

Drying Tumblers

110 Pound Capacity

— Operation/Maintenance —

Keep These Instructions for Future Reference.

(If this machine changes ownership, this manual must accompany machine.)



Part No. D0583
September 2007

Addendum A

Information in this manual is applicable to these models:

HD110

IMPORTANT NOTES - PLEASE READ

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



WARNING: Purchaser must post the following notice in a prominent location:



WARNING: For your safety, the information in this manual must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury, or death.

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

- WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any appliances.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Clear the room, building, or area of all occupants.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

Installation and service must be performed by a qualified installer, service agency or the gas supplier.



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



WARNING: Wear safety shoes to prevent injuries.



WARNING: Purchaser must post the following notice in a prominent location:



FOR YOUR SAFETY

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



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



WARNING: Be safe, before servicing machine, the main power should be shut off.

IMPORTANT NOTES - PLEASE READ



WARNING: To avoid fire hazard, do not dry articles containing foam rubber or similar texture materials. Do not put into this dryer flammable items such as baby bed mattresses, throw rugs, undergarments (brassieres, etc.) and other items which use rubber as padding or backing. Rubber easily oxidizes causing excessive heat and possible fire. These items should be air dried.



WARNING: Synthetic solvent fumes from drycleaning machines create acids when drawn through the dryer. These fumes cause rusting of painted parts, pitting of bright or plated parts, and completely removes the zinc from galvanized parts, such as the tumbler basket. If drycleaning machines are in the same area as the tumbler, the tumbler's make-up air must come from a source free of solvent fumes.



WARNING: Do not operate without guards in place.



WARNING: Check the lint trap often and clean as needed but at least a minimum of once per day.



WARNING: Alterations to equipment may not be carried out without consulting with the factory and only by a qualified engineer or technician. Only **Manufacturer's** parts may be used.



WARNING: Remove clothes from dryer as soon as it stops. This keeps wrinkles from setting in and reduces the possibility of spontaneous combustion.



WARNING: Be safe - shut main electrical power and gas supply off externally before attempting service.



WARNING: Never use drycleaning solvents, gasoline, kerosene, or other flammable liquids in the dryer. ***FIRE AND EXPLOSION WILL OCCUR. NEVER PUT FABRICS TREATED WITH THESE LIQUIDS INTO THE DRYER. NEVER USE THESE LIQUIDS NEAR THE DRYER.***



WARNING: Do not place items exposed to cooking oils in your dryer. Items contaminated with cooking oils may contribute to a chemical reaction that could cause a load to catch fire.



WARNING: Never let children play near or operate the dryer. Serious injury could occur if a child should crawl inside and the dryer is turned on.



WARNING: Never tumble fiberglass materials in the dryer unless the labels say they are machine dryable. Glass fibers break and can remain in the dryer. These fibers cause skin irritation if they become mixed with other fabrics.



WARNING: Before operating gas ignition system - purge air from natural gas or propane gas lines per manufacturer's instructions.



WARNING: To reduce the risk of electric shock, disconnect this appliance from the power supply before attempting any user maintenance other than cleaning the lint trap. Turning the controls to the OFF position does not disconnect this appliance from the power supply.

IMPORTANT NOTES - PLEASE READ

**ATTENTION: L'ACHETEUR DOIT PLACER L'AVERTISSEMENT
SUIVANT DANS UN ENDROIT CLAIR ET VISIBLE:**

AVERTISSEMENT. Assurez-vous de bien suivre les instructions donnees dans cette notice pour reduire au minimum le risque d'incendie ou d'explosion ou pour eviter tout dommage materiel, toute blessure ou la mort.

— Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.

— **QUE FAIRE SI VOUS SENTEZ UNE
ODEUR DE GAZ:**

- Ne pas tenter d'allumer d'appareil.
- Ne touchez a aucun interrupteur. Ne pas vous servir des telephones se trouvant dans le batiment ou vous vous trouvez.
- Evacuez la piece, le batiment ou la zone.
- Appelez immediatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.

— l'installation et l'entretien doivent etre assures par un installateur ou un service d'entretien qualifie ou par le fournisseur de gaz.

**ATTENTION: L'ACHETEUR DOIT PLACER L'AVERTISSEMENT
SUIVANT DANS UN ENDROIT CLAIR ET VISIBLE:**

POUR VOTRE SECURITE

Ne pas entreposer ni utiliser d' essence
ni d'autres vapeurs ou liquides
inflammables dans le voisinage de cet
appareil ou de tout autre appareil.

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CUSTOMER SERVICE

If literature or replacement parts are required, contact the source from which the machine was purchased or contact Alliance Laundry Systems at (920) 748-3950 for the name and address of the nearest authorized parts distributor.

For technical assistance, call (920) 748-3121.

SYMBOLS

The following symbols are used in this manual and/or on the machine.

Symbol	Description
	NOTE!
	Hot! Do Not Touch Heiß! Nicht Berühren Haute temperature! Ne pas toucher Caliente! no tocar
	dangerous voltage tension dangereuse Gefährliche elektrische Spannung tension peligrosa
	on marche Ein conectado
	off arrêt Aus desconectado
	start demarrage Start arranque de un movimiento
	emission of heat in general émission de chaleur en general Warmeabgabe allgemein emisión de calor
	cooling refroidissement Kühlen enfriamiento

SYMBOLS

Symbol	Description
	rotation in two directions rotation dans les deux sens Drehbewegung in zwei Richtungen movimiento rotativo en los dos sentidos
	direction of rotation sens de mouvement continu de rotation Drehbewegung in Pfeilrichtung movimiento giratorio o rotatorio en el sentido de la flecha
	End of Cycle
	caution attention Achtung atencion; precaucion

