PART NO. 9744480

NOTE: This sheet contains important Technical Service Data

FOR SERVICE TECHNICIAN ONLY
DO NOT REMOVE OR DESTROY

⚠WARNING

Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

PRECAUTIONS TO BE OBSERVED BEFORE AND DURING SERVICING OF DISHWASHER

A. Even with the door open, there is line voltage at several points in the console and below the tub. Therefore, be sure to disconnect the power supply at the fuse box before replacing a component.

B. Always check wiring harness and connectors before any test procedures.

C. Disconnect power supply before touching the circuit board or re-seating control connectors.

D. Voltage checks are made by inserting probes beside wires on the connector with the AC power source applied and the connector blocks plugged in.

E. Resistance checks are made on components with the wiring harness disconnected.

Electrostatic Discharge (ESD) Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic board. The new board may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

- Use an anti-static wrist strap. Connect wrist strap to green ground connection point or unpainted metal in the appliance
  -OR-
  Touch your finger repeatedly to a green ground connection point or unpainted metal in the appliance.
- Before removing the part from its package, touch the anti-static bag to a green ground connection point or unpainted metal in the appliance.
- Avoid touching electronic parts or terminal contacts; handle electronic board by edges only.
- When repackaging failed electronic board in anti-static bag, observe above instructions.

SPECIFICATIONS

Electrical Supply:
(Under load) 60 Hz, 120 VAC.

Supply Water Flow Rate:
To fill 1.9 liters (2 quarts) in 27 seconds, 120 PSI maximum, 20 PSI minimum.

Supply Water Temperature:
49°-71° C (120° to 160° F)
(Before starting a cycle, run water from sink faucet until hot.)

Water Charge:
8.3 liters (2.2 gallons) / fill approx.

Lower Spray Arm Rotation: 25 to 40 rpm.
Upper Spray Arm Rotation: 18 to 30 rpm.

REPAIR KITS

- Vinyl Rack Patch Kit No. 676453
- Tine Tip Kit No. 675679

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING UNITED STATES PATENTS:

3,951,683	4,418,868	4,765,697	4,927,033
4,134,003	4,449,765	4,776,620	4,991,611
4,301,882	4,693,526	4,805,647	5,005,740
4,319,598	4,732,323	4,822,241	5,018,550
4,319,599	4,732,431	4,834,125	5,031,649
4,350,306	4,746,177	4,848,382	5,031,651
	5,033,659	5,039,828	5,069,360

DES.320,487 DES.320,488 DES.320,489 DES.314,256
OTHER PATENTS PENDING

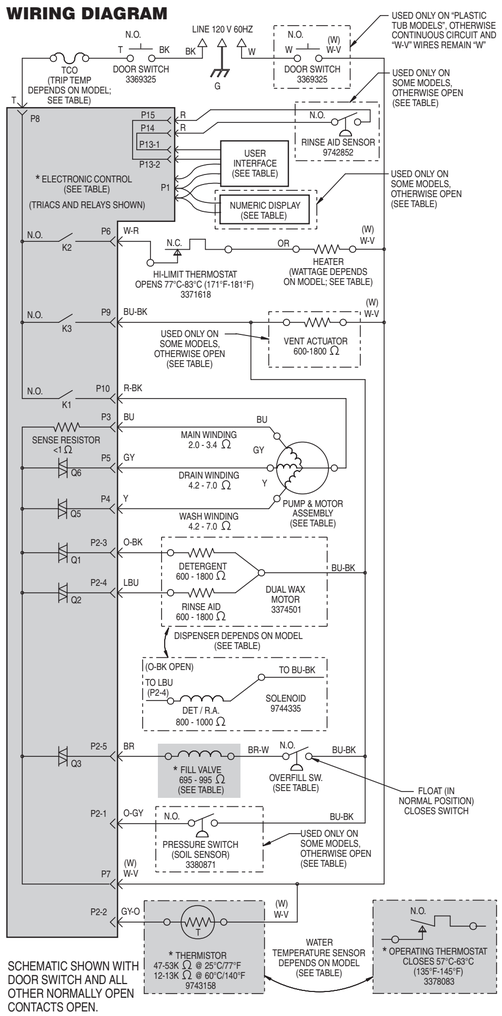
MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING CANADIAN PATENTS:

1,159,749	1,162,463	1,288,666
1,159,750	1,185,646	1,288,667
1,159,751	1,278,462	1,288,668

DES.67.168
OTHER PATENTS PENDING
WHIRLPOOL CORP - Rd. 1990

ELECTRONIC CONTROL CONNECTOR PINS		
PIN NUMBER	DESCRIPTION	WIRE COLOR
P1	Ribbon Cable To User Interface	—
P2-1	Pressure Switch (Soil Sense)	O-GY
P2-2	Thermistor/Thermostat	GY-O
P2-3	Detergent Dispenser	O-BK
P2-4	Rinse Aid Dispenser	LBU
P2-5	Fill Valve	BR
P3	Motor Main Winding	BU
P4	Motor Aux Winding - Wash	Y
P5	Motor Aux Winding - Drain	GY
P6	Switched L1 to Heater	W-R
P7	AC Neutral	W-V
P8	L1	T
P9	Switched L1 to Vent, Fill Valve, Dual Dispenser, & Pressure Switch	BU-BK
P10	Switched L1 to Motor Common	R-BK
P13	Ribbon Cable to User Interface for Optional Rinse Aid Empty Light	—
P14 P15	Optional Rinse Aid Sensor	RED

WIRING DIAGRAM



SCHEMATIC SHOWN WITH DOOR SWITCH AND ALL OTHER NORMALLY OPEN CONTACTS OPEN.

