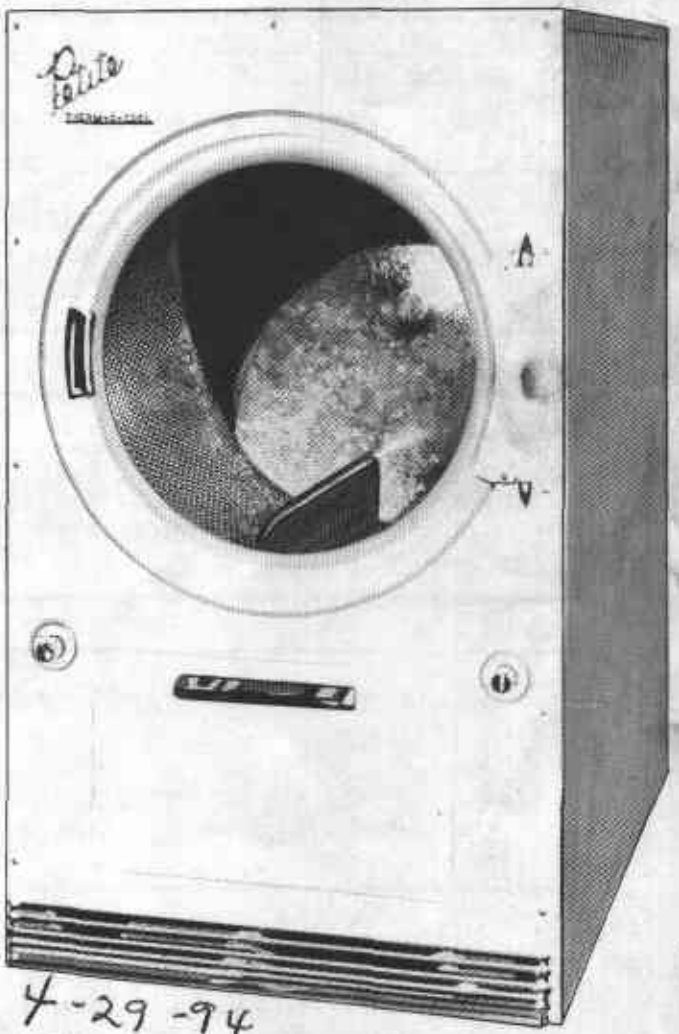
Cissell 20 lb. SERVICE MANUAL

Refer to Addendum A for Updated Information

Petite

with THERM·O·COOL

Model Laundry Dryer



GAS FIRED

ELECTRIC HEATED

Installation
Operation
Trouble Analysis
Maintenance
Illustrated Parts

4-29-94
Ju-6210 NEW Timer replaced Ju3279
K471

Cissell Manufacturing Company
831 S. FIRST STREET LOUISVILLE, KENTUCKY 40203 U.S.A.

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

European Headquarters:
Pantex-Cissell B. V.
P.O. Box 53, 9670 AB
Winschoten, Holland
Telex No. 53535

"Ask Your Distributor"

MAN1
8/84

D0012R1
2/07
Printed in U.S.A.

Addendum A

L28x20

PART NO.	DESCRIPTION	COMMENTS	PAGE NO.
TU3240H	Thermostat	2 required; Hi & Safety; 185 degrees	
TU2045H	Thermostat	Lo/Cool Down; 155 degrees	
TU1979H	Door Switch	Includes hardware	
K471	Timer Replacement Kit	60 minute timer	
TU3472	Belt	Upper	
TU3394	Belt	Lower	
TU3187	Sheave	Basket	
TU3183	Sheave	Idler pulley	
TU7603	Sheave	Motor pulley	
TU8206	Air Switch Kit		
TU14482	Switch		
TU3181	Heating Element	3 required; 240 Volt	
TU13224K	Relay	2 required; 100-120 Volt	
TU5343	Thermocouple		
TU15107	Door Glass		
TU15966	Door Glass Gasket		
TU2090	Door Gasket		
TU2874	Door Handle		

Obsolete Parts – No Longer Available

PART NO.	DESCRIPTION	COMMENTS	PAGE NO.
TU7171	Loading Door and Hinge		
	Bearing		
	Fan		
	Gas Valve		
	Front Panel		
	Basket		
	Spider		
	Lint Screen		

KEEP LOADING DOOR CLOSED

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.

FOR YOUR SAFETY - CAUTION

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

POST INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS 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 repalcement 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 idientification 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 OR 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.

FOR YOUR SAFETY

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

INDEX

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!

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.

When locating permanent location of unit, care should be taken in movement and placement of equipment.

See outline clearance diagrams for correct dimensions.

Remove all packing material such as: tapes, manuals, skid, etc. On gear reducer models, remove screw from air vent and cork from oil reserve well.

Leveling: Use spirit level on top of dryer. Adjust leveling bolts on dryer (see adjustable leveling bolts in maintenance section).

Check voltage and amperes on rating plate before installing the 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 the least amount of exhaust piping and elbows, and allow free access to the rear of dryer for future servicing of belts, pulleys and motors. Installation clearances from all combustable material is 0" ceiling clearance, 0" rear clearance and 0" side clearance.

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

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"

See additional Cissell Specification Sheets for information on other dryers.

Consult Cissell Price List for complete prices and ordering information.

CISSELL "THERM-O-COOL" DRYER

Permanent press, durable press and other modern day fabrics require the care that your Cissell Therm-o-cool laundry Dryers now provides.

At the end of the drying cycle, determined by the coin meter or timer, a thermostatic 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 because it's controlled by the heat retained in the garments, after the normal drying period, its time can extend from 30 seconds up to 5 minutes. The Therm-o-cool cycle is effective at all settings of the temperature selector. The Therm-o-cool cycle is never too long or too short. Always the exact minimum time required to reduce the temperature of the garment load to a safe and cooling handling temperature. Permanent press garments, when removed from the Cissell Dryer after the Therm-o-cool cycle, require no ironing. They are "pre-finished" -- ready for packaging.

CISSELL PETITE DRYER

GENERAL MAINTENANCE

1. FOR BEST PERFORMANCE CLEAN LINT TRAP BEFORE DRYING EACH LOAD. A clean lint trap will increase the efficiency of the dryer, as the moisture laden air will be exhausted to the atmosphere more quickly. A blocked lint trap will cause the air switch to open, cutting off gas or electric heating unit.

2. KEEP BASKET AND SWEEP SHEETS CLEAN: Check periodically and clean 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. To remove front panel, take screws out of front panel, then lift panel off.

3. PULLEYS AND BELTS: Keep belts clean. Oil and dirt will shorten the useful life of a belt. Check belts periodically for alignment and tension. Pully shafts must be parallel and the grooves must be in alignment. Check and re-tighten pulley set screws periodically. To adjust belt tension loosen blots in idler mounting bracket and adjust to proper tension. Re-tighten bolts.

4. ELECTRIC MOTOR: Keep motor clean and dry. Occasionally blow dust out of winding. Lubricate motor as directed on cover for electrical connections on rear of motor. Do not over-lubricate.

5. ON GAS-FIRED DRYERS: Keep gas burner assembly clean. Clean gas pilot. Check periodically and clean as often as required. To clean gas pilot, disconnet 1/4" tubing and remove pilot orifice. Do not attempt to clean orifice openings with pins or other objects. Brush lint from pilot burner, and blow orifice holes clean, blowing from threaded end of pilot orifice.

6. ON ELECTRIC-HEATED DRYER: Occasionally blow dust off and from around electric heating unit.

7. GENERAL MAINTENANCE: Maintenance of moving parts. All bearings on this dryer should be lubricated with medium grade motor oil periodically.

8. Periodic maintenance on the exhaust system shall be examined.

CISSELL PETITE LAUNDRY DRYER

ELECTRIC HEATED

For Coin-Meter Operation or with Time and Temperature Control

BASKET LOAD CAPACITY ..... **20 lbs. dry weight**
(For a maximum moisture retention of 100%)

APPROXIMATE DRYING TIME

Dry Weight of Load	Moisture Retention	Wet Weight of Load	Drying Time
20 lbs.	70%	34 lbs.	28 min.

NOTE: Fabrics removed from a domestic type top loading washer have a moisture retention of 70%. Under this condition, the Petite dryer will evaporate 14 lbs. of water from a wet load in 28 minutes. This evaporation will vary according to the weight of the load and the type of fabrics being dried. Heavy loads, and fabrics which retain excessive amounts of water, will require longer drying times than lighter loads which retain small amounts of water. For estimating purposes, a normal load, with a moisture retention of 70%, has a drying ratio of two minutes for each one pound water evaporated.

Floor Space ..... 28 3/4" wide x 30" deep x 48" high.
Basket ..... 28" dia. x 20" deep.
Exhaust Duct ..... 6" dia.
Motor Size ..... 1/2 H.P.
Maximum Air Displacement (cu. ft. per min.) ... 500 C.F.M.
Net Weight ..... 371 lbs.
Domestic Shipping Weight (1 box) ..... 413 lbs.

