

SERVICE MANUAL 36BD30 LAUNDRY DRYER

Steam-Gas-Electric

Installation

Operation

• Service

Parts

W.M. Cissell Manufacturing Company Louisville, Kentucky U.S.A.

> Trademark[®]Registered Marca[®]Registrada

D0090 Printed in U.S.A.

Index

WARRANTY	Page	1
SPECIFICATION	Page	4-5
INSTALLATION	Page	6-10
SERVICE AND MAINTENANCE	Page	11-13
PARTS AND HARDWARE	Page	14-31
TROUBLE SHOOTING	Page	35-39

CAUTION

DO NOT PUT INTO THIS DRYER FLAMMABLE ITEMS SUCH AS:

•BABY BED MATTRESSES

•THROW RUGS

• UNDERGARMENTS (Brassieres, etc.)

AND OTHER ITEMS WHICH USE <u>RUBBER AS</u> A PADDING OR BACKING! RUBBER EASILY OXIDIZES CAUSING EXCESSIVE HEAT AND POSSIBLE FIRE. FLAMMABLE ITEMS SHOULD BE AIR DRIED.

GENERAL INFORMATION

The Cissell 36BD30 Double Motor Dryer has a rotating basket 36" diameter and 30" deep and a capacity of 50 pounds dryweight for a maximum moisture retention of 100%. When operator opens door, basket stops; exhaust fan continues to run, thus drawing outside air into basket through open door. This prevents a blast of hot air into operators' face.

You can expect fast drying from a Cissell 36BD30 Laundry Dryer. Hot, dry air is properly and effectively moved through basket and exhausted through a lint trap to atmosphere.

The Cissell 36BD30 comes equipped with an inclined self-cleaning lint screen. In this system, lint accumulates on the underside of the screen until a blanket approximately 1/4'' thick is formed. This blanket of lint will fall from the screen to the bottom of the dryer cabinet, and should be removed daily, or as required, to prevent an over accumulation.

As an alternate, Cissell offers a large full width lint drawer. Lint is collected within the drawer on a large perforated metal area which permits full air flow while reducing the lint problem common to all clothes drying.

CISSELL "THERM-O-COOL" DRYERS

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

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 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.

<u>36BD30 DRYER</u> STEAM HEATED

HIGH PRESSURE ONLY

Operating Steam Pressure 128	5 lbs. max.
Boiler H.P 3.	8
(with normal load)	
Heat Capacity	Section Steam Heating Unit
Steam Consumption 12:	3 lbs. of condensate per hour
Steam Supply Line l"	
Steam Return Line	4''
Net Weight (approx.)	0 lbs.
Domestic Shipping 70	5 lbs.
Weight (carton (approx.)	
Export Shipping 118	0 lbs.
Weight (1 box) (approx.)	
Export Shipping 83	"(L) x 45"(W) x 55"(H)
Dimensions	
Export Crating ll8	8.9 cu. ft.
BASKET LOAD CAPACITY	50 LDS DRYWEIGHT
(For a Maximum Moisture Retention of 100%)	JULES. DRIWEIGHT
(FOT a maximum moisture netention of 100%)	
Electrical	110 or 220 V 60 or 50 Cv
	1 Ph., 220 V., 60 or 50 Cy.,
	3 Ph.
Basket Motor	
Fan Motor	
Floor Space.	
•	x 45-1/8" deep
Exhaust Duct	· •
Maximum Air Displacement	
Recommended Operating Range	
LOW PRESSURE ONLY	
Operating Steam Pressure	7 to 15 pounds
Boiler H.P.	2.9
(with normal load)	
Heat Capacity	9-Section Steam Heating Unit
Steam Consumption	76 pounds of condensate per
	hour
Steam Supply Line	1''
Steam Return Line	3/4''

36BD30 DRYER GAS-HEATED

BASKET LOAD CAPACITY...... 50 LBS. DRYWEIGHT (For a Maximum Moisture Retention of 100%)

Electrical	ll5 or 230V., 60 or 50 Cy., l Phase; 230V., 60 or 50 Cy., 3 Phase
Fan Motor	1/3 H.P.
Basket Motor	50 lb1/2 H.P.
Floor Space	75" high x 45-1/8" deep x 37-7/8" wide
Basket Size	36" dia. x 30" deep
Exhaust Duct	8" dia.
Maximum Air Displacement	800 cfm
Recommended Operating Range	580–680 cfm
Net Weight	590 lbs. (approx.)
Domestic Shipping Wt. (carton)	655 lbs. (approx.)
Export Shipping Wt. (1 box)	1130 lbs. (approx.)
Cu. Ft. Export Crating	118.9
Export Shipping Dimensions	83" (L) x 45"(W) x 55" (H)
*B.T.U. Input (2 Burners)	Approx. 130,000 per hr.

*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.

36BD30 DRYER ELECTRICALLY HEATED

Electrical	230 V., 60 or 50 Cy. 1 or 3 phase
Floor Space	75" high x 45-1/8" deep x 37-7/8" wide
Basket Size	36" dia. x 30" deep
Air Exhaust	8" dia.
Motor Size	Basket, 1/2 H.P., 50 lb.
	Basket, 1/3 H.P., 40 lb.
	Fan, 1/3 H.P., 50 lb. or 40 lb.
Max. Air Displacement	800 CFM
Recommended Operating Range	580-680 CFM
Heater Input	17 Kilowatts per hour
	73.9 amps total heater current; l phase
	42.73 amps heater current; 3 phase
Basket Door Opening	22-5/8" dia.
Dry Weight Capacity	50 lbs.
Drying Time (Indianhead, 12 lbs. dry	
weight. 70% moisture retention)	
approximately	20 minutes
Net Weight (approximately)	590 lbs.
Domestic Shipping Weight (1 carton)	655 lbs. (approx.)
Export Shipping Weight (Box)	1130 lbs. (approx.)
Export Shipping Dimensions (Box)	
Cubic Feet Export (Box)	
Electrical Wiring to Dryer Must Comply w	ith Local Electrical Code Requirements.
A Separate Circuit is Required for the Ele	cirical neater

The construction of Cissell Cabinet 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 motor.