RULES FOR SAFE OPERATION OF DRYER

1. Be sure your dryer is installed properly in accordance with the recommended instructions.
2. **CAUTION**
Be safe—shut main electrical power supply and gas supply off externally before attempting service.
3. **CAUTION**
Never use drycleaning solvents: gasoline, kerosene, or other flammable liquids in the dryer. **Fire and explosion will occur.**
Never put fabrics treated with these liquids into the dryer.
Never use these liquids near the dryer.
Always keep the lint screen clean.
Never use heat to dry items that contain plastic, foam or sponge rubber, or rags coated with oils, waxes or paints. The heat may damage the material or create a fire hazard. Rubber easily oxidizes, causing excessive heat and possible fire.
Never dry the above items in the dryer.
4. Never let children play near or operate the dryer. Serious injury will occur if a child should crawl inside and the dryer is turned on.
5. **Never** use dryer door opening and top as a step stool.
6. Read and follow manufacturer's instructions on packages of laundry and cleaning aids. Heed any warnings or precautions.
7. **Never** tumble fiberglass materials in the dryer unless the labels say they are machine dryable. Glass fibers break and can remain in the dryer and could cause skin irritation if they become mixed into other fabrics.
8. **Reference**
Lighting and shut-down instructions and wiring diagrams are located on the rear wall of the dryer cabinet.
9. The dryer must not be installed or stored in an area where it will be exposed to water and/or weather.

ENERGY SAVING TIPS

1. Install dryer so that you can use short, straight venting. Turned elbows and long vent tubing tend to increase drying time. Longer drying time means the use of more energy and higher operating costs.
2. Operate dryer using full-size loads. Very large loads use extra energy. Very small loads waste energy.
3. Dry light-weight fabrics separately from heavy fabrics. You will use less energy and get more even drying results by drying fabrics of similar weight together.
4. Clean the lint screen area daily. A clean lint screen helps give faster, more economical drying.
5. **Do not** open the dryer door while drying. You let warm air escape from the dryer into the room.
6. Unload the dryer as soon as it stops. This saves having to re-start your dryer to remove wrinkles.



NOTE

It is best to run a properly sized bag of rags and/or old towels through one or two cycles prior to drying in service. This process will remove any films or residual coatings left by the manufacturing process.



CAUTION

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

ABOVE 2,000 FEET (610 M)

ELEVATIONS ABOVE 2,000 FEET (610 M)

Input ratings shown on the rating plate (serial tag) are for elevations up to 2,000 feet (610 m). For elevations above 2,000 feet (610 m), rating should be reduced at a rate of 4% for each 1,000 feet (305 m) above sea level.

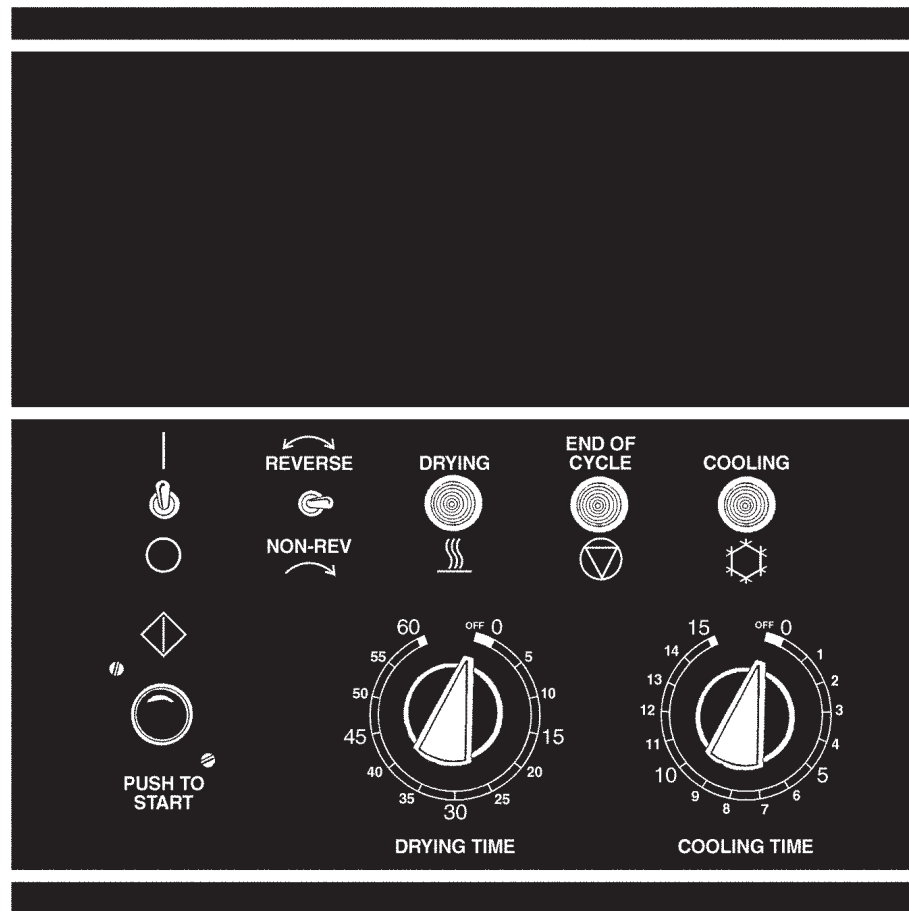


Fig. 1

Fig. 2 Temperature Selection

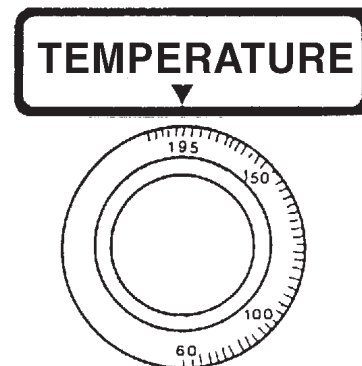
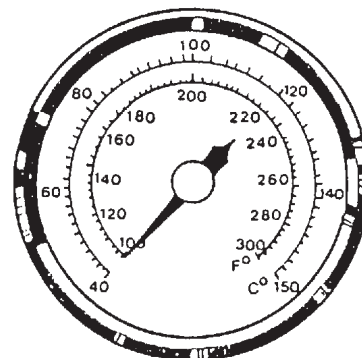


