RULES FOR SAFE OPERATION OF YOUR DRYER

RULES

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

- a. Never use dry cleaning solvents: gasoline, kerosene, or other flammible liquids in the dryer.
 FIRE AND EXPLOSION WILL OCCUR!
- b. **Never** put fabrics treated with these liquids into the dryer.
- c. Never use these liquids near the dryer.
- d. **Always** keep the lint screen clean; a full lint screen may be a fire hazard.
- e. **Never** use heat to dry items that contain plastic, foam, or sponge rubber, or rags coated with wax or paint. 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 the dryer door opening and top (or the lint drawer) as a step stool.
- 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 irriatation if they become mixed into other fabrics.
- 8. **Reference** Lighting and shutdown instructions and wiring diagrams are located on the rear wall of the dryer cabinet.



NOTE:

It is best to run a properly sized load 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 processes.



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.

ENERGY SAVING TIPS

ENERGY SAVING TIPS

- Install dryer so that you can use short, straight venting.
 Turns, elbows and long vent tubing tend to increase drying time. Longer dry 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 lightweight fabrics separately from heavy fabrics. You'll use less energy and get more even drying results by drying fabrics of similar weight together.
- 4. Clean the lint screen after each load. A clean lint screen helps give faster, more economical drying.
- 5. Don't open the dryer door while drying. You let warm air escape from the dryer into the room.
- 6. Unload your dryer as soon as it stops. This saves having to re-start your dryer to remove wrinkles.

ABOVE 2,000 FEET

ELEVATIONS ABOVE 2,000 FEET

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

Service Savers

TROUBLESHOOTING

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

DRYER WON'T START

DRYER WON'T START

- 1. Is the door completely closed?
- 2. Are the controls set to the "on" position?
- 3. Is there time on both timers?
- 4. Did you push the "push to start" button?
- 5. Has a fuse blown or a circuit breaker tripped?
- 6. Are the fuses tight?
- 7. Check for low voltage.

DRYER WON'T HEAT

DRYER WON'T HEAT

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

CLOTHES ARE NOT SATISFACTORILY DRY

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.)
- 4. *(For Moisture Control models)* Was the moisture level setting incorrect? *(Too high?)*

GAS DRYER IGNITION

GAS DRYER IGNITION

Refer to the page on "Instructions for the Direct Ignition System Operation". Check to see if the manual gas valve is open. Then reset the dryer controls. All panels, covers, and doors must be in place and closed before starting the dryer. The ignition module ground wire must be securely grounded to the machine (both sides on gas unit).

VERY IMPORTANT

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

TROUBLE	CAUSE	REMEDY
Basket motor runs, but	V-Belt broken.	Replace V-Belt.
basket will not revolve.	V-Belt loose.	Adjust belt tension.
	Motor Pulley loose.	Tighten Set Screw.
	Basket overloaded.	Remove load.
	Not leveled.	Check manual for proper leveling procedures.
Dryer noisy or vibrating.	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.
	Incorrect voltage.	Check for correct control voltage - 24V.
	No voltage.	Check power supply, check secondary voltage on
		transformer and check wiring and wiring diagram.
Dryer runs but no heat.	Spark igniter not sparking.	May be broken or defective high voltage lead. Module
NOTE: This dryer has		not receiving correct input to ignite. See pages 35-36
two ignition systems,		for Direct Spark Ignition process. Make sure ignition
valves, etc. Be sure to		module ground wire is securely grounded to the
check both systems.		machine (both sides).
	Defective gas valve.	Check continuity across unplugged valve. If defective,
		replace coil assembly.
	Gas turned off.	Turn manual gas valve "ON".