Before operating dryer, open basket door, remove blocking between front panel and basket; remove all tape used to secure dryer parts during shipment; level dryer; and read all instruction tags, etc.

EXHAUST DUCT

Vent the 8-inch diameter exhaust, on rear of dryer, to atmosphere. Do not reduce duct size. If vent is vertical through roof, install two elbows on the discharge end forming a "U" looking down; if vent is horizontal through wall, install one elbow on the discharge end looking down, to prevent wind, rain, snow, sleet, etc., from entering duct and flowing down to dryer.

For multiple dryer installations, it is preferable to vent each dryer individually with a separate duct.

When conditions require the use of a single exhaust duct for several dryers, the piping from each dryer should enter the single duct at an angle of approximately 30° , and in the direction of the air flow. The cross sectional area of the single exhaust duct should equal the combined areas of the dryer ducts connected to it. Make all exhaust connections with the least amount of elbows to reduce air resistance to a minimum. Provide cleanout and inspection openings in the horizontal sections of the duct work.

On multiple installations employing a single exhaust duct, there should be no back draft to interfere with the normal free discharge of air from each dryer.

Before approving duct installation, place each dryer in operation; progressively open each dryer door; manually trip door switch, and see that air is drawn into the basket door opening as freely as it is when all other dryers are stopped.

Keep the exhaust ducts clean. Do not install wire mesh or screen in the discharge <u>opening</u> of the duct, as lint will build up and prevent proper discharge of air from dryers.

ELECTRICAL CONNECTIONS (ALL DRYERS)

DRYERS MUST BE ELECTRICALLY GROUNDED by a separate #14 or larger wire from the grounding terminal within the service connection box to a cold water pipe; or through the grounded neutral of a 3-wire system properly grounded and connected to the grounding terminal. In all cases, the grounding method must comply with local electrical code requirements.

See wiring diagram furnished with dryer. Your Cissell dryer is completely wired at the factory and it is only necessary for the electrician to connect the power leads to the wire connectors within the service connection box on the rear of the dryer. Do not change wiring without consulting factory as you may void the factory warranty. Do not connect the dryer to any voltage or current other than that specified on the tags placed on the power leads of the dryer. <u>Electrically heated dryers require one line circuit for the drive motor and controls, and a separate line circuit for the electrical heating unit.</u>

6

GAS-FIRED DRYER INSTALLATION

Efficient operation of Gas-Heated dryers depends upon the use of the proper orifice in both gas pilot and main burner to suit the type of gas and its pressure. When measuring gas pressure, place all gas equipment in operation, and measure the gas pressure in the burner manifold with the main burner operating. 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.

For proper gas specifications, pressures, size of meter service and size of the gas line connecting the gas meter and dryer, consult your gas company. If gas performance is unsatisfactory, request the gas company to make an actual pressure test with the dryer and all other gas equipment in operation. If the pressure is different from that specified on the name plate of Gas-Heating unit, write the Cissell factory, giving the correct gas pressure, the B. T. U. specifications of the gas in BTU's per cubic foot, and the specific gravity of the gas and correct orifices will be sent you. Do not operate a gas dryer with incorrect orifice sizes.

The main burner has a fixed orifice to provide a rated BTU input, only when operated on the type of gas and pressure specified. Lower pressures will increase drying time... higher pressures will require closer attention to avoid scorching. Connect gas supply line to gas inlet line of dryer with a union and gas cock so that gas to dryer can be shut off when necessary.

STEAM PIPING RECOMMENDATIONS

- 1. Trap each dryer individually. Always keep the trap clean and in good working condition.
- 2. When dryer is on the end of a line of equipment extend headers at least 4 ft. beyond dryer. Install globe valve, union, check valve and by-pass trap at end of line. If gravity return to boiler, omit trap.
- 3. Insulate steam supply and return line for safety of operator and safety while servicing dryer.
- 4. Keep dryer in good working condition. Repair or replace any worn or defective parts.

INSTRUCTIONS FOR STEAM CONNECTIONS

IMPORTANT: INSTALL STEAM PIPING IN ACCORDANCE WITH ALL LOCAL REGULATIONS AND REQUIREMENTS

- 1. Set and anchor dryer in position. Machine should be level to assure proper steam circulation.
- To prevent condensate draining from headers to dryer, piping should have a minimum riser 12" above each respective header as illustrated. Do not make steam connection to header with a horizontal or downwardly facing tee or elbow.
- 3. Whenever possible, horizontal runs of steam lines must drain, by gravity, to respective steam header. Water pockets, or an improperly drained steam header will provide wet steam, causing improper operation of dryer. If pockets or improper drainage cannot be eliminated install a by-pass trap to drain condensate from the low point in the steam supply header to the return.
- 4. In both the steam supply and steam return line, it is recommended that each have a 1/2" union and 1/2" globe valve. This will enable you to disconnect the steam connections and service the dryer while your plant is in operation.
- 5. Before connecting trap and check value to dryer, open globe value in steam supply line and allow steam to flow through dryer to flush out any dirt and scale from dryer. This will assure proper operation of trap when connected.
- 6. After flushing system, install bucket trap (w/built-in strainer) and check valve as illustrated. For successful operation of dryer, install trap 18" below coil and as near to dryer as possible. Inspect trap carefully for inlet and outlet markings and install according to trap manufacturers instructions. If steam is gravity-returned to boiler, omit trap but install check valve in return line near dryer.
- 7. Install union and globe valve in return line and make final pipe connections to return header.

