

# IIO Ib. Drycleaning Dryer

MODEL: D44CD42S

# **OWNER'S MANUAL**

# CISSELL MANUFACTURING COMPANY

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# •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.

# \_CAUTION\_\_\_

Synthetic solvent <u>fumes</u> 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.

# 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.

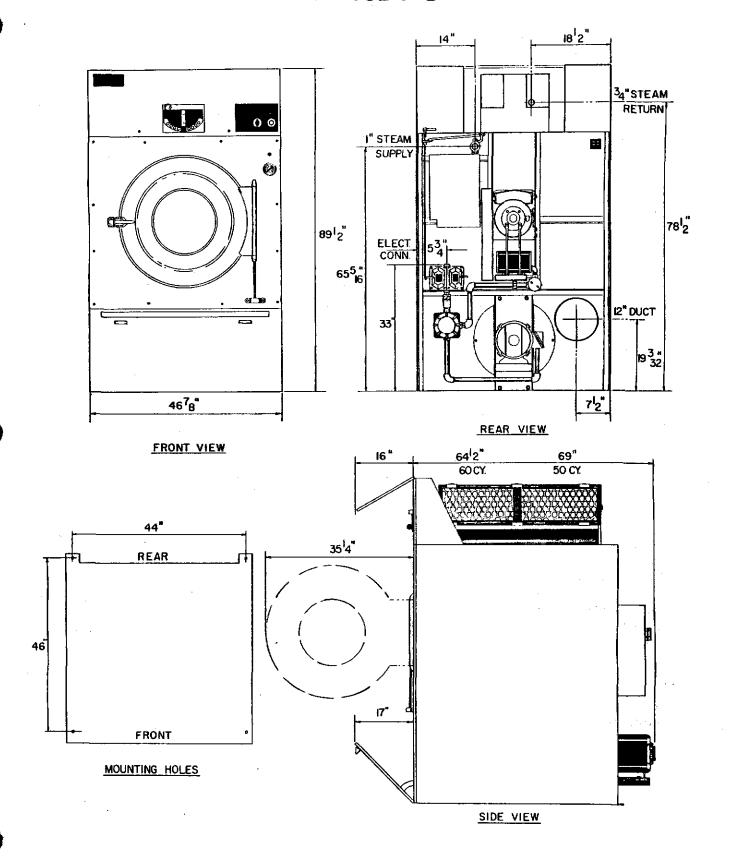
CISSELL MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY, STATUTORY OR OTHERWISE, CONCERNING THE EQUIPMENT OR PARTS INCLUDING, WITHOUT LIMITATION, A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OR A WARRANTY OF MERCHANTABILITY. THE WARRANTIES GIVEN ABOVE ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS 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.

# SPECIFICATIONS

FLOOR SPACE:	7.71°
Width Depth-60 cycle	
50 cycle	69"
Height	
DOOR DIAMETER	
DIAMETER OPENING INTO BASKET	31-1/8"
BASKET Diameter Depth	
Volume-cubic feet	36.96
Max. Capacity-Dry Weight	110 lbs.
Basket RPM-Non Reversing	
Basket RPM-Reversing	28
Reversals Per Minute	3.2
MOTORS (EXPLOSION PROOF)  Basket	
EXHAUST DUCT	12" día.
AIR DISPLACEMENT PER MINUTE	
Maximum Operating Range	2250 cu. ft. 1900-2250 cu. ft.
STEAM-OPERATING PRESSURE	60-100 pounds 8.3
TRAPS-2 REG.	
1 for Steam Coils - Pipe Size	3/4" ½"
STEAM SUPPLY LINE - Pipe Size	1"
STEAM RETURN LINE - Pipe Size	3/4"
STEAM SPRAY VALVE- Humidifying-Pipe Size	3/8"
STEAM FIRE EXTINGUISHING Valve-Pipe Size	3/4"
WEIGHTS (2-coil capacity)  Net-60 cycle  Net-50 cycle  Domestic Ship. Wt60 cycle  Export Ship. Wt50 cycle  Export Ship. Wt50 cycle  Export Ship. Wt50 cycle  Export Ship. Wt50 cycle	1790 lbs. 2275 lbs. 2305 lbs. 2450 lbs. 2500 lbs.
Export Crating	220.2 cu. ft.

# Drycleaning Dryer D44CD42S



# GENERAL INFORMATION

The Cissell D44CD42 drycleaning dryer consists of a basket 44" in diameter by 42" in depth placed at a convenient height - with a maximum capacity of 110 pounds dryweight. When operator opens door, basket stops; exhaust fan continues to run, thus drawing outside air into basket through open door. THIS IS IMPORTANT IN LOADING AND UNLOADING. The continuous fan operation during loading and unloading provides a continuous withdrawal of volatile vapors and prevents a blast of hot air or vapors into operator's face.

You can expect fast drying and complete deodorization from a Cissell D44CD42 drycleaning dryer. Hot, dry air is properly and effectively moved through basket and exhausted through a lint trap to atmosphere; an eight-stage heat control provides an accurate and dependable heat control for the dryer. As selector knob is moved from "hot" to "cold", or to any intermediate stage, damper below steam heating unit is rotated in stages from hot to cold, providing varying degrees of warm, or cool air, according to setting. The operator can move selector knob to a cold position to cool a load, and then quickly return to the setting at which the load was dried. The temperature at this setting, for repeat operation, will be exactly the same as it was originally.

The Cissell D44CD42 drycleaning dryer comes equipped with an inclined self-cleaning lint screen. In this system, lint accumulates on the underside of the screen until a blanket approximately 1/4" thick is formed. This blanket of lint will fall from the screen to the bottom of the dryer cabinet, and should be removed daily, or as required to prevent an over accumulation.

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.

A Two-Way Fire extinguisher injects steam instantly into basket and lint trap ...cuts off electric current to fan and basket motor by melting a fusible link; or, by operation of an explosion responsive mechanism.

The Static Steam Spray, operated by a hand valve, injects line steam into dryer during cycle for faster humidification. Also dissipates static charges thus reducing lint attraction and change of fire from static sparking.

It is preferable to use the static steam spray at the start of the drying run when the volatile vapor is at the highest concentration point. The moisture from the steam reduces the fire hazard and static electricity, permitting a more rapid removal of lint from the garments.

### INSTALLATION

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.

Level and anchor dryer into position. A properly leveled dryer will assure proper trap operation and steam flow. Open basket door, remove blocking between front panel and basket; remove all tape used to secure dryer parts during shipment: IMPORTANT: Read all tags carefully before attempting to install dryer.

Install all duct work as per instructions in this manual.

Install piping as per instructions on separate page.

Make all wiring connections as per instructions on separate page.

NOTE: On single phase reversing, three phase reversing and three phase non-reversing drycleaning dryers, an auxiliary control box is required.

This control box is nonexplosion proof and must be installed in a non-hazardous area.

# DUCTWORK INSTALLATION

Vent the 12 inch diameter exhaust, on rear of dryer, to atmosphere. <u>Do not reduce duct size</u>. 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 (see chart on separate page). 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.

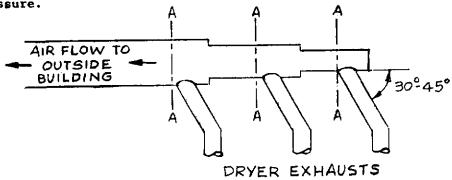
On multiple installations employing a single exhaust duct, there should be no back draft to interfere with the normal free discharge of air from each dryer.

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 opening of the duct, as lint will build up and prevent proper discharge of air from dryers.

DRYER INSTALLATION WITH MULTIPLE EXHAUST

For Exhaust Duct less than 14 ft. and two elbows equivalent and less than 0.3 in. static pressure.



Area of section "A-A" must be equal to the sum of dryer exhaust pipes entering multiple exhaust pipe. See chart below.