Fig. 3 Thermometer



OPERATING
INSTRUCTIONS—
TWO TIMER MODELS

OPERATING INSTRUCTIONS—TWO TIMER MODELS

1. After loading the dryer with the water washed clothes load, close the loading door. For better drying, do not load dryer with combination of garments that twist.
2. Turn the 60-minute drying timer to the desired drying time. The drying cycle light will be on and indicate the drying. The light shuts off when drying time is complete. (figure 1 on page 10.)
3. Turn the 15-minute cooling cycle timer to the desired cool down time. After the drying cycle is completed, then the cooling cycle time will automatically operate. The cooling light will be on and indicate the cooling of the clothes load. The light shuts off when cooling time is completed. (figure 1 on page 11.)
4. **Temperature Selector**—Select temperature per type of load being dried in the dryer.
High Heat—Mixed and heavy fabrics, set dial to 195°F (77°C).
Normal—Cottons and linens, set dial to 170°F (77°C).
Permanent Press Heat—Poly knit synthetics, blends, light-weight fabrics, set dial to 150°F (66°C).
Low Heat—Delicate, sheer fabrics, easy-to-dry, set dial to 135°F (58°C).
5. **Thermometer**—Use this with your temperature selection. Note what temperature is too hot or too cold. (figure 3 on page 10.)
6. Turn switch to “ON” or “I” position. (figure 1 on page 10.)
7. Close the dryer door, but the basket will not rotate until the **PUSH-TO-START BUTTON** is pressed. Press in the **PUSH-TO-START BUTTON** (approximately 2 seconds) until the dryer starts running and then release button. (figure 1 on page 10.)

**OPERATING
INSTRUCTIONS—
TWO TIMER MODELS**

**OPERATING INSTRUCTIONS—TWO TIMER MODELS
(continued)**

What is happening to the drying operation:

- a. The fan motor will operate.
- b. The basket will rotate.
- c. The heat source will be energized.
- d. The heated air will mix with the water washed clothes to evaporate the moisture from the garments.
- e. The thermostats will function to maintain a safe temperature throughout the drying cycle.
- f. The heat will be shut off and the motor will continue to run to cool the dry load to a desired handling temperature.

8. When the drying timer completes its time, then the cooling timer will be energized and the cooling light will be “On”. When the cooling timer completes its time, the cooling light will turn “Off” and the “End-of-Cycle” light will be “On”. The “End-of-Cycle” light will go off when the “Start/Stop” switch is turned to “Off” or “O”. At the end of the cool-down cycle, the clothes load is dry.
9. To shut the dryer “Off”, move the “Start/Stop” switch to “Off” or “O” position. This switch is a safety switch to immediately stop the dryer's operation.

Special Reversing Feature—Set the “Reversing/Non-reversing” switch to “Reversing”. See service manual for setting of time of each reversal. Reversing of the basket is designed for loads that twist (**example**—bed sheets and large mixed loads). “Non-reversing” is for small or medium-size items that don't twist.

TROUBLESHOOTING

To help you troubleshoot the dryer, listed below are the most common reasons for service calls and some answers to the problems. Before you call service, please review the following items:

DRYER WON'T START

1. Is the door completely closed?
2. Are the controls set to the **"ON"** or **"I"** position?
3. Did you push the **"start"** control?
4. Has a fuse blown or a circuit breaker tripped?
5. Are the fuses tight?
6. Check for low voltage.

DRYER WON'T HEAT

1. Is the dryer set for **"cooling time"** rather than **"drying time"**?
2. Are the gas valves in the dryer and the valve on the main gas line turned on?
3. Check for low or intermittent gas pressure.

CLOTHES ARE NOT SATISFACTORILY DRY

1. *Timed cycle*—Did you allow enough heating time before the cool-down part of the cycle?
2. Is the lint screen blocked?
3. Is the exhaust duct to the outside clean and not blocked? (*A blocked exhaust will cause slow drying and other problems.*)

GAS DRYER IGNITION

The dryer has a safety device which automatically shuts off the gas if the burner fails to light in a short time. If this happens, turn the dryer off. Check and see if the manual gas valve is open. Wait 5 minutes for the safety device to reset. Then reset the dryer controls. If the dryer still fails to heat, call for service. All panels, covers and doors must be in place and closed before starting the dryer.

VERY IMPORTANT

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

TROUBLESHOOTING CHART

TROUBLE	CAUSE	REMEDY
Motor will not start.	No power.	Check fuses on circuit breakers. Make sure main control switch is ON.
	Incorrect power.	Check power source; voltage, phase and frequency must be the same as specified on electrical rating plate.
	Time off.	Turn timer clockwise to desired time setting.
	Loose wiring connections.	Check wire connections in electrical box on rear of dryer.
	Defective starting relay.	Check coils and contacts.
Motor tripping on thermal overload.	Low voltage.	Check voltage at motor terminals. Voltage must be within $\pm 10\%$ 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 section for recommended make-up air openings.
	Poor housekeeping.	Clean lint accumulation on and around motors.
Basket motor will not run.	Loading door OPEN.	Close door.
	Door switch out of adjustment.	Adjust switch by removing cover and bend actuator lever to clear switch button 3/8" (10 mm) with cover in place.
	Defective door switch.	Replace switch.
	Defective basket motor contractor.	Replace contactor.
Motor runs, but basket will not revolve.	V-belt broken.	Replace V-belt.
	V-belt loose.	Adjust belt tension.
	Motor pulley loose.	Tighten set screw.
	Basket overloaded.	Remove load.
Dryer noisy or vibrating.	Not leveled.	Check Installation Manual for proper leveling procedures.
	Fan out of balance.	Accidental damage to the fan blade can change the dynamic balance. Damaged fans should be replaced.
	Basket rubbing.	Adjust basket clearance.
	V-belt sheaves.	Tighten set screws. Make sure sheaves are in proper alignment.
	Belt.	Adjust belt tension.
	Foreign objects.	Occasionally screws, nails, etc., will hang in the basket perforations and drag against the sweep sheets surrounding the basket. Such foreign objects should be removed immediately.

