cissell

30 lb. Stack Laundry Dryer

MODELS

GAS

L28SRS30G

OWNER'S MANUAL

Cissell Manufacturing Company

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MAN387 9/90

D0588

IMPORTANT NOTICE

For optimum efficiency and safety, we recommend that you read the owner's manual before operating this equipment. Store the manual in a file or binder and keep for future reference.

Information in this manual is subject to change without further notice.

WARNING

This dryer must be used only for water washed fabrics.

To avoid fire hazard, do not dry articles containing foam rubber or similarly textured rubber-like materials. 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 padding or backing. Rubber easily oxidizes causing excessive heat and possible fire. These items should be air dried.

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this appliance. NOTE: The purchaser is to post this warning in a prominent location.

In the event the user smells gas, instructions on what to do must be posted in a prominent location. This information can be obtained from the local gas supplier.

CAUTION

A clothes dryer produces combustible lint and should be exhausted outside building. The dryer and the area around the dryer should be kept free of lint.

Service work should be performed only by qualified or experienced mechanics and electricians.

External main power must be shut off to dryer before servicing.

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

FOR YOUR SAFETY

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

D0588

CISSELL DRYER WARRANTY

The 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 two (2) years 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 two (2) years due to normal wear and tear, and with respect to all new repair or replacement parts for Cissell equipment for which the two (2) 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 indentification plate, or serial number, altered, defaced, 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 Overall Dimensions drawings for installation reference.

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 installaing 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 combustible material is 0" ceiling clearance, 0" rear clearance, and 0" sides clearance.

For proper operation, a minimum of 0" rear clearance is required, although a service area of 36" minimum clearance at rear of dryer is recommended.

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

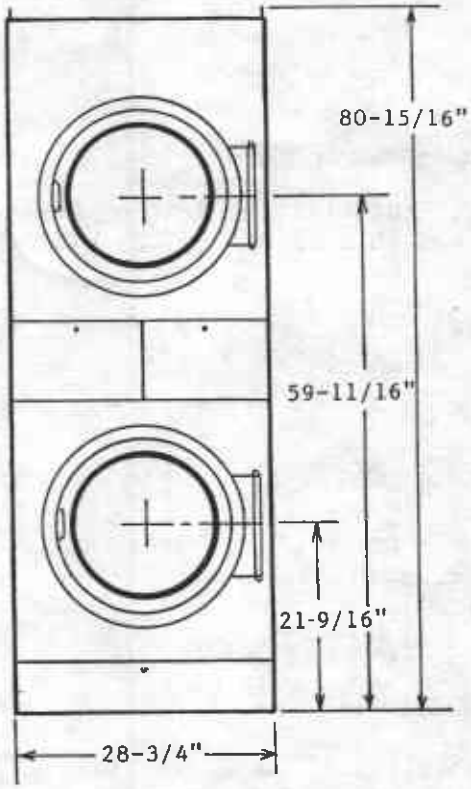
Important: Opening the clothes loading door will de-activate the door switch to shut off the fan, motor, and gas. To re-start the dryer, close the door and press the "Push-to-Start" button for about two seconds.

Important: This dryer is designed for a maximum capacity load. Over-loading it will result in a longer drying time and damp spots on some clothes.

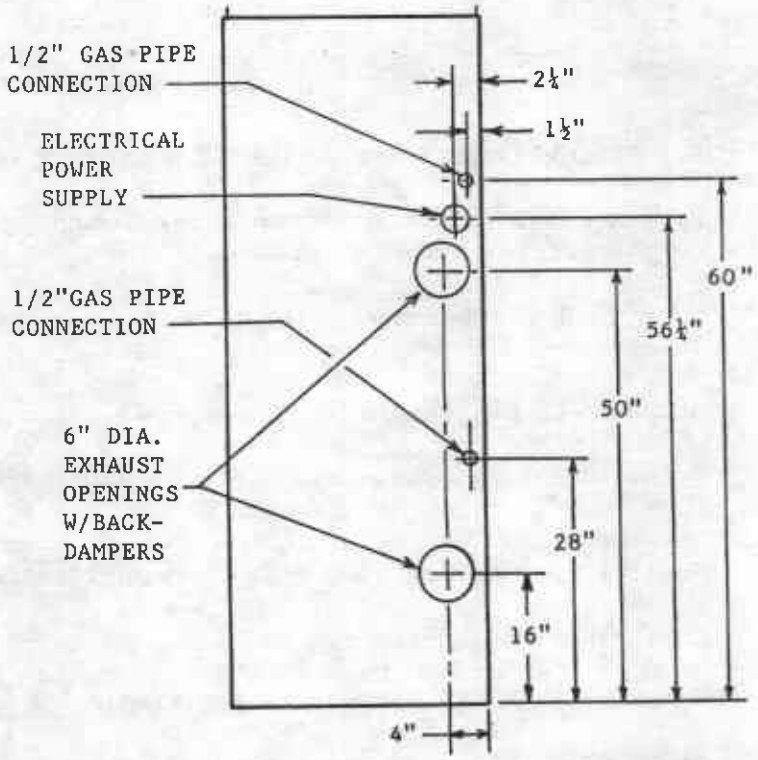
Important: Maximum operating efficiency is dependant upon proper air circulation. The lint screen must be kept clean daily to insure proper air circulation throughout the dryer.

IDENTIFICATION NAMEPLATE

The Identification nameplate is located on the rear wall of the dryer. It contains the dryer serial number, product number, model number, electrical specifications and other important data that may be needed when servicing and ordering parts, wiring diagrams, etc. Do not remove this nameplate.

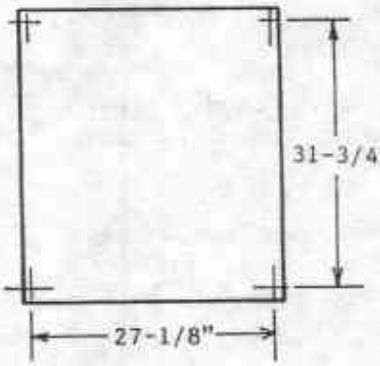


FRONT

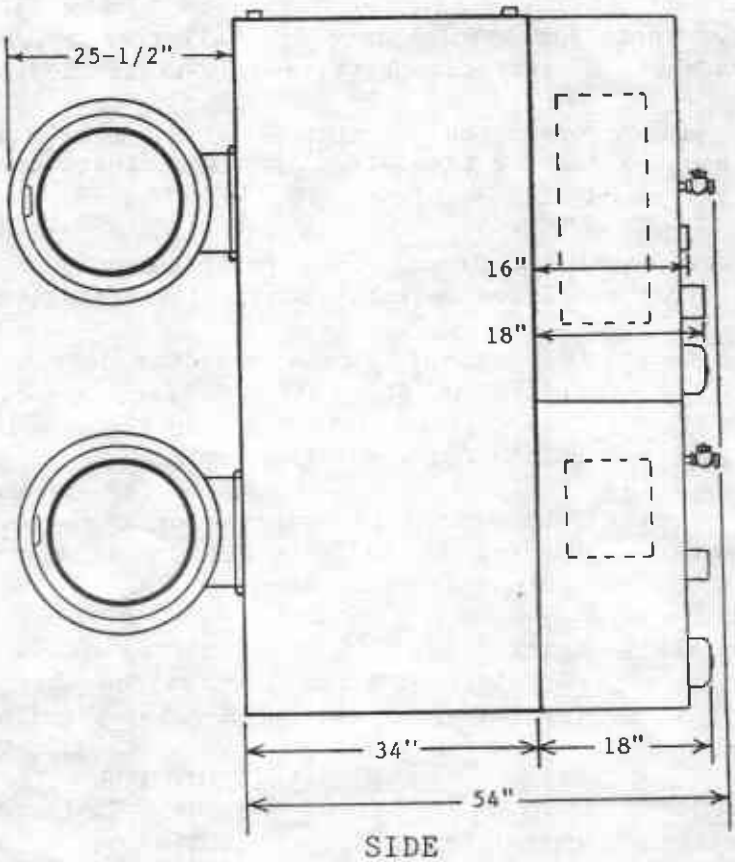


REAR

L28SRS30G OVERALL DIMENSIONS



BOTTOM



SIDE

GENERAL SPECIFICATIONS - MODELS L28SRS30G

Basket Load Capacity (Each Dryer)	30 lb. (13.6KG) Dryweight
Basket Size	28"(72CM) Dia. x 30"(76CM)Deep
Total Amps, Voltage, Cycle	Refer to Rating Plate on Rear of Dryer
Floor Size	81"(206CM) High x 28-3/4"(73CM) Wide x 53½" (136CM) Deep
Exhaust Duct Opening	6"(15CM) Dia. Each Dryer
Exhaust Air Pressure Maximum	0.3" Static Pressure
Drying Time (approximate)	30 lbs.(13.6KG) Dry Weight Indian-Head to 70% Moisture Retention — 30 minutes
Motor Drive	½ Horsepower per Basket
Net Weight	970 Lbs. (440KG)

GAS HEATING UNIT SPECIFICATIONS

Maximum Air Displacement	493 C.F.M. (14M³/Min.)
B.T.U. Input*(Natural & L.P. Gases)	81,000 B.T.U./Hour Each Dryer 162,000 B.T.U./Hour Total
Gas Burners (Factory Set)	Natural Gas - 3.5" W.C. Regulated Pressure L.P. Gas - 11" W.C. Gas Pressure
Gas Supply Connection	½" N.P.T.(Each Dryer)
Ignition System	Direct Spark Igniter

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

GENERAL INFORMATION

Cissell Dryers are so designed that when an operator opens the dryer door, the basket and exhaust fan stops. You can expect efficient drying because hot, dry air is effectively moved through the basket and exhausted through a lint drawer to the atmosphere. The dryer is equipped with drawer type lint screens. The area of the upper lint drawer is about four square feet. The lower lint drawer area is about five square feet. In this system, lint accumulates inside the drawer. This blanket of lint should be removed daily, or as required, to prevent an over accumulation which can prolong drying time and interfere with proper air circulation.

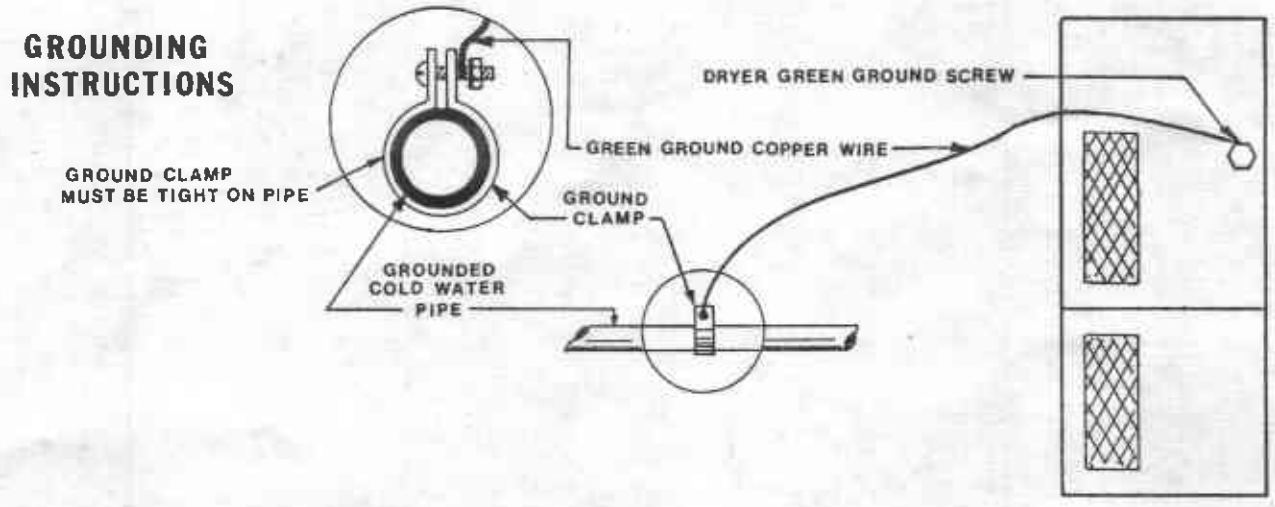
"COOL-DOWN" CYCLE

Permanent press, durable press, and other modern fabrics require the care that Cissell Laundry Dryers now provide. At the end of the drying cycle, a timed "Cool-Down" control automatically continues the rotation of the fan and basket without heat so the load can reach a safe cool temperature. This function is performed at the end of the drying cycle and continues for two minutes. The lights on the control panel indicate the "Drying" and "Cooling" cycles.

ELECTRICAL CONNECTIONS

Dryers must be electrically grounded by a separate #14 or larger green wire from the grounding terminal within the electric junction box to a cold water pipe; or through the fourth green wire properly grounded and connected to the ground 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 (ANSI/NFPA No. 70-1987).

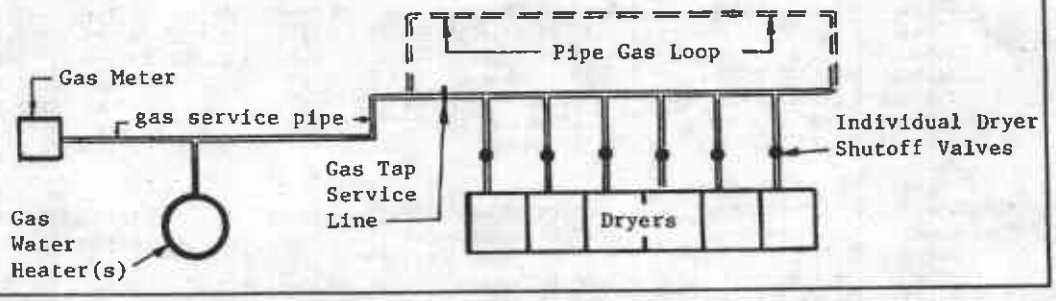
See wiring diagram located on the rear of the dryer. The dryer is completely wired at the factory and it is only necessary for a qualified electrician to connect the power leads to the wire connections within the junction box on the rear of the dryer. Do not change wiring without consulting factory, as you may void the warranty. Do not connect the dryer to any voltage or current other than that specified on rating plate located on the rear of the dryer.



GAS SERVICE INSTALLATION INFORMATION

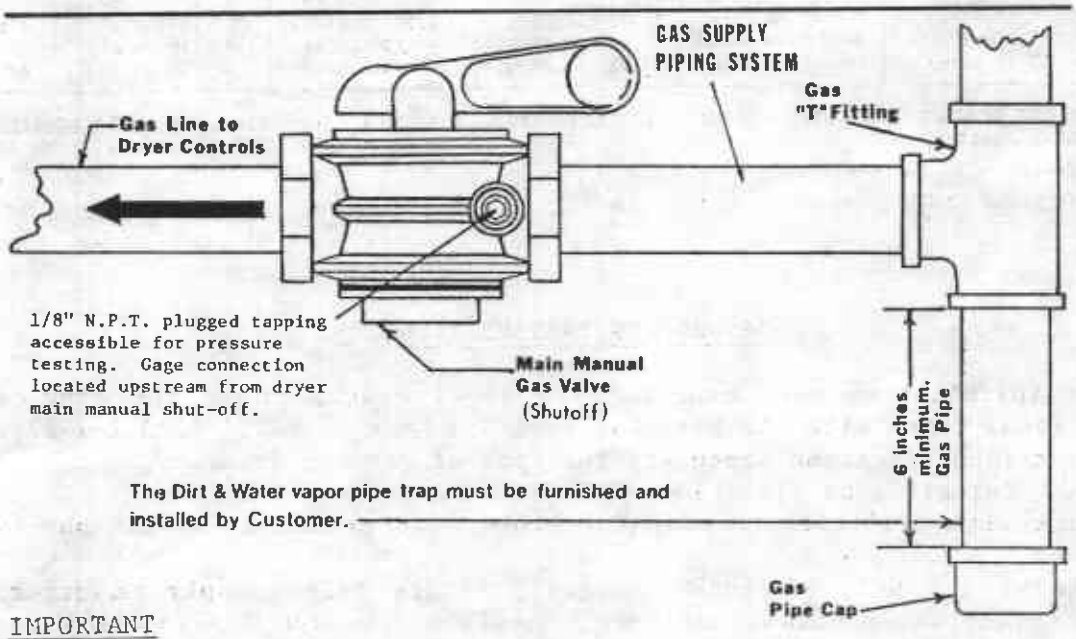
The size of the gas service pipe is dependant upon many variables, such as tees, lengths, etc. Specific pipe size should be obtained from the gas supplier. Refer to the "Gas Pipe Size" chart in this manual for general gas pipe size information.

Caution: Gas loop piping must be installed as illustrated to maintain equal gas pressure for all dryers connected to a single gas service.
Other gas using appliances should be connected upstream from the loop.



WARNING: LIQUIFIED PETROLEUM GASES ONLY

A Gas Pressure Regulator for Liquified Petroleum Gases is not furnished on Cissell Gas Heated Clothes Dryers. This regulator is normally furnished by the installer. In accordance with American Gas Association (A.G.A.) standards, a gas pressure regulator, when installed indoors, must be equipped with a vent limiter or a vent line must be installed from the gas pressure regulator vent to the outdoors.



IMPORTANT

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 pressure in excess of ½ P.S.I.G.

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 ½ P.S.I.G.