NO. OF DRYERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DUCT DIAMETER in inches	6	9	11	12	14	15	16	17	18	19	20	21	22	23	23	24	25	26	26	27	28	28	29	30
NO, OF DAYERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DUCT DIAMETER	8	12	14	16	18	20	22	23	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
in inches																								
			13	12/	12	<del></del>	32	1 -	136	138	2 4	142	<u>)</u>											
NO. OF DETERS	12	2 17	2	4	5	6 30	32	34	36	10	3 40	12												

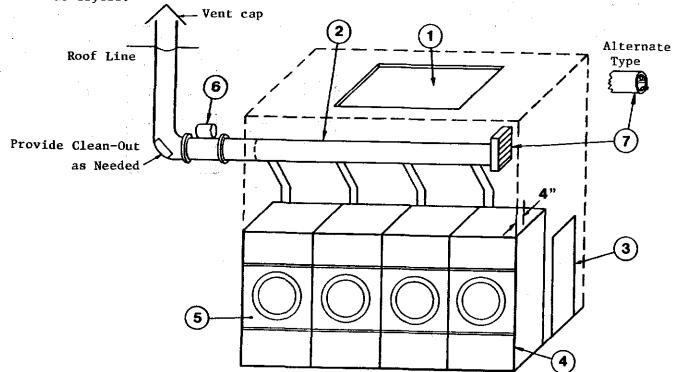
### DRYER INSTALLATION WITH MULTIPLE EXHAUST

For Exhaust Duct more than 14 ft. and 2 elbows equivalent and more than 0.3 in. static pressure.

- 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 in. diameter; 2 sq. ft. for each 8 in. diameter; and 4 sq. ft. for each 12 in. diameter.
- Use constant diameter duct with area equal to the sum of dryer duct areas. Example: 6-8 in. diameter duct = 1-19.6 in. diameter duct in area. Use 20 in. diameter duct or diameter to match tube-axial fan.
- 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./hr. for each cubic foot per minute (CFM) used. Example: 110 lb. dryer, 2000 CFM = 50,000 B.T.U./hr. 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./hr. per sq. ft.
- (6.) Flange mounted, belt driven tube-axial fan. Fan must run when one or more dryers are running.

  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 enclosure.

<u>CAUTION:</u> No two installations are the same. For assistance, consult factory (502) 587-1292. Never install hot water heaters or other gas appliances in the same room as dryers. Never install cooling exhaust fans in the same room as dryers.



# DRYER INSTALLATION WITH SEPARATE EXHAUST (PREFERRED)

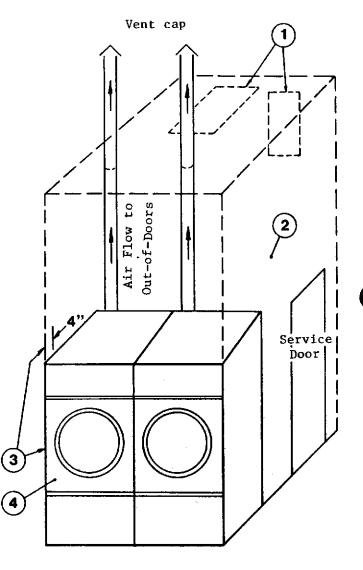
For ductwork less than 14 ft. and 2 elbows equivalent and less than 0.3 in. static pressure.

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./hr. for each cubic foot per minute (CFM) used. Example: a 110 lb. dryer with 2000 CFM = heat loss of 50,000 B.T.U./hr.
- 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./hr. per square foot.



# DRYER AIR FLOW INSTALLATION

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

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

# CISSELL WILL PROVIDE FREE ENGINEERING ADVICE FOR ANY SPECIFIED INSTALLATION.

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

### EXHAUSTING DUCT

# For best drying:

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

# MAKE-UP AIR

# For best drying:

- Provide opening to the out-of-doors in accordance with the following: For each dryer 6" dia. exhaust req. 1 sq. ft. make-up air
   dia. exhaust req. 2 sq. ft. make-up air
   dia. exhaust req. 4 sq. ft.
- Use barometric shutters in the inlet air opening to control air when dryers are not running.

# Other Recommendations

make-up air

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.

# PIPING INSTALLATION INSTRUCTIONS

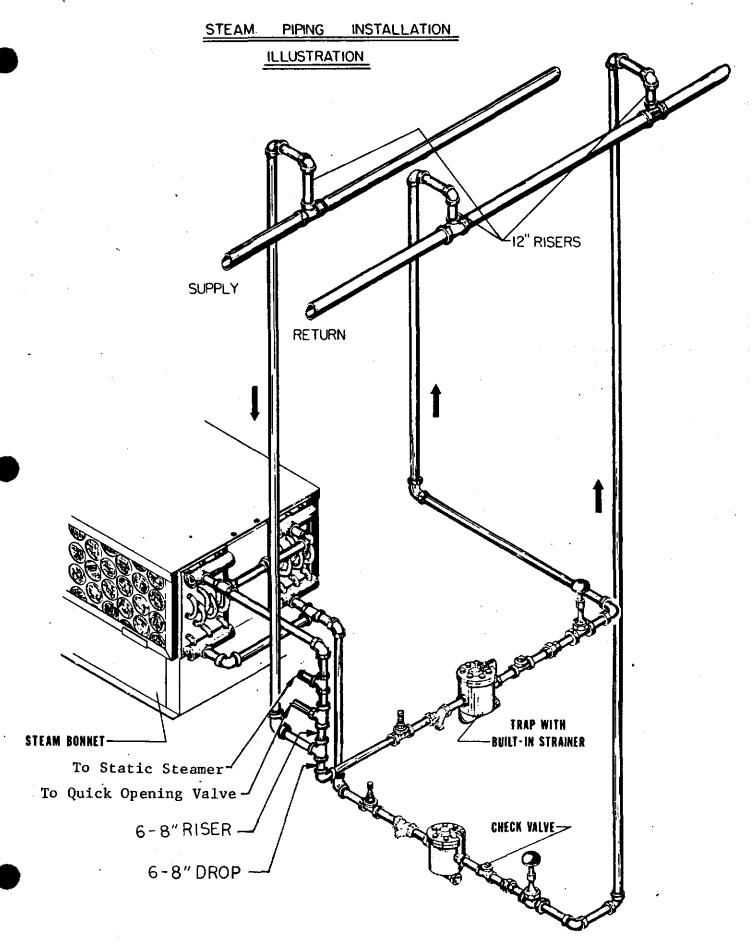
IMPORTANT: INSTALL STEAM PIPING IN ACCORDANCE WITH ALL LOCAL REGULATIONS AND REQUIREMENTS

Refer to Illustration on next page.

- 1. Set and anchor dryer in position. Machine should be level to assure proper steam circulation.
- 2. 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 iliminated install a by-pass trap to draing 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 union and 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 valve to dryer, open globe valve 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. 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.

# 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 4ft. beyond dryer. Install globe valves, unions, check valve and by-pass trap at end of line. If gravity return to boiler, omit trap.
- 3. Insulate steam supply air 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.
- 5. If steam has a large amount of condensate in the steam supply line to dryer, it will be advisable to install a condensate return line (w/by pass) to return header.



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# **ELECTRICAL CONNECTIONS**

MAKE SURE SEALING COMPOUND HAS BEEN INSTALLED as per instructions on separate page.

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.

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 tags placed on the power leads of the dryer.

All wiring should be done by a competent electrician. A fused disconnect power switch must be installed in the power connections to each dryer and as near the dryer as possible. It must be accessible for immediate operation, when required. If the power disconnect switch is mounted within the hazardous area, it must be an approved explosion proof type; when installed outside the hazardous area, the disconnect switch may be a conventional, approved, non-explosion proof type. NOTE: IF DRYER HAS AUXILIARY CONTROL BOX, IT MUST BE MOUNTED IN A NON-HAZARDOUS AREA AS PER LOCAL CODE REQUIREMENTS.

Upon completion of wiring, check dryer operation and see that all parts operate properly. When viewed from the front of the dryer, the basket should rotate counter-clockwise; the fan should rotate clockwise. To check fan rotation, remove lint screen and look into fan through the lint door opening.

# DRYING PROCEDURE

Cissell recommends that test loads of old, discarded clothing be run so that operator may familiarize himself with operation and approximate drying time required.

The drying time varies according to the degree of extraction, size of load, type of fabric and moisture content. When a normal load is completely extracted, the drying time will be approximately 20 minutes.

Normally, "non-critical" garments such as cottons and linens are dried at high temperatures; "critical" garments, such as wools and silks are dried at lower temperatures.

# INSTRUCTIONS FOR SEALING CONDUIT HUBS

The following instructions must be followed to seal conduit hubs, therefore, assuring safety in the explosion proof controls.

NOTE: Sealing Compound and fiber is furnished for the two vertical Seals, one above the switch box and the other below, on the rear of 36x30 Drycleaning Dryer. One Seal below Switch Box, on the rear of 44x42 Drycleaning Dryer.