TROUBLESHOOTING CHART

TROUBLE	CAUSE	REMEDY
Dryer runs, but no heat.	Incorrect voltage.	Check for correct control voltage - 24V.
	No voltage.	Check power supply, check secondary voltage on transformer and check wiring and wiring diagram.
	Lint door open.	Close lint door.
	Defective gas valve.	Replace valve assembly.
	Gas turned off.	Turn manual gas valve on.
	Line fuse or heater circuit fuse blown to unit.	Replace fuse.
	Defective door switch.	Replace door switch.
	Spark igniter not igniting gas.	Check ground.
	Air switch not operating.	Clean out lint compartment daily. Check back draft damper for foreign objects, lint accumulation or other causes that may prevent damper from operating. Check duct work for lint build-up. Check installation sheet to insure that duct work and make-up air openings are adequately sized. Check exhaust outlet. If a screen has been improperly installed on the outlet, it may be clogged with lint or frozen over in winter. Never install a screen on the exhaust outlet. Vacuum within dryer drops to .09 inches or water column, or less, for normal operation of dryer, vacuum reading can be made with a vacuum U-Gauge by removing a sheet metal screw in the front panel of dryer, and inserting the rubber tube of the vacuum gauge into screw opening.
	Air switch out of adjustment.	See Air Switch Adjustment Sheet in Service Manual.
	Air switch defective.	Replace air switch.
	Gas pressure too low.	Check manifold pressure and adjust to pressure specified on rating plate. If this pressure cannot be obtained, have gas supplier check main pressure.
	Improper orifice.	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.
	Electric power to heating unit turned off.	Turn power ON.
	Defective relay.	Replace relay.
	Defective thermostat.	Replace thermostat.
	Defective safety overload thermostat.	Replace thermostat.
	Lint compartment door open.	Open door.

TROUBLESHOOTING CHART

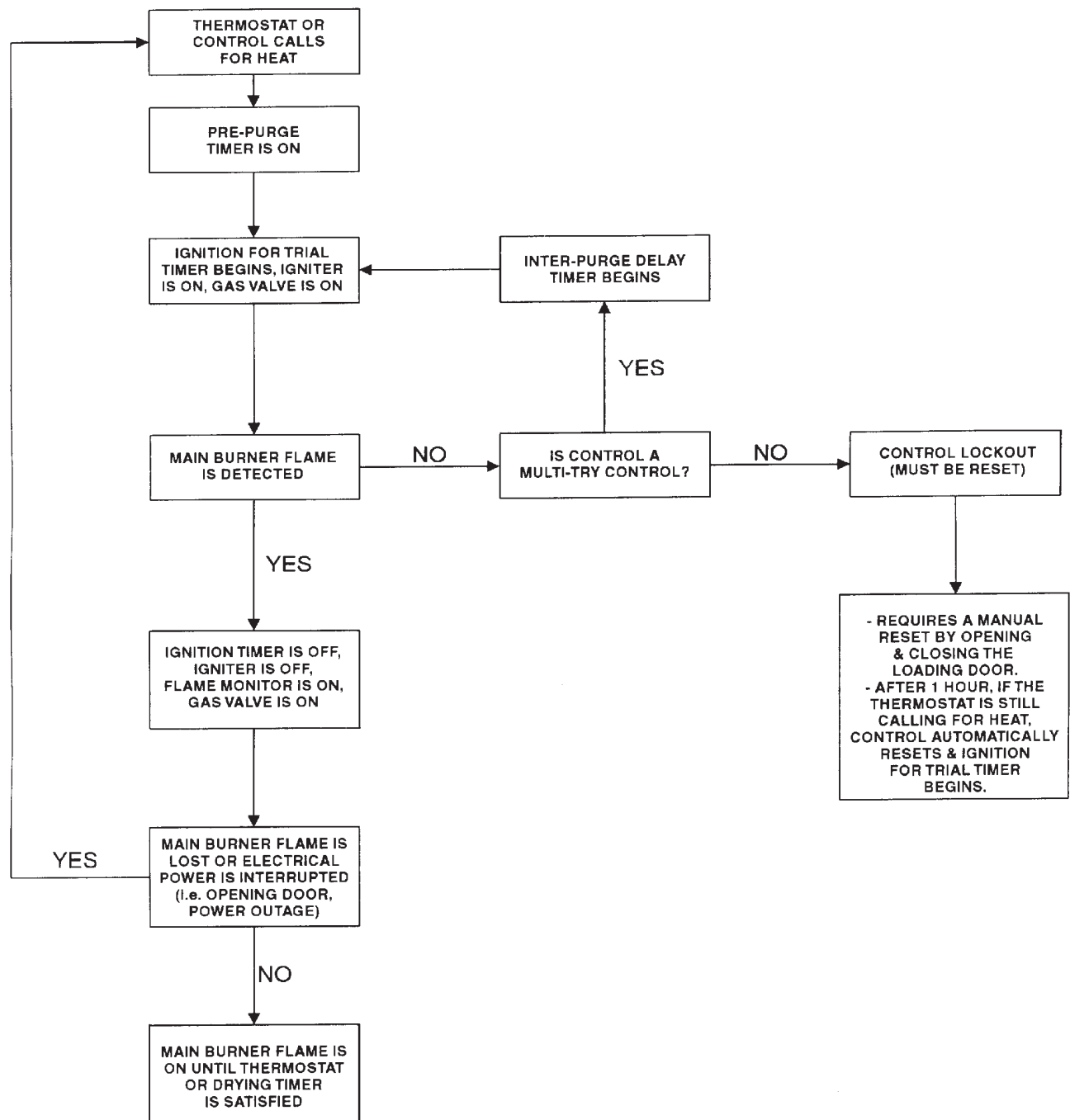
TROUBLE	CAUSE	REMEDY
Main burners burning improperly.	Dirt in burner.	Blow out.
	High gas pressure.	Adjust gas pressure per rating plate.
	Orifice too large.	Send to factory for correct orifices.
	Restricted or blocked exhaust.	Clean exhaust.
Main burner cycles on and off.	Defective ground.	Check ground.
Low or high gas flame.	Incorrect main burner orifices.	Replace orifices. Check factory for correct size.
Dryer too hot.	Incorrect main burner orifice.	Replace orifices. Check factory for correct size.
	Inadequate make-up air.	Make-up air must be 4 to 6 times the exhaust area of the dryer.
	Lint accumulated.	Remove lint.
	Exhaust duct dampers.	Must be full open or replace.
	High gas pressure.	Adjust gas pressure as specified on rating plate.
	Partially restricted or inadequately sized exhaust system.	Check Service section for recommended sizes. Remove obstructions or lint build up from duct work. NEVER use smaller size exhaust duct. ALWAYS use larger size.
	Defective thermostat.	Replace thermostat.
Dryer does not stop at end of time period (6).	Defective timer.	Replace timer.
Dryer runs no steam to coils.	Valve closed.	Check all valves in steam supply and return. Make sure they are OPEN.
	Steam trap blocked.	Remove and clean. Replace if defective.
	Solenoid valve.	On dryers using solenoid temperature control, thermostat controls operation of solenoid valve by advancing thermostat.
	Thermostat.	On dryers using solenoid temperature control, thermostat controls operation of solenoid valve. If defective, replace thermostat.
	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 thoroughly 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 thoroughly or replace. Check return line for high back pressure, or another trap charging against the trap functioning improperly.