TROUBLE	CAUSE	REMEDY
Dryer runs, but no heat	Line fuse or heater circuit fuse	Replace fuse.
(continued).	blown to unit.	
	Defective door switch.	Check continuity across contacts, opened & closed. If
		defective, replace door switch.
	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 opening. 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 of water column, or less, for
		normal operation of dryer, vacuum reading (in inches
		of water column) should range between .15 and .3 inches. Vacuum reading can be made with a vacuum
		U-gauge by removing a sheet metal screw in the back
		panel or right panel at front bottom corner and
		inserting the rubber tube of the vacuum gauge into
		screw opening.
	Air switch out of adjustment.	See air switch adjustment sheet in service section of
		manual.
	Air switch defective.	Check continuity across contacts, opened and closed.
		If defective, replace switch with power off.
		Check manifold pressure and adjust to pressure
	Gas pressure too low.	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 specifica-
		tions for gas being used. If different from rating plate,
		contact factory to obtain proper orifices.
	Electric power to heating unit	Turn power on.
	turned off.	
	!	!

TROUBLE	CAUSE	REMEDY
Dryer runs, but no heat	Defective thermostat.	Check continuity across thermostat.
(continued).		Limiting or safety thermostats are normally closed.
		If open, replace thermostat.
	Defective safety overload thermo-	See above.
	stat.	
	Lint compartment drawer open.	Close drawer.
Main burners	Dirt in burner.	Blow out.
burning improperly.	Gas pressure too high.	Check rating plate for correct gas pressure.
	Orifice too large.	Send to factory for correct orifices.
	Restricted or blocked exhaust.	Clean exhaust.
	Incorrect or poor gas mixture.	Check with gas supplier for correct
		specifications of gas used; must match rating plate.
Low gas flame or high	Incorrect main burner orifices.	Replace orifices check factory for correct size.
gas flame.		
Dryer too hot.	Incorrect main burner orifices.	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 when dryer is in operation or
		replace.
	Gas pressure too high.	Adjust gas pressure as specified on rating plate.
		Check installation sheet in service section of
	Partially restricted or	manual for recommended sizes. Check for and
	inadequately sized exhaust system.	remove obstructions or lint build-up from duct
		work. Never use smaller size exhaust duct. Always
		use larger size
		exhaust duct.
	Defective thermostat.	When flame or heat is passed over,
		thermostat circuit should open. Audible click will
		usually be heard. If continuity remains, thermostat
		is defective. Replace thermostat.

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	Low voltage.	Check voltage at motor teminals. Voltage must be
thermal overload.		within (plus or minus) 10% of voltage shown on
		motor rating plate if not, check with local power
		company for recommended corrective measures.
	Inadequate wiring.	Check with local power company to insure that
		wiring is adequately sized for load.
	Loose connections.	Check all electrical connections and tighten any
		loose connections.
	Inadequate air.	Check installation sheet in service section of this
		manual for recommended make-up air openings.
	Poor housekeeping.	Clean lint accumulation on and around motors.
		Motors should not be covered with or filled with
		lint.
Basket motor will not	Loading door open.	Close door.
run.	Door switch out of adjustment.	Adjust switch by removing cover and bend actuator
		lever to clear switch button 3/8" with cover in
		place.
	Defective door switch	Check continuity across switch with power off, in
		closed and open switch. If no
		continuity, replace switch.
	Defective basket motor contactor.	Push in contactor trip button. If motor starts, check
		voltage going to pull-in solenoid. If present,
		replace contactor. If not, problem is before motor
		contactor.
Basket will not reverse.	Reversing timer.	Adjust timer (see Maintenance Section).
		Check timer to see if it is working.

TROUBLE	CAUSE	REMEDY
Dryer does not stop at	Defective timer.	Replace timer.
end of time period (6).		
Dryer runs no steam to	Valve closed.	Check all valves in steam supply and return
coils.		make sure they are open.
	Steam trap blocked.	Remove and clean. Replace if defective.
	Solenoid valve.	On dryers using solenoid temperature
		control, check 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	Check for inlet and outlet marking on check valve,
	incorrectly.	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	Check piping per steam installation
	incorrectly.	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.
		Check voltage to damper motors.
No heat to drum	Dampers not operating	Adjust dampers to close when calling for heat.
	correctly.	