DEXTER®
LAUNDRY

USE THE BLUE TABS LOCATED ON THE RIGHT AND LEFT SIDES OF THE FOLLOWING DOCUMENT TO ADVANCE TO EACH SECTION.

DEXTER LAUNDRY

N-Series On-Premise Washer
WCN55AEH

Non-Express

Equipment Safety Warnings
Symbols and Terminology Used in this Equipment

⚠ DANGER	**Indicates an imminently hazardous situation, which if not avoided, will result in death or serious injury.**
⚠ WARNING	**Indicates a potentially hazardous situation, which if not avoided could result in death or serious injury.**
⚠ CAUTION	**Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. Minor burns, pinch points that result in bruises and minor chemical irritation.**
NOTICE	**Indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.**
	**This is the user caution symbol. It indicates a condition where damage to the equipment resulting in injury to the operator could occur if operational procedures are not followed. TO REDUCE THE RISK OF DAMAGE OR INJURY, refer to accompanying documents; follow all steps or procedures as instructed.**
	**This is the electrical hazard symbol. It indicates that there are DANGEROUS HIGH VOLTAGES PRESENT inside the enclosure of this product. TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, do not attempt to open the enclosure or gain access to areas where you are not instructed to do so. REFER SERVICING TO QUALIFIED SERVICE PERSONEL ONLY**
	**Caution! There are sharp edges on various sheet metal parts internal to the enclosure. Use safety consciousness when placing or moving your hands while working in the interior of this equipment.**
	**Caution! To reduce the risk of damage to the Water Inlet Valve, do not supply inlet water with a temperature that exceeds 70˚ C.**
	Caution! To reduce the risk of fire or explosion, do not operate this equipment in any hazardous classified (ATEX) environment.

Equipment Safety Warnings
Symbols and Terminology Used in this Equipment

Warning! Do not operate equipment if door glass is damaged in any way.

Warning! Keep clear of rotating parts.

Prohibited! Do not enter this equipment or space.

Prohibited! Do not step or stand on this equipment.

Prohibited! Do not operate without all guards and covers in place.

Prohibited! Do not operate without all guards and covers in place.

Prohibited! Do not wash clothing impregnated with flammable liquids (petrochemical).

Prohibited! Do not allow children to play in or around equipment.

⚠ DANGER	**Indicates an imminently hazardous situation, which if not avoided, will result in death or serious injury.**
⚠ WARNING	**Indicates a potentially hazardous situation, which if not avoided could result in death or serious injury.**
⚠ CAUTION	**Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. Minor burns, pinch points that result in bruises and minor chemical irritation.**
NOTICE	**Indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.**
	**This is the user caution symbol. It indicates a condition where damage to the equipment resulting in injury to the operator could occur if operational procedures are not followed. TO REDUCE THE RISK OF DAMAGE OR INJURY, refer to accompanying documents; follow all steps or procedures as instructed.**
	**This is the electrical hazard symbol. It indicates that there are DANGEROUS HIGH VOLTAGES PRESENT inside the enclosure of this product. TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, do not attempt to open the enclosure or gain access to areas where you are not instructed to do so. REFER SERVICING TO QUALIFIED SERVICE PERSONEL ONLY**
	**Caution! To reduce the risk of fire or explosion, do not operate this equipment in any hazardous classified (ATEX) environment.**

WARNING

	• All washers must be installed in accordance to all applicable electrical, plumbing and all other local codes. • These installation and operation instructions are for use by qualified personnel only. To avoid injury and electrical shock, do not perform any servicing other than that contained in the installation and operation instructions, unless qualified.
	Do not install washers in an explosive atmosphere.
	•Care must be stressed with all foundation work to ensure a stable unit installation, eliminating possibilities of excessive vibration. •Foundation must be level within 13 mm to ensure proper washer operation.

	Do not operate washer if door glass is damaged in any way.
	Do not wash clothing impregnated with flammable liquids (petrochemical).

WARNING

 	Children should be supervised to ensure they do not operate or play in or around equipment.
	Keep all panels in place to protect against electrical shock and injury and add rigidity to washer.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

A washer should not be allowed to operate if any of the following occur:

- **Excessive high water level.**
- **Machine is not connected to a properly earthed circuit.**
- **Door does not remain securely locked during the entire cycle.**
- **Vibration or shaking from an inadequate mounting or foundation**

	**Warning! Do not operate equipment if door glass is damaged in any way.**
	**Warning! Keep clear of rotating parts.**
	**Prohibited! Do not enter this equipment or space.**
	**Prohibited! Do not step or stand on this equipment.**
	**Prohibited! Do not operate without all guards and covers in place.**
	**Prohibited! Do not operate without all guards and covers in place.**
	**Prohibited! Do not wash clothing impregnated with flammable liquids (petrochemical).**
	**Prohibited! Do not allow children to play in or around equipment.**

	**Prohibited! Do not attempt to open, touch, or proceed before referring to the manual or unless qualified.**
	**Mandatory! Read all supporting documentation before operating or maintaining equipment.**
	**Mandatory! Disconnect power before servicing equipment.**
	**Mandatory! Lock out and tag out before servicing this equipment.**
	**Mandatory! Disconnect water supply before servicing equipment.**
	**Mandatory! Children should be supervised to ensure they do not operate equipment.**

Notes

Dexter Safety Guidelines

WARNING

These washers are equipped with devices and features relating to their safe operation. To avoid injury or electrical shock, do not perform and service, unless qualified to do so.

FOR SAFETY

1. Always shut off power and water supply and also discharge capacitors before servicing.
2. Do not overload the washer.
3. Do not attempt to open door if cylinder is in motion or contains water.
4. Do not mechanically force or override door lock in any way.
5. Do not bypass any safety devices of this washer.
6. Do not use volatile or flammable substances in or near this washer.
7. Keep all panels in place. They protect against shock and injury and add rigidity to the washer.

A machine should not be allowed to operated if any of the following occur:

- Excessively high water level.
- Machine is not connected to a properly grounded circuit.
- Loading door does not remain securely locked during the entire cycle.
- Vibration or shaking from an inadequate mounting or foundation.

To activate your warranty, be sure to return your red warranty form to the factory. Please have serial number and model ready when calling for assistance.

Table of Contents

Notes

Notes

Section 1:

Machine Mounting

Specifications for below model is outlined in this book:

WCN55AEH 208-240 volts 60hz. Single Phase/Three Phase

Cycle Times	Rotary Switch Position #1	Rotary Switch Position #2	Rotary Switch Position #3	Rotary Switch Position #4	Chemical Signal	Water Level
Flush	3 minutes	3 minutes	Not Used	Not Used	No	High
Drain	42 seconds	42 seconds	Not Used	Not Used		
Preswash	3 minutes	3 minutes	3 minutes	3 minutes	Yes -- A	High
Drain	42 seconds	42 seconds	42 seconds	42 seconds		
Wash	7 minutes	7 minutes	7 minutes	7 minutes	Yes -- B	Low
Drain	49 seconds	49 seconds	49 seconds	49 seconds		
Rinse 1	2 minutes	Not Used	2 minutes	2 minutes	No	High
Drain	41 seconds	Not Used	41 seconds	41 seconds		
Rinse 2	7 minutes	7 minutes	7 minutes	Not Used	Yes -- C	Low
Drain	49 seconds	49 seconds	49 seconds	Not Used		
Rinse 3	2 minutes	2 minutes	2 minutes	2 minutes	No	High
Drain	41 seconds	41 seconds	41 seconds	41 seconds		
Int. Spin	2 minutes	2 minutes	2 minutes	2 minutes		
Rinse 4	2 minutes	2 minutes	2 minutes	2 minutes	No	High
Drain	41 seconds	41 seconds	41 seconds	41 seconds		
Rinse 5	4 minutes	4 minutes	4 minutes	4 minutes	Yes -- D	Low
Drain	41 seconds	41 seconds	41 seconds	41 seconds		
Extract	5 minutes	4 minutes	5 minutes	3.5 minutes		
Tumble	37 seconds	37 seconds	37 seconds	37 seconds		
Total*	43 minutes	39.5 minutes	39.5 minutes	30.5 minutes		

*Cycle times are approximate and do not include fill time from empty to low level. Fill time from low to high level is included as timer operates during this period.

Water Temp	Push-Button Temp Switch #1	Push-Button Temp Switch #2	Push-Button Temp Switch #3	Push-Button Temp Switch #4
Flush	Warm	Warm	Warm	Cold
Preswash	Warm	Warm	Warm	Cold
Wash	Hot	Warm	Warm	Cold
Rinse 1	Hot	Hot	Warm (Hot OPT)	Cold
Rinse 2	Hot	Hot	Warm (Hot OPT)	Cold
Rinse 3	Warm	Warm	Warm (Cold OPT)	Cold
Rinse 4	Warm	Warm	Warm (Cold OPT)	Cold
Rinse 5	Warm	Warm	Warm (Cold OPT)	Cold

Options

1. Replace all Hot rinses with Warm rinses by removing brn/red wire from coil of R5 relay and insulate.
2. Push button #3 replace Warm rinse 1 & 2 with Hot by removing black jumper wire between push button #3 and push button #4 and connecting the white/brn wire (piggybacked on the black jumper) to push button #4 normally openterminal B1
3. Replace Warm rinse 3,4, &5 on push button #3 by moving brn/org wire from push button #3 common terminal A2 to push button #3 normally closed terminal C2.

Specifications
T-900 Coin Washer

Capacity	55lbs.
Dimensions	
Cylinder Depth	22″
Cylinder Diameter	30″
Cylinder Volume (cubic feet)	9.0
Door Opening	15 1/4″
Door Height (floor to bottom of door)	18 3/8″
Overall Height	54″
Cabinet Width	34 3/8″
Overall Depth	38 3/4″
Drain Diameter (O.D.)	3″
Drain Height (floor to center of outlet)	7 1/2″
Recommended Clearance Between Machines (min)	1/2″
Necessary Service Clearance Behind Machine	24″
Cylinder RPM	
Tumble Speed	43
Extract Speed	531
Extract Speed G-Force	120
Cylinder Direction in Extract	Counter-clockwise
Motor H.P.	
Wash Single Phase	3
Wash Three Phase	3
Extract Single Phase	3
Extract Three Phase	3
Amperage (avg. measured on L1)	
Wash Single Phase	3
Wash Three Phase	3
Extract Single Phase	4.2
Extract Three Phase	4.2
Running Amps (Maximum)	
Single Phase	8.4
Three Phase	8.4
Circuit Breaker (Amps)	
Single Phase	15
Three Phase	15
Built-in Controls Circuit Breaker	Yes
Built in Motor Protection	Yes

Voltage 60Hz.	
Single Phase	220-240
Three Phase	208-240
Service	
Single Phase	2 wires + ground
Three Phase	3 wires + ground
Wire Size (Minimum)	
Single Phase	12
Three Phase	12
Water	
Recommended Hot Water (degrees)	140
Water Pressure (min/max)	30-120psi
Water Inlet Size (hose thread)	3/4″
Water Flow Rate (gallons/minute)	9
Wash Cycle	
Wash Temperatures	Hot, Warm, & Cold
Rinse Temperatures	Cold-Std; Warm-Opt
Mounting Hole Dimensions	
Left to Right	27 3/4″
Front to Cabinet to First Hole	2 3/4″
First Hole to Second Hole	23″
Second Hole to Third Hole	11″
Mounting Bolt Diameter	3/4″
Hole Diameter in Base	1″
Concrete Thickness (min)	8″
Recommended Mounting Height	4″ to 10″
Weight	
Shipping (lbs.)	1075
Net (lbs.)	1025

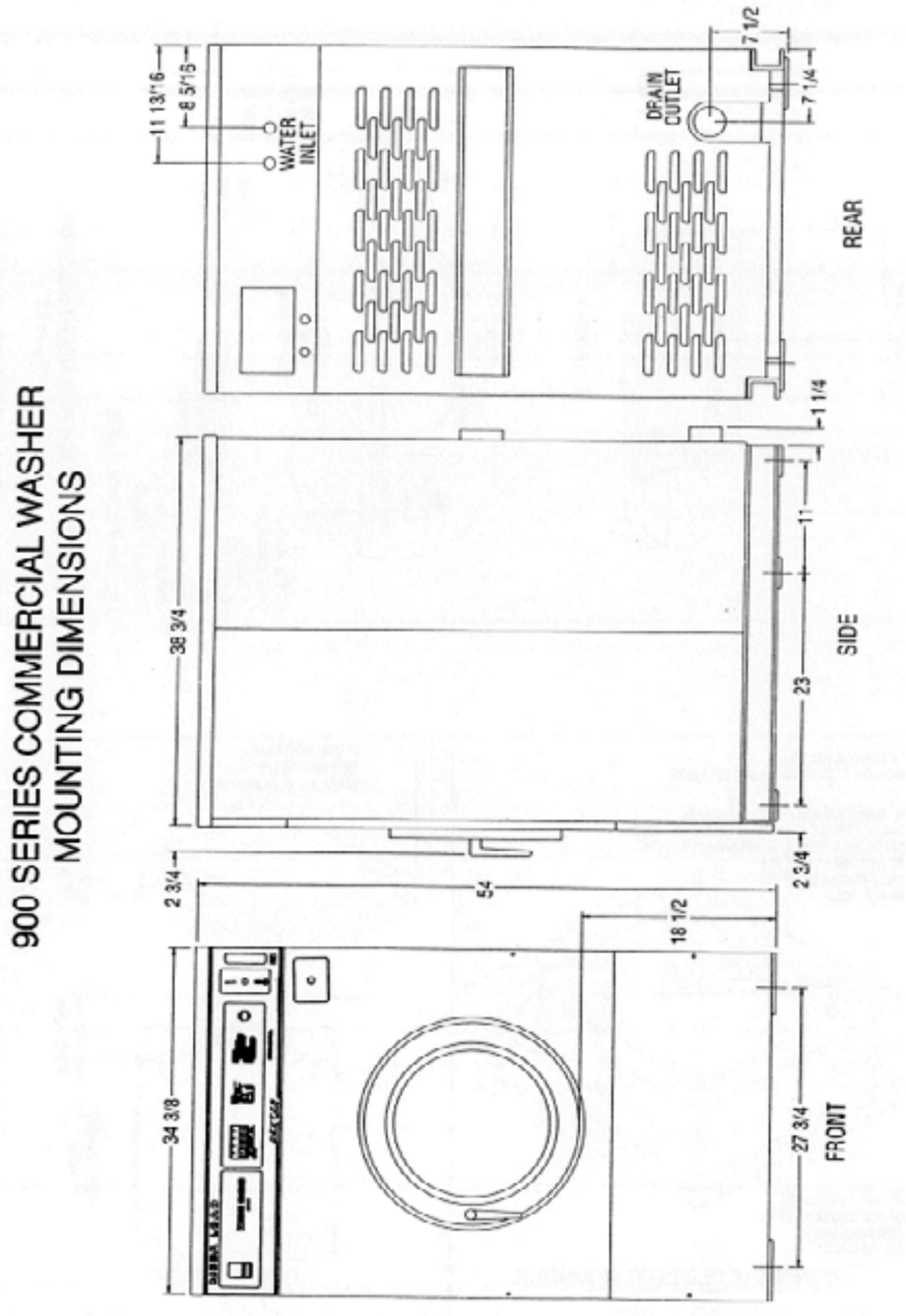
Wash Formulas

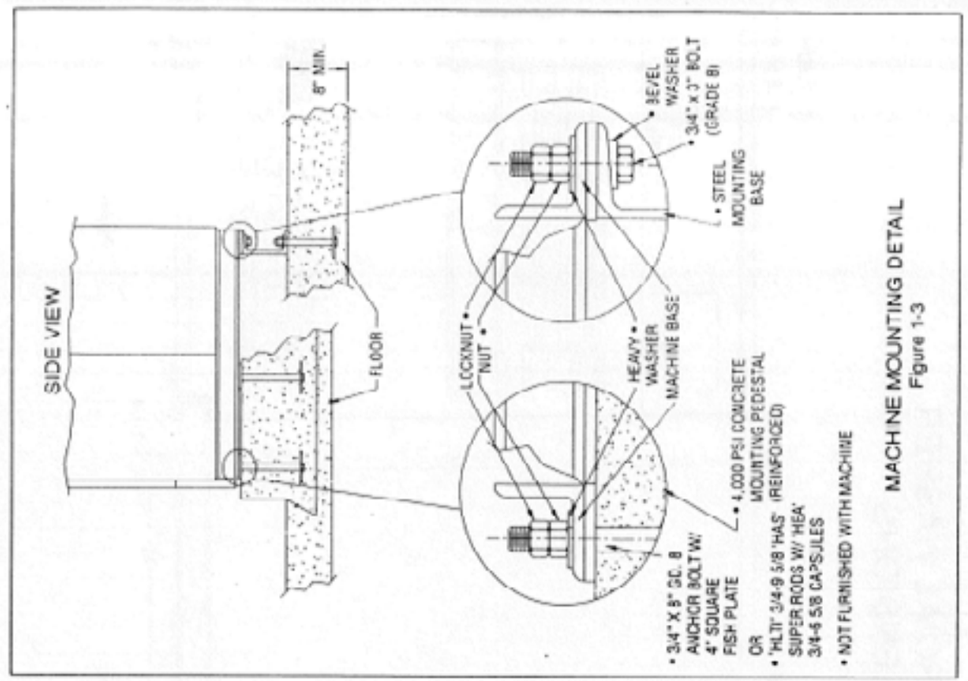
Application	Formula	Mechanical Timer	Rotary Switch Position
Shirt Laundry oxygen bleach	Shirts (No Starch) Shirts (Starch)	X X	4 (A) 4 (A)
Hotel/Motel chlorine bleach	White sheets White pillowcases White towels, bath mats, & washclothes Colored sheets & towels Delicate Wash Housekeeping rags & mops Houskeeping Uniforms Stain Treatment Reclaim Part 1 Reclaim Part 2	X X X X X X X No No No	2 (B) 1 (B) 3 (B) or 1 (B) 4 (B) or 1 (B) 4 (B) 1 (C) 2 (D)
Healthcare chlorine bleach	Sheets & Pillowcases Towels Diapers & Pads Personals Delicates	X X X X X	2 3 or 1 1 (K) 4 4
Food & Beverage chlorine bleach	White (Cotton/Blend) Table Linen Colored (Cotton/Blend) Table Linen White (100% Polyester) Table Linen Colored (100% Polyester) Table Linen White Chef Coats Kitchen & Maintenance Rags	X X X X X X	3 (E) 2 (F) 3 (E) 2 (F) 1 (J) 1 (G)
oxygen bleach	White/Colored (Cotton/Blend) Table Linen White/Colored (100% Polyester) Table Linen White Chef Coats Kitchen & Maintenance Rags	X X X X	3 (H) 3 (H) 1 (G) 1 (G)
Other oxygen bleach	Oxygen Bleach Terry Oxygen Bleach Terry (No Iron) Open	X X No	1 (G) or 3 (L) 1 (G) or 3 (L)