ELECTRIC HEATING UNIT - 15 K.W.

Voltage	Hz.	Phase	Amperes
208	50/60	1	72
208	"	3	42
240	"	1	63
240	"	3	36
415	"	3	21
480	"	3	18
575	"	3	16

CISSELL PETITE LAUNDRY DRYER
GAS-FIRED

For Coin-Meter Operation or with Time
and Temperature Control

BASKET LOAD CAPACITY..... **20** lbs. dry weight
(For a maximum moisture retention of 100%)

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Floor Space.....28 3/4" wide x 30" deep x 48" high.
Basket.....28" dia. x 20" deep.
Exhaust Duct.....6" dia.
Motor Size.....1/2 HP.
Maximum Air Displacement (cu. ft. per min.)...450 C.F.M.
New Weight.....371 lbs.
Domestic Shipping Weight (1 box).....413 lbs.
*BTU Input.....51,000 per hour on natural, mixed and manufactured gases. 51,000 per hour on L.P. gases.
Gas Supply.....1/2" Pipe

*Input ratings as shown are for elevations up to 2,000 ft. For elevations above 2,000 ft., ratings should be reduced 4% for each 1,000 ft. above sea level.

CISSELL PETITE DRYER (GAS-FIRED)

BEFORE OPERATING DRYER, READ ALL INSTRUCTIONS

INSTALLATION

The construction of Cissell Petite dryers permits them to be installed side by side to save space. Place dryers in a position that will require the least amount of exhaust piping and elbows, and still allow access to the rear of the dryers for servicing. The Cissell Petite is equipped with leveling bolts to compensate for slight irregularities in the floor. To avoid strain on piping, position and level dryer before connecting gas supply.

WARNING: Adequate provisions must be made for supply fresh incoming air to replace the air being exhausted by the dryer. Inadequate make-up air opening will result in poor performance of the dryer. Do not use an exhaust duct smaller than 6" in diameter.

GENERAL INFORMATION

The Cissel Petite dryer consists of a 28" x 20" basket placed at a convenient height--with a maximum capacity of 20 pounds dryweight. When operator opens door, gas is shut off and both fan and basket stop.

You can expect fast drying from a Cissell Petite laundry dryer. Hot, dry air is properly and efficiently moved through basket and exhausted through lint trap to atmosphere.

ELECTRICAL CONNECTIONS

WARNING: THIS DRYER MUST BE ELECTRICALLY GROUNDED.
It may be grounded by a separate #14 or larger wire from the grounding terminal lug within the wiring enclosure to a cold water pipe; or through the grounded neutral of a 3-wire system when properly grounded and connected to the grounding terminal lug. In all cases, the grounding method must comply with all local electrical code requirements.

Your Cissell Petite dryer is completely wired at factory. It is only necessary for the electrician to connect the power leads to the terminals within the wiring enclosure on the rear of the dryer. Care should be taken to insure proper polarity.

on 120 volt dryers. Two power circuits are required for electrically headed dryers one for the motor and controls, and a separate one for the electric heating elements.

Do not change wiring without consulting factory or you may void your guarantee. Do not connect the dryer to any voltage or current other than that specified on the electrical rating plate on the rear of the dryer.

All wiring should be done by a competent electrician, and should meet the requirements of your local electrical code.

Upon completion of wiring, check dryer operation and see that all parts operate properly. When viewed from the front of the dryer, basket should rotate clockwise.

Your Cissell Petite electric is equipped with safety shut-off to protect dryer and contents in event the motor should burn-out.

This appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA No. 70-1981.

CISSELL PETITE DRYER (GAS-FIRED)

Do not change wiring without consulting factory or you may void your guarantee.
Do not connect the dryer to any voltage or current other than that specified on the electrical rating plate on the rear of the dryer.

All wiring should be done by a competent electrician, and should meet the requirements of your local electrical code.

Upon completion of wiring, check dryer operation and see that all parts operate properly. When viewed from the front of the dryer, basket should rotate clockwise.

GAS-FIRED DRYER

Efficient operation of gas-heated dryer depends upon the use of the proper orifice in gas burner to suit the type of gas and its pressure.

The Cissell Petite is equipped with 100% safety shut-off type automatic gas controls to control the flow of gas to the pilot and main burner. Units for use on natural, mixed and manufactured gases are equipped with a pressure regulator to compensate for varying pressure in the supply main. For L.P. gases a pressure regulator is not furnished with the dryer, as pressure regulation form a part of the L.P. gas installation.

When measuring gas pressure, place all gas equipment in operation, and measure the gas pressure at the gas valve with burner of the dryer operating. Adjust to pressure specified on burner rating plate. Be sure that the gas service is adequate, and that the piping connecting the gas meter and dryer is sufficiently large to keep the gas pressure drop in the piping as low as possible.

The Cissell Petite is also equipped with a manual gas valve and union so gas can be shut off for servicing burners and controls without interrupting operation of other equipment.

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

Wall Clearances

Sides	Rear	Ceiling
0"	0"	0"

CONTROLS FOR GAS-FIRED LAUNDRY DRYERS

HI-LO TEMPERATURE CONTROL

Cuts off gas when dryer reaches temperature of setting and maintains this temperature by cycling burners on and off for remainder of time period.

DOOR SWITCH

Interrupts power to basket motor and gas valve when door is open. Remakes circuit when door is closed.

AIR SWITCH

Interrupts gas valve when air flow through the basket is to low. Remakes circuit when air flow is reestablished.

TEMPERATURE LIMITING THERMOSTAT

Limits temperature of dryer if Hi-Lo heat control fails.

OPERATION OF PUSH-TO-START FEATURE ON GAS DRYERS

Step 1 Close loading door.
Step 2 Energize timer with time on or activate coin meter.
Step 3 Press in "Push to Start" button until the dryer starts running and then release button.

What is happening after step 3:

1. The fan motor will operate
2. The clothes tumbler will revolve.
3. The heated energy-gas will be energized.
4. The heated air will mix with the water washed clothes to evaporate the moisture from the garments.
5. The thermostats will function at a safe temperature at the end of the drying cycle.
6. The heat will be shut off and the motor will continue to run to cool the dry load to a desired handling temperature.

Important: If tumbler door is open during the drying cycle, it stops the fan motor and the heated energy is shut off. To restart the dryer, close the door and press in the "Push to Start" button for approximately three seconds.

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

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

INSTRUCTIONS FOR LIGHTING PILOT
ON CISSELL PETITE DRYER WITH STANDING PILOT

1. Be sure manual shut-off valve has been closed for at least five minutes before proceeding.

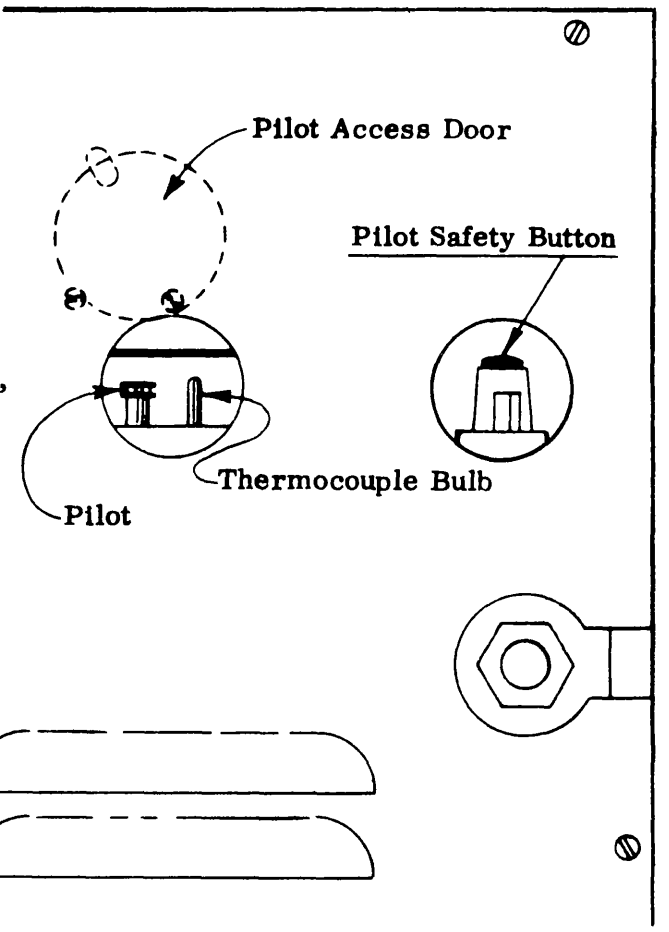
2. Reach through opening in back cover of dryer and open pilot access door.

3. Re-open manual shut-off valve.

4. Depress pilot safety button. Light pilot--keeping button depressed for about 30 seconds, then release. If pilot does not remain lighted, repeat operation.

5. Close pilot access door.

6. Operate dryer and see that pilot flame ignites burner.



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.

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.