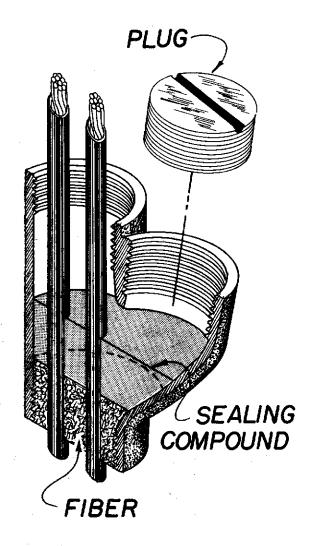
No Sealing Condulets are required for the electric Motors for they have "built in" seals.

The Junction Box does not have to be sealed

Spread wires apart and pack fiber between and around the wires in each conduit hub. It is important that the wires be permanently separated from each other, so that the sealing compound will surround each wire.

CAUTION: Do not leave shreads of fiber clinging to side walls of sealing chamber or to the conductors. Such shreads when imbedded in the compound may form leakage channels.

Use a clean mixing vessel to mix <u>two</u> parts sealing compound to <u>one</u> part <u>clean cold</u> water. Slight deviation in these proportions will not affect the result.



# MAINTENANCE

- 1. CLEAN LINT TRAP DAILY: Remove lint before starting day's operation. A clean lint trap will increase the efficiency of the dryer, as the moisture laden air will be exhausted to the atmosphere more quickly.
- 2. KEEP BASKET AND SWEEP SHEETS CLEAN: Clean periodically and 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.
- 3. GEAR REDUCER: Maintain oil level in gear reducer 1/2 depth of oil cup. Use Cissell Transmission Oil. (See attached Cissell Gear Reducer sheet).
- 4. PULLEYS AND BELTS: 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. Check and re-tighten pulley set screws periodically. Check belt tension periodically. Lower motor to increase tension by adjusting the nuts fastening the motor plate to the 5/16" rod connected to the gear reducer.
- 5. ELECTRIC MOTORS: Keep motors clean and dry.

Motors having BALL BEARINGS are packed with sufficient grease for approximately five years of operation under normal conditions. After five years, the bearings and housing should be cleaned thoroughly. Repack each bearing and the cavity back of the bearing one-third full with G. E. Ball Bearing grease.

6. Motors having wool packed SLEEVE BEARINGS are oiled at the factory for one years normal operation. After one years normal operation, add annually 1/2 teaspoon electric motor oil or S.A.E. #10 to each bearing. For 24 hours per day operation, add one teaspoon of oil annually.

If motors overheat, check voltage and wiring. Low voltage, inadequate wiring and loose connections are the principle cause of motor failure.

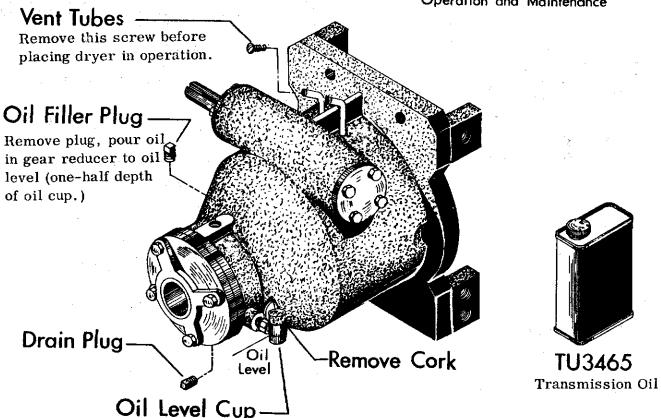
ADJUSTABLE LEVELING BOLTS: One at each corner, front and rear permits accurate alignment of dryer.

TO ADJUST: Block corner of dryer up off floor. Loosen hex nut. With wrench, turn bolt clockwise to raise dryer; counter-clockwise to lower. Rear bolts are on outside rear of dryer. Hex nuts for front bolts are inside lint trap.

7. STEAM HEATING UNITS: Keep steam coils clean. Check periodically and clean as often as required. Remove lint and dirt accumulation from coil fins periodically as dirty lint laden coil fins decrease the efficiency of steam-heated dryer.

# Large Gear Reducer

Operation and Maintenance



Oil level one-half depth of cup. Do not overflow.

BEFORE PLACING THE DRYER IN OPERATION, Remove small screw from vent tube in top rear of each Gear Reducer case. Remove the cork from the oil level inspection cup. If the oil level is correct, the oil level inspection cup will be half filled with oil. If not, add oil. Oil may be added to the Gear Reducer by removing the filler plug in the top rear of the Gear Reducer case. Do not operate a Gear Reducer unless the drain plug is tight, and the vent tube screw removed.

If it is necessary to return a Gear Reducer to the factory, either replace the small screw in the vent tube and plug the oil-level inspection cup with a cork, or drain all oil from the reducer by removing the drain plug located in the bottom rear of the Gear Reducer case.

EACH GEAR REDUCER is filled with 5 pints of Cissell TU 3465 transmission oil before leaving the factory. Change oil once every 6 months.

THE LARGE TIMKEN BEARINGS, which support the worm gear and basket load, must operate in a preloaded condition, that is the worm gear must not have end play. The Gear Reducer is assembled at the factory to provide a 16-20 inch lb. pre-load on these bearings.

THE SMALL TIMKEN BEARINGS, which carry the worm must operate in a pre-loaded condition, that is, the worm must not have end play. The Gear Reducer is assembled at the factory to provide a 2-4 inch lb. preload on these bearings.

REMOVAL AND INSTALLATION OF GEAR REDUCER SEALS

NOTE: On original equipment, the Cissell Gear Reducer is equipped with a Garlock Shaft Seal. If this seal requires replacement, it cannot be replaced with the same type of seal since the original seal would have seated in on the shaft. It must be replaced with a TU2166.

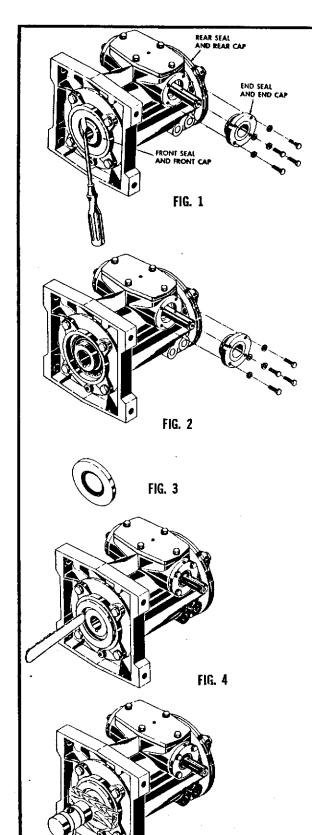


FIG. 5

### CAUTION

Drain oil before removing seals; replace with NEW oil after installing new seals (See Cissell Gear Reducer Sheet).

Remove Gear Reducer from rear of dryer before removing seals.

# TO REMOVE EXISTING FRONT AND REAR SEALS from front and rear caps on Gear Reducer (Fig. 1):

Slip end of screwdriver under seal (front seal illustrated); using end of Gear Shaft as a fulcrum, force seal out. Repeat operation at several different places until seals are removed from gear shaft.

# TO REMOVE EXISTING END SEAL and END CAP from Gear Reducer (Fig. 1):

Remove four cap screws and slip end cap and seal from worm gear. Tap seal out of cap from inside.

Clean inside of front, rear, and end caps. Spread permatex evenly over area to receive seal. Clean outside end of large and small gear shafts. Spread vasoline evenly over area to receive seal, (Fig. 2).

Spread permatex evenly over outside rim area, (Fig. 3) of seal. Spread vasoline evenly over inside rim area of seal.

# TO INSTALL NEW FRONT AND REAR SEALS:

Hold front (and rear) seal tightly in place over gear shaft with rubber seal in. Run edge of thin, dull instrument (such as wooden spatula, illustrated against front seal, Fig. 4) carefully around rubber wiping edge of seal and chamfer end of gear shaft so that seal is evenly installed all around gear shaft. DO NOT INJURE RUBBER WIPING EDGE.

# TO INSTALL NEW END SEAL:

Slip seal in end cap. Hold cap and seal tightly in place over small shaft with rubber seal in. Run edge of wooden spatula carefully around rubber wiping edge of end seal and chamfer end of small shaft so that seal is evenly installed all around edge of shaft. DO NOT INJURE RUBBER WIPING EDGE.

