

Amana Domestic Washer^{3/4} Technical Information

120 V, 60 Hz Models

ALW430RA*

PALW430RA*

- Due to possibility of personal injury or property damage, always contact an authorized technician for servicing or repair of this unit.
- Refer to Service Manual RS3100007 for detailed installation, operating, testing, troubleshooting, and disassembly instructions.
- Refer to Parts Manual RP3100017 for part number information.



CAUTION

All safety information must be followed as provided in this Technical Sheet and in Service Manual RS3100007.



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to unit and discharge capacitor before servicing, unless testing requires it.

Models	ALW430RA*	Models	ALW430RA*
Power Source		Wash cycles	7
Voltage AC	120 VAC	Water temperatures	3
Amperage (Single Unit)	10 A	Water level	Variable
Frequency	60 Hz	Features	
Motor horsepower	1/2	Steady Spin™ Balance System	X
Receptacle	6-20R	Self-cleaning lint filter	X
Plug	6-20P	Self-adjusting rear leveling legs	X
Dimensions		210 Agitation stroke	X
Cabinet		Tri-Action™ wash system	X
Height-overall	43"	Fabric softener dispenser	X
Height of cabinet	36"		
Width	27"	Motor speed	2 speed
Depth	28"	Spin speed (revolutions per minute)	640 / 427 rpm
Clearance-washer lid	17 1/2"	Agitation speed (strokes per minute)	
Weight		High	69 spm
Crated	193 lbs.	Medium	46 spm

Component Testing Information



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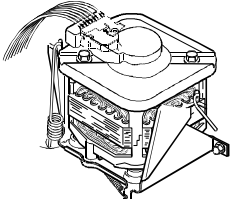
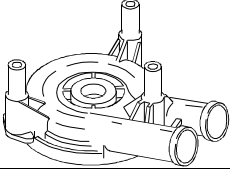
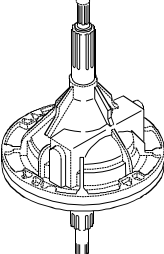
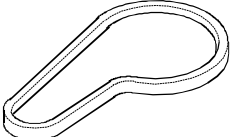

Illustration	Component	Test Procedure	Results
<p>40077101</p>	Temperature switch	<p>Disconnect wires from component to properly measure the resistance of the component.</p> <p>Place switch in the following positions and measure across the terminals below:</p> <p>Hot / Cold L1-2 _____</p> <p>Warm / Cold L1-1, L1-2, 1-2 _____</p> <p>Cold / Cold L1-1 _____</p>	<p>>1 Ω</p> <p>>1 Ω</p> <p>>1 Ω</p>
<p>40097701</p>	Mixing valve	<p>Measure resistance of terminals on each valve.</p> <p>Resistance across each valve.</p>	Approximately 1000 Ω ± 10%
<p>40058801</p>	Timer	<p>Verify input and output voltage is present.</p> <p>Verify wiring is correctly connected to the timer.</p>	See timing sequence chart for functional description of the component.
<p>40055101</p>	Pressure switch	<p>Do not disconnect the pressure hose from pressure switch to perform measurements.</p> <p>Measure resistance across the following terminals on the pressure switch:</p> <p>Terminal 1 to 2</p> <p>Terminal 1 to 3</p>	<p>Refer to wiring diagram/schematic for correct contacts.</p> <p>Air pressure that actuates switch is determined by the water level of the tub.</p> <p>Continuity (no pressure)</p> <p>Continuity (pressure)</p>
<p>40035001</p>	Lid switch-SPST	<p>Disconnect wire terminals from switch.</p> <p>Test terminals with switch closed.</p> <p>Test terminals with switch open.</p>	<p>Continuity >1 Ω</p> <p>Infinite 1 MΩ</p>
<p>R0000014</p>	Brake pad kit	<p>If washtub does not stop spinning within seven seconds after opening loading door.</p> <p>If brake pads make noises.</p>	<p>Replace all three brake pads.</p> <p>Apply a thin layer of silicone (26594P) on pads, see Service Bulletin "ASQ-213-B"</p>

Component Testing Information



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Illustration	Component	Test Procedure	Results
40095003 	Motor	Type of motor: Two speed	See following section "Internal Motor Diagram and Schematic" for correct wiring contacts.
40040301 	Drain pump	Verify drain pump is not clogged or damaged.	Remove clog and verify proper operation. Replace drain pump if damaged.
40065301 	Transmission assembly	Type of transmission: 640 rpm	Externally identical, must be identified by part number. If transmission locks-up, replace.
40053602 	Drive belt	Type of drive belt: 640 rpm Refer to "Parts Manual" for proper pulley size.	Refer to "Parts Manual", to verify which drive belt and pulley size is required.
40098701 	Power Cord	Measure resistance of wires.	Continuity should be indicated on each wire. Verify polarity and grounding.