GAS PIPE SIZE REQUIRED FOR 1000 BTU NATURAL GAS AT 7 INCH WATER COLUMN PRESSURE

	EQUIVALENT LENGTH					
GAS APPLIANCES TOTAL BTU/HR.	25 FT. (7.63 m)	50 FT. (15.25 m)	75 FT. (22.88 m)	100 FT. (30.50 m)	125 FT. (38.13 m)	150 FT. (45.75 m)
	BASED ON 0.3" WATER COLUMN PRESSURE DROP FOR LENGTH GIVEN					
60,000	3/4" (19.05mm)	3/4" (19.05mm)	3/4" (19.05mm)	3/4" (19.05mm)	3/4" (19.05mm)	3/4" (19.05mm)
80,000	3/4" (19.05mm)	3/4" (19.05mm)	3/4" (2.54cm)	1" (2.54cm)	1" (2.54cm)	1" (2.54cm)
100,000	3/4" (19.05mm)	3/4" (19.05mm)	1" (2.54cm)	1" (2.54cm)	1" (2.54cm)	1" (2.54cm)
120,000	3/4" (19.05mm)	1" (2.54cm)	1" (2.54cm)	1" (2.54cm)	1" (2.54cm)	1" (2.54cm)
140,000	3/4" (19.05mm)	1" (2.54cm)	1" (2.54cm)	1" (2.54cm)	1" (2.54cm)	1-1/4" (3.18cm)
160,000	3/4" (19.05mm)	1" (2.54cm)	1" (2.54cm)	1-1/4" (3.18cm)	1-1/4" (3.18cm)	1-1/4" (3.18cm)
180,000	1" (2.54cm)	1" (2.54cm)	1" (2.54cm)	1-1/4" (3.18cm)	1-1/4" (3.18cm)	1-1/4" (3.18cm)
200,000	1" (2.54cm)	1" (2.54cm)	1-1/4" (3.18cm)	1-1/4" (3.18cm)	1-1/4" (3.18cm)	1-1/2" (3.81cm)
300,000	1" (2.54cm)	1-1/4" (3.18cm)	1-1/4" (3.18cm)	1-1/2" (3.81cm)	1-1/2" (3.81cm)	1-1/2" (3.81cm)
400,000	1-1/4" (3.18cm)	1-1/4" (3.18cm)	1-1/2" (3.81cm)	1-1/2" (3.81cm)	2-2/3" (3.81cm)	2" (5.08cm)
500,000	1-1/4" (3.18cm)	1-1/2" (3.81cm)	1-1/2" (3.81cm)	2" (5.08cm)	2" (5.08cm)	2" (5.08cm)
600,000	1-1/2" (3.81cm)	1-1/2" (3.81cm)	2" (5.08cm)	2" (5.08cm)	2" (5.08cm)	2" (5.08cm)
700,000	1-1/2" (3.81cm)	2" (5.08cm)	2" (5.08cm)	2" (5.08cm)	2" (5.08cm)	2-1/2" (6.35cm)
800,000	1-1/2" (3.81cm)	2" (5.08cm)	2" (5.08cm)	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)
900,000	2" (5.08cm)	2" (5.08cm)	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)
1,000,000	2" (5.08cm)	2" (5.08cm)	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)
1,100,000	2" (5.08cm)	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)
1,200,000	2" (5.08cm)	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)
1,300,000	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	3" (7.62cm)
1,400,000	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)
1,500,000	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)
1,600,000	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)	3" (7.62cm)
1,700,000	2" (5.08cm)	2-1/2" (6.35cm)	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)	3" (7.62cm)
1,800,000	2-1/2" (6.35cm)	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)	3" (7.62cm)	3" (7.62cm)
1,900,000	2-1/2" (6.35cm)	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)	3" (7.62cm)	3" (7.62cm)
2,000,000	2-1/2" (6.35cm)	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)	3" (7.62cm)	3-1/2" (8.89cm)
2,200,000	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)
2.400,000	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)
2,600,000	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)
2,800,000	2-1/2" (6.35cm)	3" (7.62cm)	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)
3,000,000	2-1/2" (6.35cm)	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	4" (10.16cm)
3,200,000	3" (7.62cm)	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	4" (10.16cm)
3,400,000	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	4" (10.16cm)	4" (10.16cm)
3,600,000	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	4" (10.16cm)	4" (10.16cm)
3,800,000	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	4" (10.16cm)	4" (10.16cm)	4" (10.16cm)
4,000,000	3" (7.62cm)	3-1/2" (8.89cm)	3-1/2" (8.89cm)	4" (10.16cm)	4" (10.16cm)	4" (10.16cm)

FOR L.P. GAS, CORRECT THE TOTAL BTU/HR. BY MULTIPLYING IT BY 0.6. THE ANSWER IS THE EQUIVALENT BTU ON THE ABOVE CHART.

GAS PIPING INSTALLATION

1. The installation must conform with local codes, or in the absence of local codes with the National Fuel Gas Code (ANSI Z223.1-1987).
2. Check Identification Nameplate for type of gas for dryer.
3. Check for altitude elevation of dryer.
4. Check with utilities company for proper gas pressure and gas supply line.
5. Natural Gas Only - Check the gas pressure inlet supply to dryer, 11 inches Water Column maximum. Manifold Pressure 3.5 inches water column pressure.
6. L.P. Gas Only - Manifold pressure-13 inches water column maximum.

CAUTION: Low gas pressure and intermittent gas will cause gas ignition problems and inadequate drying of laundry.

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.

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 deg. and 30 deg. 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: For each dryer -
   6" dia. exhaust required 1 sq. ft. make-up air
   8" dia. exhaust requires 2 sq. ft. make-up air
   9" dia. exhaust requires 3 sq. ft. make-up air
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 requirements.

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.

DRYER INSTALLATION WITH SEPARATE EXHAUST (PREFERRED)

For ductwork less than 14 ft. and 2 elbows equivalent and less than 0.3 in. static pressure. Each Stack Dryer has 2 exhaust ducts (6" diameter each).

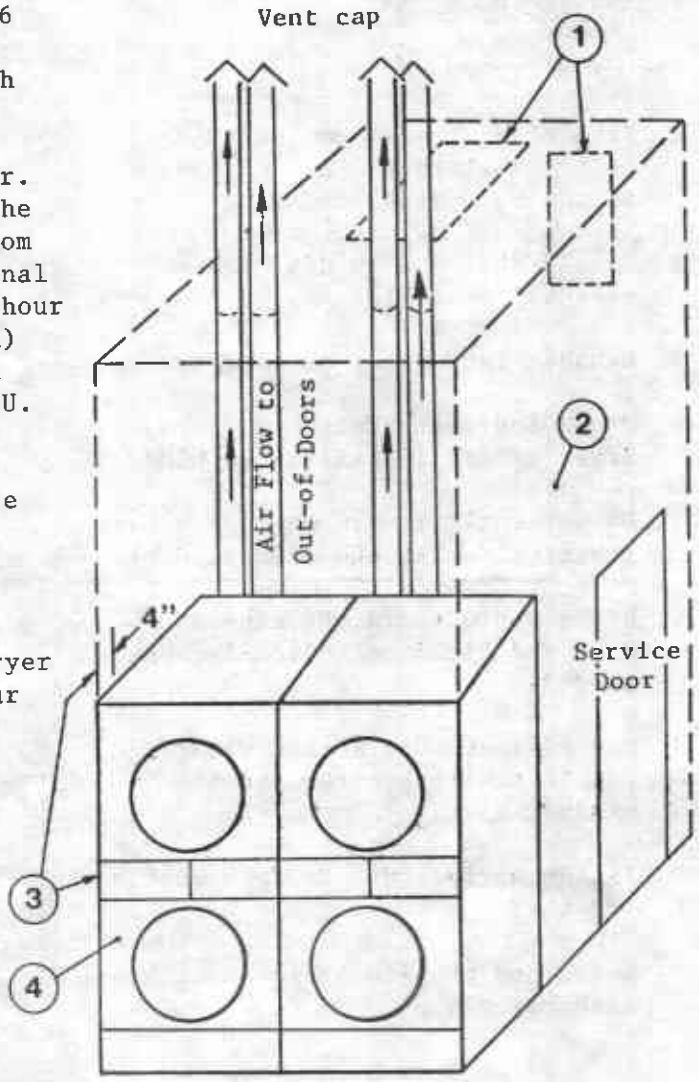
Never exhaust the dryer into a chimney.
Never install wire mesh screen over the exhaust or make-up air area.
Never exhaust into a wall, ceiling, or concealed space.

1. Make-Up Air opening from outside the building may enter the enclosure from the top or side walls. The area of the opening should be equal to 4 to 6 times the sum of the dryer duct areas. Provide 1 sq. ft. for each 6 in. diameter; 2 sq. ft. for each 8 in. diameter; and 4 sq. ft. for each 12 in. diameter.

2. Enclosure (plenum) with service door. This separates the dryer air from the room comfort air. If dryers use room air instead of outside air, additional heat loss can be another 25 B.T.U./hour for each cubic foot per minute (CFM) used. Example: A stack dryer with 1000 CFM = heat loss of 25,000 B.T.U. /hour.

3. Zero inches clearance to combustible material allowed on sides and at points within 4 inches of front on top.

4. Heat loss into laundry room from dryer front panels is about 60 B.T.U./hour per square foot.



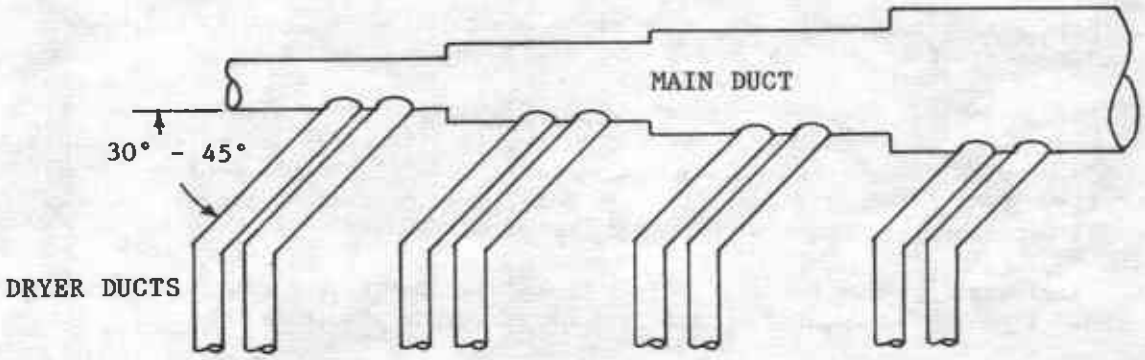
DRYER EXHAUST WITH MULTIPLE EXHAUST

For Exhaust Duct less than 14 feet and two elbows equivalent and less than 0.3 inches static pressure.

Refer to chart below for recommended diameter of main exhaust duct.

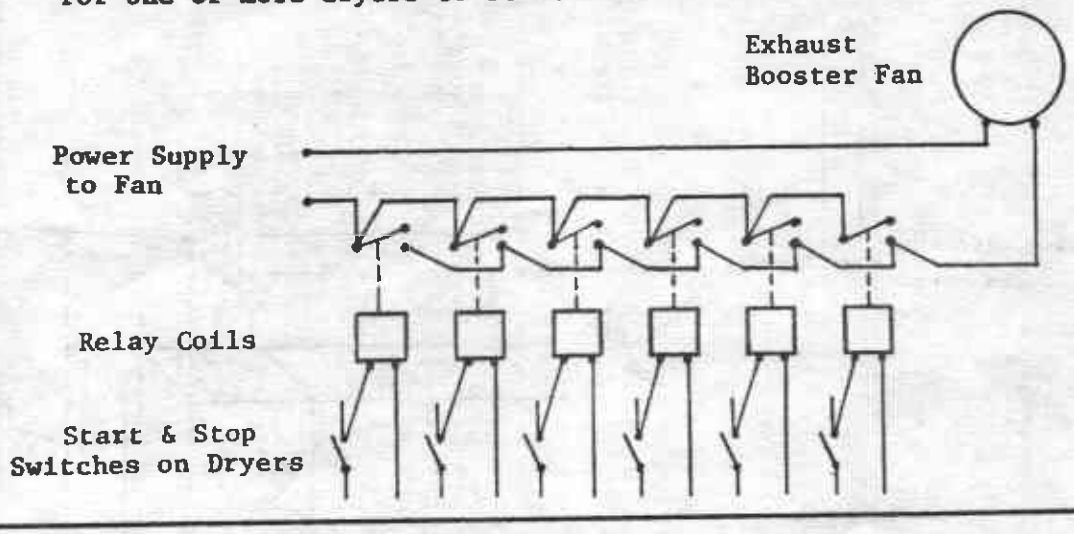
STACK DRYER WITH 6" DIA. DUCTS (2 PER DRYER)

Total Number of Dryers	1	2	3	4	5	6	7	8	9	10	11	12
Total Number of Exhaust Ducts	2	4	6	8	10	12	14	16	18	20	22	24
Total Main Duct Diameter (inches)	9	12	15	17	19	21	23	24	26	27	28	30



AUTOMATIC ELECTRICAL CONTROL FOR EXHAUST FAN

For one or more dryers to start fan.



DRYER INSTALLATION WITH MULTIPLE EXHASUT

Use the following installation for exhaust duct more than 14 feet and two elbows equivalent and more than 0.3 inches static pressure. Each Stack Dryer is factory equipped with two exhaust ducts (6 inches diameter).

1. Make-Up Air from outside building may enter enclosure from top or side walls. Area of opening should be equal to 4-6 times the sum of dryer duct areas. Provide 1 sq. ft. for each 6 inch diameter; 2 sq. ft. for each 8 inch diameter; and 4 sq. ft. for each 12 inch diameter.

2. Use constant diameter duct with area equal to the sum of dryer duct areas. Refer to "Duct Size Chart" on previous page for correct size of main exhaust duct.

3. Enclosure (plenum) with service door. This separates the dryer air from room comfort air. If dryers use room air instead of outside air, the heat loss can be another 25 B.T.U./hour for each cubic foot per minute (C.F.M.) used.
   Example: Stack dryer, 1000 C.F.M. = 25,000 B.T.U./ Hour loss.

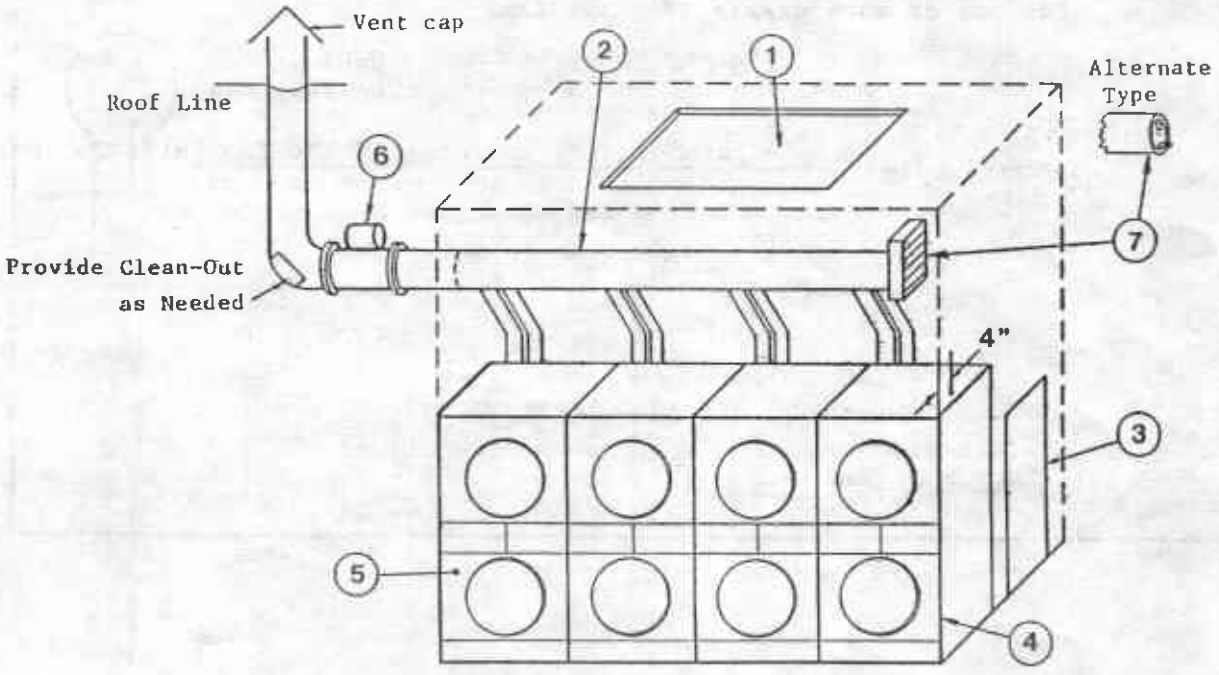
4. Zero inches clearance to combustible material allowed on sides and at points within 4 inches of front on top.

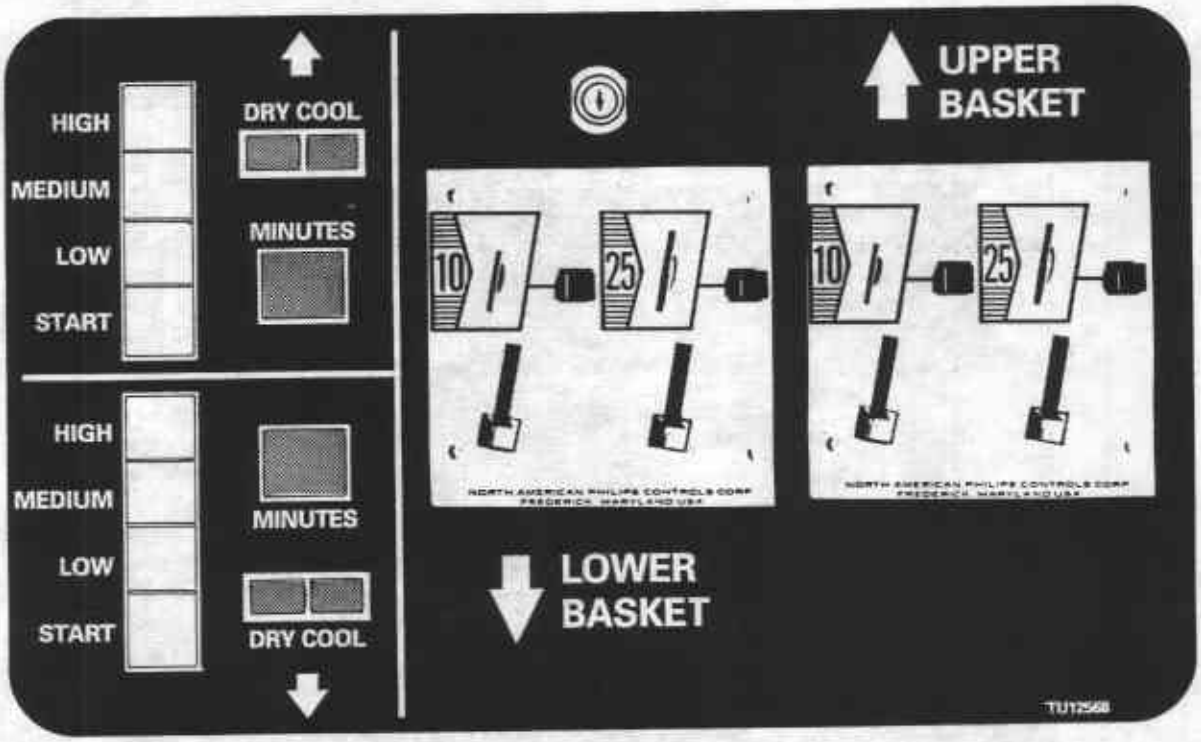
5. Heat loss into laundry room from dryer fronts only is about 60 B.T.U./hour per square foot of front surface.

