

# OWNER'S MANUAL 75 lb. HD LAUNDRY DRYER



# Gas: Natural and LP Steam Electric

Technical specifications
Installation instructions
Operating instructions
Maintenance

HD75.1

#### IMPORTANT NOTICES—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: 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 loss of life.

vicinity

- Do not store or use gasoline or other flammable liquids or vapors in the 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 the 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.

# 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 tuot 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 apparell.

# \_ QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:

- Ne pas tenter d'allumer d'apparell.
- 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. **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:** 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:** Check the lint trap often and clean as needed but at least a minimum of once per day.

**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.

#### FAGOR DRYER WARRANTY

The Fagor warrants all new equipment (and the original parts thereof) to be free from defects in material or workmanship for a period of three (3) 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 three (3) years due to normal wear and tear, and with respect to all new repair or replacement parts for Fagor equipment for which the three (3) year warranty period has expired, or for all new repair or replacement parts for equipment other than Fagor equipment, the warranty period is limited to ninety (90) days from date of sale. The warranty period on each new replacement part furnished by Fagor 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 Fagor, the warranty is limited to that provided by the respective manufacturer.

Fagor's total liability arising out of the manufacture and sale of new equipment and parts, whether under the warranty or caused by Fagor's negligence or otherwise, shall be limited to Fagor repairing or replacing, at its option, any defective equipment or part returned f.o.b. Fagor's factory, transportation prepaid, within the applicable warranty period and found by Fagor to have been defective, and in no event shall Fagor 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 Fagor 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 Fagor 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 Fagor; operated or repaired with other than genuine Fagor replacement parts; damaged by fire, flood, vandalism, or such other causes beyond the control of Fagor; altered or repaired in any way that effects the reliability or detracts from its performance, or; which have had the identification plate, or serial number, altered, defaced, or removed.

No defective equipment or part may be returned to Fagor for repair or replacement without prior written authorization from Fagor. Charges for unauthorized repairs will not be accepted or paid by Fagor.

FAGOR 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. FAGOR 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 Fagor equipment or part was purchased. If the Distributor cannot be reached, contact Fagor.

#### **IDENTIFICATION NAMEPLATE**

The Identification Nameplate is located on the rear wall of the dryer. It contains the dryer serial number, product number, model number, electrical specifications and other important data that may be needed when servicing and ordering parts, wiring diagrams, etc. Do not remove this nameplate.

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#### **SYMBOLS**

The following symbols are used in this manual and/or on the machine. The numbers between () refer to the numbers on the machine surveys.

Symbol Description Symbol

	NOTE!	Rotation in two directions Rotation dans les deux sens Drehbewigung in zwei Richtungen Movimiento rotativo en los	
nills:	Hot! Do Not Touch Heiß! Nicht Beruhren Haute temperature! Ne pas toucher Caliente! no tocar	dos sentidos  Direction of rotation Sens de mouvement continu De rotation Drehbewegung in Pfeilrichtung movimiento	
A	dangerous voltage tension dangereuse Gefährliche elektrische Spannung tension peligrosa	Giratorio o rotatorio en el sentido de la flecha End of Cycle	
	On Marche Ein Conectado	Caution Attention	
	Off Arrêt Aus Desconectado	Achtung Atencion; precaucion	<u> </u>
	Start Demarrage Start Arranque de un movimiento		
<u> </u>	Emission of heat in general Emission de chaleur en general Warmeabgabe allgemein Emisión de calor		
***	Cooling Refroidissement Kühlen Enfriamiento		

#### **UNPACKING**

Upon arrival of the equipment, any damage in shipment should be reported to the carrier immediately.

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

See outline clearance diagrams for correct dimensions.

Remove all packing material such as: tape, manuals, skid, etc

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

Check voltage and amperes on rating plate before installing the dryer.

# GENERAL INSTALLATION (ALL DRYERS)

The construction of the dryers permits installation side-byside to save space or to provide a wall arrangement. Position dryer for the least amount of exhaust piping and elbows, and allow free access to the rear of dryer for future servicing of belts, pulleys and motors. Installation clearance from all combustable material is 0" ceiling clearance, 0" rear clearance, and 0" side clearance.

Before operating dryer, open basket door and remove blocking between front panel and basket. Read the instruction tags, owner's manual, warnings, etc.

#### **IMPORTANT**

Opening the clothes loading door deactivates the door switch to shut off the motors, fan, gas, steam, or electric element. To restart the dryer, close the door and press in the push to start button.

#### **IMPORTANT**

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

#### **IMPORTANT**

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

#### **IMPORTANT**

Provide adequate clearance for air opening into the combustion chamber.

# GENERAL INFORMATION

The dryer is so designed that when an operator opens the dryer door, the basket and exhaust fan stop. You can expect fast drying from a laundry dryer. Hot, dry air is properly and effectively moved through the basket and exhausted through a lint trap to the atmosphere. The dryer comes equipped with an inclined self-cleaning lint screen. In this system, lint accumulates on the underside of the screen until a 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 overaccumulation.



#### **IMPORTANT**

Provide adequate clearance for air openings into the combustion chamber.

DRYER
"COOL-DOWN"
CYCLE

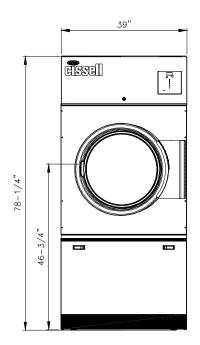
Permanent press, durable press and other modern day fabrics require the care that your laundry dryers now provide. At the end of the drying cycle, a timed "Cool-Down" control automatically takes over and continues the rotation of the fan and basket without heat until the garment load reaches a safe cool temperature. This function is performed at the end of each drying cycle and continues for two minutes.

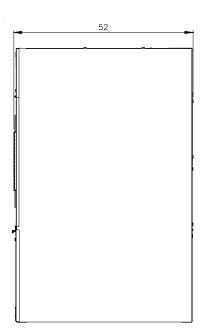
# REPLACEMENT PARTS

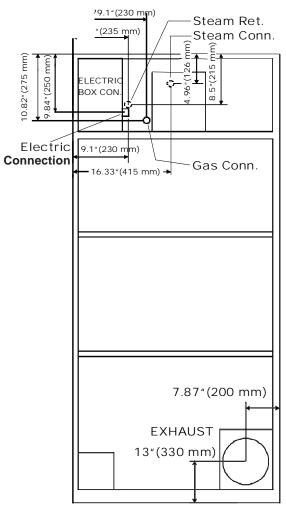
Replacement parts for this dryer are available from your distributor or by contracting the factory at the address or phone number printed on the cover page of this manual.

HD75.1 lb. Dryer Dimensions - Standard Gas

Specifications	U.S. Measure	Metric Measure	
Capacity (Dry Linen)	75 lbs.	34 kg	
Basket			
Diameter	37 inches	940 mm	
Depth	36 inches	914 mm	
Volume	22.4 ft <sup>3</sup>	634 liters	
Cabinet			
Height	78-1/4 inches	1988 mm	
Width	39 inches	990 mm	
Depth	52 inches	1321 mm	
Door Opening			
Diameter	22-5/8 inches	575 mm	
Loading height	35-1/2 inches	902 mm	
Temperature			
Minimum	100° F	38° C	
Maximum	185º F	85° C	
Motor			
Non-reversing	3/4 HP	0.56 kW	
Reversing - Drum	1/2 HP	0.37 kW	
Fan	1/3 HP	0.25 kW	
Exhaust			
Flow Rate	1000 cfm	1700 m³/h	
Diameter	8 inches	203 mm	
Electric Conn E	Clectric Dryers	Non-Reversing	Reversing
208 V	60 - 3 PH	89 A	88 A
220/240 V	50/60 - 3 PH	72/78 A	72/78 A
380/415 V	50 - 3 PH	44/48 A	43/46 A
480 V	60 - 3 PH	38 A	39 A
Electric Conn Ste	am, Gas Dryers	Non-Reversing	Reversing
120/208-240 V	50/60 - 1 PH	10.06/5.4 A	N/A
208/240 V	50/60 - 3 PH	4.2/4.1 A	5.5/5.4 A
480 V	60 - 3 PH	1.6 A	2.5 A
380/415 V	50 - 3 PH	1.7/1.8 A	4.3/4.4 A
Power			
Electric	30 kW	30kW	
Gas	189,000 Btu/h	47,627 kcal/h	
Steam	5.9 BHP	49,842 kcal/h	
Steam connection			
Inlet	3/4"	DN20	
Outlet	1/2"	DN15	
Gas Connection			
Gas Connection	1/2"	DN15	
Gas Pressure	6" - 12"	15-30 mb	
Shipping Dimensions			
(H xW x D)	87 X 42 X 57 inches	2210 X 1067 X 1448 mm	
Weight			
Gas/Elec.Net	827 lbs.	375 kg	
Gas/Elec. Gross	860 lbs.	390 kg	
Steam Net	865 lbs.	392 kg	







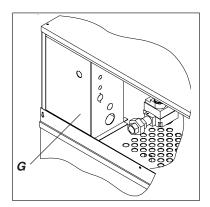
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#### Electric connection

Dryers must be electrically grounded by a separate #14 or larger green wire from the grounding terminal within the Service Connection Box, to a cold water pipe. In all cases, the grounding method must comply with local electrical code requirements; or in the absence of local codes, with the *National Electrical Code*, *ANSI/NFPA 70 or the Canadian Electrical Code*, *CA C22.1*.

See wiring diagram furnished with dryer. Do not change wiring without consulting the factory, as you may void the factory warranty. DO NOT CONNECT THE DRYER TO ANY VOLTAGE OR CURRENT OTHER THAN THAT SPECIFIED ON THE DRYER RATING PLATE. (Wiring diagram is located on rear wall of dryer.)

All panels must be in position before operation of dryer.



The connection needs to be made in the wiring box at the back. Open the coverplate (G) in order to reach the connection clamps.

The connection cable needs to be brought in through the opening on the *side of the* 



It is necessary to *ground* the dryer for your personal safety and to ensure a good operation.

#### 115 and 208-240 V - 1 ph

wiring box.

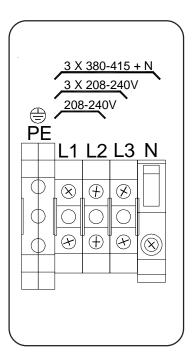
The mains wires (Ll) and (L2) should be connected to the 2 left blocks and the *yellow/green grounding wire* (PE) should be connected to the grounding block.

#### 208-240 and 480 V - 3 ph

The *3 mains wires* (*L1*), (*L2*) and (*L3*) should be connected to the 3 left blocks and the *yellow/green grounding wire* (*PE*) should be connected to the grounding block.

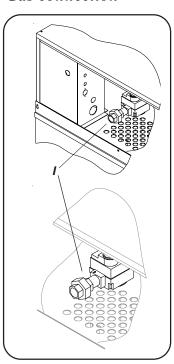
#### 380-415V - 3 ph

The 3 mains wires (L1), (L2) and (L3) should be connected to the 3 left blocks, the blue neutral (N) should be connected to the right block and the yellow/green grounding wire (PE) should be connected to the grounding block.



«Attention. Lors des opérations d'entretien des commandes, ètiqueter tous les fils avant de les dèconnecter. Toute erreur de câblage peut être une source de danger et de panne»

#### Gas connection



The gas supply pipe should be connected to the union (I), which is on the right next to the wiring box on the back.

It is very important to have the connections done by a qualified technician, in order to make sure that the installation is effected in accordance with the prevailing standards and instructions.

The dryer should be connected to the type of gas, which is indicated on the serial plate.

The use *of too small gas pipes* can result in unsufficient gas supply, which can lead to a bad heating-up and a poor drying quality.

When the dryer is used in combination with a weighing platform, the gas supply pipe has to be made of flexible material to allow the weighing system to keep moving freely.



Test all connections for possible leaks by means of a soap solution, but *never with a flame*.

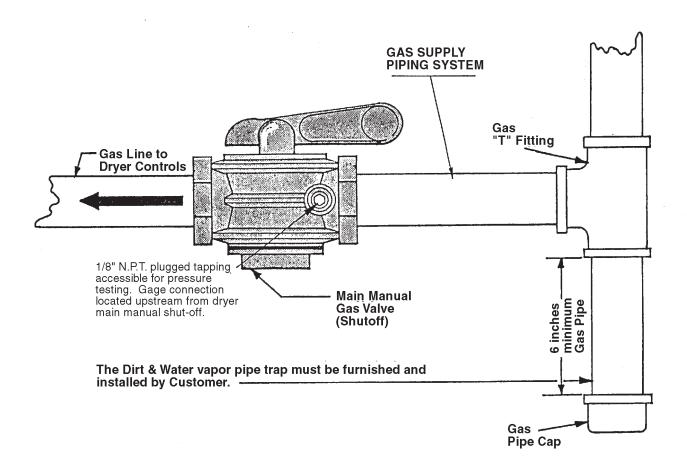
It is important to work with the right gas pressure (see technical remarks) in order to obtain a good ignition, heating and consequently a good operation in general.