831 S. FIRST STREET . P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201 Foreign Distributors: Address Correspondence Attention Export Department © Cable Cade "CISSELL" Pacific Coast Office, 4823 W. Jefferson Blvd., Los Angeles

Ask Your Distributor

When ordering, specify part number and name.

EXHAUST DUCT INSTALLATION

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



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



CI22F LL~ DUCT INSTALLATION 28BS30 28BD30 36BS30 36BD30 DRYERS

12

Consult your local building





ALL DEMENSIONS GIVEN IN INCHES : 1/4 OVERALL DIMENSIONS TYPICAL FORALL 36B30 DRYERS

10

SIDE VIEW

- 1. CLEAN LINT TRAP DAILY: Remove lint before starting day's operation. A clean lint trap will increase the efficiency of the dryer, as the moisture laden air will be exhausted to the atmosphere more quickly. A blocked lint trap will cause the air switch to open, cutting off the gas and stopping the basket. This applies to either the lint drawer or the inverted self cleaning lint screen.
- 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. Take screws out of front panel, then lift panel off.
- 3. PULLEYS (SHEAVE) AND BELT: Keep belts clean. Oil and dirt will shorten the useful life of a belt. Never allow a belt to run against the belt guard. Check belts periodically for alignment. Pulley shafts must be parallel and the grooves must be in alignment. To align pulley, loosen set screw and slide pulley in in or out to align up with the other pulley. Tighten set screw securely.
- 4. ELECTRIC MOTORS: Keep motors clean and dry. Occasionally blow dust out of winding. Lubricate motors 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, disconnect 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.

INSTRUCTIONS FOR LIGHTING BURNER

Unlock upper front cover; raise cover for access to gas controls.

- 1. Be sure manual shut-off valve (s) have been shut off for at least five minutes before proceeding.
- 2. Open valve (s) in gas line.

11

- 3. Depress pilot safety button (Red). Light pilot, keep red button depressed for 30 seconds, then release. If pilot does not remain lighted--repeat operation.
- 4. Operate dryer and see that pilot flame ignites burner.

If pilot flame fails, automatic gas valve will close within two minutes. Investigate cause of pilot failure. Correct and relight pilot.

Adjust air mixture to produce a good blue flame on burner by rotating the round disc on air mixer to the right or left.

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 "B" is parallel to the flat surface.
- 3. Place 3/16" x 5/8" spacer bar or equivalent "C" (Fig. 2) under air blade in position shown; hold switch mounting bracket firmly and adjust switch actuator "D" with needle nose pliers at "E" by twisting actuator right or left whichever is needed so that switch closes when end of air blade engages bar "C".
- 4. Maximum opening of air switch must be no greater than 3/4'' (Fig. 3). Bend tab "F" in or out to maintain this dimension.
- 5. Re-install air switch assembly on rear of dryer.
- 6. Re-check operation of air blade. Switch must close before air blade engages face of opening and re-open before stop "F" engages.



INSTRUCTIONS FOR ALIGNING BASKETS ON CISSELL DRYERS

- 1. Loosen four Gear Reducer mounting bolts (numbers 1, 2, 3 and 4) on rear of dryer
- 2. Place the "A" & "B" diameter pins (see chart for size) inside the drying compartment between the rim of the basket opening and the rim of the door opening in the positions shown.
- 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 housing mounting bolts in the numberical order indicated, then remove pins.
- Check the space between basket and door opening at "B" pin position. If the gap is not approximately the same on both sides, repeat steps 1, 2, 3 and 4.

NOTE: USE SHORT SECTIONS OF ROUND STEEL ROD FOR PINS OR DRILL BITS MAY BE USED IN PLACE OF ROUND ROD.

DRYER	PIN DIA. A	PIN DIA. B
28 B S 30	7,6	5/16
28 B D 30	3/8"	5/16
36 B S 30	%16"	7/16
36 B D 30	9/16 ^{°°}	7/16







W. M. CISSELL MANUFACTURING COMPANY 831 S. FIRST STREET • P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201 Foreign Distributors: Address Carrespondence Attention Export Deportment • Cable Code "CISSELL" Pacific Coast Office, 4823 W. Jefferon Blvd., Los Angeles Ask Your Distributor

When ordering, specify part number and name.