DIRECT SPARK IGNITION OPERATION

NOTE: Some models are equipped with a dual ignition system. The dual ignition system contains two direct spark ignition modules in parallel. Each module has its own flame sense circuit and acts independently of the other. If either bonnet limit thermostat opens because of high heat or flame impingement, the entire ignition system will shut down.

1. When a call for heat is received from the control supplying 24VAC to the ignition control module, the pre-purge delay timer begins. This delay time allows any air/sediment to be ejected prior to burner ignition. Following the pre-purge delay period, the gas valve is energized and the spark ignitor sparks for the trial for ignition period.
2. When a flame is detected during the trial for ignition period, the spark ignitor shuts off and the gas valve remains energized.
3. If no flame is detected by the flame sense circuit, the ignition control module will go into safety lockout. The valve will be turned off immediately. If the module has multiple retries and no flame is detected, the gas valve is de-energized and the module goes into an interpurge delay. After this delay, the module will attempt another trial for ignition period. This will continue until the number of retries has been used up. At that time, the module will go into safety lockout.
4. Recovery from safety lockout requires one of the following:
 - a. A manual reset by opening and closing the loading door.
 - b. After one hour if the control thermostat is still calling for heat, the module will automatically reset and the trial for ignition period will start over.
5. Opening the loading door will cause the flame to extinguish. Closing the door and starting the dryer will restart the trial for ignition period.
6. Once the control thermostat has been satisfied and/or the drying timer has been timed out, the ignition control module(s) will be de-energized, the gas valve(s) will be de-energized and the flames will extinguish.
7. The machine will continue to run in a cooldown mode without heat. This process will cool the load to the touch and help to eliminate wrinkling.

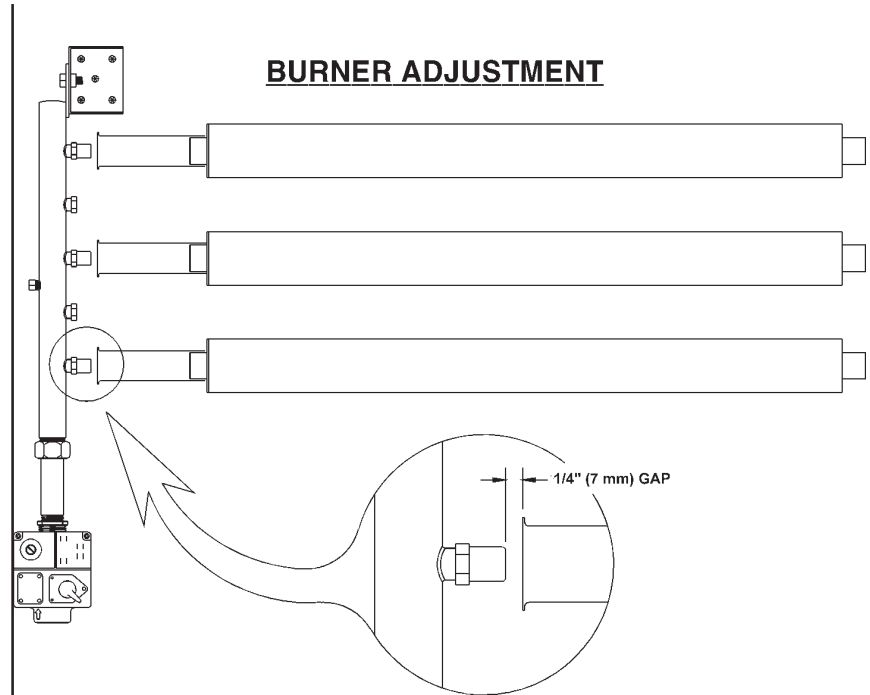
DIRECT SPARK IGNITION OPERATION FLOW CHART



MAINTENANCE—GENERAL

<u>DAILY</u>	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 more quickly. DRYER AREA. Keep dryer area clean and free from combustible materials, gasoline and other flammable vapors and liquids. SLIDING DOORS. Check track for foreign objects.
<u>WEEKLY</u>	UNITS HEATED BY STEAM. Keep steam coils clean. Check periodically and clean often, as required. Remove lint and dirt build-up from fins. Dirty fins decrease the efficiency of units heated by steam. GAS BURNERS. Keep burners clean. Check periodically and clean often. AIR PRESSURE. Check airlines for water. Check/service any air regulator/filter per manufactures information. May need to do this check more often, depending on air quality.
<u>MONTHLY</u>	FIRE DETECTION AND SUPPRESSION SYSTEM (FDS). Check FDS to make sure the system is working properly. See manuals for details.
<u>THREE MONTHS</u>	CLEAN BASKET AND SWEEP SHEETS. Clean periodically and/or as often as required. The basket and sweep sheets are easily accessible by removing the front panel of the dryer. EXHAUST SYSTEM. Check and clean. GEAR MOTORS. Check oil level. See separate information on gear motor for maintenance GEAR REDUCER. Maintain the correct oil level. See separate page on gear reducer operation and maintenance, for detailed information.
<u>SIX MONTHS</u>	PULLEYS AND BELTS. Keep belts clean. Oil and dirt will shorten the useful life of the belt. Never allow a belt to run against the belt guard. Check periodically for alignment. Pulley shafts must be parallel and the grooves must be aligned. 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 rod connected to the gear reducer. MAKE-UP AIR. Do not obstruct the flow of combustion (make-up) air and ventilating air. Check ducting for obstructions. GAS PRESSURE. Check gas pressure. DRYER VOLTAGE. Check dryer voltage per dryer Rating Plate. AIR SWITCH. Check air switch alignment. Some models do not have air switches.
<u>YEARLY</u>	ELECTRIC MOTORS. Keep motors clean and dry. LOADING DOOR GASKET. Check for tears, rips, gashes, etc. Replace if damaged.