MODEL SPECIFIC ELECTRICAL COMPONENTS KEY

MODEL NUMBER	★ ELECTRONIC CONTROL	TCO	WIRING HARNESS	RINSE AID HARNESS	RINSE AID SENSOR	USER INTERFACE	NUMERIC DISPLAY	HEATER	VENT ACTUATOR	PUMP & MOTOR ASSEMBLY	DISPENSER	OVERFILL SWITCH	★ FILL VALVE	PRESSURE SWITCH	★ WATER TEMPERATURE SENSOR
1x80x	9744031 or 9744483	3376359 (98°C/208°F)	8271433	N/A	N/A	3383824	N/A	3379486 (800/500w PTC, 15-30Ω)	N/A	8051314	3374501 (Dual Wax)	3369067	8274221	N/A	3378083 (Thermostat)
1x77x						3384164				8051310			3370554		
1x81x													8274221		
1x83x			3383914			3379320									
1x86x						3384165	3383825								9743158 (Thermistor)
1x89x						3379319	N/A							3380871	
1x95x			3383915			3379318				8051311					
1x96x						3384096	3383825		3379372						
1x97x	9744483	9743451 (110°C/230°F)	9744027	9743154	9742852	9744492	N/A	9743159 (670/435w PTC, 18-35Ω)			9744335 (Solenoid)	9743413	9744284		
1x98x	9744031 or 9744483					9744224	3383825								
DP920	9744031 or 9744483	3376359 (98°C/208°F)	8271434	N/A	N/A	8051124	N/A	3379486 (800/500w PTC, 15-30Ω)	N/A	8051313	3374501 (Dual Wax)	3369067	8274220	N/A	3378083 (Thermostat)
DU920													3370554		
SUD6000						8051460				8051314					
DU925, IJU586, DU1000			8271433			8051124									
DU929						8051460				8051313					
GU940, IJU588						8051127				8051312					9743158 (Thermistor)
GU980			3383914			8051133				8051311				3380871	
GU990			3383915						3379372				8274221		
KUDG25, KUDH25	9744031 or 9744483	9743451 (110°C/230°F)	9744027	9743154	9742852	9743991	N/A	9743159 (670/435w PTC, 18-35Ω)	3379372	8051314	9744335 (Solenoid)	9743413	9744284	N/A	3378083 (Thermostat
KUDI25, KUDJ25						9744190									
KUDM25						9743993				8051311				3380871	9743158 (Thermistor)
KUDR25, KUDY25, KUDX25						9743994									
KUDS25						9743995									
KUDC25 (BK, WH, BT)						9743996									
KUDC25 (SS)						9743997									
KUDV25 (ENERGY STAR)	9744483					9744490	9744151								

★ DENOTES ENERGY EFFICIENT COMPONENTS. DO NOT SUBSTITUTE.

FOR PLASTIC TUB MODELS ONLY:

ARTICULATED VENT ASSEMBLY & ELECTRONICS COVER REMOVAL

1. Disconnect electrical power from dishwasher.
2. Refer to Figure 1. Open dishwasher door and insert the end of a screwdriver into the notch in the vent louver. Push counter-clockwise to rotate louver approximately 1/8 turn to release it. Remove louver and set aside for later reinstallation.
3. Remove eight (8) screws around perimeter of the inner door panel and remove panel. See Figure 1.
4. To remove the vent assembly, refer to Figure 2 and disconnect two (2) electrical harness wire leads from wax motor terminals. Lift out the vent assembly, retaining the seal ring for later reinstallation.
5. To access electronic controls, press in on snap tab at end of electronics cover to release, then lift cover up at tab end as you slide cover out. See Figure 2.

ARTICULATED VENT ASSEMBLY & ELECTRONICS COVER REINSTALLATION

1. Reinstall electronics cover by sliding it into position above controls and pressing down till snap tab holds it in place. (Figure 2 shows cover removal.)
2. Reinstall the vent assembly. Refer to Figure 2 and reconnect two (2) electrical harness wire leads to the wax motor terminals. Place seal ring in seal ring groove of vent assembly, and lower vent assembly into place.
3. Reinstall inner door panel. Align it in place over the vent assembly, and reinstall eight (8) screws around the inner door panel perimeter. See Figure 1.
4. Align vent louver over vent assembly, and turn louver clockwise by hand to engage vent assembly.
5. Insert the end of a screwdriver into the notch in the vent louver. Push clockwise to rotate louver approximately 1/8 turn to lock it in position. See Figure 1.
6. Reconnect electrical power to dishwasher.