CISSELL® DRYER

FRONT VIEW PARTS



Ref. <u>No.</u>	Part No	Description
1	TU5788	Jacket Welded Assembly
2	TU2621	Solid Top (not used on Steam)

CON'T ON FOLLOWING PAGE

Ref.	Part	
No.	No.	Description
	, <u>, , , , , , , , , , , , , , , , , , </u>	
<u>TU4828</u>	DOOR SWIT	<u>CCH ASSEMBLY</u> consists of Ref. No. 3-7
3	TU1979	Door Switch
4	TU1770	Insulator
5	TU2373	Door Switch Bracket
***6	TU3219	#6x1" S. M. S.
***7	TU1771	#6 Tinnerman Twin Nut
<u>TU6010</u>	BASKET CO	<u>OMPLETE</u> consists of Ref. No. 8-14
8	TU108	Felt Seal
9	TU5173	Spider Welded Assembly
***10	TU2882	1/2"-20 Hex Head Nut
***11	TU2831	1/2" Split Lock Washer
12		Basket Weldment
13	TU2883	1/2" Cut Washer
14	TU2313	Tie Rod
15	CM35	Coin Box
16	CM61	Coin Vault w/Lock & Key
**17	TU3211	3/8"-16 x 2 1/2" Leveling Bolt
18	TU5810	Front Panel & Door Assembly See Page 16
<u>TU5808</u>	LINT DOOF	R ASSEMBLY consists of Ref. No. 19-24
19	TU5566	Lint Door Welded Assembly
20	TU5221	Handle
21	TU2710	Trim Holder
22	TU2385	Trim
23	TUC1867	Lock & Key
***24	F557	$#10-24 \times 3/8''$ Rd. Hd. Machine Screw
<u>TU5410</u>	SELF CLE.	ANING LINT TRAP ASSEMBLY consists of Ref. No. 25-26
25	TU5179	Lint Screen Housing
26	TU5261	Self Cleaning Lint Screen
27	TU5876	Set of 8 Sweep Sheet Gaskets
28	TU3204	Lock Plate
***29	M263	#8x3/8" S. M. S.
***30	TU2877	#10 Speed Nuts
**31	TU1978	$#14 \times 3/4''$ Lg. S. M. S.
**32	TU4937	3/8''-16 Jam Nut
33	TU2420	S. N. Plate
		Jultiples of 6

Sold in Multiples of 6 *Sold in Multiples of 12

15

i

W. M. CISSELL MANUFACTURING COMPANY 831 S. FIRST STREET . P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201 Foreign Distributors: Address Correspondence Attention Export Deportment © Cable Code "CISSELL" Pacific Coast Office, 4823 W. Jefferson Blvd., Los Angeles

Ask Your Distributor

When ordering, specify part number and name.

CISSELL DRYER

FRONT PANEL AND DOOR ASSEMBLY TU5810



Ref. No.

Part No.

Description

1

TU5534

Front Panel Welded Assembly

CON'T ON FOLLOWING PAGE

Ref. No.	Part No.	Description
<u>TU5269</u>	ACTUAT	OR ASSEMBLY consists of Ref. No. 2 - 6
2	TU2582	Actuator
3	TU2105	Actuator Switch
***4	M262	#8-32 Truss Head Screw
***5	FB187	#8 Split Lock Washer
**6	TU3266	#8-32 Hex Nut
<u>TU5857</u>	BASKET	DOOR ASSEMBLY consists of Ref. No. 7 - 16
7	TU5288	Basket Door Seal
8	PIF172	Delrin Bearing
9	TU2874	Basket Door Handle
10	TU5859	Basket Door Weldment
11	TU1692	Rubber Gasket
12	TU5110	Door Glass
***13	TU3215	#10-32 x 3/8" Taptite Screw
14	TU3163	Catch Pin
***15	TU4840	#10-32 Hex Crown Nut
***16	TU4839	#10-32 x 3/8" Machine Screw
17	TU2236	Hinge Posts
***18	TU2 8 36	$5/16''-18 \ge 1/2''$ Hex Head Cap Screw
***19	TU287 8	#10 x 5/8" S. M. S.
		NLY IN MULTIPLES OF 6 NLY IN MULTIPLES OF 12

20

TU6336

Cover Plate (Used W/O Coin Meter & Box)

W. M. CISSELL MANUFACTURING COMPANY 831 S. FIRST STREET • P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201 Foreign Distributors: Address Correspondence Atlention Export Deportment • Cable Cade "CISSELL" Pacific Cast Office, 4823 W. Jefferson Blvd., Los Angeles

Ask Your Distributor When ordering, specify part number and name.

CISSE LLW DRYERS

Thermostats TU5408



Ref. No.	Part No.	Description
1	TU2045	Thermostat
2	TU3240	185 ⁰ Thermostat
3	TU5149	165 ⁰ Thermostat
4	TU5150	150 ⁰ Thermostat
5	TU5143	Mounting Bracket
***6	TU3624	#6-32 x 1/4" Round Head Machine Screw
***7	TU3400	#6-32 Hex Nut
***8	M263	#8 x 3/8" S. M. S.

*** SOLD ONLY IN MULTIPLES OF 12

18

ş

W. M. CISSELL MANUFACTURING COMPANY 831 S. FIRST STREET • P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201 Foreign Distributors: Address Correspondence Attention Export Department • Cable Code "CISSELI" Pacific Coast Office, 4823 W. Jefferson Blvd., Los Angeles



Ask Your Distributor When ordering, specify part number and name.