Exhausting Duct - Gas & Electric

For best drying:

1. Exhaust duct maximum length 14 feet of straight duct and maximum of two 90 degree bends.
2. Use 45 degree 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 duct must be smooth
9. Recommend pop rivets for duct assembly.

Make-up Air, Gas & Electric

For best drying:

1. Provide opening to the out-of-doors in accordance with the following - 28F30, 36F30 and 2820, 100 to 150 square inches per dryer; 28C30, 36C30 and 44F42, 200 to 300 square inches per dryer; 44C42, 450 to 700 square inches 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.

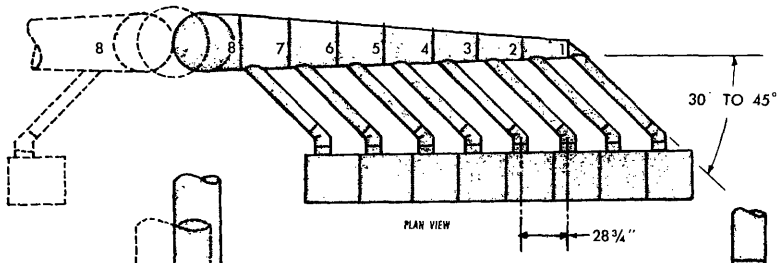
FOR HELP, consult Cissell Engineering on tough installations.

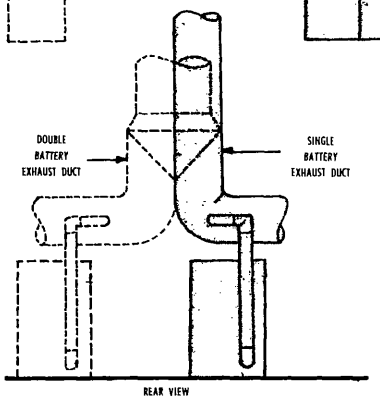
Trouble shooting; hot dryer surfaces scorched clothes, slow drying, lint accumulations, or air switch malfunction are indicators of exhaust duct and/or make up air problems.

THIS DRYER MUST BE EXHAUSTED TO OUTSIDE OF BUILDING

EXHAUST DUCT INSTALLATION

FOR DUCT DIAMETER AT EACH DRYER OUTLET CONNECTION, REFER TO TABLE USING TOTAL NUMBER OF DRYERS CONNECTED TO THAT POINT.



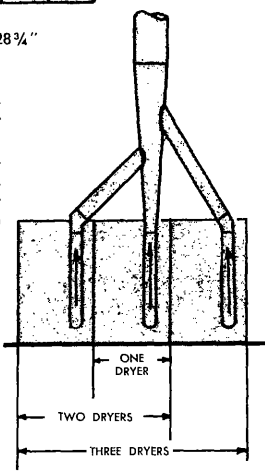


NOTE: Inside of duct shall be smooth. Do not use sheet metal screws to join sections.

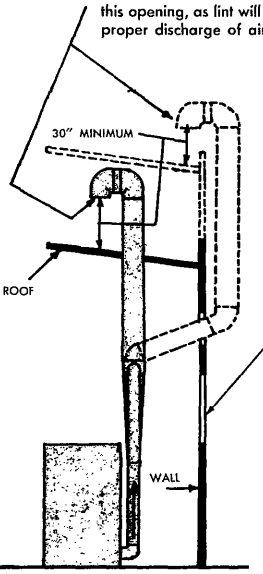
NO. OF DRYERS	1	2	3	4	5	6	7	8
DUCT DIAMETER	6	9	11	12	14	15	16	17

FOR BEST PERFORMANCE — *Provide an individual exhaust duct for each dryer.*

Do not install a hot water heater in room containing dryers. It is better to have the water heater in a separate room with a separate air inlet.



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



DRYER OUTLET: 6" DIA.
AREA - 28 SQ. IN.

CAUTION

Dryers are forced air exhausted and require provisions for *air inlet to replace the air exhausted by the dryer.* The air inlet openings into a room containing dryers should be a minimum of 60 square inches free area per dryer.

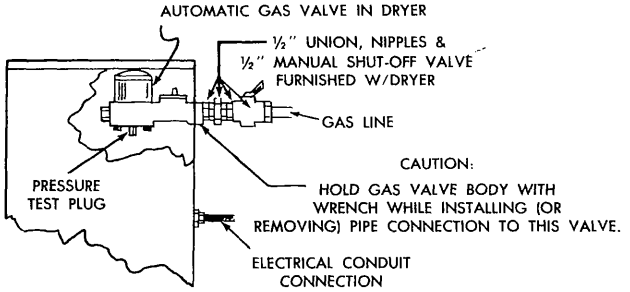
The air inlet openings into a room containing dryers and a gas fired hot water heater or other gravity vented appliance must be increased sufficiently *to prevent downdraft in* any of the vents when all dryers are in operation. Do not install gravity vented appliances between dryers and air inlet openings.

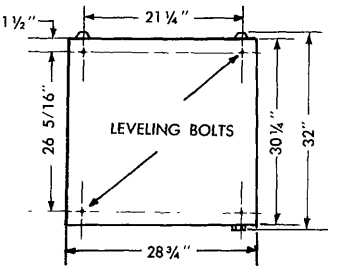
Consult your local building code requirements.

GAS INSTALLATION

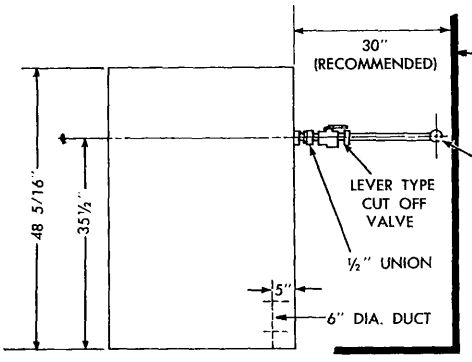
SEE NAMEPLATE ON FRONT OF GAS UNIT FOR B.T.U. INPUT RATING

Divide the combined B.T.U. input of all dryers by the B.T.U. heat value of the gas used, to determine the maximum total cubic feet of gas per hour required for the dryers. To this must be added the gas requirements of all other appliances, when determining the size of the gas service and the size of the connecting pipes. The connecting pipes must be sufficiently large to provide the lowest drop in gas pressure with all dryers and gas appliances in operation.





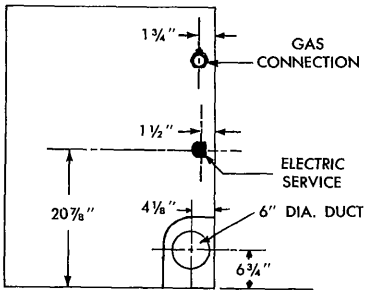
PLAN



SIDE VIEW

DRYER MUST BE ELECTRICALLY GROUNDED
Grounding method and external wiring connections must comply with all local electrical code requirements.

HEADER —
Size of header determined by number of dryers, type of gas and distance to gas meter. Consult your gas supplier or local plumbing code requirements.



REAR VIEW

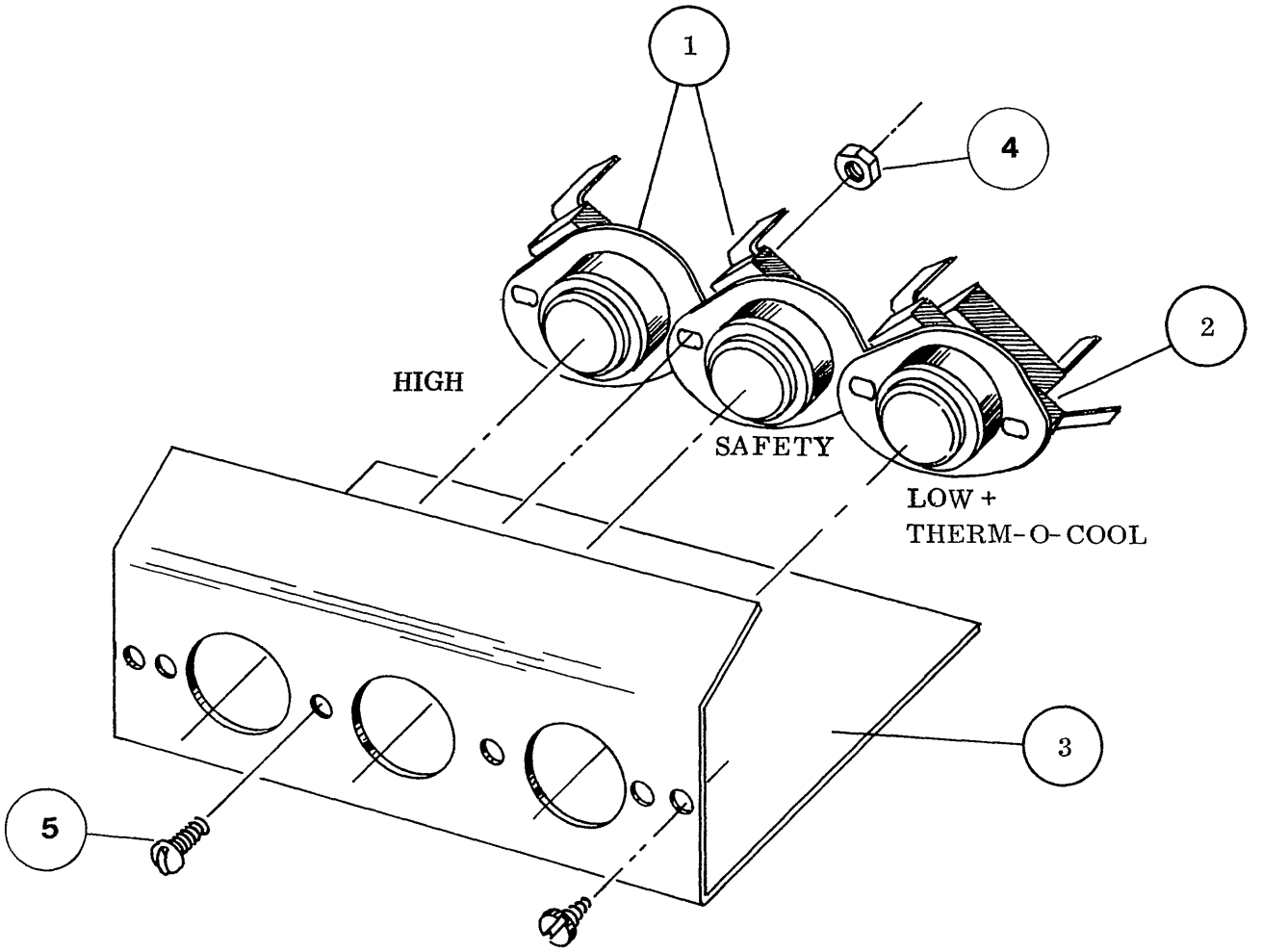
ART-231 Printed in U. S. A.