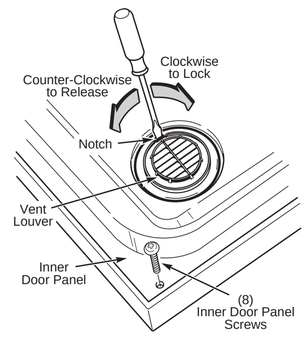


Figure 1

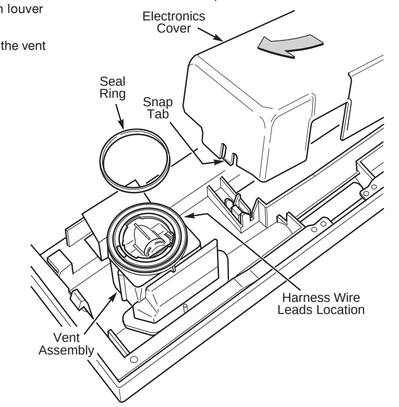


Figure 2

FOR STAINLESS STEEL TUB MODELS ONLY:

REMOVING THE ARTICULATED VENT ASSEMBLY

1. Disconnect electrical power from dishwasher.
2. Open dishwasher door. Remove four (4) screws at the top of stainless steel inner door panel to loosen console. Hold console to prevent strain on wiring.
3. Close door and pull top of console away from door. Disconnect ribbon cable and rinse aid sensor connectors from console circuit board.
4. Lift console up to disengage bottom tabs from door frame. Set console aside.
5. Disconnect electrical connectors from wax motor terminals. Open door and place your hand under the vent assembly to support it when it is released.
6. Insert the end of a screwdriver into the notch in the vent louver. Push counter-clockwise to rotate louver approximately 1/8 turn to release it. See Figure 3.
7. Retain the vent louver and seal ring for later reinstallation.

REINSTALLING THE ARTICULATED VENT ASSEMBLY

1. Place seal ring in seal ring groove of vent assembly.
2. Close dishwasher door. Align the plastic post at the top of vent assembly with the notch in door frame.
3. Move vent assembly into position so seal ring contacts stainless steel inner door panel.
4. Open door and place vent louver over vent assembly, making sure it is seated. Turn louver clockwise by hand to engage vent assembly.
5. Insert the end of a screwdriver into the notch in the vent louver. Push clockwise to rotate the louver approximately 1/8 turn to lock it in position. See Figure 3.
6. Reinstall console by first engaging bottom tabs into door frame and control mounting bracket, making sure that the latch link is properly inserted into the latch ever as the console is rotated into the proper position. Reconnect ribbon cable and rinse aid sensor connectors to console circuit board.
7. Press top of console against door and attach the console by reinstalling the four (4) screws at the top of the stainless steel inner door panel.
8. Reconnect electrical power to dishwasher.

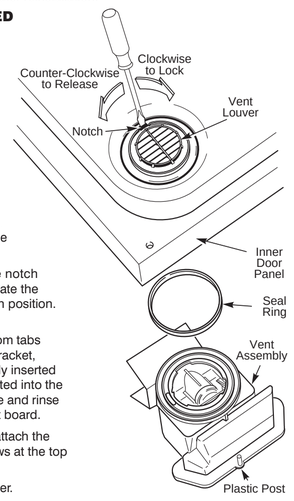


Figure 3

REMOVING THE DETERGENT DISPENSER

1. Disconnect electrical power from dishwasher.
2. With dishwasher door closed, loosen the two (2) toe panel screws, but do not remove them.
3. Remove two (2) screws from top of access panel. Pull top of access panel away from door, lift up and remove. See Figure 4.
4. Remove two (2) screws from bottom of outer door panel.
5. Refer to detail inset in Figure 4. Slide outer door panel downward until slots in door panel align with slots in door frame, then pull door panel straight off.
6. Disconnect electrical connectors from terminals of dispenser solenoid.
7. Referring to Figure 5, remove the two (2) metal dispenser retainers: First remove the two (2) outer edge screws from the control mounting bracket and detergent dispenser shield. Next remove the three (3) screws from the bottom retainer, releasing it. Reach under the detergent dispenser shield to remove the remaining screw from the center hole of the upper retainer. Set the retainers aside for later reinstallation.
8. With dishwasher door open, reach under and press the tabs at each end of dispenser to release it. Lift dispenser up from inner door panel to remove it.
9. Remove blue rinse aid cap to take note of rinse aid dial setting, then replace cap.

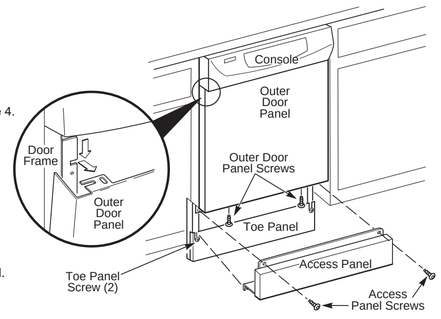


Figure 4

INSTALLING THE DETERGENT DISPENSER

1. Remove the blue rinse aid knob. Using a coin, turn the dial to setting used previously, then replace knob.
2. Snap dispenser into place from inside the dishwasher. Close the door. Referring to Figure 5, replace the metal dispenser retainers. Install one (1) screw each into the center hole of each retainer. Place two (2) screws in the remaining holes of the lower retainer and tighten. Insert the two (2) remaining screws through the upper dispenser retainer and dispenser shield, and tighten. Make sure that the detergent dispenser shield is properly installed and captured by the top dispenser retainer.
3. Connect electrical connector to detergent dispenser solenoid, in any order. Connect rinse aid dispenser indicator harness to reed switch, if applicable.
4. Refer to detail inset in Figure 4. Align slots in outer door panel with slots in door frame, push door panel in and slide upward. Install two (2) screws at bottom of outer door panel. Be sure that door insulation is installed in unit.
5. Slide access panel slots down over toe panel screws. Press top of access panel against dishwasher and tighten two (2) screws at top of panel.
6. Tighten toe panel screws.
7. Reconnect electrical power to dishwasher.