(A) Switch Position #4 gives 7 minute wash. Flush & Prewash eliminated with jumper (connect orange/white wire to terminal strip #2).
(B) Flush & Prewash eliminated with jumper (connect orange/white wire to terminal strip #2).
(C) Switch Position #1 gives 2 flushes/3 rinses after bleach
(D) Switch Position #2 gives either 2 flushes or 0 flushes. Flush & Prewash eliminated with jumper (connect orange/white wire to terminal strip #2).
(E) Switch Position #3 gives 7 minute wash.
(F) Switch Position #2 gives either 2 or 0 flushes with a 7 minute wash. Flush & Prewash elimiated with jumper (connect orange/white wire to terminal strip #2).
(G) Switch Position #1 gives 3 minutes flush/3 min. prewash/7 min. wash/5 rinses
(H) Switch Position #3 gives 7 minute wash/7 minute 2nd rinse
(J) Switch Position #1 gives 3 minute flush/3 min. prewash/7 min. wash
(K) Switch Position #1 gives 2 flushes
(L) Same as (G) only deletes first flush

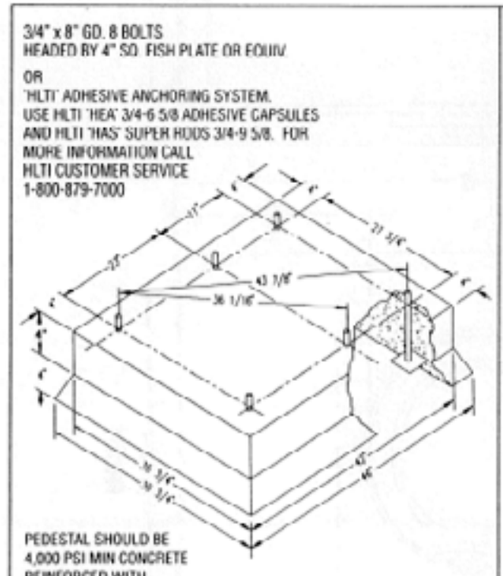
Please refer to OPL Washer CYCLE TIMES charts for all available options.

T-900 Mounting Pad Dimensions

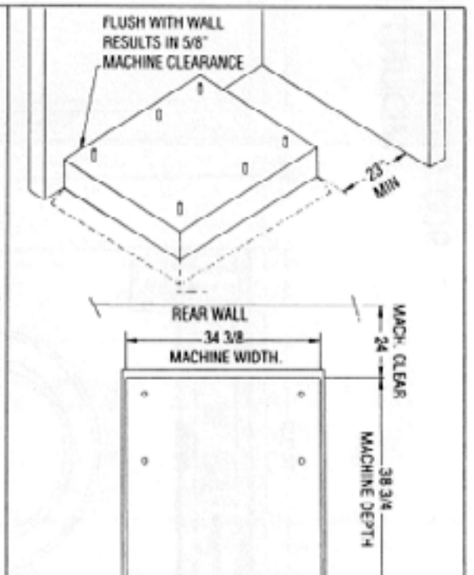




MACHINE MOUNTING DETAIL
Figure 1-3



CONCRETE PEDESTAL MOUNTING
Figure 1-1



FLOOR OUTLINE
Figure 1-2

Section 2:

Machine Installation & Operating Instructions

Installation & Operation

All washers must be installed in accordance with all local, state and national building, electrical, and plumbing codes in effect in the area.

Foundation Requirements
The washer must be securely bolted to a substantial concrete floor or mounted upon a suitable base which is in turn securely bolted to a substantial concrete floor. Care must be stressed with all foundation work to ensure a stable unit, eliminating vibration. All installations must be made on sound concrete floors 8" or thicker.

Mounting
A concrete pad or steel base which elevates the machine 4 inches above the floor level is recommended to provide easy access to the loading door. Allow a minimum of 24" of clearance behind the rear of the machine for service as is shown. Six bolts are required to mount the washer to the steel base or concrete pad.

Mounting Holes
The following pages illustrate the mounting dimensions for the machine and also show a typical concrete pad arrangement. Note: Mounting bolts should be checked frequently to ensure that they remain tight. The machine should be checked with a spinning load to be sure there is no unusual vibration or movement between the machine and the base or floor.

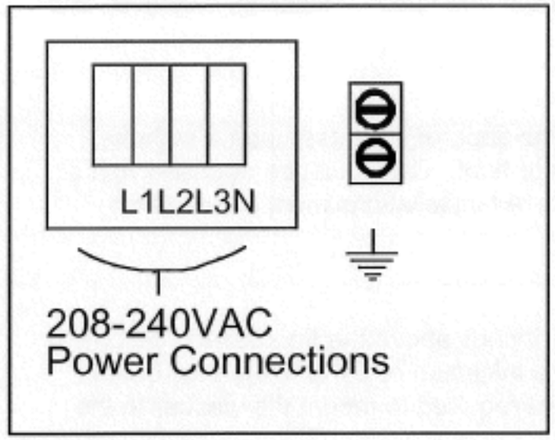
Plumbing
Water supply hoses are furnished with each machine. The threaded connections on the hoses are standard garden hose type thread. Separate hot and cold water lines with shut off valves or faucets for inlet hose connections must be provided, maintaining 30 to 120 psi. water flow pressure. A hot water recovery rate of approximately 70 gallons per hour is required with normal wash and cold rinses. A hot water temperature of 140 degrees Fahrenheit is recommended for best washing results.

Drain
The drain outlet tube at the rear of the machine is 3" in outside diameter. A flexible hose (Pt. No. 9242-417-003) is available to extend the drain system. Adequate fall must be maintained for proper drainage.

Protective Film
The machine may have protective adhesive film on the front escutcheon area and the front and side stainless steel panels. The film may be peeled off before putting the machine into service.

Electrical
Dexter WCN55 series washers are intended to be permanently installed appliances. The machines should be connected to an individual branch circuit not shared by lighting or other equipment. The electrical connection should be sheathed in water proof flexible conduit, or equivalent, with conductors of the proper size and insulation (suggested size below). A power cord is not provided. The following diagram shows the proper power connections to the rear terminal block for both 1 and 3 phase machines. Wiring should be performed by a qualified person.

Electrical power connections are made to the terminal block located at the upper right-rear corner of the washer (viewed from the front). The terminal block is accessed by removing the cover.



1 Phase
220-240 volts, 60 Hz.
3 wire plus ground

3 Phase
208-240 volts, 60 Hz.
3 wire plus ground
(high leg must go on L3)

Suggested Minimum Wire Size --12 Ga.

Fusing Requirements
Dual element time delay fuse or equivalent breaker of amperage specified below.

1 Phase/3 Phase	15 amp	When injection pump takes only signal pulses from washer terminal block.
1 Phase/3 Phase	20 amp	When injection pump uses washer terminal block for its power supply as well as signal pulses.

Always disconnect electrical power to the machine before performing any adjustments or service work.

Liquid Chemical Connection
In the left rear corner of the washer is the chemical injection assembly. This is where all chemical hose connections are made. The chemical hoses should be inserted into the round PVC pipe of 14" and a maximum of 18" to eliminate the chemical buildup in the pipe and/or restrict water flow to the tub.

Final Check Out
After all mounting, plumbing, and electrical work is completed, the washer should be run through a cycle and checked for water leaks and proper functioning.

WARNING **Always disconnect electrical power to the machine before performing any adjustments or service.**

Cycle Options

Omit All Flushes
1. Remove the cler in-line splice from the end of the orange/white wire. (This wire will be laying loose next to the terminal strip)
2. Connect the orange/white wire to terminal #2 on the terminal strip.

Omit Hot Rinses on Rinse #1 & #2
1. Remove brown/red wire from coil of R5 relay and insulate wire.

Add Hot Rinses on Rinse #1 & Rinse #2 on Temperature Push Button Position #3
1. Remove black jumper from back of temperature switch that connects push button #3 N.O. (B2) to push button #4 N.O. (B1)
2. Move white/brown wire on back of temperature switch to push button #4 N.O. (B1)

Add Cold Rinses on Rinse #3, #4, & #5 on Temperature Push Button Position #3
1. Move brown/orange wire from push button #3 Common (A2) to push button #3 N.C. (C2).

Omit Rinse #4 All Cycles
1. Remove the clear in-line splice from the end of the gray wire. (This wire will be laying loose next to the terminal strip)
2. Connect the gray wire to terminal #2 on the terminal strip.

Starting the Washer

A. Load the clothes in the cylinder and latch the door. Check to insure that clothes do not get caught between the door gasket and the tub front.

B. Make the appropriate cycle selection for the wash load using the 4-position rotary selector switch.

C. Make the appropriate temperature selection for the wash load using the 4-push button temperature selector switch.

D. To manually add wash compounds, pour low-sudsing powdered detergent in the amount shown below into the detergent dispenser on top of the machine. Rinse conditioners may also be added to the dispenser. The correct location is shown on the dispenser lid.

E. To manually add bleach in Rinse, pour bleach in round opening (location shown on dispenser lid) in top of washer.

F. To start the washer:
   1. The top (Off/On) and bottom (Pause/Run) rocker switches must be in the right hand position.
   2. The center (Advance/Start) rocker switch must then be pushed to the right hand position to begin the cycle.

G. To rapid advance the washer during a cycle, push the center (Advance/Start) rocker switch to the left hand position.

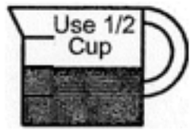
H. To pause for an extended soak, push the bottom (Pause/Run) rocker switch to the left hand position.

I. To stop the wash cycle and drain the water, push the top (On/Off) button to the left hand position.

Safety Door Lock
If power is interrupted the Safety Door Lock delays opening the door until it is safe to do so. If power failure occurs or if power is interrupted during maintenance, it will be necessary to wait 2 to 3 minutes before the door can be opened.

End of Cycle
When the cycle is completed, the washer will stop, the on light will go off, and the loading door will unlock. It can be opened by turning the door handle to the indicated position and pulling. Leave the clothes door open when the machine is not in use.

Detergent Measurements By Washer Model



Maxi Load T-900 Washer

Notes

Section 3:

Electrical Wiring Diagrams & Schematics

Electrical Path Circuit Schematics

Timer Sequence Chart

The timer sequence charts are used in conjuction with the wiring diagrams to trace the circuitry during the time cycle. The timer contacts and the operation or component that each contact controls are listed down the left side of the chart. The phases of the complete cycle are shown across the bottom of the chart. The timer switch increments are numbered across the top of the chart. The solid horizontal bars in the chart denote when the various contacts are closed during the cycle.

To use the timer sequence chart to trace the circuitry:
1. Locate the particular part of the cycle on the sequence chart.
2. Determine which timer contacts are closed during that particular step of the cycle by noting the solid vertical bars in that step across the chart.
3. Draw in the gap of the respective contacts on the wiring diagram with a soft dark pencil, to illustrate the contacts are being closed.
4. Similarly, determine which switch contacts are closed, by the switch chart, and illustrate them as closed on the wiring schematic.
5. The circuitry during the particular step of the cycle may then be easily traced on the wiring diagram, since all contacts and switches are then properly illustrated as being open or closed.

Start Circuit

Power travels into the control trough on L1 &L2. 240VAC goes to a Control Transformer that steps the voltage down to 120VAC for the controls. 120VAC then travels thru the 1.5 amp Circuit Breaker and travels on the white/red wire to the Coin Accumulator Transformer where it is stepped down to 12VAC. This 12VAC powers the Coin Accumulator Board via the gray wire. With the board now powered up, the insert coins light will be illuminated and it's ready to count coins.

120VAC is also supplied to the Main Timer Start and On-Off Contacts on the white/red wire. The Start Contact is closed before the machine has been started so 120VAC travels through the Start Contact and is sup plied to the Coin Accumulator Board Start Relay. The S4 Coin Switch counts the quarters and sends a signal to the Coin Accumulator Board. When the coin count is satisfied, the Coin Accumulator Board closes the Start Relay and sends a short 120VAC signal on the orange/white wire to the Rapid Advance Timer Motor. This timer motor starts advancing the Main Timer to the preselected starting position. A few seconds after the Coin Accumulator Board sends the start signal to the Rapid Advance Timer Motor, the Coin Accumulator Start Relay opens, the display goes blank and the On-Off Contact in the Main Timer closes to ensure that the S1 Door Switch is closed (showing that the door is locked). The On-Off Contact also pro vides 120VAC to the On Light on the red wire. With the S1 Switch closed the Door Lock Solenoid is now powered with 120VAC via the white/red wire. The Door Lock Solenoid pulls in, locking the door and closing the S2 and S3 Switches. The S2 Switch is a backup to the S1 Switch so that the adjustment on S1 isn't as critical. The S3 Switch provides 120VAC to Timer Contact RA-3 to power the Rapid Advance Motor again and the Main Timer is allowed to advance on to the preselected start position. The blue wire furnishes the neutral for the controls.

Fill Circuit-Warm

120VAC is supplied to the controls through the S1, S2, and S3 Door Switches. The On Light and the Door Lock Solenoid (discussed in Start Circuit) will remain on throughout the cycle. The Lock Thermoactuator Contact in the Main Timer is closed and provides the neutral side to operate the Thermoactuator. 120VAC is provided.to the Lock Thermoactuator on the orange wire from the S3 Door.Switch. The Drain Contact in the Main Timer is closed and pro vides 120VAC to the Drain Valve on the brown/yellow wire which closes the valve. The Wash Contact in the Main Timer is closed and provides 120VAC to the Reversing Timer and the Reversing Timer Motor on the blue/black wire. This will start the Reversing Timer operating which will alternately open and close the Micro Switches that provide the direction of tumble for the wash basket. The Wash Light Contact in the Main Timer is closed and provides 120VAC to the Wash Light. The orange wire coming from the S3 Door Switch provides power to the Wash Water Contact in the Main Timer. 120VAC connects. from the Wash Water Contact to the Wash Temperature Contact via an internal timer connection. With 120VAC on the orange wire & neutral on the orange/yellow wire, the Coin Accumulator Board turns on the Time Remaining Light & starts counting down in minutes. (If delay fill kit is installed, time count down is stopped during fill.)

Fill Circuit-Warm Continued...

Now a cycle must be selected with the Selector Switch. We'll use Normal Wash. The washer fills the tub through the back of the machine with either one or both the C1 Cold and H1 Hot Water Valves. At the beginning of the cycle, the detergent dispenser flushes the detergent into the tub. This is accomplished with the Wash Dispenser Contact in the Main Timer. 120VAC travels through the closed Wash dispenser Contact and is supplied to the H2 Hot Water Valve Solenoid by the red/orange wire. As the washer fills with water, the Wash Basket will tumble one direction for 19 seconds, pause, and then reverse direction for 19 seconds. 120VAC travels from the Wash Water Timer Contact to the Heavy Duty Contact in the Selector Switch via the white/black wire. 120VAC goes through the closed Heavy Duty Contact in the Selector Switch and energizes the C1 Cold Water Valve Solenoid via the white/orange wire. 120VAC also travels to the closed Wool/Delicate Contact in the Selector Switch. This closed contact provides power to the H1 Hot Water Valve Solenoid via the red/yellow wire. When the water reaches the predetermined level the Pressure Switch moves to the full position and opens the neutral side of the line to the Water Valves. This shuts the Water Valves off. The neutral for the Water Valves & Main Timer Motor is provided through the Pressure Switch. The Main Timer is stopped until the Pressure Switch provides neutral when full level is reached. Neutral for the Main Timer Motor during drain and spin is provided through the Delay Fill Timer Contact.

120VAC travels from the Wash Water Timer Contact to the Heavy Duty Contact in the Selector Switch via the white/black wire. 120VAC goes through the closed Heavy Duty Contact in the Selector Switch and energizes the C1 Cold Water Valve Solenoid via the white/orange wire. 120VAC also travels to the closed Wool/Delicate Contact in the Selector Switch. This closed contact provides power to the H1 Hot Water Valve Solenoid via the red/yellow wire. When the water reaches the predetermined level the Pressure Switch moves to the full position and opens the neutral side of the line to the Water Valves. This shuts the Water Valves off.