6. Flange mounted, belt driven tube-axial fan. Fan must run when one or more dryers are running. See suggested automatic electrical control wiring diagram on previous page. Installation must meet local electrical codes. Fan air flow (CFM) is equal to sum of dryer air flows, but static pressure (S.P.) is dependent on length of pipe and number of elbows.

7. Barometric By-Pass Damper. Adjust to closed flutter position with all dryers and exhaust fan running. Must be located within plenum.

   CAUTION: No two installations are the same. For assistance, consult Engineering Dept. (502) 587-1292. Never install hot water heaters or other gas appliances in same room. Never install cooling exhaust fans in same room.





OPERATING INSTRUCTIONS - COIN METER MODEL

1. After loading the dryer with the water washed clothes, close the loading door.
2. Insert the coin(s) in the proper coin meter (Upper or Lower Basket). The amount of time will appear on the digital display. Additional coins may be added anytime during cycle.
3. Push one: HIGH, MEDIUM, or LOW button (Drying Temperature).
   LOW - delicate, easy to dry fabrics, 130°-140°F exhaust temperature
   MEDIUM - permanent press fabrics, 155°-165°F exhaust temperature
   HIGH - cottons, heavy fabrics, 170°-180°F exhaust temperature
4. Push the "START" button, holding about 2 seconds until dryer is running.
   A. The Digital Display will count down the minutes remaining in the cycle.
   B. The "Dry" light will illuminate.
   C. The fan motor and basket will revolve.
   D. The gas burners will operate and the heated air will mix with the wet clothes to evaporate the moisture.
   E. The thermostats will operate at a safe temperature.
   F. The heat will shut off and the cooling cycle will begin. The "COOL" light will illuminate.
   G. This dryer is equipped with an air switch. If the fan fails to operate or no air flows, the switch will open and shut off the gas.
   H. This dryer is equipped with a combustion chamber high limit thermostat. If the air switch fails to open, then the high limit thermostat will open and shut off the gas.

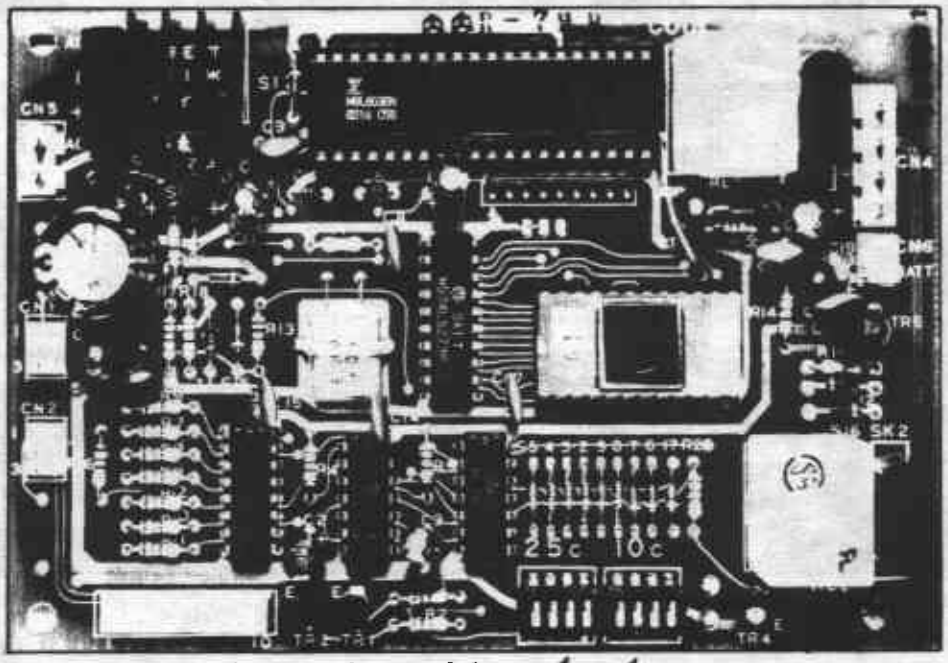
IMPORTANT

If the dryer door is opened during the operating cycle, the fan and heat will shut off. Push the "START" button to resume operation, after closing the door.

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

Maximum operating efficiency depends on proper air flow. The lint screens must be kept clean daily to insure proper circulation of air. Locks and keys are provided for the safety of the user for access to the lint compartments.

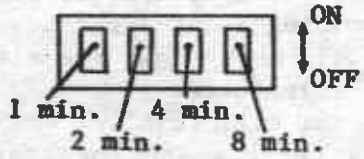
INSTRUCTIONS FOR SETTING TIME ON "COMPUTERIZED COIN METER" CONTROL BOARD



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 appropiate switch to the "on" (up) position to total the desired amount of time:

Example: 10¢ for 7 min.

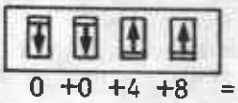
1 +2 +4 +0 = 7 Min.

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, substract 3 min. from your desired total time, and set the switches to equal the remainder.

Example: 25¢ for 15 min.

15 min.(desired total time)
-3 min.("built-in" time)
12 min.(set switches for remainder)



0 +0 +4 +8 = 12 Min.
"built-in" = 3 Min.

Total desired= 15 Min.

RULES FOR SAFE OPERATION OF YOUR CISSELL DRYER

(1) Be sure your dryer is installed properly in accordance with the recommended instructions:

(2) CAUTION: External main power and gas supply must be shut off to dryer before servicing. Service work should be performed only by qualified or experienced mechanics and electricians.

(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 state 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.

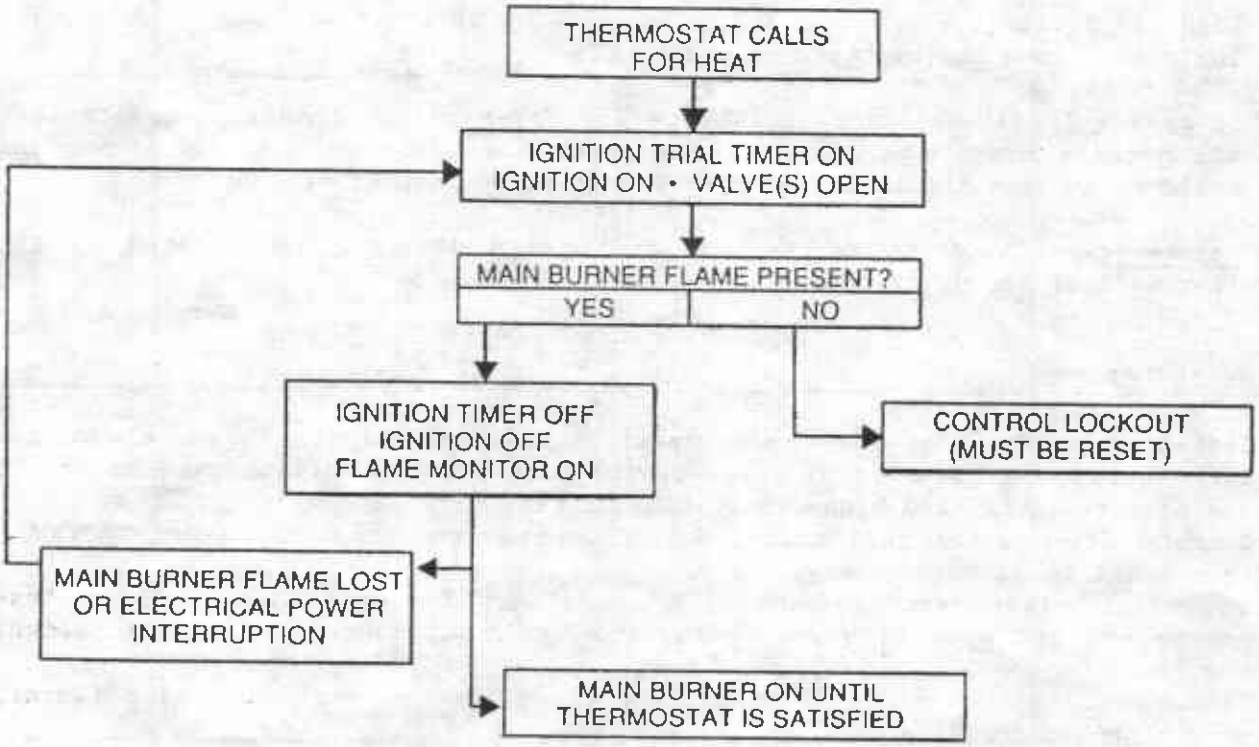
(8) Reference - Shutdown instructions and wiring diagrams are located on the rear wall of the dryer cabinet.

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.

OPERATION OF DIRECT SPARK IGNITION SYSTEM

1. Thermostat calls for heat.
2. Direct Spark Ignition Control simultaneously starts ignition trial timer, ignition sparking and opens the gas valve(s).
3. Burner flame is detected by flame rectification circuit; ignition sparking stops, gas valves remain open, ignition trial timer is off.
4. Failure to establish the flame within the ignition trial time will result in safety lockout. Control lockout is reset by interrupting the electrical power to the Control. This is normally accomplished through the thermostat.
5. Loss of flame during the heating cycle will result in the Control cycling through one complete ignition trial. If the flame is still not established or detected, the Control will Lockout.
6. Main burner flame is continuously monitored throughout the heating cycle.
7. Thermostat is satisfied, shutting off electrical power ending the heating cycle.

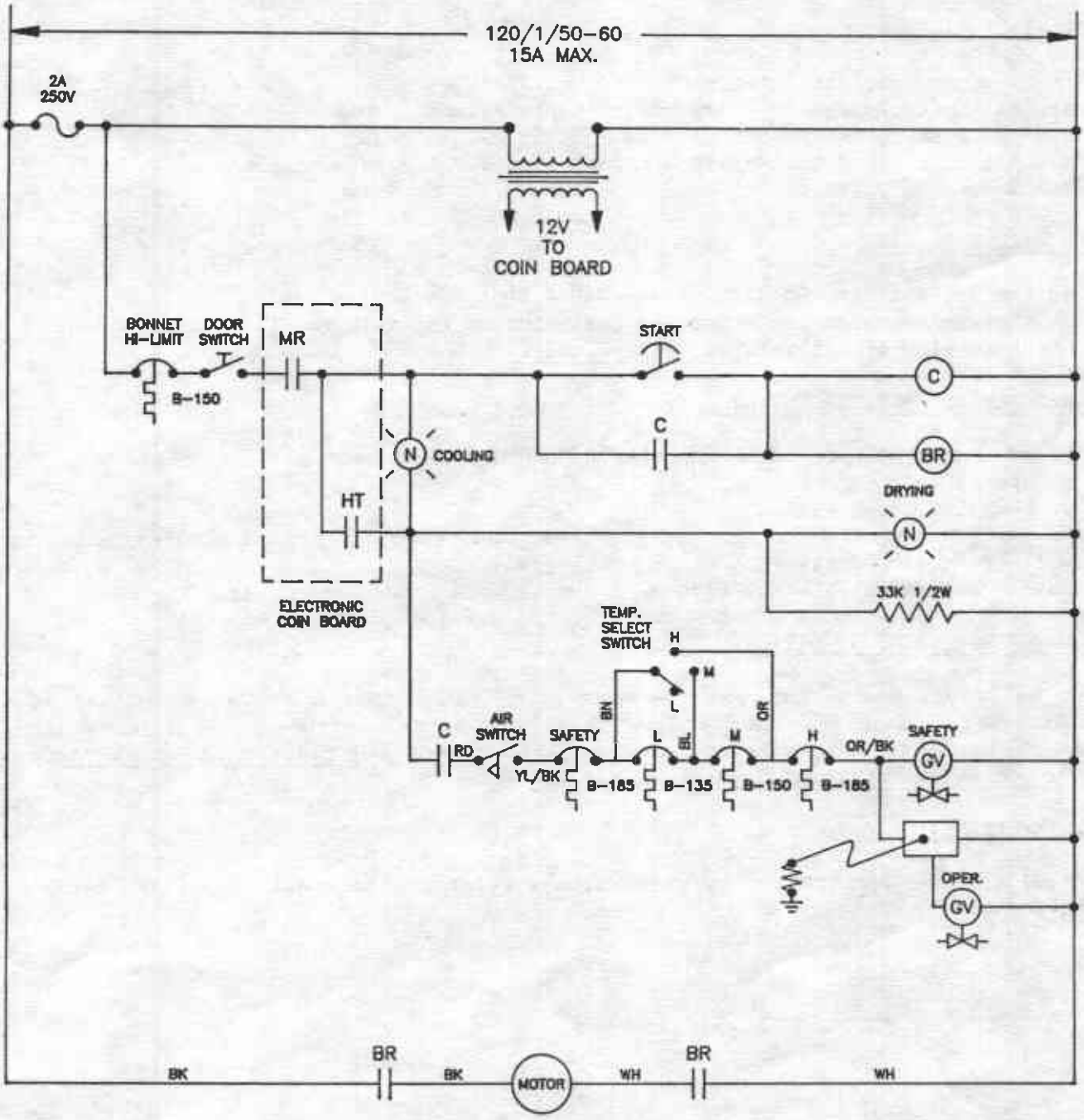


cissell
LOUISVILLE, KENTUCKY

WIRING SCHEMATIC

L28SRS30G
CONTROL WIRING
120 VOLTS, 50/60 HZ., 1 PH.

TSL 4



MR = COIN BOARD CONTACT (MOTOR)
HT = COIN BOARD CONTACT (HEATING)
C = CONTROL RELAY
BR = BLOWER CONT.

3/15/90

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 WILL NOT 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 button?
4. Has a fuse blown or a circuit breaket tripped. Are fuses tight?
5. Check for low voltage.

DRYER WILL NOT HEAT:

1. Is the dryer in the Cooling cycle rather than the Drying cycle?
2. Is the gas valve on the dryer and the valve on the main gas line turned open?
3. Check for low or intermittant gas pressure.

CLOTHES ARE NOT SATISFACTORILY DRY:

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

GAS DRYER ELECTRONIC IGNITION:

Refer to Direct Spark Ignition System section of the manual. 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.

TROUBLE SHOOTING CHART

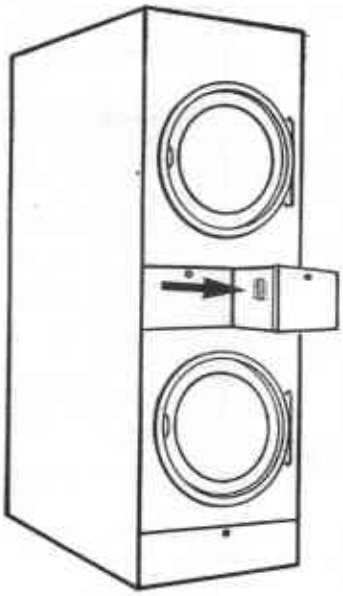
TROUBLE	CAUSE	REMEDY
Motor will not start	No Power	Check fuses or circuit breakers. Make sure main control switch is on.
	Incorrect power	Check power source; voltage, phase, and frequency must be the same as specified on electrical rating plate.
	Time off	Check timer for proper setting or check coin meter for proper vending.
	Loose wiring connections	Check wire connections in electrical box on rear of dryer
Motor tripping on thermal	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 for recommended corrective measures.
	Inadequate wiring	Check with local power company to insure that wiring is adequately sized for load.
	Loose connections	Check all electrical connections and tighten any loose connections.
	Inadequate air flow	Check installation sheet in service manual for recommended make up air openings.
	Poor housekeeping	Clean lint accumulations on and around motors.
Basket will not turn	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 front panel in place.
	Defective door switch	Replace switch.
	Defective basket motor contactor	Replace contactor.
Motor runs, but basket will not revolve	V-Belt Broken	Replace V-Belt.
	V-Belt Loose	Adjust Belt Tension.
	Motor pulley loose	Tighten set screw.
	Basket overloaded	Remove load.