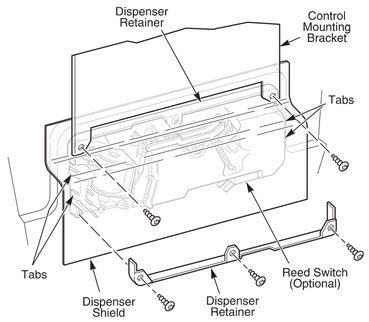
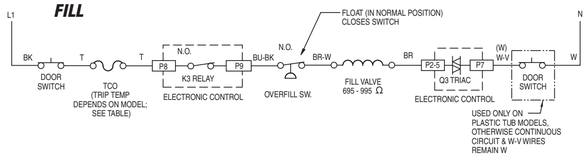


Figure 5

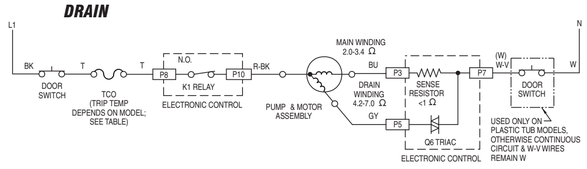
DISHWASHER CIRCUITS

The following individual circuits are for use in diagnosis. **Before starting diagnosis, check the line voltage and check for blown fuses.**

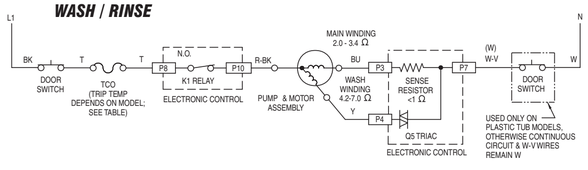
FILL



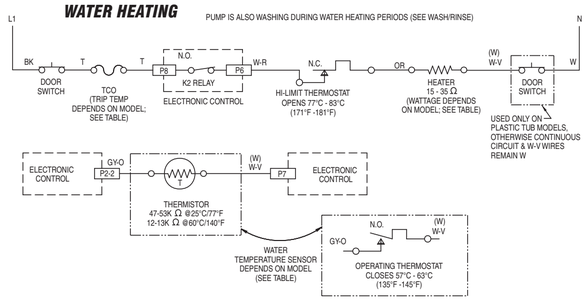
DRAIN



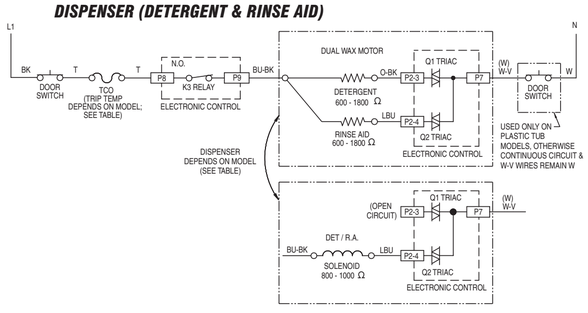
WASH / RINSE



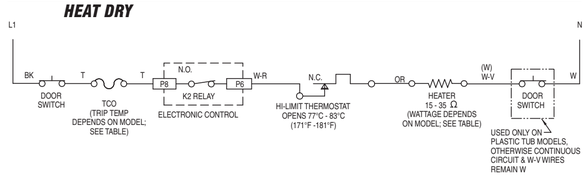
WATER HEATING



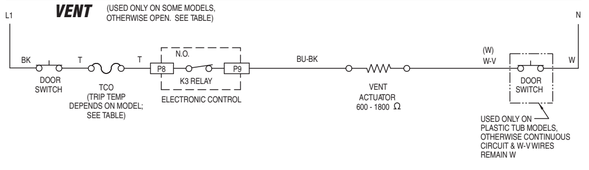
DISPENSER (DETERGENT & RINSE AID)