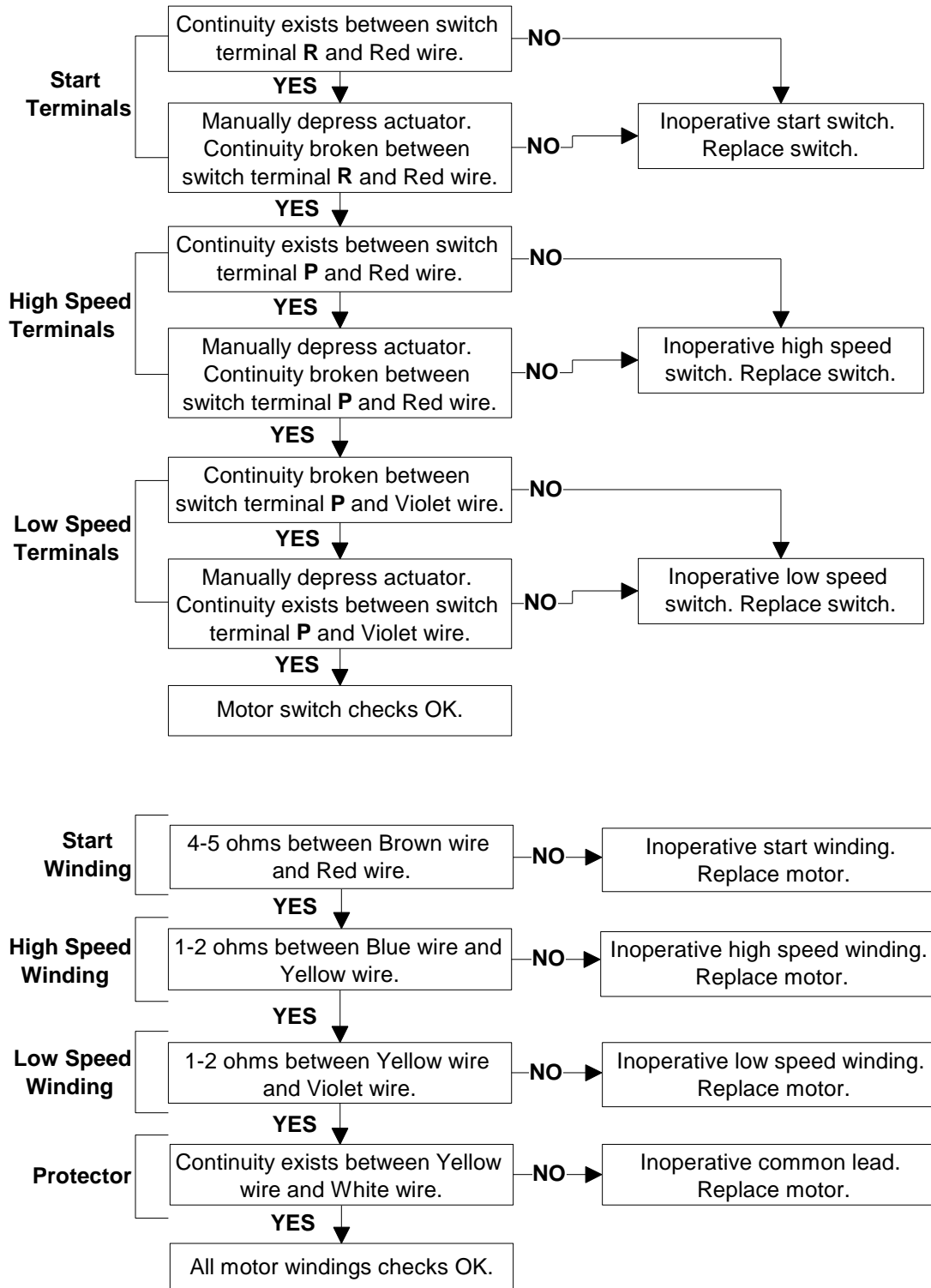
Internal Motor Diagram and Schematic



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One