TROUBLE SHOOTING CHART

TROUBLE	CAUSE	REMEDY
Dryer noisy or vibrating	Not leveled	Check manual for proper leveling procedures.
	Fan out of balance	Accidental damage to the fan blade can change the dynamic balance. Damaged fans should be replaced.
	Basket rubbing	Adjust basket clearance.
	V-Belt, sheaves	Tighten set screws, make sure sheaves are in proper alignment.
	Belt	Adjust belt tension.
	Foreign objects	Occasionally screws, nails, etc. will hang in the basket perforations and drag against the sweep sheets surrounding the basket. Such foreign objects should be removed immediately.
Main burners burning improperly	Burner air shutters closed	Open for blue flame.
	Dirt in burner	Blow out.
	High gas pressure	Adjust gas pressure per rating plate.
	Orifice too large	Send to factory for correct orifices.
	Restricted or blocked exhaust	Clean exhaust.
Low or high gas flame	Incorrect main burner orifice	Replace orifices--check factory for correct size.
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.
	Exhaust duct dampers	Must be full open or replace.
	High gas pressure	Adjust gas pressure per rating plate.
	Partially restricted or inadequately sized exhaust system	Check service manual for recommended sizes. Remove obstructions or lint build-up from duct work. Never use smaller size exhaust duct, always use larger size.
	Defective thermostat	Replace thermostat

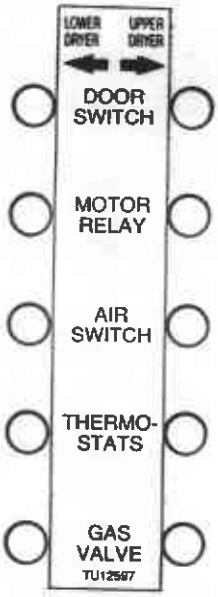
TROUBLE SHOOTING CHART

TROUBLE	CAUSE	REMEDY
Dryer runs but no heat	Defective door switch	Replace door switch.
	Air switch not operating	Clean out lint compartment daily. Check back draft damper and duct-work for foreign objects, lint accumulation or other causes that may prevent damper from opening. Never install a screen on the exhaust outlet.
	Air switch out of adjustment	See air switch adjustment sheet in service manual.
	Air switch defective	Replace air switch
	Gas pressure too low	Check manifold pressure and adjust to pressure specified on rating plate. If this pressure cannot be obtained, have gas supplier check main pressure.
	Improper orifices	Dryer is orificed for type of gas specified on rating plate. Check with gas supplier to determine specifications for gas being used. If different from rating plate, contact factory and obtain proper orifices.
	Incorrect voltage	Check for correct control voltage - 120V.
	No voltage	Check power supply, check secondary voltage on transformer and check wiring and wiring diagram.
	Defective relay	Replace relay.
	Defective thermostat	Replace thermostat.
	Lint door open	Close lint door.
	Defective gas valve	Replace coil assembly.
	Gas turned off	Turn manual gas valve "on".



DRYER DIAGNOSTIC LIGHTS

The Dryer Diagnostic Lights are a valuable aid in detecting problems in the dryer. The lights are located on the left side of the control panel drawer as shown in the illustration. Unlock the drawer and pull it out 4-6 inches. The vertical row of lights on the left side of the label pertain to the LOWER DRYER only. The row of lights on the right side of the label pertain to the UPPER DRYER only. The lights are sequenced vertically from top to bottom. If a light is <u>not</u> glowing, none of the lights below it will glow.



DIAGNOSTIC LIGHTS DESCRIPTION

DOOR SWITCH - When dryer door is closed, this light glows and power is available to start the dryer.

MOTOR RELAY - Glows when "START" button is pushed and the motor is running; power to the safety control circuit is available.

AIR SWITCH - Glows when the air flow switch is closed and it blinks when air flow switch is fluttering. Power is available to the control thermostats when air switch is closed.

THERMOSTATS - Glows when a control thermostat circuit is closed and whenever the timer is not in the cool-down cycle. The control thermostat circuit is controlled by the setting of either LOW, MEDIUM, or HIGH on the control panel. Power is flowing through all the previous elements as indicated by the lights and power is flowing to the safety gas valve and available for ignition.

GAS VALVE - Glows when power is flowing to the operating gas valve and ignition system.

OPERATION OF DIAGNOSTIC LIGHTS

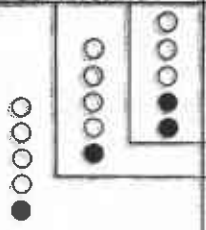
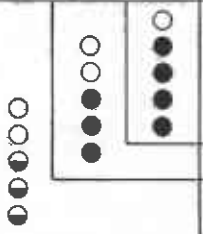
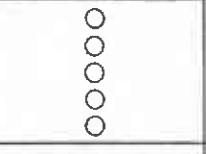
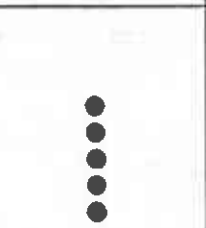
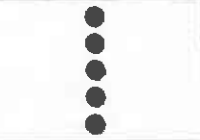
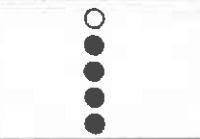
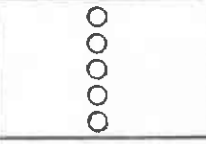
○ - Light Glowing ● - Light Off

●	○	○	○	○	○	DOOR SWITCH
●	●	○	○	○	○	MOTOR RELAY
●	●	●	○	○	○	AIR SWITCH
●	●	●	●	○	○	THERMOSTATS
●	●	●	●	●	○	GAS VALVE

NOTE: Chart shows either Upper or Lower Dryer Diagnostics

Gas Valve and Ignition energized.
Thermostats closed.
Air Switch closed.
Motor is running.
Door Switch closed; Coin Meter energized.
Dryer is off.

DIAGNOSTICS TROUBLE SHOOTING

TROUBLE	DIAGNOSTICS	CAUSE	REMEDY
Dryer runs but no heat		Defective Thermostat	Replace Thermostat
		Defective Gas Valve	Replace Valve
		Defective Ignition System - Igniter, Wires, Controls	Check and replace defective component
		Defective Motor	Replace motor
		Air Switch Adjustment	Adjust per instructions in manual
		Air Switch fluttering	Clean lint drawers and lint inside dryer and ductwork
Gas not igniting		Low gas pressure	Adjust pressure per rating plate
		Wrong burner orifice	Replace with correct size - Consult factory
Main burner cycling on and off		Defective Thermostat	Replace Thermostat
Dryer too hot		Wrong Burner Orifice	Replace with correct size - Consult factory
		Inadequate Make-Up Air	See "Dryer Air Flow" page in this manual
		Lint Accumulated	Clean lint through-out
		Exhaust Duct Damper	Must be full open or replace
		Gas pressure too high	Adjust pressure as shown on rating plate
		Restricted or inadequate size exhaust system	Clean lint build-up and check for recommended size ductwork per manual
Motor will not start (panel light on)		Loading Door open	Close door
		Door switch defective or needs adjusting	Replace if defective; to adjust, remove front panel and bend actuator lever to clear switch button 3/8" with panel in place
		Defective Motor	Replace Motor
Motor will not start (panel light off)		No Power	Check fuses/circuit breaker/main power.
		Coin meter off	Deposit coin
		Loose wires	Check wiring and correct
Motor runs for short time and trips on thermal protector		Basket overloaded	Remove some of the heavy load
		Poor Housekeeping	Clean lint from around motor
		Low Voltage	Check voltage; must be within ±10% voltage on rating plate
Motor runs but basket will not revolve		Belt broken	Replace belt
		Belt loose	Adjust belt tension
		Idler wheel broken	Replace idler wheel
		Motor pulley loose	Tighten set screws
Dryer will not stop at end of cycle		Defective Coin Meter	Replace Coin Meter

GENERAL MAINTENANCE

1. Clean lint trap daily. Remove lint before or after each day of operation. A clean lint trap will increase the efficiency of the dryer and the moisture laden air will be exhausted outside more quickly.

2. Keep basket and sweep sheets clean. Clean periodically as often as needed. The basket and sweep sheets within the dryer are easily accessible by removing the front panel of the dryer.

3. Gas burners. Check periodically and keep clean often.

4. Pulleys and belts. Keep clean as oil and dirt will shorten the life of a belt. Check periodically for alignment. Pulley shafts must be parallel and the grooves must be aligned. Check belt tension periodically. Adjust tension by movement of idler bracket. Lubricate Idler Pulley once every two months using six grams of high temperature grease. Do not overgrease.

5. Electric motor. Keep motor clean and dry. Motors are packed with sufficient grease for 10 years normal service. After that, bearings and housing should be cleaned and repacked one third full with Chevron Grease No. SR1-2. See label on motor for further information.

6. Adjustable leveling bolts. One at each corner permits accurate alignment of dryer.
   To adjust: Block one corner of dryer up off the floor, loosen hex nut. With wrench, turn bolt clockwise to raise dryer, opposite to lower. Rear bolts are outside of dryer and front bolts are inside lint trap compartment.

7. Periodically clean and examine exhaust system.

8. Keep dryer area clean and free of gasoline, combustible materials and other flammable liquids or vapors.

9. Do not obstruct the flow of combustion (make-up) air and ventilating air.

10. Check gas pressure periodically.

11. Gas burners air inlet shutters can be adjusted for proper flame by following instructions outlined on separate page of this manual.

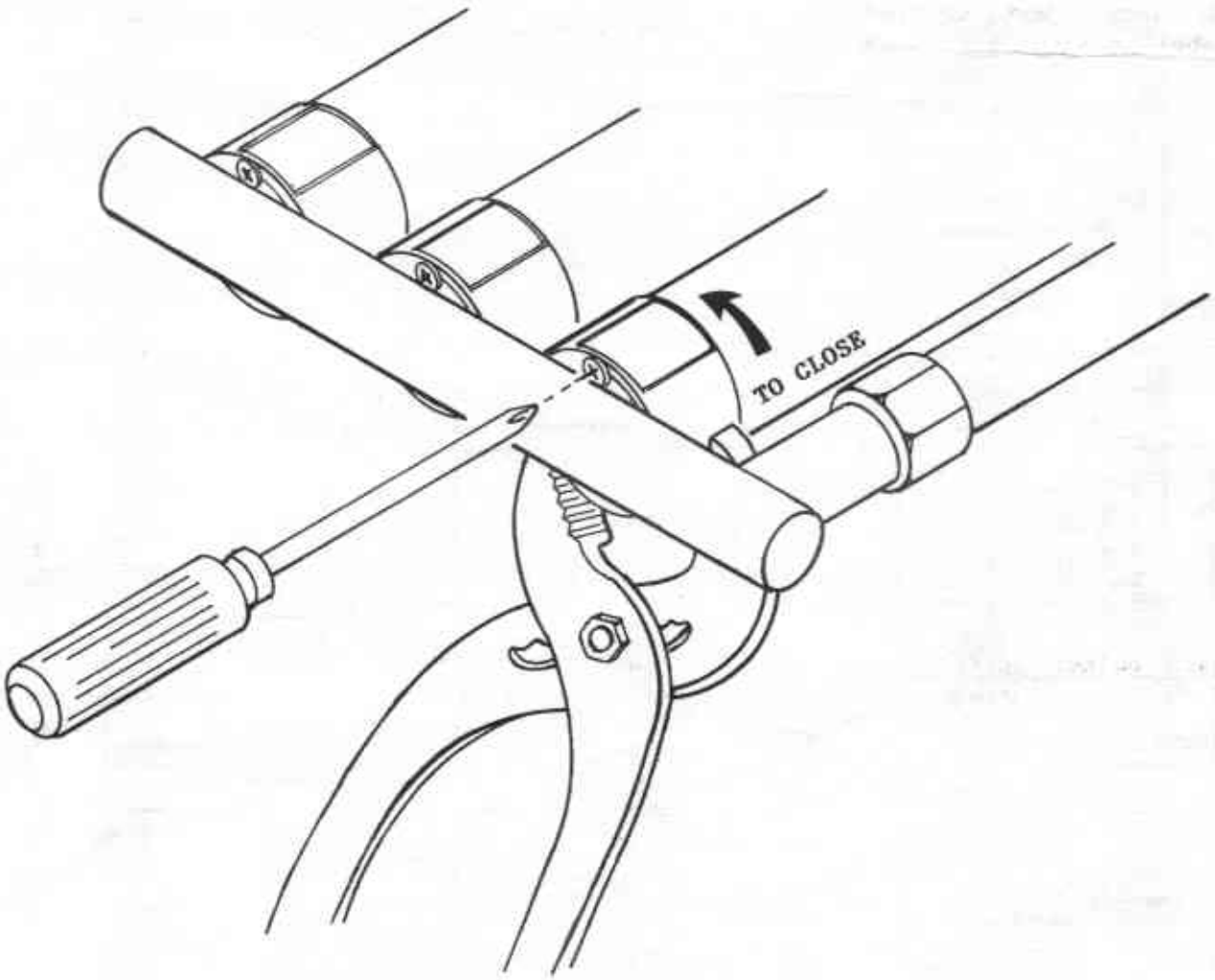
12. Main Basket Bearings - Lubricate once every six months using six grams of high temperature grease. Do not overgrease.

AIR SHUTTERS ADJUSTMENT

The Air Shutters are factory shipped in wide open position for use with natural gas. No adjustment is necessary.

For use with Liquified Petroleum Gases, the air shutters are factory shipped 80% closed.

For adjustment, use a #6 Phillips Head Screwdriver to loosen or tighten the Air Shutter Screw. Using a small Channel Lock around the Air Shutter, turn Channel Lock one direction to open and the other way to close. See illustration below.



Instructions for Basket Alignment

1. Loosen both eccentric locking collars on the two basket flange bearings. Loosen the set screws and turn clockwise. If necessary, use a punch and mallet, striking the punch hole in a clockwise direction to break it loose.

2. Loosen the four side bolts, "1, 2, 3, 4," on the basket bearing bracket (See Fig. 3). Loosen the two adjusting bolts and locknuts "5, 6," inside the bracket.

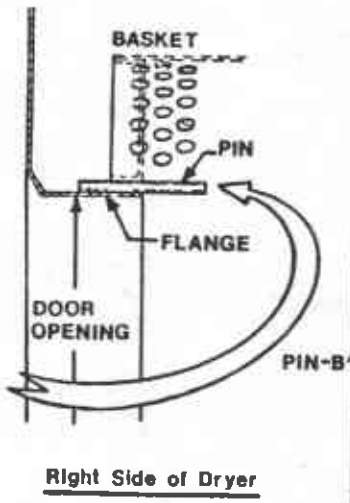
3. Place one "A" and two "B" diameter pins inside the drying compartment between the rim of the basket opening and the rim of the door opening in the positions shown in Figs. 1 & 2. Check the two "B" pins for equal clearance.
   Note: Push the basket toward the rear.

4. With the pins in position, lock the collar nearest the rear wall of the dryer on the shaft by striking the punch hole in a counter-clockwise direction. Tighten the set screw.

5. Tighten the side bolts "1, 2, 3, 4," in numerical order. Tighten the bolts "5" and locknuts "6".

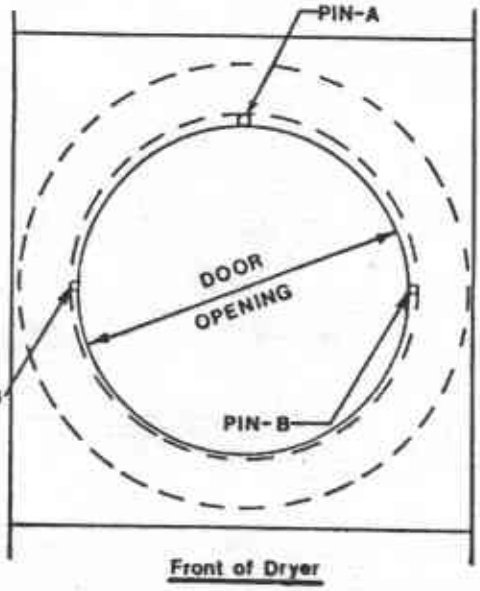
6. Remove the aligning pins and if alignment is O.K., then tighten the collar on the other flange the same as in Step 4.
   Caution: Check to see that the set screws are wrench tight on the locking collars.

FIG. 1



Right Side of Dryer

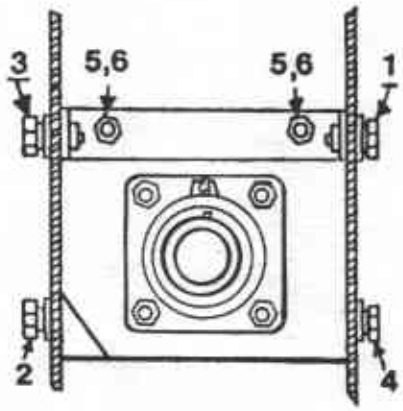
FIG. 2



Front of Dryer

PIN-A-1/2 DIA.
PIN-B-5/16 DIA.

FIG. 3



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).

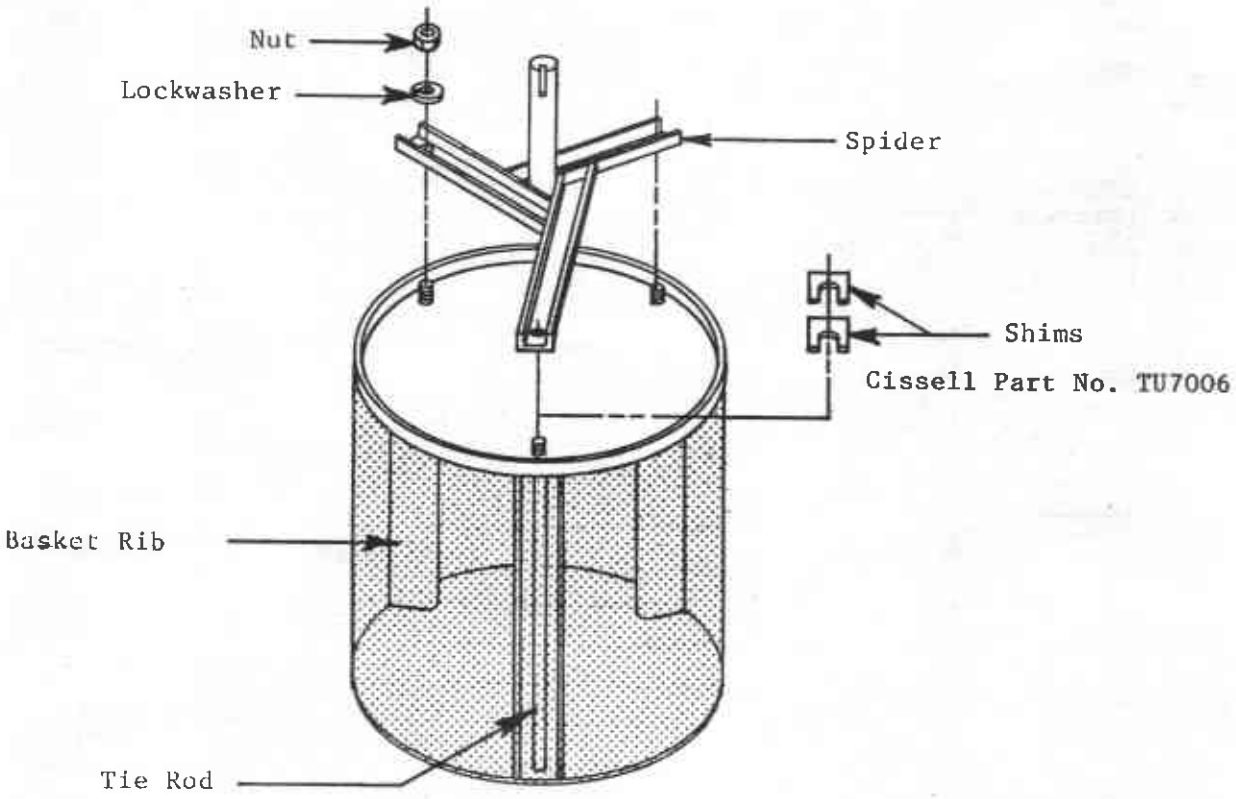
E. With the basket on the floor (spider up), place one or two shims between the spider leg and the back of the basket at the marked rib position. (See drawing)

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.