After the gas supply has been connected, the gas tap in the dryer should beturned on (clockwise).

# GAS PIPING INSTALLATION

- 1. The installation must conform with local codes, or in the absence of local codes with the *National Fuel Gas Code*, *ANSI Z223.1 or the CAN/CGA-B149*, *Installation Codes*.
- 2. Check Identification Nameplate for type of gas for dryer.
- 3. Check for altitude elevation of dryer.
- 4. Check with utilities company for proper gas pressure and gas supply line.
- 5. Natural Gas Only—Check the gas pressure inlet supply to dryer, 11 inches water column (27.4 mbar) maximum. Manifold Pressure—3.5 inches water column (8.8 mbar) pressure.
- 6. L.P. Gas Only—Check the gas pressure inlet supply to dryer, 13 inches water column (32.4 mbar) maximum. Manifold Pressure—11 inches water column (27.4 mbar) pressure.

CAUTION: Low gas pressure and intermittent gas will cause gas ignition problems and inadequate drying of laundry.



The dryer and it's individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (.04 bar).

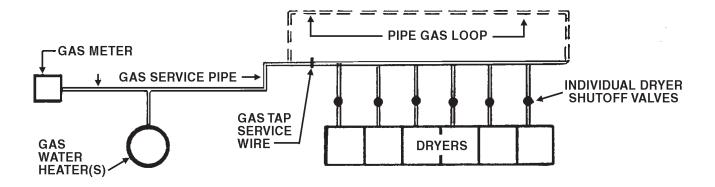
The dryer must be isolated from the gas supply piping system by closing it's individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (.04 bar).

# GAS SERVICE INSTALLATION INSTRUCTIONS

The size of the gas service pipe is dependant upon many variables, such as tees, lengths, etc. Specific pipe size should be obtained from the gas supplier. Refer to the "Gas Pipe Size" chart in this manual for general gas pipe size information.

CAUTION: Gas loop piping must be installed as illustrated to maintain equal gas pressure for all dryers connected to a single gas service

Other gas-using appliances should be connected upstream from the loop.



WARNING: LIQUIFIED PETROLEUM GASES ONLY!

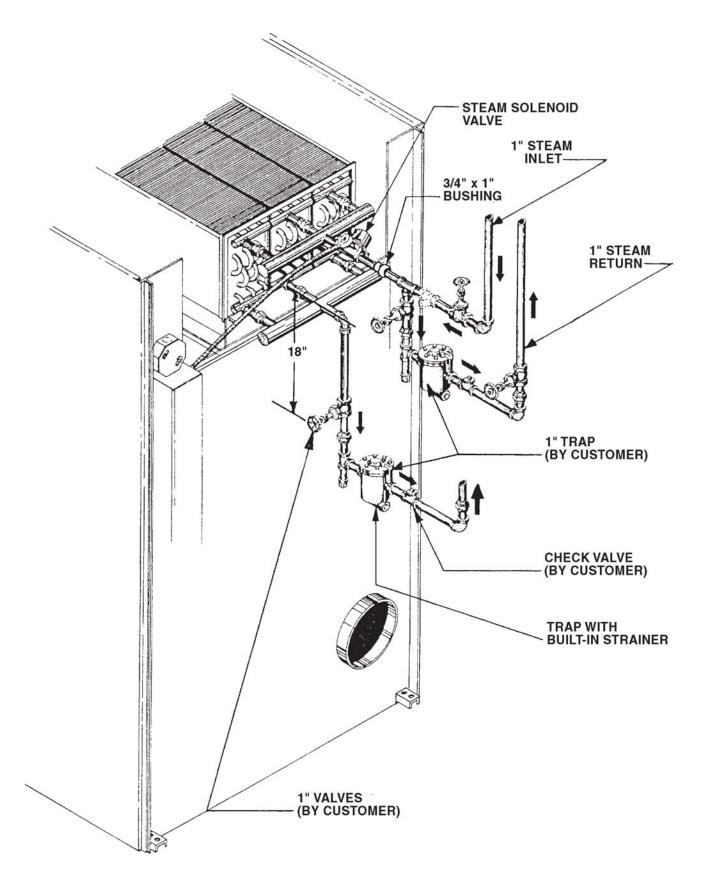
GAS PRESSURE
REGULATOR FOR
LIQUIFIED
PETROLEUM GASES

A Gas Pressure Regulator for Liquified Petroleum Gases is not furnished on Gas Heated Clothes Dryers. This regulator is normally furnished by the installer. In accordance with American Gas Association (AGA) standards, a gas pressure regulator, when installed indoors, must be equipped with a vent limiter or a vent line must be installed from the gas pressure regulator vent to the outdoors.

TOTAL BTU/HR (for LP Gas correct total BTU/HR below by	TOTAL KCAL	GAS PIPE SIZE FOR 1000 BTU (250 KCAL) NATURAL GAS AT 7" (17.5 MBAR) W.C. PRESSURE							
multiplying by .6)	HOUR	In figur (25 ft.) 7,62 m	ing total leng (50 ft.) 15,24 m	(75 ft.) 22,86 m	(100 ft.) 30,48 m	(125 ft.) 38,1 m	(150 ft.) 45,72 m		
60,000	15000	3/4	3/4	3/4	3/4	3/4	3/4		
80,000	20000	3/4	3/4	3/4	1	1	1		
100,000	25200	3/4	3/4	1	1	1	1		
120,000	30200	3/4	1	1	1	1	1		
140,000	35200	3/4	1	1	1	1	1 1/4		
160,000	40300	3/4	1	1	1 1/4	1 1/4	1 1/4		
180,000	45300	1	1	1	1 1/4	1 1/4	1 1/4		
200,000	50400	1	1	1 1/4	1 1/4	1 1/4	1 1/2		
300,000	75600	1	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2		
400,000	100800	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	2		
500,000	126000	1 1/4	1 1/2	1 1/2	2	2	2		
600,000	151200	1 1/2	1 1/2	2	2	2	2		
700,000	176400	1 1/2	2	2	2	2	2 1/2		
800,000	202000	1 1/2	2	2	2	2 1/2	2 1/2		
900,000	230000	2	2	2	2 1/2	2 1/2	2 1/2		
1,000,000	250000	2	2	2	2 1/2	2 1/2	2 1/2		
1,100,000	270000	2	2	2 1/2	2 1/2	2 1/2	2 1/2		
1,200,000	300000	2	2	2 1/2	2 1/2	2 1/2	2 1/2		
1,300,000	330000	2	2 1/2	2 1/2	2 1/2	2 1/2	3		
1,400,000	350000	2	2 1/2	2 1/2	2 1/2	3	3		
1,500,000	380000	2	2 1/2	2 1/2	2 1/2	3	3		
1,600,000	400000	2	2 1/2	2 1/2	3	3	3		
1,700,000	430000	2	2 1/2	2 1/2	3	3	3		
1,800,000	450000	2 1/2	2 1/2	3	3	3	3		
1,900,000	480000	2 1/2	2 1/2	3	3	3	3		
2,000,000	504000	2 1/2	2 1/2	3	3	3	3 1/2		
2,200,000	550000	2 1/2	3	3	3	3 1/2	3 1/2		
2,400,000	605000	2 1/2	3	3	3	3 1/2	3 1/2		
2,600,000	650000	2 1/2	3	3	3 1/2	3 1/2	3 1/2		
2,800,000	705000	2 1/2	3	3	3 1/2	3 1/2	3 1/2		
3,000,000	750000	2 1/2	3	3 1/2	3 1/2	3 1/2	4		
3,200,000	806000	3	3	3 1/2	3 1/2	3 1/2	4		
3,400,000	850000	3	3 1/2	3 1/2	3 1/2	4	4		
3,600,000	907000	3	3 1/2	3 1/2	3 1/2	4	4		
3,800,000	960000	3	3 1/2	3 1/2	4	4	4		
4,000,000	1000000	3	3 1/2	3 1/2	4	4	4		

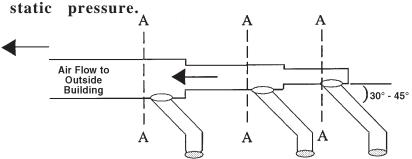
# STEAM PIPING INSTALLATION INSTRUCTIONS

- 1. Set and anchor dryer in position. Machine should be level to assure proper steam circulation.
- To prevent condensate draining from headers to dryer, piping should have a minimum 12" above respective header. 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 imporperly drained steam header will provide wet steam, causing improper operation of dryer. If pockets or improper drainage cannot be eliminated, install a by-pass trap to drain condensate from the low point in the steam supply header to the return.
- 4. In both steam supply and steam return line, it is recommended that each have a 3/4" union and 3/4" 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 (with built-in strainer) and check valve. For successful operation of dryer, install trap 18" below coil and as near to the dryer as possible. Inspect trap carefully for inlet and outlet markings and install according to trap manufacturer's 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.



Page 19

For Exhaust Duct less than 14 feet (5 m) and 2 elbows equivalent and less than 0.3 inches (8 mm)

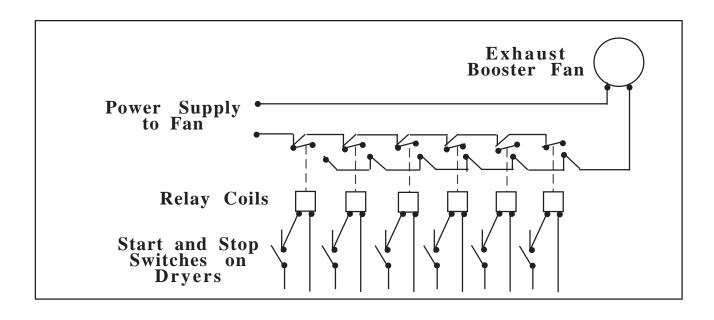


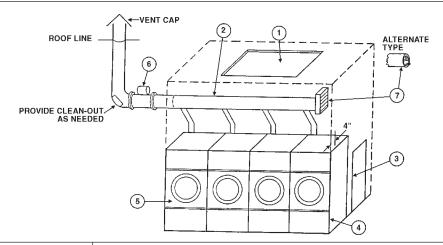
DRYER EXHAUSTS

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
Duct Diameter
(in inches)
(in CM)

HD	75																						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
8	12	14	16	18	20	22	23	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
20	30	25	41	46	51	56	58	61	66	68	71	73	76	78	81	84	86	89	91	94	97	99	100





DRYER INSTALLATION WITH MULTIPLE EXHAUST

For Exhaust Duct more than 14 feet (5 m) and 2 elbows equivalent and more than 0.3 inches (8 mm) static pressure.

(See illustration on page 21.)

- 1. Make-up air from outside building may enter enclosure from top or side walls. (See Dryer Make-Up Air Requirements Chart)
- Use constant diameter duct with area equal to the sum of dryer duct areas.
   EXAMPLE: Six 8 inch (204 mm) diameter duct = one

19.6 inch (498 mm) diameter duct in area. Use 20 inch (508 mm) 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 Btu/hr (6.3 kcal/hr) for each cubic foot per minute (cfm) used.
- 4. Zero inches clearance to combustible material allowed on sides and at points within 4 inches (102 mm) of front on top.
- 5. Heat loss into laundry room from dryer fronts *only* is about 60 Btu/hr per square foot (15 kcal/hr per 0.1m²).
- 6. Flange mounted, belt driven tube-axial fan. Fan must run when one or more dryers are running. See suggested Automatic Electrical Control Wiring Diagram on previous page. Must meet local electrical codes. Fan air flow (cfm) (m³/min.) is equal to sum of dryer air flows, but static pressure (SP) is dependent on length of pipe and number of elbows.
- 7. Barometric Bypass Damper—Adjust to closed flutter position with all dryers and exhaust fan running. Must be located within enclosure.





CAUTION: 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.

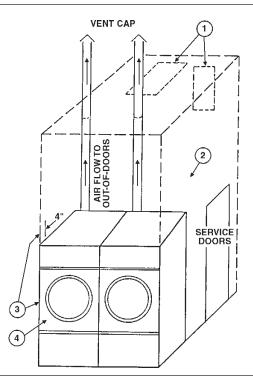
CAUTION: Never exhaust dryers with other types of equipment.