NOT USED ON STEAM



Ref. No.	Part No.	Description
1	TU2463	Actuator Arm
2	TU1981	Air Switch
3	TU1770	Insulator
4	TU2462	Air Switch Bracket
***5	TU3219	#6 x 1" S. M. S.
***6	M263	#8 x 3/8" S. M. S.
***7	TU1771	#6 Tinnerman Twin Nut
***8	F888	"E" Ring

*** SOLD ONLY IN MULTIPLES OF 12

For Adjustment of Air Switch See Page 12

Ref. No.	Part No.	Description
1.	TU5788	Jacket
2.	TU2372	Snap Bushing
3.	TU2335	Electrical Box Cover
4.	M155	Wire Harness Clamp
5.	TU2726	Strain Relief Plate
6.	TU1839	Control Box Cover
7.	TU3857	Belt Guard Cover
8.	TU2317	V-Belt 46-380
9.	TU2323	Gear Sheave (AK-51) W/Set Screw
10.	F1034	Motor Sheave (AK-34) W/Set Screw
11.	TU5254	Belt Guard Mounting
12.	TU5241	Shaft Key
13.	TU1832	Small Gear Reducer
14.	Basket Motor	Specify H.P., Voltage & Motor Number
15.	TU5241	Кеу
16.	TU34	Belt Adjusting Rod
17.	TU4791	Right Angle Connector
18.	5046-41-292	1/2" Greenfield Cable (Specify 17" Lg.)
19.	TU4790	Straight Connector
20.	TU33	Motor Drive Bracket
21.	5046-41-292	l/2" Greenfield Cable (Specify 29" Lg.)
22.	Fan Motor	Specify H.P., Voltage & Motor Number
23.	TU2376	Motor Mount Weldment
24.	TU2473	Side Gasket
25.	TU2474	Top & Bottom Gasket
26.	TU2476	Feal Seal
27.	TU4684	Key
28.	TU5874	Fan Ass'y.
29.	TU2423	See Page 21
***30.	M263	#8-3/8" S.M.S.
**31.	RC344	1/4-20x3/4 Cap Screw
***32.	TU2846	l/4" Lock Washer
***33.	TU2847	l/4 Cut Washer
***34.	TU4934	1/4-20 Hex Nut
**35.	TU5439	5/16-18x3/4" Cap Screw
***36. ***37.	VSB130	5/16" Cut Washer
***38.	TU2814	5/16" Split Lock Washer
***39.	C249	5/16''-18 Hex Nut
**40.	M263	#8x3/8'' S. M.S. 1/2''-13x1-1/4 Cap Screw
**41.	RC347 TU1851	1/2'' - 13x1 - 1/4 Cap Screw $1/2''$ Cut Washer
**42.	TU2831	1/2" Lock Washer
**43.	TU4787	3/8''-16 Hex Nut
***44.	VSB134	3/8" Lock Washer
***45.	VSB134 IB140	3/8" Cut Washer
**46.	TU3211	3/8''-16x2-1/2'' Leveling Bolts
**47.	TU4937	3/8 -16 Jam Nut
**48.	TU3124	3/8-16x3/4 Cap Screw
	** Sold Only in I	-
	*** Sold Only in]	
	Solu Uniy in I	Multiplos of 14

* *

ŧ,

W. M. CISSELL MANUFACTURING COMPANY

 W. M. CISSELL MANDFACTORING COMPANY
831 S. FIRST STREET • P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201
Foreign Distributors: Address Correspondence Attention Export Department • Cable Code "CISSELL"
Pacific Coast Office, 4823 W. Jefferson Bivd., Los Angeles CISSELL® DRYER 36B 30 REAR VIEW PARTS



When ordering, specify part number and name.



W. M. CISSELL MANUFACTURING COMPANY 831 S. FIRST STREET . P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201

Foreign Distributors: Address Correspondence Attention Export Department • Cable Code "CISSELL" Pacific Coast Office, 4823 W. Jefferson Blvd., Los Angeles Ask Your Distributor

CISSELL S ELECTRIC HEATING UNIT 28BS30, 28BD30, 36BS30 & 36BD30 LAUNDRY DRYER

WHEN ORDERING PARTS OR MAKING INQUIRY, Specify Machine, Serial Number, Voltage and Current.



- TU 3509 ELECTRIC HEATING UNIT COMPLETE 208V.
- TU 3508 ELECTRIC HEATING UNIT COMPLETE 230V.

Ref. No.	Part No.	Description
1	TU 3104	Air Inlet Cover
2	TU 2890	
	TU 3497	
3	TU 3767	
	TU 3768	
4	TU 3102	
5	TU 3101	
6	TU 3103	Electric Furnace Housing
7	SEE PAGE	28



Ref <u>No.</u>		Description			
1	TU5878	Junction Box Weldment			
2	TU5880	Bushing W/Lock Nut			
3	TU3496	Relay W/115 Volt, 50 or 60 Cy. Coil			
	TU3495	Relay W/208 or 230 Volt, 50 or 60 Cy. Cofl			
4	TU5881	Terminal Block Single Phase			
5	TU5454	Upper Cover			
6	TU5455	Lower Cover			
7	TU5002	1/2" Straight Connector			
8	50-4641-292	1/2" Cable (4"28B30)			
9	TU6327	Terminal Block Three Phase (4 Wire)			
10	TU3269	Terminal Block Three Phase			
• 11	TU3416	#8-1 1/4" S. M. S.			
* 12	M263	#8-3/8"' S. M. S.			
*13	TU3218	#8-32 x 7/16 Self Tapping Screw			