Wash Circuit

As the washer fills the tub through the back of the machine with either one or both the C1 Cold and H1 Hot Water Valves, the Wash Basket will tumble one direction for 19 seconds, pause, and then reverse direction for 19 seconds. This is accomplished through the use of a Reversing Timer. 120VAC is supplied to the Reversing Timer Motor on the blue/black wire from the Wash Motor Timer Contact in the Main Timer and 120VAC is supplied to the R1 Run Relay any time the door is locked. This R1 Relay closes & provides 24VDC thru the Reversing Timer Wash Micro Switches. The Reversing Timer will alternately open and close the two Wash Micro Switches and provide 24VDC to the FW (forward) or RV (reverse) terminals on the Variable Frequency Drive.

As discussed in Start and Fill, the Lock Thermoactuator, Drain Valve, On Light, and Main Timer Motor (except in fill) are all operating throughout the Wash Cycle.

Drain, Rinse 1 & 2, and Final Rinse Circuit

The Drain Contact on the Main Timer opens. removing power to the Drain Valve. The normally-open spring-loaded Drain Valve opens and empties the tub.

For Rinse 1 & 2, the Rinse Light Contact in the Main Timer closes and provides 120VAC to the Rinse Light. The Rinse Water Contact in the Main Timer also closes and provides 120VAC to the C1 Cold Water Solenoid. The tub will fill until the predetermined level is achieved at which time the.Pressure Switch Contact will open the neutral side of the line shutting off the C1 Cold Water Solenoid. When the tub is full, the pressure switch also closes a neutral circuit to the M1 Timer Motor and to the orange/yellow wire on the Coin Accumulator Board. This allows the Main Timer to advance only after the tub is full and stalls the time count down on the Coin Accumulator Board during fills.

For the Final Rinse, the. Final Rinse Light Contact in the Main Timer closes and provides 120VAC to the Final Rinse Light. Rinse water is the same as in Rinses above.

As discussed in Start and Fill, the Lock Thermoactuator, Drain Valve, On Light, and Main Timer Motor (except in fill) are all operating throughout the Wash Cycle.

Intermediate Extract Circuit

The Wash Contact remains closed and provides 24VDC to the closed Clockwise Micro Switch on the Reversing Timer. 24VDC is then fed to the Counter Clockwise Micro Switch via a jumper wire..120VAC is then sent to the Delay Spin Micro Switch. The Delay Spin Micro Switch provides 120VAC to the Spin Motor Contact in the Main Timer on the blue/white wire. The Spin Motor Contact is closed for spin and the voltage continues on to the R2 Spin Motor Relay Coil on the red/black wire. With 120VAC to the R2 Spin Motor Relay Coil two things happen. 120VAC is now provided from the orange wire directly to the Relay eliminating the Reversing Timer and the Micro Switches from the circuit.

The second thing that happens when the R2 Relay is closed is that 24VDC is provided from the DCM terminal of the Variable Frequency Drive through the R1 Run Relay through the R2 Spin Relay to terminals MI 1 & MI3 on the Drive and the washer spins at intermediate speed.

Final Extract Circuit

Same as Intermediate Extract but adds the R3 Extract Relay. The Main Timer provides 120VAC to the Extract Relay Coil. When this relay closes it provides 24VDC to the MI2 terminal on the Variable Frequency Drive. This means that all 3 terminals MI1, MI2 & MI3 are powered for high spin.

Unlock Thermoactuator and Shake Out Circuit

The Lock Thermoactuator Contact in the Main Timer opens 1 1/2 minutes before the end of the cycle removing the neutral to the Thermoactuator. This allows the Thermoactuator time to retract by the end of the cycle.

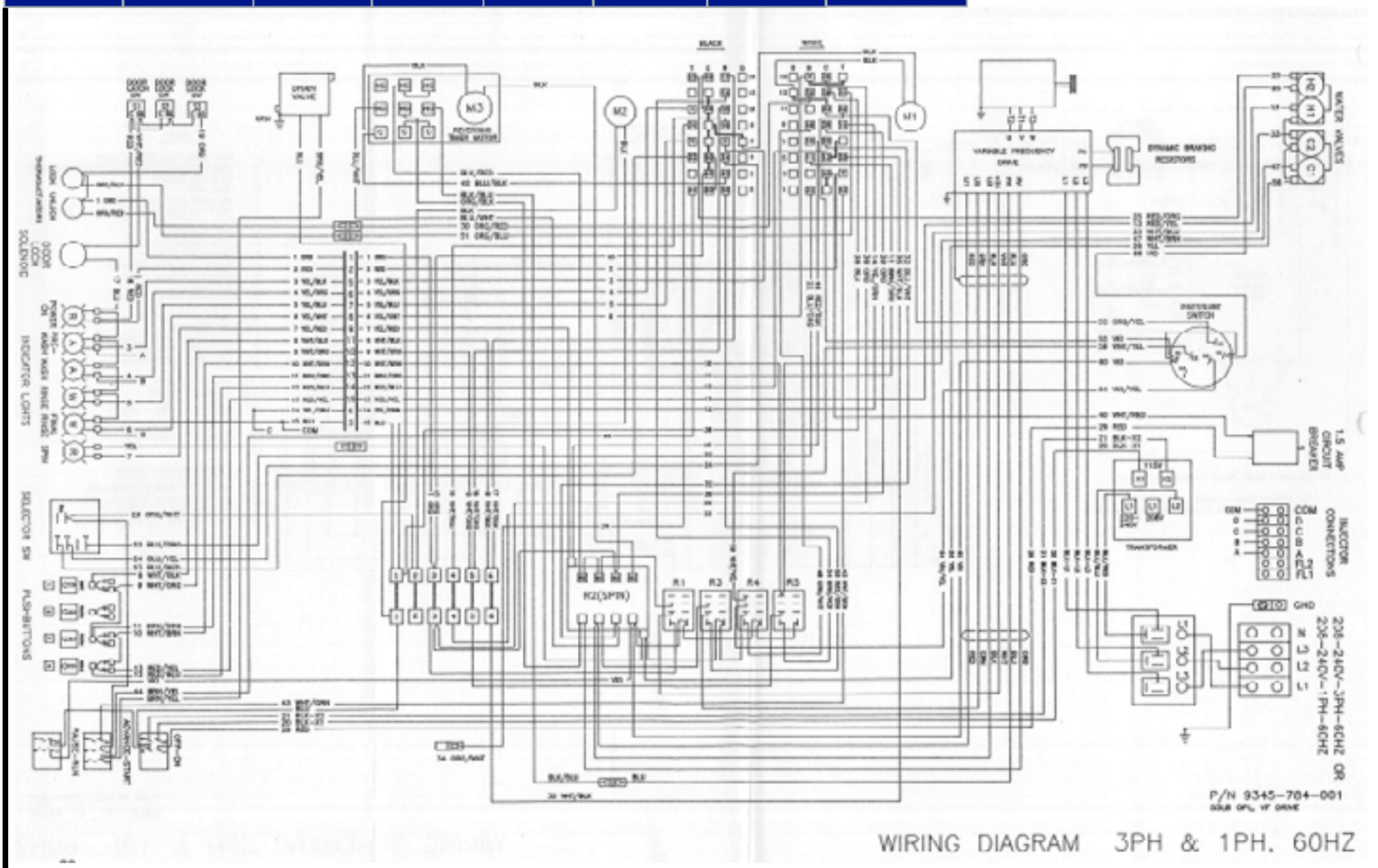
To insure that the Lock Thermoactuator has retracted by the end of the cycle, 1 minute prior to the end of the cycle, the Unlock Thermoactuator is powered with 120VAC through the Unlock Thermoactuator Contact in the Main Timer.

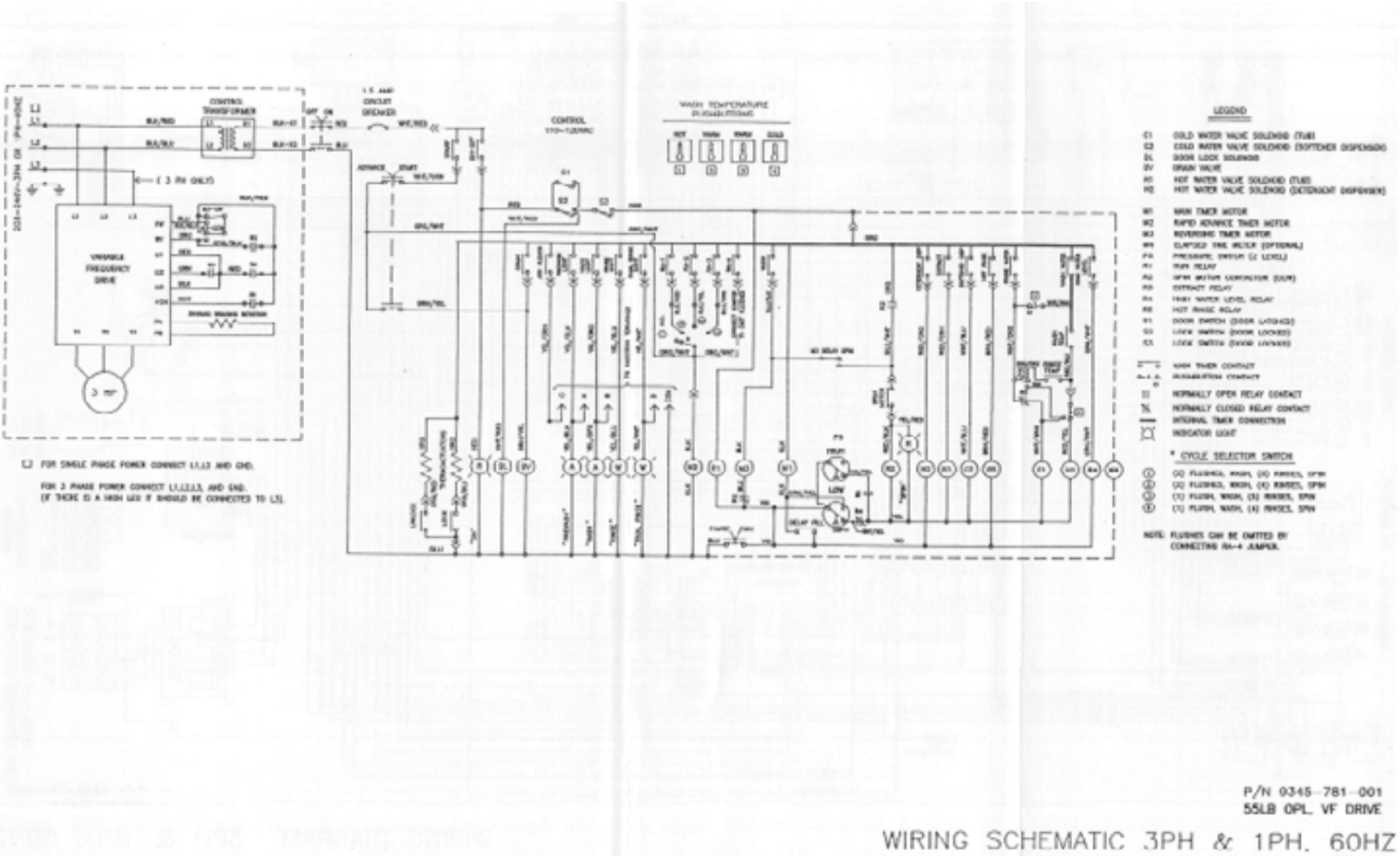
The Spin Motor Contact in the Main Timer opens, stopping voltage to the R2 Spin Motor Relay & the motor. The basket will coast to a stop. The Wash Motor Contact in the Main Timer closes providing power to the Reversing Timer once again (discussed in Wash Cycle). The washer will tumble for approximately 30 seconds to let the clothes shake loose and then stop.

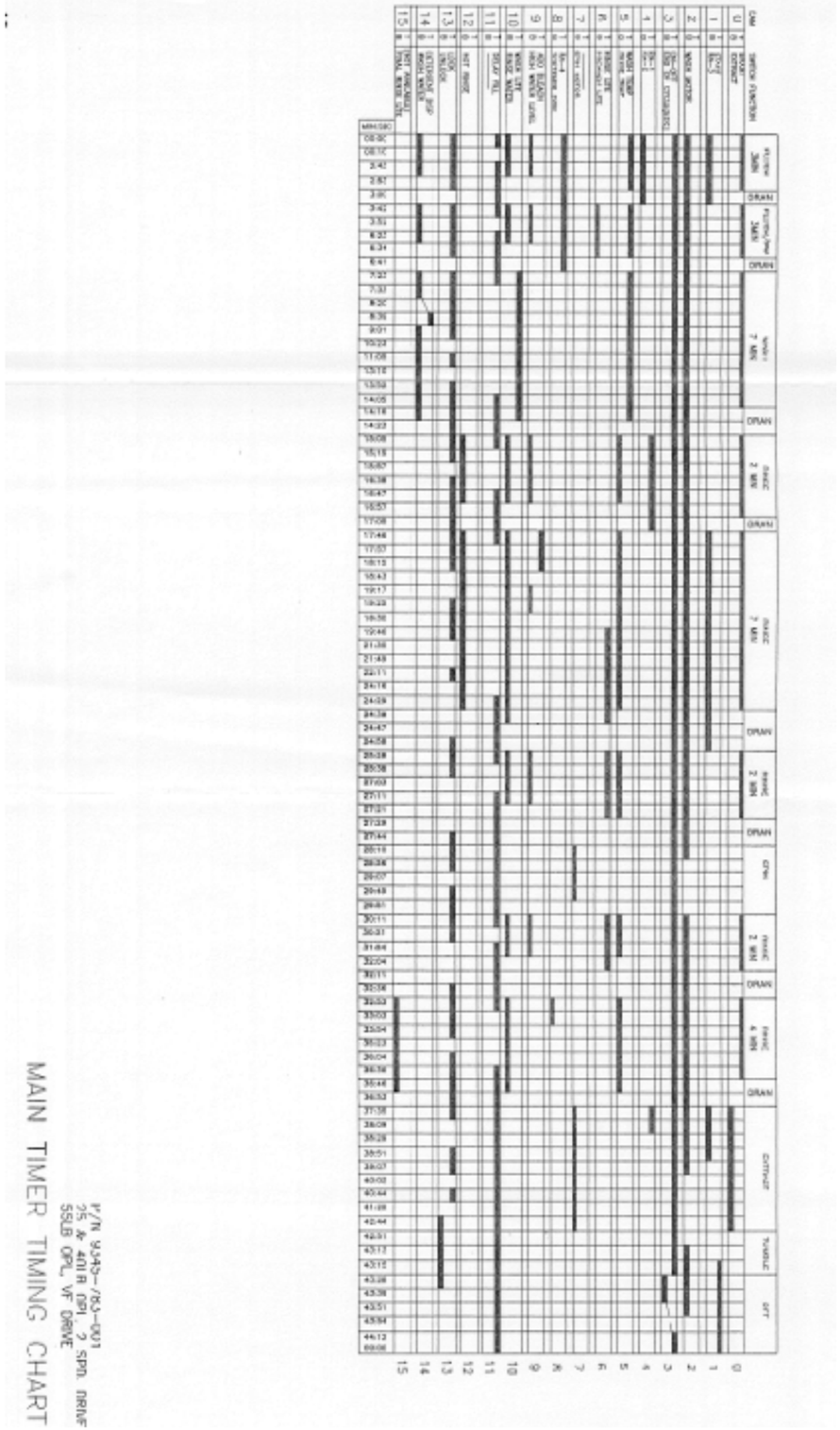
End of Cycle Circuit

The On-Off Contact in the Main Timer opens removing power to the Door Lock Switches and Contactors. The machine is now stopped. The Start Contact on the Main Timer is closed providing 120VAC to the Coin Accumulator Board on the white/green wire.

The End Of Cycle Contact in the Main Timer is closed sending a 120VAC signal to the Coin Accumulator Board on the white/yellow wire telling it that the cycle is over. This does 2 things:
1. The beeper will signal for 3 seconds letting the user know that it is the end of the cycle.
2. It resets the Coin Accumulator Board and it is now ready to count coins again.


P/N 9345-784-001
WIRING DIAGRAM 3PH & 1PH. 60HZ


P/N 9345-781-001
55LB OPL. VF DRIVE
WIRING SCHEMATIC 3PH & 1PH. 60HZ



Section 4:

Machine Service Procedures

Top Panel Removal

Step 1: Remove 4 screws that hold detergent dispenser to top panel.
Step 2: Unlock top panel lock.
Step 3: Raise top panel, slide to the rear to release from back clips and lift off.

Front Panel Removal

Step 1: Remove 2 screws between front panel top and front (located behind control panel).
Step 2: Remove the two screws in the middle of the front panel.
Step 3: Pull panel out at the bottom to about a 45 degree angle to detach the top lip and remove.

Back Panel Removal

Step 1: Remove all screws holding back panel in position except the bottom row.
Step 2: The bottom row of screws are slotted and only need to be loosened and to lift off panel.

NOTE: The back panel is not only a safety requirement but also contributes to the rigidity of the cabinet.

Drain Valve Access

For access, remove lower service panel. The drain valve is a ball type and is powered closed by the drain valve motor. It is spring loaded open. If power is interrupted to the washer, the motor releases the sealing ball, allowing the drive spring to open the valve. With the valve open, all water in the washer will drain out.

Chemical Injection Assembly

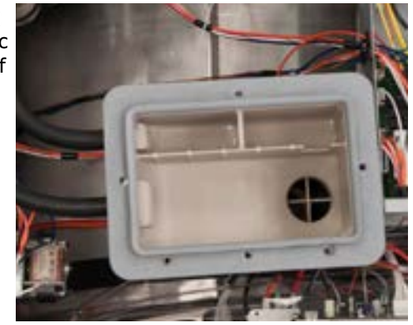
In the left rear corner of the washer is the chemical injection assembly. This is where all chemical hose connections are made.