# AFTER SEALS ARE EVENLY INSTALLED ALL AROUND EDGES OF SHAFTS:

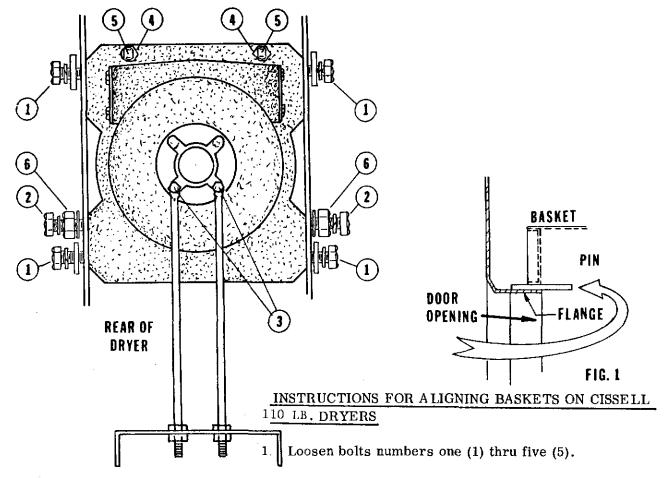
Place block of wood over front and rear seals and tap all around with a plastic faced mallet, (Fig. 5) until seal is flush into recess of front (or rear) cap.

Slip end seal and cap into position and tighten four bolts; then with a block of wood over end seal, gently tap with plastic faced mallet, until seal is flush into recess of end cap.

REINSTALL GEAR REDUCER ON REAR OF DRYER

### **IMPORTANT**

While the sealing element or packing ring in a seal is not fragile, care must be taken to prevent damage to the wiping edge during mounting. Do not apply pressure to, nor hammer directly on, the sealing ring or spring: make sure that all mounting tools contact only the metal case of the seal.





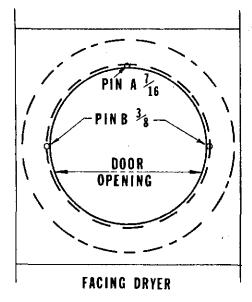


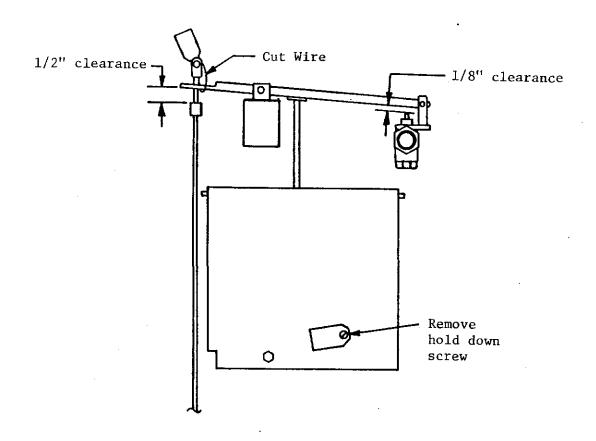
FIG. 2

- 3. Check pins "B" at position shown in Fig. 1 & 2 for equal clearance.
- 4. If pin "B" clearance is unequal, adjust at nut #6.
- 5. When clearance at pin "B" is correct, tighten bolts #1 in the following order, as viewed from rear of dryer, top right, bottom left, top left and bottom right.
- 6. Tighten bolts #5 until flush against back of dryer. Tighten lock nut #4 to secure bolt #5 in position.
- 7. Tighten bolts #2 and #3.
- 8. Remove pin "A" and check for proper clearance at points "A" and "B". If clearance is incorrect, repeat the above steps.

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

### EXPLOSION HATCH INSTRUCTIONS

- 1. After uncrating machine, cut the wire holding the weight support bar in an upright position and gently lower the weight support bar. The wire is tagged with a white tag.
- 2. Remove the hold down screw (also tagged) in the hatch plate.
- 3. Check the 1/8" and 1/2" clearances as shown.
- 4. If the explosion hatch is ever used, reset the linkage as follows:
  - A. Shut off the steam supply
  - B. Replace the fuse link as required (1 or 2), located under the dryer basket in the lint compartment.
  - C. Lift the weight support bar and at the same time, push up on the push rod linkage with the index finger and close the hatch plate with the thumb. Then lower the weight support bar on the push rod linkage. Check the clearance dimensions.
  - D. Pull the hatch plate toward you manually to see if the weight falls, then repeat Step C.



# INSTRUCTIONS FOR DRYERS WITH REVERSING CONTROL TIMER

In operation, coasting of basket increases, making it necessary to readjust reversing timer:

### CAUTION:

Failure to do this will cause the thermal overload units for the basket to cut-out unnecessarily and probably damage gear reducer.

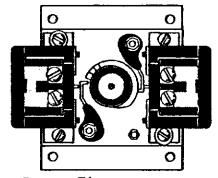
# Adjustment of Reversing Timer:

CAUTION: Dryer power supply must be shut off before adjusting timer.

- Reversing timer operates 18.7 seconds per reversal.
- 2. Rotate upper cam clockwise to increase stop time between reversals, counter-clockwise to decrease.
- 3. Lower cam has 10 divisions. Normal adjustment, 3 divisions, as shown.
- 4. Each division adds 1.87 seconds. Example: 3 divisions "off time: 5.61 seconds 7 divisions "on time" 13.09 seconds.
- 5. Recommended time basket must stop completely for 5 to 7 seconds between reversals. Minimum basket stopping time is 4 seconds.

# CAUTION

ONLY Operate Non-Reversing and Reversing SWITCH when basket is rotating or basket will not rotate.



Furnas Timer

# FAN ROTATION

NOTE: Fan rotates counter-clockwise as viewed from back end of motor. See arrow on motor support. To change rotation, reverse power leads L1 & L2.

# INSTRUCTION FOR DRYERS WITHOUT REVERSING CONTROL FAN AND BASKET ROTATION

NOTE: Fan rotates counter-clockwise as viewed from back end of motor. See arrow on motor support.

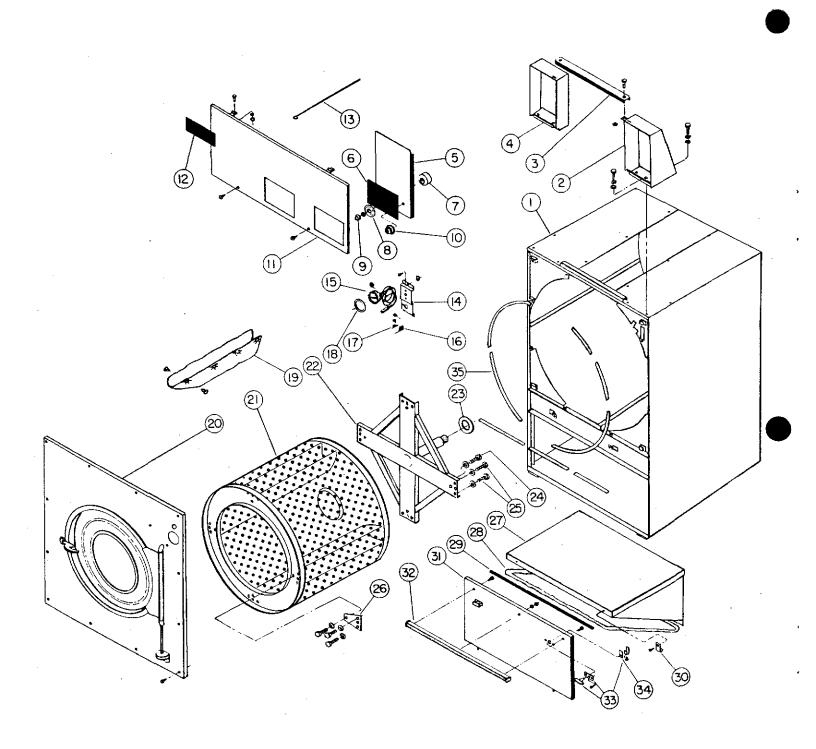
Basket rotates counter-clockwise as viewed from back end of motor. See arrow on motor support.

Basket rotates counter-clockwise as viewed form front of tumbler.

To change rotation of both fan & basket, reverse power leads L1 and L2.

To change rotation of fan only, reverse motor leads F1 and F2.

To change rotation of basket only, reverse motor leads B1 and B2.