or Two Speed Motors

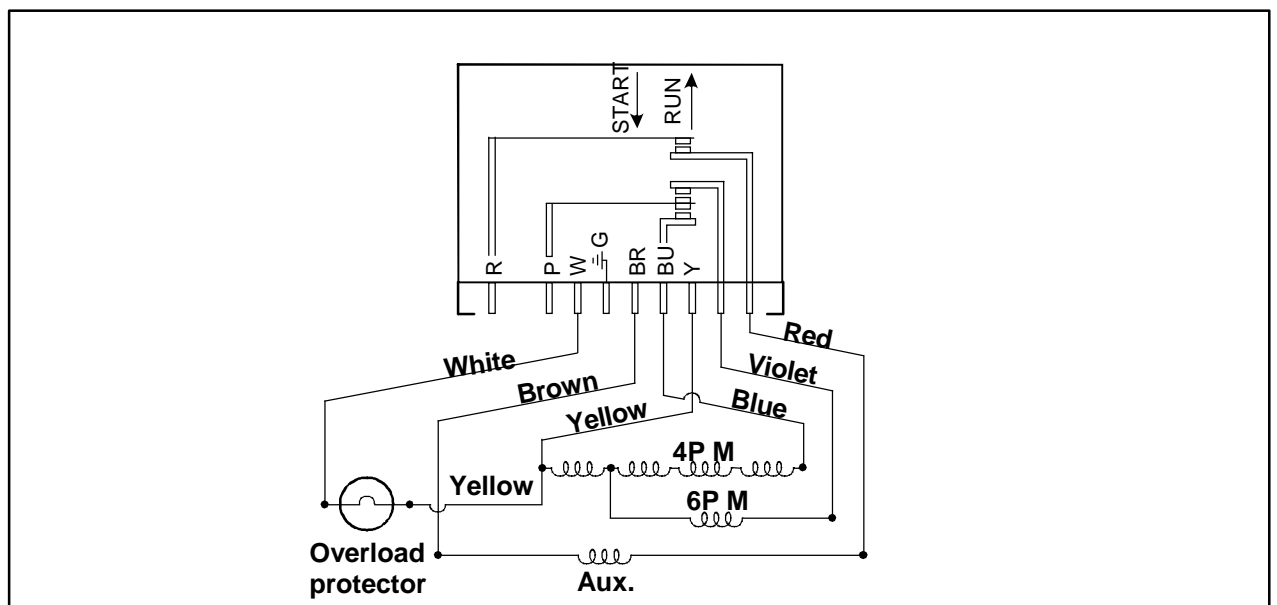
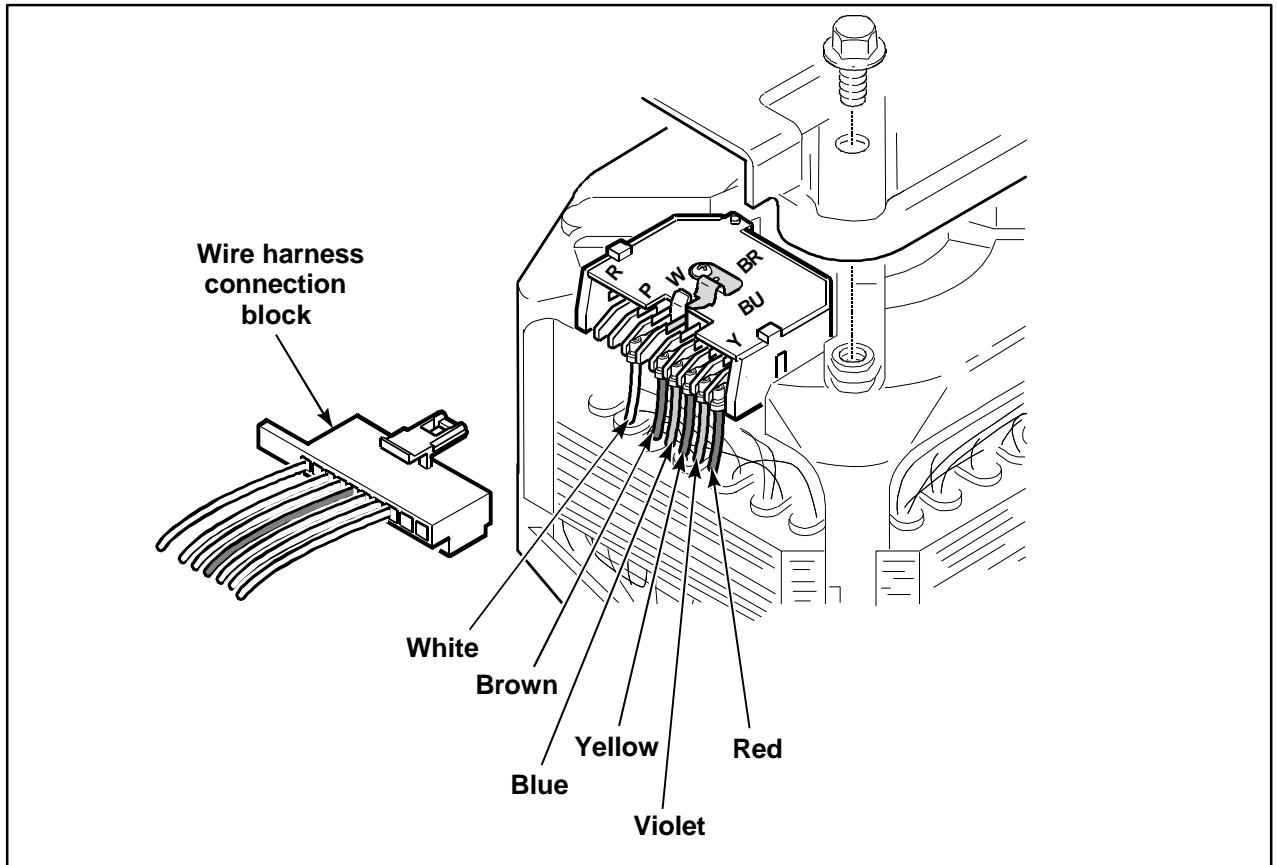