CISSELL®

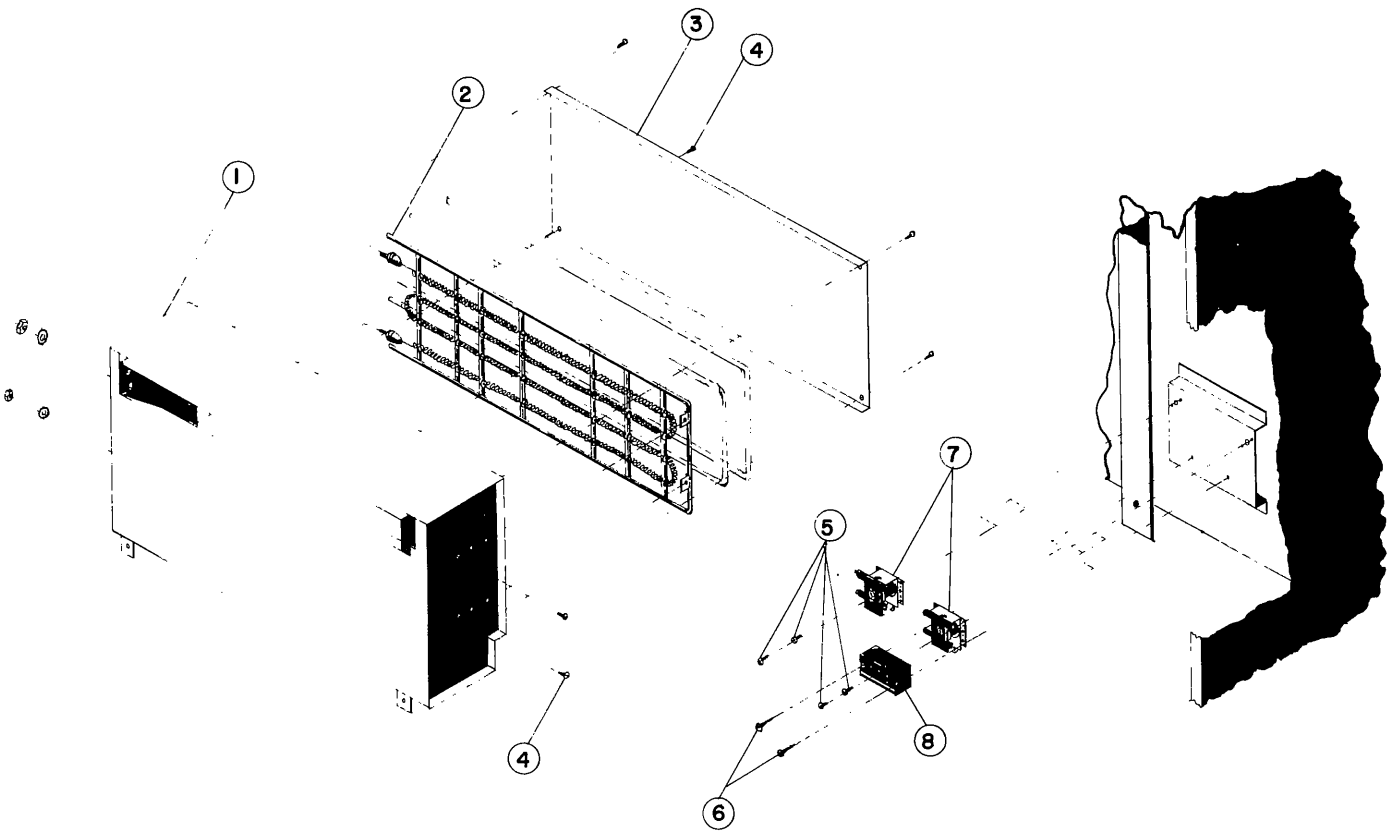
PETITE DRYER

THERMOSTATS AND BRACKET

PARTS

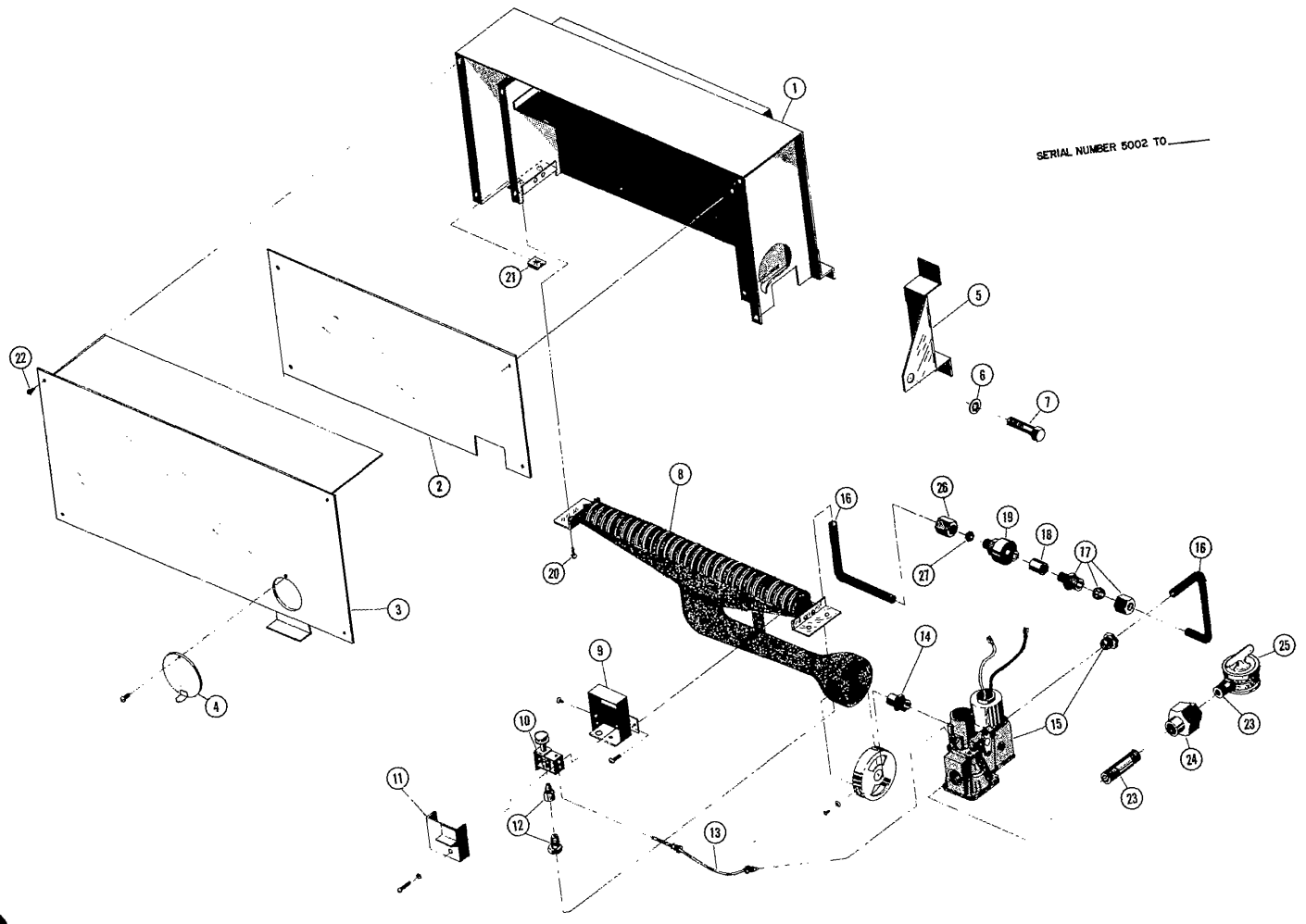


REF. NO.	PART NO.	DESCRIPTION
1	TU-3240	THERMOSTAT (2 REQ'D)
2	TU-2045	THERMOSTAT (THERM-O-COOL) (1 REQ'D)
3	TU-3565	MOUNTING BRACKET
4	TU3400	Brass Hex Nut (4)
5	TU3624	#6-32x¼ Rd. Hd. Screw (4)



ELECTRIC HEATING UNIT ASSY.
(Consists of Parts 1-4)
TU6899 - 240 V.
TU8773 - 208 V.
TU8774 - 380 V.
TU9176 - 480 V.