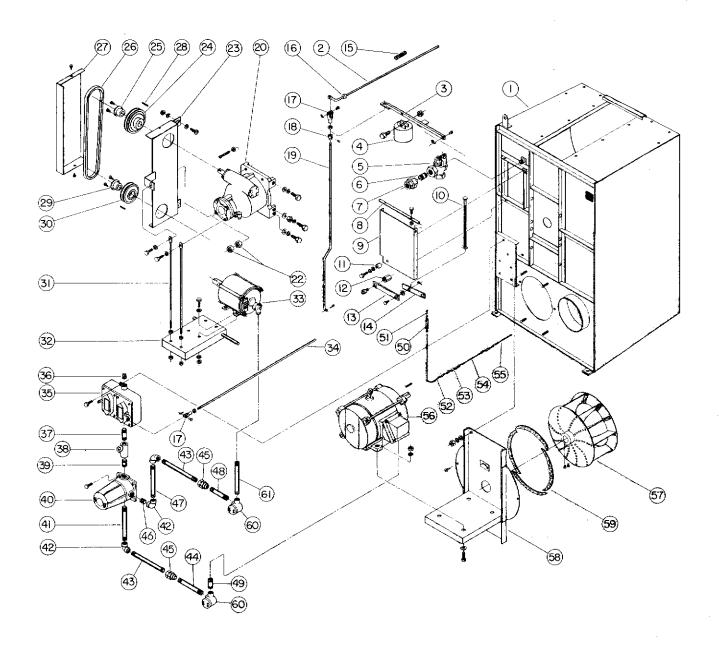


# FRONT VIEW PARTS

Ref. No.	Part No.	Description
1.	TU6040	Welded Jacket
2.	TU7158	Right Hand Control Box
3.	TU5674	Channel Brace
4.	TU7159	Left Hand Control Box
5.	TU6253	Control Panel
6.	TU6143	Control Nameplate
7.	T308	Bell Alarm
8.	TU5000	Timer Dial
9.	T148	Knob
10.	TU3322	On-Off Knob
11.	TU8097	Access Door
12.	TU8013	Cissell Nameplate
13.	TU5739	Support Arm
14.	TU5530	Mounting Bracket
15.	TU3593	THermometer
16.	TU5337	Bulb Support
17.	F645	½" Clamp
18.	TU2641	Thermometer Gasket
19.	TU5864	Rib Cover (4 Req'd.)
20.	TU6256	Front Panel & Door Assembly
21.	TU6469	Basket Welded Assembly
	TU5803	Basket Assembly Consists of:
		Ref. No. 21, 22, 23, 24, 25, 26
22.	TU5295	Spider Assembly
23.	TU5290	Felt Seal
24.	TU2664	$5/8" - 18 \times 1\frac{1}{2}"$ Hex Hd. Cap Screw
25.	TU2662	$\frac{1}{2}$ " - 20 X $1\frac{1}{2}$ " Hex Hd. Cap Screw
26.	TU5397	Rib Plate
27.	TU10345	LInt Trap Housing
28.	TU6024	LInt Screen & Frame
29.	TU2851	Sponge Gasket
30.	TU6159	Lint Trap Support Clip
31.	TU5624	Lint Trap Door Only
	TU6257	Door Assembly Complete Includes: Door, Handles,
		Gasket, Cam Stop, Screws & Washers.
32.	TU7473	Door Handle
33.	TU2504	Lint Drawer Lock & Handle
34.	TU6025	Cam Stop
35.	K118	Sweep Sheet Gaskets Set

# 110 LB. DRYCLEANING DRYER (Double Motor Model)

MODEL: D44CD42 - Steam



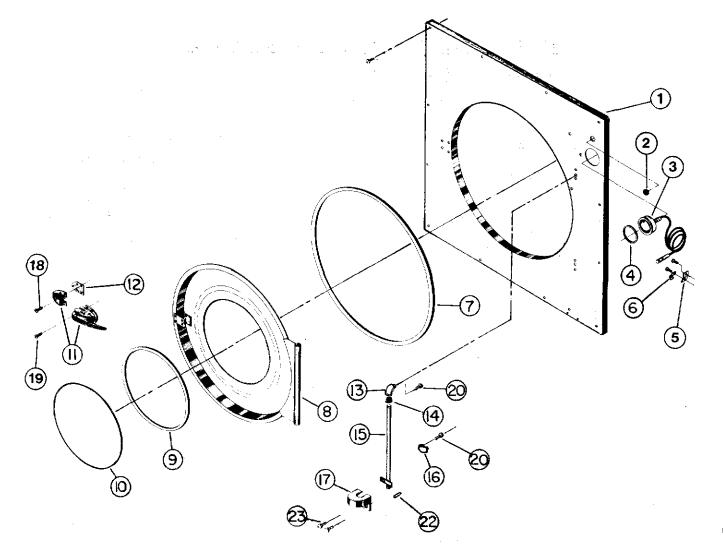
# 110 LB. DRYCLEANING DRYER (Double Motor Model)

MODEL: D44CD42 - Steam

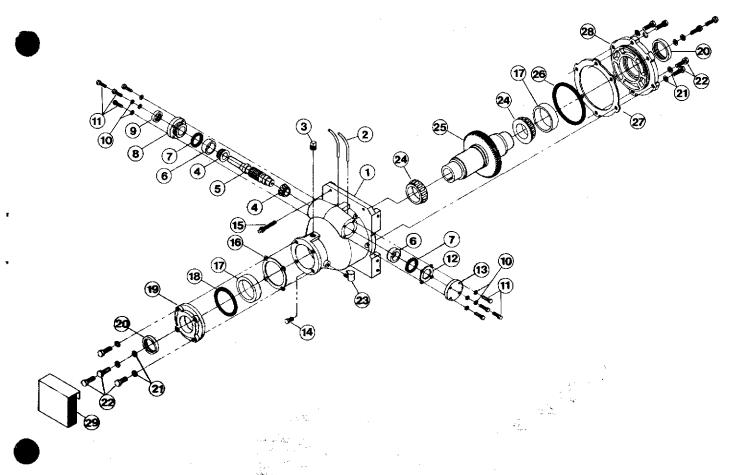
# REAR VIEW PARTS

1					
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU6040	Jacket	34	TU5922	Door Switch Rod
2	TU5964	On/Off Push Rod	35	TU11159	2 Gang Explosion
3	TU5826	Support Arm			Proof Box, 1 Ph.
4	TU5770	Weight		TU11160	2 Gang Explosion
	TU3363*	Quick Opening Valve			Proof Box, 3 Ph.
5 6	TU4608	3/4 X 2" Pipe	36	TU4612	3/4 Pipe Plug
7	TU4600	3/4 Union	37	TU6231	3/4 X 3" Conduit
8	TU5779	Hinge Pin	38	TU3374	3/4 Condulet
9	TU5780	Explosion Door Plate	39	TU6245	3/4 X 1" Conduit
10	TU5776	Push Rod	40	*	Explosion Proof Dome
11	TU8224	Rod Linkage Support	41	TU6235	½ X 10" Conduit
12	TU5781	Hex Linkage Spacer	42	TU3383	$\frac{1}{2}$ - 90° Conduit Elbow
13	TU5774	Push Rod Linkage	43	TU9828	½ X 9½ Conduit
14	TU5775	Rod Support Bar	44	TU6248	1/2 X 6" Conduit
15	TU4631	Switch Rod Spring	45	TU4617	Explosion Proof Union
16	F215	Set Collar	46	TU6246	1/2 All Thread
17	· P39	Yoke	47	TU6230	1/2 X 7" Conduit
18	P33	Retainer	48	TU9869	1 <sub>2</sub> X 41 <sub>2</sub> " Conduit
19	TU6004	Vertical Switch Rod	49	TU6232	12 X 212" Conduit
20	TU418*	Gear Reducer	50	TU5835	Turn Buckle
21	TU5797	Washer	51	J17	S-Hook
22	TU470	Jam Nut	52	TU5929	Fuse Link Cable 47垓"
23	TU5672	Belt Guard	53	TU5836	Fuse Link
24	TU3806	Gear Sheave, 50/60 Cy.	54	TU5928	Fuse Link Cable 7"
25	TU3807	Bushing H3/4	55	TU5927	Fuse Link Cable 6"
26	TU2363	V-Belt	56	MTR102	Fan Motor, 230/460/60/3
27	TU5668	Outside Belt Guard		MTR103	Fan Motor, 208/60/3
28	TU5341	Worm Gear Key		MTR195	Fan Motor, 240/415/50/3
29	TU2833	Bushing H5/8	57	TU403	Fan
30	TU2832	Motor Sheave, 60 Cy.	58	TU5658	Motor Support
30	TU6081	Motor Sheave, 50 Cy.	59	TU2473	Cork Gasket
31	TU5328	Belt Adjusting Rod	60	TU3373	½" Condulet
32	TU4626	Basket Motor Mount	61	TU9870	½ X 5½" Conduit
33	MTR46	Basket Motor, 208/230/480/60/3			
	MTR177	Basket Motor, 415/50/3			