INSTRUCTIONS FOR REPLACING BEARINGS & COLLARS

1. Remove rear covers, V-Belt, and basket sheave.

2. Loosen set screw in first locking collar and remove from shaft by rotating clockwise. If needed, use a punch and mallet to loosen collar, hitting in clockwise direction with punch in collar hole.

3. Remove the 4 nuts/washers holding the first flange bearing and take if off the shaft.

4. Before removing the second flange bearing, the support bracket must be removed. Remove the 4 bolts/washers from the sides and pull the bracket off.

5. Remove the second locking collar (See item 2).

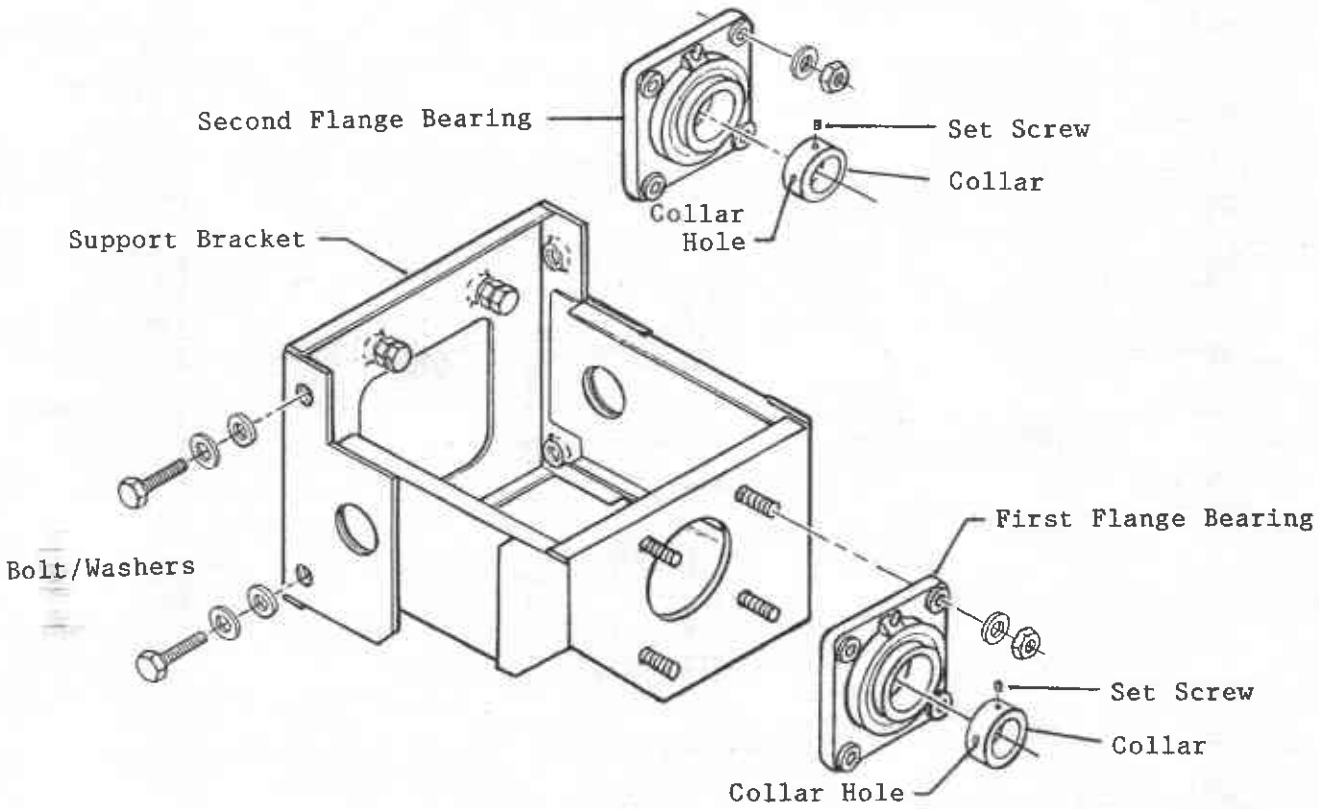
6. Remove the 4 nuts/washers holding the second flange bearing and take it off the rear wall of dryer.

7. Inspect the collars and bearings for damage and replace as necessary in reverse order of removing them. Before tightening securely, align basket per instructions on separate page.

BEARINGS LUBRICATION GUIDE

Bearings are factory lubricated and ready to use. They are equipped with grease fittings. Add grease slowly, when it begins to come out of seals, it contains the correct amount. Use Lubriplate #310 (Cissell part no. 420326015).

Operating Conditions	Grease Intervals
Clean	Every 6 months
Dirty	Every month
Moisture	Every week



AIR SWITCH ADJUSTMENT

1. Shut off electrical current. Disconnect wires from air switch and remove air switch assembly.

2. Lay air switch assembly on a flat surface. See Figure 1. Adjust air blade at "A" so that it lays flat and surface "B" is parallel to flat surface.

3. Place a spacer bar (3/8" x 5/8") or equivalent "C" under air blade in position shown in Figure 2. 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 the switch closes when air blade engages spacer bar "C".

4. Maximum opening of air switch must be no greater than 1-1/8"(See Figure 3). Bend tab "F" in or out to maintain this dimension.

5. Re-install air switch assembly on rear of dryer.

6. Check operation of air blade. Switch must close before air blade engages face of opening and re-open before tab "F" engages.

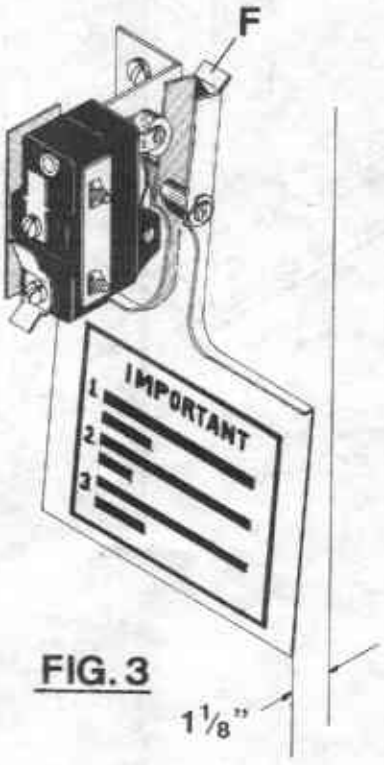


FIG. 3

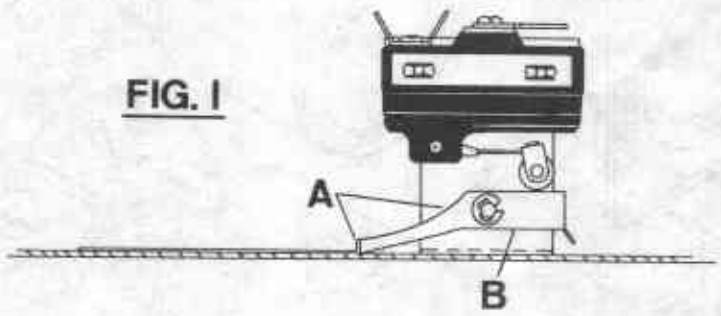


FIG. 1

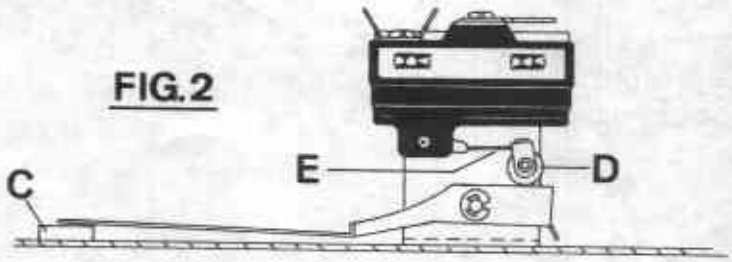
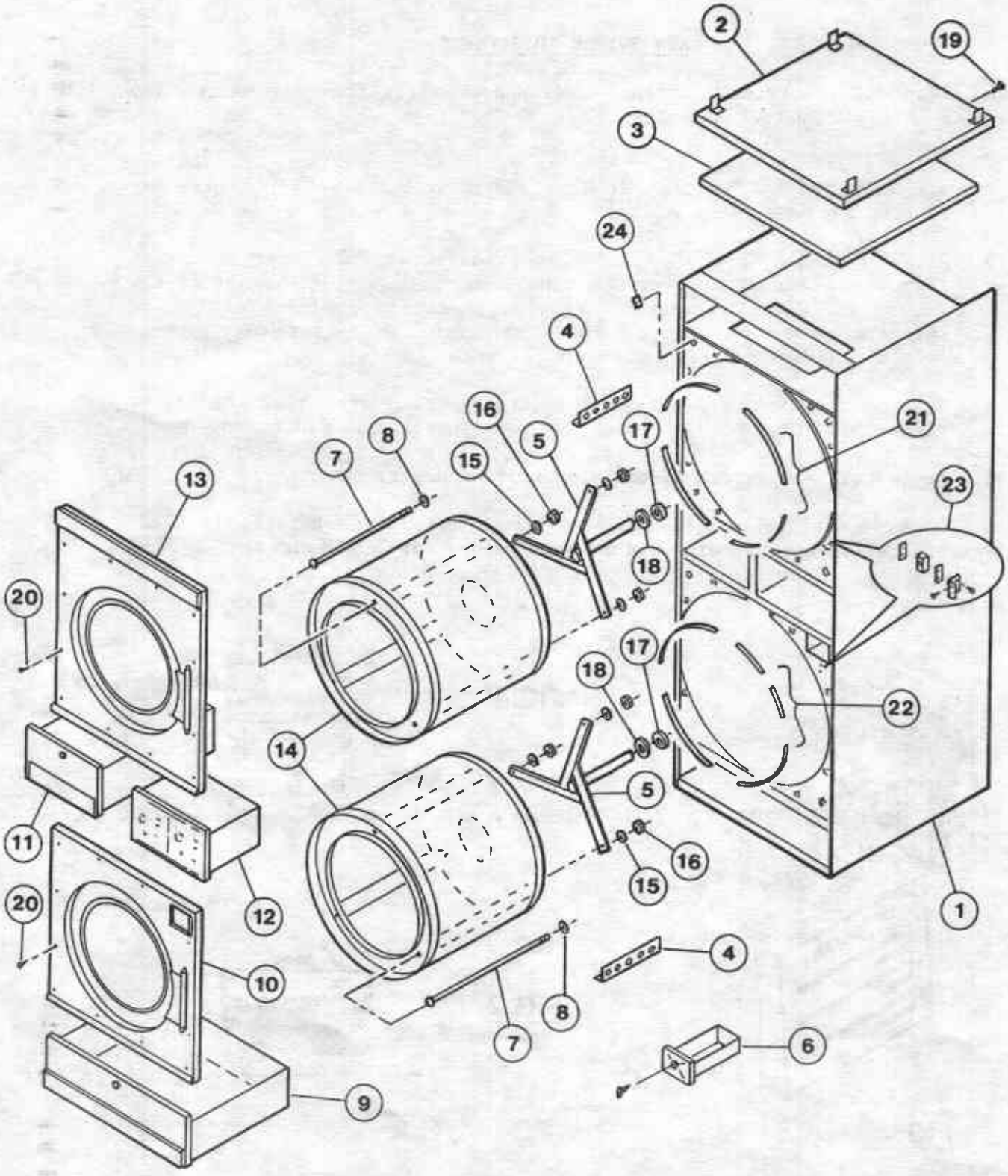


FIG. 2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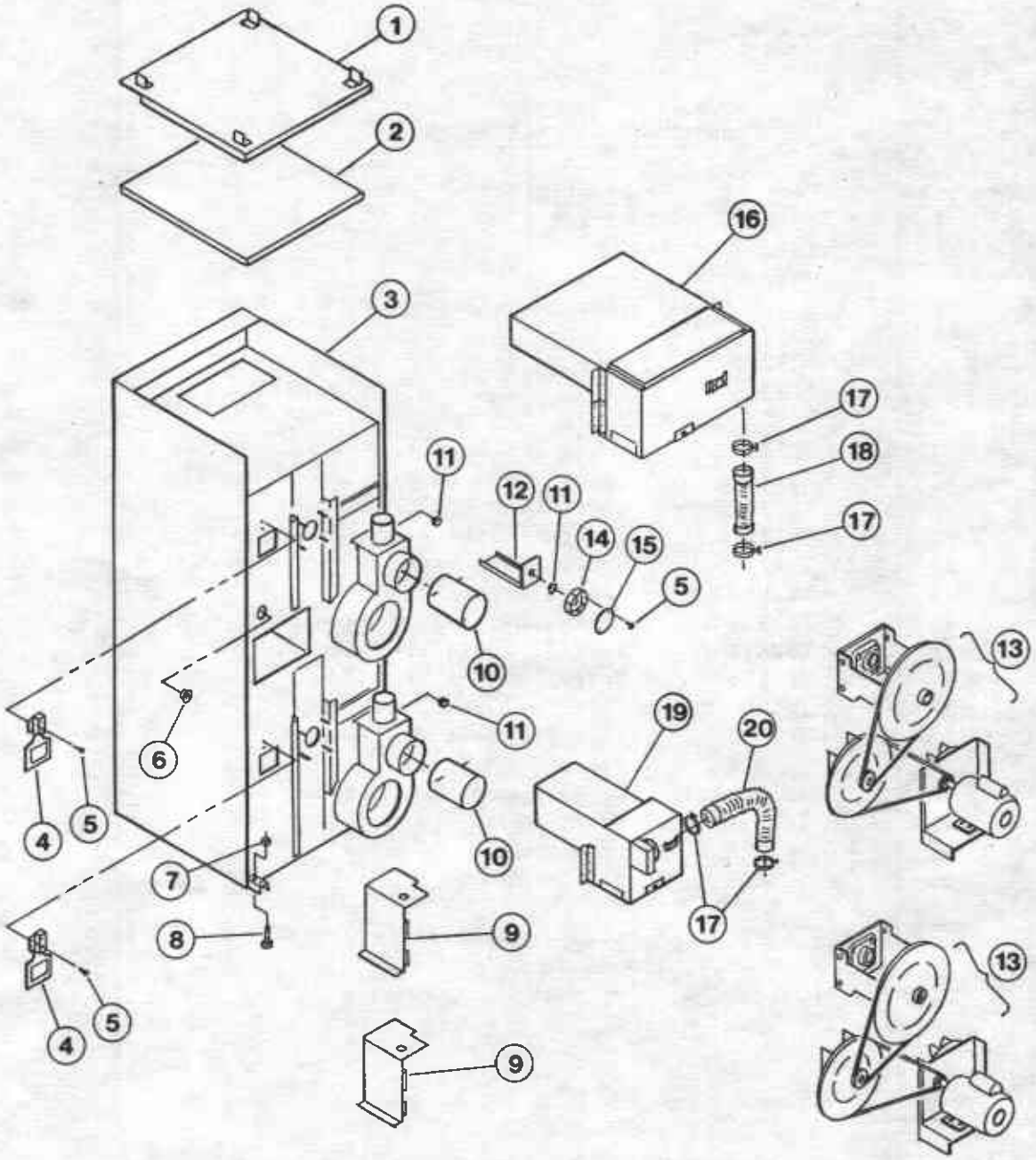
FRONT VIEW - STACK DRYER

Ref. No.	Part No.	Description
1	TU12340	Jacket
2	TU12694	Top
3	TU12662	Insulation
4	TU12554	Thermostat Assembly **
5	TU12116	Spider *
6	TU9225	Coin Vault W/Lock & Key
7	TU2313	Tie Rod *
8	TU2883	Washer-1/2" *
9	TU12295	Lower Lint Drawer Assembly **
10	TU12716	Lower Front Panel & Door Assembly **
11	TU12272	Upper Lint Drawer Assembly **
12	TU12726	Control Panel & Box Assembly **
13	TU12715	Upper Front Panel & Door Assembly **
14	TU2083	Basket *
15	TU2831	Lockwasher-1/2" *
16	TU2882	1/2"-20 x 3/4" Hex Nut *
17	TU10854	Spacer
18	TU108	Felt Seal
19	TU7733	#8 x 1/2 Self Drill Screw
20	TU2878	#10 x 5/8" Screw
21	TU12717	Upper Sweep Sheet Gasket Set
22	TU12718	Lower Sweep Sheet Gasket Set
23	TU4828	Door Switch Assembly
24	TU2877	#10 Speed Nut