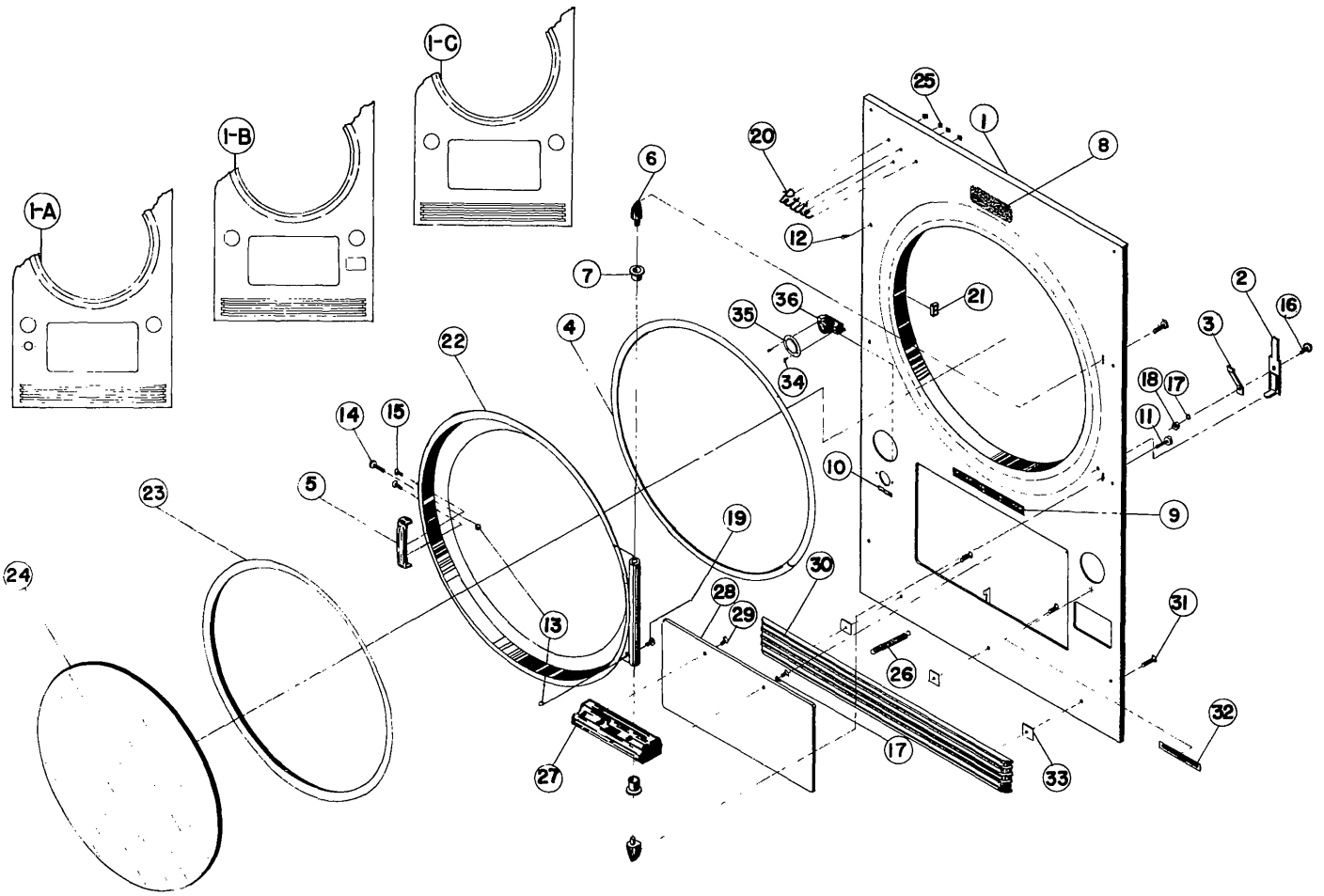
Ref. No.	Part No.	Description
1	TU7378	Electric Bonnet Weldment
2	TU3181	Heating Element 5 KW 240V. (3 req'd.)
3	TU7379	Outside Cover Plate
4	TU7733	8-18 x 1/2 Self Drill Screw
5	TU3218	#8 x 3/8 Self Drilling Screw
6	TU3416	#8 x 1 1/4 S.M.S.
7	TU1984	Relay 110V.
8	TU9143	Terminal Block



GAS HEATING UNIT

TU7493 Gas Heating Unit For Natural Gas 115V.
TU7494 Gas Heating Unit For Natural Gas 220V.
TU7495 Gas Heating Unit For L.P. Gas 115 V.
TU7492 Gas Heating Unit For L.P. Gas 220 V.
NOTE: Above Unit Assy's. Do Not Include Ref. No. 23, 24, 25.

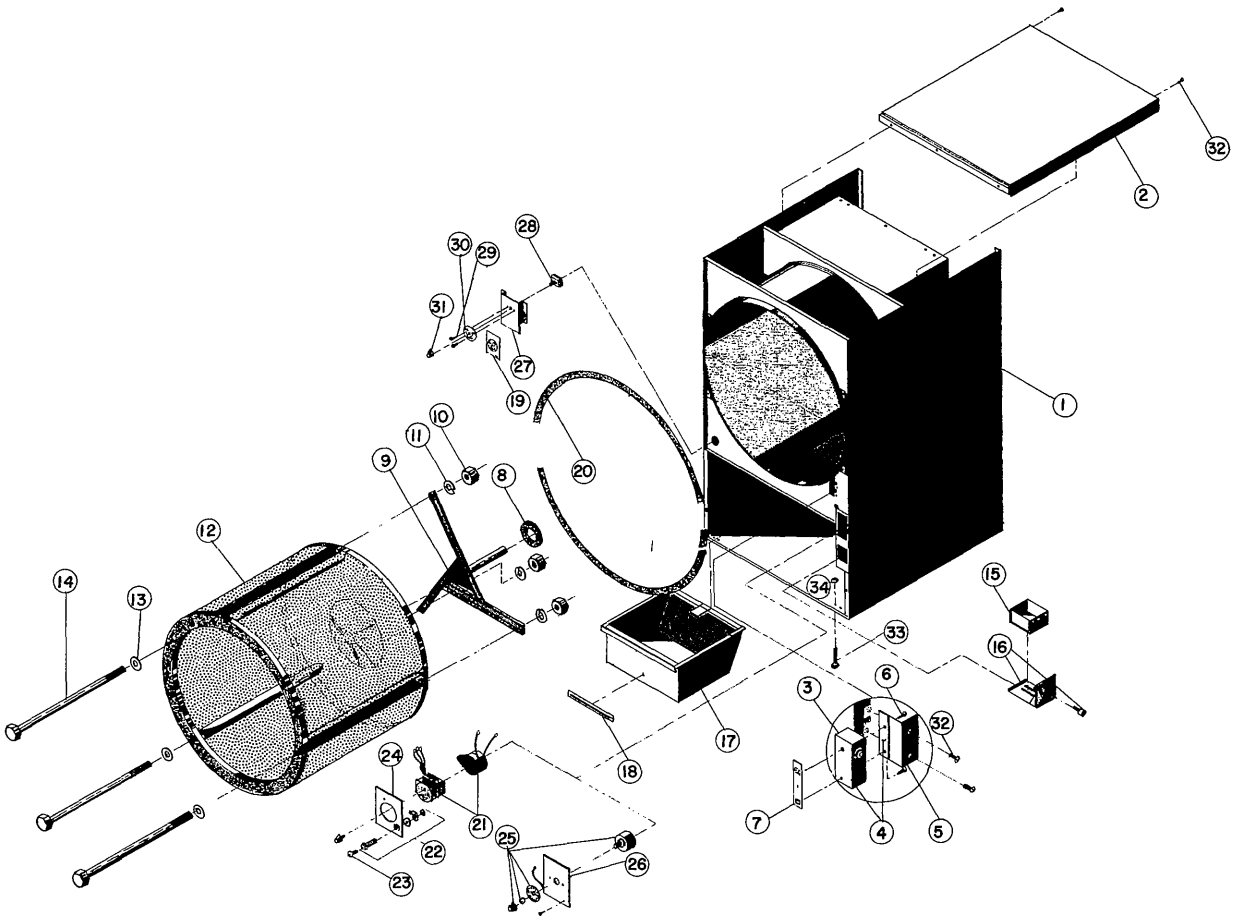
Ref. No.	Part No.	Description
1	TU7486	Gas Bonnet Weld Assy.
2	TU3640	Inner Heat Shield
3	TU3641	Furnace Rear Cover
4	TU3642	Pilot Inspection Sheet
5	TU7489	Valve Mounting Bracket
6	TU3243	3/8 Int. Tooth Washer
7	TU4914	3/8-23x1/2 Hex Hd. Cap Screw
8	TU7474	Gas Burner
	TU7491	L.P. Gas Burner
9	TU4697	Pilot Box
10	TU7534	Pilot Burner
	TU3710	L.P. Pilot Burner
11	TU3663	Pilot Box Cover
12	TU700	Pilot Orifice (Specify Size)
13	TUA157	Thermocouple Lead
14	TU3539	Burner Orifice (Specify Size)
15		See Basotrol Valve Sheet
16	TU5171	Gas Line
17	OP436	Connector
18	AT232	Coupling
19	TU7337	Pilot Filter
20	TU2878	#10 x 5/8 S.M.S.
21	TU2877	#10 Speed Nut
22	TU3218	#8x3/8 Self Drilling Screw
23	OP290	1/2" x 2" Pipe Nipple
24	OP314	1/2" Union
25	TU6321	1/2" Manual Gas Valve
26	SU65	Compression Nut
27	PU8	Compression Bead
	TU7664	L.P. Gas Tag (Not illustr