Drain Valve Cleaning

Step 1: Loosen the clamp on the tub hose at the drain valve end and remove the hose from the drain valve.
Step 2: Loosen the drain hose clamp on the back of the drain valve. Remove two drain valve mounting racket screws from the frame of the washer.
Step 3: Remove the drain valve and bracket assembly.
Step 4: Unplug the wiring after the drain valve is removed from the washer.

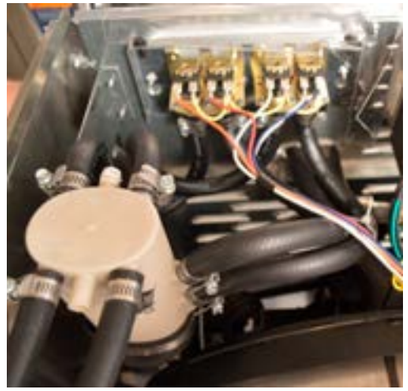
Detergent Dispenser

Remove top panel to access dispenser. (see Removing Top Panel) Detergent is flushed from the front of the compartment and fabric softener is flushed from the back. There will be a small amount of water left in the fabric softener compartment after each use.



Vacuum Breaker (also called an air gap)

In the left rear of the cabinet is the vacuum breaker. It guides the water to the tub and dispenser and prevents a back flow of water.



Water Valves

Remove top panel to access water valves. (see Removing Top Panel) The two dual outlet water valves are mounted to the rear channel with two screws each. Always check inlet screens to be sure that they are clean. Disassembly requires the removal of two solenoid screws and three valve body screws. Below the solenoid coil is a solenoid guide, armature, armature spring and diaphragm. All valve parts are available individually or as a complete unit.

Masking Ring (door lock cover) Removal

A. Remove front panel.
B. Remove nuts that retain masking ring.
C. Move it to the left and off.

Door Lock Assembly Operation

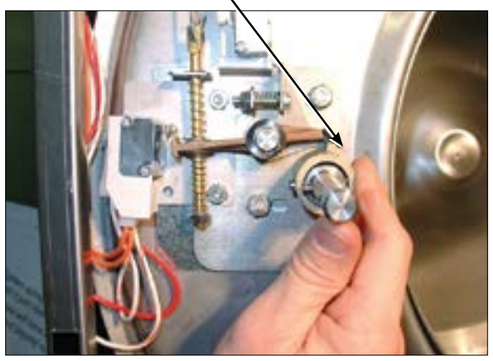
After loading the clothing, the door should be closed and latched. The locking cam on the door contacts the latching switch actuator which closes the latching switch. The specified number of coins should now be added to start the washer. The gear motor pulls up on the locking pawl by use of a linkage rod. The locking pawl has two jobs. The first is to lock the door. This is accomplished by blocking the locking cam on the door so that it can't rotate to unlock. The second job is to close the two piggyback lock sensing switches. These switches control power to all of the controls. If the door unlocks for any reason, these two switches will stop the machine. When the door handle is 1/4 to 1/2 of an inch from its fully closed position, the latching switch should close. The two piggyback lock sensing switches should be open when the door is unlocked and should be closed when the door is locked.

Accessing the Door Lock Assembly

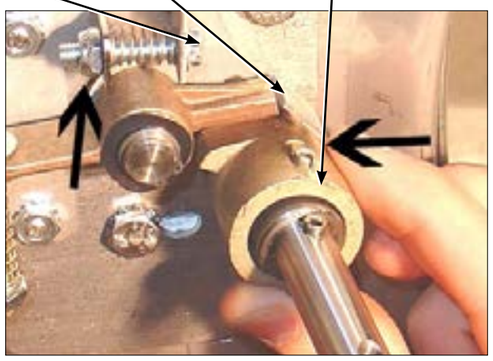
After removing the front panel and masking ring, the door lock assembly can now be accessed.

Adjustment for Door Lock Assembly

The latching switch and the piggyback lock sensing switches all have slotted mounting for easy adjustment.

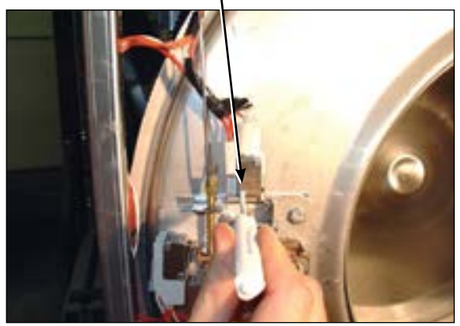


Step 1: Set door cam over pin. Here you can see the door cam away from the door lock assembly.

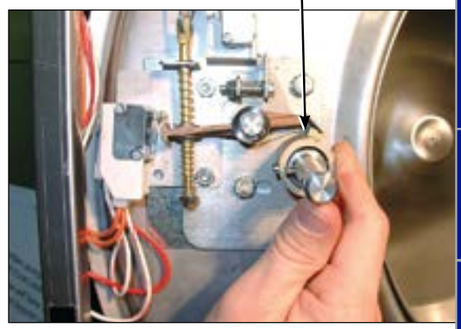


Step 2: Tighten spring screw on switch actuator bracket arm until it just clears cam OD. at base of door lock assembly.

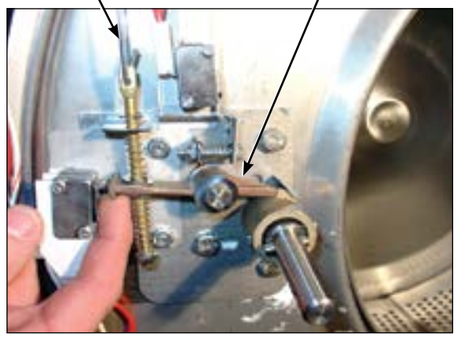
Adjustment to this bracket usually is not necessary as next step is used more in field.



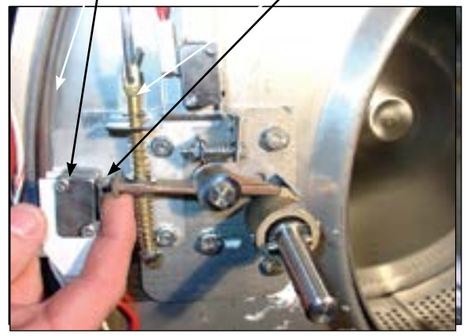
Step 3: With switch actuator bracket adjusted you will now need to adjust single switch by loosening 2 flat brade screws and allowing swivel of switch. Move switch towards above bracket until it actuates. Now tighten flat blade screws. Use a .040 thickness guage to insert between bracket and switch and the switch should close and open again upon removal of thickness guage.



Step 4: Check for switch actuation at partial turn of cam as in operation above. Door handle goes from horizontal to six o'clock vertical.



Step 5: Check that lock pawl arm swings to cam lobe to lock position.



Step 6: The lock stacked switches (piggyback) must be adjusted as door lock solonoid pulls up on door rod and locking pawl is now blocking door cam from turning and is in full up position. The stacked swtiches (piggyback) have a single actuator arm and it must actuate when single actuator roller wheel rolls to flat side of locking pawl. You will also notice a .040 gap between actuator arm and switch bodies.

Note: Both stacked switches must operate together!

Door Locking Solenoid
The door locking solenoid is powered shut with control voltage to lock the door and releases when voltage is removed. It is located in the left front corner of the washer.

Thermoactuators
The thermoactuators are a safety device that keeps the door from immediately unlocking if power is lost while the machine is operating. They are mounted under the door locking solenoid.

Lock Thermoactuator
Control voltage is applied to the lock thermoactuator at the beginning of the cycle making it extend and block the door locking solenoid. This keeps the door locked for approximately two minutes after a power failure occurs. The lock thermoactuator does not delay the door opening at the end of a normal cycle.

Unlock Thermoactuator
To ensure that the lock thermoactuator has retracted by the end of the cycle, one minute prior to the end of the cycle, the unlock thermoactuator is powered with control voltage making it extend and unblock the door locking solenoid.

Loading Door Removal
A. Support door to prevent dropping.
B. Remove 3 bolts holding hinge retainer and set door off.

Loading Door Disassembly
A. Remove the loading door as outlined above.
B. Lay the door on a flat surface with the glass down.
C. While holding down on the door glass, lift up on the door ring and roll back the lip of the gasket with your fingers.
D. Work all the way around the gasket and the glass is out.

Loading Door Reassembly
A. Lay the door ring face down on a flat surface.
B. Start the glass into one side of the door. gasket.
C. Use one hand underneath to push the gasket out and the other hand on the top pulling the gasket in place.
D. The front lip of the door gasket should be checked for proper seating.

Loading Door Adjustment
The door can be adjusted by changing the number of shims behind the door hinge and the door lock assembly. The vertical fit of the door to the tub can be altered by loosening the door hinge bolts and raising or lowering the door before retightening. It is important for the door to be centered on the tub front. By chalking the nose of the tub and closing the door to transfer that line to the gasket, the centering can be evaluated. It is also important for door pressure to be similar around the door perimeter. Door pressure can be evaluated by inserting a dollar bill in several positions and tugging on it. See Parts Section for kit to increase door sealing pressure.

Loading Door Hinge Removal
A. First remove loading door, front panel, and trim ring.
B. Remove 3 screws holding door hinge. Shims may be present between hinge and tub front. The number may be increased or decreased to adjust right side door pressure.

NOTE: Door hinge mounting bolts penetrate tub front and require silicone sealer applied to holes when reinstalling.

Control Panel Name Plate Decal
The name plate on washer front is adhesive backed.

Control Panel Name Plate Removal
The name plate may be removed by simply peeling it off.

Re-Installation of Name Plate
Step 1: Remove any remaining glue from the control panel.
Step 2: Before removing the paper backing from the name plate, check fit to the control panel. The program push buttons are the locating guides.
Step 3: Remove the paper backing from the right side of the name plate, position it on the panel and press right end into place. Peel the backing from the left end and press into place.

Motor Relays
These relays are in the center of the control trough. The front relay is for intermediate spin. The middle relay is for high speed extract. The back one is the run relay.

R1 Run Relay
The R1 Run Relay is a small relay that is mounted directly behind the R3 extract relay. The 120VAC coil on the Run Relay is energized any time that the timer is in the run position and the door is locked. When energized, the Run Relay provides 24VDC to the reversing timer for wash and to the R2 intermediate extract relay for spin.

R2 Spin Motor Relay (Intermediate Extract Relay)
The R2 Spin Motor Relay is the large relay that mounts in the center of the control trough. The i20VAC coil on the R2 Relay is energized any time that the timer is in the spin position. 24VDC is provided from the +24 terminal of the Variable Frequency Drive through the R1 Run Relay to the R2 Relay. When energized, the R2 Relay provides 24VDC to terminals MI2 & MI3 on the Drive and the washer spins at intermediate speed. The relay is removed by prying out on the mounting tab at the bottom of the relay with a straight blade screw driver.

R3 Extract Relay (High Speed Extract Relay)
The R3 Extract Relay is a small relay that is mounted directly behind the large R2 spin motor relay. The Main Timer provides 120VAC to the R3 Extract Relay coil. When this relay closes it provides 24VDC to the LI2 terminal on the Variable Frequency Drive. This relay combined with the R2 Spin Motor Relay powers all 3 terminals M11, MI2 & MI3 on the Variable Frequency Drive for high spin.

R4 High Water Level Relay
The R4 High Water Level Relay is a small relay that is mounted directly behind the R3 extract relay. The Main Timer provides 120VAC to the R4 High Water Level Relay coil. The R4 Relay closes the circuit from the pressure switch coming out of the high level contacts for the various high level baths in the cycle. It also opens the circuit coming out of the low level contacts.

R5 Hot Rinse Relay
The R5 Hot Rinse Relay is a small relay that is mounted directly behind the R4 high water level relay. The Main Timer provides 120VAC to the R5 Hot Rinse Relay coil. The R5 relay opens the circuit to the cold water valve so that specific rinses are hot water only.

Program Timer
This timer is located on the left side of the control trough directly behind the reversing timer and is held in place with two screws. It controls most machine functions. There are two drive motors on the program timer. The one towards the front of the machine advances the timer at the beginning of the cycle. The timer motor towards the rear drives the timer throughout the cycle. These two motors can be replaced individually. The program timer has a black knob that allows the timer to be manually turned to any portion of the cycle for diagnostic purposes.

Controls Transformer
This transformer is mounted at the back of the control trough and steps a range of 208 to 240 volts down to 115 volts for the controls. There are two terminals on the controls transformer for incoming power. One terminal is for 208 to 220 volts and the other is for 221 to 240 volts.

Note: All 60 Hz. 551b. washers have a controls transformer. Always check the incoming voltage and use the appropriate transformer terminal when installing these washers.

Pressure Switch
The pressure switch sets the water level in the washer and is located in the left rear corner of the control trough. As the water level rises, it compresses the air in the pressure switch hose. When the washer reaches the desired water level, the compressed air in the pressure switch hose opens the contacts in the.switch, shutting off the water. When at the empty level, the pressure switch contacts are closed allowing the machine to either spin or fill with water. At low level the water will be approximately 1/2" up from the bottom of the door glass. On high level the water will be approximately 3"-4" up from the bottom of the door. The pressure switch is sealed and is not adjustable.

Power Connection Terminal Block
This terminal block sets in the right rear corner of the washer and is accessed from the back. Incoming power to the washer should connect here. (see Electrical under Installation and Operation Section for exact connections)

Cycle Indicator lights
The 120VAC indicator lights are mounted to the back of the control panel and are held in place with two tabs. They are removed by squeezing the tabs with a screwdriver. The lights are replaced as a complete unit.

Temperature Selector Switch
The push-button temperature selector switch is mounted in the center of the control panel and is held in place with two nuts. It allows the selection of hot, warm or cold water temperatures.

Note: Do not over tighten on reinstallation as the switch can be damaged.

Cycle Selector Switch
The rotary cycle selector switch is mounted to the left of the temperature selector switch and is held in place with two phillip screws. It allows the selection of 4 different wash cycles.

Rocker Switches
These switches can be replaced individually by squeezing the tabs on the back side and pressing them out the front of the panel.

A. Top switch is red and controls Off and On. This switch must be in the On position for the washer to operate. The off position will cause the washer to stop in the cycle and drain the water.
B. Middle switch is white and controls Advance and Start. This switch must be held in the start position momentarily to start a cycle. Wash and rinse baths can be advanced through by holding the switch in the advance position.
C. Bottom switch is blue and controls Pause and Run. This switch must be in the Run position for the washer to advance through the cycle. The washer can be stalled at any point during the cycle for extended soaks by selecting pause. The door will remain locked and the drain valve will remain closed keeping the water in the tub.

Lower Service Panel Removal
Remove 2 screws and pull forward to disengage from the locator studs.

Drive Belt Removal
Turn the drive belt(s) off the basket pulley first and then remove from the motor pulley.

Reverse this procedure for installation.

Circuit Breaker
The circuit breaker mounts to the rear channel. It carries all of the controls in the machine but does not include the motor. To reset the circuit breaker just push in the button.

Control Mounting Trough
Remove top panel to access control trough. (see Removing Top Panel) It sets on the right side of the machine and holds many of the controls.

Reversing Timer
The reversing timer operates the variable frequency drive directly in wash and operates the spin relay for spin. It is mounted on the left side of the control trough with two screws. It has three cam operated switches. Two switches operate the wash cycle by alternately engaging and sending a 24VDC signal to the FW and RV terminals of the variable frequency drive to tumble counter clockwise for 19 seconds, stop for 3 seconds, reverse direction and tumble clockwise for 19 seconds. The third switch engages the spin relay for the inter- mediate and high speed spin portions of the cycle.

Drive Belt

Outer Tub

Removal

Step 1: The outer tub can easily be removed when the tub back, bearing, and cylinder assembly have been removed as outlined.

Step 2: At that point only attachments to the chassis are the two front strap mounting bolts.

Reassembly

Step 1: Install outer tub in front strap leaving bolts loose.

Step 2: Install tub back assembly in washer (see Reassembly of Tub Back, Bearing, and Cylinder (basket) Assembly).

Step 3: With tub tback assembly bolted to washer frame and to the back of the outer tub, tighten front strap bolts.

Tub Back, Bearing and Cylinder Assembly

Removal

Step 1: Remove the top panel as described previously.

Step 2: Remove lower service panel as described previ- ously.

Step 3: Remove front panel as described previously.

Step 4: Remove masking ring as described previously.

Step 5: Remove door lock assembly. (Leave wires & pull rod in place)

Step 6: Remove clothes door.

Step 7: Remove tub front clamp ring.

Step 8: Remove tub front. Use a flat screw driver to pry the tub front loose.

Step 9: Remove the rear access panel.

Step 10: Remove the drive belts.

Step 11: Remove drive pulley.
Remove 3 retaining screws.
Insert 3 2" screws into the threaded removal holes.
Alternately tighten these screws evenly to pull the pulley off.

Step 12: Remove pulley hub. Drive a flat screw driver into the slot in the hub and pull it from the shaft.

Step 13: Install cylinder puller.
(Snap On part #CJ-84-C) Be sure to thread a bolt into the end of the cylinder shaft to protect the threads.

Step 14: Push the basket out.

Reassembly

Step 1: Use the hub of the drive pulley, a stack of 5/8" flat washers and a 3" long 5/8" bolt to pull the cylinder shaft through the bearings. After the 3" bolt a 2" long bolt will be required to fin ish pulling the cylinder shaft through.

Step 2: Remove the 1/2" bolt and nut from the top of the outer tub clamping band.

Step 3: Install Dexter Tool part# 8545-056- 001 on the back of the outer tub to adjust tub front to cylinder clear ance. Thread 5/8" bolt through tool and into cylinder shaft. Push the outer tub forward 1/4" to 1/2" with tool 8545-056-001 by tightening the 5/8" bolt. This will ease the installa tion of the outer tub front.