#### Suggested Minimum Dryer Make-up Air Requirements

Dryer	<b>Dryer Pock</b>	ket	Maximu	m Air Flow	<b>Duct Size</b>	For	Required Make	e-up
Model	Capacity		Rate per	Pocket	Service	Connection	Air Area per	Pocket
	lb	kg	cfm	m3/h	inch	mm	sq. inch	cm2
C 30 ST	30	13.6	450	765	6	153	87	561
C 75 ST	75	34	1000	1700	12	305	192	1240
C 110	110	50	2200	3740	12	305	422	2723
C 110 E/S	110	50	850	1445	8	203	163	1052
C 125	125	56.7	2000	3400	12	305	384	2477
C 150	150	68	2250	3825	12	305	432	2787
HD175	175	79.4	2780	4726	12	305	534	3445
HD190	190	86.2	3000	5100	12	305	576	3716
HD20.1	20	9.1	450	765	6	153	87	561
HD30SL	30	13.6	600	1020	8	203	116	748
HD30.1	30	13.6	625	1063	8	203	120	774
HD50.1	50	22.7	850	1445	8	203	164	1058
HD75.1	75	34	1000	1700	8	203	192	1240
HD80.1	80	36.3	1000	1700	10	254	192	1240

#### **Notes:**

- 1) The Model C 30 ST has 2 pockets per dryer, each pocket has the above listed characteristics; each pocket is exhausted separately with a 6" (153mm) duct.
- 2) The Model C 75 ST has 2 pockets per dryer, each pocket has the above listed characteristics; both pockets have one 8" (203mm) exhaust manifolded into one 12" (305mm) exhaust duct for exhaust connection.
- 3) For the C 30 ST and the C 75 ST Models, the Required Make-up Air Area shown in the table should be doubled since it is shown per pocket, only.



DRYER INSTALLATION
WITH SEPARATE
EXHAUST (PREFERRED)



For ductwork less than 14 feet (5 m) and 2 elbows equivalent and less than 0.3 inches (8 mm) 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.

- Make-Up Air opening from outside the building may enter the enclosure from the top or side walls. (See Dryer Make-Up Air Chart)
- 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 Btu/hr (6.3 kcal/hr) for each cubic foot per minute (cfm)  $(.03m^3/\text{min.})$  used.
- 3. Zero inches (mm) clearance to combustible material allowed on sides and at points within 4 inches (102 mm) of front on top.
- 4. Heat loss into laundry room from dryer front panels is about 60 btu/hr per square foot (15 kcal/hr per 0.1m²).

#### Exhaust and Venting

## 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 (4-6 times the combined areas of the air outlet) and an exhaust duct, size and length of which allows flow through the dryer with no more than 0.3 inches water column (.8 mbar) static pressure in the exhaust duct.

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:

- 1. Exhaust duct maximum length 14 feet (5 m) of straight duct and maximum of two  $90^{\circ}$  bends.
- 2. Use 45° and 30° elbows wherever possible.
- 3. Exhaust each dryer separately.
- 4. Use 2 feet (0.6 m) of straight duct on dryer before installing an elbow on Energy-Saver models only.
- 5. **Do not** install wire mesh or other restrictions in the exhaust duct.
- Use clean-outs in the exhaust duct and clean periodically when needed.
- 7. **Never** exceed 0.3 inches water column (.8 mbar) static pressure in the exhaust duct.
- 8. Inside surface of the duct must be smooth.
- 9. Recommend pop rivets for duct assembly.

#### MAKE-UP AIR

#### FOR BEST DRYING:

1. Provide opening to the out-of-doors in accordance with the following:

For each dryer—

6 inches (2 m) diameter exhaust requires a 1 square feet (0.1 m²) opening for make-up air.

8 inches (3 m) diameter exhaust requires a 2 square feet (0.2 m²)opening for make-up air.

12 inches (4 m) diameter exhaust requires a 4 square feet  $(0.4 \text{ m}^2)$  opening for make-up air.

2. Use barometric shutters in the inlet air opening to control air when dryers are not running.

### OTHER RECOMMENDATIONS

#### **TROUBLESHOOTING**

#### Other Recommendations

To assure compliance, consult local building code requirements.

#### Troubleshooting

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

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. <u>Fire and explosion</u> 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.
- 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 restart your dryer to remove wrinkles.

#### Direct-Spark Ignition Operation

# DIRECT SPARK IGNITION OPERATION

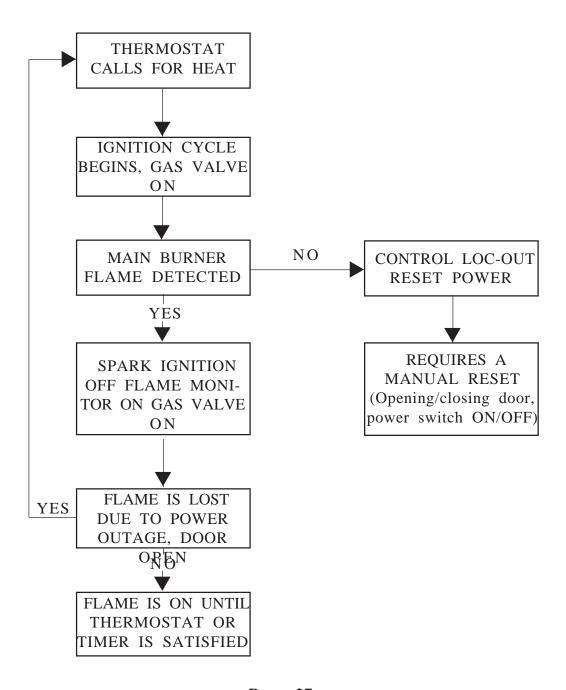
NOTE: All HD dryers manufactured by are equipped with the DSI (Direct Spark Ignition) modules. These are designed to increase dryer efficiency and to reduce dryer operating costs. The main burner is directly ignited from a spark electrode. A burning flame provides an electrical path for a small amount of sensing current to allow gas valve operation. If the main burner flame extinguishes for amy reason (aside from the thermostatic control) sensing current will shut down the gas valve and the spark ignition circuit.

- 1. Once flame is established, the spark shuts off, and the main burner flame is then electronically monitored by means of a sensing spark probe which is located over the burner. The gas valve remains energized (open).
- 2. If no flame is detected within the first 11 seconds the DSI will go into a safety "lock-out". The gas valve is energized.
- 3. If recovery from a safety lockout requires one of the following:
  - A. Opening the main door thus interrupting power to the DSI module and allowing dryer diagnostic trouble shooting.
  - B. Disconnecting the entire dryer from a power source using a circuit breaker of a switch.
- 4. By closing the main door the ignition circuit will be restored for another trial of the ignition circuit.
- Once the thermostatic control has been satisfied by reaching a
  pre-set temperature or the drying timer has been timed out, the
  ignition circuit will be de-energized thus extinguishing the
  flames.
- 6. The dryer will continue to run in a cool-down mode without heat. This process will cool the load to the touch and help to eliminate wrinkling.
- 7. The cool down time is pre-set on some models and manually set on other dryer models. The cool-down cycle prevents fabric wrinkles by allowing clothes to reach room ambient temperature while still in a continuous levitation state until clothes are ready to be folded or pressed.

# DIRECT SPARK IGNITION OPERATION FLOW CHART

The DSI module is powered by a 24 volt AC supplied by a stem-down transformer in series with eight safety interlocks:

- A. Timer Switching Device (1)
- B. Main Door and Lint Door Switches (2)
- C. Sail Switch (1)
- D. Under Basket and Burner Housing Thermal Safety Switches (2)
- E. Variable Thermostat (1)
- F. Push to Start Switch (1)



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#### GENERAL MAINTENANCE

- 1. Clean lint trap daily. Remove lint before or after each day of operation. A clean lint trap will increase the efficiency of the dryer and the moisture-laden air will be exhausted outside more quickly.
- 2. **Keep basket and sweep sheets clean.** Clean as often as needed. The basket and sweep sheets are accessible by removing the front panel of the dryer.
- 3. Gas burners, steam coils, electric coils. Check and clean often.
- 4. Pulleys and belts. Keep clean, as oil and dirt will shorten the life of a belt. Check periodically for alignment. Pulley shafts must be parallel and the grooves must be aligned. Check belt tension periodically. Adjust tension by movement of Idler Bracket. Lubricate Idler Pulley once every two months, using six grams of high temperature grease.

  Do not over-grease.
- 5. **Electric motor.** Keep motor clean and dry. Motors are packed with sufficient grease for 10 years normal service. After that, bearings and housing should be cleaned and repacked one-third full with Chevron Grease No. SR1-2. See label on motor for further information.

If motor overheats, check voltage and wiring. Low voltage, inadequate wiring and loose connections are the main cause of motor failures.

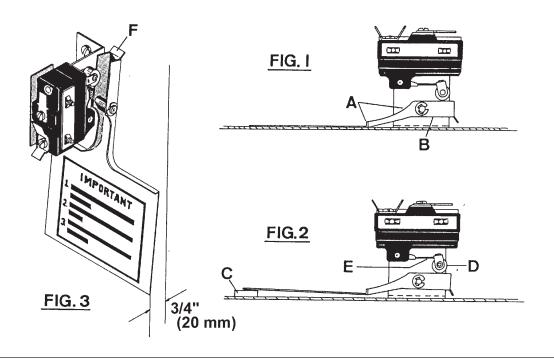
6. **Adjustable leveling bolts.** One at each corner permits accurate alignment of dryer.

**To adjust:** Block one corner of dryer up off the floor, loosen hex nut. With wrench, turn bolt clockwise to raise dryer, opposite to lower. Rear bolts are outside of dryer and front bolts are inside lint trap compartment.

#### General Maintenance

# GENERAL MAINTENANCE (continued)

- 7. Periodically clean and examine exhaust system.
- 8. **Keep dryer area clean** and free of gasoline, combustible materials and other flammable liquids or vapors.
- 9. **Do not obstruct the flow** of combustion (make-up) air and ventilating air.
- 10. Check gas pressure periodically.



#### AIR SWITCH 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.

#### OPERATING INSTRUCTION - DOUBLE TIMER

OPERATING
INSTRUCTIONS DOUBLE TIMER
MODELS



- 1. After loading the dryer with water washed clothes, close the loading door.
- 2. Turn the 60 minute drying (heat) timer to the desired time.
- 3. Turn the 15 minute cooling (air) to the desired time.
- 4. Select the temperature desired: Low, Medium, or High.

#### HIGH HEAT

 $175^{\circ}$  F ( $80^{\circ}$  C) exhaust temperature, heavy fabrics and hard to dry, such as cottons, towels, denim, etc..

#### PERMANENT PRESS (medium)

155° F (69° C) exhaust temperature, synthetic blends, including a mixed wash load.

#### LOW HEAT

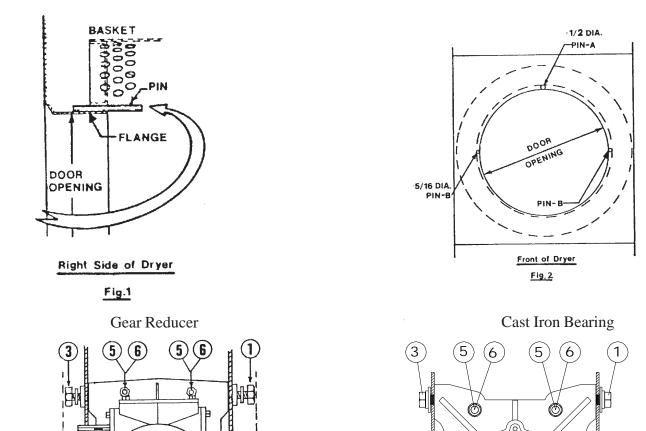
135° F (58° C) exhaust temperature, delicate, sheer fabrics.

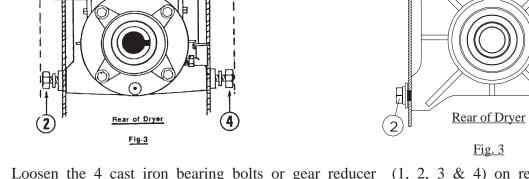
- 5. Press the "push to start" button to start the drying cycle. The heat or drying light will stay on until the drying cycle is completed
- 6. At the end of the drying cycle, the cool down cycle will automatically count down until all time runs out. The cool down light will stay on until the end of the cycle.

#### **IMPORTANT**

- 7. Drying cycle will not start unless a few minutes of the cool-down cycle are set on the cool-down timer.
- 8. To shut the dryer off at any time during the cycles by opening the door.