Internal Motor Diagram and Schematic



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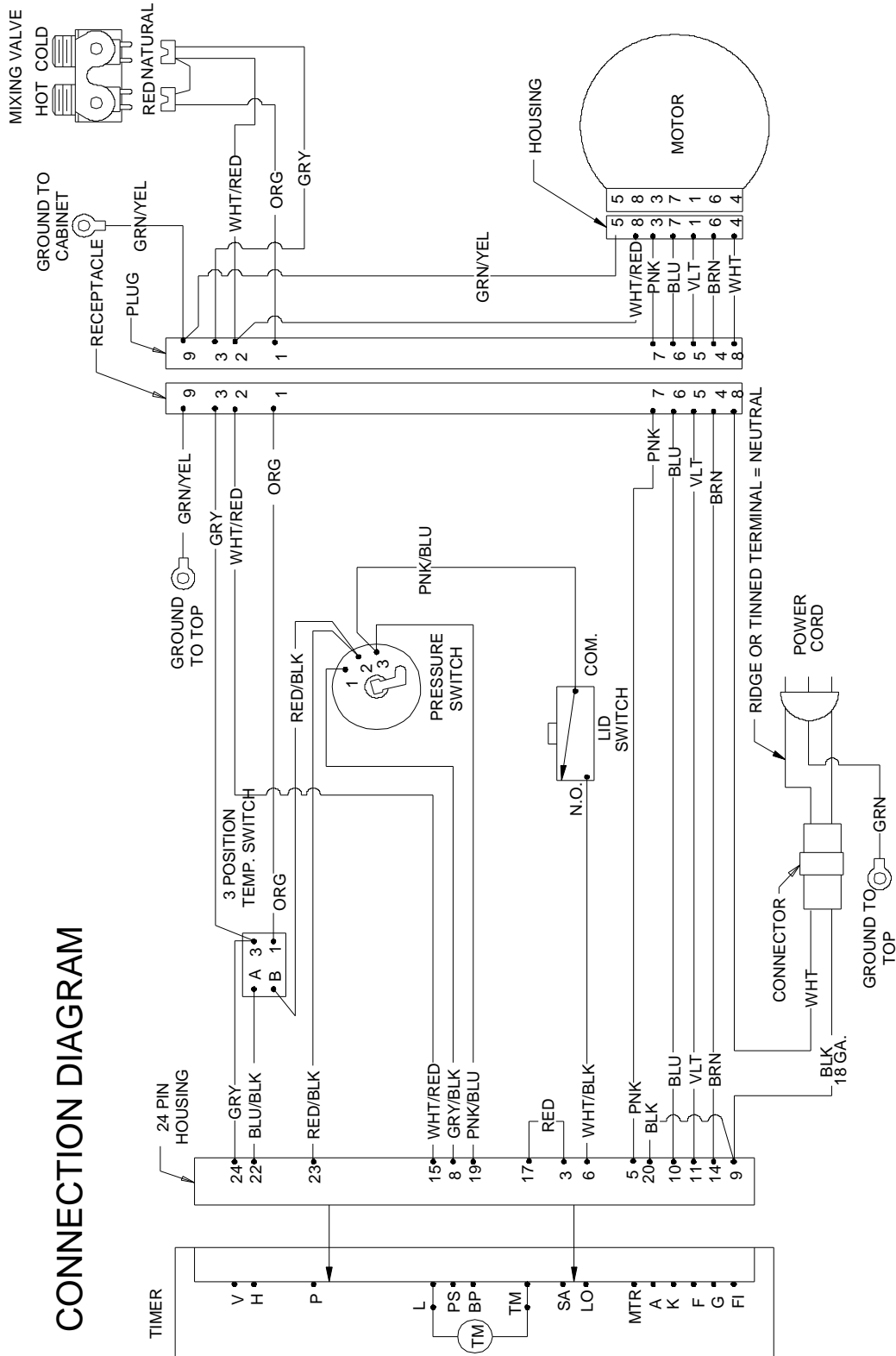
**Motor Assembly
(two speed motor)**