**BURNER AIR INLET
ADJUSTMENT**



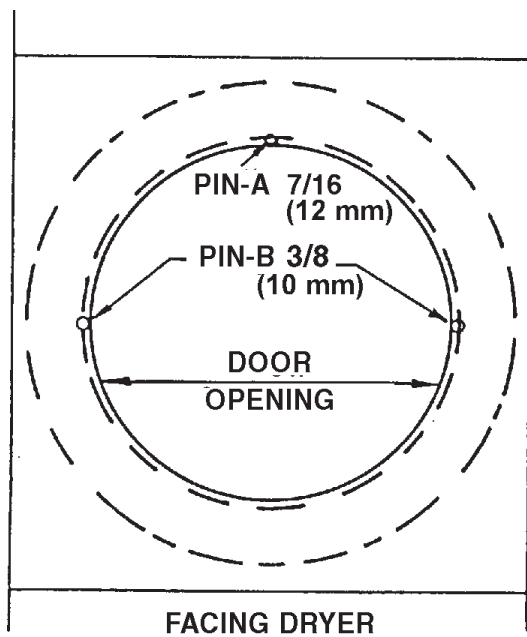
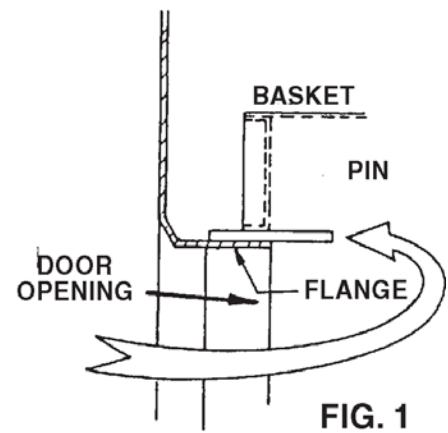
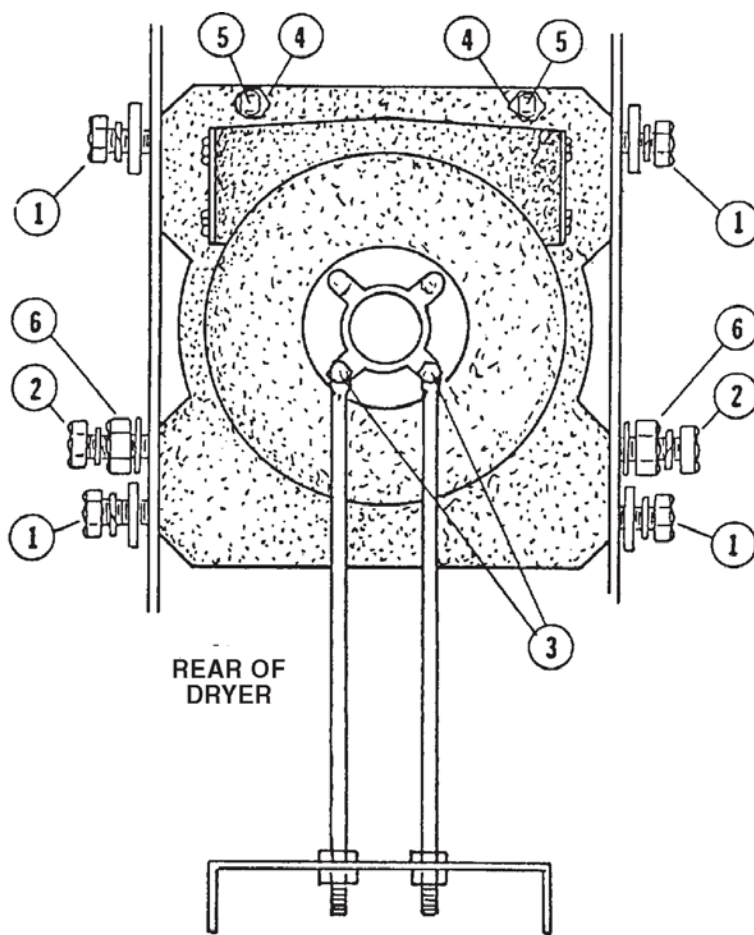


FIG. 2

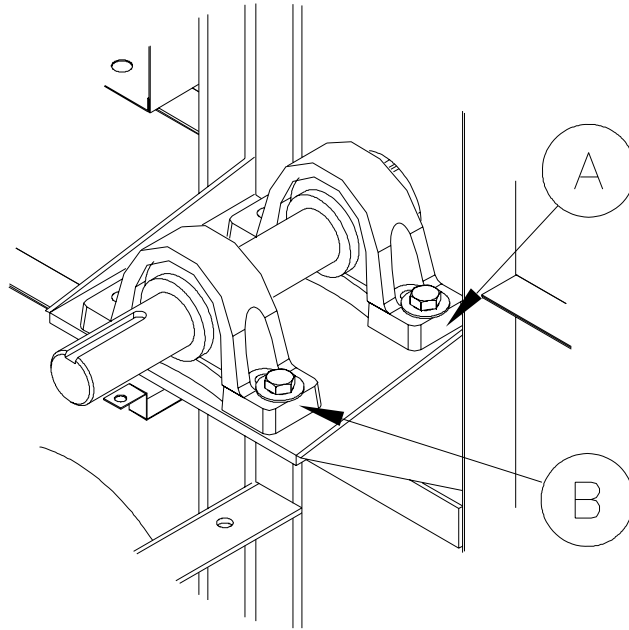
**INSTRUCTIONS FOR
ALIGNING BASKETS ON
110 LB. DRYERS**

INSTRUCTIONS

1. Loosen bolts number one (1) through five (5).
2. Place pin "A" in position shown in figures 1 and 2.
3. Check pins "B" at position shown in figures 1 and 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.