* Basket & Spider Assembly - TU12692 consists of Ref. No.'s 5,7,8,14,15,16

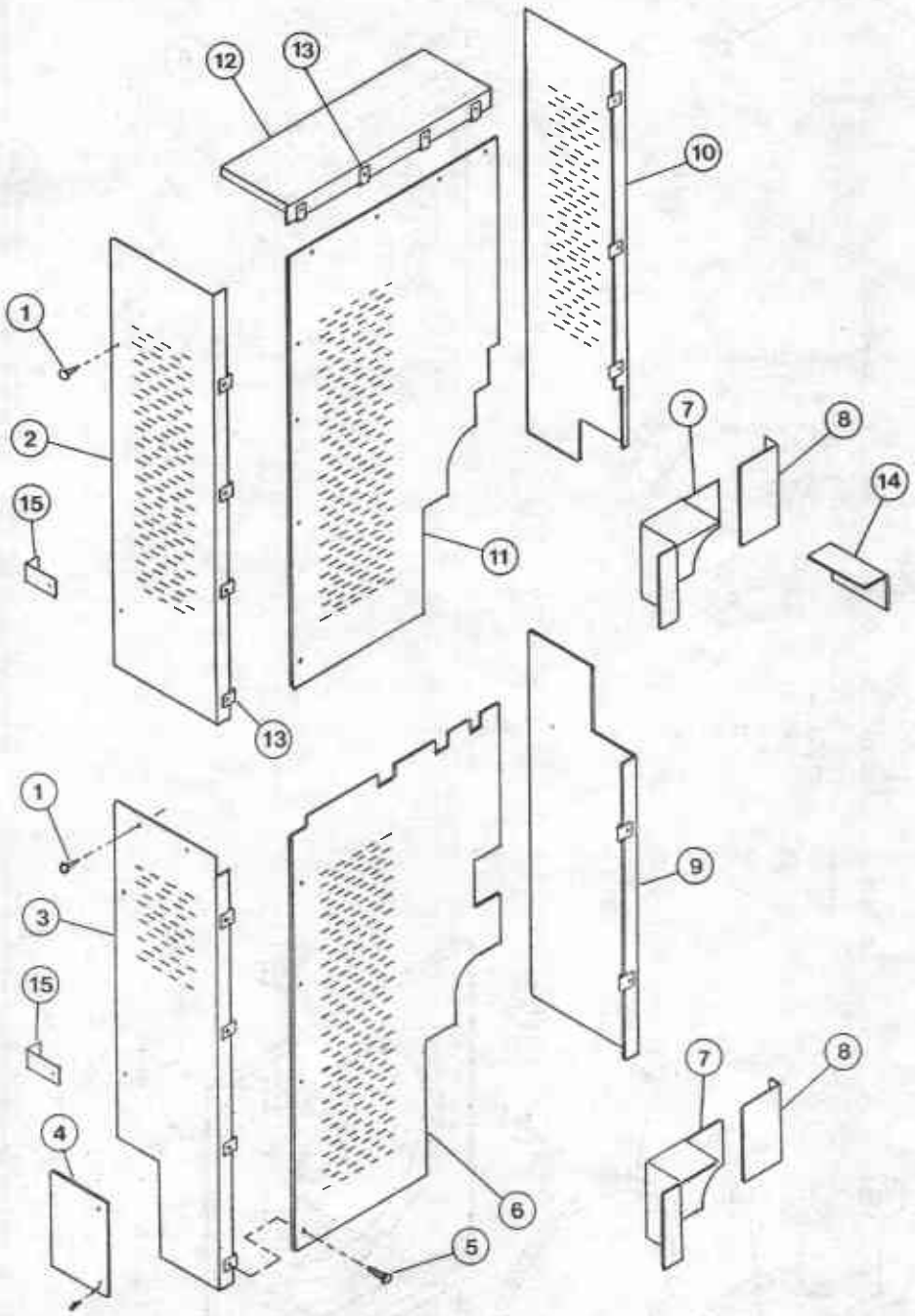
** See Separate Page for Parts Breakdown



REAR VIEW STACK DRYER

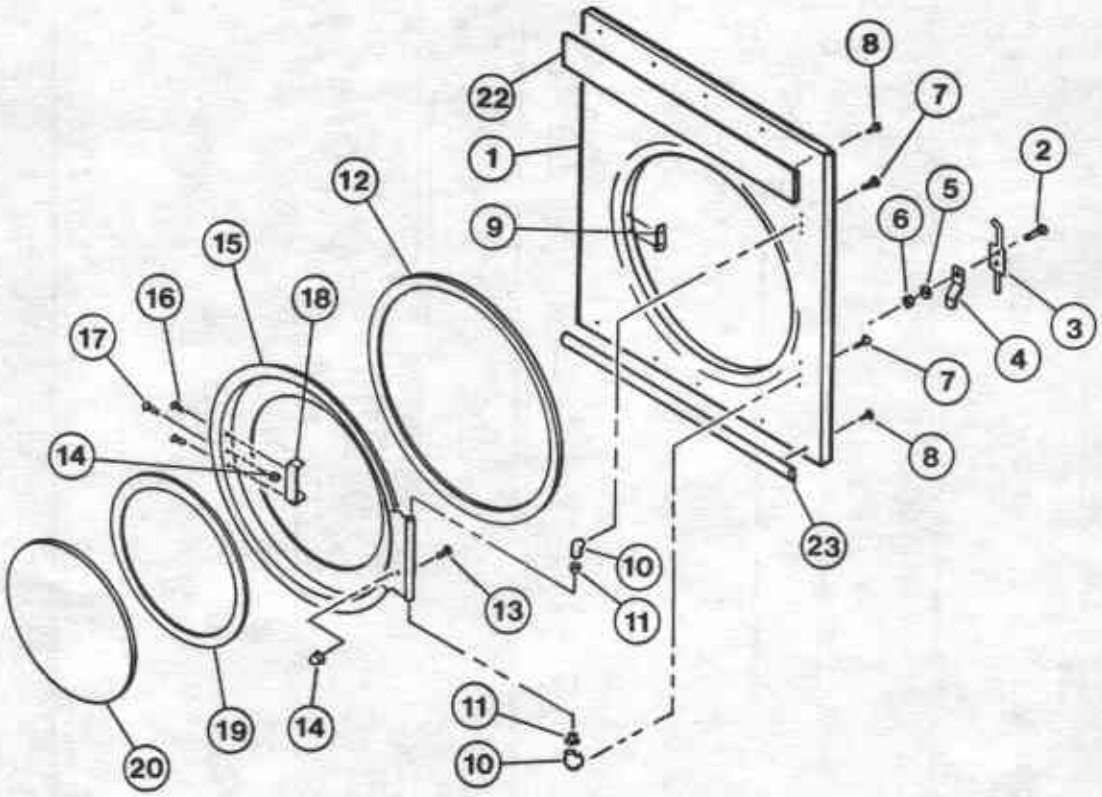
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU12694	Top Cover	11	TU2372	Snap Bushing
2	TU12662	Insulation	12	TU12613	Junction Box Bracket
3	TU12340	Jacket	13	---	Drive Assembly*
4	TU12355	Air Switch *	14	SB35	Junction Box
5	TU7733	#8 x 1/2" Screw	15	SB170	Box Cover
6	TU5958	Snap Bushing	16	---	Upper Bonnet Assembly*
7	TU4937	3/8-16 Jam Nut	17	TU12632	Collar Clamp
8	TU3211	Leveling Bolt	18	TU12489	Upper Duct & Collar
9	---	Control Panel*	19	---	Lower Bonnet Assembly*
10	TU12685	Back Draft Damper	20	TU12470	Lower Duct & Collar

* See Separate Page for Parts Breakdown



REAR COVERS

Ref. No.	Part No.	Description
1	TU7733	#8 x ½ Self Drill Screw
2	TU12604	Upper Left Side Cover
3	TU12605	Lower Left Side Cover
4	TU12609	Adjusting Screw Cover
5	TU2878	#10 x 5/8" Sheet Metal Screw
6	TU12607	Lower Rear Cover
7	TU12611	Motor Sheave Guard
8	TU12610	Motor Belt Guard
9	TU12606	Lower Right Side Cover
10	TU12603	Upper Right Side Cover
11	TU12608	Upper Rear Cover
12	TU12614	Top Rear Cover
13	TU2877	#10 Speed Nut
14	TU12722	Spacer
15	TU12612	Mounting Bracket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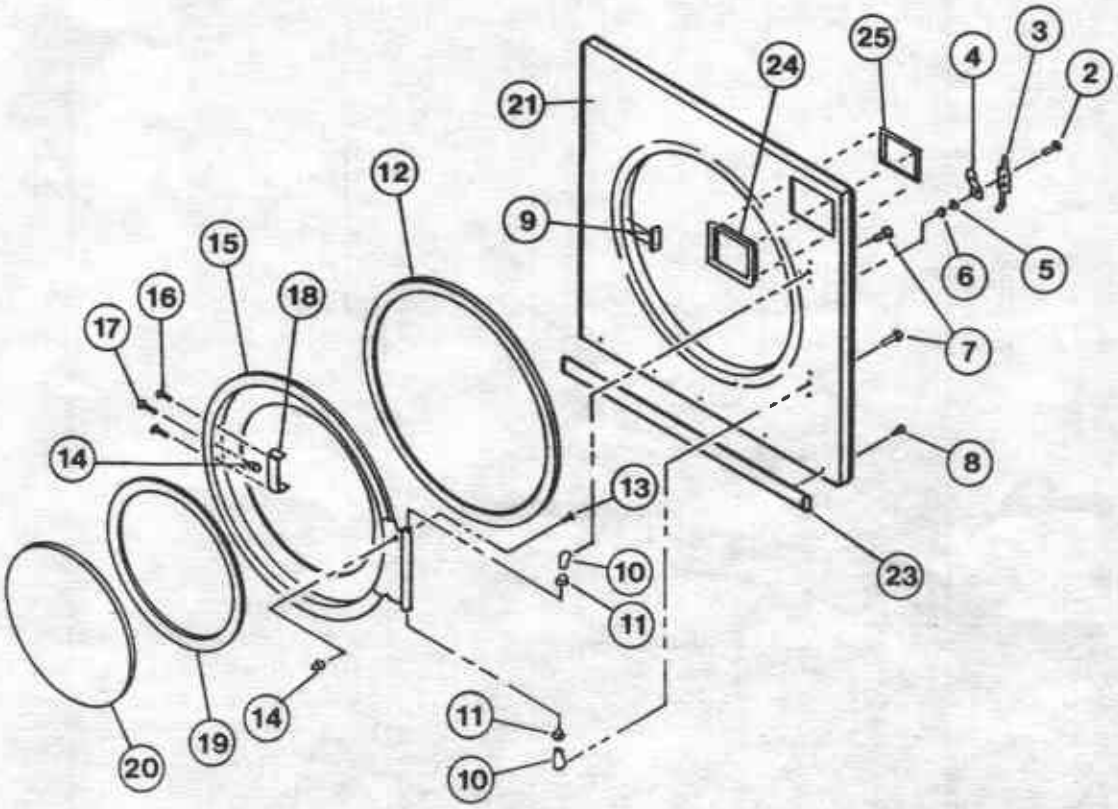
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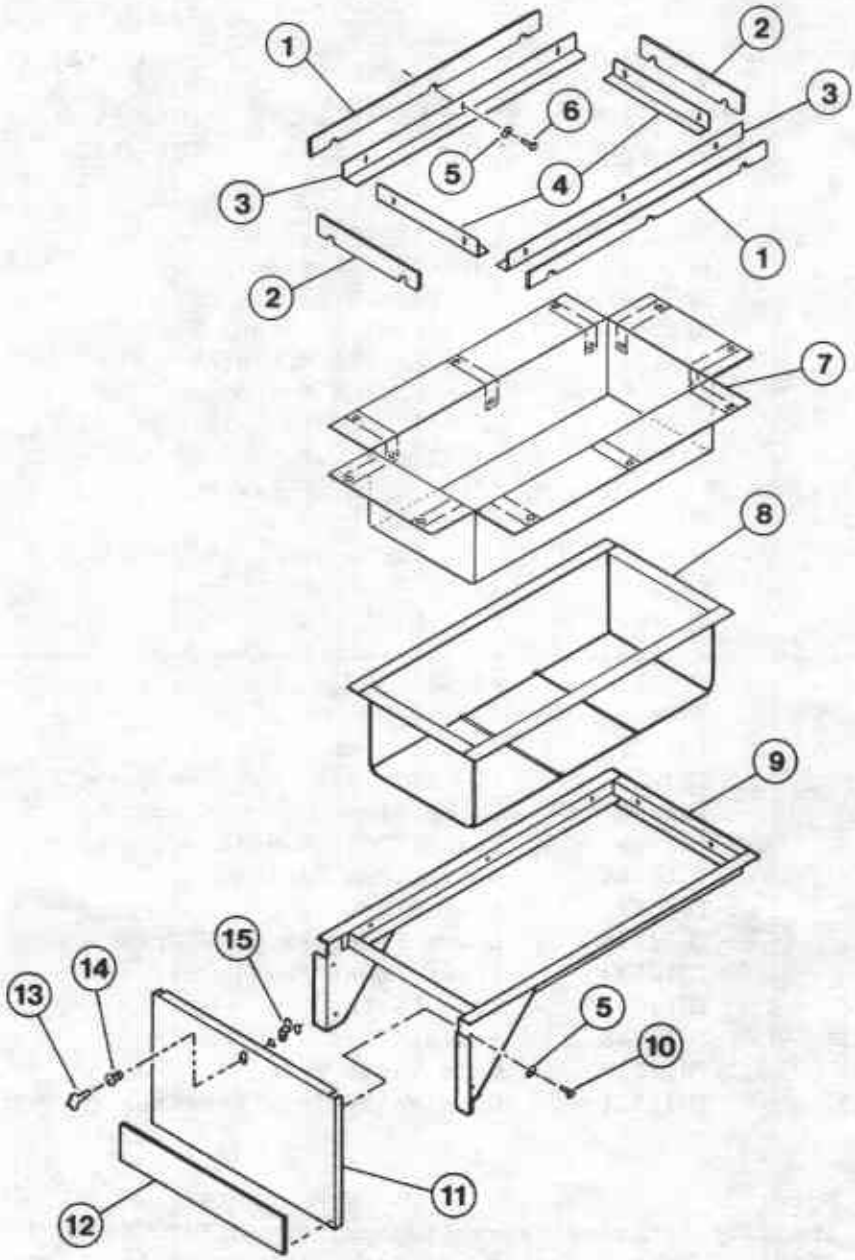
UPPER FRONT PANEL/DOOR ASSEMBLY - TU12715
LOWER FRONT PANEL/DOOR ASSEMBLY - TU12716

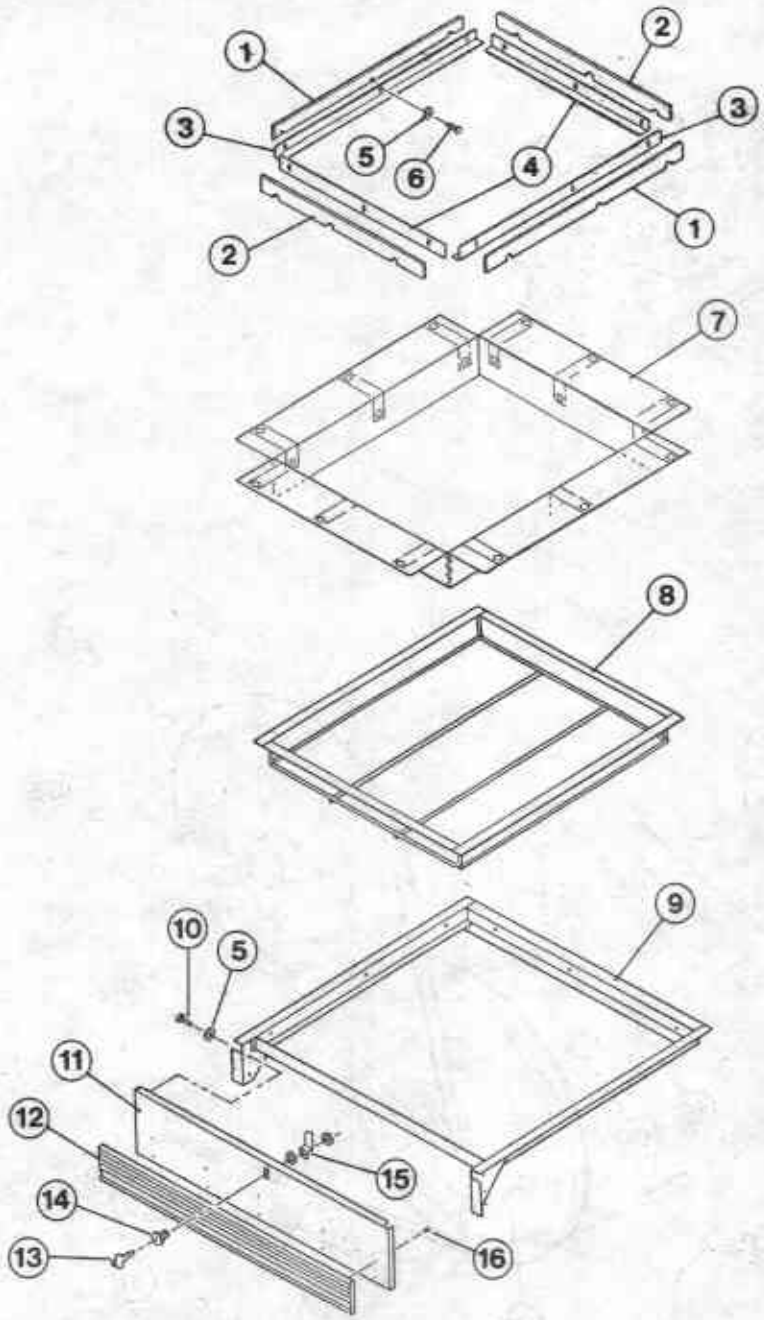
Ref. No.	Part No.	Description
1	TU12749	Upper Front Panel W/Trim & Insulation
	TU12621	Upper Front Panel Only
2	M262	#8-32 x 3/8" Truss Head Screw
3	TU2194	Door Switch Actuator
4	TU2105	Door Switch Spring
5	FB187	#8 Split Lockwasher
6	TU3266	#8-32 Hex Nut
7	TU2836	5/16"-18 x ½" Hex Head Screw
8	TU12744	#6 x 3/8" Screw
9	TU7456	Door Catch W/Rivets
10	TU2236	Hinge Post
11	PIF172	Delrin Bushing
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
16	TU3215	#10-32 x 3/8" Taptite Screw
17	TU3163	Catch Pin
18	TU2874	Basket Door Handle
19	TU10184	Door Glass Gasket
20	TU7862	Door Glass
21	TU12750	Lower Front Panel W/Trim
	TU12623	Lower Front Panel Only
22	TU12747	Trim Plate
23	TU12748	Accent Trim
24	TU11517	Coin Vault Trim
25	TU11511	Coin Vault Trim Retainer

Note:
TU4827 - Actuator Assembly consists of Ref. No.'s 2-6.
TU9040 - Door Assembly consists of Ref. No.'s 11-20.