Step 4: Clean the silicone rubber off the tub front and the outer tub.

Step 5: Install new bead of silicone rubber on tub front.

Step 6: Install tub front.

Step 7: Install drive pulley and belts.

Step 8: Install back panel.

Step 9: Install door lock.

Step 10: Install door, masking ring, front panel, lower service panel, and top panel.

Installing Tub Front

Step 1: Align hole in top of tub front with notch in top of outer tub.

Step 2: Use 4-6 #11R vise grip clamps to hold tub front to outer tub. A rubber mallet may be needed to properly seat the tub front into the outer tub.

Step 3: Install tub front gasket around outer edge of tub front and outer tub flange. The opening should be centered at the top.

Step 4: Remove vise grips. The tub front gasket will hold the tub front in place.

Step 5: Install tub front clamp ring and tighten. Tap around the clamp ring with a rubber mallet to seat the ring and gasket while tightening the clamp ring bolt.

Step 6: Adjust clearance between the outer tub front and the front lip of the cylinder to 5/16"

Step 7: Tighten the outer tub clamping band.

Step 8: If necessary, adjust the outer tub with the 2 bolts that fasten the tub clamping band to the frame.

Step 9: Remove Dexter tool part 8545-056-001 from the back of the other tub.

Step 10: Install drive pulley.

Installing Drive Pulley

Step 1: Install hub on cylinder shaft.

Step 2: Hold hub against rear bearing with 5/8" bolt and flat washer in end of cylinder shaft.

Step 3: Line up 3 unthreaded holes in pulley with the 3 threaded holes in tub.

Step 4: Insert 3 pulley bolts and tighten evenly alternating bolts to 30ft/lb. Note: Overtightening or uneven tightening can break drive pulley.

Water Seals Replacement

A. Remove cylinder from washer (see Cylinder (basket) removal).

B. Remove water seals from the seal mounting plate on the cylinder shaft with your fingers.

C. The primary and secondary seals that mount on the sealing ring may.be slid over the shaft and seated on the metal sealing ring with your fingers. In the unlikely event that the metal ring that mounts these sealing rings were to be damaged or moved, a new one would need to be pressed on. The T-900 ring must be pushed against the stop on the shaft. After installing the seals, lubricate the faces of the seals with silicone grease.

D. Install cylinder as previously outlined.

Bearing Housing Assembly Removal

A. Remove cylinder from washer (see Cylinder (basket) removal).

B. Remove 6 7/16" tub back to bearing housing cap screws.

C. Remove 6 3/4" bearing housing to frame bolts.

D. Remove bearing housing from frame.

E. Remove the retaining ring next to the front bearing.

F. The bearings are pressed into the housing and must be pressed back out.

Bearing Housing Assembly Reassembly

A. When installing new bearings into a bearing housing, first press the front (large) bearing into the housing until it bottoms and install the snap ring. With the bearing spacer in place, press the rear bearing in until the spacer is snug between the two bearings. Note: If the tub-back water-seal mating ring has been moved it must be cleaned and resealed with silastic around all 6 bolt holes and around the outer edge.

B. Set bearing housing on frame.

C. Install and torque 6 tub back to bearing housing cap screws according to the previous chart.

D. Install and torque 6 bearing housing to frame bolts according to the previous chart.

E. Install cylinder as previously outlined.

Drive Motor Removal

Step 1: Remove the drive belt as explained in previous instructions.
Step 2: Remove the tension spring and bracket.
Step 3: Disconnect the motor wires at the variable frequency drive unit.
Step 4: Loosen the set screws on the motor support shaft.
Step 5: Remove the retaining bolt from the front of the support shaft.
Step 6: Remove the motor support shaft.
Step 7: Lift motor out of machine. Note: On larger washers it is advisable to put a board under the motor and slide it out rather than lifting it.

T-900 Bolt Torque Chart

Bolt Size	Where Used	Torque
7/16" Stainless Cap Screw	Outer Tub to Bearing Housing	60-80 ft/lbs
3/4" Bolt	Bearing Housing to frame	200-300 ft/lbs
1/2" Bolt	Outer Tub Clamping Band to Frame	70-110 ft/lbs
1/2" Bolt	Outer Tub Clamping Band - Top	30-40 ft/lbs
3/8" Cap Screw	Drive Pulley to Hub	30 ft/lbs

Notes

Section 5:

Trouble Shooting

Common Troubleshooting Solutions

Symptom	Probable Cause	Suggested Remedy
Machine does not start	Power Supply	Check these areas: Circuit breakers, Voltage, Power leads, Power connections. Is front display LED showing a dollar amount.
	Door Switch	Check for continuity through door switch when door is closed. If no continuity, adjust or replace door switch.
	Control Breaker	Check 1.5 amp (T-950 and T-1200 use 2.5amp) breaker or fuse for continuity. If no continuity, replace breaker or fuse.
	Control Transformer (3 Phase Only)	Check voltage output from control transformer for 120VAC. If voltage is incorrect, replace transformer.
	Start Switch	When actuated there must be continuity through the contacts on the start switch.
	Pause-Run Switch	Must be in Run position and should have continuity through the switch.
	Off-On Switch	Check the continuity in "On" Position. If no continuity, adjust or replace switch.
	Timer	Check to insure the timer is in the "off" position to supply 120VAC throught the Start cam to the coin accumulator board.
	Timer, Rapid Advance Motor	Check the rapid advance motor for continuity and replace if no continuity.
Door does not lock	Timer Position	The following sequence must have taken place to advance the timer before the door locks: 1. Loading door closed 2. Proper number of coins inserted to start machine 3. Accumulator counted and credited coins to advance timer into cycle closing on-off timer contact.
	Door locking Solenoid	Check to insure that Solenoid is receiving 120VAC from main S1 door switch. If it is, replace solenoid.
	Door Switch	Check for continuity through door latch switch when door closed. If no continuity, adjust or replace door switch.

Common Troubleshooting Solutions

Symptom	Probable Cause	Suggested Remedy
Door will not open	Thermoactuator	Check to see if thermoactuator(s) and/or its mechanism is stuck or binding and not allowing the door lock gear motor to open. Check to be sure that the locking thermoactuator is not receiving 120VAC during the last 1 1/2 minutes of the cycle. Also check to see that the unlocking thermoactuator is receiving 120VAC during the last minute of the cycle. If the thermoactuators do not receive voltage at the correct times, change the timer. If the timing and voltage are correct, replace the thermoactuator.
	Door Rod	Check to see that door rod from solenoid to lock ass y is long enough to allow lock ass y to disengage. If not, adjust rod.
	Door Locking Solenoid	Check that door lock solenoid is not stuck closed. If stuck, replace solenoid.
	Timer	Make sure machine is in off position allowing Timer to authorize door unlock.
Machine starts but timer will not advance	Main Timer Drive Motor	If 120VAC is supplied to timer motor, but it doesn't operate, replace timer motor.
	Water Valves	Check to ensure that water valves are operating. If not, check for 120VAC to water valve from timer. If 120VAC, clean screens. If still no operation, change water valve. If no voltage, check pressure switch then change timer.
	Drain Valve	Check to ensure that drain valve is closing. If not, check for 120VAC to drain valve from timer. If 120VAC, change or clean drain valve. If no voltage, change timer.
	Fill Hose Screens & Water Valve Screens	Check all screens for obstructions and clean.
	Water	Check to ensure that water is turned on and operating.
	Pressure Switch Hose	Check hose for holes. Be sure the inlet end of the large part of the hose is lower than the rest of the hose and is free of debris.
	Pressure Switch	Check to ensure that pressure switch has continuity between #21 and #22 and #11 and #12. If no continuity, check pressure switch hose for obstruction. If hose is clear, change pressure switch.
No hot water in detergent dispenser	Water Valve Coil	Check coil continuity at terminals and replace if no continuity. 120 V power only on for 20 second in wash bath.
	Water Inlet Screens	Check water inlet screens for blockage and clean screens if necessary.
	Water	Check to insure that water is turned on and operating.
	Timer	Advance to wash, check for voltage on red/org in from timer. If not voltage, replace timer.
	Pause-Run Switch	Check in "Run" position for continuity. If no continuity, replace switch.

Hot water does not enter tub in wash	Water Valve Coil	Check coil continuity at terminals and replace if no continuity. Check for 120 V power from main relay PCB
	Water Inlet Screens	Check water inlet screens for blockage and clean if necessary screens
	Water	Check to insure that water is turned on and operating.
	Timer	Advance machine into wash cycle and check for 120VAC at red/blue wire coming from timer.
	Water Temp Selector Switch	Check switch for continuity between red/blue wire and red/yellow wire when Hot is selected. If no continuity, change switch.
	Pressure Switch	Check pressure switch continuity between terminals . If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.
	Pause-Run Switch	Check in "Run" position for continuity. If no continuity, replace switch.
	High Water Level Relay	Check for continuity across NC contacts of high water level relay. If no continuity, replace relay.
No cold water to tub in wash	Water Valve Coil	Check coil continuity at terminals and replace if no continuity.
	Water Inlet Screens	Check water inlet screens for blockage and clean if necessary.
	Water	Check to insure that water is turned on and operating.
	Timer	Choose cold cycle, advance to wash, check for voltage on white/black from timer. If no voltage, replace.
	Water Temp Selector Switch	Choose cold cycle, advance to wash and check wht/org wire from selector switch for 120VAC. If no voltage, change switch.
	Pressure Switch	Check pressure switch continuity between terminal contacts. If no continuity, check pressure switch hose for obstruction. If hose okay, change pressure switch.
	Pause-Run Switch	Check in "Run" position for continuity. If no continuity, replace switch.
	High Water Level Relay	Check for continuity across NC contacts of high water level relay. If no continuity, replace relay.
	Hot Rinse Relay	Check for continuity across NC contacts of hot rinse relay. If no continuity, replace relay.
Water comes in but level does not rise	Drain Valve (open)	Check these areas • Drain valve blockage • Drain valve motor and gear train. If power but drain valve does not close, replace valve. • Power to the drain valve. If no power to drain valve, check (brn/yel) circuit for power.
Water level too high	Pressure Switch	Check for blockage in pressure switch hose. Check for pressure switch opening circuit across terminals . Replace switch if contacts do not open.
	High Water Level Relay	Check for continuity across NC contacts of high water level relay. If not contunity, replace relay.

Symptom	Probable Cause	Suggested Remedy
Water drains slowly	Drain System	Check hoses and drain valve for blockage. Clean of inadequate size. if necessary. Check building drains for blockage
Water does not flush softener compartment.	Water Valve Coil	Check coil continuity at terminals and replace if no continuity.
	Water Inlet Screens	Check water inlet screens for blockage and clean if necessary.
	Water	Check to insure that water is turned on and operating.
	Pressure Switch	Check pressure switch continuity between terminals #1 & #4. If no continuity, check · pressure switch hose for obstruction. If hose okay, change pressure switch.
	Timer	Advance machine to final rinse and check for voltage at wht/blue wire coming from timer. If no voltage, replace timer.
	Pause-Run Switch	Check in "Run" position for continuity. If no continuity, replace switch.
Machine tumbles in one direction	Reversing Timer	Check to see that reversing timer is running. Check for alternating 120VAC at orange/green and at brown/white from reversing timer to signal reversing operation to wash relays. If not running or no voltage, replace reversing timer.
Excessive vibration	Mounting System	Check these areas: • Strength of mounting structure, concrete or base. • Mounting bolts may be loose and need tightening.
	Drive Belt	Worn drive belt can cause vibration and noise.
	Pulleys	Damaged pulleys.
	Loading	Note: Small loads contribute to out of balance loading and increase vibration.
Machine does not spin	Spin Relay	Check spin relay coil for continuity, replace if no coil continuity. Check relay contacts, replace if no continuity.
	Pressure Switch	Check pressure switch for continuity across terminals #21 & #22 indicating pressure switch has reset to the empty position. If no continuity, change pressure switch.
Machine starts and advances through cycle	Reversing Timer	Check to see that reversing timer is running. Check for alternating 120VDC at brown/white but and at orange/green from reversing timer to signal reversing operation to wash relays. If not running or no voltage, replace reversing timer.
Water leakage around loading door	Door Adjustment	Door may need adjustment due to abuse or wear. Check tightness around perimeter using a dollar bill. Adjust left to right tightness by shims at door lock or hinge side. It is important to center gasket to tub opening before tightening door to hinge bolts. Chalk may be used on tub front to show point of contact with tub. If gasket is deformed, worn, or damaged, replace. Refer to parts section for door gasket expander kit.

Notes

N-Series Accessories

WCN55AEH 208-240 volts 60Hz Single or Three Phase

Key	Description	Part Number
*	Hose, Water Supply 3/8" I.D. x 48"	9990-027-011
*	Strainer, Inlet Hose (furnished) 2	8641-242-000
*	Drain Hose 10 ft length x 2-1/4" I.D. (optional)	9565-003-001
*	Kit, Door Gasket Expander (large)	9732-139-002
*	Kit, Door Gasket Expander (small)	9732-139-001
*	Special Tool for adjusting spacing between outer tub front and cylinder front	8545-056-001
*	Puller for Pushing Cylinder out of Bearings	Snap On #CJ-84-C

Section 6:

Parts Data

N-Series On-Premise

Large Chassis

Models
WCN55AEH

Wiring Harness Group by Part

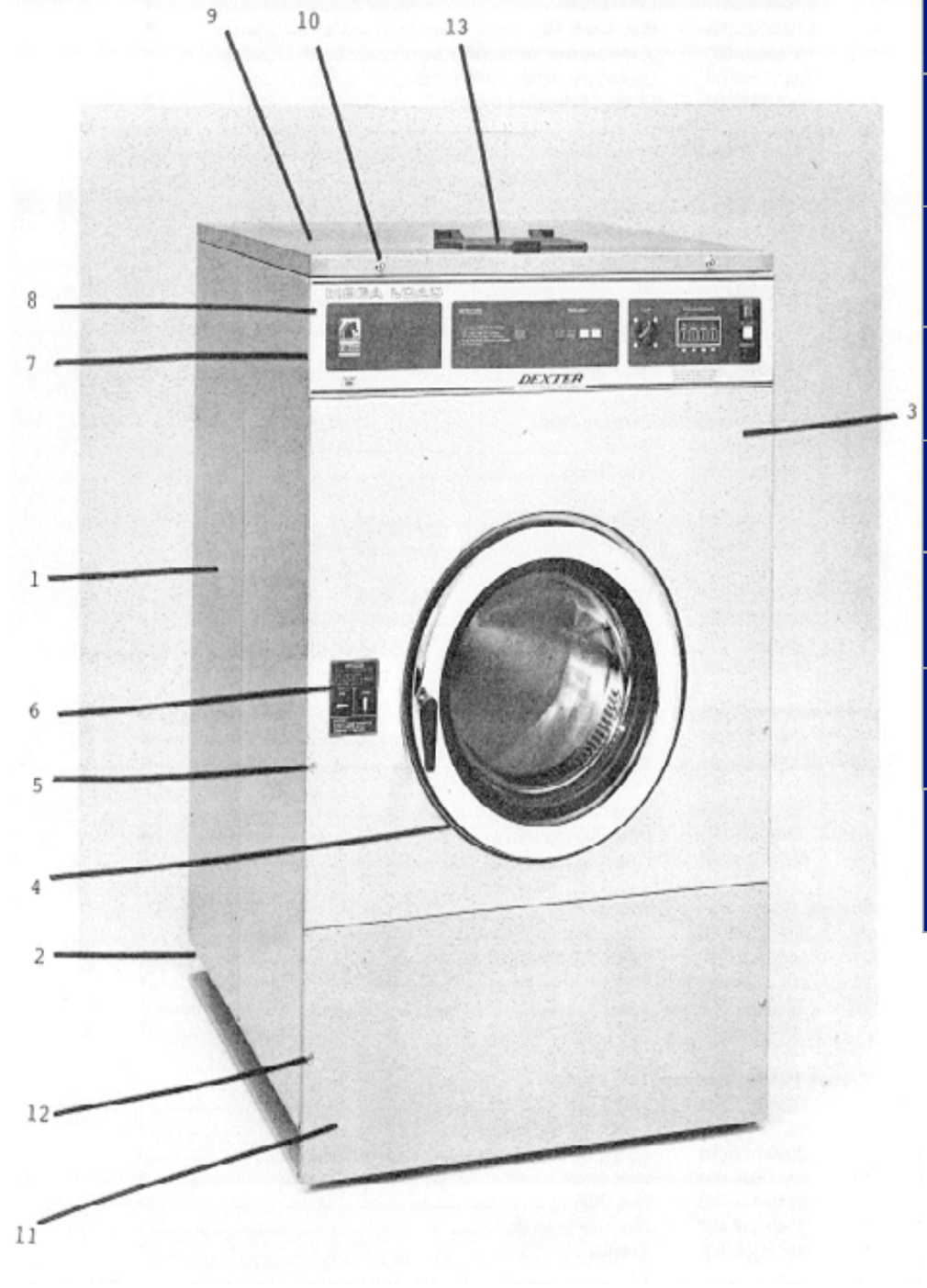
Key	Part Number	Description	Qty
*	9627-688-001	Wiring Harness, Power Term Blk	1
*	9627-690-001	VF Power Drive	1
*	9627-692-001	Wiring Harness, Main	1
*	9627-694-001	Wiring Harness, Control	1
*	9627-693-001	Wiring Harness, VF Control Shield	1
*	9627-691-001	Wiring Harness, Injection Control	1
*	9627-683-001	Wiring Harness, Drain Valve	1
*	8654-125-001	Clamp, Cable- 1/4 Dia	1