Jacket Rear View

BASKET TOO LOW

If there are shims under Bearing B;

1. Loosen bolts
2. Remove shim(s).
3. Tighten bolts - check alignment.

If there are no shims under B;

1. Loosen bolts on bearing A.
2. Add shim(s) under bearing A.
3. Tighten bolts - check alignment
4. Repeat until aligned.

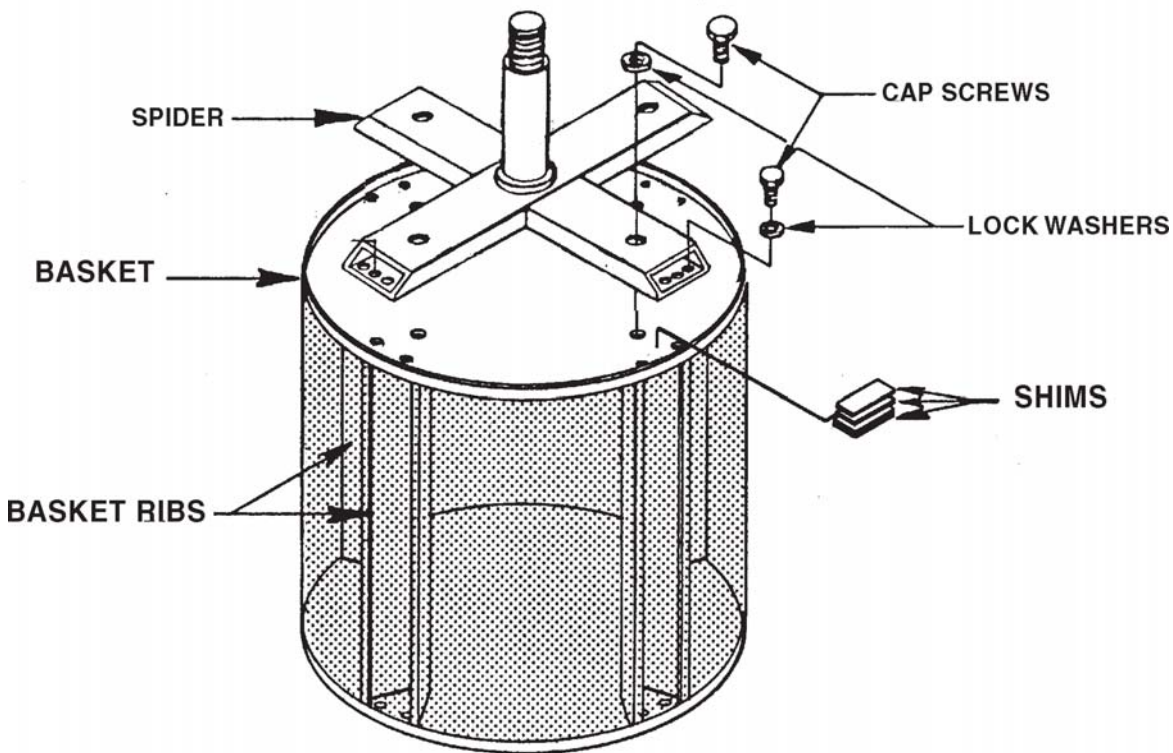
BASKET TOO HIGH

If there are shims under A;

1. Loosen bolts
2. Remove shim(s).
3. Tighten bolts - check alignment.

If there are no shims under A;

1. Loosen bolts on bearing B.
2. Add shim(s) under bearing B.
3. Tighten bolts - check alignment
4. Repeat until aligned



INSTRUCTIONS FOR SHIMMING THE BASKET AND SPIDER ASSEMBLY

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

- A. Align the basket as per instructions on the previous page.
- B. Rotate the basket to determine where the most out-of-round point is (where the basket scrapes or comes closest to scraping the sweep sheet).
- C. Mark this position and the nearest rib to this position. If it is between two ribs, both ribs may need to be shimmed.
- D. Remove the basket from the dryer (do not loosen the alignment bolts).
- E. With the basket on the floor (spider up), loosen the cap screws and tie rod nuts enough to insert one or two shims between the spider leg and the basket at the marked position. With shims in place, tighten the screws and nuts.
- F. Install spider and basket assembly and check again.
- G. If basket is still out-of-round, start at *Step B* and repeat procedure.
- H. When shimming is completed, re-align basket.