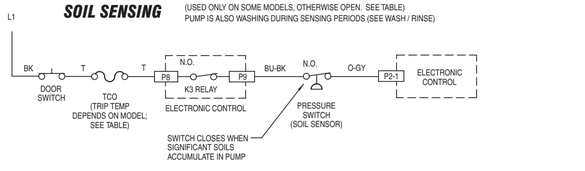
HEAT DRY



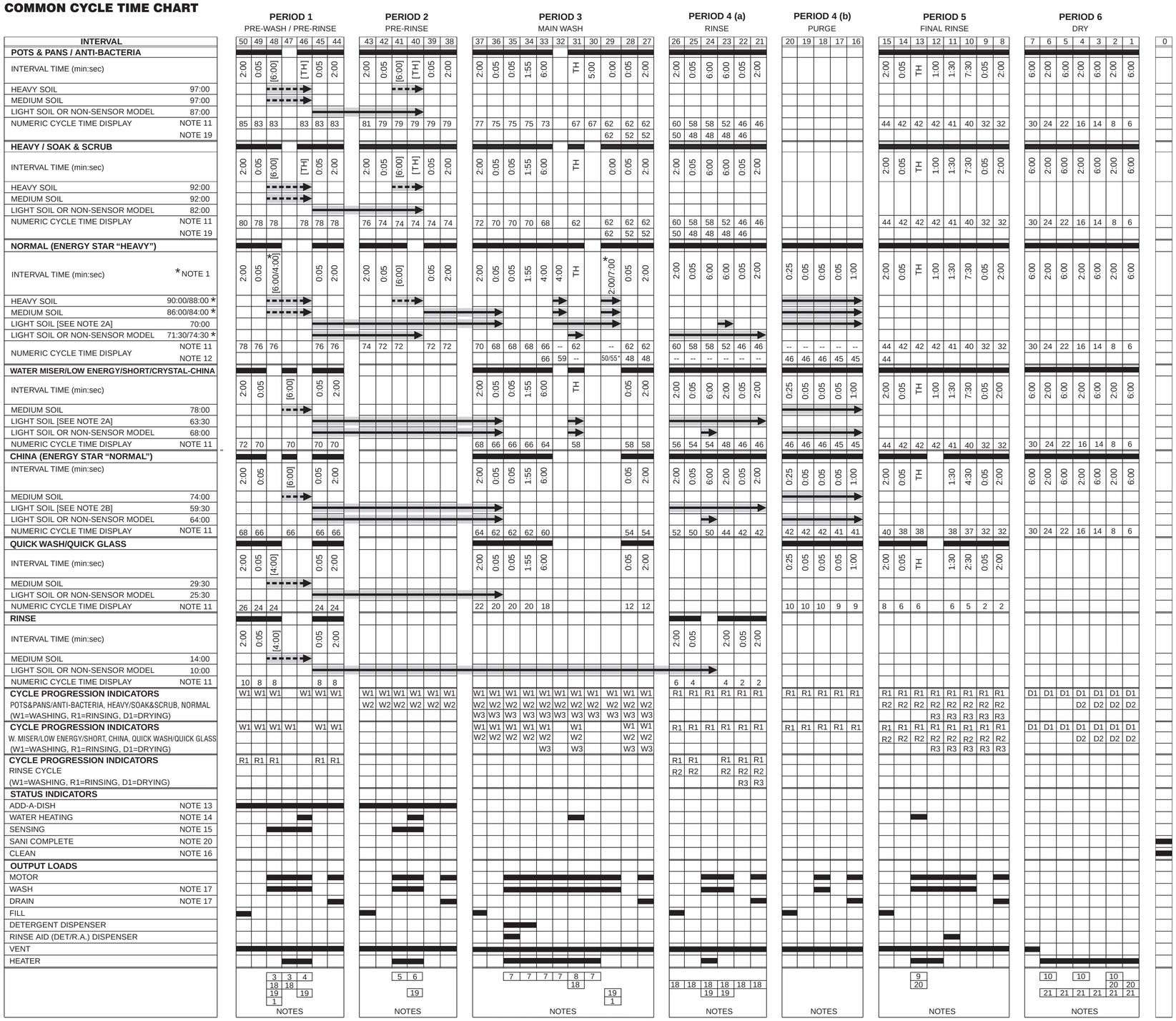
VENT



SOIL SENSING



COMMON CYCLE TIME CHART



COMMON CYCLE TIME CHART (above)

The common cycle time chart describes the operation of all possible cycles, options, display indicators, & sensor features for the electronic dishwasher models that use this tech sheet. The cycles, options, display indicators, & sensor features shown in the time chart are not all available on every model. Cycles and options execute the same way on all the models with the exception of a few model specific timing changes described in notes 1, 2, and 20.

The solid bar on the time chart for each cycle shows the intervals used by that cycle (EXAMPLE: Interval 47 is not used in Pots & Pans). The "Interval time" on the time chart specifies the duration of each interval for each cycle.

Cycles all assume at first that a worst case (Heavy or Medium) soil is on the dishes. Each cycle then determines the true soil level based on soil sensor inputs received during the Pre-Wash and/or Pre-Rinse sense intervals:

- **HEAVY SOIL** - Soil sensor tripped in intervals 48, 47, or 46, and again in intervals 41 or 40
- **MEDIUM SOIL** - Soil sensor tripped in intervals 48, 47, or 46, but not in intervals 41 or 40
- **LIGHT SOIL** - Soil sensor did not trip in intervals 48, 47, or 46 (cycle skips sense intervals 41 & 40)

Each cycle skips certain intervals based on the true soil level. The arrows on the time chart show which intervals are skipped. (EXAMPLE: Pots & Pans cycle skips intervals 45 through 40 when light soil is detected). See notes 3, 4, 5, and 6 for more details. The time chart also shows a maximum cycle time estimate for each soil level (EXAMPLE: 97:00 minutes for Pots & Pans cycles with heavy soil). These estimates do not include time spent in thermal hold intervals.

During thermal hold ("TH") intervals, cycle timing pauses and the dishwasher washes and heats until the water reaches a setpoint temperature or a default time limit elapses. See notes 4, 6, 8, and 9 for more details.

Models without a soil sensor will never detect a sensor trip in intervals 48, 47, or 46 and will always run the light soil version of each cycle (assuming no options are selected).

The Water Heat/High Temp/High Energy and Power Scour/Super Scrub options force certain cycles to run no less than the medium soil version of the cycle (regardless of soil sensor presence or input). See notes 18 and 19.

For models that have a thermostat, instead of a thermistor, the thermal hold and thermal cap temperatures specified in this document will all default to the trip point of the thermostat.