Timer Cycle Chart



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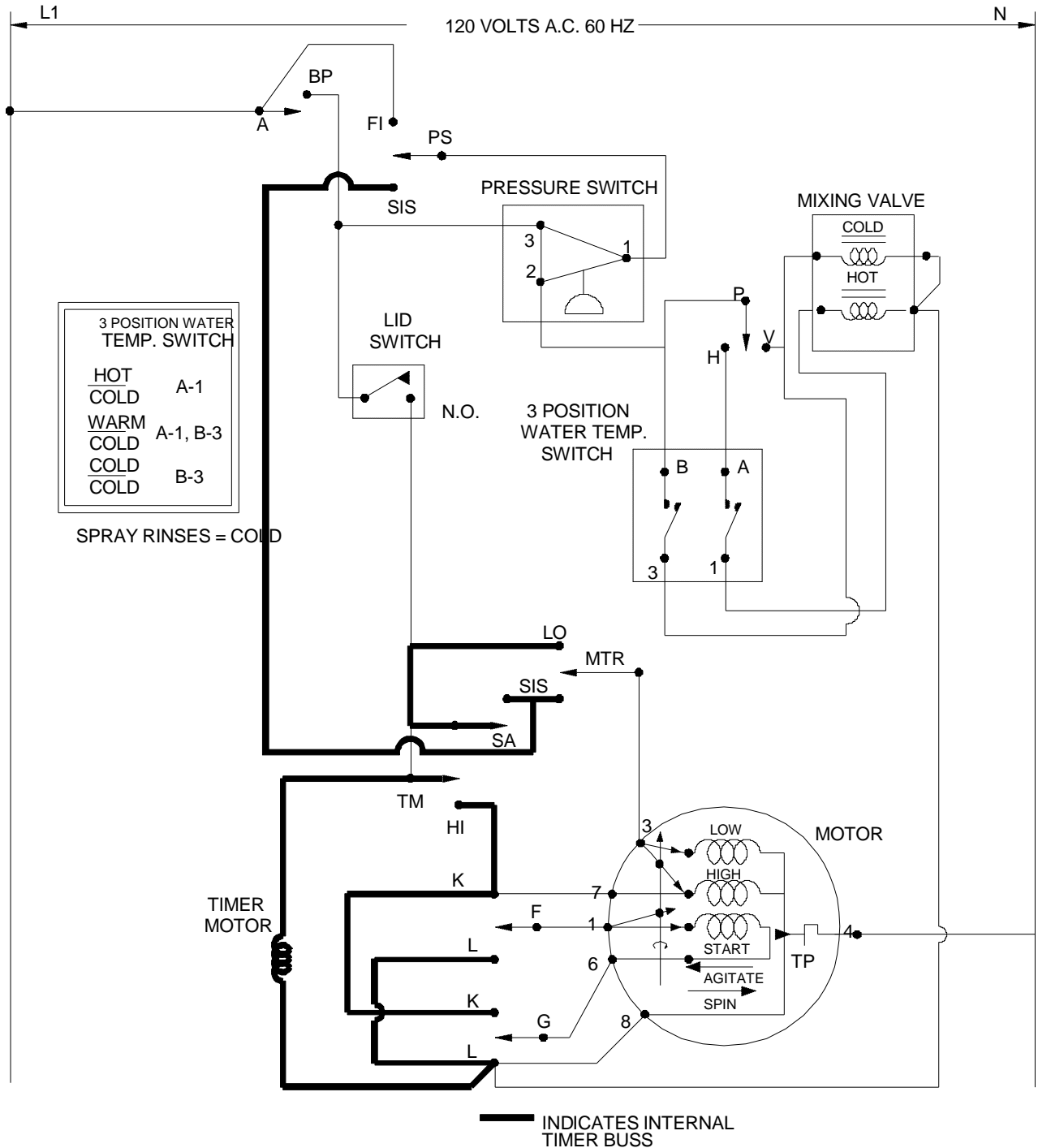
Wiring Diagram and Schematic