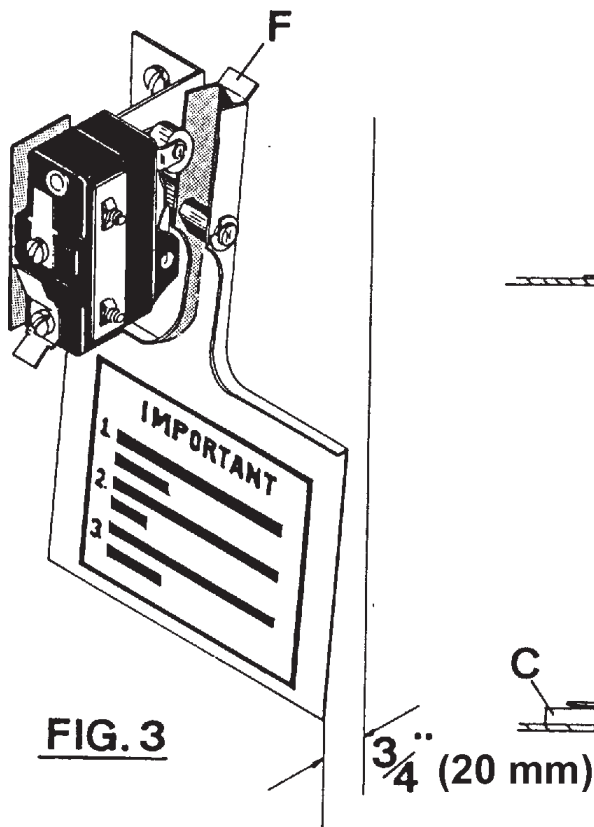


FIG. 1

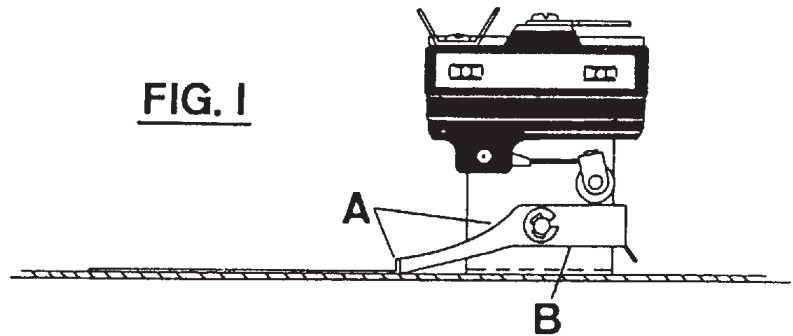
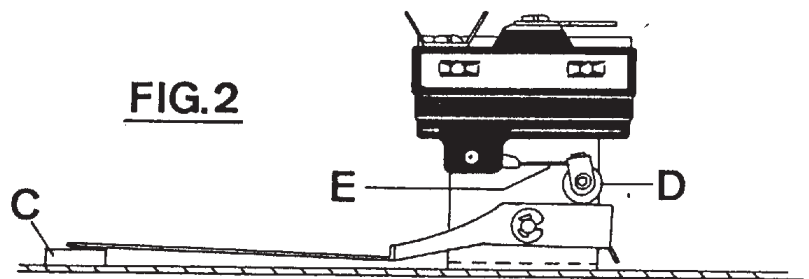


FIG. 2



AIRSWITCH ADJUSTMENT

1. Shut off current; disconnect leads and remove air switch.
2. Lay air switch assembly on flat surface. Adjust air blade at "A" (figure 1) so that air blade lays flat and surface "B" is parallel to the flat surface.
3. Place 3/8" x 5/8" (10 mm x 16 mm) spacer bar or equivalent "C" (figure 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" (20 mm) (figure 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
DRYERS WITH
REVERSING CONTROL
TIMER**

Instructions

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 the gear reducer.

Adjustment of reversing timer dwell time

CAUTION

Dryer power supply must be shut off before adjusting timer.

The dwell time is the time from when the motor turns “off”, to when it turns “on” again in the opposite direction.

Turning the dwell adjustment knob counter-clockwise increases the dwell time and turning it clockwise decreases the dwell time.

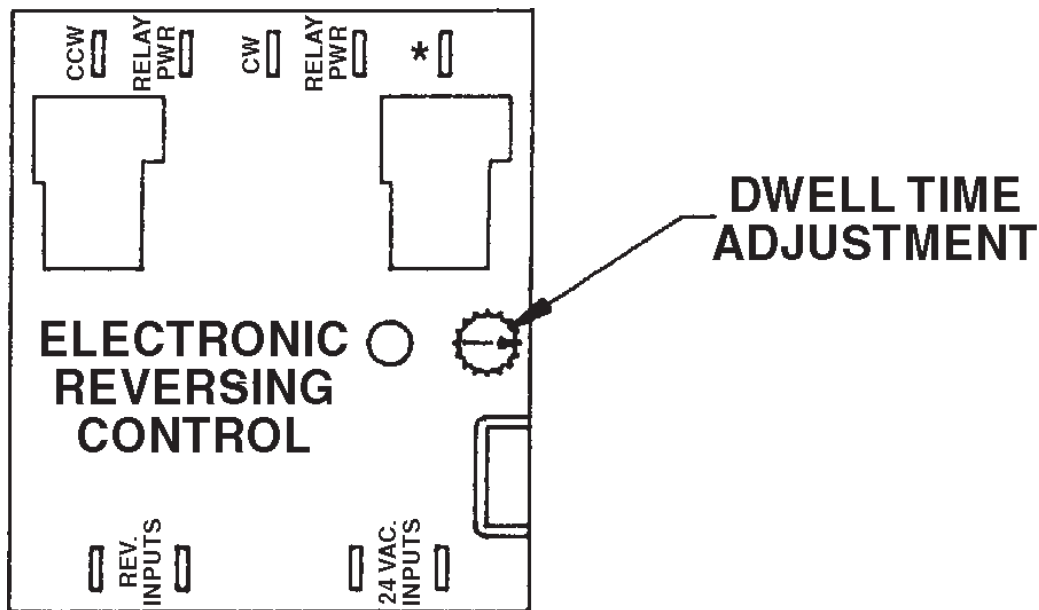
Recommended dwell time for the basket to stop completely is 5 to 7 seconds. Minimum basket stopping time is 4 seconds.

NOTE

Select non-reversing or reversing before starting dryer.

NOTE

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



**INSTRUCTIONS FOR
DRYERS WITHOUT
REVERSING CONTROL
FAN AND BASKET
ROTATION**

Instructions

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 clockwise as viewed from front of tumbler.

To change rotation of both fan and 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.

**LARGE GEAR
REDUCER
MAINTENANCE**

LARGE GEAR REDUCER MAINTENANCE

Before placing the dryer in operation, check the oil level. If the oil level is correct, it can be checked by removing the fill overflow plug on the right hand side of the gear reducer (facing rear).

If oil must be added, remove the pop-off valve at the top of the gear reducer and add as needed.

CHANGE OIL ONCE EVERY 6 MONTHS.

WARNING:

Oil level shall not exceed 52 oz.

Please drain oil to oil level plug if required.