#### INSTRUCTIONS FOR ALIGNING BASKET ON CISSELL DRYER

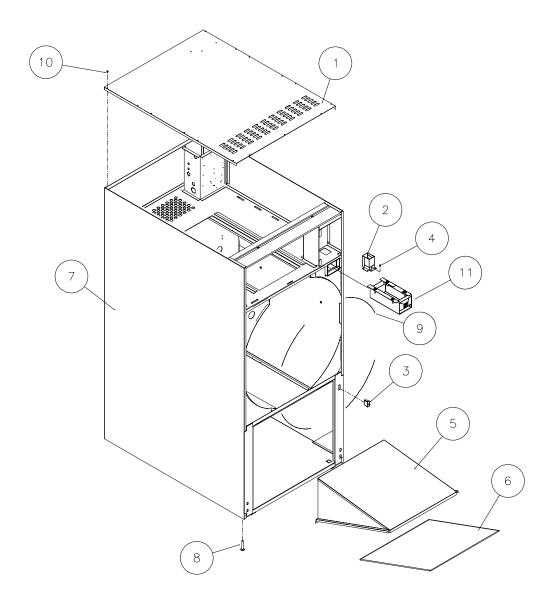




- 1. Loosen the 4 cast iron bearing bolts or gear reducer (1, 2, 3 & 4) on rear of dryer, and 2 adjusting bolts #5, on gear reducer housing. (Fig. 3).
- 2. Place one "A" and two "B" diameter pins inside the drying compartment between the rim of the basket opening and the rim of the door opening in the positions shown in Figure 1 and Figure 2. Check the two "B" pins for equal clearance.
- 3. With the pins in position, tighten the two No. 5 bolts until flush against back of dryer. Retighten cast iron bearing or gear reducer mounting bolts in the numerical order indicated in Figure 3. Tighten lock nuts No. 6 to secure bolts No. 5 in position. Then remove pins.
- 4. Check the space between basket and door opening at "A" pin and "B" pin positions (Figure 2). If the gap is not approximately the same on both sides, repeat steps 1, 2 & 3.

NOTE: Use short sections of round steel rod for pins or drill bits may be used in place of round rod.

### FRONT VIEW

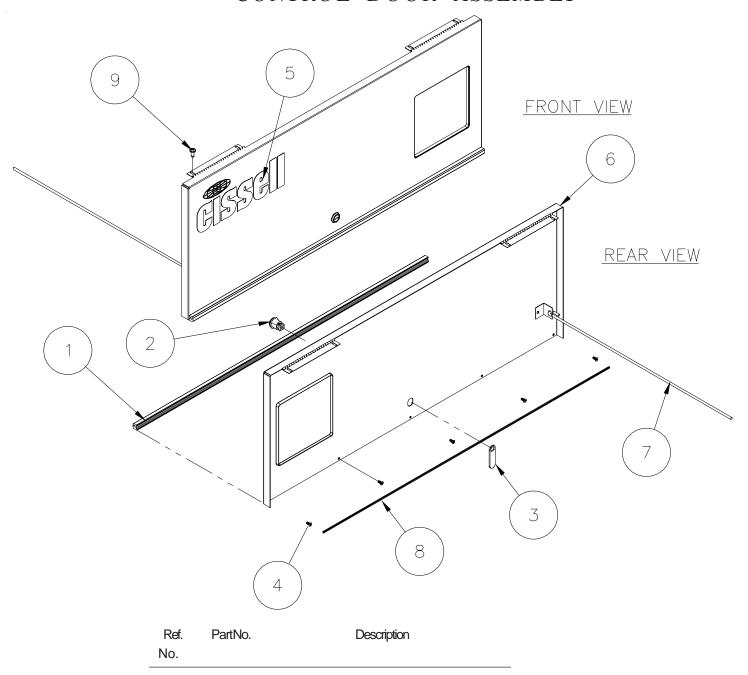


Ref. No.	PartNo.	Description
		_
1	TU14849	Тар
2	CSA-01435-0 Coin chute	weldedassembly
3	EA-11621-0	Switch door
4	SC504	Pop rivet
5	TU10290	Lint trap welded assembly
6	TU10362	Lintscreen
	TU5225	Lint screen frame
7	TU14819	Jacket (white)
8	TU3211	Leveling bolt
9	430146179	Gasket,5feet
10	TU7733	Screw selfdrilling 8-18 X 1/2"
11	TU15544*	CoinboxAss'y,bolton,w/hardware

\* Specify Color

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### CONTROL DOOR ASSEMBLY

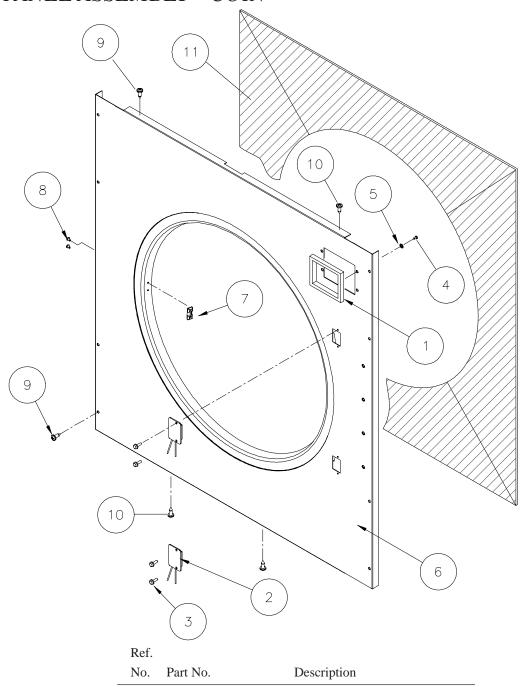


#### CSA-01510\*-Access Door Complete

1	CA-00858-0	Trim - control door
2	LA-00121-0	Lock-control door
3	LA-11941-0	Lock-cam
4	SB-00951-0	Screw-phillips #8 x 7/16 flat hd.
5	TU14957	Logo "CISSELL"
6	CSA-01416*	Panel welded assembly
7	TU15446	Supportarm
8	CA-13098-0	DoorGasket
9	TU7733	Screw,#8-18selfdrilling

\*SpecifyColor

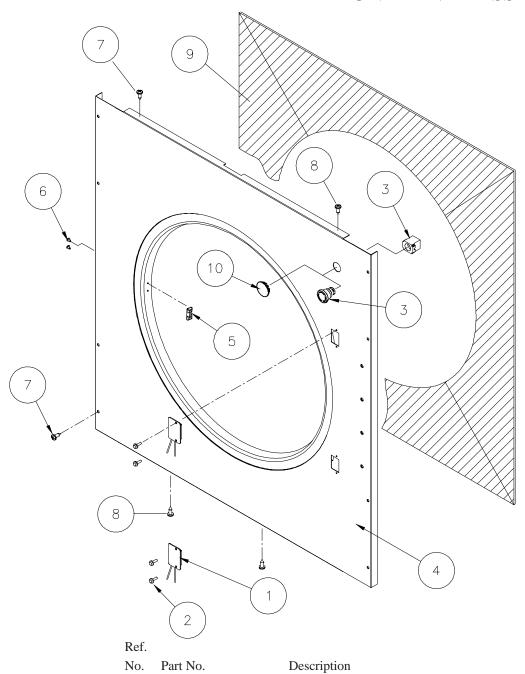
### FRONT PANEL ASSEMBLY - COIN



TU14733 - Front panel assembly complete

1	CA-00699-0Bezel - Co	oin box
2	ESA-00862-0	Reed switch
3	SB-00975-0 #6-32 Scr	ew
4	SB-00924-0 4-40 x 3/8	Screw
5	SB-00938-0 #4 Ext. to	oth lockwasher
6	CSA-01524WH	Front panel W/A - Coin
7	TU2876	Door catch
8	TU3213	Pop rivet
9	SB-00915-0#10-16 Se	elf drilling screw
10	SB-00836-0 #10 Panca	ake screw
11	TU14991	Insulation

### FRONT PANEL ASSEMBLY - OPL

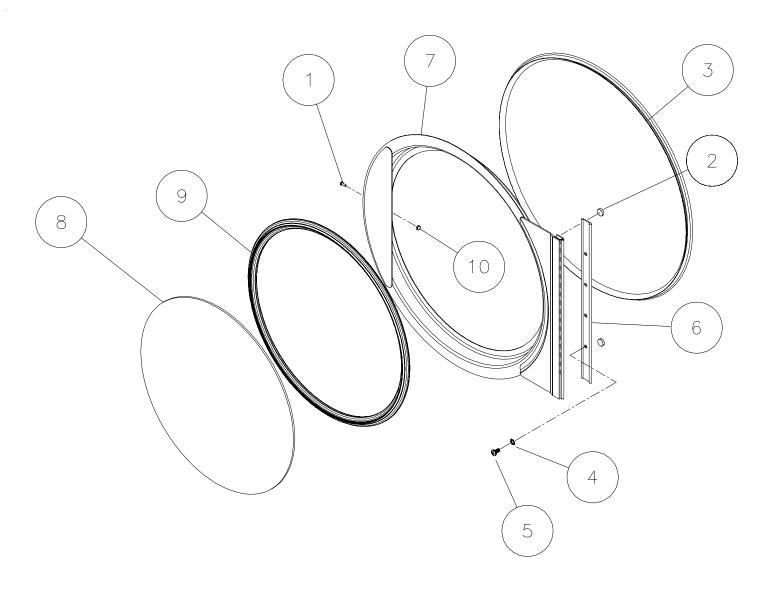


TU14538WHT - Front panel assembly complete (E-stop button)
TU15728WHT - Front panel assembly complete (with out E-stop button)

1	ESA-00862-0	Reed switch
2	SB-00975-0	#6-32 Screw
3	TU14435	Emergency stop
4	TU14532WHT	Front panel W/A - OPL
5	TU2876	Door catch
6	TU3213	Pop rivet
7	SB-00915-0	Screw, #10-16 self drilling
8	SB-00836-0	#10 Pancake screw
9	TU14991	Insulation
10	TU15724	Button Plug

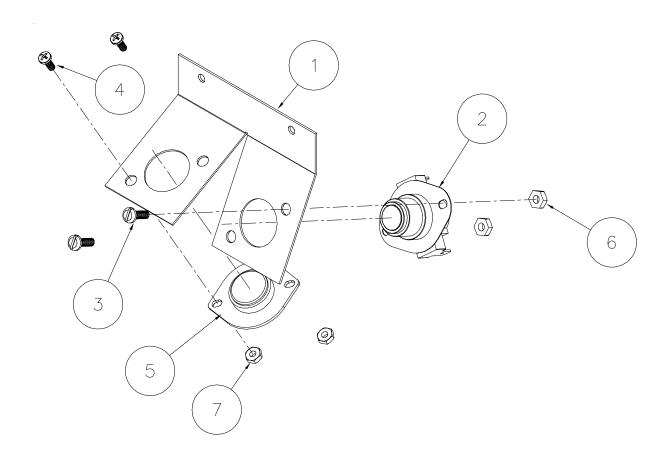
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## DOOR ASSEMBLY



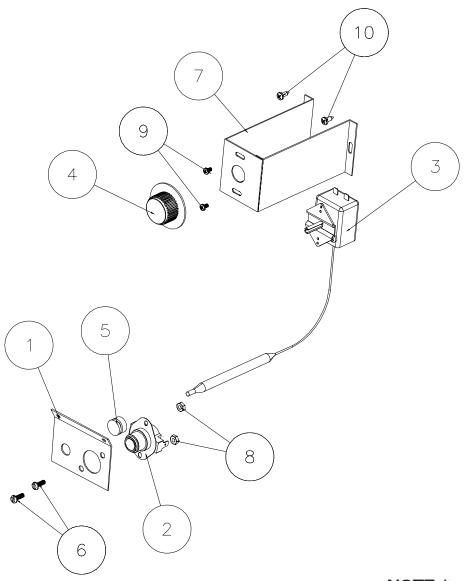
Ref.		
No.	Part No.	Description
	TU15110	Complete door assy
1	CA-13218	Catch pin
2	TU15536	Magnet - read switch
3	MD-00360-0	Gasket - door rim gasket
4	SB-00852-0	Washer 1/4" external starluck
5	SB-00921-0	Screw 1/4"-20 round head
6	TU15073	Door hinge spacer
7	TU15076	Door rim w/a
8	TU15107	Door glass
9	TU15108	Door glass gasket
10	TU4840	#10-32 Crown nut