CISSELL[®] GAS FIRED UNIT 28BS30, 28BD30, 36BS30 & 36BD30 LAUNDRY DRYER



TU2227 GAS-FIRED HEATING UNIT

Ref. <u>No.</u>	Part No.	Description	Ref. <u>No.</u>	Part No.	Description
1	TU2219	Gas Fired Heating Unit	16	TU157	Thermocouple Lead 18" (87D-18)
2	TU2393	Nameplate	17	TU5568	Gas Line Assembly 16"
3	TU2666	Pilot Shield	18		See Basotrol Valve Sheet
4	TU4687	Rear Bracket W/Mtg. Hardware	19	TU2722	1/8" x 1/4" Compression Ell
5	TU1802	Burner (All Gases)	20	TU2723	Gum Filter
6	TU4688	Front Bracket W/Mtg. Hardware	21	TU4689	Brass Adapter
7	TU4686	Air Shutter	22	F875	Straight Connector
8	TU2169	Gas Orifice (Specify Size)	23	OP291	1/2" Street Elbow
9	TU2227	Gas Manifold, Natural, Mixed, Propane & Butane	24	TU2724	1/2" x 25" Pipe
10	TU2224	1/8" Plug for Gas Manifold Test Hole	25	TU2425	3/8" Greenfield Cable W/Connectors (12" Long)
11	TU2226	2 Piece Mounting Brackets	26	TU2714	1/2" Close Nipple
12	TU3798	Burner and Pilot Support	27	TU6321	Valve 1/2" x 1/2" Gas Cock
13	TU3800	Pilot Burner (G-21)	28	TU3209	#14x5/8" S. M. S.
14	TU145	Pilot Orifice (Specify Size)	29	M263	#8x3/8" S. M. S.
15	TU3799	Pilot Support Bracket	30	LB74	#14 Tinnerman Nut

İ



TU 5908	4-Coil Laundry Bonnet Complete With Solenoid Valve (120 V.)
TU 5909	4-Coil Laundry Bonnet Complete With Solenoid Valve (240 V.)
TU 5910	4-Coil Laundry Bonnet Complete Without Solenoid Valve

<u>Ref. No</u> .	Part No.	Description	Ref. No.	Part No.	Description
1	TU6053	Lever Assembly	15	TU1613	4 Coil Steam Coil
2	TU5708	Control Nameplate	16	TU5588	Top Plate
3	TU5730	Control Mounting Plate	17	TU4608	3/4" x 2" Pipe Nipple (2 req'd)
4	TU5587	Connecting Link	18	TU4597	3/4" Pipe Tee (3 req'd)
5	TU4581	Damper Arm	19	TU4601	3/4" x 3" Pipe Nipple (3 req d)
6	F 215	Set Collar	20	TU5914	3/4" x 3 1/2" Pipe Nipple (2 req'd)
7	TU4578	Control Rod	21	TU4610	3/4" x 5" Pipe Nipple (3 req'd)
8	TU5904	Bonnet Weldment	22	TU4600	3/4" Pipe Union (3 req'd)
9	TU5574	Adjustment Channel	23	TU4605	3/4" Pipe Elbow (3 req'd)
10	TU6054	Damper Weldment	24	TU2862	3/4" x 6 1/2" Pipe Nipple (1 reg'd)
11	TU5576	Adjustment Angle	e (25	TU6041	Solenoid Valve 120V. 50/60 cy.
12	TU5571	Damper Bearing Plate	<u> </u>	TU5924	Solenoid Valve 240V. 50/60 cy.
13	TU28612	Coil Holder Plate		TU6204	3/4" x 2 7/8" Pipe Nipple
14	TU28611	Coil Holder Bar	° (₂₇	TU2736	3/4" 'Y' Strainer

.

W. M. CISSELL MANUFACTURING COMPANY 831 S. FIRST STREET • P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201 Foreign Distributors: Address Correspondence Attention Export Department • Coble Code *CISSELI* Pacific Coost Office, 4823 W. Jefferson Blvd., Los Angeles CISSELL[®] DRYER 9 SECTION STEAM COIL ASSY PARTS

Ask Your Distributor

When ordering, specify part number and name.



LOW PRESSURE STEAM ONLY

NINE SECTION STEAM BONNET ASSEMBLY

Ref.			
No.	Part No.	Description	
1	TU2546	Housing Weldment	
2	TU2547	Front Coil Retainer	
3	TU2548	Rear Coil Retainer	
4	TU2413	Steam Coil Manifold	
5	TU2414	3/4"-16 x 3/8" Strai	ght Connector
6	TU2405	Steam Coil (9 req'd.	$\tilde{)}$ 7 3/4" W x 1 5/8"H x 26" Lg
7	TU2598	Air Filter (Optional)	16" x 25" x 1"
***8	M263	#8 x 3/8" S. M. S.	
**9	TU3209	#14 x 5/8'' S. M. S.	High Pressure Only
			Items 1 through 9 PLUS
	•	y in Multiples of 6	TU6041 Solenoid valve 120V/60 cy
	*** Sold Only	y in Multiples of 12	•
			TU5924 Solenoid valve $240V/50$ 60 cy

TRANSFORMER AND MOUNTING BOX

(Located on Rear of Dryer)



***M263

......

*** Sold Only in Multiples of 12

#8x3/8" S.M.S.

6 - COIL BONNET (36-30)

TU59686-Coil Laundry Bonnet Complete With Solenoid Valve (120 V.)TU59696-Coil Laundry Bonnet Complete With Solenoid Valve (240 V.)TU59706-Coil Laundry Bonnet Complete Without Solenoid Valve