NOTE 1 – Timing Exceptions for Normal Cycle on Stainless Steel Tub Models

For the Normal cycle on stainless steel tub models, the default time for Pre-Wash sense interval 48 is changed from 6:00 minutes to 4:00 minutes and the duration of Main Wash interval 29 is changed from 2:00 minutes to 7:00 minutes. The cycle time displayed by numeric display models in interval 29 is adjusted accordingly.

NOTE 2 – Timing Exceptions for the Light Soil Version of the Normal, Water Miser, & China Cycles on Certain Models

To use less water and/or simulate past production cycles, the intervals skipped for the Light Soil version of the cycle are different for some models.

A. Special Light Soil version of Normal and Water Miser cycles for models: 1x83x, 1x86x, 1x89x, 1x95x, & 1x96x

B. Special Light Soil version of China (Energy Star "Normal") cycle for models: 1x83x, 1x86x, 1x89x, 1x95x, 1x96x, KUDV25 (Energy Star)

NOTE 3 – Pre-Wash/Pre-Rinse Sensing Intervals 48 and 47

The dishwasher suspends cycle timing in each of these intervals and washes until a soil sensor trip is detected or a default time limit elapses. The default time for each interval is shown in brackets on the time chart as the "Interval Time" for the interval. The control heats interval 47 but not interval 48. The heater is turned off in interval 47 if the water temperature reaches 60°C/140°F. When a soil sensor trip is detected in either interval, the cycle jumps immediately to interval 45 and proceeds with the Heavy or Medium Soil versions of the cycle (until sense interval 41). If the default time limit elapses without a soil sensor trip, the cycle proceeds with the Light Soil version of the cycle.

NOTE 4 – Pre-Wash/Pre-Rinse Thermal Hold/Sensing Interval 46

This thermal hold interval only occurs in Pots & Pans/Antibacteria and Heavy/Soak & Scrub cycles. The thermal hold setpoint temperature is 57°C/135°F and the default time limit 25:00 minutes. This interval is also a sensing interval. If a soil sensor trip is detected, the cycle jumps immediately to interval 45 and proceeds with the Heavy or Medium Soil version of the cycle (until sense interval 41). If the thermal hold reaches its setpoint temperature or the thermal hold default time limit expires without a soil sensor trip, the cycle proceeds with the Light Soil version of the cycle.

NOTE 5 – Pre-Rinse Sensing Interval 41

The dishwasher suspends cycle timing and washes and heats until a soil sensor trip is detected or a default interval time limit elapses. The default time for this interval is shown in brackets on the time chart as the "Interval Time" for the interval. The heater is turned off in this interval if the water temperature reaches 60°C/140°F. When a soil sensor trip is detected in this interval, the cycle jumps immediately to interval 39 and proceeds with the Heavy Soil version of the cycle. If the default time limit elapses without a soil sensor trip, the cycle proceeds with the Medium Soil version of the cycle.

NOTE 6 – Pre-Rinse Thermal Hold/Sensing Interval 40

This thermal hold interval only occurs in Pots & Pans/Antibacteria and Heavy/Soak & Scrub cycles, and only occurs if the thermal hold at interval 46 failed to reach temperature due to a soil sensor trip in interval 46 or 48. The setpoint temperature for this thermal hold is 57°C/135°F and the default time limit 20:00 minutes. This interval is also a sensing interval. Upon detecting a soil sensor trip, the cycle jumps immediately to interval 39 and proceeds as a Heavy Soil cycle. If this thermal hold reaches its setpoint temperature or the thermal hold default time limit expires without a soil sensor trip, the cycle proceeds as a Medium Soil cycle.

NOTE 7 – Thermally Capped Heated Wash Intervals

For intervals 32-35 of the Normal, Water Miser/Low Energy/Short/Crystal-China, China, and Quick Wash/Quick Glass cycles, the heater is turned off if the water reaches 60°C/140°F. For interval 30 of the Pots & Pans/Antibac cycle, the heater is turned off if the water temperature reaches 66°C/150°F.

NOTE 8 – Main Wash Thermal Hold Interval 31

The setpoint temperature for this thermal hold is 60°C/140°F. The default time limit is 20:00 for Pots & Pans/Antibac and Heavy/Soak & Scrub cycles, and 30:00 for all other cycles.

NOTE 9 – Final Rinse Thermal Hold Interval 13

The setpoint temperatures and default time limits for this thermal hold vary by cycle as follows:

Antibacteria	68°C/155°F	40:00	(Automatic Sani Rinse)
Pots & Pans	60°C/140°F	25:00	
Heavy/Soak & Scrub	60°C/140°F	25:00	
Normal	60°C/140°F	30:00	
W.Miser/L.Energy/Short/Cr-China	60°C/140°F	40:00	
China	54°C/130°F	15:00	
Quick Wash/Quick Glass	60°C/140°F	40:00	

NOTE 10 – China Cycle Pulsed Heat Dry

For the China cycle, the heater is turned off in intervals 2, 4, and 6 of the Dry period.

NOTE 11 – Numeric Cycle Time Display

Models with numeric time displays show the current minutes remaining in a cycle or the current hours remaining in a delay. The time chart shows the cycle time that is displayed at the beginning of each interval of a cycle. The cycle time displayed is based on the highest soil level version of the cycle. As intervals are skipped for lighter soil levels, the time skips down to the cycle time specified for that point in the cycle. The time display is frozen during Sensing and Thermal Hold intervals.