* Not Illustrated

Cabinet and Front Panel Group by Part

Key	Part Number	Description	
1	9454-672-001	Panel, Side (Left or Right)Stainless	4
*	9545-018-013	Screw, Side to Side	8
*	8640-414-006	Nut, Keps	8
2	9966-012-001	Strap Assy, Side Panel	4
2	8640-414-006	Nut	8
3	9454-671-002	Panel Assy, Front	1
4	9059-063-002	Band, Edge Protector	1
*	9545-008-024	Screw, Hex- To Control Panel.	2
*	8640-399-005	Nut, Spring- To Control Panel	2
5	9545-008-014	Screw, Flat Head- Front to Sides	2
5	8641-585-001	Washer, Finish	2
*	8640-399-008	Nut, Spring- To Control Panel	2
*	9545-008-023	Screw, Fillister Head Guide	2
6	8502-624-002	Label, Door Opening	1
7	9989-454-001	Panel, Control (Mounts Nameplate)	1
*	9545-008-024	Screw, Control Panel Mtg to front	2
*	8640-399-005	Nut, Spring	2
*	9545-008-026	Screw, Hex Wshr-Control Panel to Sides	4
8	9412-092-001	Nameplate, Control Panel	1
*	9355-001-001	Locator, Panel	1
*	9545-008-025	Screw, #1O	1
9	9454-673-001	Panel, Top	1
10	8650-012-003	Lock, Top(w/Key)	2
*	9306-025-001	Key, Top-6324	1
*	9095-038-001	Cam, Lock Top	2
*	8640-426-001	Nut, 9/32	2
*	8641-581-008	Washer, Flat	2
11	9108-099-001	Door, Lower Service	1
*	9244-081-003	Handle (bumper guard)	1
*	9545-045-010	Screw	1
*	9545-008-023	Screw, Fillister Head Guide	2
12	9545-008-014	Screw, Flat Head	2
12	8641-585-001	Washer, Finish	2
*	8640-399-008	Nut, Spring	2
13	9108-095-003	Door, Dispenser	1
*	9451-191-001	Pin, Plain	2
*	9467-025-001	Post, Door Mounting	2
*	9545-045-002	Screw, Dispenser Post Mtg	4
*	9545-008-012	Screw, Dispenser Mounting	4
*	8640-399-007	Nut, Spring	4

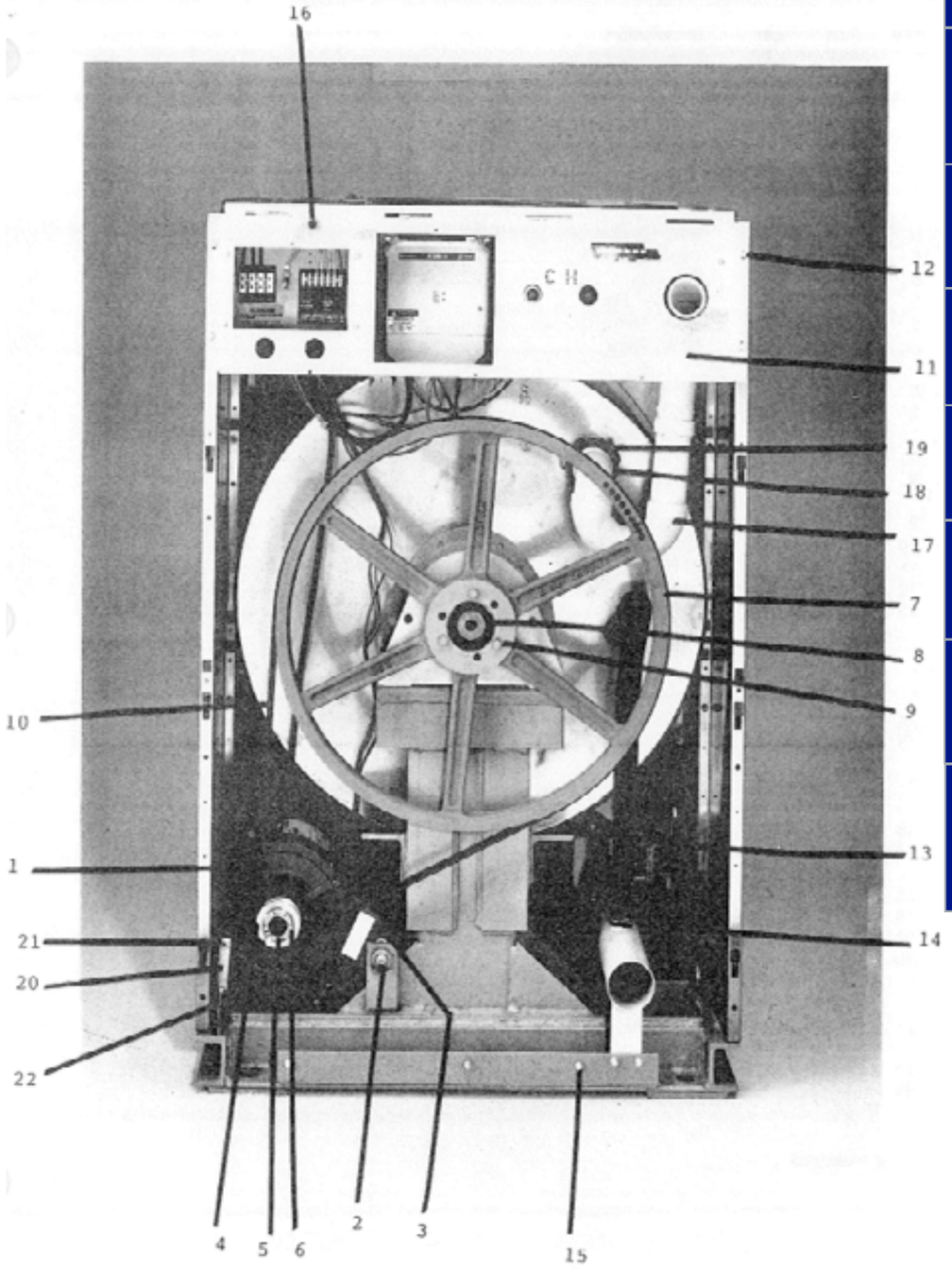
* Not Illustrated



Rear View Access by Part

Key	Part Number	Description	Qty
1	9376-298-001	Drive Motor	1
2	9497-222-004	Rod, Motor Mtg	1
*	9545-029-005	Screw (end of motor rod)	1
*	8641-582-014	Lockwasher (end of motor rod}	1
3	9076-052-002	Collar, Shaft (w/set screws)	2
4	9453-175-002	Pulley, Motor	1
5	9053-077-001	Bushing, SplitTaper	1
6	9545-018-021	Screw	3
7	9453-176-001	Pulley, Driven	1
8	9053-076-001	Bushing, Taper	1
9	9545-029-011	Screw	3
9	8641-582-003	Lockwasher	3
10	9040-079-002	Drive Belt (double wide)	1
11	9081-109-001	Channel, Rear	1
12	9545-008-026	Screw	4
*	8640-399-004	Nut, Spring	4
13	9242-449-003	Hose, Overflow	1
14	8654-029-000	Clamp, Hose	2
*	9989-455-001	Panel Assy., Back	1
15	9545-030-002	Screw, To Base	4
*	9545-008-026	Screw	14
*	8640-399-004	Nut, Spring	10
*	9242-175-004	Hose, Pressure Switch	1
*	8654-117-015	Clamp, Pressure Sw. Hose	1
16	5198-211-004	Circuit Breaker, 1.5 amp	1
17	9883-005-001	Injector Assy	1
18	9242-461-001	Hose, Injector Assy	2
19	8654-117-001	Clamp	4
Original Motor Tensioner			
20	9029-027-004	Strap, Motor Tension	1
21	8640-413-002	Nut, Strap to Motor	1
21	8641-581-006	Washer	1
22	9545-018-020	Screw 1/4x3	1
*	8640-414-003	Nut, Elastic Stop	1
New Motor Tensioner (not pictured)			
*	9545-055-001	Bolt, Eye	1
*	9534-151-000	Spring, Belt Tension	1
*	9099-012-001	Chain, Spring Tension	1
*	9341-046-001	Link, Chain	1
*	8640-414-003	Nut, Stop	1
*	8640-413-002	Nut, Link to Motor	1
*	8641-581-006	Washer	1

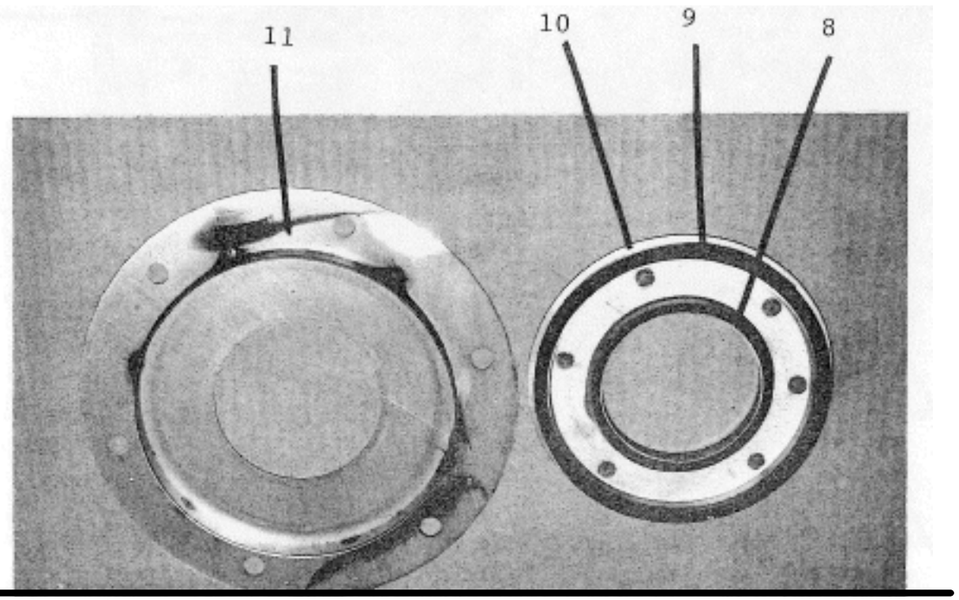
*Not illustrated

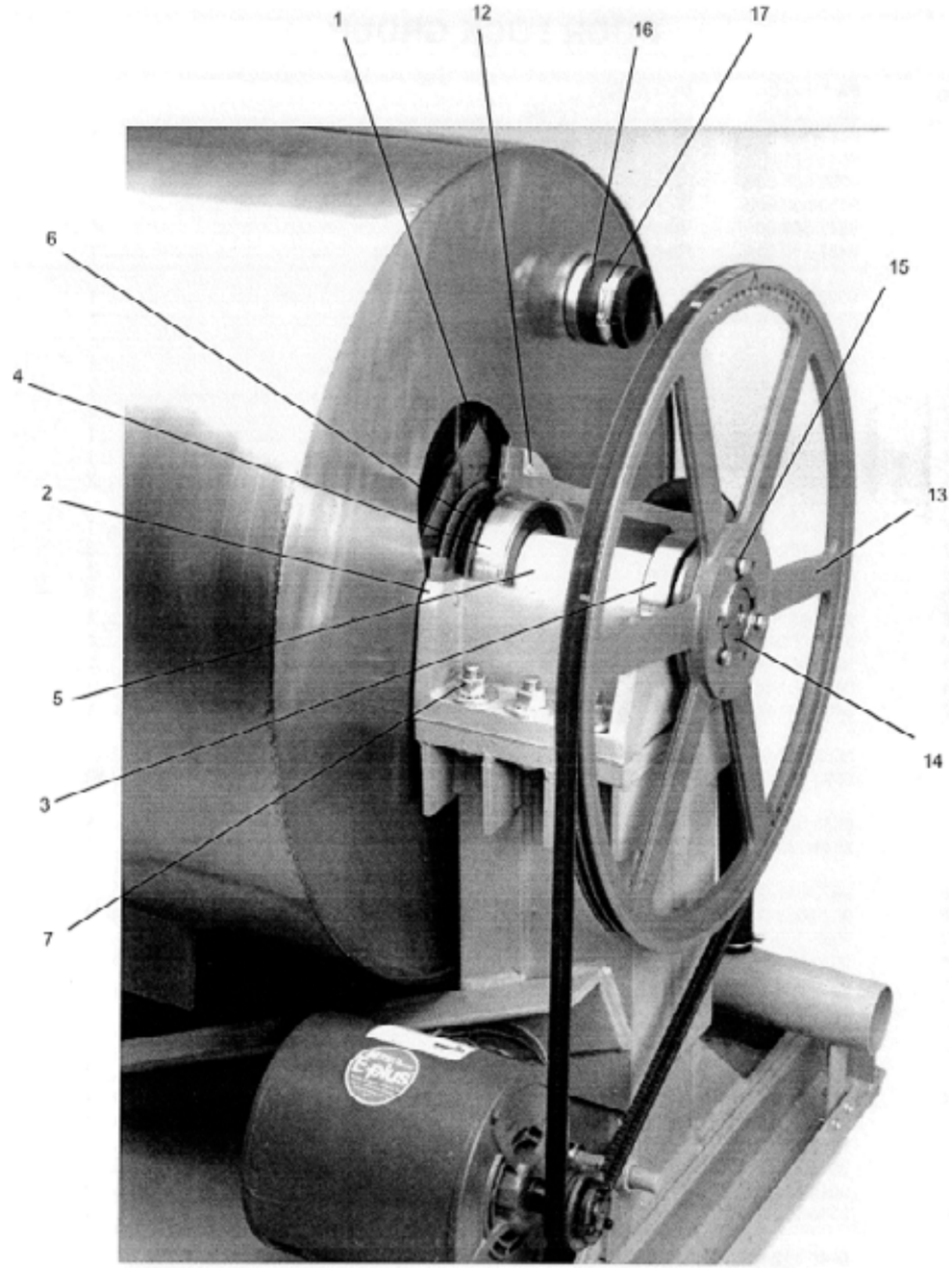


Cylinder, Seals & Bearings by Part

Key	Part Number	Description	Qty
1	9848-116-001	Cylinder, Assy	1
*	9456-041-006	Plug, Cylinder (inside)	1
*	9803-187-001	Housing, Bearing- Assembly (includes items #2-#6)	1
2	9241-181-004	Housing, Bearing	1
3	9036-159-006	Bearing, Rear	1
4	9036-159-005	Bearing, Front	1
5	9538-170-001	Spacer, Bearing	1
6	9487-238-004	Ring-Retainer, Internal	1
7	9545-057-002	Screw, Bearing Housing to Frame, 3/4	6
7	8641-581-033	Washer, Flat- To Frarne	6
7	8641-582-020	Washer, External Tooth	6
7	8640-418-003	Nut	6
8	9532-140-008	Seal, Secondary	1
9	9532-140-007	Seal, Primary	1
10	9950-052-001	Ring, Seal Mtg	1
11	9950-054-004	Ring, Seal Tub Back	1
12	9545-059-004	Screw, 7/16 Tub Back to Bearing Housing	6
12	8641-581-034	Washer, Flat	6
13	9453-176-005	Pulley, Driven	1
14	9053-078-002	Bushing, Taper	1
15	9545-029-011	Screw	3
15	8641-582-003	lockwasher	3
16	9242-461-001	Hose, Injector Assy	1
17	8654-117-001	Clamp	2