## THERMOSTAT ASSEMBLY - ESA-00961-0



Ref.		
No.	Part No.	Description
1	CA-13172	MTG. Bracket
2	EA-00411	Switch - 220 Degree
3	SB-00828	#8-32 x 1/2 Screw
4	SB-00952	#6-32 x 3/8 Screw
5	TU11991	Thermistor
6	TU3266	#8-32 Hex Nut
7	TU3400	#6-32 Hex Nut

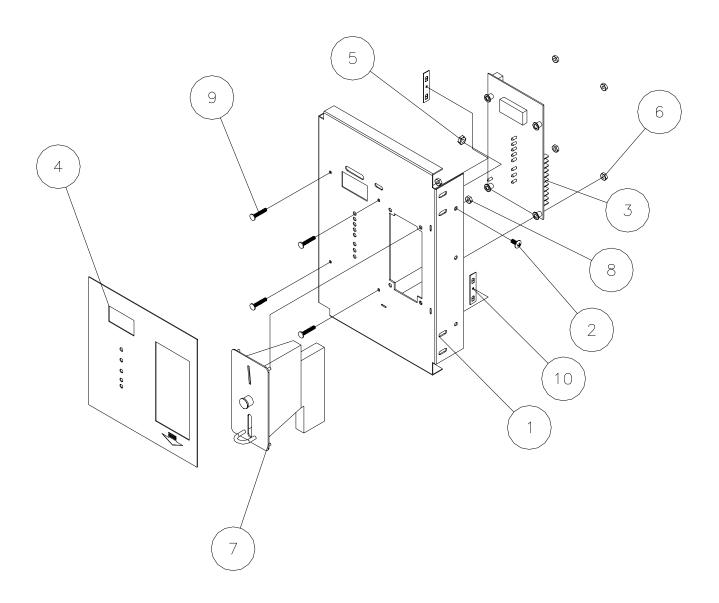
#### THERMOSTAT ASSEMBLY



R N	<b></b>	PartNo.	Description
1		CA-13214-0	Thermostatbracket
2		EA-00594-0	Thermostat-HI-Limit
3		EA-00606-0	Bulbthermostat
4		EA-00607-0	Thermostatknob
5		EA-00608-0	) Grommet/rubber
6		SB-00828-0	Screw 8-32 X 1/2"
7		TU15010	Thermostat bracket
8		TU3266	Nut-brass 8-32
9		TU3624	Screw 6-32X1/4"
10	)	TU7733	Screw-selfdrilling 8-18 X 1/2"

**NOTE:** Items 3,4,7,9&10 mounted in front wire box. Items 1,2,5,6,&8 are mounted under the basket

## DMP COIN CONTROL ASSEMBLY



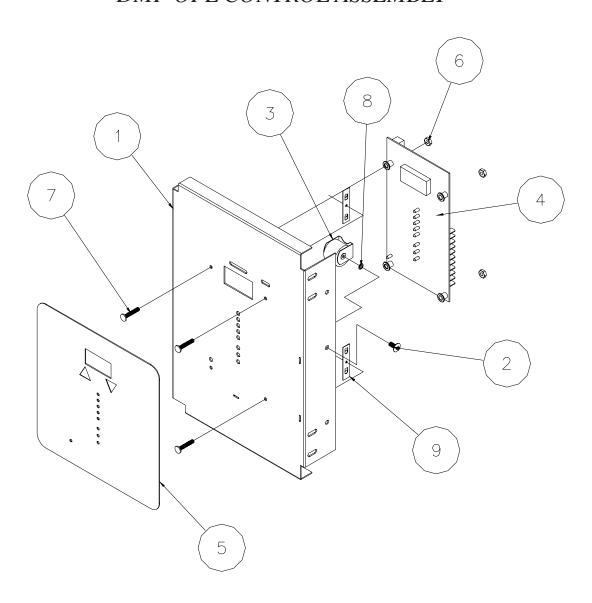
#### TU15256 - Complete Assembly

1	TU15255	Control panel w/a
2	M262	Screw, mach truss HD #8-32X3/8"
3	TU14404	Controller OPL/COIN board new
4	TU14406	Overlay
5	TU3266	Nut, hex-brass #8-32
6	TU3400	Nut, hex #6-32
7	TUD0336	Coin drop-hanke
8	TUD0367	Nut, hex - #5-40 machine
9	TU12253	Stud, self clinch
10	TU1771	Nut, speed twin type

MECHANICAL COIN 10 10 6 Ø Œ 15 13 Ref. Ref. Description No. Part No. No. Part No. Description TU15251 - Complete Assembly 8 TU15265 Terminal board 9 TU1771 Tinnerman nut Coin meter 24V CM7366 1 10 TU3266 #8-32 Hex nut 2 EA-00619-0 Start switch 11 TU3400 #6-32 Hex nut 3 M262 #8-32 Screw 12 #8-32 Carriage bolt TU4958 4 P104 1/4" Washer 13 TU9524 #6 S.M. Screw 5 #10-16 Screw SB-00915-0 14 TUD0355 Overlay TU12253 6 #6-32 Stud 15 LED light 24V W 1/4 Q.C. **TUT316** 7 TU15250 Control panel 16 SEE BELOW TIMER MOTORS CISSELL PART NO. VENDOR PART NO. NO. OF PINS 30 MIN 60 MIN TU3009 59-439-2 2 15 30 3 TU3010 59-439-3 10 20 TU3011 4 7-1/2 59-439-4 15 TU3012 59-439-5 5 6 12 TU3013 6 5 10 59-439-6 TU3014 59-439-8 8 3-3/4 7-1/29 6-2/3 TU3015 59-439-9 3-1/3 3 TU3016 59-439-10 10 6 TU3017 59-439-12 12 2-1/2 5 Page 41

CONTROL PANEL ASSEMBLY

## DMP OPL CONTROL ASSEMBLY



Ref.		
No.	Part No.	Description
	TU15254 - Revers	sing Control Panel Complete
1	TU15252	Control panel
2	M262	#8-32 Screw
3	TU14137	Buzzer 24V
(Optio	onal)	
4	TU14404	DMP Control
5	TU15184	Overlay
6	TU3400	#6-32 Nut
7	TU12253	#6-32 Stud
8	M270	#6 Lockwasher
9	TU1771	Speed nut twin type

# CONTROL PANEL ASSEMBLY (DUAL TIMER) REVERSING and NON-REVERSING 15 10

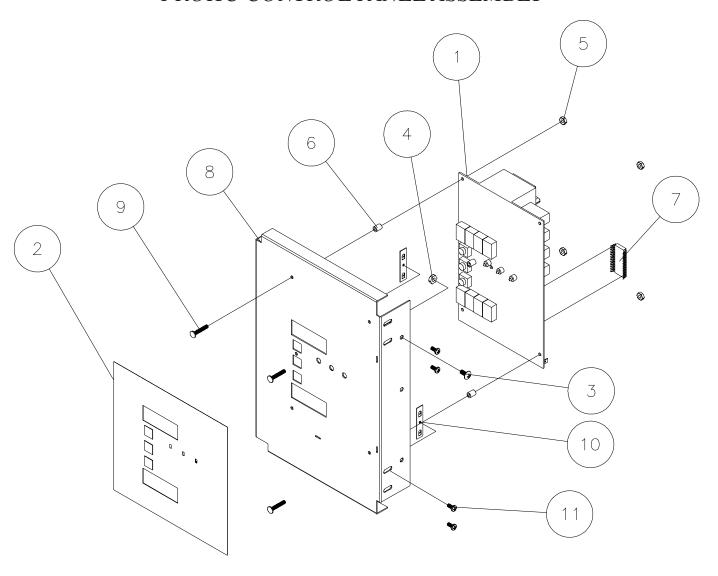
TU15248 Control panel assembly (Non-Reversing) TU15249 Control panel assembly (Reversing)

\* - Parts used on TU15249 only

18

Ref.			Ref.		
No.	Part No.	Description	No.	Part No.	Description
1	EA-00619-0Swit	tch - start	10	TU14931*	Bracket, mounting rev. board
2	FG147*	Toggle switch spst 2 position	11	TU14936	Overlay, non-reversing
3	F540*	Screw, sheet metal #6x 5/8" long		TU14937*	Overlay, reversing
4	M262	Screw, machine truss HD. #8-32	12	TU15247	Control panel
5	TUT316	Light, led 24V	13	TU15265	Terminal board
6	TU12253	#6-32 Screw	14	TU2555	Knob
7	TU12874*	Timer, solid state	15	TU3266	Nut, hex. brass #8-32
8	TU12932	Timer 0-60 sec.	16	TU3400	#6-32 Hex nut
9	TU12933	Timer 0-15 sec.	17	TU3805	Nut
			18	TU7733	Screw, self drill #8-18

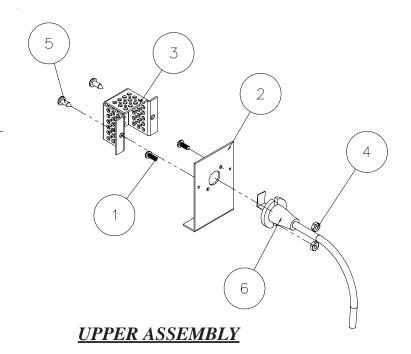
## PROHC CONTROL PANEL ASSEMBLY

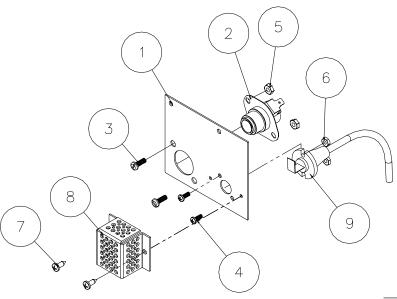


Ref. No.	Part No.	Description
TU15298	Reversir	ng/Non Reversing Complete Assembly
1	254/00054/00	PCboard, professional
2	254/00018/00	Lable, PRO moisture controller
3	M262	Screw, machine truss #8-32x 3/8" long
4	TU3266	Nut, hex brass #8-32
5	TU3400	Nut, hex #6-32
6	TU14701	Spacer nylon 1/4" O.D. x 5/16" long
7	TU14452	Chip, EPROM, PROHC
8	TU15257	Wiring box welded assembly
9	TU12253	Stud, self clinch
10	TU1771	Nut, speedtwintype
11	TU9524	Screw,#6x5/16

#### PROHC SENSOR ASSEMBLY - UPPER and LOWER

Ref. No.	PartNo.	Description
	TU14724	PROHCSensorassembly(upper)
1 2 3 4 5 6	SB-00952-0 Screw,#6- TU14693 TU14694 TU3400 TU7733 254/00060/00 Humidityse	Mountingplate upper probe Coverplate, probe Nut, #6-32 Screw, self drill #8-18x1/2" long





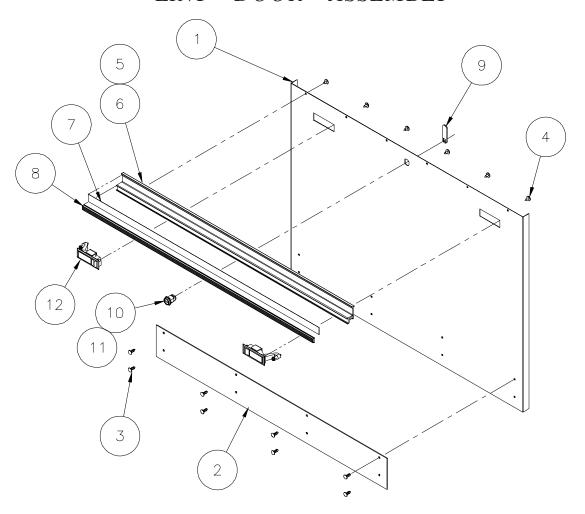
OWER	<b>ASSEMBLY</b>
30 11 222	

No.		
	TU14723	PROHCSensorassembly(lower)
1	CA-13067-0	Bracket(sensor)
2	EA-00411-0	Switch-220degrees
3	SB-00828-0	Screw,machine#8-32x1/2"long
4	SB-00952-0	Screw, #6-32x3/8"long
5	TU3266	Nut, hexbrass#8-32
6	TU3400	Nut, hexbrass#6-32
7	TU7733	Screw, self drill #8-18x1/2" long
8	TU14694	Cover, plate
9	254/00060/00	) Humiditysensor

Description

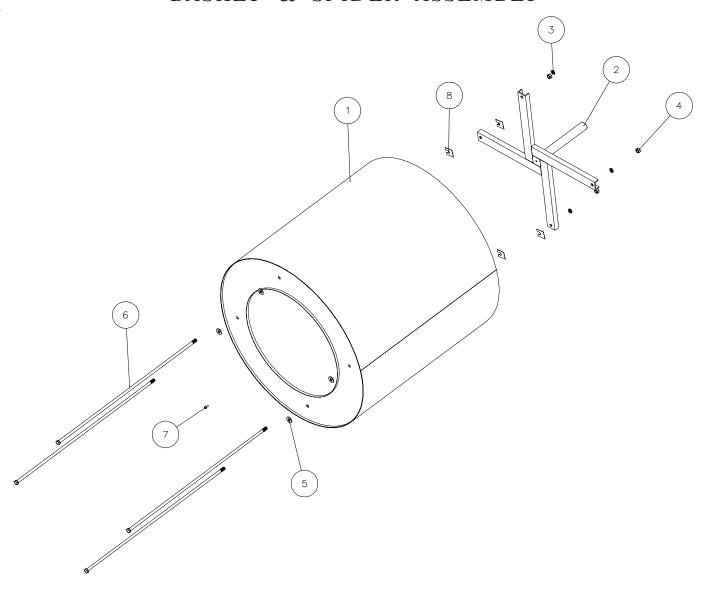
Ref. PartNo.