NOTE 12 – Numeric Cycle Time Display Adjustment for Normal Cycles with Purge

Normal cycles that execute period 4b (Purge), instead of period 4a (Rinse), for low soil conditions (or non-sensor models) also execute intervals 29 and 32. These two intervals are not used in the heavier soil versions of the cycle; consequently, the cycle time displayed by numeric display models in intervals 27-32 is adjusted accordingly for the insertion of these intervals.

NOTE 13 – Add-A-Dish Indicator

The Add-A-Dish indicator is only turned on for Pots & Pans, Heavy, and Normal cycles.

NOTE 14 – Water Heating Indicator

The Water Heating indicator is turned on during all thermal hold intervals to signal that cycle timing has been interrupted to heat the water to a specified setpoint temperature.

NOTE 15 – Sensing Indicator

The Sensing indicator is turned on during all sensing intervals to signal that cycle timing has been interrupted while soil levels are being determined.

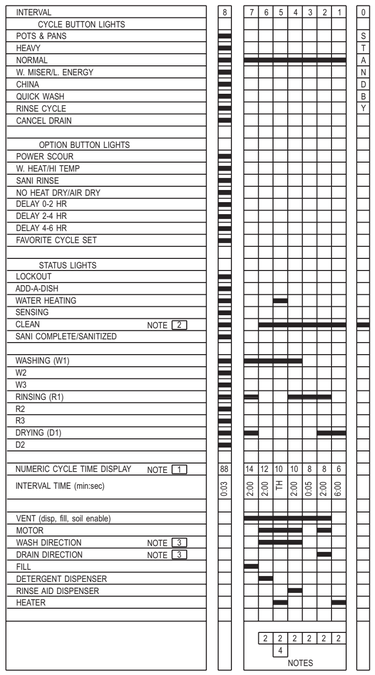
NOTE 16 – Clean Indicator

The Clean indicator is turned on at the end of all cycles except the Rinse cycle and is turned off by opening the door or pressing any key.

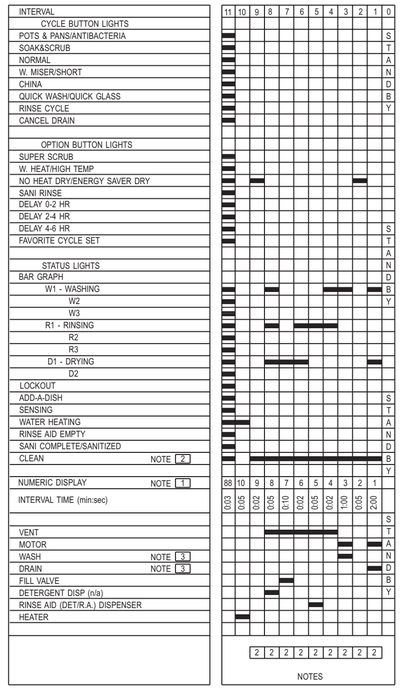
NOTE 17 – Wash and Drain Motor Phase Windings

The Wash and Drain phase winding outputs are only "on" while the motor is starting in the respective mode. Once the control has determined that the motor started properly, the phase winding output is turned "off".

DIAGNOSTICS CYCLE - PLASTIC TUB MODELS



DIAGNOSTICS CYCLE - STAINLESS STEEL MODELS



RAPID ADVANCE SERVICE FEATURE AND DIAGNOSTICS CYCLES (above)

Pressing the following option keys in the sequence shown will either start the Diagnostics Cycle or turn on the Rapid Advance feature for customer selectable cycles:

HI TEMP WASH, AIR DRY, HI TEMP WASH, AIR DRY
or
POWER SCOUR, AIR DRY, POWER SCOUR, AIR DRY

(HI TEMP WASH = HIGH TEMP WASH = WATER HEAT)
(POWER SCOUR = SUPER SCRUB)
(AIR DRY = ENERGY SAVER DRY = NO HEAT DRY)

If the sequence is entered after starting a cycle, the Rapid Advance feature is turned on, which allows the operator to manually advance the currently running cycle, interval by interval, by pressing the Pots & Pans/Antibacteria or Heavy/Soak & Scrub key.

If the above key sequence is entered with the dishwasher in Standby, the Diagnostics Cycle is started. The Diagnostics Cycle for stainless steel tub models is different than the Diagnostics Cycle for plastic tub models (see time charts) but the entry sequence is the same. The operator can advance either cycle, interval by interval, by pressing the Pots & Pans/Antibacteria or Heavy/Soak & Scrub key.

(DIAGNOSTICS) NOTE 1 – Numeric Cycle Time Display

For plastic tub models with time displays, the display shows the current cycle time remaining in the diagnostics cycle (in minutes). For stainless steel tub models with numeric time displays, the display simply shows the "Interval Number" of the currently executing interval.

(DIAGNOSTICS) NOTE 2 – Thermostat/Thermistor Detection

To help identify whether a thermostat or thermistor is installed in the dishwasher, the Clean light is only illuminated in intervals 1-6 of the plastic tub Diagnostics Cycle and 1-9 of the stainless tub Diagnostics Cycle if a thermostat is installed. This determination is based on the resistance detected on the temperature sensor line. Because the resistance limits used by the control are close to the thermistor resistance at room ambient, this indicator is only reliable if warm water is in the dishwasher.