<sup>\*</sup> See Separate Page for Details



Ref. No.	Part No.	Description
1.	TU5933	Front Panel (Welded Ass'y.)
2.	TUl594	3/4" Perf. Plug Button
3.	TU3593	Thermometer
4.	TU2641	Thermometer Gasket
5.	TU5337	Bulb Support
6.	F645	I/4" Clamp
7.	TU5288	Door Gasket
8.	TU5500	Door Panel (Welded Ass'y.)
9.	TU1692	Door Glass Gasket
10.	TU5287	Door Glass
11,	TU2319	Door Latch W/Keeper
12.	TU5503	Latch Spacer
13.	TU2236	Upper Hinge Post
14.	PIF172	Delrin Bearing
15.	TU2470	Door Switch Rod
16.	TU6324	Lower Hinge Post Ass'y.
17.	TU6046	Switch Lever Housing
18,	TU2687	#8 Phillips Scw.
19.	TU2686	#8-32 x 3/8" Sew.
20.	TU2836	$5/16''-18 \times 1/2''$ Hex Hd. Cap Scw.
21.	TU6593	5/16"-18 x $3/8$ " Hex Hd. Cap Scw.
22.	OP357	l/8" x l" Roll Pin
23.	TU2820	# $10 \times 1/2$ " Hex Head S. M.S.
24.	M263	#8 x 3/8" S. M.S.



TU12977 - LARGE GEAR REDUCER

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU404	Housing	16	TU1828	Large Shim Set of 4
2	TU69	Vent Tubes	17	TU2437	Cup Bearing
3	J36	½" Pipe Plug	18	TU89	Large "O" Ring
4	TU2535	Cone Bearing	19	TU458	Large End Cap
5	TU441	Worm	20	TU2536	Large Oil Seal
6	TU2534	Cup Bearing	21	TU3243	3/8" I.T. Lockwasher
7	TU487	Small "O" Ring	22	OP380	3/8 - 16 X ½" Cap Screw
8	TU406	Small Open End Cup	23	TU70	Oil Cup
9	TU2533	Small Oil Seal	24	TU2538	Large Cone Bearing
10	VSB134	3/8" Sp. Lockwasher	25	TU12877	Worm Gear
11	TU3246	3/8 - 16 X 1" Cap Scre	w 26	TU448	X-Large "O" Ring
12	TU447*	Small Shim (Set of	27	TU1905*	Shims, Set of 3
		2 ea005 & .007)	28	TU405	Large End Cap
13	TU407	Small Closed End Cap	29	TU7517	Basket Shaft Cover -
14	X170	'z" Pipe Plug			not part of assembly
15	TU485	3/8 X 3" Set Screw			

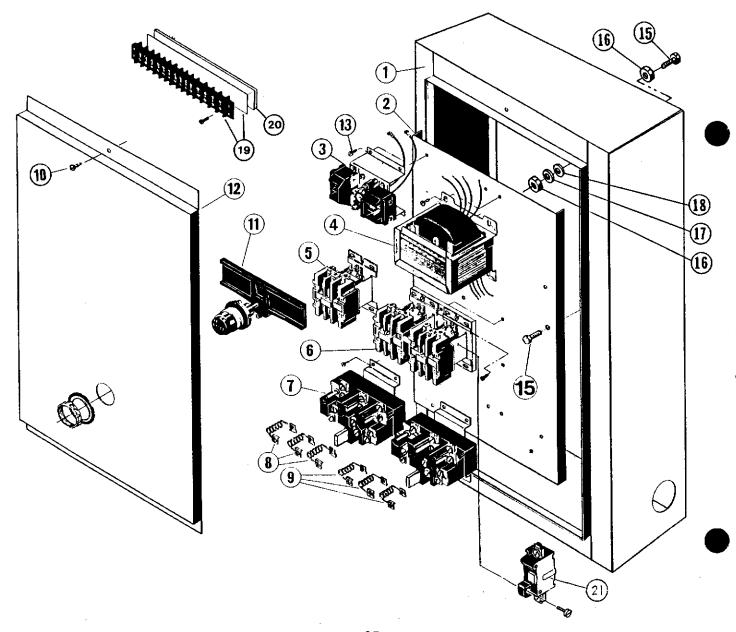
(TU3465 - One pint of Cissell transmission oil - not illustrated)
See Separate Page for Maintenance

<sup>\*</sup>Shims used if needed.

# CONTROL BOX ASSEMBLY - REVERSING/NON-REVERSING

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	TU6835	Control Box	8	•	Overload Heater (Fan)
2	TU6959	Control Panel Plate	9	*	Overload Heater (Basket)
3	TU44132	Timer (Rev. Models)	10	P274	½ - 20 X 3/4" Tr. Hd. Screw
4	TU4660	Transformer	11	TU6808	Reset Button Kit
5	TU6963	Contactor (220/60)	12	TU6834	Box Cover Plate
_	TU7282	Coil for TU6963	13	TU7733	8 - 18 X ½" Self Drill Screw
	TU6965	Contactor (110/60)	15	FB189	½ - 20 X 1" Hex Bolt
	TU7281	Coil for TU7252	16	TU4934	¼ - 20 Hex Nut
6	TU6964	Rev. Contactor (220/60)	17	TU2846	4 Cut Washer
-	TU7282	Coil for TU6964	18	TU2847	ሂ Flat Washer
	TU7252	Rev. Contactor (110/60)	19	TU2214	Terminal Strip
	TU7281	Coil for TU7252	20	TU3812	Insulator
7	TU6774	Overload Unit	21	TU12864	Anti-Dwell Switch

\*To order Overload Heater, see chart on next page.



Page 27

# TABLE FOR ORDERING OVERLOAD HEATERS FOR OVERLOAD RELAYS

Properly sized overload heaters provide motor protection to the dryer. Improper heater size may allow the motor to be damaged, or could cause nuisance tripping.

Heater sizes are listed on the overload heater table below. To use the table, refer to the motor rating plate and locate the Full Load Amps (FLA), the Service Factor (S.F.), and the Ambient Temperature (Amb.). Example: Motor Rating Plate shows FLA = 3.8, S.F. = 1.15, and 60 Deg. C Amb.

From the table, heater size is H-25. Order TU267900 - H25.

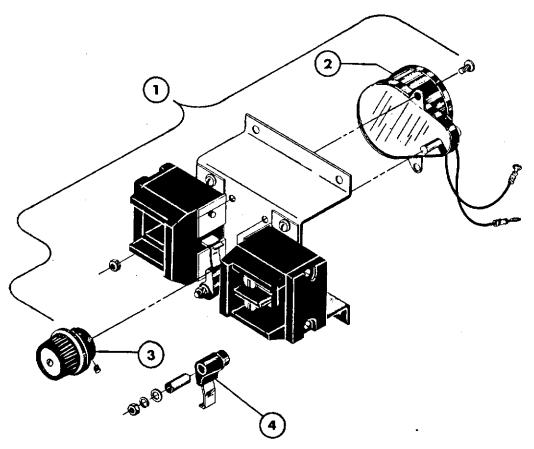
CAUTION: Overload Relays do not provide protection from short circuits.

Short circuit protection is provided by a device such as a breaker or wall disconnect.