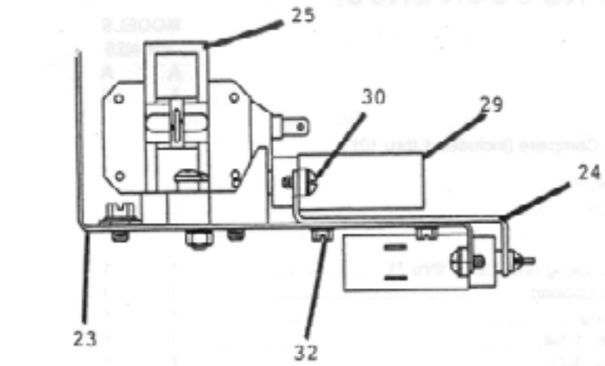
* Not Illustrated

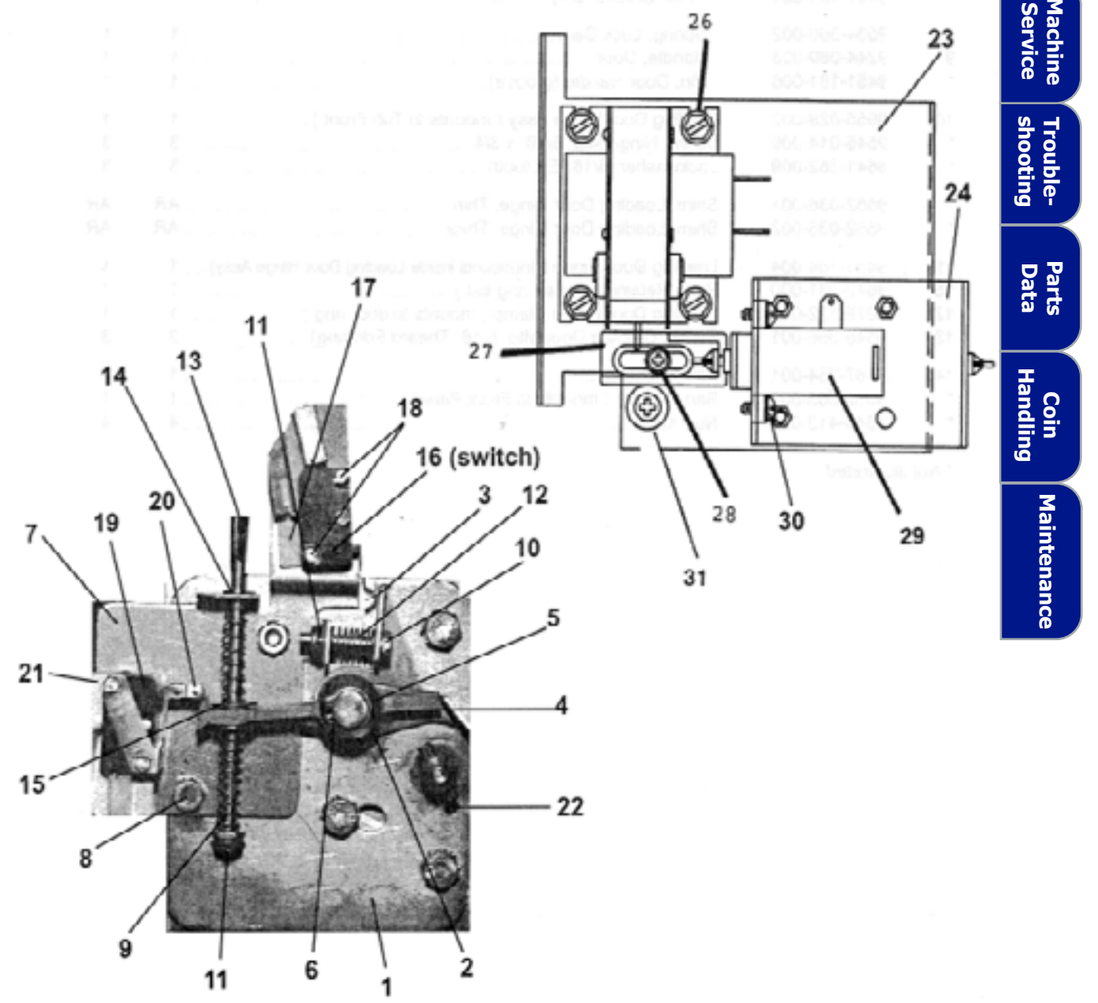




Door Latching & Solenoid Door Lock Assemblies by Part

Key	Part Number	Description	Qty
*	9885-023-001	LockAssy, Complete (includes #1 thru #22)	1
1	9982-284-001	Plate Assy, Door Lock	1
2	8641-581-030	Washer, Flat	1
3	9008-005-001	Actuator, Latching Switch	1
4	9450-002-002	Pawl, Locking	1
5	8641-569-003	Washer, Spring	1
6	9487-200-004	Ring, Ret Jning	1
7	9029-035-001	Bracket; S0Wiitch	1
8	8640-413-002	Nut, Hex 10-32 UNF	2
9	9534-364-001	Spring, Actuating	2
10	9545-012-020	Screw, Hx. 10-32 x 1	1
11	8640-413-004	Nut, E.lastic Stop 10-32	2
12	9534-364-002	Spring, Return	1
13	9451-193-001	Pin, Guide	1
14	9487-200-005	Ring, Retaining	1
15	8641-581-031	Washer	2
16	9539-461-008	Switch, Latching Sensing	1
17	9550-169-003	Shield, Switch	3
18	9545-020-001	Screw 4-40 x 5/8	2
18	8640-401-001	Nut, Twin	1
19	9539-461-007	Switch, Locking Sensing	2
20	9008-006-002	Actuator, Switch	2
21	9545-020-003	Screw 4-40 x 1 1/8	2
21	8640-401-001	Nut, Twin 4-40	1
22	9451-181-004	Pin, Dowel	1
*	9552-037-001	Shim, Door Lock, Thin	AR
*	9552-037-002	Shim, Door Lock, Thick	AR
*	9545-018-014	Screw, Lock mtg 1/4 -20 x 3/4	3
*	8641-582-007	Lockwasher 1/4 Ext tooth	3
*	9922-011-001	Solenoid Ass'y, Door Locking (includes 23 thru 32)	1
23	9029-073-001	Bracket, {Door Locking Solenoid)	1
24	9985-169-001	BracketAss'y, Soienoid Slide	1
25	9536-074-001	Solenoid 120V 60 hz	1
26	9545-008-001	Screw, Solenoid Mtg	4
27	9540-033-002	Stop, Door Lock Solenoid	1
28	9545-061-001	Screw, Shoulder	1
28	8640-411-003	Nut, Keps #6	1
29	9586-001-001	Thermoactuator 120 V	2
30	9545-031-011	Screw. #6 x5/16	4
31	9538-157-004	Spacer, Plastic	1
31	9538-166-004	Spacer, Metal	1
31	9545-010-001	Screw, Cross Recessed	1
31	8640-412-005	Nut, Keps #8	1
32	8640-411-002	Nut, Keps#6	1
*	8640-412-005	Nut, Sol.Brkt. to Control. Panel	3
*	9497-225-006	Rod, Pull	1

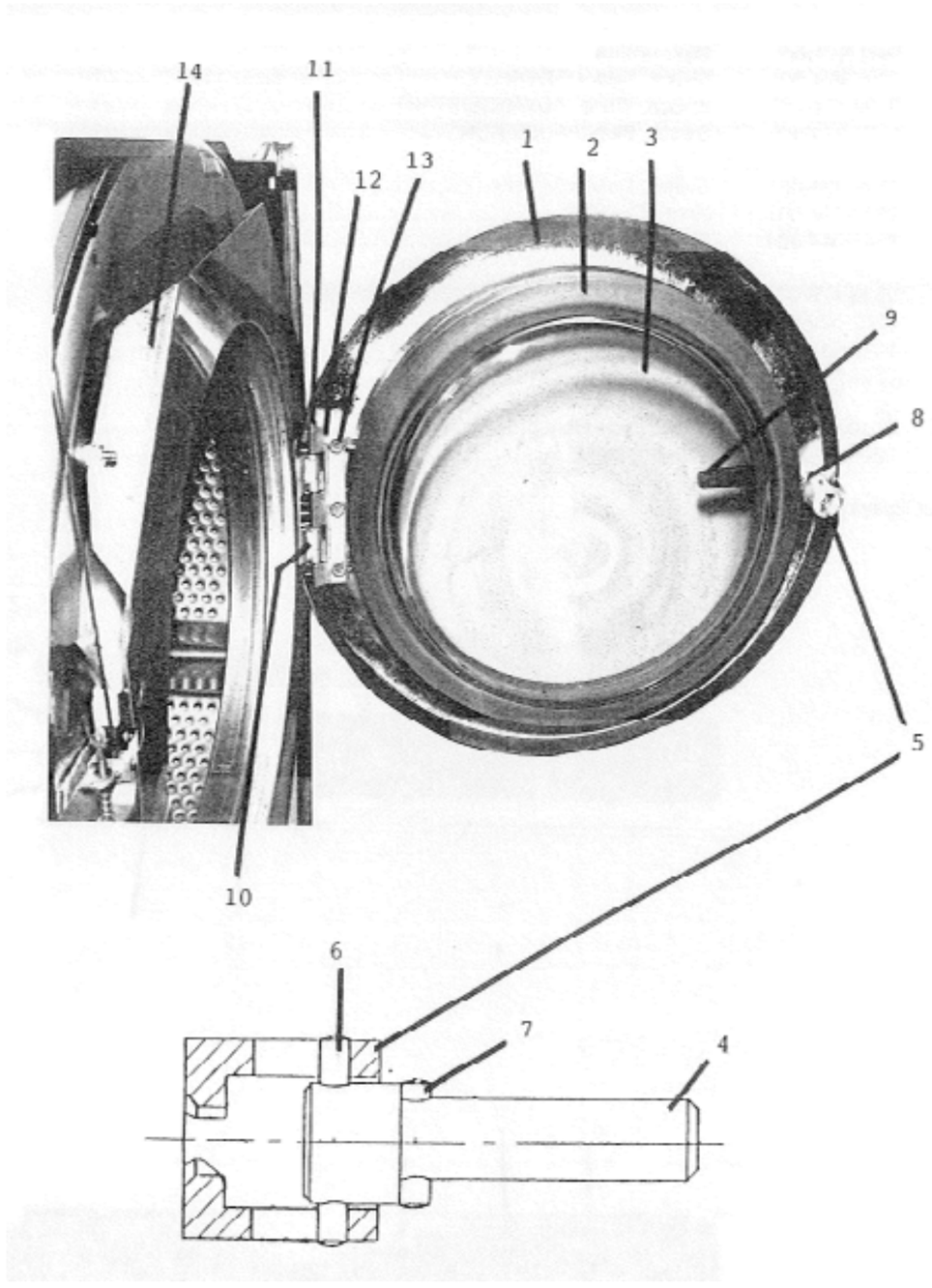




Loading Door Part # by Model

Key	Part Number	Description	Qty
*	9960-259-002	Loading Door, Complete (includes 1 thru 9)	1
1	9487-230-001	Loading Door, Ring	1
2	9206-419-001	Gasket, Loading Door	1
3	9635-016-001	Window, Loading Door	1
*	9913-134-003	Shaft Assy, Locking includes (4 thru 7)	1
4	9537-195-002	Shaft, Door Locking	1
5	9095-040-001	Cam, Locking	1
6	9451-181-005	Pin, Groove (1 1/4)	1
7	9451-181-004	Pin, Groove (3/4)	1
8	9534-360-002	Spring, Lock Cam	1
9	9244-080-003	Handle, Door	1
*	9451-181-006	Pin, Door Handle (groove)	1
10	9955-029-001	Hinge Assy, Loading Door	1
*	9545-014-009	Screw, Hinge Mtg	3
*	8641-582-009	Lockwasher	3
*	9552-036-001	Shim, Loading Door Hinge, Thin	AR
*	9552-036-002	Shim, Loading Door Hinge, Thick	AR
11	9451-184-003	Pin, Loading Door Hinge	1
*	8649-031-000	Ring, Retaining	1
12	9079-122-002	Clamp, Loading Door Hinge Pin	1
13	9545-056-001	Screw, Loading Door Mtg	3
14	9487-254-001	Ring, Masking	1
*	9059-063-002	Band, Edge	1
*	8640-413-002	Nut, Keps	4

* Not Illustrated

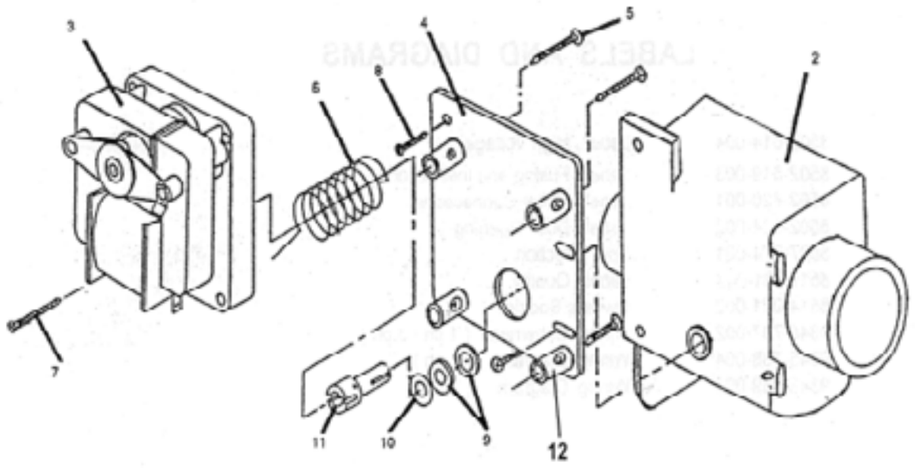


Notes

Drain Valve Group Part # by Model

Key	Part Number	Description	Qty
*	9379-187-001	Valve, Drain (includes 2 thru 11)	1
*	9379-202-001	Replacement Drain Valve	1
2	9064-070-001	Body, Valve (w/ball)	1
3	9914-137-001	Motor & Gear Train	1
4	9452-538-001	Plate, Motor Mtg	1
5	8639-994-001	Screw	3
6	9534-339-001	Spring, Drive	1
7	9545-054c001	Screw	2
8	9545-054-002	Screw	1
9	9532-134-001	Seal, V Packer	2
10	8641-584-001	Washer	1
11	9451-196-001	Pin, Main Drive	1
12	9538-149-001	Plate (spacers needed for replacement motor mtg. plate)	4

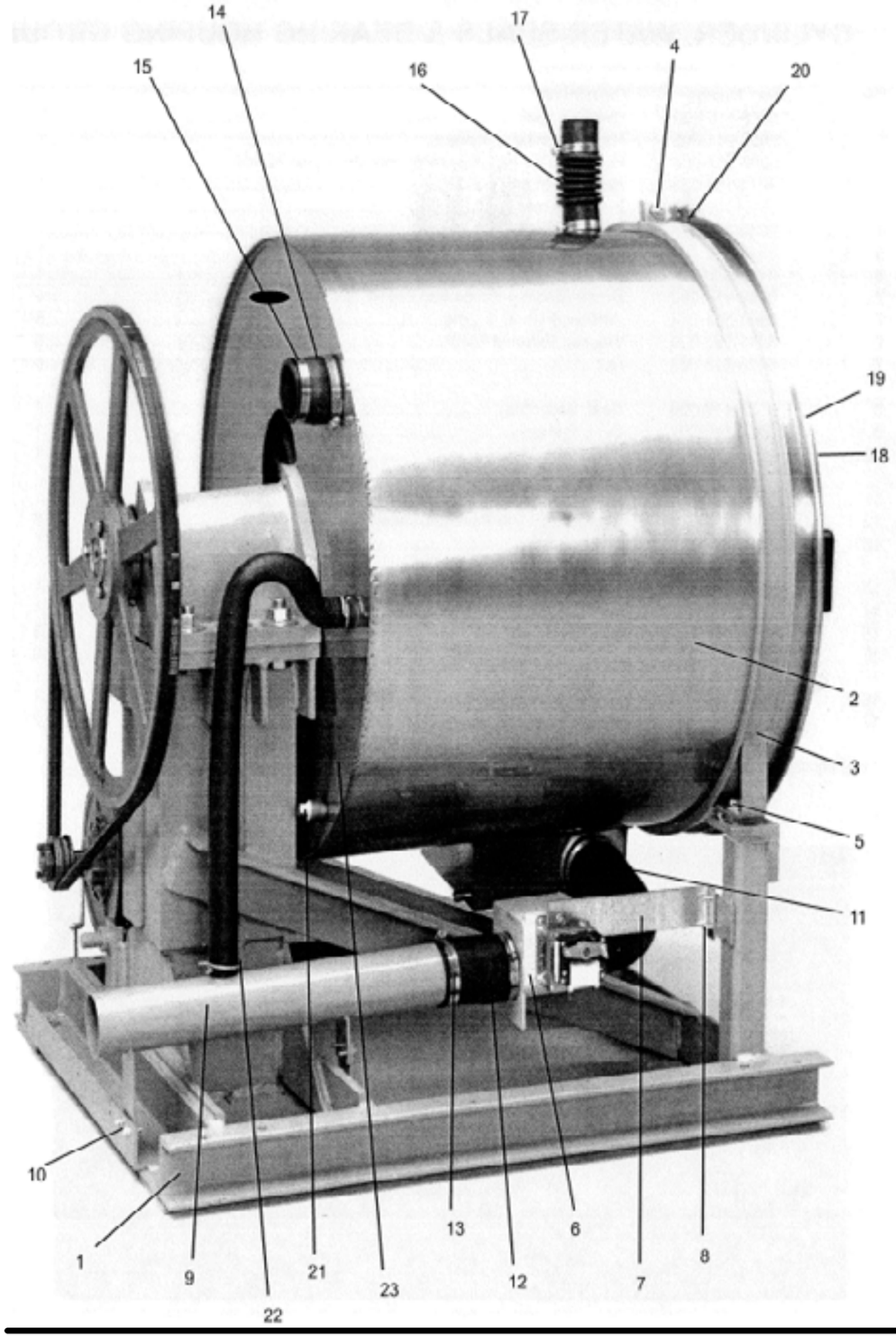
* Not illustrated



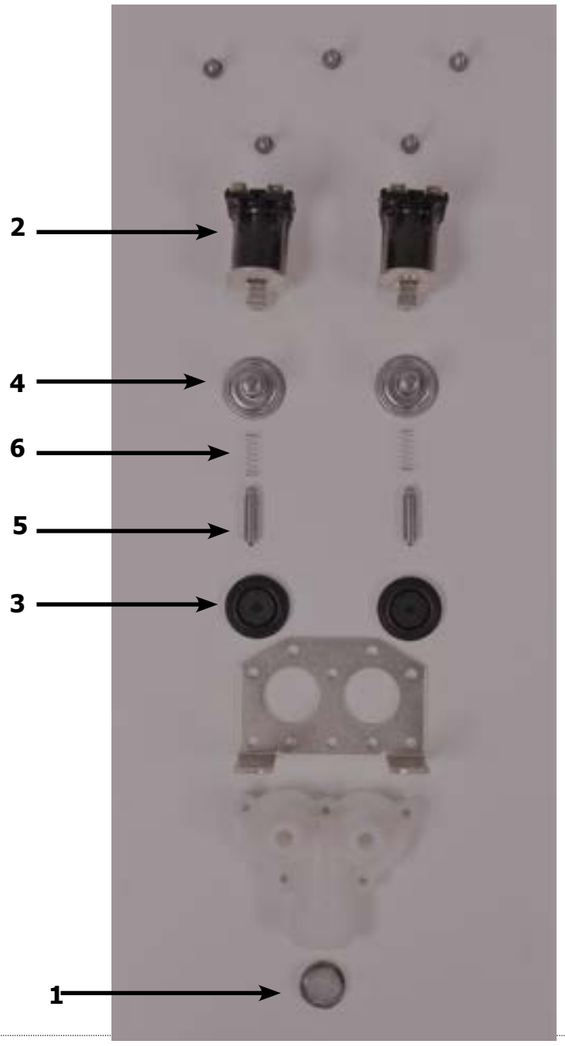
Valve Complete

Chassis and Drain Part # by Model

Key	Part Number	Description	Qty
1	9945-101-002	Base Assy, Frame	1
2	9930-138-001	TubAssy	1
3	9950-053-002	Ring Assy, Tub Mtg-Front	1
4	9545-017-013	Screw, 1/2” grade 5	1
4	8640-417-002	Nut	1
4	8641-582-016	Lockwasher	1
5	9545-017-003	Bolt,.1/2 Grd 5.Tub to Base	2
5	8641-582-016	Lockwasher	4
5	8640-417-002	Nut, Hex	8
5	8641-581-026	Washer, Flat	
5	9552-013-001	Shim, Thin	AR
5	9552-013-002	Shim, Thick	AR
6	9379-187-001	Valve, Drain	1
7	9029-070-001	Bracket, Drain Valve	1
*	9545-048-001	Screw, Valve to Bracket	1
*	8641-581-018	Washer	1
8	9545-030-002	Screw, Bracket to Base	2
9	9915-120-002	Tube Assy, Drain	1
10	9545 030-002	Screw, Tube Mtg	4
11	9242-459-001	Hose, Tub to Drain Valve	1
12	9242-457-001	Hose, Drain Valve to Tube	1
13	8654-117-014	Clamp, Hose	4
14	9242-461-001	Hose, Injector Assy	1
*	9610-001-001	Vacuum Breaker	1
*	9029-069-001	Bracket, Vacuum Breaker	1
*	9545-008-005	Screw	4
15	8654-117-001	Clamp	2
*	9732-108-002	Dispenser	1
*	9206-416-001	Gasket, Dispenser	1
16	9242-450-001	Hose, Dispenser to Tub	1
17	8654-117-008	Clamp, Dispenser Hose	2
18	9974-007-001	Front Ass’y, Tub	1
19	9950 055-001	Ring Ass’y, Clamp (tub front to outer tub)	1
20	9545-029-009	Screw, 3/8	1
20	8640-415-001	Nut, Hex 3/8	1
*	9206-421-002	Gasket, Tub Front	1
21	8615-104-039	Pipe Plug	2
22	9242-449-003	Hose, Overflow	1
23	8654-029-000	Clamp, Hose	2