(DIAGNOSTICS) NOTE 3 – Wash and Drain Motor Phase Windings

The wash and drain phase winding outputs are only "on" while the motor is starting in the respective mode. Once the control has determined that the motor started properly, the phase winding output is turned "off".

(DIAGNOSTICS) NOTE 4 – Thermal Hold

This thermal hold only occurs in the Plastic Tub Diagnostics Cycle, the setpoint temperature for this thermal hold is 60°C/140°F and the default time limit is 1 hour.

OPTION NOTES (See chart at left)

NOTE 18 – Water Heat/Hi Temp/High Temp Option

This option guarantees the selected cycle will execute a Main Wash thermal hold at interval 31 and then follow the Main Wash with a heated rinse at period 4a (regardless of soil sensor presence or input). It does this by forcing the Normal and Water Miser/Low Energy/Short/Crystal-China cycles to always execute at least the Medium Soil version of the cycle. This option is "Automatic" for Pots & Pans/Antibacteria and Heavy/Soak & Scrub cycles, and is not allowed with China, Quick Wash/Quick Glass, or Rinse cycles.

NOTE 19 – Power Scour/Super Scrub Option

This option optimizes the selected cycle for tough soils by making the following adjustments to the cycle:

- Because tough soils are not always removed soon enough to detect in the Pre-Wash/Pre-Rinse sense intervals, the option forces the cycle to execute at least the Medium Soil version of the cycle (regardless of soil sensor presence or input).
- The option turns the heater on in Pre-wash sense interval 48. If the water temperature reaches 60°C/140°F, the heater will be turned off.
- For Pots & Pans/Antibacteria and Heavy/Soak & Scrub cycles only, the option lengthens the default time limit for sense interval 48 to 16:00 minutes.
- For Pots & Pans/Antibacteria and Heavy/Soak & Scrub cycles only, the option also increases the setpoint for thermal hold intervals 46 and 40 from 57°C/135°F to 60°C/140°F.
- For Pots & Pans/Antibacteria and Heavy/Soak & Scrub cycles only, the option adds 10:00 minutes of wash time to the main wash at interval 29 and compensates for the added cycle time by shortening rinse intervals 24 and 23 to 0:00 and 2:00 minutes respectively. The cycle time displayed by numeric display models in intervals 23-28 is adjusted accordingly.

This option is only allowed with Pots & Pans/Antibacteria, Heavy/Soak & Scrub, and Normal cycles.

NOTE 20 – Sani Rinse Option

The Sani Rinse option changes the setpoint temperature for Final Rinse thermal hold interval 13 to 68°C/155°F and adds 15:00 minutes to the default time limit for the thermal hold. The option also turns the heater off in intervals 1 and 2 of the Dry period. This option is not allowed with China, Quick Wash/Quick Glass, or Rinse cycles. This option is automatic for the Antibacteria cycle on all KitchenAid models.

If the Sani Rinse option is completed satisfactorily, the Sani Complete/Sanitized indicator is turned on at the end of the cycle. If one of the following Sani Rinse problems occurs, the indicator will flash on and off at the end of the cycle:

- Final Rinse thermal hold fails to heat the water to the Sani Rinse setpoint temperature before the default time limit expires.
- Power to the dishwasher is interrupted (e.g. by opening the door or AC line failure) anytime between interval 13 and the end of the cycle.

The indicator is turned off by opening the door or pressing any key.

NOTE 21 – No Heat Dry/Air Dry/Energy Saver Dry Option

This option turns the heater off during the Dry period of the cycle. This option is not allowed with Quick Wash/Quick Glass or Rinse cycles (which have no Dry period).

OTHER CONTROL FEATURES

CANCEL / DRAIN:

Terminates current active cycle and clears cycle selections. Executes 2-minute drain upon first selection if water is likely to be left in sump. Subsequent selections toggle between 2-minute drains and going to standby.

CONTROL LOCK:

The Control Lock light is turned on and all keys of the keyboard are disabled whenever the Control Lock feature is invoked by the customer. The Control Lock feature (and light) can be turned on or off by the customer at any time by holding down the Air Dry option key for 4 seconds.

DELAY START:

Allows the customer to delay the start of a cycle. Each press of the Delay key increases the delay to the next available delay time selection and then back to no delay.

- For **models with a Start key**, the delay will begin clocking down upon selecting the Start key.
- For **models without a Start key**, the delay period will begin upon selecting the Cycle key.

The cycle selected will begin automatically upon completing the delay period.

FAVORITE CYCLE:

Allows the customer to save a Cycle, Option & Delay combination as a favorite cycle, which can be started at any time thereafter by pressing the Favorite Cycle key. The customer sets the favorite cycle in memory by selecting the desired Cycle, Option & Delay combination and then holding down the Favorite Cycle key until the Favorite Cycle Set light is turned on. The Favorite Cycle Set light will turn off on its own after 10 seconds.

ERROR MESSAGES

STUCK KEY:

If the control detects that a key is stuck in the depressed position, dishwasher operation will be suspended and the control will flash the light for that key until the condition is corrected. If a key without a light is stuck or multiple keys are stuck, the control will flash the Lock-Out light.

PART NO. 9744480

NOTE: This sheet contains important Technical Service Data

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DO NOT REMOVE OR DESTROY