# OVERLOAD HEATER TABLE Motor Full Load Amps (FLA)

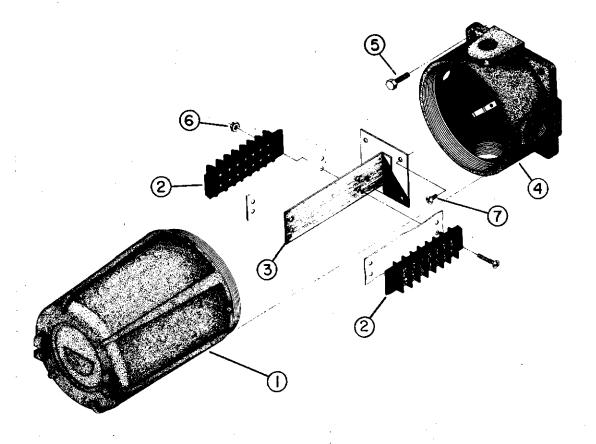
-	S.F. = 1.	.00	S.F. = 1.	15	S.F. GREATER
			4		Than 1.15
Heater	40 Deg. C	60 Deg. C	40 Deg. C	60 Deg. C	40. Deg C
_Size_	Amb.	Amb. or More	Amb.	Amb. or More	Amb. or More
H-6	.6976	.5560	.6268	.5054	.6974
H-7	.7782	.6166	.6974	.5559	.7583
н-8	.8392	.6774	.7583	.6066	.8493
H-9	.93-1.03	.7583	.8493	.6774	.94-1.02
H-10	1.03-1.13	.8491	.94-1.02	.7581	1.03-1.16
H-1 1	1.14-1.29	.92-1.03	1.03-1.16	.8293	1.17-1.31
H-12	1.30-1.46	1.04-1.16	1.17-1.31	.94-1.05	1.32-1.45
H-13	1.47-1.61	1.17-1.29	1.32-1.45	1.06-1.16	1.46-1.63
н-14	1.62-1.81	1.30-1.45	1.46-1.63	1.17-1.30	1.64-1.80
H-15	1.82-2.00	1.46-1.60	1.64-1.80	1.31-1.44	1.81-1.96
H-16	2.01-2.18	1.61-1.74	1.81-1.96	1.45-1.57	1.97-2.22
H-17	2.19-2.47	1.75-1.97	1.97-2.22	1.58-1.77	2.23-2.43
H-18	2.48-2.70	1.98-2.16	2.23-2.43	1.78-1.94	2.44-2.55
H-19	2.71-2.83	2.17-2.27	2.44-2.55	1.95-2.04	2.56-2.81
H-20	2.84-3.12	2.28-2.50	2.56-2.81	2.05-2.25	2.82-2.99
H-21	3.13-3.32	2.51-2.66	2.82-2.99	2.26-2.39	3.00-3.43
H-22	3.33-3.81	2.67-3.05	3.00-3.43	2.40-2.74	3.44-3.90
H-23	3.82-4.33	3.06-3.49	3.44-3.90	2.75-3.12	3.91-4.28
H-24	4.34-4.76	3.48-3.80	3.91-4.28	3.13-3.42	4.29-4.86
H-25	4.77-5.40	3.81-4.32	4.29-4.86	3.43-3.89	4.87-5.45
H-26	5.41-6.06	4.33-4.84	4.87-5.45	3.90-4.36	5.46-6.13
H-27	6.07-6.81	4.85-5.45	5.46-6.13	4.37-4.90	6.14-6.79
H-28	6.82-7.55	5.46-6.03	6.14-6.79	4.91-5.43	6.80-7.72
H-29	7.56-8.58	6.04-6.86	6.80-7.72	5.44-6.17	7.73-8.48
H-30	8.59-9.42	6.87-7.54	7.73-8.48	6.18-6.78	8.49-9.65
H-31	9.43-10.72	7.55-8.58	8.49-9.65	6.79-7.72	9.66-10.70
H-32	10.72-11.99	8.59-9.59	9.66-10.70	7.73-8.63	10.8-12.3

# **Timer Complete**



# REVERSING TIMER

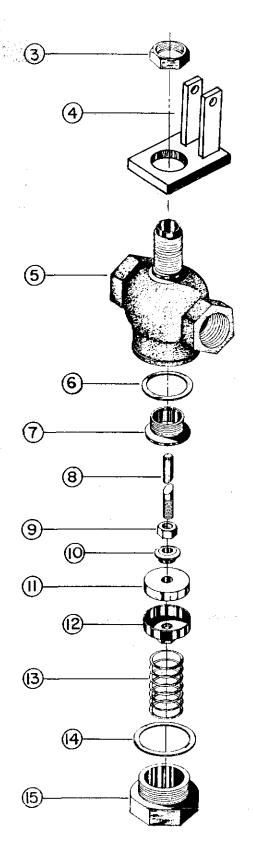
REF. NO. 1** 2	PART NO. TU44131 TU44132 TU44133 TU44134 TU17371 TU17372 TU17373 TU17374 TU4424 TU4426	DESCRIPTION Timer (Complete) 120 V., 60 Cy. Timer (Complete) 240 V., 60 Cy. Timer (Complete) 120 V., 50 Cy. Timer (Complete) 240 V., 50 Cy. Timer Motor 120 V., 60 Cy. Timer Motor 240 V., 60 Cy. Timer Motor 120 V., 50 Cy. Timer Motor 240 V., 50 Cy. Timer Cam Timer Cam
**	<u> TU7502</u>	Reversing Timer Complete Less Motor

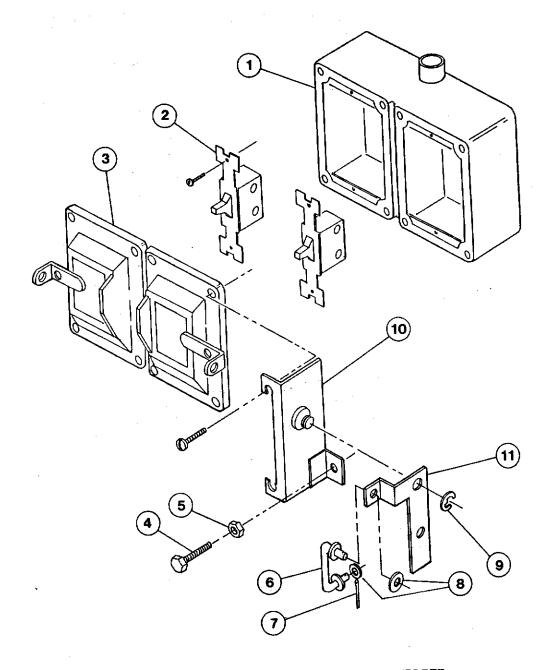


Ref. No.	Part No.	Description
1.	TU452	Dome Casting
2.	TU2207	Terminal Strip
3.	TU2362	Terminal Bracket
4.	TU453	Tumbler Base
5.	TU1978	#14 x 3/4" Hex Hd. S.M.S.
6.	TU3266	#8-32 Hex Nut
7.	M262	#8-32 x 3/8" Mach. Scw.
8.	TU6191	#8-32 x 1-1/8" Mach. Scw.

# TU3363 Quick Opening Valve (Complete)

Ref. No.	Part No.	Description					
::25 ::::							
		Salar Sa					
3	OP547	3/4"-16 Hex. Nut					
4	TU6661	Weight Arm Support					
5	TU3346	Valve Body					
6	TU3364	Copper Gasket					
7	TU3362	Renewable Seat					
8	TU3367	Stem					
9	V15	1/4"-28 Hex Nut					
10	TU3368	Disc. Retainer					
11	P99	Teflon Disc.					
12	TU3369	Disc Holder					
13	V330	Spring					
14	P103	Copper Gasket					
15	TU3366	Bonnet					





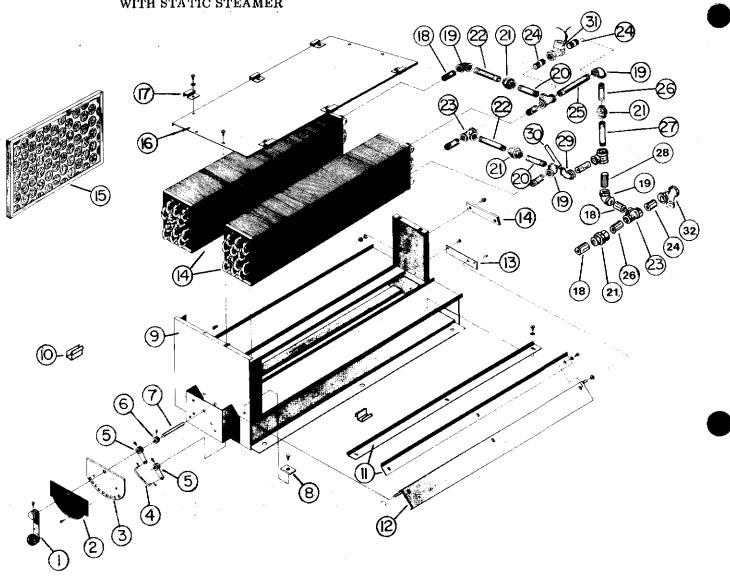
2 GANG EXPLOSION PROOF BOX COMPLETE

TUll159 - Single Phase TUll160 - 3 Phase

Ref. No.	Part No.	Description
1	565157113	Switch Housing
2	TU11104	Switch - Single Phase
	TU11105	Switch - 3 Phase
3	TU11144	Switch Cover Assembly
4	FG267	½-20 X 1¼ Hex Hd. Screw
5	TU4934	1/4-20 Hex Nut
6	TU11165	Switch Arm Linkage Assembly
7	FB201	Cotter Pin
8	P104	Washer
9	F489	"E" Ring
10	TU11150	Pivot Bracket Weldemnt
11	TU11151	Lever