FRONT PANEL & DOOR ASSEMBLY

MODEL #L2820GP

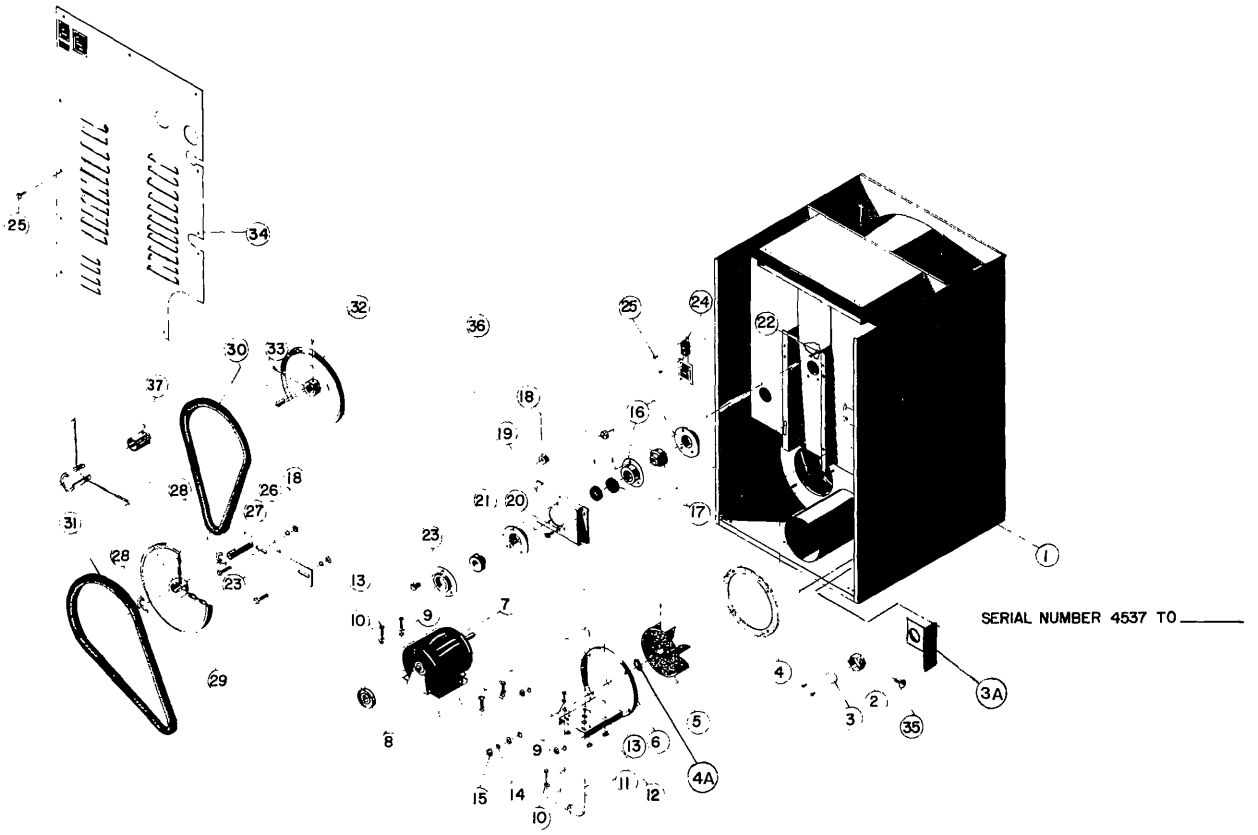
Ref. No.	Part No.	Description
1	TU8340	Front Panel (coin meter) Gas Only
1a	TU8341	Front Panel (time-temp.) Gas Only
1b	TU3510	Front Panel (coin meter) Electric Only
1c	TU3512	Front Panel (time-temp.) Electric Only
2	TU2194	Door Switch Actuator
3	TU2105	Door Switch Spring
4	TU2090	Basket Door Seal
5	TU2874	Basket Door Handle
6	TU2236	Hinge Post (2 req'd)
7	PIF172	Delrin Bearing (2 req'd)
8	TU7855	Name Plate
9	TU7858	Clean Lint Name Plate
10	TU8342	Push-To-Start Label
11	TU2836	5/16" - 18 x 1/2" Hex Head
12	TU2878	#10 x 5/8 S.M.S.
13	TU4840	#10 - 32 Hex Crown Nut
14	TU3163	Catch Pin
15	TU3215	#10-32 x 3/8" Taptite Screw
16	M262	#8-32 x 3/8" Truss Head Screw
17	FB187	#10 Split Lock Washer
18	TU3266	#8 - 32 Hex Head Nut
19	TU4839	#10-32 x 3/8" Machine Screw
20	TU3145	"Petite" Name Plate
21	TU7456	Door Catch Ass'y. (W/rivets)
22	TU7171	Basket Door Weldment
23	TU7169	Rubber Gasket
24	TU7862	Door Glass
25	TU3147	Push-on Nut
26	CB 19	Extension Spring
27	TU3176	Lint Door Handle
28	TU3511	Lint Door
29	F 557	#10-24 x 3/8 Rd. Head Mach. Screw
30	TU23841	Trim
31	TU3218	#8 x 3/8 S.D.S.
32	TU2683	Additional Coins Plate
33	TU2710	Trim Holder
34	ET 208	6-32 x 1/4" Binding Head Screw
35	PT 107	Switch Spacer
36	PT 111	Push to Start Switch



FRONT VIEW

Ref. No.	Part No.	Description
1	TU6898	Welded Jacket Assy.
2	TU3105	Top
3	TU1979	Door Switch
4	TU1770	Insulator
5	TU2373	Door Switch Bracket
6	TU3219	#6 x 1" S.M.S.
7	TU1771	#6 Tinnerman Twin Nut
8	TU108	Felt Seal
TU7189 Basket Complete consists of Ref. No. 9-14		
9	TU7185	Spider Welded Assy.
10	TU2882	1/2-20 Hex Nut
11	TU2831	1/2" Split Lock Washer
12	TU7374	Basket Weldment
13	TU2883	1/2" Cut Washer
14	TU3117	Tie Rod
15	CM35	Coin Box
16	CM61	Coin Vault Lock Assy.
17	TU3432	Lint Drawer
18	TU1893	Lint Drawer Plate
19	TU3146	HI-LO Control Plate (used w/Coin Meter)
20	TU2472	Sweep Sheet Gasket

Ref. No.	Part No.	Description
TU4991 Coin Operated Timer 110V. 60 Cy.		
TU6175 Coin Operated Timer 220V. 60 Cy.		
consists of Ref. No. 21-24		
21	TU3070	Coin Meter 110V.
	TU3071	Coin Meter 220V.
22	TU4822	Lock & Cam Assy.
23	TU2844	Key
24	TU3271	Coin Meter Mtg. Plate
TU4999 Timer & Panel Assy.		
consists of Ref. No. 25-26		
25	TU3279	Timer Control Assy.
26	TU5003	Timer Mtg. Bracket
TU5004 HI-LO Temp. Control		
consists of Ref. No. 19, 27-31		
27	TU3238	Mtg. Bracket
28	TU3159	Control Switch
29	TU3624	#6 x 1/4" R.H.M.S.
30	TU3198	HI-LO Control Plate (for use w/Time-Temp)
31	TU3164	Knob
32	TU3218	#8 x 3/8 S.D.S.
33	TU3211	Leveling Bolt
34	TU4937	Jam Nut