## LINT DOOR ASSEMBLY



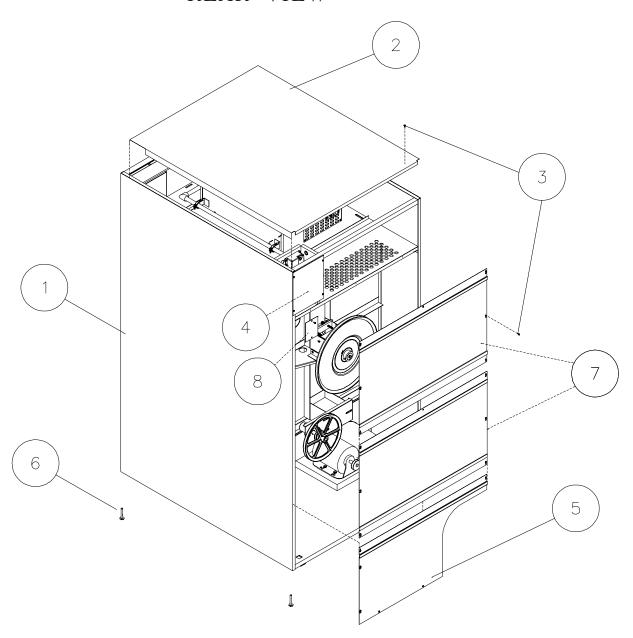
Ref. No.	PartNo.	Description
	CSA-01515WH	Complete Assembly-HD75 OPL
	CSA-01594WH	Complete Assembly-HD75 Coin
1	CSA-01516WH	Lint door w/latch holes (white) OPL
1	CSA-01593WH	Lint door w/lock holes (white) Coin
2	CSA-00839-0 Kickplate	
3	SB-00949-0 Fastenei	r plastic kickplate (8 each)
4	SB-00915-0 Screw se	elfdrilling #10-16 x 5/8 (6 each)
5	TU2853	Gasket
6	CA-00697-0 Handle li	int door
7	CA-00841-0 Label (no	ot part of assembly.)
8	CA-00655-0 Trim-rub	rail-specify 39" long
9	CA-11359-0 Cam lock	(
10	CA-00121-0 Look	
11	CA-00119-0 Key (not	shown)
12	CA-00123-0 Latch-trig	gger ( <u>OPLmodelsonly</u> )

## BASKET & SPIDER ASSEMBLY



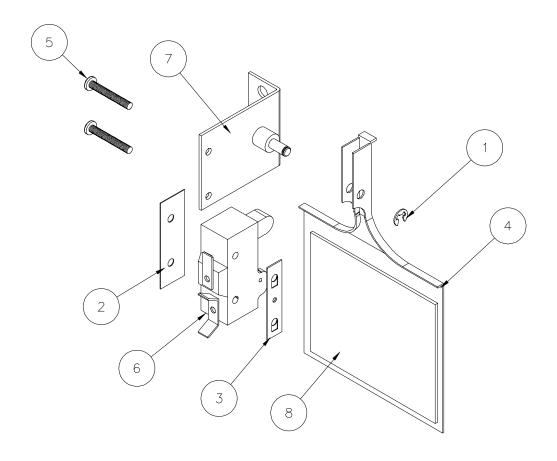
Ref. No.	PartNo.	Description
	TUS14866	Basket&SpiderAsssemblyHD75-S.S.(BeltDrive)
	TU14866	Basket&SpiderAssemblyHD75-Galv.(BeltDrive)
	TUS15397	Basket&SpiderAssemblyHD75-S.S.(GearDrive)
	TU15397	Basket&SpiderAssemblyHD75-Galv.(GearDrive)
1	CSA-01695-0	Stainless steel basket assembly (Belt & Gear Drive)
	CSA-01690-0	Galvanizedbasketassembly(Belt&GearDrive)
2	TU14865	SpiderAssembly(BeltDrive)
	TU15396	SpiderAssembly(GearDrive)
3	TU2831	Lockwasher1/2"
4	TU2882	Hexnut1/2-20
5	TU2883	Washer, flat 1/2"
6	TU8297	Basketbolt
7	SB-00965-0	Screwbuttoncap
8	TU7006	Shim, basketspider

## REAR VIEW



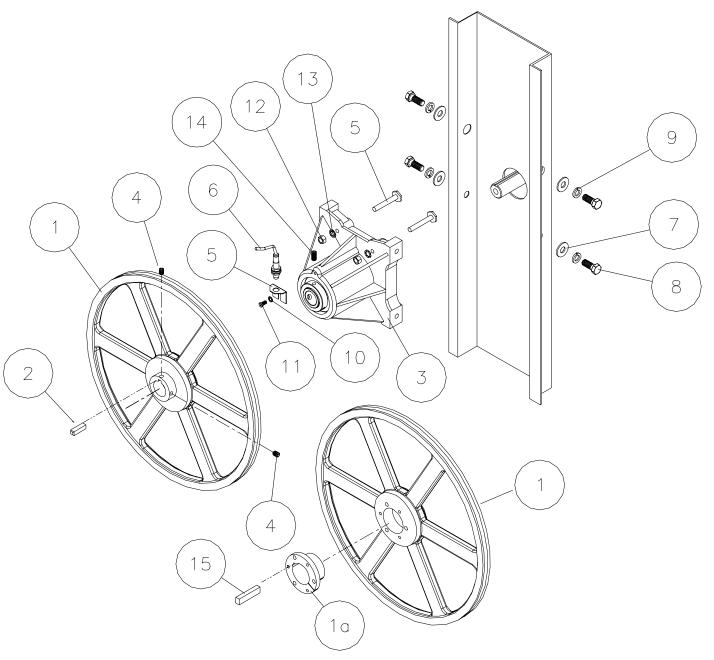
Ref. No.	PartNo.	Description
1	TU14819WHT	Jacketgas/electric(white)
	TU14887WHT	Jacketsteam(white)
2	TU14849	Toppanel
3	TU7733	Screwselfdrilling8-18x1/2"
4	TU14725	Coverplate
5	CA-13259-0	Lowerrearcover
6	TU3211	Levelingbolts
7	CA-13272-0	Upperrearcover
8	TU15671	Airswitchplate

# AIR SWITCH ASSEMBLY

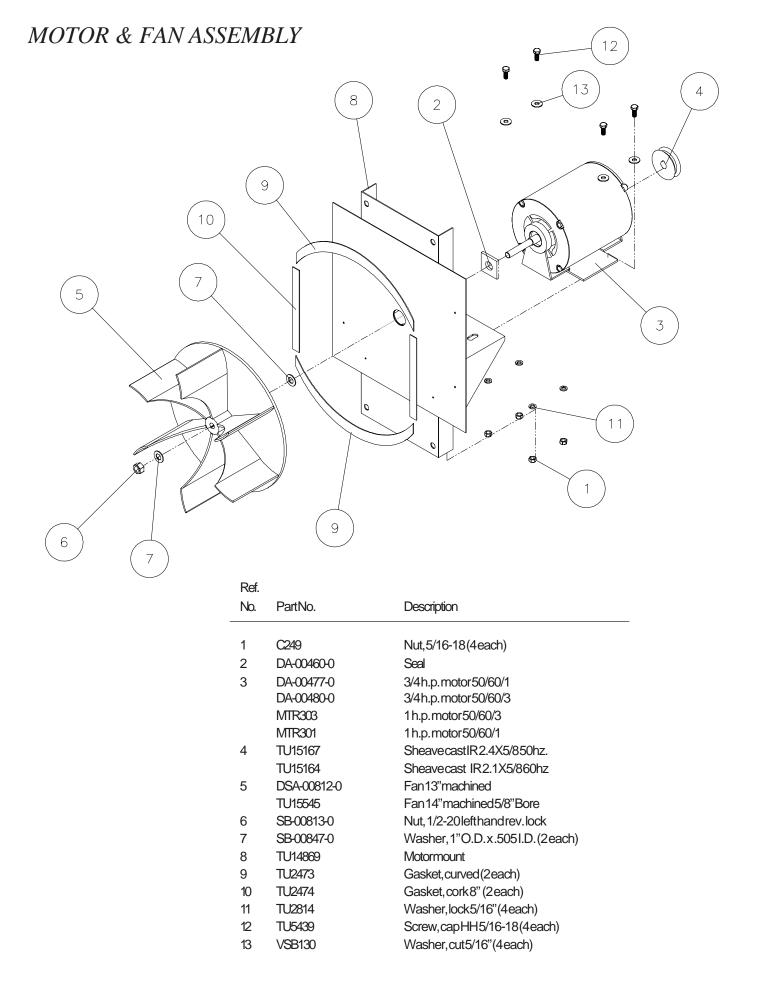


Ref. No.	PartNo.	Description
	TU8206	Sail switch assembly complete
1	F888	"E"Ring
2	TU1770	Insulator
3	TU1771	#6Tinnermannut
4	TU2463	Actuatoram
5	TU3219	#6x1"Roundheadscrew
6	TU8155	Airswitch
7	TU8171	Airswitchbracket
8	TU3476	Airswitchdecal

## BASKET BEARING, AND SHEAVES

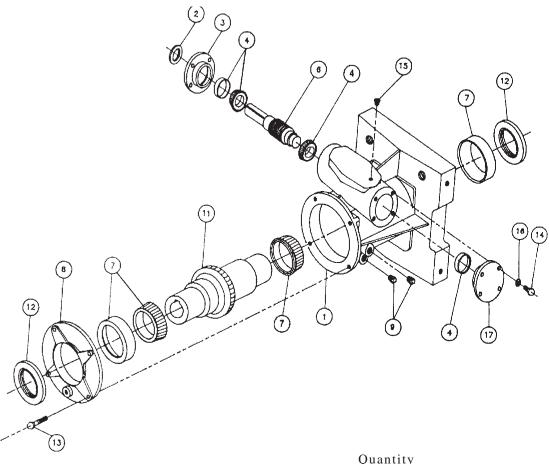


Ref			Ref		
No.	Part No.	Description	No.	Part No.	Description
1	TU15174	18" Dia. Sheave (Non-reversing)	7	TU1851	1/2 Flat washer
	TU15157	18" Dia. Sheave (Reversing)	8	RC347	1/2-13 x 1 1/4" H.H. Screw
1a	TU15154	1 7/16" Tappered Bushing	9	TU2831	1/2 Lock washer
2	TU14973	3/8" Key	10	RC349	1/4 Internal tooth washer
3	TU15613	1 7/16 Cast Iron Bearing	11	TU15698	1/4-20 Low head socket bolt
4	TU10644	Set screw	12	TU4787	3/8-16 hex nut
5	TU15588	Rotation Bracket	13	TU3243	3/8 Internal tooth washer
6	TU14414	Rotation sensor	14	TU15686	#10-32 x 3/4 lg Set screw
				(One require	ed for rotation sensor ONLY)
			15	TU15317	3/8" Key



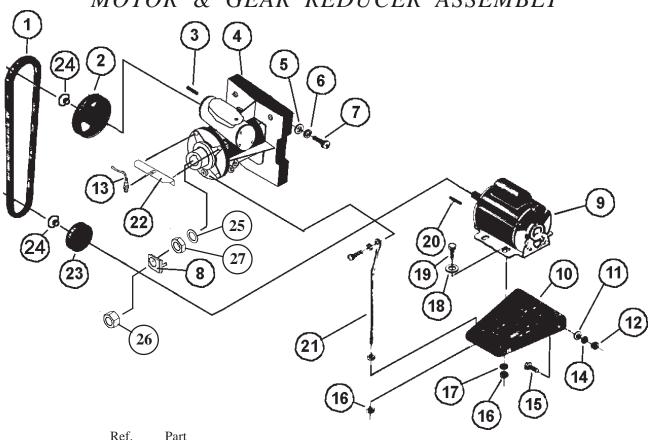
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#### PARTS—SMALL GEAR REDUCER—TM100



