Panel (for TU9048 order separately)	23	TU2847	1/2" Flat Washer
2	TU7733	#8 x 1/2" Self Drilling Screw	24	TU4934	1/2" - 20 Hex Nut
3	TU2842	10-32 Hex Nut	25	TU2224	1/8" Pipe Plug
4	TU2724	1/2" Pipe Nipple 25" Lg.	26	TU3539	Gas Burner Orifice (specify size)
5	OP308	1/2" Pipe Nipple 4" Lg.	27	TU7840	Burner Assembly
6	TU7935	Regulator (nat'l gas only)	28	TU7979	Manifold Assembly
7	TU6557	Baso Gas Valve	29	TU8736	#8x1 Sheet Metal Scr. Brass Hex
7A	TU3832	Baso Gas Valve Coil Assy.	30	X172	Manifold Plug
8	TU6321	Gas Cock	31	M271	Brass Lock Washer
9	OP290	1/2" Pipe Nipple 2"	32	P104	1/4" Washer Brass
10	TU2226	Manifold Mtg. Bracket	33	TU8605	Molex Connector Harness
11	136067752	Fiberglass Tubing	34	602102180	8x1/2 Hex Head Slot Screw
12	TU7294	Upper Rear Air Deflector	35	TU2877	#10 Tinnerman Nut
13	TU8760	Burner (Ignition Left Hand)	36	TU2878	#10 x 5/8 S.M. Screw
14	390501053	1/2" Elbow	37	TU3479	10-32 x 7/16 Truss Hd. Screw
15	TU8598	Radiant Sensor	38	TU8613	Norton Ignition Instructions
16	CL365	Connector T&B (Gas Valve)	39		Gas Rating Plate
17	TU8690	Norton Igniter Mtg. Plate	40	TU8645	Installation Instructions
18	TU7373	Clean Out Panel Nameplate	41	P104	1/4" Cut Washer
19	TU8596	Norton Igniter	42	TU3266	8-32 Hex Nut
20	TU8601	Norton Igniter Bracket	43	AT383	Truss Head Slot #8-32x1/2
			44	TU2853	Gasket Material



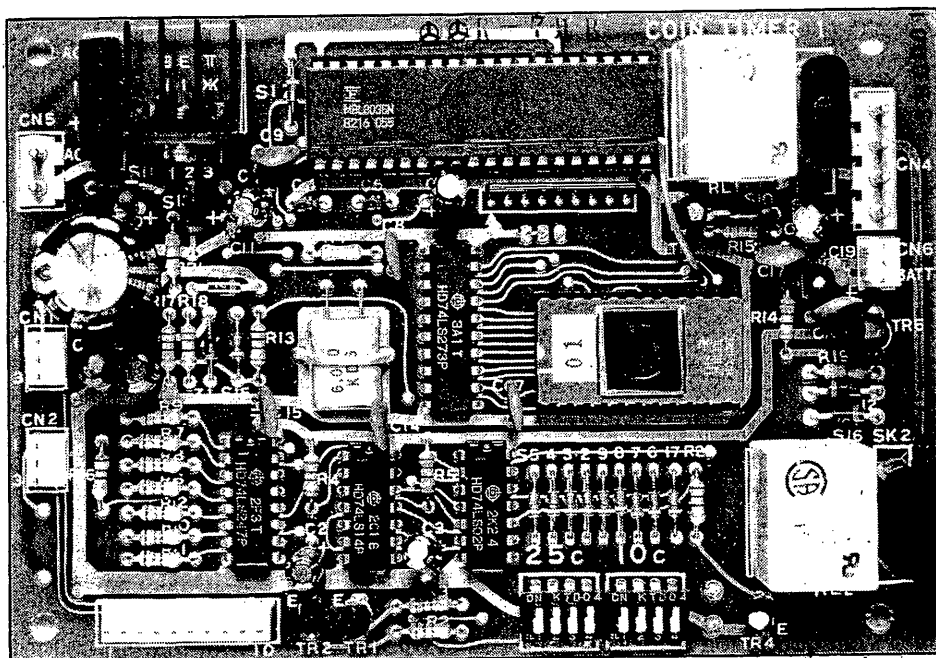
ACCESS DOOR & CONTROL PANEL - DIMENSION 1000

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	TU9390	Cissell Nameplate	16	TU9327	Transformer & Wire Assy.
2	TU3479	#10-32x7/16" Tr. Hd. Screw	17	M270	#6 I.T. Washer
3	P104	1/4" Cut Washer	18	TU3400	#6-32 x 5/16 Hex Nut
4	FB187	#10 Lock Washer	19	TU9028	Push Button Switch
5	TU2842	#10-32 Hex Nut	20	TU9525	#6-32x1/4 Tamper Proof Screw
6	TU9391	Access Door W/A*	21	TU9491	Shield
7	TU9386	Lock JWC3	22	TU3268	#6-32x1/4 Self Tap Screw
7A	TU8995	Lock Cam	23	TU9329	Electronic C/M Control
8	TU9387	Key JWC3	24	TU9347	P.C. Board Support
9	TU8935	Knob	25	TU9030	Temp. Selector Switch
10	- - -	** Coin Rejector (Specify Denomination & Number of Coins)	26	TU9535	Velcro Pad
11	TU9426	4-40x5/8 Machine Screw	27	TU9286	Control Panel
12	TU9427	4-40 Hex Nut	28	TU9514	Reset Label
13	TU9328	Digital Display Assembly	29	TU5421	Neon Indicator Lamps 110V
14	TU9326	Battery Pack	30	TU7959	Chrome Trim
15	TU3624	#6-32x3/4 Rd. Hd. Screw	31	TU5739	Door Support Arm
			32	TU9302	Control Panel Nameplate
			33	TU9448	Wire Harness - 10¢ Coin Switch
			34	TU9449	Wire Harness - 25¢ Coin Switch

*Access Door Complete Consists of
Ref. No's: 1,6,7,7A,8,30,31.

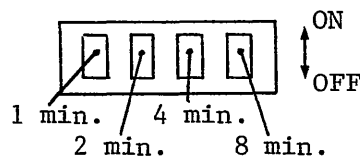
**TU9897 - 10¢ Coin Switch Replacement
TU9898 - 25¢ Coin Switch Replacement

INSTRUCTIONS FOR SETTING TIME ON ELECTRONIC CONTROL BOARD



DIP Switch Banks are located here

1. This dryer is equipped with 2 separate DIP switch banks for setting drying time. One is for 10¢, one for 25¢.
2. Each DIP switch bank consists of 4 small switches each with a specified amount of time (minutes), as shown:



3. To set the time on the 10¢ DIP: Simply set the appropriate switch to the "on" (up) position to total the desired amount of time:

Example: 10¢ for 7 min.



$$1 + 2 + 4 + 0 = 7 \text{ Min.}$$

Note: "Off" (down) position equals 0 minute.

4. To set the time on the 25¢ DIP: The same method is used as the 10¢ DIP, except, there are 3 min. already built in the 25¢ DIP only. So, subtract 3 min. from your desired total time, and set the switches to equal the remainder.

Example: 25¢ for 15 min.



$$0 + 0 + 4 + 8 = 12 \text{ Min.}$$

$$\text{"built-in"} = 3 \text{ Min.}$$

15 min. (desired total time)

-3 min. ("built-in" time)

12 min. (set switches for remainder)

$$\text{Total desired} = 15 \text{ Min.}$$