REAR VIEW

Ref. No.	Part No.	Description
1	TU6898	Welded Jacket Assy.
2	SB35	Electrical Outlet Box
3	SB170	Electrical Box Cover
3A	TU9262	Bracket
TU5308 Fan Complete		110V.
TU6219 Fan Complete		220V.
Consists of Ref. No.		4-13
4	TU3182	Gasket
4A	TU4793	Felt Gasket
5	TU3555	Fan
6	TU3466	Motor Mount Weldment
7	TU3439	Motor 110V. 60 Cyc.
	TU3440	Motor 230V. 50 Cyc.
	MTR4	Motor 230V. 50
8	TU6761	Sheave 60 Cyc. (TU6280-50 cyc.)
9	TU2846	1/4" Split Lock Washer
10	TU2847	1/4" Cut Washer
11	TU5309	Motor Mount Support
12	TU4934	1/4-20 Hex Nut
13	TU3148	¼"-20x5/8 Hex Hd. Cap Screw
14	TU4672	5/16" Internal Tooth Washer
15	TU3125	5/16"-18 Hex Nut
16	TU7018	Bearing Housing
17	TU3401	Bearing
	TU3403	Collar

Ref. No.	Part No.	Description
18	TU3188	3/8-16 Nylock Nut
19	TU7162	Bearing Bracket
20	IB140	3/8" Flat Washer
21	TU3246	3/8-16x1 Hex Hd. Bolt
22	TU7178	3/8-16x3/4 Rib Neck Bolt
23	TU4936	3/8-16x3/4 Carriage Bolt
24	TU8206	Air Switch
25	TU3218	#8x3/8 S.D.S.
26	TU3243	3/8" Int. Tooth Washer
27	TU4947	Idler Bracket
28	TU3247	"E" Ring
29	TU3183	Idler Sheave
30	TU3472	V-Belt 4L520
31	TU3394	V-Belt 4L500
32	TU3187	Basket Sheave
33	TU3167	Key
34	TU3108	Back Panel (gas)
	TU3190	Back Panel (Elec.)
35	TU2372	Snap Bushing
36	TU7186	Bearing Bracket Assy. Consists of Ref. No. 6-21 & 23
37	TU3828	Bronze Bushing

INSTRUCTION FOR ALIGNING BASKET

1. LOOSEN THREE BOLTS IN REAR BEARING FLANGE, FIGURE 3, AND LOOSEN BEARING COLLAR. LOOSEN COLLAR ONLY ON FRONT BEARING.

2. PLACE THE "A" AND "B" PINS INSIDE THE DRYING COMPARTMENT BETWEEN THE RIM OF THE BASKET OPENING AND THE RIM OF THE DOOR OPENING IN THE POSITIONS SHOWN IN FIGURE 1 AND FIGURE 2.

3. PUSH THE BASKET TO THE REAR OR PULL TO THE FRONT, WHICHEVER IS REQUIRED TO MAKE THE BASKET APPROXIMATELY FLUSH WITH THE DOOR OPENING FLANGE, PLUS OR MINUS 1/8".

4. WITH THE PINS IN POSITION, RETIGHTEN BEARING FLANGE BOLTS AND COLLAR, THEN REMOVE PINS.

5. CHECK THE SPACE BETWEEN BASKET AND DOOR OPENING AT "B" PIN POSITION (FIG. 2). IF THE GAP IS NOT APPROXIMATELY THE SAME ON BOTH SIDES, REPEAT SAME STEPS OVER.

NOTE: USE SHORT ROUND STEEL ROD FOR PINS.

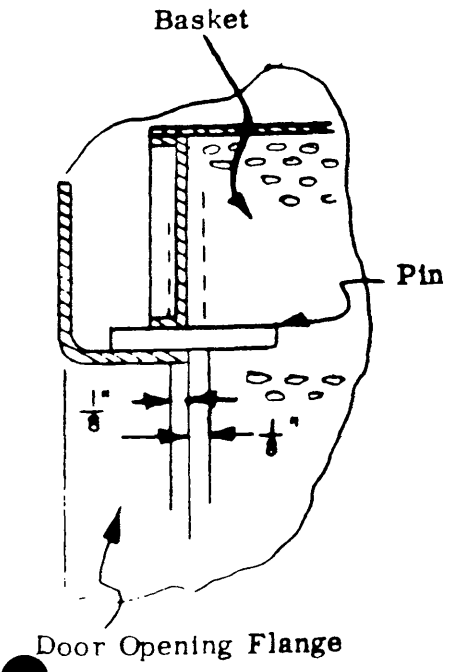


FIGURE 1

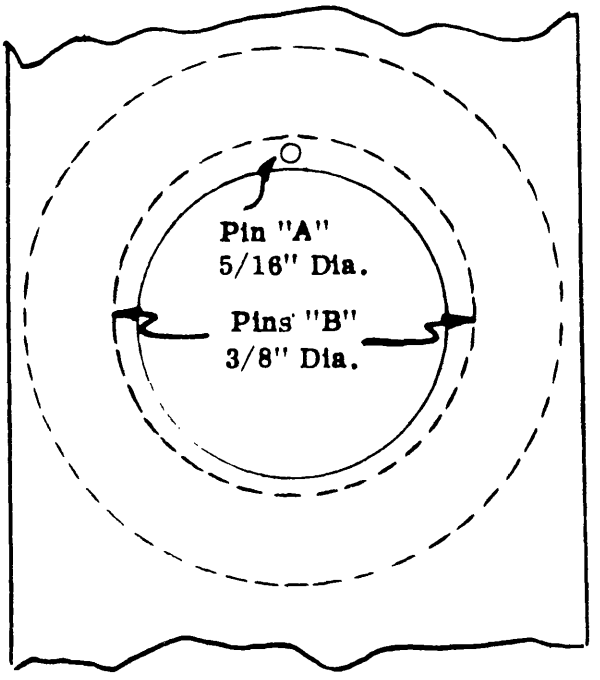


FIGURE 2
Dryer Door Opening
(Front View)

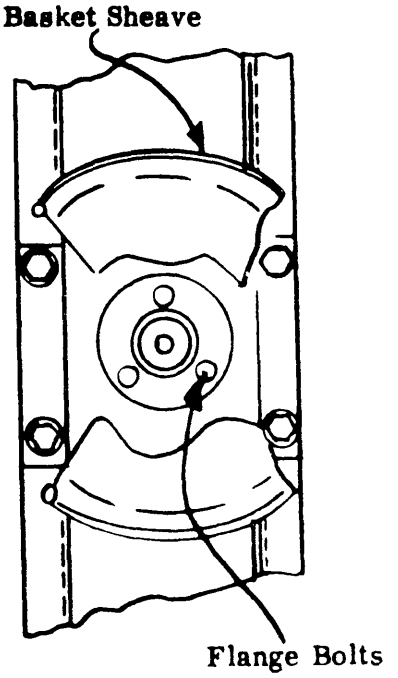


FIGURE 3

TROUBLE SHOOTING CHART FOR PETITE DRYER GAS FIRED & ELECTRIC

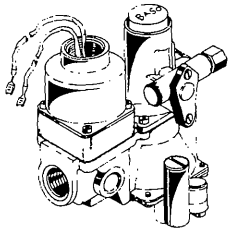
TROUBLE	CAUSE	REMEDY
Motor won't start Gas & Electric	Line fuse blown	Replace fuse
	Defective timer	Greenwald Series 5900 - See Greenwald Service Manual " " 5700 - " " " " Cissell TU6210 - Replace Timer
	Defective motor	Replace or take to General Electric Authorized service station for repairs.
	Loose or Broken Wires	Replace
Basket won't revolve - heating unit won't come on Gas & Electric	Loading door open	Close door
	Door Switch out of adjustment	Adjust Door Switch
	Door Switch defective	Replace Switch
	Defective relays	Replace Relay
Basket revolves Heating unit doesn't operate Gas & Electric	Air Switch not operating	Clean lint drawer Check duct work for lint buildup. Check installation sheet to insure that duct work and make up air openings are adequately sized.
	Air Switch out of adjustment	See Air Switch Adjustment Sheet in Service Manual
	Air Switch defective	Replace Switch
	Pilot Out	Refer to pilot section
	Gas turned off	Open manual gas valve
	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.
	Defective LOW thermostat	Replace thermostat
	Defective safety overheat thermostat	Replace thermostat
	Defective gas valve	Replace solenoid unit. See gas valve sheet in service manual for proper specifications
	Defective relays	Replace Relay (Electric Only)
Basket won't revolve - furnace comes on Gas & Electric	V-Belt Broken	Replace V-Belt
	V-Belt Loose	Adjust belt tension
	Motor pulley loose	Tighten set screws
	Basket Overloaded	Remove load
Dryer doesn't stop at end of time period Gas & Electric	Defective LOW thermostat	Replace Thermostat
	Defective timer	Greenwald Series 5900. See Greenwald Service Manual " " 5700. " " " " Cissell TU6210 - Replace Timer