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SCHEMATIC



Timer Cycle Chart



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CYCLE/FUNCTION	WATER TEMP SELECT	MOTOR SPEED	CYCLE CHART hh:mm:ss
	Water Temperature	Speed	
REGULAR			
Wash: Fill & Agitate	hot, warm, & cold	F	0:14:32
Pause	-	-	0:00:15
Spin	-	F	0:03:00
Spin & Spray	cold	F	0:00:27
Spin	-	F	0:02:18
Pause	-	-	0:00:15
Rinse: Fill & Agitate	warm, & cold	F	0:02:45
Pause	-	-	0:00:15
Spin	-	F	0:05:53
			0:29:40
OFF			0:01:50
PERMANENT PRESS/KNITS			
Wash: Fill & Agitate	hot, warm, & cold	F	0:08:32
Pause	-	-	0:00:15
Spin	-	S	0:03:00
Spin & Spray	cold	S	0:00:27
Spin	-	S	0:02:18
Pause	-	-	0:00:15
Rinse: Fill & Agitate	warm, & cold	F	0:02:45
Pause	-	-	0:00:15
Spin	-	F	0:05:53
			0:23:40
OFF			0:01:50
DELICATE			
Wash: Fill & Soak	hot, warm, & cold	-	0:01:17
Agitate	hot, warm, & cold	S	0:00:27
Soak	hot, warm, & cold	-	0:02:33
Agitate	hot, warm, & cold	S	0:00:27
Soak	hot, warm, & cold	-	0:02:33
Agitate	hot, warm, & cold	S	0:00:27
Soak	hot, warm, & cold	-	0:01:03
Spin	-	S	0:03:00
Spin & Spray	cold	S	0:00:27
Spin	-	S	0:02:18
Pause	-	-	0:00:15
Rinse: Fill & Agitate	warm, & cold	S	0:02:45
Pause	-	-	0:00:15
Spin	-	S	0:02:53
			0:20:40
OFF			0:01:50
HANDWASH			
Wash: Fill & Soak	hot, warm, & cold	-	0:01:17
Agitate	hot, warm, & cold	S	0:00:27
Soak	hot, warm, & cold	-	0:02:33
Agitate	hot, warm, & cold	S	0:00:27
Soak	hot, warm, & cold	-	0:01:03
Spin	-	S	0:03:00
Spin & Spray	cold	S	0:00:27
Spin	-	S	0:02:18
Pause	-	-	0:00:15
Rinse: Fill & Agitate	warm, & cold	S	0:02:45
Pause	-	-	0:00:15
Spin	-	S	0:02:53
			0:17:40
OFF			0:01:32