Water Inlet Valve Breakdown Part # by Model

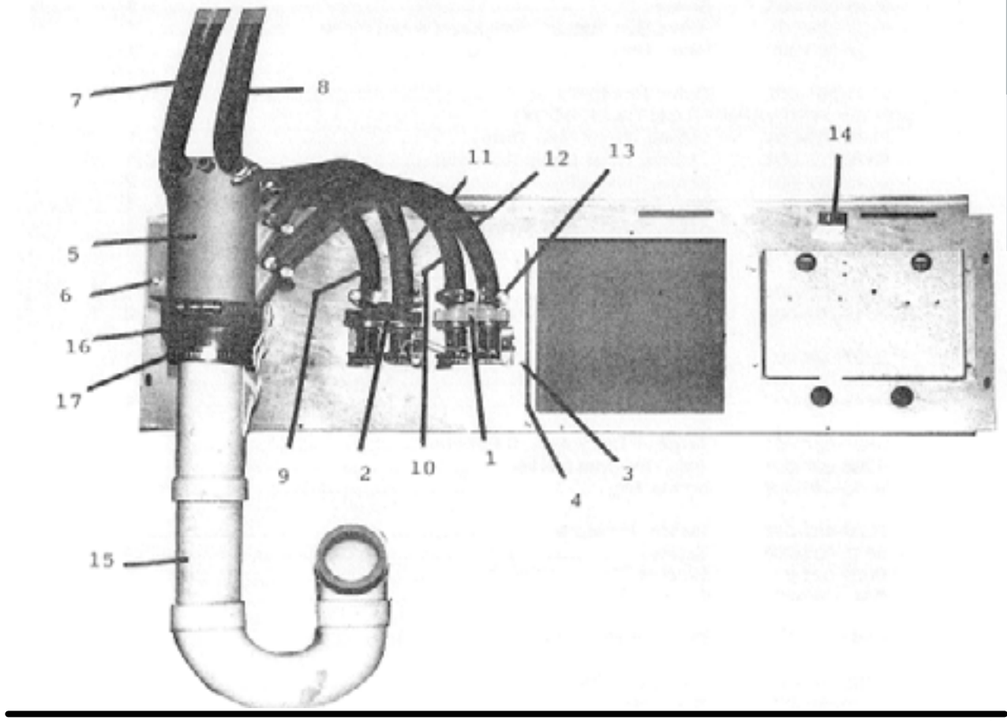


Key	Description	Part Number	QTY
*	Valve, Water Inlet (includes 1 thru 6)	9379-183-012	2
1	Screen, Inlet end of valve	9555-056-001	2
2	Coil Assy., 120 V Invensys	9089-017-001	2
3	Diaphragm Invensys (Viton)	9118-049-002	2
3	Diaphragm Invensys (EPDM)	9118-049-001	2
3	Diaphragm Invensys (EPDM NSF)	9118-049-003	2
4	Guide, Solenoid Invensys	9211-021-002	2
5	Armature Invensys	9015-008-001	2
6	Spring, Armature Invensys	9534-298-001	2

Water Inlet & Rear Channel

Key	Part Number	Description	Qty
1	9379-183-012	Valve, Water Inlet (see Water Inlet Valve Breakdown for individual parts)	2
2	9545-008-026	Screw, Valve Mtg	4
*	8640-399-009	Nut, Spring	4
3	9208-049-001	Guard, Water Valve	1
4	9545-008-026	Screw	2
5	9610-001-001	Vacuum Breaker	1
*	9029-069-001	Bracket, Vacuum Breaker	1
6	9545-008-026	Screw	4
			1
7	9242-453-018	Hose, Vac.. Brkr. to Wash Dis	1
8	9242-453-019	Hose, Vac. Brkr. to Rinse Dis	1
9	9242-453-015	Hose, Hot Valve to Vac. Brkr	1
10	9242-453-007	Hose, Cold Valve to Vac. Brkr	1
11	9242-453-015	Hose, Hot Valve to Tub	1
12	9242-453-007	Hose, Cold to Tub	1
13	8654-117-015	Clamp, Hose-Worm	12
14	5198-211-004	Circuit Breaker	1
15	9883-005-001	Injector Assy, Soap	1
16	9241-461-001	Hose, Injector Assy	2
17	8654-117-001	Clamp	4

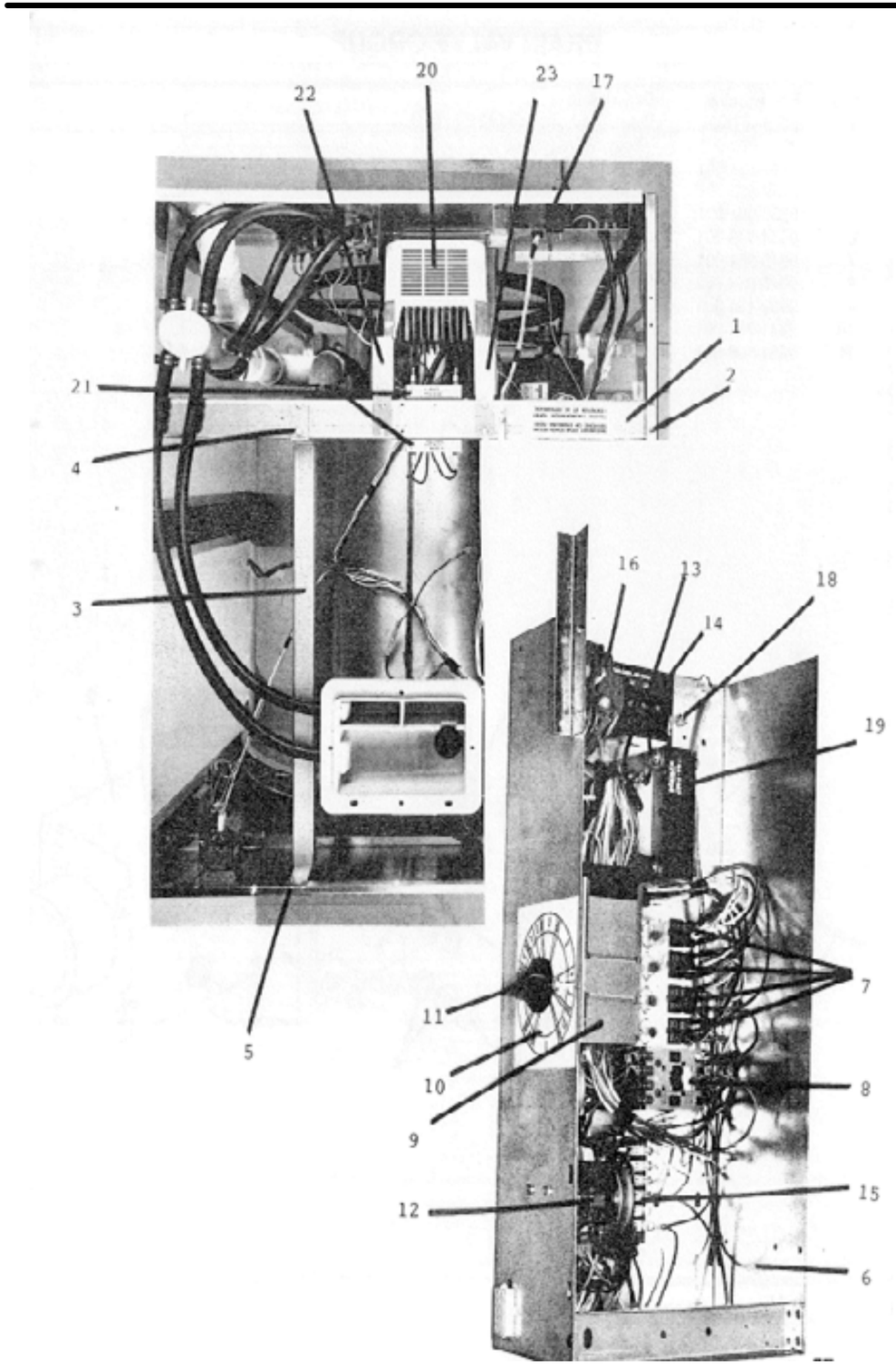
* Not Illustrated



Electrical Components - Top Compartment

Key	Part Number	Description	Qty
1	9081-110-001	Channel, Trough Mtg	1
2	9545-008-023	Screws	2
3	9081-108-001	Channel, Dispenser Support	1
4	9545-008-026	Screw	2
5	9545-008-001	Screw, To Cntrl Panel	2
6	9839-013 001	Trough Assy, Controls Mtg	1
*	9545-008-005	Screw	4
7	5192-285-001	Relay, Run & Extract	2
8	5192-286-009	Relay, Spin	1
9	9571-361-002	Timer, Program (VERIFY PART NUMBER ON TIMER BODY)	1
*	9376-295-004	Motor, Timer Main Drive	1
*	9376-286-004	Motor, Timer Rapid Advance	1
*	9545-012-001	Screw, Timer Mtg	2
10	9107-067-001	Dial, Timer	1
11	9307-176-001	Knob, Timer (w/set screws)	1
*	9538-157-006	Spacer, Knob	1
12	9571-360-001	Timer, Reversing	1
*	9545-044-004	Screw, Reversing Timer	2
13	9897-028-001	Terminal Block, 3 Position	1
14	9558-022-001	Strip, Terminal Marker	1
-- *	9545-045-007	Screw, Mtg	2
15	9897-029-001	Terminal Block Assy, 12 Position	1
*	9558-021-001	Strip, Terminal Marker	1
*	9545-045-007	Screw, Mtg	2
16	9539-482-001	Switch, Pressure	1
*	9545-031-003	Screw	1
*	9029-071-001	Bracket, Pressure Switch	1
*	9545-045-001	Screw, Mtg	2
17	5198-211-004	Circuit Breaker, 1.5 amp	1
18	8652-134-001	lug, Grounding	1
*	8639-621-007	Screw, Mtg	1
*	8641-582-006	lockwasher	1
19	8711-004-001	Transformer, Control	1
*	9545-008-026	Screw	1
*	8641-582-006	lockwasher	1
20	9375-001-002	Drive, VF-120G	1
21	9483-004-001	Resistor, Braking	2
*	9545-012-003	Screw	4
*	8640-413-002	Nut	4
22	9003-238-001	Angle, Drive Mtg LH	1
23	9003-238-002	Angle, Drive Mtg RH	1
*	9545-413-002	Nut	6

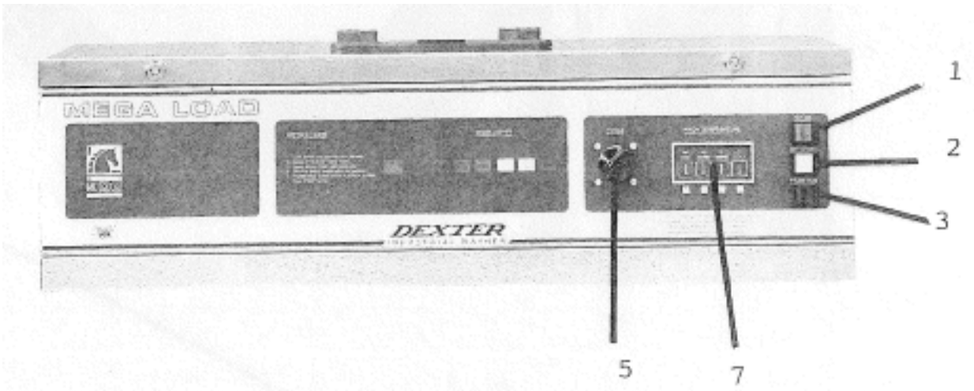
* Not Illustrated

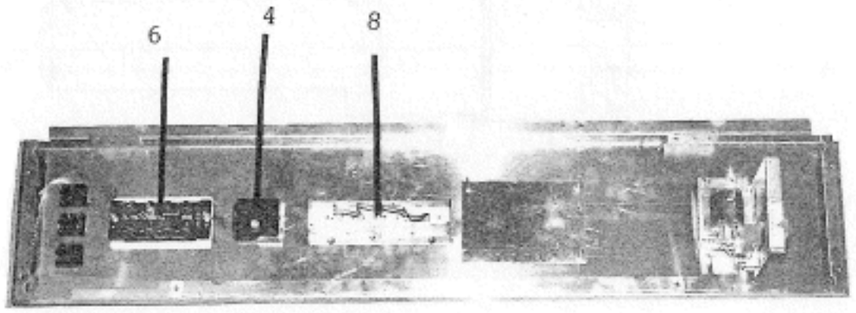


Control Panel Part # by Model

Key	Part Number		
1	9539-474-004	Switch, Red--OFF/ON	1
2	9539-474-005	Switch, White--ADVANCE/START	1
3	9539-474-006	Switch, Blue--PAUSE/RUN	1
4	9539-471-001	Switch, Rotary Selector	1
5	9307-176-001	Knob, Control	1
*	9545-044-004	Screw 6-32x1/4	2
6	9539-479-007	Switch, Push Button (Temp Selector)	1
7	8502-629-007	Label, Switch	1
*	8640-412-003	Nut, Switch Mtg	2
*	9538-165-001	Spacer	2
8	3310-041-001	Light, Cycle Control	1
*	9206-100-001	Gasket, Light	2

* Not Illustrated





Terminal Blocks & Labels

Key	Part Number	Description	Qty
*	9897-034-001	Terminal Block, 6 Position	1
*	9558-027-001	Terminal Marker Strip	1
*	9545-045-007	Screw	2
*	9897-028-001	Terminal Block, 3 Position	1
*	9558-022-001	Terminal Marker Strip	1
*	9545-045-007	Screw	2
*	9897-033-001	Terminal Block, 4 Position	1
*	9558-025-001	Terminal Marker Strip	1
*	9545-031-010	Screw	2
*	9897-032-002	Terminal Block, 7 Position	1
*	9558-028-001	Terminal Marker Strip	1
*	9545-053-002	Screw	2
*	8652-134-001	Terminal Lug, Ground	1
*	8639-621-007	Screw	1
*	9544-041-002	Lockwasher	1
*	8652-130-037	Terminal, Grounding	1
*	8639-621-007	Screw	1
*	9544-041-002	Lockwasher	1
*	8502-624-002	Label, Warning Door Opening	1
*	8502-614-004	Label, High Voltage	1
*	8502-647-001	Label, Connections- Injector	1
*	8502-649-001	Label, Connections- Electrical	1
*	8502-619-004	Label, Fusing & Installation	1

Section 8:

Maintenance

Preventative Maintenance

Daily

Step 1: Check that the loading door remains securely locked and cannot be opened during an entire cycle.

Step 2: Clean the top, front, and sides of the cabinet to remove residue.

Step 3: Clean the soap dispenser and lid and check that all dispenser mounting screws are in-place and tight.

Step 4: Check the loading door for leaks. Clean the door seal of all foreign matter.

Step 5: Leave the loading door open to aerate the washer when not in use.

Quarterly

Step 1: Make sure the washer is inoperative by switching off the main power supply.

Step 2: Check the V-belts for wear and proper tension.

Step 3: Clean lint and other foreign matter from around motor.

Step 4: Check all water connections for leaks.

Step 5: Check the drain valve for leaking and that it opens properly.

Step 6: Wipe and clean the inside of the washer and check that all electrical components are free of moisture and dust.

Step 7: Remove and clean water inlet hose filters. Replace if necessary.

Step 8: Check anchor bolts. Retighten if necessary.