Part No.	Description
•	Lever Assembly
TU5708	Control Nameplate
TU5730	Control Mounting Plate
TU5587	Connecting Link
TU4581	Damper Arm
	Set Collar
	Control Rod
	Bonnet Weldment
	Adjustment Channel
	Damper Weldment
TU5576	Adjustment Angle
TU5571	Damper Bearing Plate
TU28612	Coil Holder Plate
TU28611	Coil Holder Bar
TU3172	6-Coil Steam Coil
TU5684	Top Plate
TU4608	3/4'' x 2'' Pipe Nipple (2 req'd)
TU4597	3/4" Pipe Tee (3 req'd)
TU4606	3/4" x 4" Pipe Nipple (2 req'd)
TU5914	3/4" x 3 1/2" Pipe Nipple (2 req'd)
TU4610	3/4" x 5" Pipe Nipple (2 req'd)
TU4600	3/4" Union (3 req'd)
TU4605	3/4'' Elbow (3 req'd)
TU2862	3/4'' x 6 1'2'' Pipe Nipple (1 req'd)
TU4601	3/4" x 3" Pipe Nipple (1 req'd)
TU6202	3/4" x 8 3/16" Pipe Nipple (1 req'd)
TU6041	Solenoid Valve 120 V. 50/60 cy.
TU5924	Solenoid Valve 240 V. 50/60 cy.
TU6204	3/4" x 2 7/8" Pipe Nipple
TU2736	3/4" 'Y' Strainer
	TU6053 TU5708 TU5730 TU5587 TU4581 F 215 TU4578 TU5905 TU5574 TU5576 TU5571 TU28612 TU28611 TU3172 TU5684 TU4608 TU4597 TU4606 TU4597 TU4606 TU5914 TU4600 TU4605 TU2862 TU4601 TU2862 TU4601 TU2862 TU4601 TU6202 TU6041 TU5924 TU6204





ł

W. M. CISSELL MANUFACTURING COMPANY

831 S. FIRST STREET • P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201 Foreign Distributors: Address Correspondence Attention Export Department • Cable Cade "CISSELL" Pacific Coast Office, 4823 W. Jefferson Blvd., Los Angeles

Ask Your Distributor

CISSELL® BASOTROL GAS VALVES FOR PETITE, COMPACT (2830), 36A30, 42X42 & TWIN (2624) GAS FIRED DRYERS Parts

WHEN ORDERING PARTS OR MAKING INQUIRY, Specify Dryer, Serial Number, Voltage and Current





W. M. CISSELL MANUFACTURING COMPANY 831 S. FIRST STREET • P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201 Foreign Distributors: Address Correspondence Attention Export Department • Cable Code "CISSELL" Pacific Cost Office, 4823 W. Jefferson Bivd., Los Angeles

Ask Your Distributor

When ordering, specify part number and name.

CISSELL^W DRYER

Single Timer & Access Door Parts

i

:

۴,

ļ



Ref. No.	Part No.	Description
1	TU5078	Burner Door
$\frac{1}{2}$	TU2610	Cissell Script
3	TU3656	Therm -o-cool Name Plate
4	TUC1867	Lock & Key
5	TU5147	Lever Temperature Control Plate
6	TU5115	Push Button Control Plate
U	105115	Fush Button Control Flate
8	TU5421	Pilot Light 110V.
	TU5639	Pilot Light 220V.
9	TU2801	Support Rod
10	TU6018	Single Timer Mtg. Plate
11	TU5153	Push Button Plate
12	TU5102	Push Button Switch
13)	TU1980	Temperature Regulating Thermostat
14 Optional		Thermostat Lever
15)	TU5133	Thermostat Adjustment Plate
16	TU4864	60 Min. Haydon Timer
		120-60-1 Double Switch
	TU4865	15 Min. Haydon Timer
		120-60-1 Double Switch
	TU4866	15 Min. Haydon Timer
		120-60-1 Single Switch
17	TU2428	Resistor (Used on 220-60-1 Timer)
18	TU6019	Timer Mounting Plate 60 Cy. TU6323 50 Cy.
19	TU3748	60 Min. Dial
20	TU2554	15 Min. Dial
21	TU2845	Knob Complete
		-
**22	TU3479	#10-32 x 7/16" Truss Head Screw
***23	P104	1/4" Cut Washer
***24	TU2842	#10-32 Hex Nut
***25	TU3137	Push-On Speed Nut
***26	TU3624	$#6-32 \times 1/4''$ Round Head Screw
***27	TU4958	#8-32 x 3/8" Machine Screw
**28	M264	#6-32 x 7/8" Round Head Screw
***29	M270	#6 Internal Tooth Lock Washer
***30	TU3400	#6-32 Hex Nut
***31	FB187	#10 Lock Washer
*32	TU3266	#8-32 Hex Nut
**3 3	TU3802	#8-32 x 3/8" Flat Hd. Screw
** S(OLD ONLY IN MUI	TIPLES OF 6

** SOLD ONLY IN MULTIPLES OF 6 *** SOLD ONLY IN MULTIPLES OF 12 * SOLD ONLY IN MULTIPLES OF 3

ş

Ł

CISSELL^W DRYER

W. M. CISSELL MANUFACTURING COMPANY 831 S. FIRST STREET • P. O. BOX 1143, LOUISVILLE, KY., U.S.A. 40201 Foreign Distributors: Address Correspondence Attention Export Deportment • Cable Code "CISSELL" Pocific Coast Office, 4823 W. Jefferson Blvd., Los Angeles Ask Your Distributor

When ordering, specify part number and name.

Single Meter & Access Door Parts



ł.

.