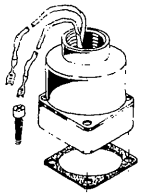
TROUBLE	CAUSE	REMEDY
Main burners burning with yellow flame Gas only	Air shutter closed	Open air shutters on front of burners to give sharp blue flame
	Dirt in burner	Remove burners and blow out with compressed air
	Gas pressure too high	Check manifold pressure and adjust to pressure specified on rating plate.
	Orifices too large	Check with gas supplier to insure that gas being used is the same as that specified on the rating plate. If not, contact the factory for new orifices giving proper gas specifications.
Pilot burner won't light Gas only	Gas turned off	Open manual gas valve
	Pilot orifice blocked	Remove and clean. See General Maintenance sheet in service manual.
	Gum filter clogged	Replace with new filter
Pilot burner lights but won't stay lit Gas only	Defective thermocouple	Replace thermocouple
	Pilot orifice dirty	Remove and clean. See General Maintenance sheet in service manual
	Gum filter partially clogged	Replace with new filter
	Defective power unit	Replace. See gas valve sheet in service manual for proper specifications
Motor tripping on thermal overload Gas & Electric	Low voltage High voltage	Check voltage at motor terminals. Voltage must be within (plus or minus) 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	Check installation sheet in service manual for recommended make up air openings. Poor air movement or high ambient temperatures around the motor decreases the heat dissapation from the motor and can result in "nuisance trips" of the thermal protector.
	Poor housekeeping	Lint accumulation in the ventilation openings of the motor and insulating blankets of lint on the motor housing will cause a heat build up within the motor and result in thermal tripping of the motor.

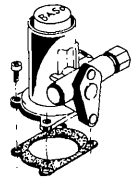
TROUBLE	CAUSE	REMEDY
Dryer does not heat - Excessive drying time Gas only	Line Fuse Blown To Heating Unit	Replace Fuse
	Power to Heating Unit turned off	Turn on Power
	Pilot burner out	Relight pilot burner refer to pilot section
	Main burners not operating	Refer to section in this chart covering this problem
	LOW thermostat defective	Replace
	Gas pressure too low	Check manifold pressure and adjust to pressure specified on rating plate.
	Gas turned off	Open manual gas valve.
	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.
Dryer too hot Gas & Electric	Lint accumulated on thermostat	Clean thermostat by brushing off lint.
	LOW thermostat defective	Replace thermostat
	Inadequate make up air	Check installation sheet in service manual for recommended minimum make up air opening.
	Gas pressure too high (Gas)	Check manifold pressure and adjust to pressure specified on rating plate.
	High voltage Electric	Check voltage. Voltage must be within (plus or minus) 10% of voltage shown on rating plate. If not, check with local power company for recommended corrective measures
	Partially restricted or inadequately sized exhausting system	Check installation sheet in service manual for recommended sizes. Check for and remove obstructions or lint build up from duct work.
Excessive noise or vibration	Dryer not level	Check leveling bolts to make sure of good contact between all four bolts and floor. Adjust bolts to level dryer.
	Basket out of adjustment	Adjust basket. See basket adjustment sheet in service manual.
	Foreign object stuck in basket perforation and dragging on sweep sheets	Remove.
	Loose object in basket	Remove
	V-Belt too loose, too tight, or rubbing fan guard	Adjust and align belt to eliminate rubbing.
	Motor pulley loose	Tighten set screw.
	Fan Blade loose	Check clearance between fan blade and inner edge of inlet ring. Adjust to $\frac{1}{2}$" and tighten set screws on fan blade.

BASOTROL GAS VALVES FOR
ALL CISSELL GAS FIRED DRYERS

1-6372







	COMPLETE BASOTROL VALVE				REPLACEMENT ELECTRIC OPERATOR		REPLACEMENT POWER UNIT	
	CISSELL PART NO.	BASOTROL PART NO.	TYPE GAS	VOLTAGE	CISSELL NUMBER	BASOTROL NUMBER	CISSELL NUMBER	BASOTROL NUMBER
PETITE DRYERS	TU3701	G92YAA-1	LIQUID PETROLEUM	120V	TU3705	R54889-122A	TU3707	R54319-38
	TU3702	G92YBA-1	LIQUID PETROLEUM	240V	TU3711	R54889-122B	TU3707	"
	TU3703	G93YAA-1	NATURAL, MIXED	120V	TU3705	R54889-122A	TU3707	"
	TU3704	G93YBA-1	NATURAL, MIXED	240V	TU3711	R54889-122B	TU3707	"
OTHER DRYERS	TU3818	G93AAA-8	NATURAL, MIXED, MFG.	120V	TU3832	R54889-144A	TU3838	R54319-59
	TU3819	G93ABA-6	NATURAL, MIXED, MFG.	240V	TU3833	R54889-143A	TU3838	"
	TU3817	G92CAA-11	LIQUID PETROLEUM	120V	TU3836	R54889-151A	TU3838	R54319-59
	TU3820	G92CBA-8	LIQUID PETROLEUM	240V	TU3837	R54889-150B	TU3838	"

AIR SWITCH ADJUSTMENT

1. Shut off current; disconnect leads and remove air switch.

2. Lay air switch assembly on flat surface and stand up on small end of switch mounting bracket. Adjust air blade by bending at "A" (Fig. 1) so that air blade lays flat and surface "G" is parallel to the flat surface.

3. Place 3/16" x 5/8" spacer bar "B" (Fig. 2) under air blade in position shown; hold switch mounting bracket firmly and adjust switch actuator "C" with needle nose pliers at "D" by twisting actuator right or left whichever is needed so that switch closes when end of air blade engages bar "B".

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.

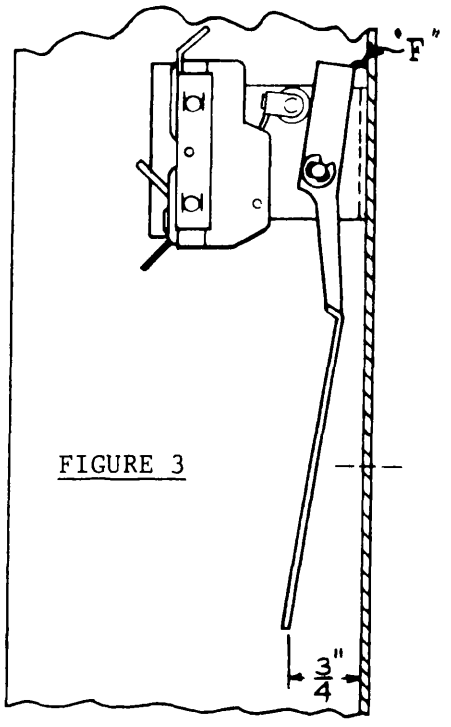


FIGURE 3

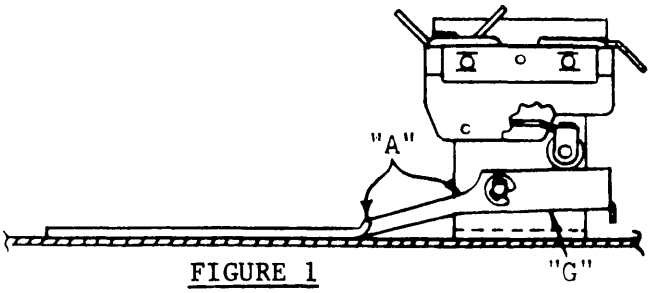


FIGURE 1

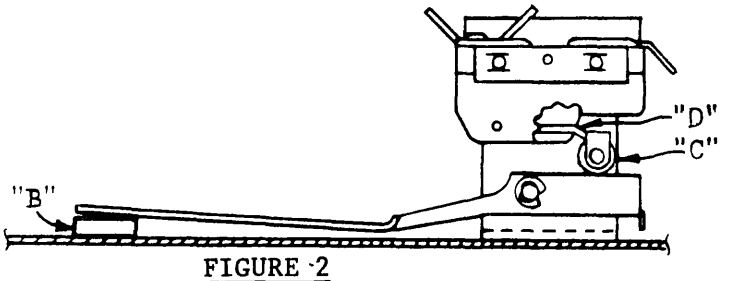
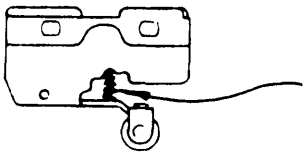


FIGURE 2



NOTE: WHEN REPLACING THIS SWITCH MAKE SURE EXTERNAL SPRING IS REMOVED AND DISCARDED.