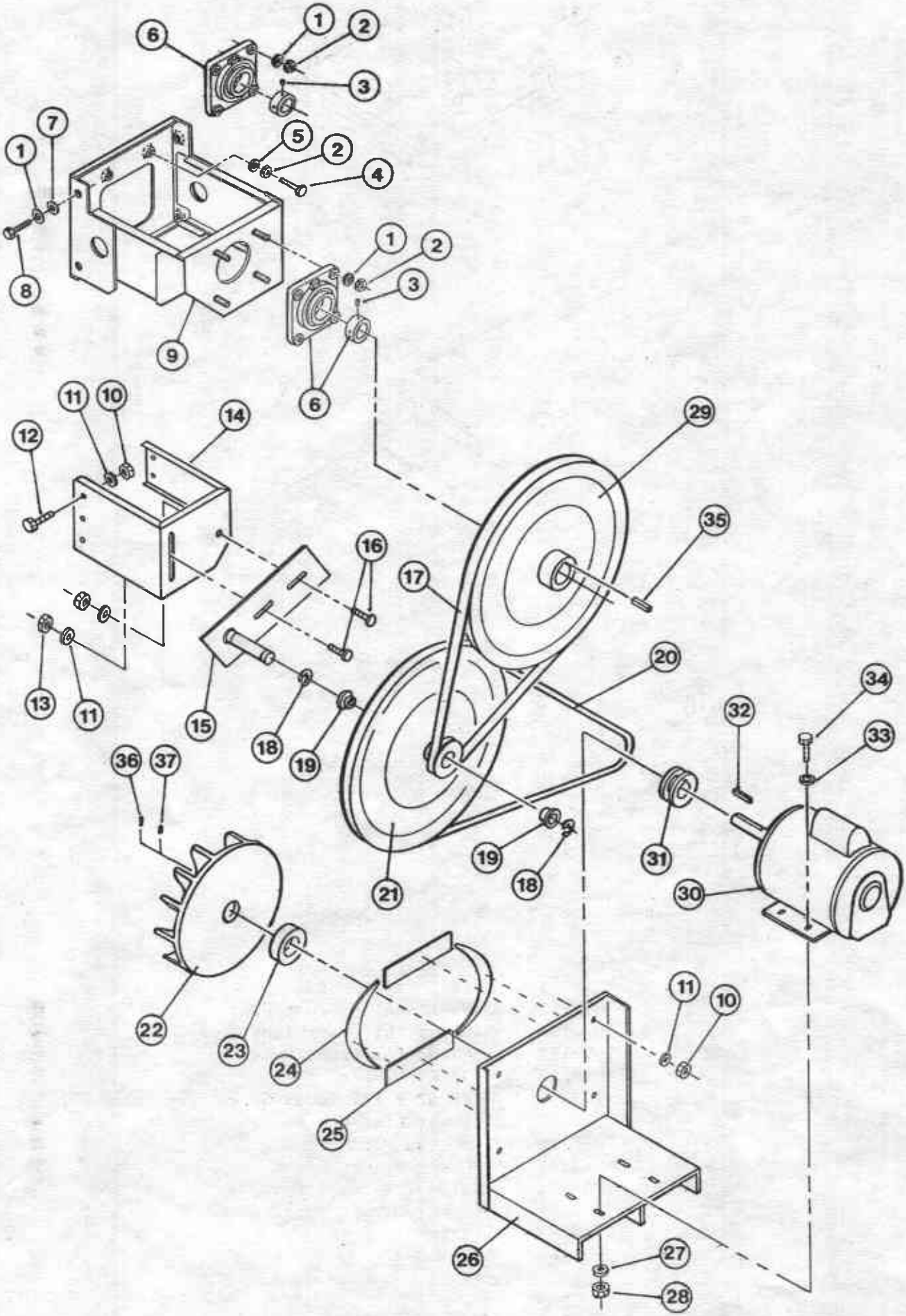
UPPER LINT DRAWER ASSEMBLY - TU12272

Ref. No.	Part No.	Description
1	TU12741	Felt Seal - Side
2	TU12740	Felt Seal - Front/Rear
3	TU12197	Clamp for Side Rail
4	TU12198	Clamp for Front/Rear Rail
5	TU4820	3/16" Cut Washer
6	AT383	#8-32 Sheet Metal Screw
7	TU12274	Upper Lint Screen Bag
8	TU12218	Upper Screen Frame
9	TU12273	Upper Drawer Frame
10	TU12589	#10-32 x 3/8" Truss Screw
11	TU12192	Upper Drawer Door
12	TU12675	Cissell Logo Label
13	TU2844	Key - JWC2
14	TU9035	Lock W/Nuts - JWC2
15	TU8995	Cam



LOWER LINT DRAWER ASSEMBLY - TU12295

Ref. No.	Part No.	Description
1	TU12741	Felt Seal - Side
2	TU12742	Felt Seal - Front/Rear
3	TU12197	Clamp for Left/Right
4	TU12199	Clamp for Front/Back
5	TU4820	3/16" Washer
6	AT383	#8-32 x 1/2 Truss Screw
7	TU12188	Lower Lint Screen
8	TU12298	Bottom Wire Frame
9	TU12297	Lower Drawer Frame
10	TU12589	#10-32 Truss Screw
11	TU12191	Lower Drawer Door
12	TU12747	Trim Strip
13	TU2844	Key-JWC2
14	TU9035	Lock W/Nuts - JWC2
15	TU8995	Cam
16	TU12744	#6 x 3/8 Sheet Metal Screw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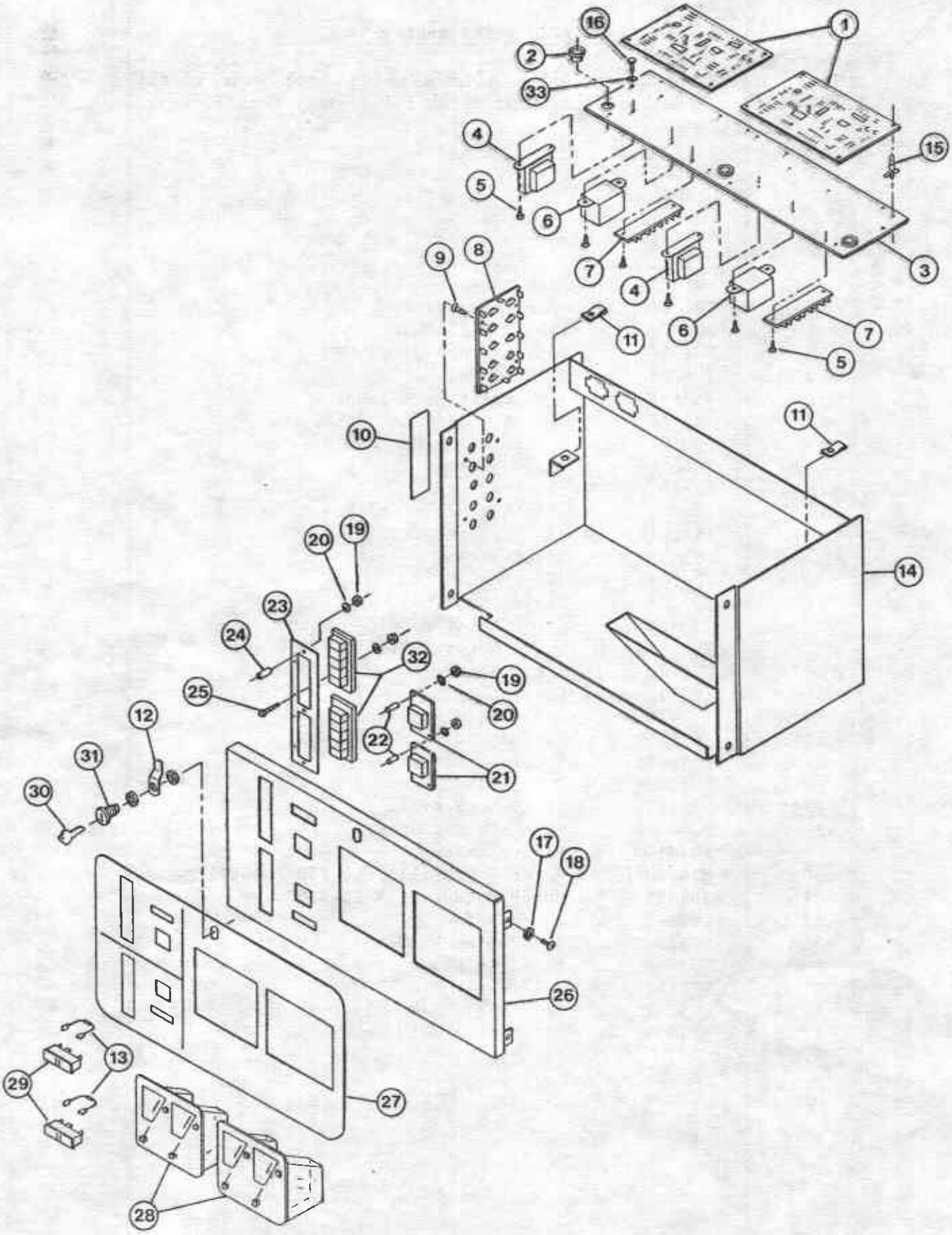
BASKET/FAN DRIVE ASSEMBLY

NOTE: Upper and Lower Drive Assemblies are the same except the V-Belts. Refer to Parts List below for correct part numbers.

Ref. No.	Part No.	Description
1	TU2831	1/2" Split Lockwasher
2	OP233	1/2" - 13 Jam Nut
3	TU10644	Nylok Set Screw
4	TU2195	1/2-13 x 1-3/4" Cap Screw
5	OP251	1/2" I.T. Lockwasher
6	TU10850	Flange Bearing W/Collar
7	TU1851	9/16" Cut Washer
8	RC347	1/2-13 x 1¼" Cap Screw
9	TU11984	Bearing Support
10	TU4787	3/8"-16 Hex Nut
11	VSB134	3/8" Split Lockwasher
12	TU3124	3/8-16 x 3/4" Hex Screw
13	TU3188	3/8-16 Nylok Hex Nut
14	TU12465	Idler Bracket Support
15	TU11979	Idler Bracket
16	TU4936	3/8-16 x 3/4" Carriage Bolt
17	TU12570	Upper Basket V-Belt - 4L560
	TU5638	Lower Basket V-Belt - 4L550
18	TU3247	"E" Ring
19	TU7184	Bronze Bushing
20	TU3395	Upper Motor V-Belt - 4L580
	TU12570	Lower Motor V-Belt - 4L560
21	TU5217	Idler Sheave
22	TU3555	Fan
23	TU2476	Felt Gasket
24	TU12619	Curved Gasket
25	TU12672	Straight Gasket
26	TU11393	Motor Mount
27	TU2814	5/16" Lockwasher
28	C249	5/16"-18 Hex Nut
29	TU7016	Basket Sheave
30	MTR200	Motor - ½ HP,115/208-230V/60Hz/1Ph.
31	TU6559	Motor Sheave - AK-20-5/8"
32	TU5241	Shaft Key
33	VSB130	5/16" Flat Washer
34	TU5439	5/16"-18 x 3/4" Hex Screw
35	TU5887	1/4" Key
36	TU9272	5/16"-18 x 3/8" Allen Hd. Set Screw
37	F819	5/16"-18 x 5/8" Square Hd. Screw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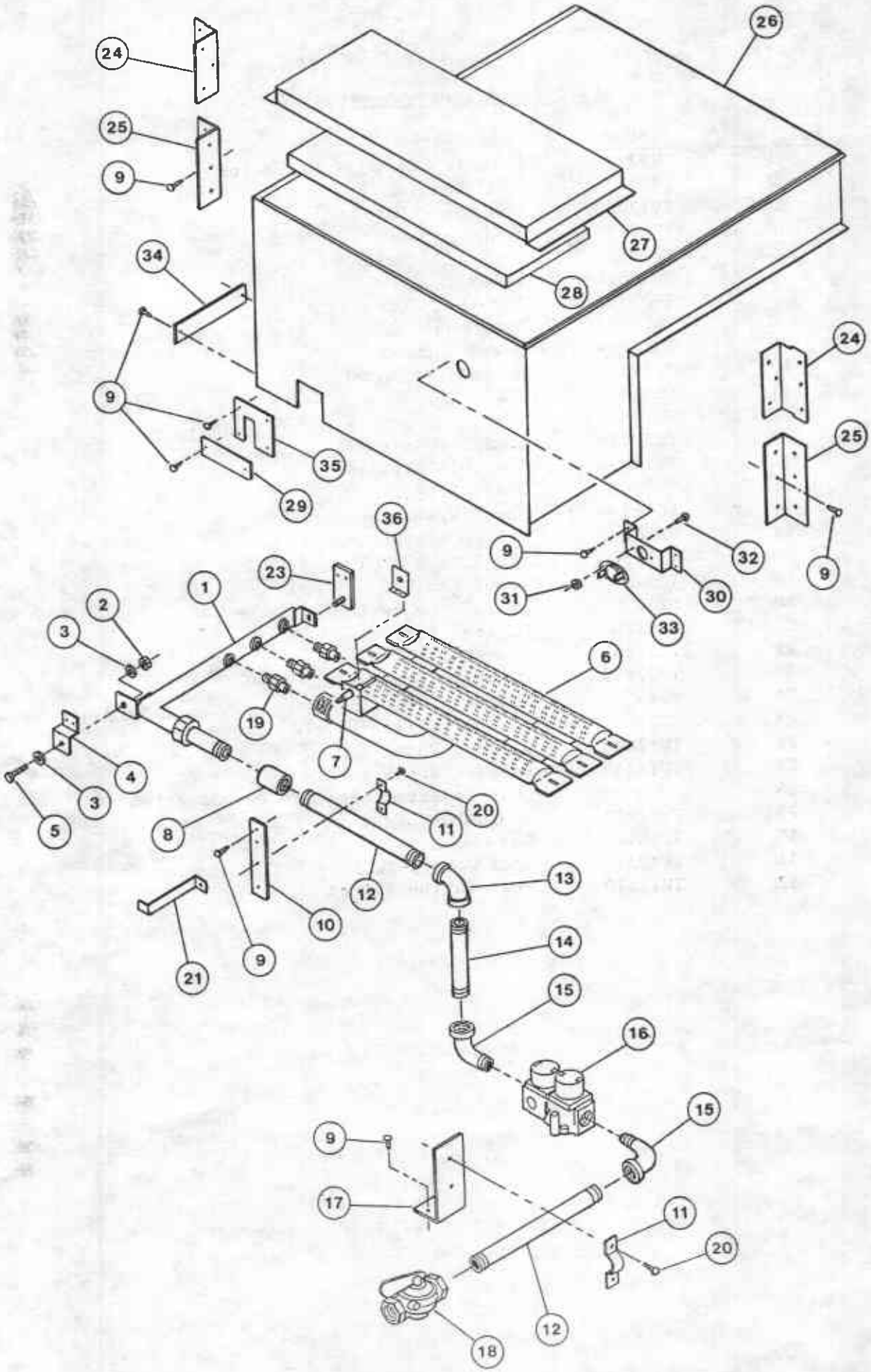
Control Panel & Drawer Assembly