ļ

•i |

• 1

ł

Ref. No.	<u>Part No.</u>	Description
1	TU5078	Burner Door
2	TU2610	Cissell Script
3	TU3656	Therm-o-cool Name Plate
4	TUC1867	Lock & Key
5	TU5147	Lever Temperature Control Plate
6	TU5115	Push Button Control Plate
7	TU2683	Add Coin (Name Plate)
8	TU5421	Pilot Light 110V.
	TU5639	Pilot Light 220V.
9	TU2801	Support Rod
10	TU6018	Single Coin Meter Mounting Plate
11	TU5153	Push Button Plate
12	TU5102	Push Button Switch
13)	TU5133	Thermostat Adjustment Plate
14 Optional	TU5134	Thermostat Lever
15)	TU1980	Temperature Regulating Thermostat
16		Coin Meter (Specify voltage & coin
		denomination)
**17	TU3479	#10-32 x 7/16" Truss Head Screw
***18	P104	1/4" Cut Washer
***19	TU2842	#10-32 Hex Nut
***20	TU3137	Push-On Speed Nut
***21	TU3624	#6-32 x 1/4" Machine Screw
***22	TU4958	#8-32 x 3/8" Machine Screw
**23	M264	#6 x 32 x 7/8" Round Head Screw
***24	M270	#6 Internal Tooth Lock Washer
***25	TU3400	#6-32 Hex Nut
***26	FB187	#10 Lock Washer
*27	TU3266	#8-32 Hex Nut

** SOLD ONLY IN MULTIPLES OF 6 *** SOLD ONLY IN MULTIPLES OF 12 * SOLD ONLY IN MULTIPLES OF 3

÷

Ì

TROUBLE SHOOTING CHART FOR 28B 30, 36B 30

TROUBLE	CAUSE	REMEDY
Fan Motor won't start	Line fuse blown	Replace fuse
	Defective timer	Greenwald Series 5900 - See Greenwald Service Manual
	Defective motor	Replace or take to Authorized service station for repairs.
Basket won,'t	V-Belt Broken	Replace V-Belt
revolve- Gas orElectric	V-Belt loose	Adjust belt tension
heating unit	Motor pulley loose	Tighten set screws
does notoperate	Basket Overloaded	Remove load
Basket revolves gas or electric unit does not	Electric Power to Heating unit turned off	Turn Power on
operate	Line Fuse Blown to Heating Unit	Replace Fuse
	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 thermostat	Replace thérmostát
	Defective safety overheat thermostat	Replace thermostat
	Defective gas valve	Replace solenoid unit.
	Defective Power Relay for electric heating unit	Replace Relay

GAS----ELECTRIC----STEAM

TROUBLE	CAUSE	REMEDY
Basket won't	Loading door open	Close door
revolve- Gas or Electric Heating Unit	Lint comp a rtment door open	Close door
WON'L OPERATE	Air Switch not operating	Clean lint drawer Check back draft damper for foreign objects, lint accumulation or other causes that may prevent damper from opening. Check duct work for lint buildup. Check installation sheet to insure that duct work and make up air openings are adequately sized. Check exhaust outlet. If a screen has been improperty
		installed on the outlet, it may be clogged with lint or frozen over in the winter.
	Air Switch out of adjustment	See Air Switch Adjustment Sheet in Service Manual
	Air Switch defec- tive	Replace Switch
	Door Switch out of adjustment	See Door Switch Adjustment Sheet in Service Manual
	Door Switch defec- tive	Replace Switch
	Defective relay	Replace Relay
Main burners burning with yellow flame	Air shutter closed	Open air shutters on front of burners to give sharp blue flame
yerrow ridine	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	Gas turned off	Open manual gas valve
won't light	Pilot orifice blocked	Remove and clean.
	Gum filter clogged	Replace with new filter

é

TROUBLE	CAUSE	REMEDY
	Line Fuse Blown To Hesting Unit	Replace Fuse
	Power to Heating Unit turned off	Turn on Power
	Pilot burner out	Relight pilot burner
Dryer does not he at	Main burners not operating	Refer to section in this chart covering this problem
	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 and light pilot burner.
	Improper orifices	Dryer is orificed for type of gas specified on rating plate. Check with gas supplier to determine specifica- tions for gas being used. If different from rating plate, contact factory and obtain proper orifices.
Dryer too hot	Lint accumulated	
	Thermostat defective	Replace thermostat
	Inadequate make up air	Check installation sheet in service manual for recommended minimum make up air opening.
	Gas pressure t oo high	Check manifold pressure and adjust to pressure specified on rating plate.
	Partially restrict- ed 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
	1	

TROUBLE	CAUSE	REMEDY
Pilot burner lights but won't stay	Defective thermo- couple	Replace thermocouple
lit	Pilot orifice dirty	Remove and clean.
	Gum filter partially clogged	Replace with new filter
	Defective power unit	Replace. See gas valve sheet in service manual for proper specifications
Dryer doesn't		
stop at end of time period	Defective timer	Greenwald Series 5900. See Greenwald Service Manual
Motor tripping on thermal overload	Low voltage	Check voltage at motor terminals. Voltage must be within (plus or minus) 10% of voltage shown on motor rating pla 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.
	Inadequațe air	Check installation sheet in service manual for recommend- ed make up air openings. Poor air movement or high ambient temperatures around the motors decrease 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 fan motor and result in thermal tripping of the motor.

÷

.

-

TROUBLE	CAUSE	REMEDY
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 1/2" and tighten set screws on fan blade.
No Steamto steam bonne	Trap installed incorrectly	Check trap for inlet and outlet markings. Install trap according to markings.
	Supply line valve closed	Open Valves in supply and in the return lines
	Check valve installed incorrectly	Check for inlet and outlet marking on check valve, and invert if necessary.
	Strainer Clogged	Remove plug and blow down strainer or remove and clean thororghly if heavily clogged.
Water in steam line	Steam piping installed incorrectly	Check piping per steam installation instructions.
	Trap not functioning	Check trap for size and capacity. If dirty and sluggish- clean thororghly or replace. Check return line for high back press re, or another trap charging against the trap functioning improper ly