		Quantity
TM103	Housing	1
TM104	Small Seal	1
TM105	Small Open End Cap	1
TM107	Small Bearing Cup	2
TM108	Small Bearing Cone	2
TM101	Worm 1-1/2" x 7-1/8"	1
TM110	Large Bearing Cup	2
TM112	Large End Cap	1
TM115	1/4" Pipe Plug	1
TM117	Large Bearing Cone	2
TM102	Worm Gear	1
TM120	Oil Seal	2
TU2623	Cap Screw 3/8" - 16 x 1-1/2"	4
TU2839	Cap Screw 1/4" - 20 x 7/8"	8
TU3243	3/8" Internal Tooth Lockwasher	6
RC349	1/4" Internal Tooth Lockwasher	8
TM118	Small Closed End Cap	1
TU4787	3/8" - 16 Hex Nut	2
TU3211	3/8" - 16 x 2-1/2" Screw	2
TM119	Vent Plug 1/4" NPT	1
	TM104 TM105 TM107 TM108 TM101 TM110 TM112 TM115 TM117 TM102 TM120 TU2623 TU2839 TU3243 RC349 TM118 TU4787 TU3211	TM104 Small Seal  TM105 Small Open End Cap  TM107 Small Bearing Cup  TM108 Small Bearing Cone  TM101 Worm 1-1/2" x 7-1/8"  TM110 Large Bearing Cup  TM112 Large End Cap  TM115 1/4" Pipe Plug  TM117 Large Bearing Cone  TM102 Worm Gear  TM120 Oil Seal  TU2623 Cap Screw 3/8" - 16 x 1-1/2"  TU2839 Cap Screw 1/4" - 20 x 7/8"  TU3243 3/8" Internal Tooth Lockwasher  RC349 1/4" Internal Tooth Lockwasher  TM118 Small Closed End Cap  TU4787 3/8" - 16 Hex Nut  TU3211 3/8" - 16 x 2-1/2" Screw

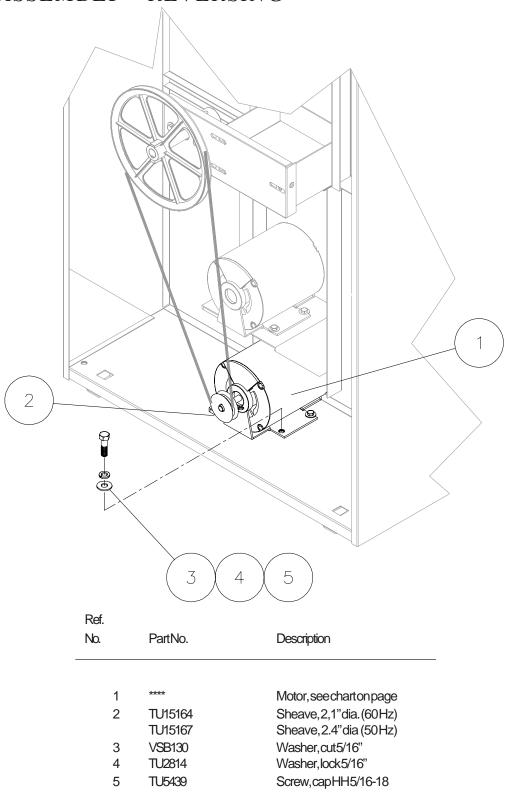
## MOTOR & GEAR REDUCER ASSEMBLY



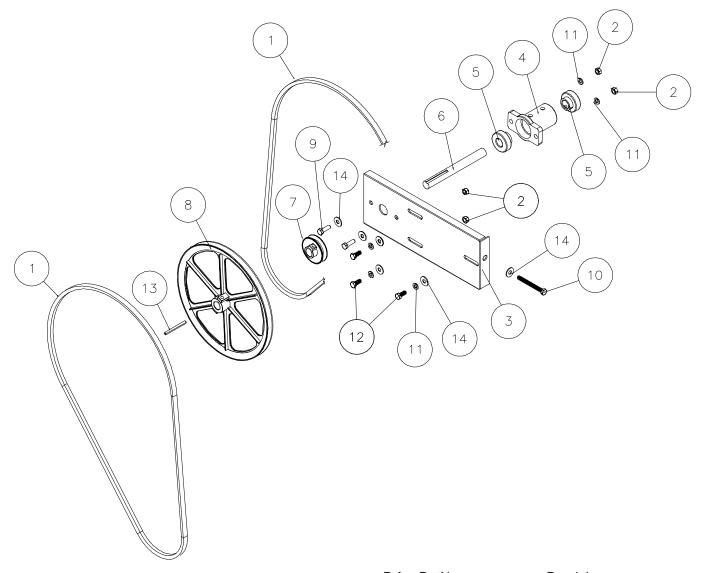
Ref.	Part	$\sim$
No.	No.	Description
1	TU2317	BELT, V 4L-380
2	510101041	SHEAVE, AK39 (50 Cycle)
	TU6722	SHEAVE, AK-51H (60 Cycle)
3	TU5241	KEY, 3/16 SQ. X 1" LONG
4	TM100	REDUCER, GEAR-SMALL-METRIC
5	TU1851	WASHER
6	TU2831	WASHER, REG. LOCK 1/2"
7	RC347	SCREW, CAP H.H. 1/2-13 X 1-1/4
8	TU15517	ROTATION SENSOR PICK UP BRKT
9	MTR303	MOTOR, 1 HP 3PH
	MTR301	MOTOR, 1 HP 1 PH
10	TU33	BRACKET, MTR DRIVE-28X36 DBLMT
11	IB140	WASHER, FLAT 3/8"
12	TU4787	NUT, HEX 3/8-16
13	TU14414	SENSOR/INDUC/ROTAT/BALLUFF
14	VSB134	WASHER, SPLIT LOCK 3/8
15	TU3246	SCREW,CAP HEX HD 3/8-16
16	TU4934	NUT, HEX 1/4-20
17	TU2846	WASHER, LOCK 1/4 MEDIUM
18	TU2847	WASHER, CUT 1/4"
19	RC344	SCREW, CAP H.H. 1/4-20 X 3/4
20	TU4684	KEY, 3/16 SQ. X 1-1/2 LONG
21	TU8608	ROD, BELT ADJUSTING
22	TU15516	ROTATION SENSOR BRACKET G/D
23	510101040	SHEAVE, AK46-H (50 Cycle)
	TU7334	SHEAVE, AK-34H (60 Cycle
24	TU2833	BUSHING (50 & 60 Cycle)
25	TU14062	WASHER
26	TU3536	NUT, JAM
27	TU3537	NUT, HEX

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#### MOTOR ASSEMBLY- REVERSING



# IDLER ASSEMBLY (Reversing and Non-reversing)



Ref. No.	PartNo.	Description			
Reve	Reversing				
1	DA-00497-0	Belt, upper (Basket)			
1	DA-11908-0	Belt, lower (Motor)			
Non-	<u>reversing</u>				
1	DA-00497-0	Belt, upper (Basket)			
1	DA-00525-0	Belt, lower (Motor)			
2	C249	Nut, Hex 5/16-18			
3	CA-12059-0	Idler adjustment plate			
4	DA-00517-0	Housing, idler bearing			
5	DA-00518-0	Bearing			
6	DA-11711-0	ldler shaft			
7	TU14691	V-belt pulley			
8	TU15156	Idler pulley 11"			
9	FB124	Screw 5/16-18x1"			

	Ref. No.	PartNo.	Description
-	10 11 12 13	SB-00935-0 TU2814 TU5439 TUD0187	Screw 5/16-18x3" Lock Washer 5/16" Screw 5/16-18x1" Key 3/16" square 21/2"
	14	VSB130	Washer 5/16"

#### REAR CONTROL PANEL ASSEMBLY - GAS 16 10 11 12 14 17 3 6 16 Ref. Ref. No. Part No. Description No. Part No. Description 10 TU14958 T-Block 1 CA-11935-0 Rear wiring box T-Block end 2 11 TU14959 EA-00680-0 Plug knock out Din rail 12 TU14985 3 EA-00685-0 Reverse control, 24V coil 13 TU15007 T-Block ground end 4 SB-00865-0 Screw, phillips head 14 Terminal Board 5 TU15265 SB-00868-0 Bushing, insulating 15 Plug, button Transformer, 200-240V/24VA TU2490 6 TU13480 7 Contactor, 24VAC 16 TU2793 #8-18 Self-drilling screw TU15138

8

9

GA-00765-0

GA-11007-0

Ignitor module 60Hz

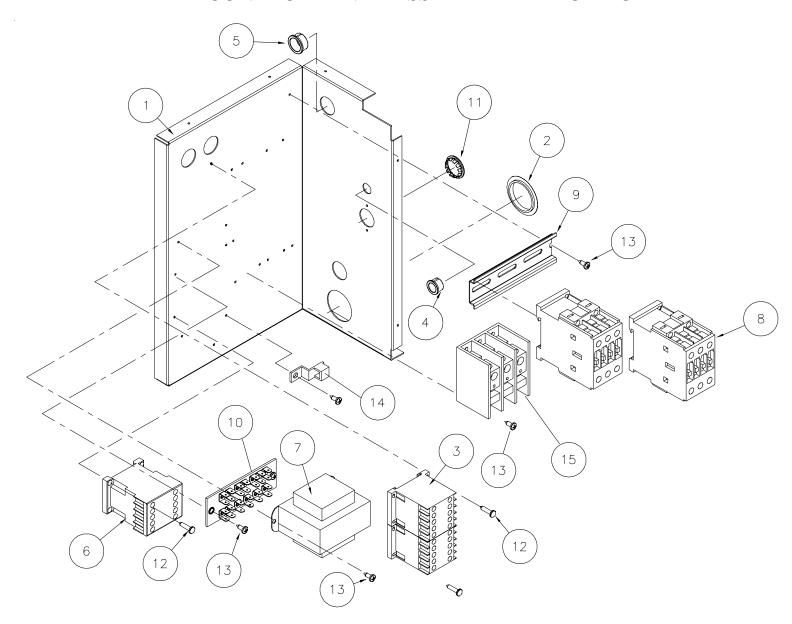
Ignitor module 50Hz (C.E.)

17

TU7733

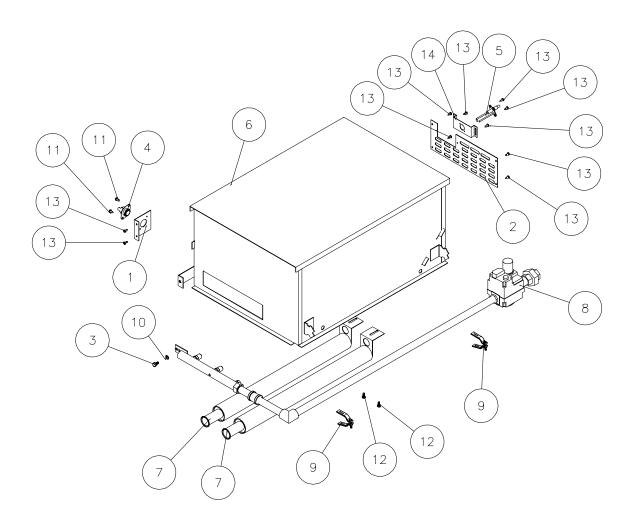
#8-18 Self-drilling screw

#### REAR CONTROL PANEL ASSEMBLY - ELECTRIC



Ref.			Ref.		
No.	Part No.	Description	No.	Part No.	Description
1	CA-11935-0	Rear wiring box	9	TU14986	Din rail
2	EA-00680-0	Plug knock out	10	TU15265	Terminal Board
3	EA-00685-0	Reverse control, 24V coil	11	TU2490	Plug, button
4	SB-00867-0	Bushing, insulating	12	TU2793	#8-18 Self-drilling screw
5	SB-00868-0	Bushing, insulating	13	TU7733	#8-18 Self-drilling screw
6	TU13463	Contactor, 24VAC	14	TU7738	Ground lug
7	TU13480	Transformer, 200-240V/24VA	15	TU9143	Terminal Block
8	TU13521	Contactor, 208-240V			
	TU14684	Contactor, 346-600V			