# TU5990 4 COIL DRYCLEANER COMPLETE BONNET WITH SOLENOID VALVE & WITH STATIC STEAMER

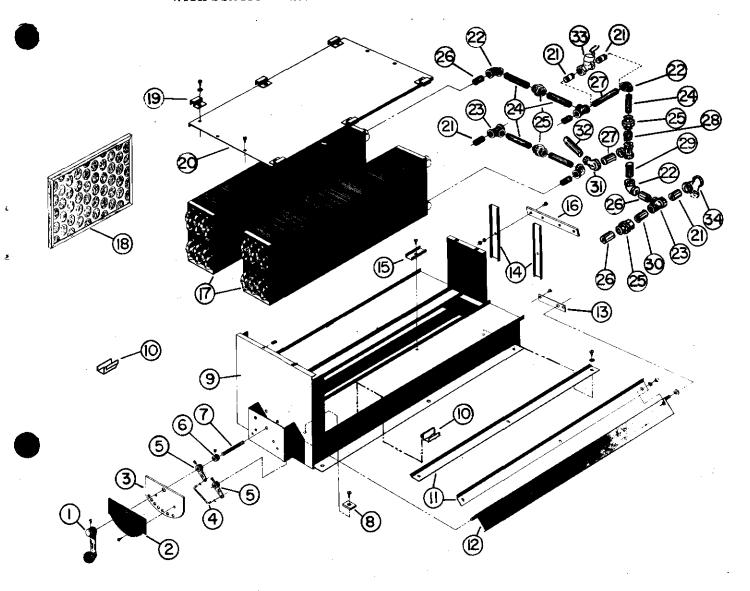
TU5974 4 COIL DRYCLEANER COMPLETE BONNET WITHOUT SOLENOID VALVE & WITH STATIC STEAMER



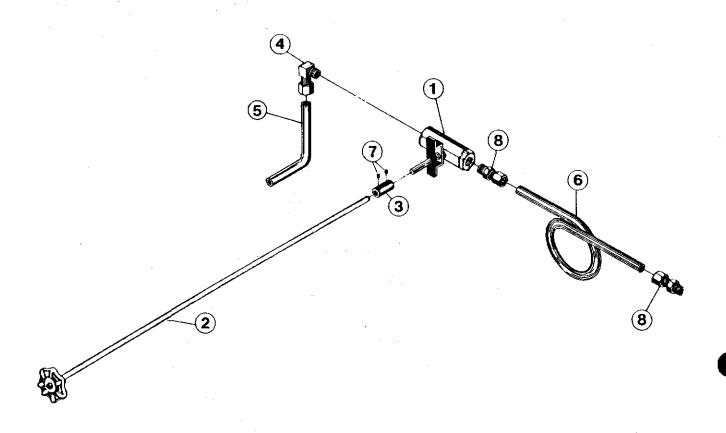
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1.	TU6053	Lever Assembly	17.	TU5724	Top Filter Guides (6 Req'd.)
2.	TU5708	Control Nameplate	18.	TU4608	3/4" x 2" Lg. Pipe
3.	TU5730	Control Mtg. Plate	19.	<b>TU4605</b>	3/4" Elbow
4.	TU5587	Connecting Link	20.	<b>TU4620</b>	$3/4'' \times 4\frac{1}{2}''$ Lg. Pipe
5.	TU4581	Damper Arms	21.	TU4600	3/4" Union
6.	F215	Retainer	22.	TU4610	3/4" x 5" Lg. Pipe
7.	TU4578	Control Rod	23.	TU4597	3/4" Tee
8.	TU4570	Coil Stop	24.	TU5914	$3/4'' \times 3\frac{1}{2}''$ Lg. Pipe
9.	TU6244	Bonnet Welded Assy.	25.	TU2862	$3/4$ " x $6\frac{1}{2}$ " Lg. Pipe
10.	<b>TU6490</b>	Filter Guides (6 Req'd.)	26.	TU4601	3/4" x 3" Lg. Pipe
11.	TU5741	Damper Seal Plate	27.	TU4598	3/4" x 6" Lg. Pipe
12.	TU6078	Damper Weldment	28.	TU5942	3/4" x 8¼" Lg. Pipe
13.	TU5721	Rear Bearing Plate	29.	TU5915	3/4" x ¼" Reducing Ell
14.	TU1699	Steam Coil	30.	TU5916	$\frac{1}{4}$ " x $9\frac{1}{2}$ " Lg. Pipe
		6"W. $\times 10\frac{1}{4}$ "H. $\times 40\frac{1}{2}$ "L.	31.	TU5923	Solenoid Valve 240 V. 50 or
15.	TU6458	Air Filter $10\frac{1}{4}$ "x22 $\frac{1}{4}$ "x1" (4 Req'd.)	<b>3</b> 2.	TU2736	60 Cy. 3/4" -'Y' Strainer
16.	TU5742	Top Cover Panel			

TU5991 2 COIL DRYCLEANER COMPLETE BONNET WITHOUT SOLENOID VALVE & WITH STATIC STEAMER

TU5993 2 COIL DRYCLEANER COMPLETE BONNET WITH SOLENOID VALVE & WITH STATIC STEAMER



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1.	TU6053	Lever Assembly	18.	TU6458	Air Filter
2.	TU5708	Control Nameplate			$10\frac{1}{4}$ " x $22\frac{1}{4}$ " x 1" (4 Req'd.)
3.	TU5730	Control Mtg. Plate	.19	TU5724	Top Filter Guides (6 Req'd.)
4.	TU5587	Connecting Link	20.	TU5742	Top Cover Panel
٠5.	TU4581	Damper Arms	21.	TU5914	$3/4'' \times 3\frac{1}{2}''$ Lg. Pipe
6.	F215	Retainer	22.	TU4605	3/4" Elbow
7.	TU4578	Control Rod	23.	TU4597	3/4" Tee
8.	TU4570	Coil Stop	24.	TU4598	3/4" x 6" Lg. Pipe
9.	TU6244	Bonnet Welded Assembly	25.	TU4600	3/4" Union
10.	TU6490	Filter Guides (6 Req'd.)	26.	TU4608	3/4" x 2" Lg. Pipe
11.	TU5741	Damper Seal Plate	27.	TU2862	$3/4" \times 6\frac{1}{2}"$ Lg. Pipe
12.	TU6078	Damper Weldment	28.	TU4601	3/4" x 3" Lg. Pipe
13.	TU5721	Rear Bearing Plate	29.	TU5965	3/4" x 8" Lg. Pipe
14.	TU5860	Rear Coil Spacer	30.	TU4606	3/4" x 4" Lg. Pipe
15.	TU5862	Front Coil Spacer	31.	TU5915	3/4" To 4" Reducing Elbow
16.	TU5861	Rear Coil Holder Bar	32.	TU5936	$\frac{1}{4}$ " x $7\frac{1}{2}$ " Lg. Pipe
17.	TU1700	Steam Coil 4"W. x $10\frac{1}{4}$ "H. x $40\frac{1}{2}$ "L.	33.	TU5923	Solenoid Valve 240 V. 56 or 60
			34.	TU2736	3/4" 'Y' Strainer



# STATIC STEAMER ASSEMBLY

# CONVERSION KIT - TU10655

Ref. No.	Part No.	Description
1	TU8442	Valve Welded Assembly
2	TU9915	Rod & Knob Assembly
3	TU5926	Valve Rod Coupling
4	SF46	ኒ" X 3/8" Elbow
5	TU6050	Static Steamer Tube
6	TU7701	3/8" Copper Tubing
. 7	P126	¼"-20 X ¼" Set Screw
8	SF59	坛" Pipe X 3/8" Tube
		(2 req'd., both ends)
		Compression Straight
•		Connector w/Nut & Bead