Ref. No.	Part No.	Description
1	TU9329	Circuit Board for Coinmeter
2	TU2372	7/8" Bushing
3	TU12660	Controls Plate
4	TU9327	Transformer
5	TU7733	#8 x 1/2" Self Drill Screw
6	TU12600	Relay
7	TU8629	Terminal Strip
8	TU12596	Diagnostic Board
9	TU12624	Board Support
10	TU12597	Diagnostic Label
11	FG344	Speed Nut
12	TU8995	Cam
13	TU12719	Resistor Assembly
14	TU12658	Controls Drawer
15	TU9347	Board Support
16	FG343	Screw W/Wear Washer
17	FB187	#10 Lockwasher
18	TU12589	#10-32 x 3/8" Tr. Hd. Screw
19	TU3400	#6-32 Hex Nut
20	M270	#6 I.T. Lockwasher
21	TU9328	Digital Readout
22	TU11668	Standoff
23	TU12659	Mounting Bracket
24	F943	Spacer
25	SV136	#6-32 x 15/16" Rd. Hd. Screw
26	TU12628	Control Panel
27	TU12568	Control Panel Label
28	---	Coin Rejector (Specify Denomination)
29	TU12599	Indicator Light
30	TU2844	Key -JWC2
31	TU9035	Lock W/Nuts-JWC2
32	TU11510	Push Button Switch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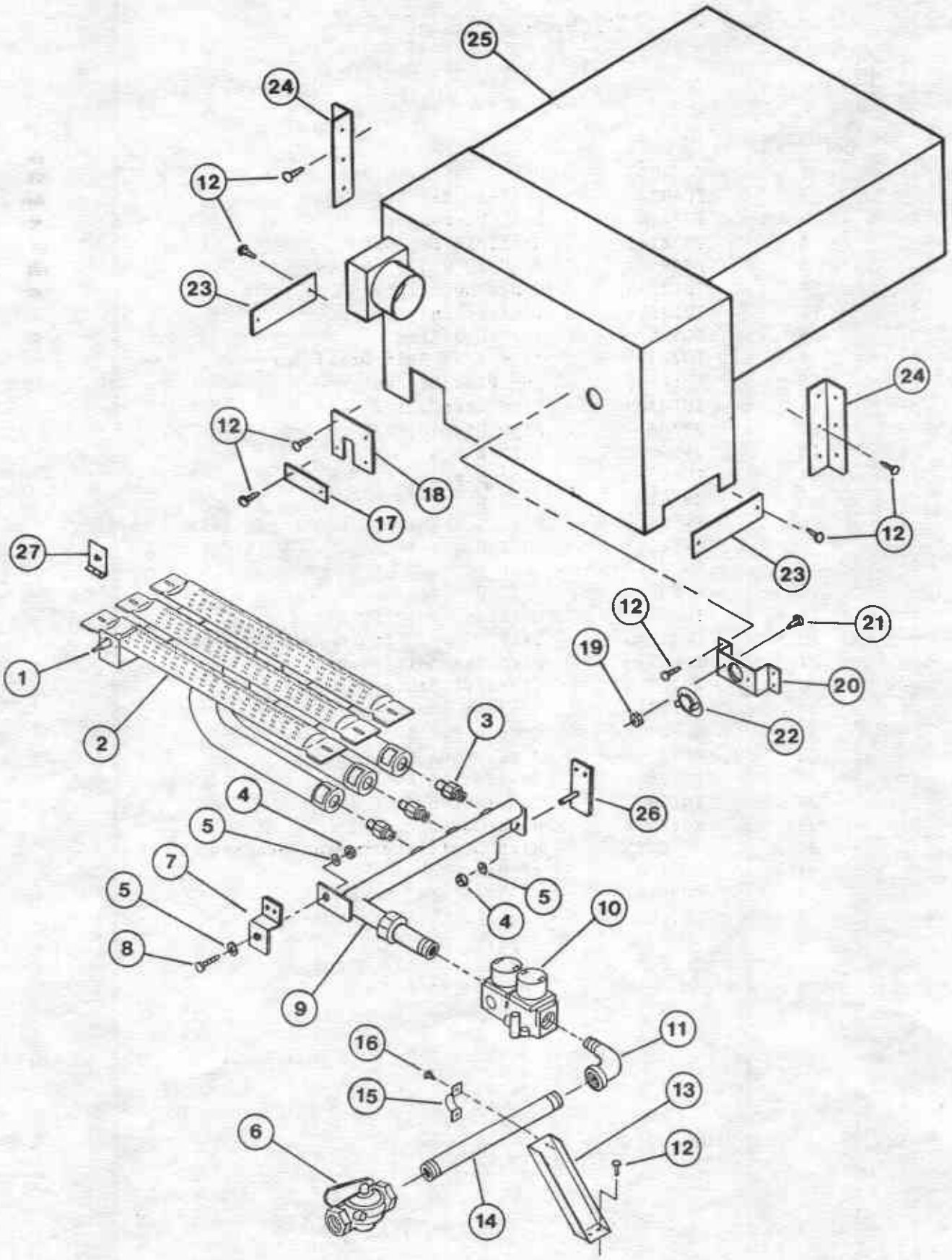
UPPER GAS BONNET ASSEMBLY

TU12734-Natural Gas Model
TU12738-L.P. Gas Model

Ref. No.	Part No.	Description
1	TU12617	Upper Manifold Assembly
2	TU4934	1/4"-20 Hex Nut
3	TU2846	1/4" Lockwasher
4	TU12741	Manifold Support
5	P509	1/4"-20 x 5/8" Screw
6	TU12593	Upper Burners
7	TU12516	Igniter Only
8	SC505	1/2" Coupling
9	TU7733	#8 x 1/2" Self-Drill Screw
10	TU12706	Top Pipe Bracket
11	TU10229	Pipe Strap, 1/2"
12	OP288	Pipe Nipple, 1/2" x 9-3/4
13	390501053	1/2" Elbow
14	TU4651	Pipe Nipple, 1/2" x 6"
15	OP291	1/2" Street Elbow
16	TU11811	Dual Gas Valve W/Regulator (Nat. Gas)*
	TU12048	Dual Gas Valve (L.P. Gases)*
17	TU12698	Pipe Bracket
18	TU6321	1/2" Gas Valve
19	TU3539	Orifice (Specify Size)
20	TU12743	3/16" x 1/2" Stove Bolt
21	TU12733	Wire Standoff Bracket
23	TU12723	Standoff Manifold Bracket
24	TU12714	Closure Bracket
25	TU12667	Bonnet Retainer Bracket
26	TU12666	Upper Bonnet
27	TU12665	Insulation Enclosure
28	TU12663	Insulation
29	TU12592	Hole Cover
30	TU12335	High Limit Thermostat Bracket
31	TU3400	#6 Hex Nut
32	TU3624	#6-32 x 1/4" Screw
33	TU7089	High Limit Thermostat
34	TU12231	Burner Support
35	TU12467	Electrode Hole Cover
36	TU12769	Igniter Shield

* Replacement Coil Assembly - TU12768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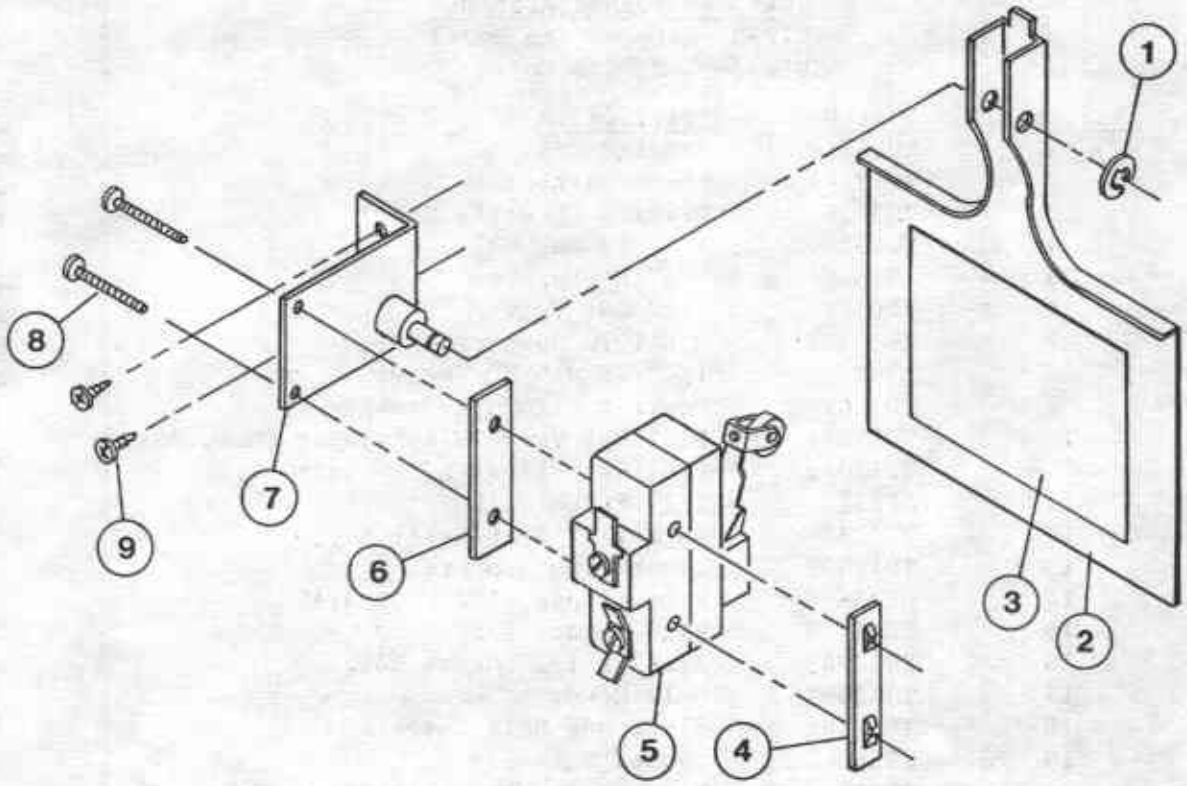
LOWER GAS BONNET ASSEMBLY

TU12735-Natural Gas Model
TU12739-L.P. Gas Model

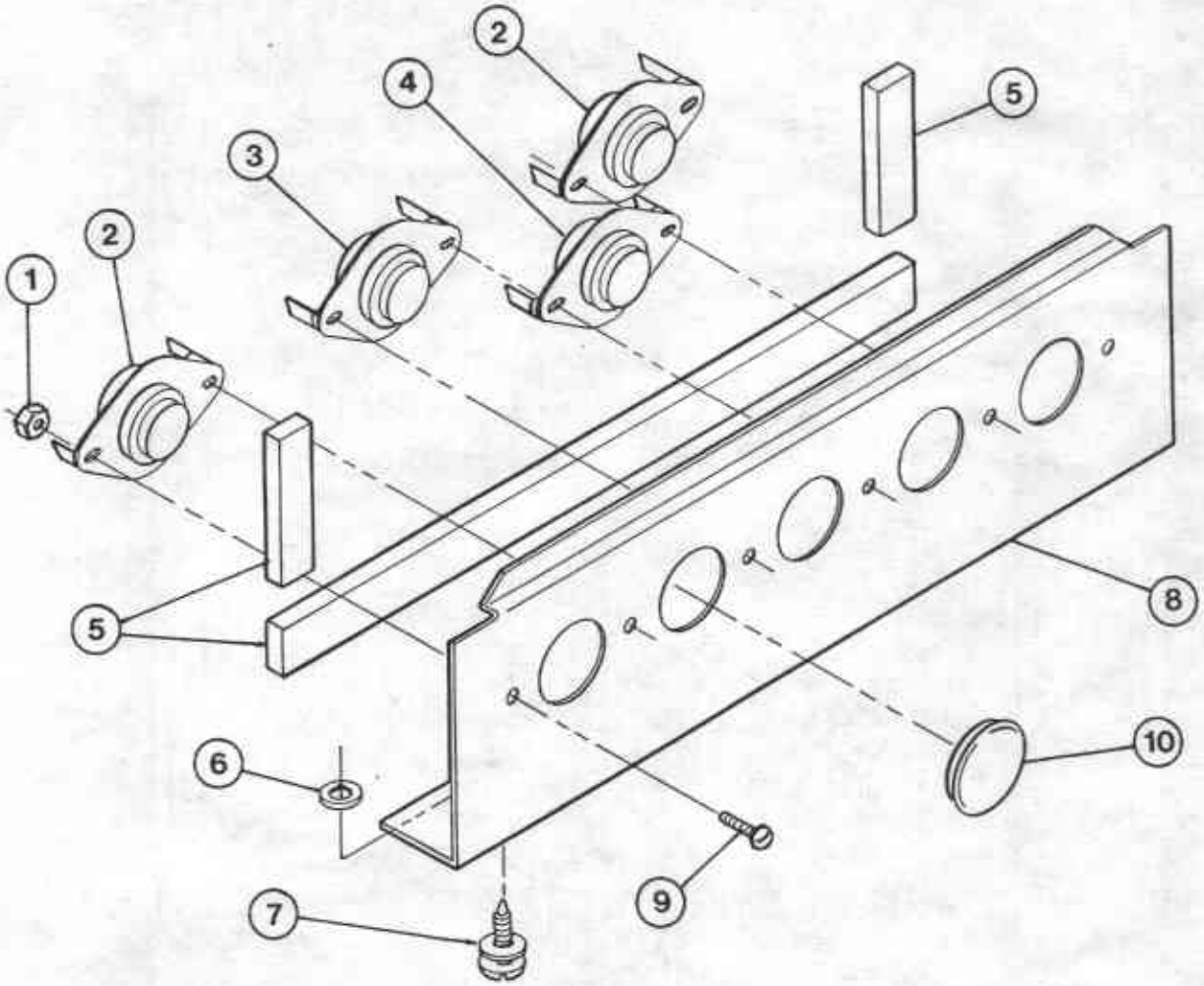
Ref. No.	Part No.	Description
1	TU12516	Igniter Only
2	TU12594	Lower Burners
3	TU3539	Orifice (Specify Size)
4	TU4934	1/4"-20 Hex Nut
5	TU2846	1/4" Lockwasher
6	TU6321	1/2" Gas Valve
7	TU12341	Manifold Support
8	P509	1/4"-20 x 5/8" Screw
9	TU12618	Lower Manifold Assembly
10	TU11811	Dual Gas Valve W/Regulator (Nat. Gas)*
	TU12048	Dual Gas Valve (L.P. Gas)*
11	OP291	1/2" Street Elbow
12	TU7733	#8 x 1/2" Self-Drill Screw
13	TU12699	Lower Pipe Support
14	OP288	Pipe Nipple, 1/2" x 9-3/4"
15	TU10229	Pipe Strap, 1/2"
16	TU12743	3/16" x 1/2" Stove Bolt
17	TU12592	Hole Cover
18	TU12468	Electrode Hole Cover
19	TU3400	#6 Hex Nut
20	TU12335	High Limit Thermostat Bracket
21	TU3624	#6-32 x 1/4" Screw
22	TU7089	High Limit Thermostat
23	TU12231	Burner Support
24	TU12667	Bonnet Retainer Bracket
25	TU12577	Bonnet
26	TU12723	Standoff Manifold Bracket
27	TU12769	Igniter Shield

* Replacement Coil Assembly - TU12768



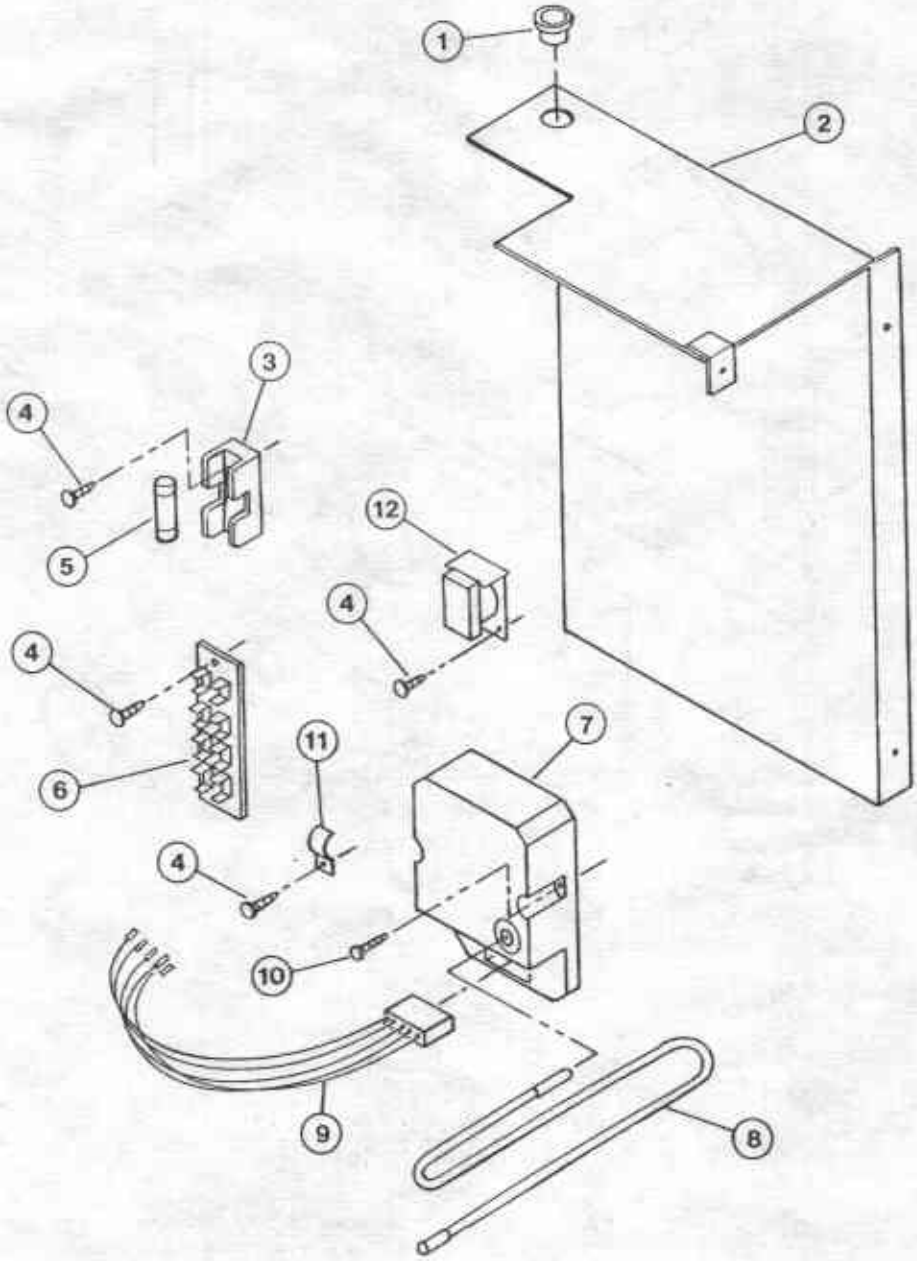
AIR SWITCH ASSEMBLY - TU12355

Ref. No.	Part No.	Description
1	F888	"E" Ring
2	TU12354	Actuator Arm Plate
3	TU3476	Air Switch Label
4	TU1771	Twin Speed Nut
5	TU8155	Air Switch
6	TU1770	Insulator
7	TU8171	Mounting Bracket
8	TU3219	#6 x 1" Sheet Metal Screw
9	TU7733	#8 x ½ Self-Drill Screw (Not Part of Assembly)



THERMOSTAT ASSEMBLY - TU12554
Coin Meter Models

Ref. No.	Part No.	Description
1	TU3400	#6-32 Hex Nut
2	TU3240	185°F Thermostat
3	TU7244	135°F Thermostat
4	TU5150	150°F Thermostat
5	TU2853	Gaskets
6	FG345	Retaining Washer
7	FG343	Screw W/Wear Washer
8	TU12133	Thermostat Bracket
9	TU3624	#6-32 x 1/4" Screw
10	TU5867	Plug Button



IGNITION SYSTEM CONTROL PANEL
UPPER OR LOWER

Ref. No.	Part No.	Description
1	TU5958	Snap Bushing
2	TU12697	Control Panel
3	TU7505	Fuse Holder
4	TU7733	#8 x ½" Self-Drill Screw
5	TU12705	Fuse - 2A
6	TU8629	Terminal Strip
7	TU12050	Ignition Control
8	TU12525	Ignition Electrode Wire
9	TU12583	Ignition Wire Harness
10	TU2793	#8 x 3/4" Self-Drill Screw
11	C332	Conduit Clamp
12	TU1984	Relay