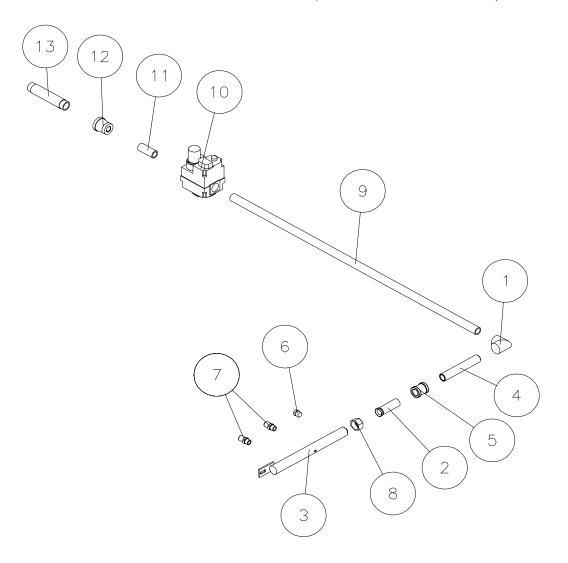
# GAS HEATING UNIT (NATURAL & LP GAS)



Ref. No.	PartNo.	Description
	TU14827	AssemblyNaturalgasbonnet
	TU14828	AssemblyLPbonnet
1	GSA-11028-0	Bracket, HI limit
2	CA-13251-0	Burnercoverplate
3	C836	Screw,hex1/4-20
4	EA-00245-0	Thermostat, 330 degree F
5	GA-00764-0	Electrode/straight
6	GSA-00791-0	Burnerboxhousing
7	TU14505	Burnerw/bracket
8	TU14824	Manifold&valveassembly(NG)seeseparatepage.
	TU14826	Manifold&valveassembly(LP)seeseparatepage.
9	TU2226	Bracketassembly
10	TU2846	Lockwasher1/4"
11	TU2878	Screw
12	TU6263	Screw,hex
13	TU7733	Screw self drilling 8-18x1/2"
14	TUD0242	Bracket, mount-electrode

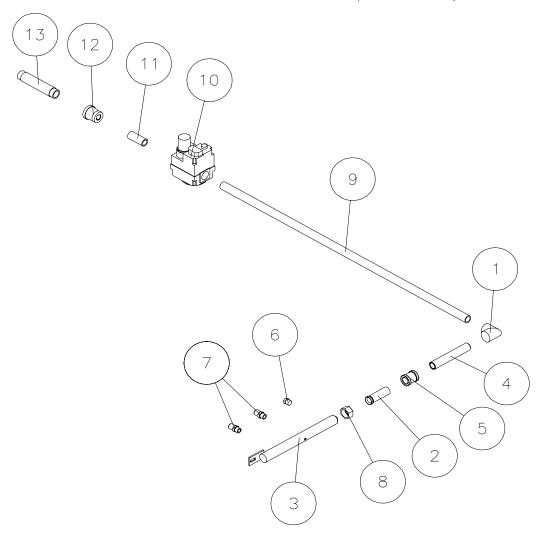
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# MANIFOLD ASSEMBLY (NATURAL GAS)



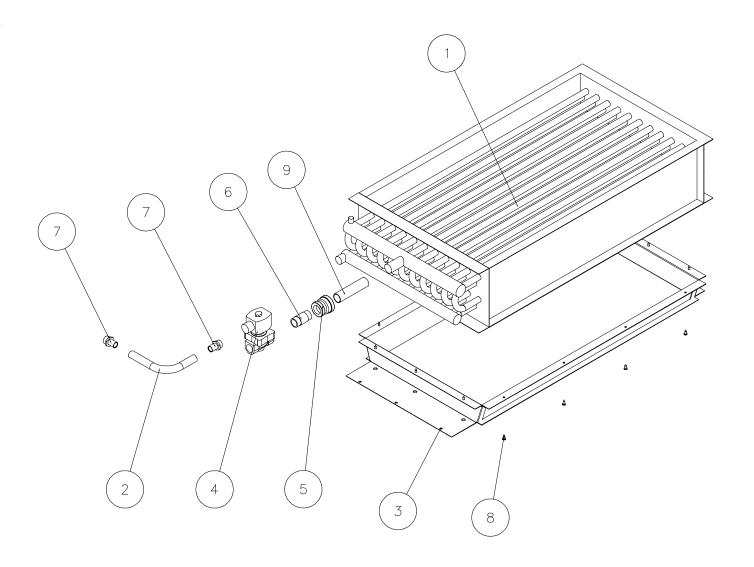
Ref.	PartNo.	Description
No.		
1	390501053	Elbow, 1/2"90 degree
2	664946146	Pipe-tail
3	GA-11006-0	Manifold
4	OP296	Nipple, 1/2"x5"
5	SC505	Coupling,pipe1/2"
6	TU10946	Plug,pipe(large)
7	TU3539	Orfice, burner
8	TU6862	Nut, union-gas
9	TU7358	Pipe, 1/2"x341/2"
10	TU14178	Valve,gasNG1/2"
11	OP290	Pipenipple 1/2"X2"
12	CA-13099-0	Reducer, 3/4" to 1/2"
13	TU4610	Nipple3/4"x5"

# MANIFOLD ASSEMBLY (LP GAS)



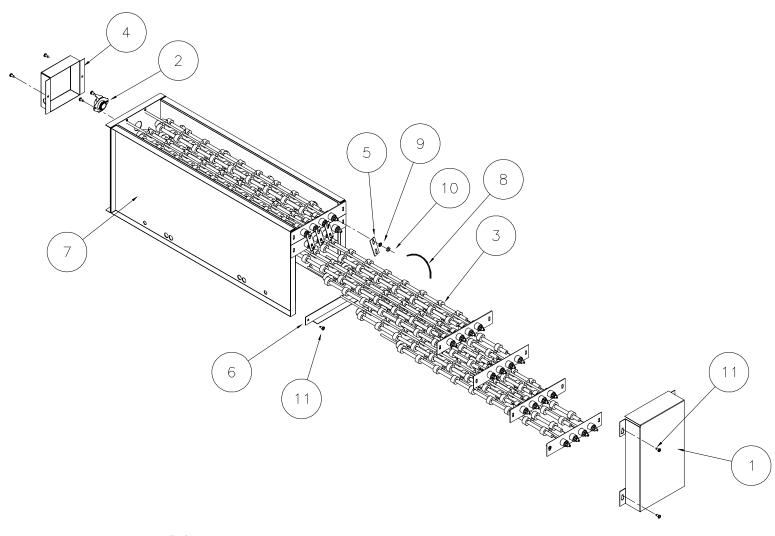
Ref.	PartNo.	Description
No.		
1	390501053	Elbow, 1/2"90 degree
2	664946146	Pipe-tail
3	GA-11006-0	Manifold
4	OP296	Nipple, 1/2"x5"
5	SC505	Coupling,pipe1/2"
6	TU10946	Plug,pipe(large)
7	TU3539	Orfice,burner
8	TU6862	Nut, union-gas
9	TU7358	Pipe, 1/2" x 34 1/2"
10	TU14177	Valve,gasLP1/2"
11	OP290	Pipenipple1/2"X2"
12	CA-13099-0	Reducer, 3/4" to 1/2"
13	TU4610	Nipple3/4"x5"

## STEAM HEATING UNIT



Ref. No.	PartNo.	Description
	CSA-01670-0	Steamheatingbonnetassembly
1	CA-13221-0	Steamcoil
2	CFB1300	Cable, GREENFIELD 1/2"X13"
3	CSA-01602-0	Adaptor,w/a
4	TU13517	Valve, steam solenoid 3/4"24V
5	TU2735	Reducer, pipe 1"x3/4"
6	TU4608	Nipple,3/4"x2"black
7	TU4790	Connector
8	TU7733	Screw, selfdr. #8-18x1/2"
9	TU9656	Nipple, 1"x4"black

## ELECTRIC BONNET ASSEMBLY



Ref. No.	PartNo.	Description
	ESA-00256-0	380-415V/30KWCompleteassembly
	ESA-00997-0	460-480V/30KWCompleteassembly
	TU14829	220-240V/30KWCompleteassembly
	TU14830	200-208V/30KWCompleteassembly
1	CA-11984-0	Rearheaterboxcover
2	EA-00243-0	Bonnethighlimtswitch
3	EA-00472-0	Heaterelement
	EA-00473-0	Heaterelement(208V)
4	EA-10232-0	Switchcover
5	EA-10417-0	Jumperbars
6	EA-11613-0	Heaterboxback
7	ESA-00610-0	Heaterboxhousing
8	ESA-00948-0	Jumper
9	TU11613	#10Ext.toothwasher
10	TU2842	#10-32Hexnut
11	TU7733	Screw, selfdr. #8-18x1/2"

#### RECOMMENDED SPARE PARTS LIST

EA-11621-0	LINT DOOR SWITCH	BELTS			
CA-13033-0	20-30# LINT SCREEN				
TU5261	30SL, 50,75# LINT SCREEN	DA-00533-0	NON-REV UPPER BELT 20/30SL		
MD-00337-0	MAGNET -READ SWITCH	TU15206	NON-REV LOWER BELT	20/30SL	
MD-00360-0	GASKET DOOR RIM	DA-00533-0	REV UPPER BELT	20/30SL	
TU15108	DOOR GLASS GASKET	DA-00522-0	REV LOWER BELT	20/30SL	
ESA-00862-0	READ SWITCH	DA-00523-0	NON-REV UPPER BELT 30 LB.		
TU7456	DOOR CATCH ASSY (W/RIVETS)	DA-00494-0	NON-REV LOWER BELT	30 LB.	
TU14435	EMERGENCY STOP	DA-00523-0	REV UPPER BELT	30 LB.	
TU8155	SWITCH, SPST AIR SWITCH	DA-00533-0	REV LOWER BELT	30 LB.	
EA-00685-0	REVERSING CONTROL, 24V COIL	DA-00497-0	NON-REV UPPER BELT	50 LB.	
TU13463	CONTACTOR, 24VAC	DA-00521-0	NON-REV LOWER BELT	50 LB.	
TU14176	C.E. IGNITOR MODULE	DA-11917-0	REV UPPER BELT	50 LB.	
GA-00765-0	NON- C.E. IGNITOR MODULE	DA-00523-0	REV LOWER BELT	50 LB.	
TU13521	CONTACTOR, 208-240V	DA-00497-0	NON-REV UPPER BELT	75 LB.	
TU14684	CONTACTOR, 346-600V	DA-00525-0	NON-REV LOWER BELT	75 LB.	
EA-00245-0	SWITCH, 330 DEGREE	DA-11917-0	REV UPPER BELT	75 LB.	
GA-00764-0	ELECTRODE / STRAIGHT	DA-11908-0	REV LOWER BELT	75 LB.	
TU13517	VALVE, STEAM SOLENOID ¾" 24V	EA-00245-0	SWITCH, 330 DEGREE		
EA-00243-0	BONNET HIGH LIMIT SWITCH	GA-00764-0	ELECTRODE / STRAIGHT		
EA-00472-0	HEATER ELEMENT	TU13517	VALVE, STEAM SOLENOID 3/4" 24V		
EA-004730-0	HEATER ELEMENT (208V)	EA-00243-0	BONNET HIGH LIMIT SWITC	H	
		EA-00472-0	HEATER ELEMENT		
DMP SPARE PARTS		EA-004730-0	HEATER ELEMENT (208V)		
EA-00594-0	SWITCH,220 DEGREES				
TU11991	THERMISTOR				
TU14414	SENSOR				
TU15184	OVERLAY (OPL)	PROHC			
TU14406	OVERLAY (COIN)				
TU14137	BUZZER 24V	TU14452	CHIP/PROHC/EPROM/#10VW2	X1450	
		254/00060/00	HUMIDITY/TEMP SENSOR		
DOUBLE TIMER PARTS		EA-00594-0	EA-00594-0 SWITCH, 220	DEGREES	
EA 00606 0	THERMOSTAT/ROBERTSHAW				
EA-00606-0 EA-00594-0	SWITCH,220 DEGREES				
EA-00394-0 EA-00619-0					
FG147	START SWITCH TOGGLE SWITCH 2 POSITION				
TUT316	LIGHT, LED 24V				
TU1316 TU12874	TIMER, SOLID STATE REVERSING				
TU12932	TIMER, MODEL N407 0-60				
TU12933	TIMER, MODEL N407 0-00 TIMER, MODEL N407 0-15				
TU2555	KNOB, W/PLATE-LOCK-SCR-SET SCREW				
102333	KNOD, W/FLATE-LOCK-SCK-SET SCKEW				

#### **MECHANICAL COIN**

EA-00606-0 THERMOSTAT/ROBERTSHAW

EA-00619-0 START SWITCH TUT316 LIGHT, LED 24V SEE CAM CHART ON PAGE 40